Towards care integration for frail, community dwelling older people: the contribution of case management in the Protocol3 projects

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Frailty day

UCLouvain
What are the demographic previsions in Belgium?

Number of older people ↑
22.1% of the Belgian population will be aged 67 years or older in 2040

↓

Number of frail older person ↑

↓

While today’s health system is focused on particular diseases, these demographic characteristics show that the health system will increasingly need to take care of people with complex needs.
What are the consequences of demographics previsions on the health system?

Older people go back and forth between the primary care and the secondary care

- General practitioners
- Nurses
- Physiotherapists

- Specialists
- Inpatient care
- Emergency

Going back and forth increases the risk of poor continuity and comprehensiveness of care (because of non coordinated decisions in care provision)

One strategy to overcome that problem is to develop case management
What are the results of case management intervention in Belgium?

For Who?

Dyads (older persons & their family carers) in complex situation

→ Due to the disability of the older person
Four disability profiles were used in Protocol 3 evaluation to define the long-term care needs:
  - Older persons with IADL limitations and initial cognitive impairment
  - Older persons with functional limitations
  - Older persons with functional and cognitive impairments
  - Older persons with functional, cognitive impairments and behavioral problems

→ Due to the social situation
  - Level of presence of family carer (cohabitant / non-cohabitant)
  - Level of autonomy
    - Autonomy in decision making
    - Financial autonomy
  - Quality of older person network
What are the results of case management intervention in Belgium?

What effectiveness?

- Clinical outcomes:
  - ↓ depressive status
  - ↑ quality of life

- Use of services:
  - Identification of unmet needs
  - Providing of adequate services (nursing care, ...)
  - ↓ repetitive emergency department visits
  - ↓ use of GP out-of-hours

Classic evaluation of the case management as an intervention failed to find consistent results

→ Different delivery models of case management
→ Non-inclusion of contextual characteristics
The case management as a process

Case management is defined by the Case Management Society of America as “a collaborative process of assessment, planning, facilitation, care coordination, evaluation, and advocacy for options and services to meet an individual’s and family’s comprehensive health needs through communication and available resources to promote quality, cost-effective outcomes”

↓

There is an overlap between some CM functions and the functions of primary care. Thus, some functions are directly influenced by the context and particularly by the visibility of the primary care.

↓

This process must be adapted to the context to be successful.

How are primary care and the secondary care are organized? What socioeconomic characteristics can influence the care accessibility and the autonomy of decision making?
How describe the Belgian context?

- **Database of Inter-Mutualist Agency:**
  - Permanent Sample of persons aged 65 years or older (for the reference year 2013)
  - Representative of the Belgian population

- **Creation of aggregated indicators at municipalities’ level:**
  - Spatial and socioeconomic characteristics
  - Primary care use (GP, nurses, physiotherapists)
  - Secondary care use (specialists, inpatient care, emergency care)

1. To create categories of municipalities sharing similar characteristics in terms of context
2. To describe specific contexts and discuss the implementation of Case Management process
   → Two examples:
     - Brussels Pentagon (including the municipalities: Saint-Gilles, Saint-Josse)
     - Western Flanders (including the municipalities: Ypres, Tielt, Diksmuide, Courtrai, Kuurne, Harelbeke, Menin, Torhout, Ostende, Furnes)
What is the socioeconomic and spatial context?

<table>
<thead>
<tr>
<th>Indicators</th>
<th>Urban high income</th>
<th>Urban low income</th>
<th>Suburbs high income</th>
<th>Suburbs low income</th>
<th>Rural low income</th>
<th>Belgium</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age (median)</td>
<td>78[76-80]</td>
<td>78[77-79]</td>
<td>78[76-80]</td>
<td>79[78-81]</td>
<td>79[76-81]</td>
<td>78[77-80]</td>
</tr>
<tr>
<td>N</td>
<td>61</td>
<td>110</td>
<td>172</td>
<td>164</td>
<td>82</td>
<td>589</td>
</tr>
</tbody>
</table>
Sociodemographic and spatial context:
Brussels Pentagon & Western Flanders

Population clustering

Age (median)
Socioeconomic context: Brussels Pentagon & Western Flanders

- **Brussels Pentagon** groups urban municipalities with a socio-economic status far below the socio-economic status of municipalities included in the group “Urban low income”.
- **Western Flanders** groups mainly suburbs municipalities with a low socio-economic status. The situation socio-economic is however better than in Brussels Pentagon.
## What is the primary care context?

### Primary care clustering

#### Indicators

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Low use</th>
<th>Moderate use</th>
<th>High use</th>
<th>Belgium</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Practitioner (GP)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nursing care</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Physiotherapist</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>50</td>
<td>309</td>
<td>230</td>
<td>589</td>
</tr>
</tbody>
</table>

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![Map of Belgium with primary health care clustering](image-url)
**Primary care context: Brussels Pentagon & Western Flanders**

- **Brussels Pentagon:**
  - N users of GP far below the median of municipalities with a low use of primary care
  - Low use of GP home visit
  - Low use of GP for emergency consultation
  - Low use of nursing care for hygiene tasks

- **Western Flanders:**
  - Almost all inhabitants have a GP
  - GP Home visits are common
  - GP is also consulted out-of-hours for emergency consultation
  - High use of nursing care for hygiene tasks
What is the secondary care context?

<table>
<thead>
<tr>
<th>Indicators</th>
<th>Low use, hospital close</th>
<th>High use, hospital close</th>
<th>High use, hospital far</th>
<th>Belgium</th>
</tr>
</thead>
<tbody>
<tr>
<td>Specialist conventionne (%)</td>
<td>68 [63-72]</td>
<td>78 [72-85]</td>
<td>84 [78-88]</td>
<td>74 [67-82]</td>
</tr>
<tr>
<td>Users more than two speciality (N/1000 hab)</td>
<td>446 [408-488]</td>
<td>526 [472-558]</td>
<td>495 [450-545]</td>
<td>485 [432-537]</td>
</tr>
<tr>
<td>Hospitalized persons (N/1000 hab)</td>
<td>6 [5-8]</td>
<td>6 [5-8]</td>
<td>8 [6-10]</td>
<td>7 [5-8]</td>
</tr>
</tbody>
</table>

| N                                         | 250                     | 242                      | 97                      | 589     |
Secondary care context: Brussels Pentagon & Western Flanders

- Brussels Pentagon:
  → High use of emergency department visits
  → Low proportion of emergency visits requested by a GP (50%)
    → The primary care seems to be Bypassed
    → Financial reasons? Lack of accessibility of primary care?

- Western Flanders:
  → Low use of emergency department
  → 78% of emergency visits were requested by GP
    → The primary care seems played a core role
The number of inhabitants hospitalized at least once a year is slightly higher in Western Flanders in spite of a low use of emergency.

→ The majority of hospitalization are planned in Western Flanders

The number of days spent at hospital during the year is higher in Brussels Pentagon

→ That can be the sign of repeat hospitalizations, inadequate social network or poor level of primary care organization
How the contextual characteristics can influence care trajectory?

Legend:
- Strengthening of Primary care (Nursing care, physiotherapy)
- Specialist consultation
- Planned hospitalization or Unplanned hospitalization but asked by the GP
- Unplanned hospitalization/ emergency visits
In this context (Western Flanders):

→ The majority of needs are covered by efficient primary care.
→ After a sudden deterioration of the patient’s health status, the unmet need can be covered by the implementation of CM process from the primary care.
→ Setting-up the CM should be initiated by the GP.
How the contextual characteristics can help for CM implementation?

In this context (Brussel Pentagon):
→ Older person is treated punctually for accurate problems. The long-term care needs are not covered.
→ The entry point of older person in the health system = hospital
→ The CM process should be initiated by secondary care, after hospitalization discharge
  → risk of increase the low visibility of GP
→ Implementation of CM is questionable... Priority = enhancement of the primary care
Take home message:
For a successful implementation of CM process
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3. The context evolve over time (partly due to the implementation of CM process). That influences the coverage of older people’s needs and the future CM needs.
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4. Therefore, it is a dynamic process. For a successful implementation of CM process, we need to develop adaptive strategies.
Thank a lot for your attention
Take home message: How evaluate?

CM = intervention
→ Evaluation of clinical outcome
  → Mixed result

X

CM = process
→ Evaluation of adaptive strategies
  → Evolution of the care trajectory

2017
2018 ...
2019 ...