Care co-ordination: lessons from the development and impact of the PRISMA model in Quebec

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- 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%)

% >65yo

1992

2015

2040
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 by clients, no co-payment
- State: funder, manager, principal provider
Comparison of two models of Integrated Care

Coordination model (PRI SMA)
- Single entry
- Triage
- Case-Manager
- Home Care
- Hospital & Rehab.
- Long-term Care Inst.

Full Integration model (SI PA, PACE, CHOICE)
- Entry
- Case-Manager Multidisciplinary Team
- +/- Day Centre
- +/- Home care
- Hospital & Rehab.
- Long-term Care Inst.
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
1. Co-ordination 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 ⇒ 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)
3. Case-Manager

- **Functions**
  - basic assessment (functional autonomy, needs)
  - reference to other professionnals (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
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
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, roles, expresses desires, ideas, opinions and limitations
# AUTONOMY ASSESSMENT SCALE

Name: ___________________________

Dossier: _________________________

Date: ________________________ Assessment #: ______

## DISABILITIES

<table>
<thead>
<tr>
<th>RESOURCES</th>
<th>HANDICAP</th>
<th>STABILITY*</th>
</tr>
</thead>
<tbody>
<tr>
<td>0. Subject himself</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Family</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Neighbour</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Employee</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Aides</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Nurse</td>
<td></td>
<td></td>
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<tr>
<td>6. Volunteer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Other</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

## A. ACTIVITIES OF DAILY LIVING (ADL)

### 1. EATING

0: Feeds self independently

**-0.5** With difficulty

-1: Feeds self but needs stimulation or supervision
OR food must be prepared or cut

-2: Needs some help to eat
OR dishes must be presented one after another

-3: Must be fed by another person
OR has a naso-gastric tube OR a gastrostomy

<table>
<thead>
<tr>
<th>Resources:</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>naso-gastric tube</td>
<td></td>
<td></td>
</tr>
<tr>
<td>gastrostomy</td>
<td></td>
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</tr>
</tbody>
</table>

**Does the subject presently have the resources (help or supervision) necessary to overcome this disability?**

- [ ] Yes
- [x] No

-1: Resources provided
-2: Additional resources required
-3: Extensive resources needed

- [ ] 0
- [ ] +
- [ ] -
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)
Hours of care and support

Hours per day

 Iso-MAF Profiles

Support
Personal
Nursing
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
Single point of entry

SCREENING

Case Manager

Social Economy Agencies

Voluntary Agencies

Long-term care institutions

Hospitals and Rehab. services

Family physician

CLSC

Home Care
Nursing Care
Occ. Therapy, etc.

Specialized Physicians

Geriatric services
Specialized and General Care Services
Rehabilitation

Day Centre
Institutionnalization
(temp or permanent)

Domestic tasks

Meals-on-wheels
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
From innovation to services

“When the rubber hits the road”

• Decision to generalize the model

• Concurrent reform (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 announced !?!?!
  – Merge of all CSSS with other Health and Social Institutions (Mental Health, Rehab, Youth Protection, Public Health) in 20 Regional CISSS
Implementation of Integrated Networks

2008 2011 2012 2013 2014
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)
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
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 Long-term care social and health service expenses in 2008 (%GDP)

Source: OECD, 2010
Distribution of Public Long-term Care expenses

Source: Huber et al. Facts and figures on Long-Term Care, 2009
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: 7th element of the PRISMA model
  – Create an hybrid model (tax funded and social insurance)
  – Long-Term Care Public Insurance
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
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
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 parliament dissolution on March 6th

Parti Québécois defeated on April 7th

Project abandoned by the Liberals
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

• All is about Politics 😊