

RESEARCH

Track and Trace of Administrative Costs in the Dutch Long-Term Care System

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Context: Practitioners and politicians alike emphasise the wish to reduce administrative costs (AC) in Dutch LTC, but a robust empirical body of evidence on the components, determinants and value of AC in LTC is absent. Neither has the expert consensus of ways to track and trace AC in LTC been sought.

Objective(s): We investigated whether it is possible to reach consensus on operationalising AC in Dutch LTC. Successively we also explored whether the Dutch LTC reform in 2015 had the intended effect of reducing AC.

Methods: We differentiated between AC for governing and financing LTC (macro), overhead costs of LTC delivery organisations (meso) and AC on the level of professional care delivery activities (micro). We identified possible data sources in grey literature and national accounts. The quality and completeness of identified data and potential determinants of AC were validated by experts via a survey and focus group discussions.

Findings: We were able to reach agreement on how to track AC in Dutch LTC, but current research instruments and data systems are not robust and consistent enough to trace differences before and after the 2015 reform.

Limitations: We did not investigate AC experienced by patients and self-selected participating experts.

Implications: AC concern a considerable share of total LTC spending, but AC are hidden in regular health expenditure statistics. Our study highlights three approaches for a more sophisticated and fact-based policy debate on reducing low-value AC; defining AC on macro, meso and micro levels of the health care system, determining the underlying value/use of activities; and focusing on interactions of AC between system levels.

Keywords: administrative costs; administrative burden; overhead costs; indirect costs; long-term care; healthcare reform

Introduction

Politicians and LTC practitioners often emphasise dissatisfaction with the bureaucracy, red tape or administrative burden that they perceive to be associated with the organisation and delivery of long-term care. Bureaucracy is a serious source of work dissatisfaction among LTC professionals that can ultimately even culminate in patient maltreatment (Ulsperger & Knottnerus, 2007). In the Netherlands, many recent pamphlets from dissatisfied healthcare professionals and interest groups advocate reducing the administrative burden by ‘capping’ either direct overhead costs or the administrative burden of healthcare professionals (Borst & Gamers, 2016; Dappere Dokter, 2020). Members of parliament tend to periodically recommend

an overhead norm too (House of Representatives, 2014, 2016, 2019). Reducing bureaucracy is also framed as a policy priority by the current Dutch minister of health. The programme (*ont*)regel de zorg—(de)regulate care—ought to reduce the administrative burden by removing unnecessary administrative requirements in multi-stakeholder settings (Ministry of Health, 2019a).

This latest programme was set up in the wake of a large reform that aimed to improve the fiscal sustainability of Dutch LTC. In this reform, the Exceptional Medical Expenses Act (AWBZ)—in international comparison, a relatively extensive benefits package of LTC services—was split up into non-residential social care and domestic care and support (financed by municipalities), 24/7 care (financed by regional care offices) and personal care and community nursing (financed by medical health insurance companies). The idea behind these changes was that the appropriate types of LTC would become more integrated with health care delivery. Reducing bureaucracy was another core aim of this reform (**Text box 1**).

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Despite all of this attention, there is no academic consensus on a broad set of definitions on administrative costs (AC) in healthcare. AC concern an opaque construct that can be interpreted in a narrow definition when it solely refers to, typically, filling obsolete forms. However, a much wider definition can also be adopted that defines AC as all indirect costs associated to healthcare or LTC, with many shades of grey in between this narrow and wide definition. The available literature on AC in healthcare and LTC is heavily skewed towards health care, with hardly any study investigating administration in LTC. The studies on AC in health care indicate that AC take up a considerable share of total spending. Costs borne by organisations that finance and govern healthcare alone constitute around 3% of total health expenditure on average in OECD countries (Hagenaars et al., 2018). These macro level AC omit the AC of healthcare delivery organisations and the administrative activities of healthcare professionals (meso and micro levels), and therefore represent an underestimation of the total share of AC in healthcare spending. No internationally comparable periodical data collections exist on the meso and micro levels, but studies show that AC may be much higher here. Himmelstein et al. (2014), for instance, found that overhead costs of hospitals were approximately 20% and 25% in the Netherlands and the USA, respectively. Observational studies conducted in different settings find that physicians spend 8% to 27% of their time on documentation activities (OECD, 2017a).

Proper data systems and intelligence on the total size, components and determinants of AC in LTC are a precondition to formulate and evaluate policies aiming to reduce AC. However, AC are not easy to demarcate. Furthermore, even if a standard set of AC components were available on the macro, meso and micro levels, it should be taken into account that not all AC represent waste. In fact, many administrative activities are vital for the functioning of the LTC system. For instance, pooling information on SARS-CoV-2 infections in nursing homes can be seen as an administrative function, but it is vital for evidence-informed decision making during the SARS-CoV-2 pandemic. Also, continuity of LTC delivery requires

administration of a patient's status to ensure a proper transfer from one caregiver to another. Still, terms like bureaucracy, red tape or administration are generally perceived negatively. This asks for a more thorough empirical exploration and operationalization, which is the objective of this study.

Objective

We have contributed to the gaps in the scholarly literature on AC in LTC by investigating whether it is possible to reach consensus on operationalising AC in Dutch LTC. We have analysed the completeness and quality of available data and validated our operationalisation of AC in Dutch LTC with a group of experts. With these analyses, we assessed whether it is possible to track the total size, components of, drivers of, and barriers for AC in LTC, in addition to tracing whether the Dutch LTC reform in 2015 had its intended effect of reducing AC.

Methods

Study scope

To our knowledge, this is the first systematic attempt by a group of experts to reach consensus of ways to trace and track AC in LTC in the Netherlands and to assess the completeness and quality of available data. This required us first to deploy an initial demarcation of AC and LTC. We initiated our study with a wide definition that essentially entailed all indirect costs associated with LTC. We then analysed more specific definitions used in existing studies and data sources.

We demarcated LTC by including those sectors that were part of the 2015 LTC reform in the Netherlands. This means that we investigated the AC of providers of 24/7 care for older persons and home care (VVT), residential care for people with a disability (GHZ) and domestic care and support (RIBW), in addition to the costs of organisations that finance and govern these sectors. We excluded AC borne by patients, including those who buy and organise their own care with a publicly financed personal budget, in addition to AC borne by providers who were only indirectly affected by the reform. This led to the taxonomy shown in **Table 1**.

Text box 1: Long-term care reform in the Netherlands in 2015.

The 2015 long-term care reform in the Netherlands focused on de-institutionalisation and encompassed a normative reorientation that made non-residential social care a provision instead of a right. Municipalities were to finance social care, under the assumption that this would reduce bureaucracy as municipalities know the local situation better and could therefore make the wants and needs of clients central, rather than the rules and customs of LTC delivery organisations and regional care offices (Maarse & Jeurissen, 2016; Ministry of Health, 2013). The Exceptional Medical Expenses Act (AWBZ) was replaced by the Long-Term Care Act (WLZ), covering 24/7 care for older persons and persons with a disability and long-term mental healthcare. The WLZ remained a responsibility of regional care offices. Health insurance companies became responsible for body-related personal care and community nursing under the Health Insurance Act (Zvw). All other non-residential (social) care, in addition to domestic care and support, became part of the Social Support Act 2015 (WMO) to be executed by municipalities (Maarse & Jeurissen, 2016; Kroneman et al., 2016).

Data collection

For the macro level explorations, we were able to use the health expenditure database of Statistics Netherlands. We analysed what Statistics Netherlands currently reports under the internationally recognised function of ‘governance, and health system and financing administration’. We then attempted to identify governing and financing-related expenditures that could potentially be added to this function by investigating two residual categories in the health expenditure database of Statistics Netherlands, in addition to the annual budget of the Ministry of Health.

We deployed a snowballing technique in the grey literature for the meso and micro levels. Official recent documents in which the Ministry of Health reports to the Dutch parliament about AC in LTC were used (Ministry of Health, 2019a; Ministry of Health, 2019b). This identified several reports of consultancy firms, research institutes and interest groups (Berenschot, 2019a & 2019b; De Veer et al., 2017; KPMG, 2019; Verest et al., 2019; VvAA, 2019).

Based on the aforementioned data collection, we operationalised a construct for AC in LTC. This draft construct was validated through a survey and follow-up focus group discussions with Dutch experts who collectively covered the different areas of expertise on AC at the macro, meso and micro levels. With these steps, we aimed to reach consensus on operationalising AC in Dutch LTC.

Expert validation – survey

A detailed web-based survey was distributed to purposely selected Dutch experts in the field of administration in healthcare. See appendix A for the complete survey (in

Dutch). The objective was to validate and reach consensus on our suggested operationalisation of AC in LTC, to weigh the completeness and quality of data and to have experts suggest potential determinants. The sample included members of a health statistics expert group that Statistics Netherlands consults periodically, along with additional experts from universities, research institutes, policymaking institutions and consultancy firms involved in LTC. Non-responders were sent reminder e-mails every two weeks, up to two in total. We reached out to 61 experts, 14 of whom completed the survey. See **Table 2** for respondent characteristics.

The survey was structured in macro, meso and micro sections and contained quantitative and qualitative items. The macro section contained a separate module on municipalities because these items required detailed knowledge. Respondents could omit sections if they deemed their knowledge to be insufficient. In all three sections we first described the results of and definitions used by identified data sources, in addition to potential strengths and weaknesses. Respondents were then asked to weigh the quality of these data and to identify additional data sources. Respondents were finally asked to mention determinants of AC. The responses to the survey items delivered descriptive statistics and some qualitative information which are presented in appendix B.

Expert validation – focus group discussions

After completing the survey, respondents were asked to participate in a focus group discussion. We held two web-based meetings of 1.5 hours: one with two survey respondents and two research team members, and one with four respondents and four research team members. The objec-

Table 1: Taxonomy of administrative costs in long-term care used in this study.

Macro	Total operational costs of organisations that govern and/or finance LTC, such as the Ministry of Health, social care departments of municipalities, regional care offices, relevant autonomous governmental bodies (<i>Zelfstandige Bestuursorganen</i>). The total costs of these organisations are seen as AC, as none of these organisations directly delivers care.
Meso	Overhead costs of providers of 24/7 care for older persons and home care (VVT), residential care for people with a disability (GHZ) and domestic care and support (RIBW). Encompasses functions such as governance, management, communication, secretarial work, policy advice, legal advice, financing & administration, ICT, and HR.
Micro	Time spent by LTC professionals on tasks other than direct patient care, such as clinical and administrative documentation and meetings about topics other than patient care.

Table 2: Characteristics of consulted experts.

	Survey respondents	Survey respondents who also participated in the focus group	Survey respondents who completed the macro level section	Survey respondents who completed the meso level section	Survey respondents who completed the micro level section
Policymaking institutions	2	2			
University	1	1			
Research institutions	3	1			
Interest group	2	0			
Consultancy firm	0	2			
Total	8	6	7	7	13

tive was to refine our understanding of how consensus can be reached on the operationalisation and measurement of AC in LTC and to explore its determinants. Both meetings were structured with slides of survey findings at the macro, meso and micro levels to ensure that all levels were given appropriate attention. Extra attention was given to issues with a lack of consensus among respondents. See appendix B for the slides that were used (in Dutch).

The setup of the focus group discussions was shared with participants prior to the sessions, together with their original individual survey responses. The discussions were video recorded after participants consented that the recording would be used solely for accurate reporting. Immediately after each discussion, the first author drafted a report that highlighted central themes. These reports were distributed to participants to triangulate whether these were the central themes. The anonymised version of these reports (in Dutch) can be found in appendix C. The reports were then discussed several times with the whole research team to identify general themes. The first author then drafted the findings section on the focus group discussions, which was discussed several times by the research team to ensure it adequately represented the interpretation of the whole research team. Ample attention was paid to select appropriate quotes to ensure these reflect the identified themes best.

Findings

We present the most important findings for the macro, meso and micro levels separately. In these sections, we present the identified data sources and how experts weighed their completeness and validity. These passages also present determinants of AC as suggested by respondents. A complete overview of the survey findings can be found in appendix B. The findings section concludes with themes identified during the focus group discussions. We do not separately present these for the macro, meso and micro levels because of the observed overlap in themes across all levels.

Macro level – data sources and survey responses

Under the function *beleid en beheer*, Statistics Netherlands includes organisations and activities concordant with the internationally defined SHA function of ‘governance and health system and financing administration’ (CBS.nl, 2020a; OECD, 2017b). Two components make up this function: (1) activities necessary for the design, operation, management and control of healthcare policy and (2) activities necessary for managing the process of healthcare financing. Statistics Netherlands operationalises this by including the costs of the organisations shown in **Text box 2**.

With the Statistics Netherlands definition, 2,426 million euros was spent on macro level AC in 2018 (excluding costs for supplemental insurance). From 2011 to 2018, these costs have increased by 185 million euros. These figures cover the whole healthcare system. All the included organisations also enact tasks unrelated to LTC, except for regional care offices and the CIZ that solely cater for LTC. We investigated whether costs of these organisations can be apportioned to LTC using their annual reports, but the level of detail is not sufficient for such a bottom-up approach. An alternative top-down approach is possible by estimating the share that LTC takes up in the total work of these organisations.¹ In all, 34–36% of the costs of the Ministry of Health were apportioned to LTC, for instance, because LTC takes up a bit more than one third of total LTC spending. This led to LTC-related macro level AC of 772 million in 2011 and 834 million in 2018, equating to almost 3% of the total LTC budget in both years.

A weak point in this analysis is that the AC of municipalities have to be estimated, because municipalities do not report LTC-specific AC. For this estimate, Statistics Netherlands assumes that the AC of municipalities increased by 4% from 2014 to 2015. However, in reality, the increase may have been larger, because the 2015 reform increased the number of financiers from 25 healthcare offices to almost 400 municipalities. This may have caused a loss in economies of scale. Yet, without valid and reliable data on these costs, no conclusion can be drawn on the effect of the 2015 reform among municipalities.

Text box 2: Organisations included under macro level administrative costs in the health expenditure database of Statistics Netherlands.

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- Ministry of Health, Welfare and Sport (solely personnel costs)
 - Statistics Netherlands (CBS), health statistics department
 - Health and Youth Care Inspectorate (IGJ)
 - National Health Care Institute (ZiNL)
 - Dutch Healthcare Authority (NZa)
 - Body for the Settlement of Healthcare Organisations (*College Sanering Zorginstellingen*)
 - Central Administration Office (CAK)
 - Care Assessment Agency (CIZ)
 - Regional Care Offices
 - Healthcare insurance companies (costs for mandatory insurance is reported separately from costs for supplemental coverage)
 - Municipalities (estimates for youth care, social care-WMO and public health)

A more general disadvantage of this approach is that it does not allow us to see specific effects of the 2015 reform, because costs are apportioned generically. This is not the case for the AWBZ/WLZ, which mostly concerns the spending of regional care offices and the CIZ. **Figure 1** shows how this spending category increased in relative terms just before 2015, the year of the reform. Although it also increased in 2017, during our analysis we discovered two omissions that explain this specific hike. First, costs for distributing personal budgets were incorrectly not reported under the AWBZ/WLZ financing scheme before 2017. Second, the costs of CAK were reported under this scheme, but this should not have happened, as CAK took over several tasks of the ZiNL that were unrelated to LTC in 2017. If we correct for these omissions, costs are still 0.3–0.4 percentage points higher after 2015 than they were beforehand. Respondents related this to decreasing economies of scope when regional care offices became responsible for fewer tasks after the reform.

Figure 2 lists activities that could potentially be seen as macro level AC but are currently not reported as such by Statistics Netherlands. There was a lack of consensus among respondents as to whether these activities should be included. **Figure 2** shows that this was especially the case for consulting services, waiting list mediation, funds related to social care or debt mediation and representation of informal carers. No respondent disagreed that care improvement programmes subsidised by the Ministry of Health could be seen as AC, but many did not know what to do with this category. Respondents did agree that representation activities and research and advice for policy and practice were the most important missing activities.

However, adding representation and research activities can cause double counts because interest groups and research institutes are to a large extent financed by providers, financiers and governance institutes (which are already part of health expenditure statistics). Longitudinal data of these organisations' spending patterns can nevertheless indicate an effect of the 2015 reform. Therefore,

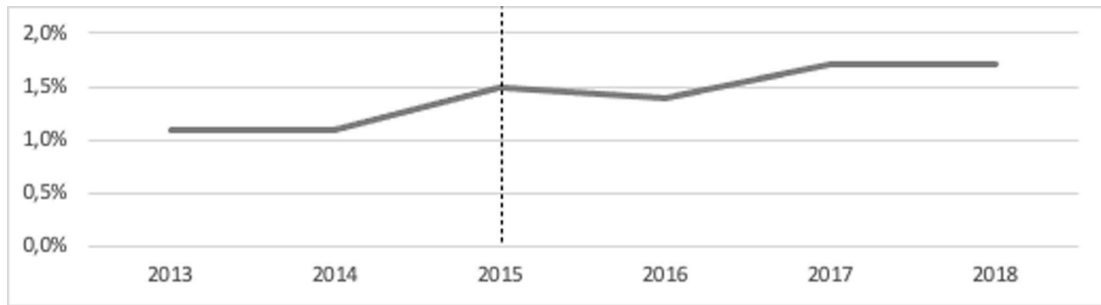


Figure 1: Costs related to governing and financing AWBZ/WLZ, % of total AWBZ/WLZ spending (CBS.nl, 2020b). The vertical line represents the 2015 reform.

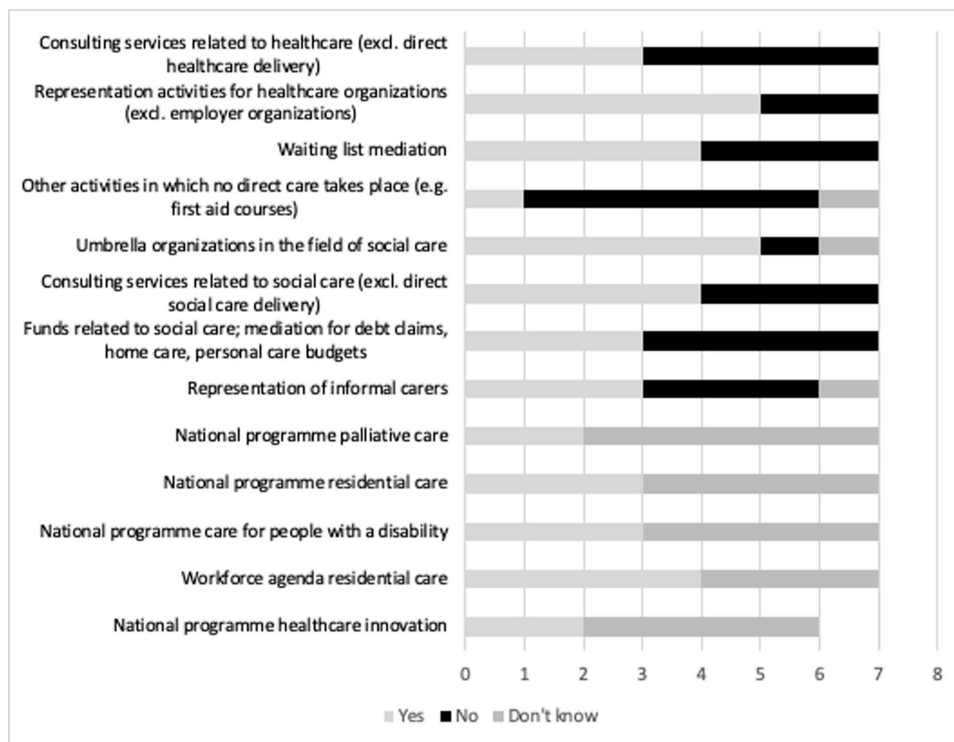


Figure 2: Survey respondents' views on including activities as administrative costs, that are currently not reported as such in Dutch national accounts. See appendices A & B for a more detailed description of these activities (in Dutch).

we investigated the annual reports of the Association of Netherlands Municipalities (VNG), Vilans (a research institute focusing on LTC) and LTC-related research programmes funded by the Netherlands Organisation for Health Research and Development (ZonMw). **Figure 3** shows that the budget of the VNG increased prior to the 2015 reform. According to respondents, this was caused by the shift of responsibilities towards municipalities in 2015. The budgets of Vilans and ZonMw did not show a significant change around 2015. The budget of Vilans did increase considerably from 2010 to 2018, and ZonMw spending increased considerably in 2019. Respondents indicated that these findings were not so much related to the reform. Rather, they should be seen in the light of increasing attention towards quality of LTC, as this led to investment in health services' research.

Meso level – data sources and survey responses

We identified two potential data sources. First, large LTC delivery organisations are required to report the share of personnel working with patients and in support func-

tions in their annual reports (Ministry of Health, 2019b). Statistics Netherlands used to report these figures but stopped after identifying several inconsistencies (e.g., organisations reported more years of employment than the number of employees would allow). Six respondents agreed that these data are currently unusable, and one respondent partially agreed. However, most respondents indicated that it is, in principle, possible to come up with a valid figure.

A second stream of data has been collected with the Berenschot benchmark care (2019b) since 2011. LTC delivery organisations complete a voluntary survey that defines AC as general administrative functions (e.g., board of directors, secretarial support), care management (e.g., LTC managers who spend at least half of their time on management) and facility-related functions. Appendix A describes this definition scheme in more detail. **Figure 4** shows that overhead costs in the VVT have remained similar. A slight decrease in costs can be observed in the GHZ. The overhead costs of RIBW organisations are more volatile.

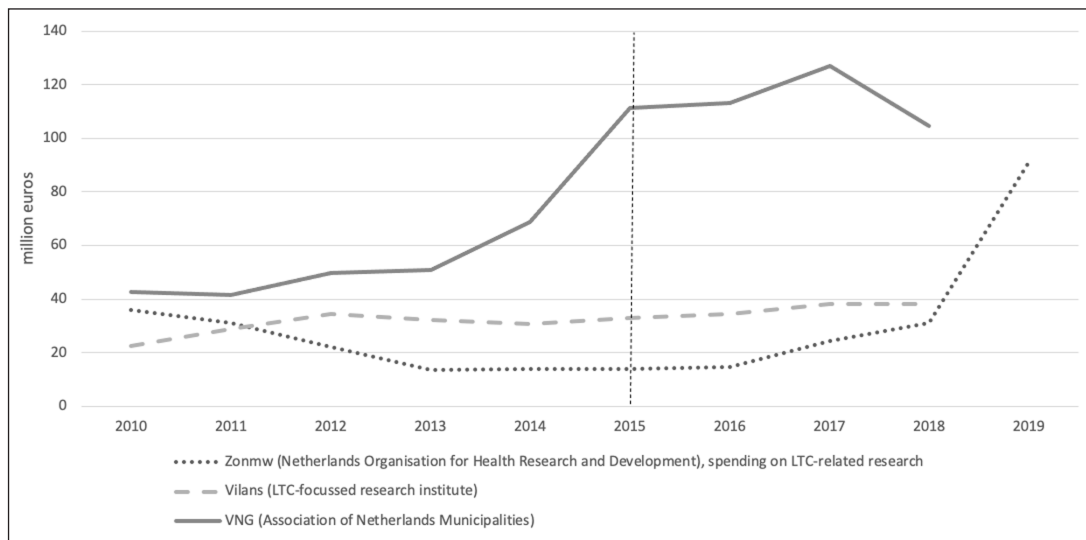


Figure 3: Organisational costs of a selection of relevant interest groups and research institutes in Dutch long-term care. Source: annual reports of included organizations. The vertical line represents the 2015 reform.

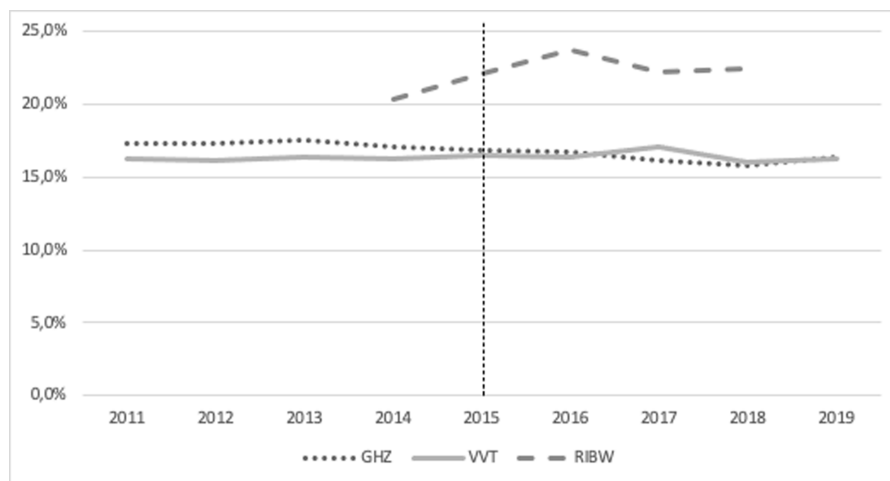


Figure 4: Overhead costs of providers of 24/7 care for older persons and home care (VVT), residential care for people with a disability (GHZ), and domestic care and support (RIBW). Source: Berenschot (2019b). The vertical line represents the 2015 reform.

The face validity of these figures appeared high to us because the definition scheme is well thought out. We were less positive about the generalisability. Berenschot includes 11% of all GHZ delivery organisations, 6% of VVT and 29% of RIBW organisations. As a share of total expenditure, this equates to 44% of total spending on GHZ and 30% of total VVT spending, meaning that larger organisations are overrepresented. This is probably especially the case in the home care sector, which encompasses many smaller organisations and self-employed providers (Kroneman et al., 2016). Also, participation is voluntary and costs organisations 4,000–6,000 euros. Though this makes the figures reliable, it might introduce a selection bias. Respondents were not explicit about the validity of the Berenschot benchmark care. Four respondents indicated that they did not know, one partially agreed and two agreed with our conclusion that validity seems high. Respondents did confirm that smaller LTC delivery organisations seem underrepresented.

Potential drivers of meso level AC included the 2015 reform that caused a loss in economies of scale because auditing requirements by financiers were not streamlined. Automation and self-management of LTC professionals were mentioned as barriers. Respondents mentioned not only that generic austerity led to a more critical view of overhead costs, but also that investment in primary personnel could decrease the share of overhead costs through a denominator effect.

Micro level – data sources and survey responses

For the period around 2015—when the LTC reform took place in the Netherlands—we identified survey-based reports of large consultancy firms (KPMG, 2019; Berenschot, 2019a), representatives of healthcare professionals (VAA, 2019) and the Netherlands Institute for Health Services Research - Nivel (De Veer et al., 2017; Verest et al., 2019). There are large differences in number of participants, definitions used and sectors covered, but a common theme is that the self-reported time spent on administra-

tion is 8–20 percentage points higher than the amount of time LTC professionals find acceptable for administrative tasks. The studies that provided the most useful and reliable longitudinal data are shown in **Figure 5**. Interestingly, the Berenschot figures show an increase from 2016 to 2019, but this is not the case for the Nivel figures. Respondents had no explanation for these opposing results. See appendix A, page 4–6, for more detailed results.

The respondents addressed three mean weaknesses in the available data. First, apart from one Nivel study (Verest et al., 2019), all surveys solely investigated the administrative burden. This could introduce a selection bias when opinionated professionals are overrepresented. Most experts agreed with this observation (**Table 3**, column 2). Second, a valid trend series dating back before 2016 is absent, making it impossible to see whether the 2015 reform had any effect, as there is no baseline measurement. We suggested that a more valid time series could be realised by including items on administration in broader periodical surveys. Experts reached no consensus on this idea (**Table 3**, column 3), because it would not eradicate other methodological problems, such as the fact that surveys measure the perceived rather than the real time spent on administration. Third, few studies differentiated between administrative tasks (a heterogeneous set of activities). Experts agreed that administrative tasks should be differentiated more to identify tasks that are wither obsolete or less related to care delivery itself (**Table 3**, column 4). The survey listed an approach to differentiate administrative tasks that was published in an OECD report (2017a, page 244). Respondents liked how it differentiates financial, organisational and clinical documentation but suggested adding communication (e.g., calling around for an LTC bed), contract negotiations and certain types of education.

Respondents highlighted numerous determinants of AC at the micro level. An important driver related to the reform was that there was an unclear delegation of responsibilities shortly after the reform. Other determinants

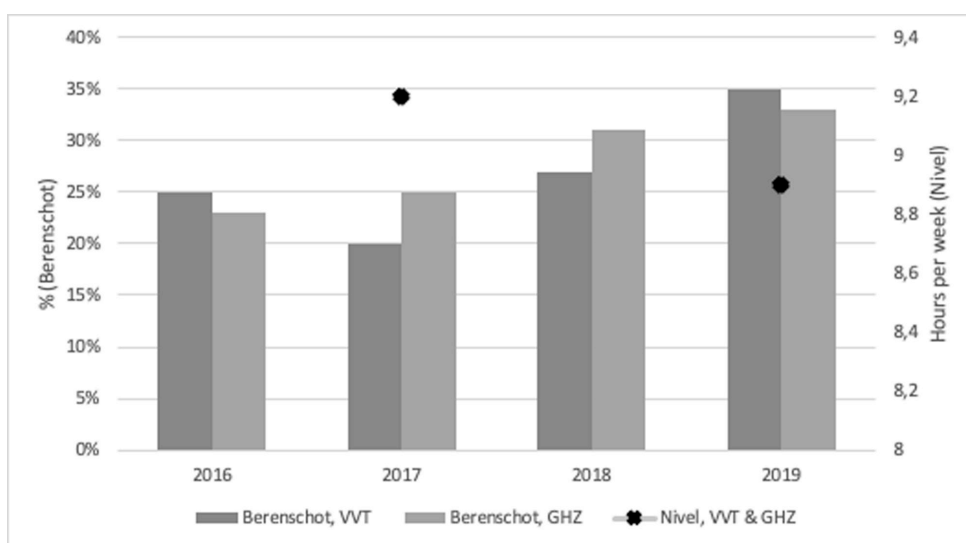


Figure 5: Self-reported time spent on administrative tasks by professionals working in 24/7 care for older persons and home care (VVT) and residential care for people with a disability (GHZ). Sources: Berenschot (2019a) & Nivel (De Veer et al., 2017; Verest et al., 2019).

Table 3: Survey responses to statements as regards the quality of studies on self-reported time spent by long-term care professionals on administration in the Netherlands.

	Most existing survey studies investigating the time spent by long-term care professionals on administration know a selection bias, because they are about administration exclusively	A valid time series of administration by long-term care professionals can be constructed if items are added to broader periodical surveys among healthcare professionals, thereby omitting selection bias	Surveys among long-term care professionals should differentiate components of administrative tasks
Agree, this causes an overestimation	5	–	–
Agree, this causes an underestimation	0	–	–
Agree	–	1	9
Partially agree	6	6	3
Disagree	0	3	0
Don't know/no opinion	2	2	1

were either unrelated or only indirectly related to the reform, and these included problems related to obtaining patients' medical information, registrations for quality monitoring, ineffective ways of organising care delivery and stricter privacy regulations. Often noted too was the repeated negative attention towards the topic, which is likely to increase the *experienced* burden. Potential barriers included automation (i.e., electronic patient records), sessions where stakeholders together identify obsolete registrations, alternative ways for quality monitoring of (e.g., a minimal set of quality indicators) and classifying healthcare services, flexible care delivery organisations, uniformity in auditing by financiers and multi-year contracts.

Themes identified during focus group discussions

We identified three main themes. First, there was consensus that there is a lack of consensus over what AC actually are. For the macro level, participants highlighted that interest groups and research institutes should be added, but participants found it difficult to draw the line where AC at this level should stop. Participants mentioned that meso-level AC may be the easiest to demarcate and measure of all three levels. This is evidenced by the fact that a considerable number of LTC organisations already participate voluntarily in the Berenschot benchmark. The most substantial lack of construct validity was apparent at the micro level. Participants indicated that terms like 'administration' and 'quality reporting' can have a different connotation for regulators, financiers and managers, as compared to professionals.

Participants offered guidance on methods to improve construct validity. They thought that Statistics Netherlands should continue to assign costs in a pragmatic way for the macro level, but its decisions should be based more on the type of activities instead of the types of organisations, as is the care currently. Participants thought it was vital to invest in innovative research methods for the micro level, not least because there has been prolonged negative attention towards administration among professionals,

which makes surveys less reliable. Observational studies, in which healthcare professionals report what they are doing at random points in time, were suggested. As one participant highlighted:

I recognise the shaky construct of administration. People define and interpret it differently. From my practice-based point of view, I think it would be useful to measure it in a different way [than with surveys], because professionals have created some sort of fatigue towards surveys.

A second theme was that administration is a key element of any health system and should therefore not be seen as wasteful by definition. One participant concluded with the following point:

'to what extent are the benefits of administration investigated and netted? For instance, proper administration of medication usage can prevent errors, which can consequently prevent costs. This is important when analysing the issue with a total system perspective'.

Participants stressed that the efficiency of administrative processes should receive greater scrutiny and that a lack of feedback on the purpose of registration frustrates healthcare professionals. Experts also thought it was important to better differentiate administrative tasks that are either useful or inevitable from those that are either useless or redundant. Observational studies could generate such intelligence in a more reliable way compared to lengthy surveys.

A third and final theme was that AC act like communicating vessels across the macro, meso and micro levels. Examples of how macro level issues impact the meso level were mentioned. Regionalisation of healthcare governance can, for instance, require managerial staff to participate in additional networks. On the interaction between the meso and micro levels, automation and management

and leadership styles are important. Participants mentioned that a focus on lean management may decrease meso level AC, but this can have repercussions at the micro level if managers still require professionals to keep record of an extensive set of indicators. When LTC professionals schedule their own work in self-steering teams, the opposite can occur.

Because of this interaction, participants mentioned that there is no blueprint or ideal level of AC on one level if the effects on other levels are not recognised. One participant stressed that

some administrative output may fall into a black hole, but in other cases it is crucial for the enactment of the task of external organisations. So, not to complicate matters further, but even if we would be able to optimise administration amongst professionals, it does not mean the system as a whole is perfect.

In line with this comment, participants universally agreed that an overhead norm, as suggested by interest groups and politicians, is a bad idea because this can lead to blunt austerity and negative spill-over effects at the micro level. Benchmarking overhead costs was seen as useful when it helps to reach a better balance between trust and accountability in LTC delivery organisations, but not when it leads to a race to the bottom.

Determinants of AC, including the effects of the 2015 reform, should also be seen in the light of this interaction. Participants reported that it took a few years to resolve implementation hiccups, which impeded automation and economies of scale. Municipalities, for instance, had different auditing requirements, meaning that LTC providers had to comply with multiple auditing systems. However, participants emphasised that a causal explanation of the net effects of the reform would be hard even with perfect data, both because of the multitude of interacting drivers and barriers and because participants identified most determinants through speculation. Participants suggested using experimental and qualitative studies for investigating the determinants of administration to test their causality.

Discussion

Our objective was twofold: (1) is it possible to reach consensus on operationalising AC in Dutch LTC and (2) can we evaluate whether the 2015 reform of Dutch LTC had the intended effect of reducing AC? We believe that it may be possible to reach such consensus. At the macro level, we discovered omissions that can help demarcation efforts. Experts agreed that it should be possible to gather valid data at the meso level. Micro level AC lack construct validity, but valuable ideas to improve data collection exist.

However, the current research instruments and data systems are not robust and consistent enough to trace the overall effects of the 2015 reform. A major limitation concerns the lack of knowledge of micro-level AC before 2015 and the contradictory results in different surveys. Another important missing piece of the puzzle concerns the AC of municipalities. Therefore, we can make no clear

quantitative statements on the impact of the reform on total AC. However, it seems to us that the reform has placed some (temporary) burden at the macro level as we observe a relative increase in the AC of regional care offices. At the meso level, available data suggest that AC have remained more or less equal. Much more important, but also much more insecure, are the developments at the micro level, with studies pointing both to an increase and to a decrease.

Three resulting reflections on reducing AC in LTC

Our study highlights three lessons. First, the magnitude of total AC becomes apparent with a total system perspective. However, meso- and micro-level AC are hidden in regular expenditure statistics, which complicates our understanding of the topic in its entirety and our evaluation of political promises of reducing AC. More research should be conducted to achieve a more refined understanding of AC and, as a result, to construct a more sophisticated policy debate. A more refined understanding of AC and better data are specifically needed at the micro level. We purposively adopted a wide definition to be able to analyse definitions used in a wide selection of studies and data sources. We discovered that the definitions used are often too generic to enable a sophisticated conceptual debate on essential characteristics and how AC can be assessed in an empirical way. As an effect, we did not yet reach consensus whether care management or clinical documentation should be considered as AC, for instance. More refined survey studies and observational studies could help this discussion. Van Hassel (2020) investigated the working hours of Dutch general practitioners with a real-time measurement tool and found that almost half of all activities were not directly related to patient care. It delivered sophisticated evidence on a wide variety of administrative tasks conducted by general practitioners, of which many related to clinical documentation. A similar technique could be deployed among LTC professionals. Specific for the Dutch situation, LTC-related AC of municipalities requires attention. It is expected that economies of scale were lost, but the current monitoring systems do not allow us to test this hypothesis. In-depth investigation of annual budgets of a selection of municipalities could be considered.

Second, we need to better differentiate administrative tasks that are either useful or inevitable from those that are either less useful or redundant. This is realistic because professionals understand that some administration is necessary. For instance, a study in Dutch hospitals found that only 36% of quality registrations were perceived as useful for everyday practice (Zegers et al., 2020). However, we also need to prevent useful administrative tasks from being lost in blunt eradication exercises. Our study did not focus on identifying the value of specific administrative functions as we aimed to investigate what can be considered AC in the first place. Therefore, our attempt can function as a guide where to locate AC, which can be used by researchers interested in identifying low-value AC. This might benefit the value for money of future research on AC in LTC.

Third, we need to acknowledge and better understand the interaction of AC across all levels. Potential determinants of macro-level AC, such as reforms, seem to cause many trickle-down effects at the meso and micro levels, and vice versa; however, the causality of such determinants is tested rarely. Therefore, benchmarking information on, for instance, the meso level should be interpreted with caution if the relationship with effects at the macro and micro levels is unclear. Qualitative and experimental studies may be appointed to better understand the determinants of AC from a total system perspective.

Limitations and strengths

To our knowledge, this is the first systematic attempt by a group of experts to reach consensus of ways to trace and track AC in LTC in the Netherlands and to assess the completeness and quality of available data. A strength is our deployment of two validation rounds (the survey and the focus group discussions). This was pivotal because we had to rely on grey literature, and structured group interaction is an important element of consensus development (Murphy et al., 1998). Another strength lies in our attempt to explore the entire eco-system of AC in LTC, as opposed to only the macro, meso or micro level, as is the case in most other studies on AC (Larjow, 2018). In our study, we self-selected a non-representative sample of 14 participating experts. Not all experts considered themselves knowledgeable on all three domains (macro, meso, micro); hence, 7 out of 14 respondents completed the macro and meso sections of the survey. Therefore, the consensus reached as a whole as depicted in **Figure 2** should be interpreted with caution. A limitation of this study is that we did not operationalise AC on the level of patients, given that patients also conduct administrative tasks.

Conclusions

We can reach agreement on how to track AC in Dutch LTC, but current research instruments and data systems are neither robust enough nor consistent enough to trace differences before and after the 2015 LTC reform in a valid and reliable manner. Through our study, we identified practical and more fundamental insights to improve the reporting on AC. An important practical idea is to conduct more observational research to generate objective longitudinal data on a heterogeneous set of administrative tasks conducted by professionals. A more fundamental insight is that AC in all cases need to be viewed from a total system perspective, because AC interact heavily across the macro, meso and micro levels. These ideas can help to refine our understanding of the large, but hidden, cost category of AC and the interaction of AC across levels of the LTC system. A better understanding of the construct of AC can, as a result, lead to a more sophisticated and fact-based policy debate on AC. This is important because practitioners and politicians are generally negative about AC, which carries the risk that important administrative functions are lost in blunt efforts to generically reduce AC. The goal should be to reduce low-value AC. This study has provided some groundwork to trace low-value AC by attempting to track all elements of administration in the LTC system.

Additional Files

The additional files for this article can be found as follows:

- **Appendix A.** Survey used. DOI: <https://doi.org/10.31389/jltc.68.s1>
- **Appendix B.** Comprehensive results of survey responses. DOI: <https://doi.org/10.31389/jltc.68.s2>
- **Appendix C.** Anonymised reports of focus group discussions. DOI: <https://doi.org/10.31389/jltc.68.s3>

Note

- ¹ We allocated costs as follows: according to the definitions for health care and long term care in the system of health accounts (CBS, 2020b), total costs of long term care (HC3+HCR1) is 34–36% (depending on the year) of the total costs of health care plus HCR1 (long term social care), plus the part of 'other goods and services' (M1(HC)) that is financed by municipalities, minus the costs of voluntary health insurance schemes (HF21). This percentage is then applied to the total costs of 'governance and health system and financing administration' (HC7) minus the part of HC7 that is related to voluntary health insurance schemes.

Competing Interests

The authors have no competing interests to declare.

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