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Strategic cost-shifting in long-term care. Evidence from the Netherlands

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ABSTRACT

With the reform in 2015 of the system of long-term care (LTC) in the Netherlands, responsibilities for the provision of social support and assistance were delegated from the central government to the municipalities. Unintentionally, the way municipalities are financed created incentives to shift cost from the local level back to central level. In this paper we examine whether municipalities respond to the prevailing financial incentives by shifting costs to the public LTC insurance scheme. Using data on almost all Dutch municipalities over the period 2015–2019, we estimate that municipalities with a solvency rate below 20% have a 2.5% higher admission rate to the public LTC scheme. Furthermore, we show that the tightening municipal budgets for social care since 2017 were accompanied with about 14% higher admission rates in 2018 and 2019 compared to 2015. The results point to strategic cost shifting by municipalities that can be counteracted by changing the financial incentives for municipalities and by reducing the existing overlap between the local and central care domains.

1. Introduction

In 2015 a major reform of the system of long-term care (LTC) financing and provision in the Netherlands was implemented to make the system more sustainable in view of the rapidly aging population. The former comprehensive public LTC insurance scheme (AWBZ) had generated a system characterized by a relatively high use of formal and institutional care, resulting in the highest public LTC expenditure as percentage of GDP worldwide (3.7 percent in 2017) [1]. This scheme was replaced by a less comprehensive one (Wlz) covering only institutional care and intensive home health care (as a substitute for nursing home care) [2–4]. The other benefits formerly covered by public long-term care insurance (LTCi) were transferred to municipalities and health insurers. Municipalities became responsible for providing social long-term care, while health insurers had to cover the cost of nursing and personal care at home.

The objectives of the reform were: (1) to improve the coordination between the health-related LTC (i.e. nursing and personal care) and medical care (e.g. primary care and hospital care), and between social LTC (e.g. social assistance) and social care and housing, and (2) to reinforce incentives for an efficient provision of care by making health insurers and municipalities responsible and financially accountable for procurement of LTC. By delegating responsibilities for the provision of social support and assistance from the central to the local level, aging-in-place should be encouraged.

Unintentionally, however, the reform also created opposite incentives due to the way municipalities are financed [3]. Since municipalities receive a fixed non-earmarked budget from the central government, they have a strong incentive to shift costs of providing LTC to the public LTCi scheme, which is possible since both domains have partially overlapping and substitutable benefits. Municipalities can do so by directly or indirectly encouraging frail elderly to apply for nursing home care or intensive home health care covered by public LTCi.

To date, however, it has not been examined whether municipalities do indeed respond to the prevailing financial incentives by shifting costs to the public LTC scheme. Therefore, the aim of this paper is to fill this gap. To this end, we constructed a longitudinal dataset including all Dutch municipalities over the period 2015–2019 to estimate the relationship between the financial pressure on municipalities and the admission rate to long-term care covered by public LTCi. Incentives for strategic cost shifting may be especially strong for municipalities with a weak financial position because they may have little financial reserves to compensate (growing) deficits on social care. Hence, we examined whether

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municipalities with a low solvency rate (< 20 percent) were more likely to engage in strategic cost shifting. In addition, as the financial pressure on all municipalities increased over time because municipal budgets were not keeping pace with rising expenditures for social care and assistance, we also examined whether this resulted in an overall upward trend in admission rates to LTC services covered by public LTC services.

This paper is organized as follows. In Section 2 we first briefly describe the background of the decentralization of LTC provision to the municipalities in 2015 and the resulting financial incentives for municipalities and then the methods and data used. The results of our analysis are presented in Section 3 and discussed in Section 4. Section 5 concludes.

2. Materials and methods

2.1. Evidence about cost-shifting between government layers

Cost-shifting between different layers of multilevel governance is found in several countries, having impact on the efficiency and effectiveness of health care provision [5–7]. A study about the reform of the long-term care system in Spain found that the reform fell short to expectations because of strategic cost-shifting between various government layers responsible for LTC provision [6]. The following key elements of the reform were identified that provided opportunities for cost-shifting: (i) an imprecise definition of responsibilities; (ii) a separation between the actor or government level that carries out investments and the actor or level that actually benefits from these investments; and (iii) a lack of alignment between governance arrangements in the two policy fields involved (health and social care) in terms of who is in charge, who regulates them, and how people access services.

2.2. Study context

A key element of the 2015 reform of the Dutch LTC system was the decentralization of social LTC to municipalities, a revision of the Social Support Act (Wmo). Municipalities became responsible for providing tailor-made support and assistance in daily life for people with disabilities and chronic psychic or psychosocial problems. As stipulated in the law, however, municipalities only have to provide this care if people's social network is not capable to provide it. Municipalities have considerable freedom in the way individual care needs are assessed, how care is provided, how prices are set, and which providers are contracted, although court decisions have put some restrictions on the freedom municipalities have [8].

To provide social care, municipalities receive a tax-financed non-earmarked block grant from the national government. This block grant depends on objective factors like the number of inhabitants, low-income households, people over 65, and frequent users of prescription drugs (as an indicator of people's health). The block grant does not depend, however, on the number of people using long-term care and whether this care is covered by public LTCi. Therefore, it is financially attractive for municipalities when people become beneficiaries of public LTCi; municipalities have little financial incentives to prevent frail elderly from needing institutional care or substitutive intensive home care covered by public LTCi.

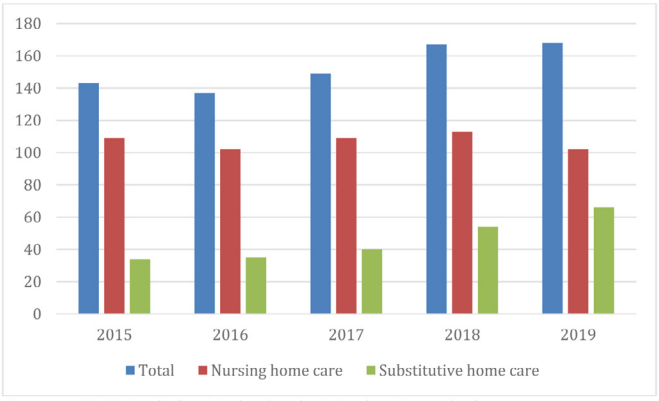
The total budget municipalities received in 2015 from the national government was about 11% lower than the total expenses on the same benefits under the former more comprehensive public insurance scheme (AWBZ). In addition, the existing budget for providing domiciliary care was reduced by 32% [9]. The idea behind these budget cuts was that people could be more effectively urged to use their social networks to provide informal care and that risk-bearing municipalities would have strong incentives to negotiate lower prices and to contract more efficient providers than the regional procurement offices [8]. Furthermore, municipalities were supposed to have better information about the local situation and more instruments to tailor the provision of care and facilities to the specific needs of the municipal population. Although the total budget for all municipalities slightly increased from 2015 to 2018 (from 4.8 to 5.1 billion euros) this increase was about 1.3 billion euro less than the projected expenditure without the reform [10].

During the first two years after decentralization, municipalities on average were able to keep expenditures on social care and assistance within these tighter budget constraints, although there was a large variation in financial results across municipalities [11]. In subsequent years, however, a growing number of municipalities report incurring increasing deficits on providing social support and assistance [12–14]. For youth care, another part of the block grant for social care, municipal expenditures increased especially from 2017 onwards, resulting in a growing deficit of about 0.8 billion euros in 2017 to 1.7 billion euros in 2019 relative to the budget transferred from the government to the municipalities since the 2015 reforms [15].

To alleviate this growing financial pressure, municipalities tried to cut down costs by negotiating higher prices and by imposing strict rules for eligibility [8,16]. Another strategy municipalities can employ to reduce expenditure on social care is to shift costs to public LTCi. This cost-shifting is possible because – to some extent – social support and assistance offered by the municipalities in combination with informal care and personal care provided by district nurses (covered by health insurance) can substitute for institutional care or intensive home health care covered by public LTCi.

Although eligibility for care covered by public LTCi is assessed by an independent agency [17], municipalities have ample room to nudge frail elderly to apply for care covered by public LTCi [3,18]. First, by economizing on the quantity and quality of care, and by limiting investments in prevention, home adaptations and other facilities that may enable people to stay at home as long as possible. Particularly people in need of substantial support and assistance at home may be incentivized to apply for institutional care or substitutive intensive home health care covered by the public insurance scheme. Second, municipalities may urge people to apply for publicly insured care. When the municipality suspects that someone is eligible for nursing home care or intensive home health care covered by LTCi, for instance when people have dementia or are highly dependent on social support and community nursing, it can demand a needs assessment by the independent agency (CIZ). Municipalities can deny care if people do not cooperate with an assessment. Moreover, once someone is eligible for care covered by public LTCi, the municipality can reject a request for support. There is even a commercial entity offering municipalities to screen citizens who may be eligible to care covered by public LTCi. This does not mean, however, that all applications to public LTCi are successful, as inappropriate applications are not likely to be approved by CIZ [19]. According to the Monitor long-term care by Statistics Netherlands (CBS) (see Appendix), the average proportion of applications for care covered by public LTCi per municipality that were rejected by CIZ slightly increased from 12.0% in 2015 to 16% in 2019 (varying between 0 and 30%). This indicates that during our study period an increasing number of people inappropriately applied for public LTCi.

As shown in Fig. 1, the number of people over 65 admitted to nursing home care and intensive home health care covered by public LTCi increased by 17% from 143 per 10,000 in 2015 to 168 per 10,000 in 2019. Whereas the number of people admitted to a nursing home slightly decreased, the number of newly admitted people



Source: CBS Statistics Netherlands, Monitor Langdurige zorg

Fig. 1. Number of people admitted to care covered by public LTC insurance per 10,000 people over 65 from 2015 to 2019
Source: CBS Statistics Netherlands, Monitor Langdurige zorg https://mlzopendata.cbs.nl/#/MLZ/nl/.

opting for substitutive home health care almost doubled (from 34 to 66 people per 10,000 elderly) and this increase is particularly strong in 2018 and 2019.

The increase of intensive home care utilization covered by public LTCi in the period 2016–2020, was accompanied with a similar trend in the number of people that did not want an admission to a nursing home or could not find a place in the nursing home of their first choice (classified as people on a "non-active waiting list"). In the period 2016–2020 this number increased from 7794 to 18,054, with the vast majority of the increase in 2018 and 2019 [20].

2.3. Empirical strategy

Using municipal level data for all Dutch municipalities over the period 2015–2019, we estimate a random effects model to explain the variation across municipalities in the proportion of people over 65 annually admitted to care covered by public LTCi. The model is specified as follows:

$$AR_{m,t} = \alpha + \beta SOLV_{m,t-1} + \boldsymbol{\gamma X}_{m,t} + u_m + \lambda_t + \varepsilon_{m,t}$$

where $AR_{m,t}$ is admission rate to care covered by public LTCi of people over 65 (i.e. number of first-time admissions per 10,000 inhabitants over 65) for municipality m in year t, *SOLV* is a dummy variable denoting whether the solvency rate of municipality m in year *t-1* is low (i.e. less than 20 percent), $\boldsymbol{X}_{m,t}$ is a vector of characteristics of the population of municipality m in year t that are related to the demand for LTC, u_m is a municipality-specific random effect, λ_t is a year effect and $\varepsilon_{m,t}$ is a random error term.

The key variable of interest is the solvency rate. The solvency rate, defined as the ratio of equity and total assets, provides insight in the extent to which municipalities can meet their financial obligations. The Dutch Ministry of the Interior classifies the solvency of municipalities as low (red category), when the solvency rate is below 20 percent. We expect that municipalities with a low solvency rate at the end of the previous year (i.e. for which $SOLV_{t-1} = 1$) are under effective financial pressure to shift costs to public LTCi and therefore are likely to have a higher admission rate to publicly insured LTC (all other things equal).

A second variable of interest is the year effect. As explained in Section 2, since 2017 most municipalities are running deficits on the budget for social care and assistance. Hence, we expect that most municipalities are under increasing financial pressure to shift costs to public LTCi and therefore expect positive year effects from 2017 onwards.

We included several confounding factors that are likely to explain part of the variation in admission rate to publicly insured LTC across municipalities. These are characteristics of the municipal population related to the demand for nursing home care and intensive homecare. Specifically, we included the percentage of people within a municipality being 80 years or older, the percentage of persons aged 80 or older in a municipality that lives alone, the percentage of people over 65 "with a limitation as a result of health problems" and the percentage of households in a municipality with a main breadwinner of 65 years or older with a household income in the lowest three income deciles. The percentage of people of 80 years and older is expected to be positively related to the use of nursing home care or substitutive intensive home health care covered by public LTCi, as this type of care is primarily used by people belonging this age category: in 2019 15.7 percent of people over 80 years used publicly insured LTC, compared to only 1.4 percent of people between 65 and 80 years of age [21]. In addition, the use of institutional care and substitutive home care is likely to be even higher among single households of people over 80 years as there is no partner who can provide informal care. Among the people over 65 years particularly those with limitations as a result of health problems are likely to be admitted to a nursing home or substitutive home care. Furthermore, the uptake of nursing home care is expected to be higher among people over 65 years in households with a low income because they may be less able to stay at home because of less favorable housing conditions and less means to invest in necessary home adaptations. Finally, since there is evidence of LTC use being higher in highly urbanized areas [22], we also controlled for the level of urbanization per municipality, based on a classification by Statistics Netherlands (see Appendix).

We allowed for unobserved differences between municipalities, e.g. differences in culture or supply factors, by including a municipal specific random effect. We estimated a random effects rather than a fixed-effects model because the Hausman test did not reject the random effects assumption, in which case the random effects estimator is more efficient. Statistical analyses were performed in Stata 16.

2.4. Data sources

We used data on 327 of the total number of 355 Dutch municipalities from several open sources over the period 2015–2019 (28 municipalities that merged during the period 2014–2019 were excluded from the analysis). All data sources are freely accessible and appropriate links are specified in an Appendix. Data about the admission rate to publicly insured care per municipality were derived from the Monitor Long-term Care (*Monitor Langdurige Zorg*) published online by Statistics Netherlands (see Appendix). Data about the solvency rate per municipality were derived from an online dashboard by the Ministry of the Interior with key statistics on municipal finances (see Appendix). Finally, data per municipality on demographics, household income, number of elderly people with limitations and living alone, as well as on the level of urbanization were derived from long lasting series provided online by Statistics Netherlands (see Appendix).

3. Results

3.1. Descriptive statistics

The descriptive statistics of our sample of Dutch municipalities are summarized in Table 1. Table 1 shows the differences between municipalities with and without a low solvency rate (< 20 percent). Municipalities with a low solvency rate had significantly more people admitted to care covered by public LTCi, had a higher percentage of older people over 80 years that lived alone, a higher

Table 1
Differences between municipalities with and without low solvency rate.

Characteristics Municipalities	Total *N = 1.577*[a]	Solvency rate ≥ 20% in year t-1 *N = 1287*	Solvency rate < 20% in year t-1 *N = 290*	Difference (p-value)
Admission rate per municipality per 10.000 65+, average (SD)	154.4 (29.5)	152.8 (29.0)	161.4 (30.4)	<0.001
People over 80 years (%)	4.9	4.9	4.8	.328
People over 80 years living alone (%)	51.1	50.7	52.7	<0.001
People over 65 years with limitations (%)	49.7	49.5	50.5	<0.001
People over 65 years with a low household income (% in lowest 3 deciles)	34.3	33.7	36.8	<0.001
Urbanization (1 = high; 0 = low/moderate,%)	28.9	24.2	49.3	<0.001

[a] The number of municipalities is 319 in 2015, 308 in 2016 and 2017, 322 in 2018 and 320 in 2019. Differences over the years are the result of missing data on the solvency rate for that particular year.

Table 2
Estimation results (dependent variable: annual number of admissions to care covered by public LTCi per 10,000 people over 65 years old per municipality).

	Coefficient (Standard Error)	Confidence Interval
Solvency rate (< 20% = 1)	3.79 (1.90)	0.08 – 7.51*
Year 2016	−8.80 (1.59)	−11.91 – −5.69***
Year 2017	2.63 (1.62)	−0.55 – 5.81
Year 2018	20.95 (1.68)	17.65 – 24.25***
Year 2019	19.85 (1.75)	16.42 – 23.29***
People over 80 years (%)	7.86 (0.85)	5.89 – 9.26***
People over 80 years living alone (%)	0.92 (0.27)	1.04 – 1.97***
People over 65 years with limitations (%)	1.07 (0.24)	0.66 – 1.61***
People over 65 years with a low household income (% in lowest 3 deciles)	0.91 (0.16)	0.44 – 1.02***
Urbanization (1 = high; 0 = low/moderate)	6.29 (2.25)	2.73 – 11.60**

* $p < .05$; ** $p < .01$; *** $p < .001$.
R^2 (overall) = 0.38.

Table 3
Estimation results for different critical levels for low solvency.

	Coefficient (Standard Error)	Coefficient (Standard Error)
Solvency (< 15% = 1)	5.08 (2.36)*	
Solvency (< 25% = 1)		0.69 (1.51)
Year 2016	- 8.92 (1.58)***	−9.04 (1.58) ***
Year 2017	2.42 (1.61)	2.27 (1.61)
Year 2018	20.75 (1.67)***	20.58 (1.68)***
Year 2019	19.71 (1.74)***	19.48 (1.75)***
People over 80 years (%)	7.88 (0.85)***	7.94 (0.85)***
People over 80 years living alone (%)	0.90 (0.27)***	0.92 (0.27)***
People over 65 years with limitations (%)	1.06 (0.24)***	1.07 (0.24)***
People over 65 years with a low household income (% in lowest 3 deciles)	0.92 (0.16)***	0.93 (0.16)***
Urbanization (1 = high; 0 = low/moderate)	6.39 (2.24)**	6.78 (2.24)**
	R^2 *(overall)* = 0.38	R^2 *(overall)* = 0.38

* $p < .05$; ** $p < .01$; *** $p < .001$.

percentage of people over 65 years with limitations and a low household income, and were more often highly urbanized.

3.2. Estimation results

The estimation results of the random-effects model are summarized in Table 2. As shown in this table municipalities with a low solvency rate had 3.79 (SE 1.90) more admissions to care covered by public LTCi per 10,000 people over 65 than municipalities with a higher solvency rate. This is equivalent to 2.5% more admissions than the average number of admissions in all municipalities over the years. In the year 2016 the number of admissions was significantly lower, but in subsequent years they were significantly higher, particularly in 2018 and 2019. The year effects were equivalent to a change in the number of admissions of −6.1% in 2016, 1.8% in 2017 (not significant), 14.5% in 2018 and 13.7% in 2019 relative to 2015 (144.7). Furthermore, as expected, municipalities with a higher percentage of people over 80 years, more older people living alone or with limitations, more older people within the lowest income categories, and a high level of urbanization, had significant higher admissions rates to care covered by public LTCi.

3.3. Sensitivity check for different low solvency levels

Our classification of municipalities into the low solvency category is based on the critical level of 20 percent applied by the Dutch Ministry of the Interior. Below this solvency level the financial position of a municipality is considered troublesome. As this level may be a somewhat arbitrary indication of the financial strain experienced by a municipality, we checked the sensitivity of our results for different critical low solvency levels (i.e., 15 and 25%).

Table 3 shows that the coefficient of the solvency rate is sensitive to the chosen low solvency level. A level of 15% results in a higher coefficient (5.08 (SE 2.36)), which is equivalent to 3.5% more admissions than the average admission rate. By contrast, at a level of 25% the coefficient of the solvency rate is no longer significant. These results suggest that the level of 20 percent may indeed provide a good indication of whether municipalities experience ef-

fective financial pressure to shift costs. As expected, a lower level of 15% implies that municipalities with a solvency below this level are under even stronger financial pressure to shift cost, resulting in a higher coefficient. By contrast, when the critical level is raised to 25% the financial pressure on municipalities classified in the low solvency category apparently has no longer a significant effect on admission rates.

The coefficients of the year dummies and confounders are robust; a 5% higher or lower critical solvency level has a small impact on the year effects.

4. Discussion

In this study, we investigated whether municipalities respond to financial incentives by shifting costs to the public LTCi scheme. In particular, we examined whether municipalities with a low solvency had higher admissions rates to publicly insured LTC, and whether an upward trend in admission rates in response to tighter budgets over time could be established.

We found that municipalities with a solvency rate below 20% in the prior year, had 2.5% more admissions per 10,000 inhabitants over 65 years of age. Furthermore, we found strong year effects: compared to 2015, the number of admissions initially decreased in 2016 (about 6% lower), but strongly increased in 2018 and 2019 (about 14% higher). As municipalities initially did not have strong incentives for cost-shifting, the initial decrease in number of admissions to public LTCi may be due to the trend of aging-in-place, that has already been present for decades [4,23,24].

Although the year effects we find are consistent with the changes in the financial situation for municipalities in the social domain, we cannot rule out the possibility that they also capture other effects than the impact of the municipal budgets for social care.

One potentially important effect may be due to changes in the financing of community nursing, for which in 2015 health insurers became financially responsible. Like municipalities, health insurers are also at risk for providing care, and may have incentives to shift cost to public LTCi. However, the incentives for cost-shifting for insurers are much weaker than for municipalities because insurers are largely compensated for additional costs of community nursing by the Dutch risk equalization scheme [3]. Only for very high-cost clients ($>$ €30,000 per year) the compensation by the risk equalization scheme may not be sufficient. So for these individuals, insurers indeed may have incentives for cost shifting, but these incentives are weak in comparison to those for municipalities [3]. Furthermore, these incentives cannot explain why the admission rate to public LTCi is particularly high in municipalities with a low solvency.

Another potential explanation for the increasing number of admissions to public LTCi, might be that since 2018 extra public investments in the quality of nursing home care were made. As shown in Fig. 1, however, the growth in the number of people admitted to public LTCi since 2018 was largely due to a growing number of people opting of intensive home health care, while the number of people being admitted to a nursing home care was comparable to previous years. Hence, it is not likely that the growth in the admission rate to public LTCi can be explained by an improvement of nursing home care.

A third potential alternative explanation for the increasing number of admissions to public LTCi might be an increase in demand as a result of increased attractiveness of small-scale private nursing homes where clients pay for housing in return for a lower (income-dependent) copayment. Although the number of these small-scale private nursing homes substantially increased since the reform [25], this cannot explain the strong growth of the number people using intensive home health care since 2018. Furthermore, while these small-scale private nursing homes are primarily attractive for high income clients, we find that the admission rate to public LTCi is particularly high in municipalities with many older people in the lowest income brackets.

A final potential factor that might have affected the uptake of public LTCi is the strong reduction of the maximum copayment for municipal care that was implemented in 2019. Since these lower copayments most likely had an opposite (i.e., negative) effect on the number of admissions to publicly LTCi, the year effect for 2019 would be an under- rather than an overestimation of the impact of financial pressure on municipalities to shift costs.

5. Conclusion and policy options

The results of our study provide evidence for cost shifting to public LTCi by municipalities in response to financial incentives: firstly, by municipalities with a solvency rate below 20%, and secondly in response to the tightening budgets for social care since 2017. The sensitivity analysis shows that an increase in admissions as a result of a lower solvency rate is only visible when municipalities have a solvency rate of around 20% (or lower). Therefore, the critical low solvency level chosen by the government seems to function as an appropriate signal for the financial strain experienced by municipalities.

Strategic cost shifting by municipalities is likely to result in a misallocation of funds over the different care domains, in less effort by the municipalities to prevent nursing home admissions, and in less investments to accommodate aging-in-place. Furthermore, the policies might not align with preferences of older adults, because for most citizens co-payments for care provided by municipalities and health insurers are much lower than for care covered by public LTCi.

A straightforward way to counteract strategic cost shifting by municipalities is to remove the financial incentives to do so. To this end, the budget allocated to individual municipalities for social support and assistance should be risk-adjusted for the characteristics of the municipal population used in our analysis and should be inversely related to the proportion of frail elderly people in the municipality using and/or being admitted to publicly insured LTC. This would decrease or eliminate the current financial reward for municipalities for not providing care and therefore would reduce incentives to shift costs to public LTCi. In addition, the existing overlapping benefits between the local and central care domains could be largely eliminated by restricting the coverage of the public LTCi scheme to institutional care only, in which case all non-institutional LTC should be covered by health insurers and municipalities.

A general implication for other countries is that when LTC is financed from different sources and governance levels, it is of crucial importance to align financial incentives between these sources and levels and with the country's objectives of LTC policy, and to avoid overlapping benefits between LTC domains financed from different sources.

Declaration of Competing Interest

Peter Alders is also working at the Ministry of Health, Welfare and Sport. The views presented here are those of the authors and should not be attributed to the Ministry of Health, Welfare and Sport.

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Appendix: Data sources

All data are retrieved from freely accessible public data sources, either from Statistics Netherlands (CBS Statline) or from the Ministry of the Interior (www.findo.nl). A complete dataset is available from the authors upon request.

The links to the data sources of all variables used in our model are specified below.

- Annual number of people admitted to care covered by public LTCi (care profile VV) per 10,000 people over 65 years per municipality over the period 2015–2019: https://www.monitorlangdurigezorg.nl/publicaties/maatwerk-publicaties/2021/01/27/personen-met-een-in-2015–2016-of-2017–2018-of-2019-afgegeven-wlz-indicatiebesluit-die-eerder-geen-toegang-tot-de-wlz-hadden
- Solvency rate per municipality per year: findo.nl/dashboard/dashboard/gemeentelijke-rekening-kengetallen/
- Share of municipal population over 80 of age:
- https://opendata.cbs.nl/statline/#/CBS/nl/dataset/70072NED/table?dl=58938
- Number of people over 80 years living alone per municipality: https://opendata.cbs.nl/statline/#/CBS/nl/dataset/71488ned/table?dl=58999
- Share of municipal population over 65 years with functional limitations: https://opendata.cbs.nl/#/CBS/nl/dataset/83674NED/table?dl=5899A
- Share of municipal households with a main breadwinner over 65 years with an income in the lowest three income deciles: https://opendata.cbs.nl/statline/#/CBS/nl/dataset/84866NED/table?dl=58939
- Urbanization level per municipality (levels 1 – very strongly urbanized - and 2 – strongly urbanized are recoded as 1 (high); level 3 – moderately urbanized – level 4 – little urbanized, and level 5 – not urbanized – are recoded as 0 (low/moderate)): https://opendata.cbs.nl/statline/#/CBS/nl/dataset/84378NED/table?dl=1B91E

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