



PRISMA

*Programme of Research to  
Integrate the Services for the  
Maintenance of Autonomy*

# PRISMA: A Coordination-type Integration Model

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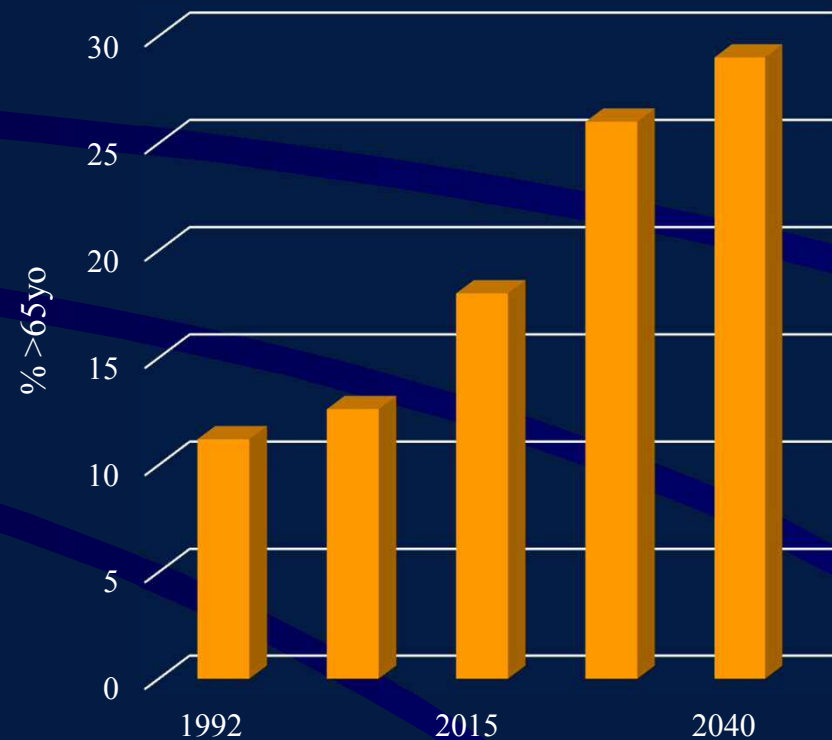




PRISMA

# The Province of Québec

- Pop tot: 7.9 millions
- >65 ans: 1.3 million (16%)
- 30% (65+) long-term care
  - Home care
    - Individual homes (16%)
    - Private collective housing (8%)
  - Intermediate facilities (3%)
  - Nursing Homes (3%)





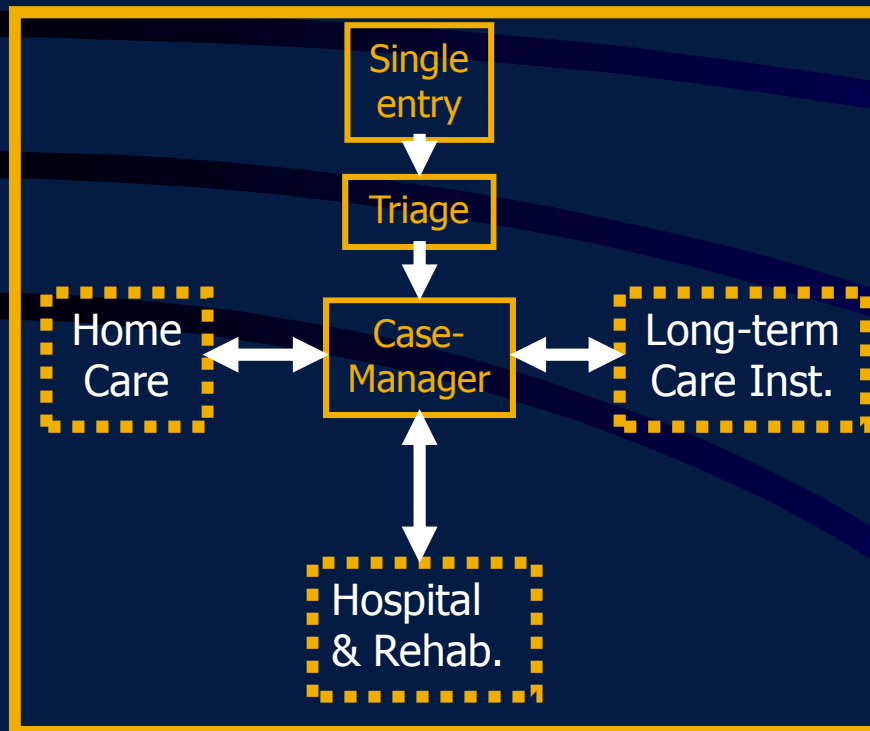
# Quebec Health Care System

- Tax-funded Beveridge-type
- Publicly funded & universal:
  - Integration of funding
- Integration of health and social services
  - National, Regional and Local
- No direct payment nor reimbursement by clients (Health Insurance Card)
- State: funder, manager, principal provider

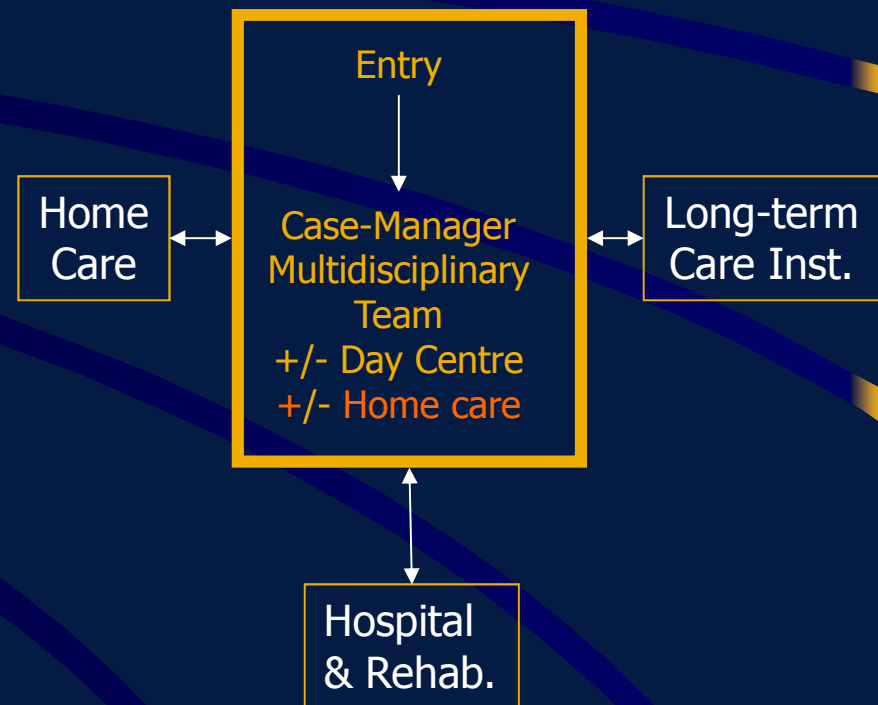


# Comparison of two models of Integrated Care

## Coordination model (PRISMA)



## Full Integration model (SIPA, PACE, CHOICE)





# Integrated Network of Services

1. Coordination between services
2. Single point of entry
3. Case-management
4. Individualized Service Plan
5. Unique assessment tool and Case-mix classification system
6. Information tool (Computerised Clinical Chart)
7. Financing



PRISMA

# 1. Coordination between services

- Strategic (decision makers)
  - Local Governance Table: structures, financing and protocols
    - Hospitals and CLSCs CEOs
    - Chairs and directors of voluntary or private agencies
  - Shift of paradigm: client-centered  $\Rightarrow$  population-centered
- Tactical (services' managers)
  - Local Management Committee: mechanisms
- Operational (clinicians)
  - Multidisciplinary team



## 2. Single point of entry

- Common door to get access to all services
- Triage (for people not referred by prof.)
  - screening instrument: PRISMA-7
  - reference to the right service or to the Integrated Service Delivery Network
  - link to the 24/7 nursing phone line.
- Basic data collection (socio-demography)



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## 3. Case-Manager

- Functions
  - basic assessment (functional autonomy, needs)
  - reference to other professionals (for completing the assessment)
  - planning of services (with patient & family)
  - service “broker”
  - patient advocacy
  - follow-up (periodic re-assessment)
- *Clinical* (Scharlach) / *Neighborhood* (Eggert) / *Basic* (Phillips) / Intensive Case-Management (Challis)





# Case-Manager

- Distributed by territory (neighbourhood)
- Nurse or Social worker or others
- Special training
- Not associated with a single institution or agency but with the Local Governance Table
  - intervenes wherever is the patient (“blue helmet”)
- May also provide direct care (in his/her field of competency)
- Case load: 40-45



## 4. Individualized Service Plan

- Prepared once the assessment is completed
- Lead by the Case-Manager
- Consensus amongst the providers
- Approval by patient (and/or family)
  - empowerment
- Includes the Management Plan of each provider
- Periodical revision



## 5. Unique assessment tool

- SMAF: disability and handicap scale
- Case-mix classification: Iso-SMAF Profiles
  - 14 different homogeneous patterns of disabilities
  - Functions:
    - Service allocation: admission criteria
    - Monitoring
    - Management
    - Financing



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# SMAF

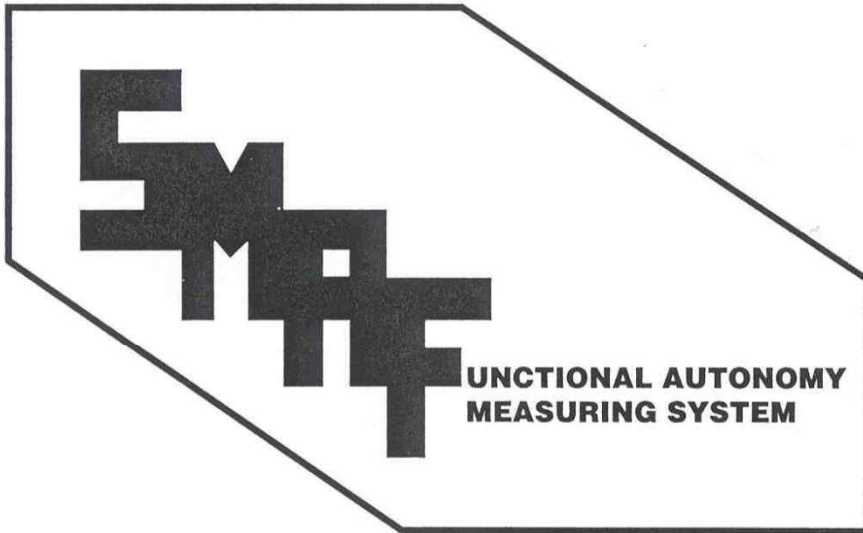
- Système de Mesure de l'Autonomie Fonctionnelle (Functional Autonomy Measurement System)
- Developed according to the WHO Classification of disabilities
- 35 items on a 5-point scale
  - 0: autonomous
  - -0.5: with difficulty
  - -1: need supervision
  - -2: need help
  - -3: dependent



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# Items of the SMAF

- Activities of Daily Living
  - Eating, washing, dressing, grooming, urinary & fecal continence, using the bathroom
- Mobility
  - Transfers, walking inside & outside, donning a prosthesis & orthosis, propelling a wheelchair, negotiating stairs
- Mental functions
  - Memory, orientation, judgement, understanding, behaviour
- Communication
  - Vision, hearing, speaking
- Instrumental Activities of Daily Living
  - Housekeeping, meals, shopping, laundry, telephone, transportation, medications, budget
- Social functioning
  - Free time, relationships, environment, relationships, roles, expresses desires, ideas, opinions and limitations



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# AUTONOMY ASSESSMENT SCALE

Name: \_\_\_\_\_

Dossier: \_\_\_\_\_

Date: \_\_\_\_\_ Assessment #: \_\_\_\_\_

DISABILITIES	RESOURCES 0. Subject himself 2. Neighbour 4. Aides 6. Volunteer 1. Family 3. Employee 5. Nurse 7. Other	HANDICAP	STABILITY*
<b>A. ACTIVITIES OF DAILY LIVING (ADL)</b>			
<p><b>1. EATING</b></p> <p><input type="checkbox"/> 0 Feeds self independently _____</p> <p><input checked="" type="checkbox"/> -05 With difficulty</p> <p><input type="checkbox"/> -1 Feeds self but needs stimulation or supervision OR food must be prepared or cut</p> <p><input type="checkbox"/> -2 Needs some help to eat OR dishes must be presented one after another</p> <p><input type="checkbox"/> -3 Must be fed by another person OR has a naso-gastric tube OR a gastrostomy</p> <p><input type="checkbox"/> naso-gastric tube    <input type="checkbox"/> gastrostomy</p>	<p>Does the subject presently have the resources (help or supervision) necessary to overcome this disability?</p> <p><input type="checkbox"/> Yes _____</p> <p><input type="checkbox"/> No _____</p> <p>Resources:    <input type="checkbox"/>    <input type="checkbox"/>    <input type="checkbox"/></p>	<p><input type="checkbox"/> 0</p> <p><input type="checkbox"/> -1</p> <p><input type="checkbox"/> -2</p> <p><input type="checkbox"/> -3</p>	<p><input type="checkbox"/> -</p> <p><input type="checkbox"/> +</p> <p><input type="checkbox"/> •</p>



# ISO-SMAF Profiles

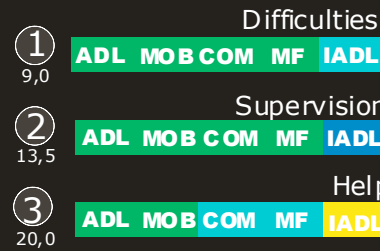
(Dubuc et al, 2001)

- Case-mix classification system
  - Needs Related Groups (not resources utilization)
- Developed by Cluster analysis (n=1997) and expert consultation
- Validation
  - internal: split samples
  - external: discrimination of nursing care time and costs
- 14 groups
- Internal validation process (Euclidian distance)



PRISMA

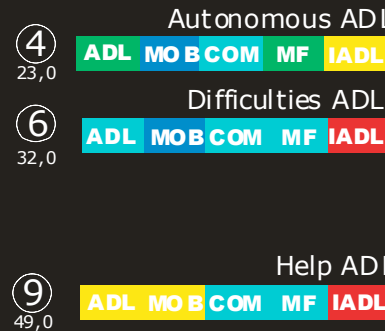
### PROBLEMS IN INSTRUMENTAL ACTIVITIES OF DAILY LIVING ONLY



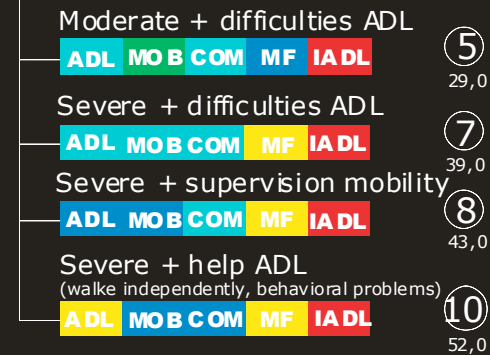
**Legend**

- Autonomous (0)
- Difficulties (0,5)
- Supervision (1)
- Help (2)
- Dependence (3)

### PREDOMINANT ALTERATIONS IN MOBILITY FUNCTIONS



### PREDOMINANT ALTERATIONS IN COGNITIVE FUNCTIONS

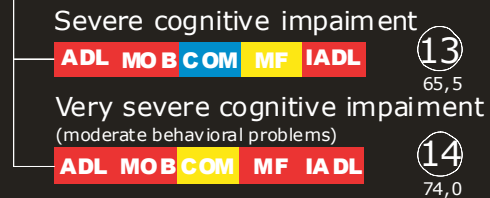


### MIXED ALTERATIONS MOBILITY + COGNITIVE

#### HELP IN MOBILITY



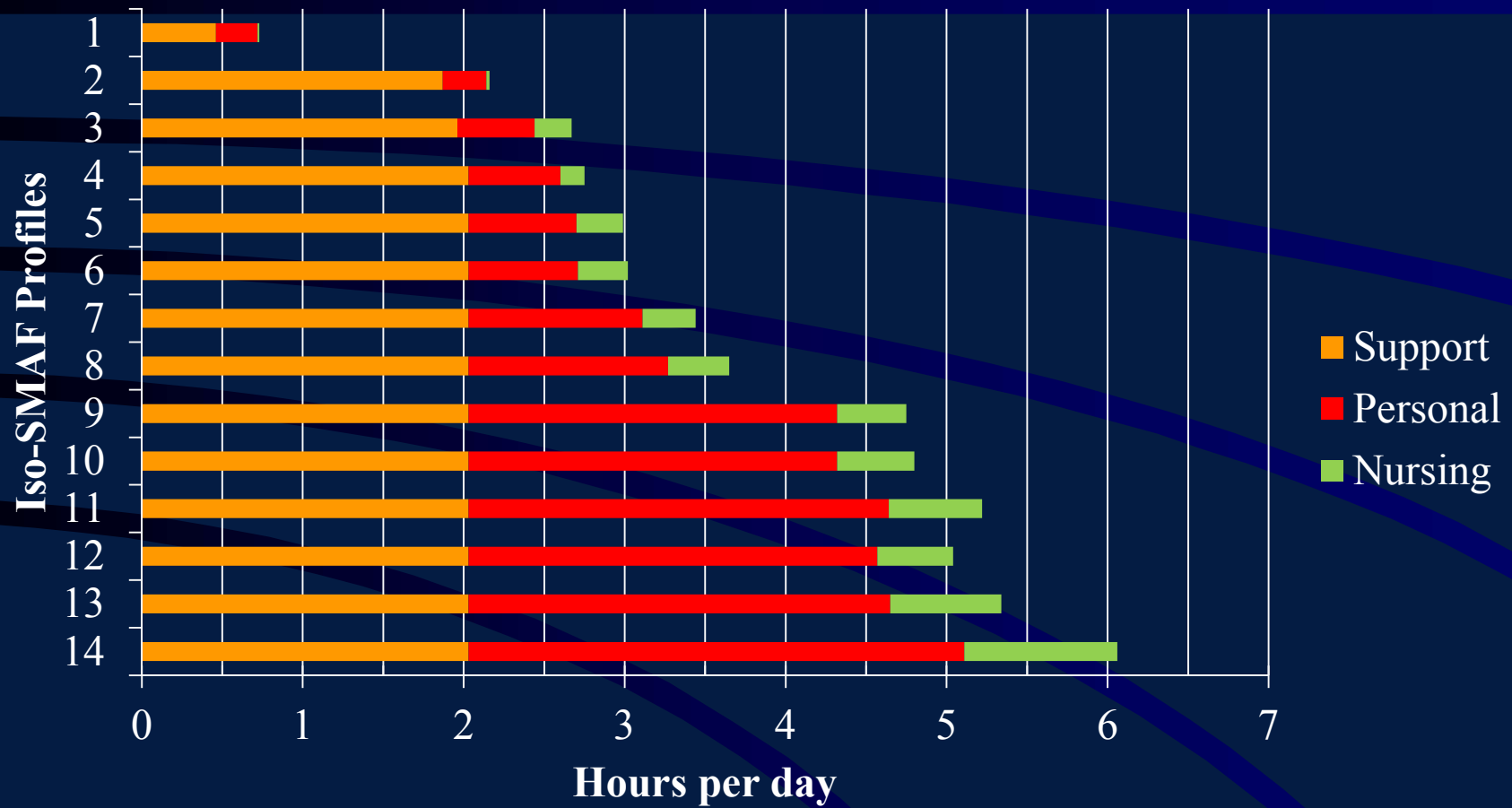
#### BEDRIDDEN AND DEPENDENCY IN ADL







# Hours of care and support





# ISO-SMAF Profiles

- Functions:
  - Service prescription: admission criteria
  - Clientele Monitoring
  - Management of resources
    - Staff distribution
    - Patients distribution in units or services
    - New resource design (e.g. Profile 9)
  - Financing



## 6. Information Tool

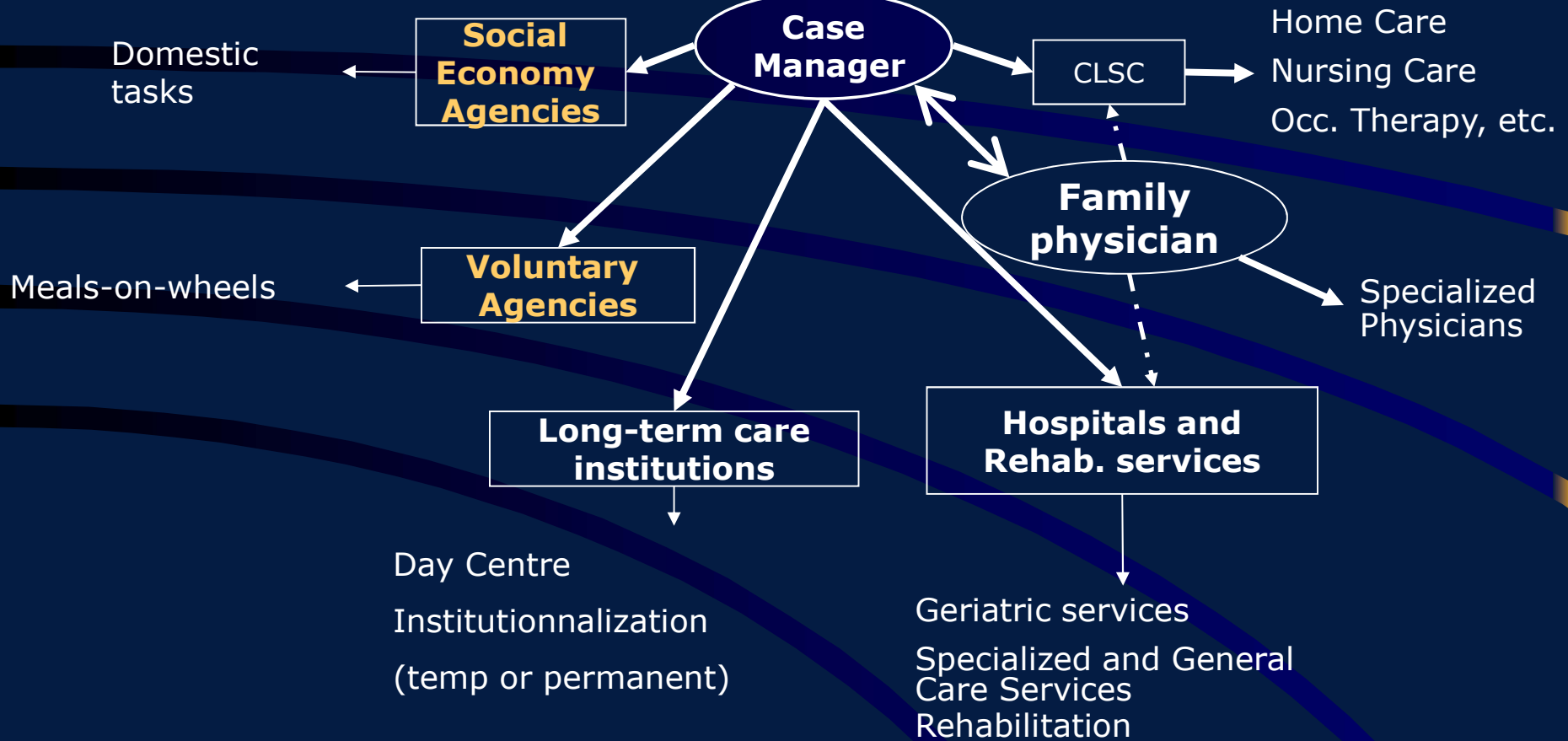
- Facilitates information flow
- Computerized Clinical Chart
  - accessible by all professionals and institutions
  - via internet (Quebec Health and Social services Network)
  - security and privacy
  - data generator: for monitoring and research



PRISMA

Single point of entry

SCREENING





# Estrie project

- Implementation of the Integrated Service Delivery Network within 3 areas
  - 1 urban : Sherbrooke
  - 2 rurals: Granit (Lac Mégantic) & Coaticook
- Evaluation
  - implementation (process): case-studies (3)
  - impact (outcome): quasi-exp population design (n=1500 >75 at risk; 4 years)



## Conclusion for implementation

- PRISMA Model can be implemented
- Implementation Rates reached 70 to 85%
- Impact when implementation over 70%
- Degree of integration was good to very good (communication/cooperation level)



# Conclusion for the impact

- Significant effect on
  - Functional Decline: prevalence (7%) and Incidence (14%)
  - Handicap (Unmet needs): ↓ by half
  - Satisfaction and empowerment
  - ER
  - Hospitalisation (nearly significant)
- No effect on:
  - Institutionalization
  - Consultations with health prof
  - Home care services
- Equal Cost: improves the efficiency



PRISMA

# From innovation to services

## “When the rubber hits the road”

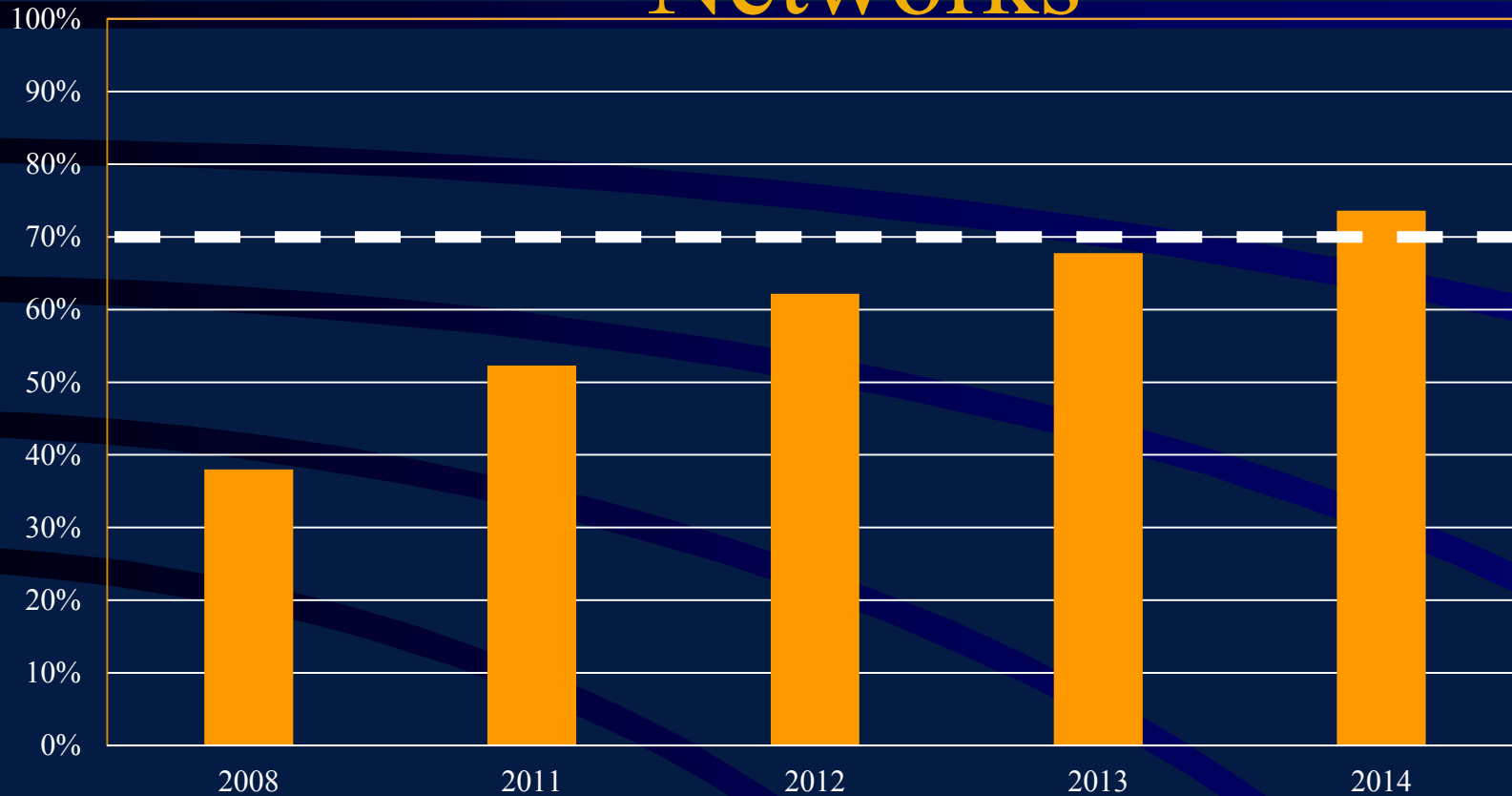
- Decision to generalize the model
  - Government Action Plan 2005-2010
- Concurrent reform in 2003: creation of CSSS: merge of Hospitals, Nursing Homes, Home Care Agencies)
  - Less energy for other issues
  - Silo effect within the organizations
  - Less open to external partnerships
  - Structural ≠ Functional
- New structural reform in 2015
  - Merge of all CSSS with other Health and Social Institutions (Mental Health, Rehab, Youth Protection, Public Health) in 20 Regional CISSS





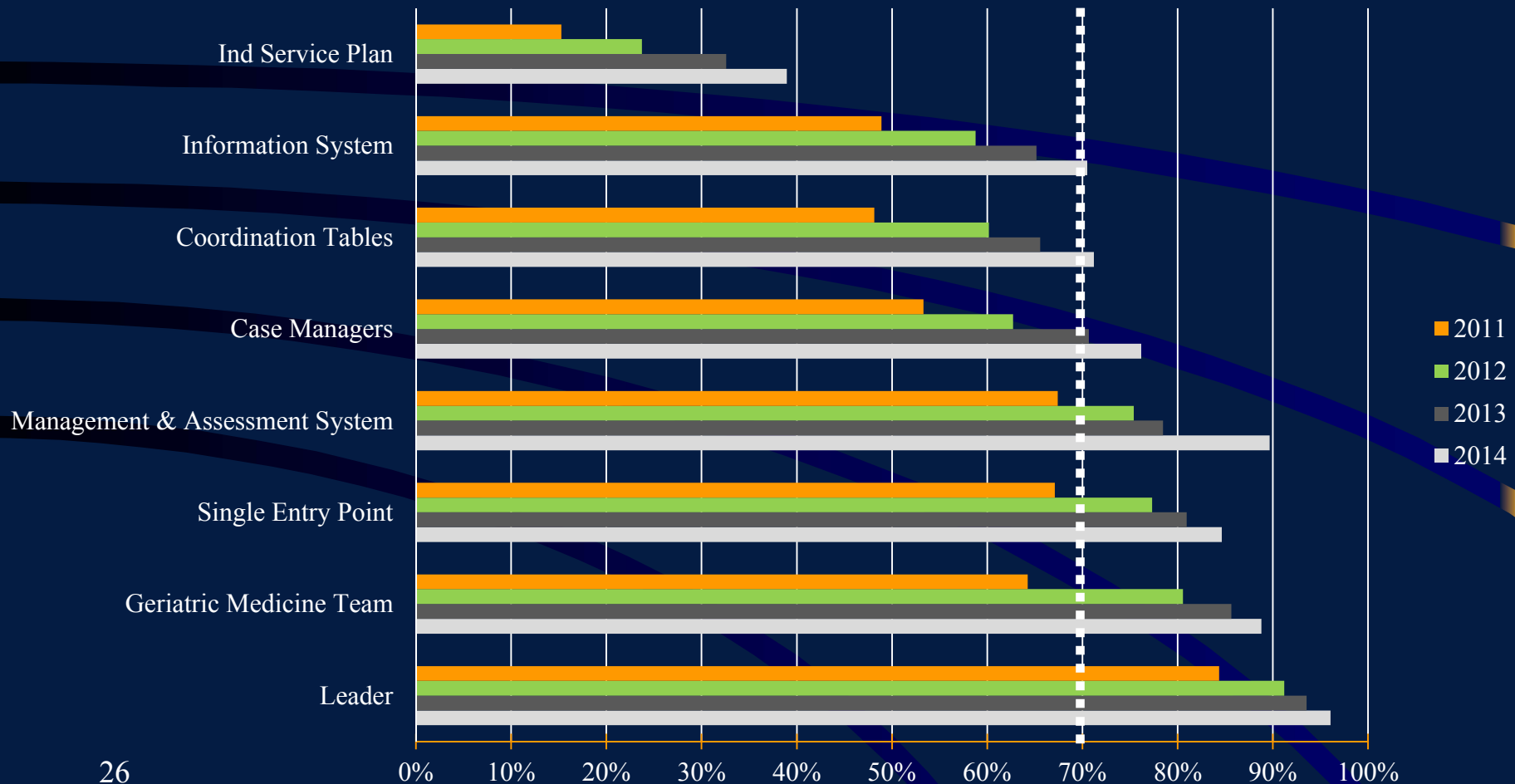
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# Implementation of Integrated Networks





# Implementation of Integrated Networks by Components





# Implementation Evaluation

(Quebec National Public Health Institute, 2014)

- Need of a well-identified local leader (champion)
- Case-Managers
  - Funding
  - Clarity of the role
  - Insufficient training for shifting to the new role
  - Needs for adequate professional coaching and support
- Delay in the availability of the electronic record
  - General Computerization of the Health Care Institutions
  - Specific Software for the Integrated Network (2011)
  - Individualized Service Plan and Resource Allocation Module (2014)
- Lack of interest and involvement of GPs
  - Funding issues
  - Match of one CM with a GP group



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# Population vs Disease – oriented integration

- Population-based (PRISMA) vs Disease-based (Chronic Care Model)
  - “Your integration is my fragmentation” (Leutz)
- < 70 yo: disease-oriented integration could work
- > 70 yo (or when more than 1 CD)
  - Population-based: primary line
    - Case-manager in direct contact w patient
  - Disease-based: second line
    - Contact with Case-Manager, not patient



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# Financing: key issue

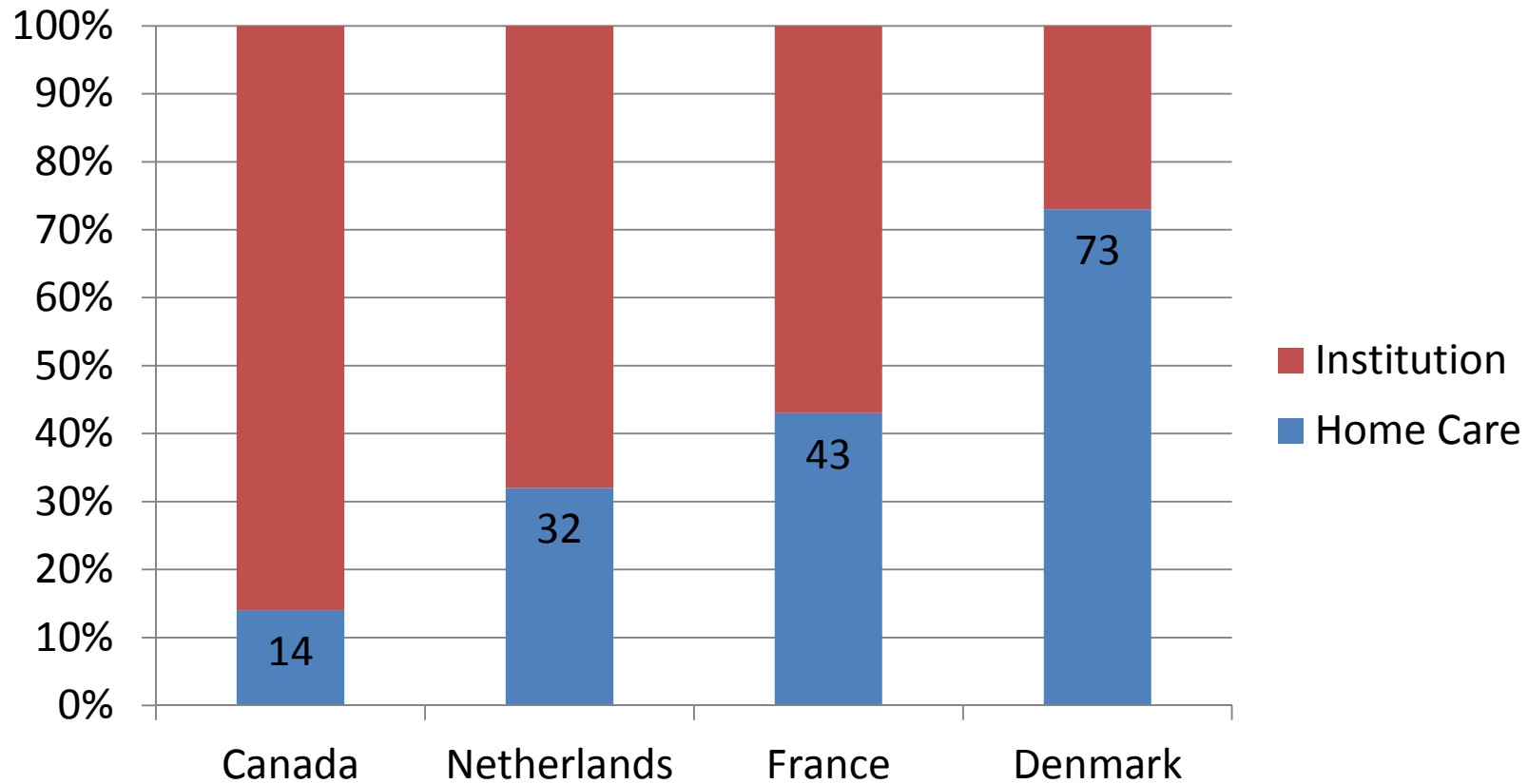
- “We better coordinate the use of the basket of services, but the basket is leaky” (one of the CM)
- Lack of funding, especially for Home Care

Public spending on long-term care (health and social components) in 2014 as a % of GDP



Source: [OECD Health Statistics 2017](#).

# Distribution of Public Long-term Care expenses



Source: Huber et al. Facts and figures on Long-Term Care, 2009



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# Financing: key issue

- Lack of funding, especially for Home Care
- Limitation of the Canadian Beveridge model
  - No specific funding associated with a given level of disability (Iso-SMAF Profile)
  - Difficulties for transferring funds to private or not-for-profit agencies
  - Problems in prioritizing Home Care and protecting funding (Canada Health Act: Hospital and Physicians)
- Financing: 7<sup>th</sup> element of the PRISMA model
  - Create an hybrid model (tax funded and social insurance)
  - Long-Term Care Public Insurance





PRISMA

# Quebec Autonomy Insurance

## L'AUTONOMIE POUR TOUS

Livre blanc sur la création de  
l'assurance autonomie



Parliamentary Commission: Fall 2013

60 days - 61 reports & groups

General support.

# Quebec Autonomy Insurance

- Objectives:
  - Ensure equitable public funding
  - Establish a public management of LTC
  - Ensure quality of services
- Adults with permanent and significant disabilities (aged AND handicapped)
- All living environments
- Universal: means-adjusted

# Process

- Assessment by Case Manager (with the SMAF)
- Benefits
  - According to the Iso-SMAF Profile
  - Means-adjusted
  - In-kind (public), by contract (private) or cash (with caution)
- Individualized Service Plan and Service Allocation
  - Formal approval by the user and relatives
- Contract with service providers (private & NFP)
  - Accreditation process (quality)
- Follow-up and quality control by CM

# Services covered

- Professional Care
  - Nursing
  - Nutrition
  - Psychosocial
  - Rehabilitation (PT and OT)
- ADL support
- IADL support
- Services to informal caregivers
  - respite, support services
- Technical Devices



AUTONOMIE

SOUTIEN



CHOIX

# Funding

- Tax-funded (income)
- Transfer of the actual budget in a specific programme (no transfer)
- Additional significant budget for Home Care (doubling)
- Prevision for annual increase in budget to deal with aging of the population
- Allocation managed by the medicare agency



# NATIONAL ASSEMBLY

FIRST SESSION

FORTIETH LEGISLATURE

Bill 67

**Autonomy Insurance Act**

Introduction

Introduced by  
Mr. Réjean Hébert  
Minister of Health and Social Services  
and Minister responsible for Seniors

Québec Official Publisher  
2013

Introduced at the National assembly on  
December 6th 2013

Waiting for Parliamentary Commission  
and detailed article revision ▲

Planned Implementation: April 1st 2015 ▲

Election triggered and parlement  
dissolution on March 6th ▲

Parti Québécois defeated on April 7th ▲

Project abandoned by the Liberals ▲

AUTONOMIE

SOUTIEN ▲

CHOIX ▲



PRISMA

# Conclusion

- PRISMA: an example of transfer from research to public policy
- Implementation needs:
  - More time than expected
  - Adequate monitoring
  - Adequate funding: « Integration costs before it benefits » (Leutz)
  - No major concurrent competing reform
- Integration needs appropriate financing system
  - Coupling with Long-Term Care Insurance