Research Chair in Intergenerational Economics

Funding autonomy support for the elderly at a crossroads

Executive summary

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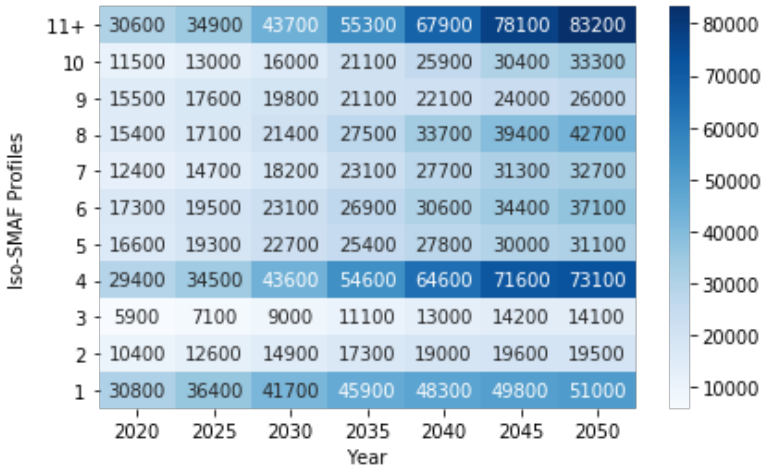
- This working paper describes future needs in terms of autonomy support for the elderly in Quebec and estimates its cost.
- Projections are performed according to the needs associated with Iso-SMAF Profiles and depending on the living environment. Furthermore, simulations maintain the status quo for service needs coverage, meaning that adequacy rates remain constant, and that no constraint is imposed on the supply of services.
    - For instance, if the number of beds required in long-term care centres (CHSLDs in French) is higher than the current capacity, as many additional necessary beds are created.
- Results clearly show that needs will grow more and more quickly during the next two decades (see Figure 1).
    - The number of individuals with the highest needs (Iso-SMAF Profiles of 11 or more) will increase from 30,600 in 2020 to 83,200 in 2050.
    - The number of individuals receiving autonomy support will increase from 195,700 in 2020 to 329,300 in 2035, and to 443,900 in 2050.
- The strongest growth will take place in long-term care centres.
    - The number of residents in these centres will increase from 38,767 in 2020, to 80,911 in 2040, and to 99,591 in 2050. The number of beds in long-term care centres will thus double in the next 20 years.

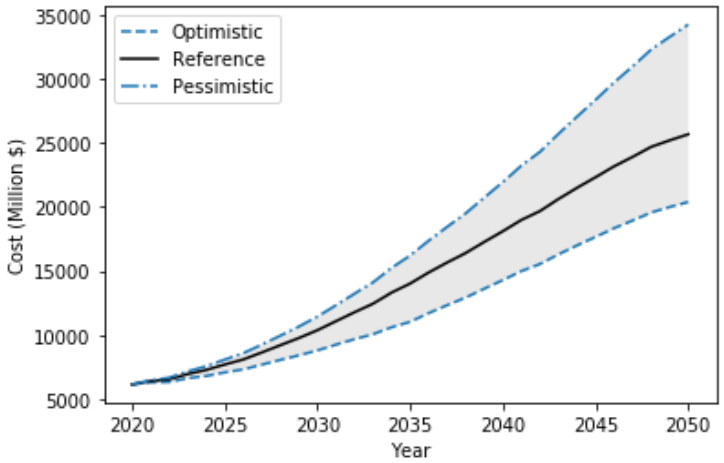
Figure 1. Number of individuals receiving autonomy support by year and by Iso-SMAF Profile



Source: Authors' calculations.

- We add two alternative scenarios to the reference scenario which aim to measure the sensitivity of the projections to our assumptions.
  - An optimistic scenario that considers an improvement of the health status of individuals aged 65 and older.
  - A pessimistic scenario that involves a higher structural annual growth rate[1] (2.6 % instead of 1.6 % in the reference scenario).

Figure 2. Evolution of the total cost of autonomy support for the elderly under the three scenarios (in millions of $)



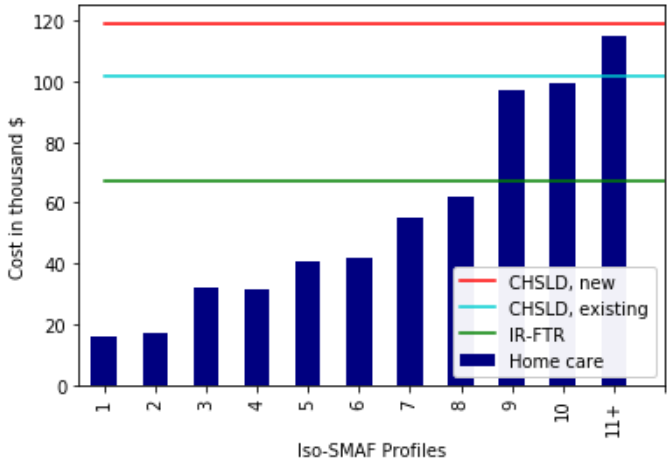
Year	Optimistic		Reference		Pessimistic	
	Amount (M$)	AAGR (%)	Amount (M$)	AAGR (%)	Amount (M$)	AAGR (%)
2020	6,160	-	6,160	-	6,160	-
2025	7,093	2.9	7,710	4.6	8,095	5.6
2030	8,811	4.4	10,387	6.1	11,442	7.2
2035	11,042	4.6	14,023	6.2	16,200	7.2
2040	14,292	5.3	18,104	5.2	21,931	6.2
2045	17,657	4.3	22,311	4.3	28,341	5.3
2050	20,383	2.9	25,662	2.8	34,209	3.8

Source: Authors' calculations.
Note: AAGR: Average Annual Growth Rate every five years (in %).

[1] The structural growth rate includes the growth of a combination of costs, including wages; the evolution of medical technology; and the evolution of the balance between supply and demand. The rate used here is calculated from observed historical rates.

- Whichever scenario is used, results evidence that costs will quickly become prohibitive, even when keeping service levels constant or when assuming improved health for the 65 and older (see Figure 2).
    - In the reference scenario, total costs will be multiplied by 2.3 within 15 years (2035) and by 4.2 within 30 years (2050). Total cost will be multiplied by 3.3 within 30 years (2050) according to the optimistic scenario and by 5.6 according to the pessimistic scenario.
    - These results are in line with MacDonald et al. (2019)[2] who project that "the cost of public care in nursing homes and private homes will more than triple" for the whole Canada in the next 30 years.
- Figure 3 shows total costs by Iso-SMAF Profile and by living environment. It indicates that costs could decrease by reallocating individuals from long-term care centres (CHSLDs) or Intermediate and Family-Type Resources (IR-FTR) to home care.

Figure 3 – Per capita annual costs in 2020 (in thousands of $) by Iso-SMAF Profile and by living environment



Source: Author's calculations.

- A future working paper will explore several solutions to fund autonomy support for the elderly in Quebec and it will compare their economic impacts to the status quo. Such projections should provide new evidence to governments in order to improve the wellbeing of both the users and the taxpayers.

[2] MacDonald, B.J., Wolfson, M., and Hirdes, J. (2019). The Future Co$t of Long-Term Care in Canada. National Institute on Ageing, Ryerson University.

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