Implementation analysis of case management programs for frequent users of healthcare services:
a multiple embedded case study

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NAPCRG Conference

November 2020

Teams

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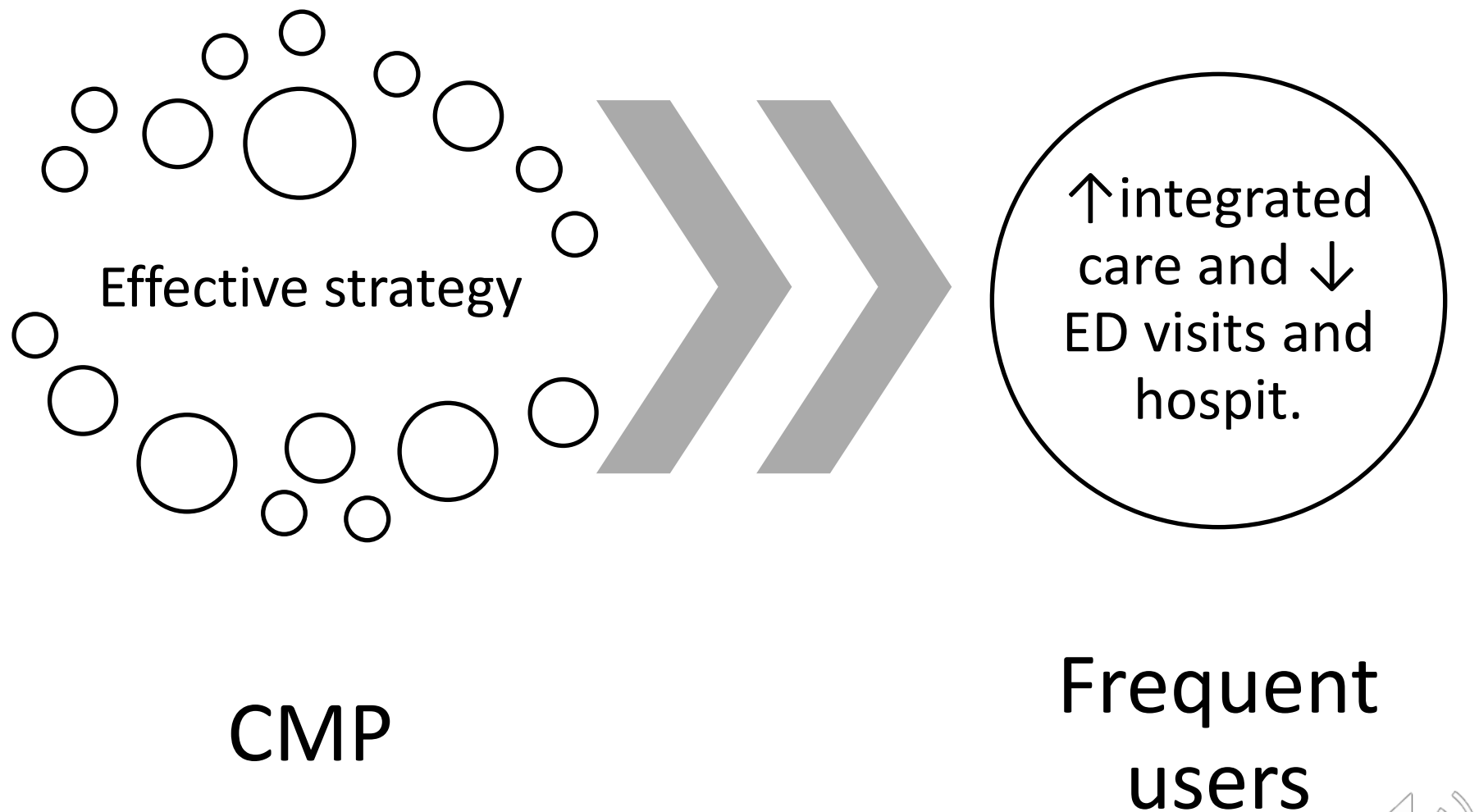
- ✓ Managers: Julie Labbé and Sylvie Massé

Frequent use of healthcare services
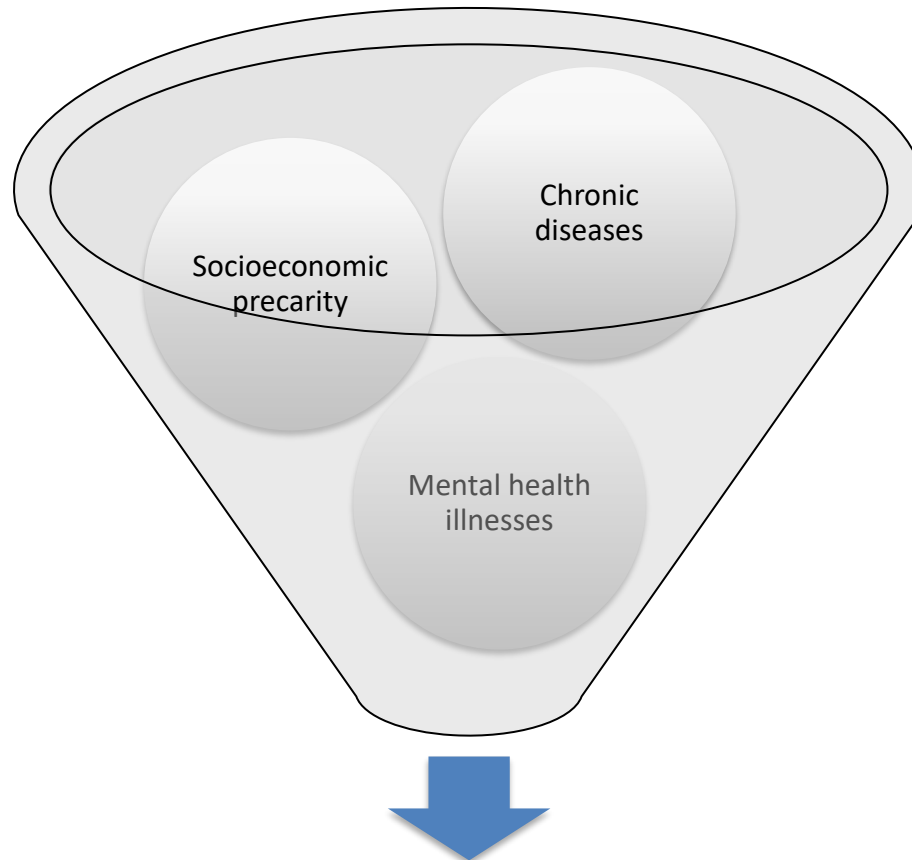
Complex needs (Kreig 2016)

and frequent use of healthcare services (Blumenthal 2016)

Effective strategy

↑integrated care and ↓ ED visits and hospit.

CMP

Frequent users

Altaus 2011; Kumar 2013; Soril 2015

Case management programs (CMP)

Collaborative approach

Coordination and integration

Key navigator

Close collaboration with health, social and community partners
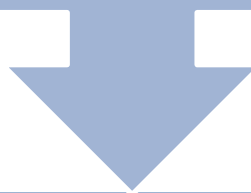
American Nurse Association 2010

Case management programs (CMP)

Strong evidence about effectiveness

⬇

Paucity of evidence about implementation

Hudon 2017

To identify characteristics of CMP and their context contributing to impact on patient and health services use
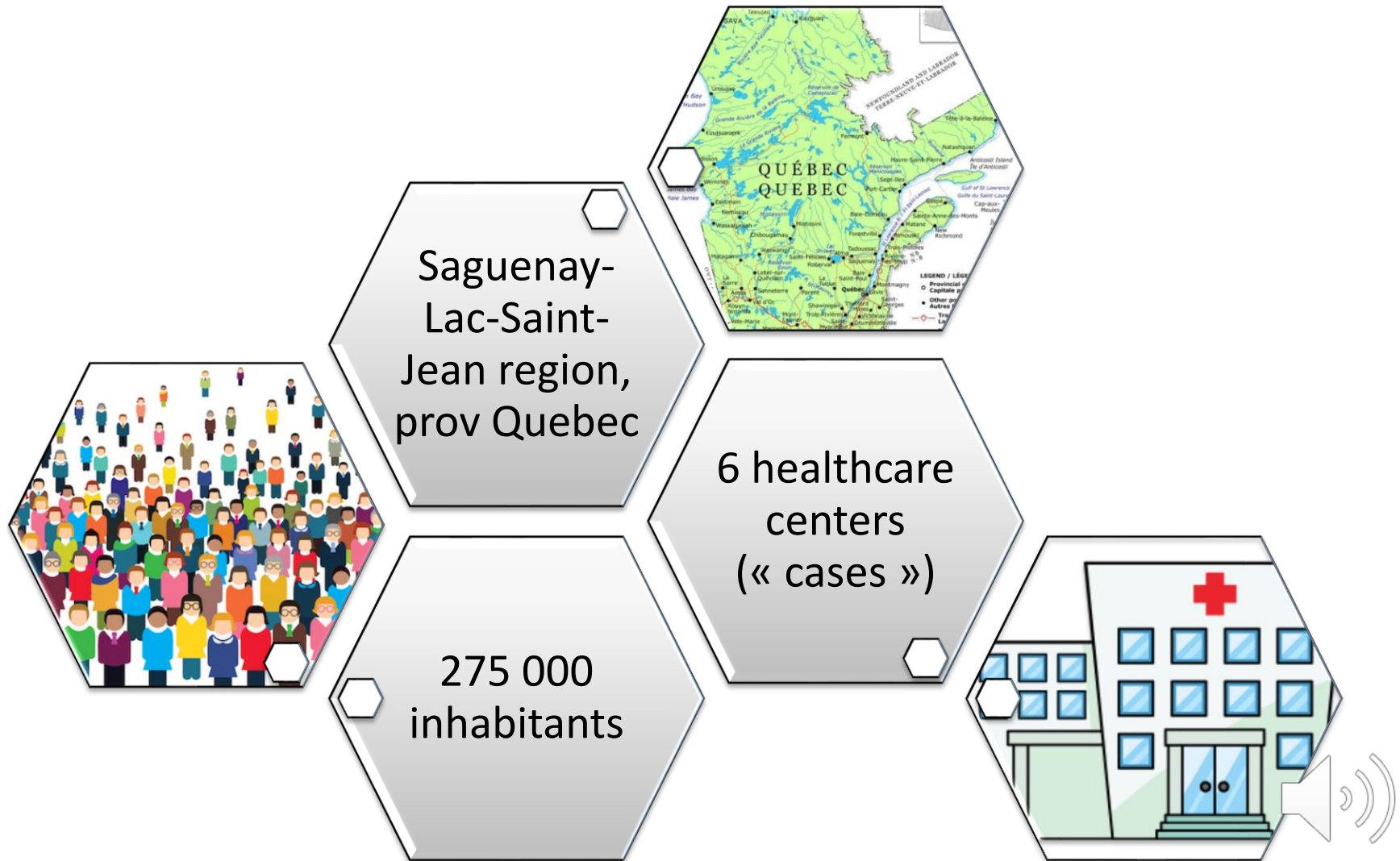
Research questions

✓ What characteristics of CMP…

✓ What characteristics of their context…

      … contribute to impact on self-management,

      patient experience of integrated care, and health

      services use

Multiple embedded case study design (Yin 2014)

Saguenay-Lac-Saint-Jean region, prov Quebec

6 healthcare centers (« cases »)

275 000 inhabitants

Conceptual Framework of Chaudoir et al. (2013)

Structural and environmental factors

Organizational factors
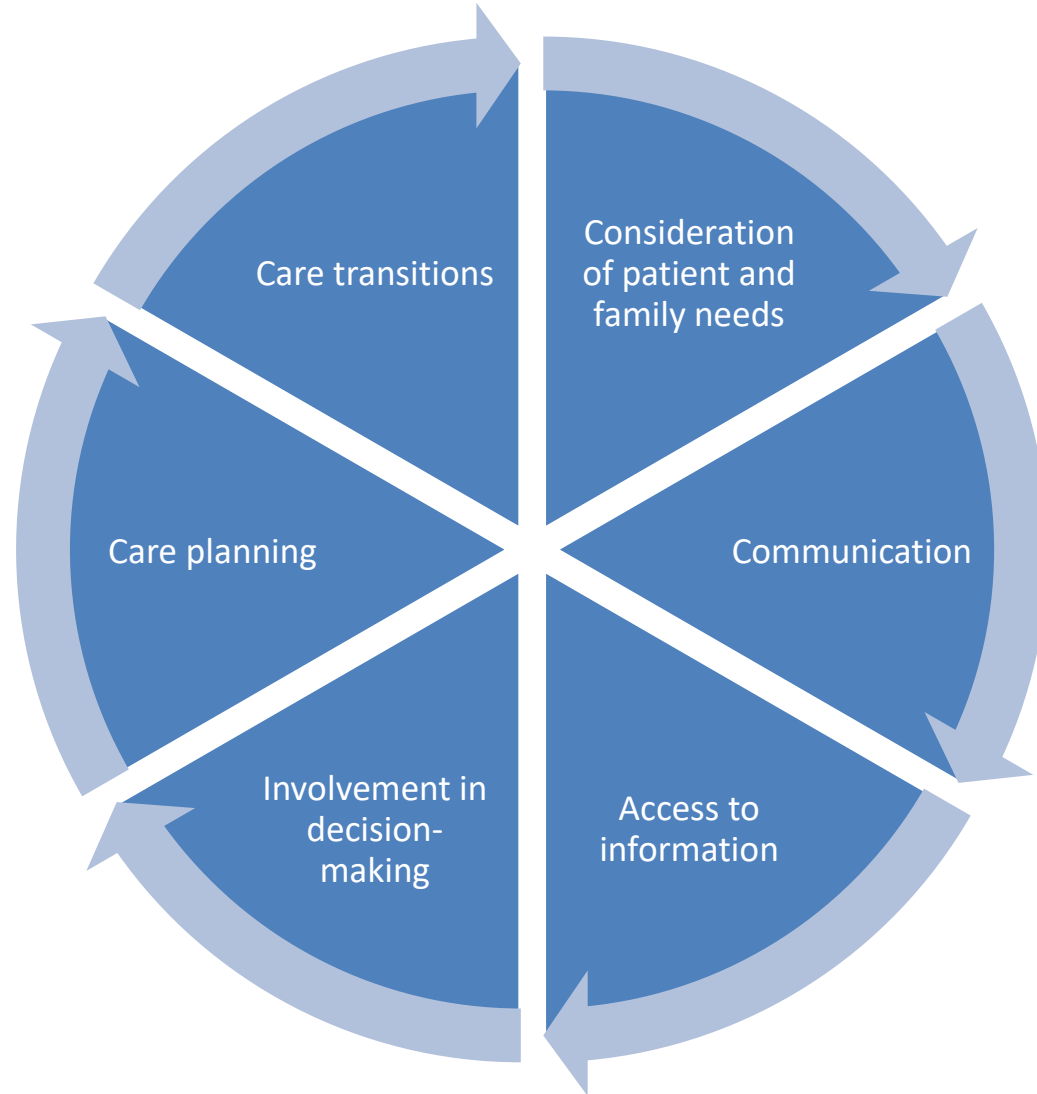
Practitioners-level factors

Patients-level factors

Innovation-level factors

Patient Experience of Integrated Care

(National Collaboration for Integrated Care and Support, 2013)

Implementation strategy (Champagne 2011)
Mixed-method data collection

Individual interviews and focus groups with key actors

Participant observation during quarterly meetings of the CMP committee

Document analysis

Number of frequent users (6 ED visits or more) measured monthly

Fortin 2010; MacQuarrie 2010; Martinson 2010

* Study approved by REB

Analysis

Qualitative data: Deductive and inductive thematic analysis

Quantitative data: Graphic illustrating the number of ED frequent users

Comparison and merging of qualitative and quantitative results for each case. Reporting and comparison of the 6 case histories

Miles 2014; Pluye 2018

Results: participants

✓ Semi-structured interviews (n=56) and focus groups (n=11):
- 24 patients
- 12 case managers and coordinators
- 8 decision-makers
- 12 family physicians
- 25 community stakeholders
- 6 pharmacists

✓ Participant observation:
- case managers' training (n=1)
- committee meetings (n=11) and activities (n=6)

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Qualitative results

	Case A	Case B	Case C	Case D	Case E	Case F
Structural and environmental-level factors						
(+) Proximity between providers		↑ patient support		↑ communication between healthcare professionals ↑ healthcare transitions	↑ communication between healthcare professionals ↑ healthcare transitions	↑ collaboration with medical teams ↑ communication among case manager, managers and healthcare professionals
Organizational-level factors						
(-) Staff turnover and teams' instability		↓ continuity of care		↓ follow-up with healthcare professionals	↓ continuity of care	↓ patient information ↓ continuity of care
(+/-) Information access / Lack of information access			↑ better response to the patient's needs	↓ continuity of care between hospital and clinics	↑ communication among case manager, ED physicians, liaison nurses and mental health nurses	↑ health care transitions
(+) Managers support		↑ services access for patients with very complex needs ↓ use of healthcare services				↑ case manager legitimacy and autonomy ↓ use of healthcare services

Qualitative results

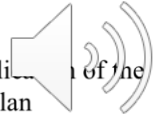| Practitioners-level factors	Case A	Case B	Case C	Case D	Case E	Case F
(+) Case managers leadership (skills, personal qualities, attitudes, previous experience, networking)		↑ access to other healthcare providers; leads to better follow-up; and decreases healthcare use		↑ patient-centred care and improves access to adapted services ↑ continuity of care ↓ ED visits by developing new trajectories of care		
(+) Providers engagement					↑ collaboration, communication and exchange of patient's information	
(+) Inter-professional collaboration	↑ follow-up and a better response to patient needs		↑ communication ↓ healthcare use		↑ access to patient information ↑ continuity of care	↑ communication ↑ patient's knowledge of the care planning ↑ appropriate use of resources

Qualitative results

	Case A	Case B	Case C	Case D	Case E	Case F
Patients-level factors						
(+) Anxious patient	↓ ED visits because of the case manager reassurance					
(+) Patient with good self-management skills		↑ patient's engagement ↓ ED visits		↑ patient's engagement ↓ ED visits		

Qualitative results

| Innovation-level factors						
(+) Individualized services plan (ISP)	↑ patient support and follow-up ↑ patient involvement ↑ access to care	↑ patient care planning	↑ communication	↑ inter-professional collaboration, communication, information exchange and healthcare transitions	↑ healthcare professionals' knowledge of the care plan	
(+) Consideration of patient and family needs		↑ patient adherence to the program ↓ healthcare use		↑ involvement of the patient in decision-making	↑ patient-provider trusting relationship, which strengthens self-management support	↑ patient's involvement in decision-making
(+) Self-management support approach			↑ patient confidence, which leads to decreases their health services use (3)			↑ bond of trust between case manager and patient, which helps to improve communication
(+) Involvement of relatives in decision-making / relatives support	↑ bidirectional exchange of information		↑ knowledge of patient's needs and situation ↑ patient and relatives awareness		↑ patient's adherence to the care plan	↑ response to patient needs ↓ patient health services use ↑ application of the care plan

Quantitative results
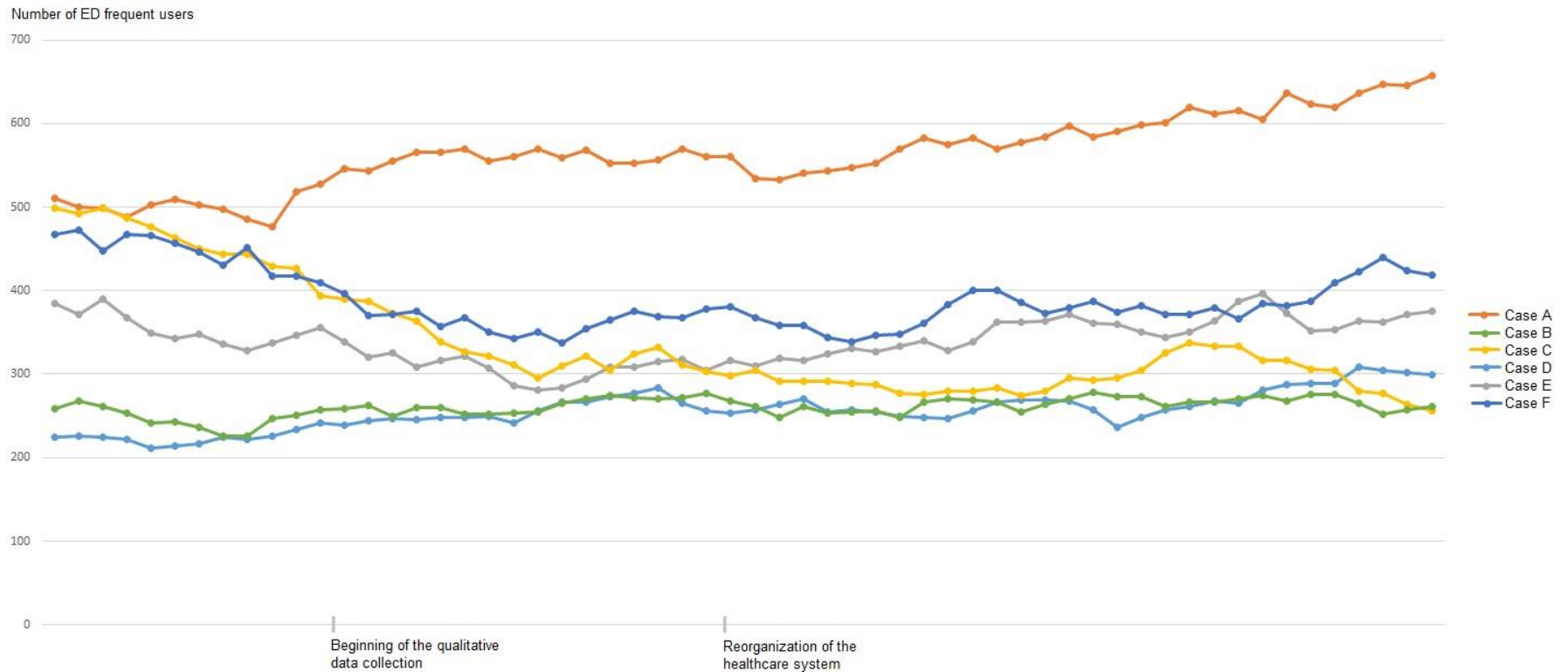
Fig. 1. Number of ED frequent users (6 visits or more in the previous year) for each case

Integrated results

Skills, leadership and experience of the case manager

- Proximity with providers facilitates communication

- Well supported by managers to personalize care trajectories

Staff turnover and instability

- Negative impact on communication and transitions

Strengths and limits

- In-depth description of the settings

- Diversity of the contexts

- Few factors related to patients

- Transferability limited to similar contexts

Key messages

Facilitate skills, leadership and experience of the case manager, as well as proximity with providers

Give good support and autonomy to the case manager

Promote teams stability

Implement a CMP considering patient and family needs and involving them in decision-making

Find a good balance between coordination and self-management support

Questions?