Case Management for Frequent Users with Chronic Disease in Primary Care

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Overview

- Objectives of the presentation
- Introduction
- Context
- The VIsages Project
- Planned evaluation
- Observations about the implementation at this stage
Objectives of the Presentation

- Present the project VIsages and its context
- Present the three components of its planned evaluation
- Make observations about:
  - the implementation process
  - the processes used to identify and enroll patients
  - the role performed by the primary care nurses case managers
  - mechanisms developed to improve the accessibility, continuity and coordination of services
The VIsages Project

- Demonstration research project
- Developed to faced challenges of frequent users with chronic diseases in primary care
- Included two main components:
  - Case management by PC nurse
  - Self-management support groups
Chronic Diseases (CD)

- Challenges of chronic diseases (CD)
- Important day-to-day adjustments
- Vulnerability characteristics
- Increased health services use (frequent users)

(Context)

(Commissaire à la santé et au bien-être du Québec, 2010; World Health Organization; 2002; Marks et al., 2005)
Chronic Diseases (CD)

- Quebec’s Ministry of Health and Social Services priorities
- Chronic Disease Prevention and Management Strategy:
  1) Coordination of care
  2) Self-management support for CD
  3) Primary care: interdisciplinary, patient-centred and adapted to their needs

(McMurphy, 2009; MSSS, 2008)
Primary Care Role in CD Management

- Primary care viewed as central in CD management
- Must propose innovative strategies to better support vulnerable people with CD
- Must provide a range of services:
  - Interdisciplinary
  - Person-centred
- Must be oriented towards self-management support
Organisation of Primary Care in Québec

- Implementation of Family Medicine Group (FMG)
- Addition of primary care nurses in medical clinics
- To improve accessibility, continuity and coordination of health care and social service
- Collaboration with community services, hospitals, community pharmacies
- May employ other health professionals
- Vulnerable groups of patients still pose major challenges
Frequent Users of Hospital Services

• Subgroup of patients with more complex needs
• Major impact on emergency and hospital services and costs
• A combination of factors: multimorbidity, mental health and/or psychosocial comorbidity
• Challenges to the actual FMG model capacity to address the needs of those patients
Regional Round Table

About CD in Saguenay-Lac-Saint-Jean region (2010)

1) Improve coordination of care through case management
2) Develop self-management support strategies
Local Observations

- Primary care: increase of needs and issues for vulnerable patients with CD
- FMG: so far, scarce case management and self-management support strategies
- Case management programs in the context of hospital offered mainly for seniors, mental health patients or home care
- But still a need to improve coordination with FMG
Case Management in CD

Evidence of efficiency:

- Better care coordination when done by a central and unique professional
- By a primary care nurse for different CDs

Limitations:

- Research on single diseases

(Schraeder et al., 2008; Sutherland et Hayter, 2009; Lillyman et al. 2009; Kendall et al., 2010; Health Canada, 2007)
Self-Management Support

Evidence of positive effects:
✓ Reduced hospitalization length and improved patient satisfaction
✓ Improvement in patient self-management abilities

Limitations:
✓ Limited knowledge about the mechanisms for implementation and for mobilization of primary care professionals

(Chodosh et al., 2005; Harvey et al., 2008; Richardson et al., 2010; Williams et al., 2010; Zwar et al., 2006)
To document the implementation and the effects of a *case management* and *self-management support* intervention in FMG for high users of hospital services with chronic diseases.
A model for innovation
in social and health services for patients with chronic disease (UK)

The VISAGES Project

- Partnership with the community:
  - Agence de la santé et de services sociaux, 2 health centers, 4 FMG and other partners
- Mobilization
- Local expertise
- Grounded with current services
- Clinical component, evaluative component
Settings

- 2 FMG in Chicoutimi
- 2 FMG in Alma

Characteristics:
- Surrounding environments: urban, semi urban, rural
- Experience as a FMG: 1 to 9 years
- Number of physicians: 5 to 19
- Number of enrolled patients: 5,000 to 18,000
Patients

- 400 patients
- Followed in one of the 4 participating FMG
- 18 to 80 years old
- With CD
- Vulnerable patients
  - Frequent use of hospital services (MAGIC Chronique)
  - Identification by primary care physicians of participating FMG
I. Case Management

- A collaborative, dynamic, client-driven process for the provision of quality health and support services through the effective and efficient use of resources
- Main components:
  - Evaluation of patient needs and resources
  - Establishment and maintenance of a patient-centred, individualized service plan (ISP)
  - Coordination of services among partners
  - Self-management support for patients and families

(National Case Management Network, 2009; Freund et al., 2011)
I. Case Management

Responsibilities of nurses:

- Evaluate the patient’s situation and needs
- Identify partners to involve
- Plan patient follow-up
- Negotiate the services
- Coordinate care and services
- Monitor the ISP application
- Educate and support the person
I. Case Management

- Five nurses were added into the participating FMG
- Training (5 days) of the nurses selected for case management
- Monthly meetings of co-development with case discussion
- Participation of:
  - Family doctors
  - Other professional resources of the FMG
  - Professional resources of the health center
  - Other partners: community organizations (e.g., home care services), patient associations and community pharmacists
2. Self-Management Support

- Group meetings (10–12 participants) for self-management support
- Based on the self-management program developed by the Stanford Patient Education Center
- Standardized six-week program with interactive weekly group meetings led by two lay leaders, who themselves have a CD
- Two sessions of the self-management group by GMF
- 30% of participants
Evaluation Objectives

The evaluation-specific objectives are to:

- Analyze the implementation of the intervention within the existing structures of four Family Medicine Groups (FMG) in the Saguenay-Lac-Saint-Jean region, Quebec, Canada
- Evaluate the effects of this intervention among patients
- Conduct an economic analysis
Implementation Analysis

To describe:
- Implementation context
- Mechanisms of the intervention
- Effects of the intervention

With two approaches:
- Realistic evaluation
- Practical participatory
I. Realist evaluation

- Recognizes that any outcome of an intervention results from the interaction between this intervention and its context
- Underline the mechanisms and their performance under certain conditions
- Outcomes are found not only in the patients but also in the stakeholders and organizations involved

(Pawson et Tilley, 1997; Pawson, 2006)
Implementation Analysis

Multiple case study:

Multiple data collection strategies:
✓ Focus group
✓ Individual interview
✓ Document analysis

Key informants:
◦ FMG stakeholders (doctors/nurses)
◦ Managers (FMG/ health and social services centers)
◦ Patients and their family
◦ Partners of case management

Three measurement times: Before (T0), during (T1) and after (T2)
Evaluation of the effects

- Pragmatic randomized experimental design with delayed intervention for the control group
- Measurements taken before and after the intervention (at six-month follow-up)
## Evaluation of the effects

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<td><strong>PROXIMAL OUTCOMES</strong></td>
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<td>Self-efficacy for Managing Chronic Disease</td>
<td>0, 3 et 6 months</td>
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<td>Health habits</td>
<td>Enquête Saguenay</td>
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<td>Quality of life</td>
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<td>Use of services</td>
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<td>Litteratie</td>
<td>Newest Vital Sign (NWS)</td>
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<td>Mental health</td>
<td>Hospital Anxiety and Depression Scale</td>
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<tr>
<td>Multimorbidity</td>
<td>Disease Burden Morbidity Assessment (DBMA)</td>
<td>0 month</td>
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**Economic Analysis**

Two types of analysis:

I. **Cost-effectiveness**
   To compare the relative costs invested and effects of implemented intervention

II. **Benefit Analysis**
   To explore the savings per dollar invested in the implemented intervention in terms of the benefit/cost ratio
Implementation Process

Facilitating factors
- Clinical coordinator involvement
- Continuous KT plan
- Community partners engagement
- Physicians interest in the project
- Use of individualized service plans

Challenges
- Sustainability of changes brought on by a short-term project
- Limited access to specialized resources
- Ethical dilemmas
Identification of Patients

Facilitating factors
- Use of clinical data information system
- List of frequent users for each physician

Challenges
- Clinical information sharing between health centers
- Quality of data
- Cohort vs information in real time
- Variable number of vulnerable patients in each FMG
Role of the PC Nurse Case Manager

Facilitating factors
• Recognized by patients as central role
• Skills and competencies of hired nurses
• Training and support for the nurses
• Important role in the coordination of care

Challenges
• Nurses turnover
• Collaboration of other nurses in the FMG
• New competencies: mental health and pain
Developed Mechanisms of Collaboration

- Interest and involvement of community organizations in collaboration mechanisms
- Involvement of physician in the ISP formulating meeting
- Collaboration agreement with the specialized mental health services, home care services and specialized services
Conditions for success

- Stability of the nursing staff
- Better interprofessional collaboration and inter-organizational
- Specialized services more accessible
  A complete and suitable training for nurse case managers
- Adequate clinical support provided to nurse case managers
- Mechanisms of collaboration
Conclusion

- Integration of case-management by nurses and of self-management support groups into the FMG has the potential to impact patients positively.
- Importance to better know factors to consider in the implementation of case management for frequent users into primary care.