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Managing the COVID-19 Crisis: Assessing the Responses of Politicians and Service Providers in Long-Term Care

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ABSTRACT

COVID-19 was a mega-crisis that disproportionately affected vulnerable groups, with nursing home residents accounting for 30%–60% of COVID-19-related deaths in Europe during the Spring 2020. Despite these shortcomings, little is known about how individuals evaluate crisis management by governments compared to performance by service providers. To address these gaps, we surveyed family members of nursing home residents ($n = 2060$) in Spain through two survey waves (2022, 2024). We test three hypotheses: the first examines whether perceived quality of routine services provided by nursing homes is associated with a better perceived response during crisis episodes. The second and third hypotheses test how perceptions of national and regional governments' responses affect the perceived performance of nursing homes. Our findings show that in times of crisis, perceptions of performance are shaped more by the actions and visibility of political actors than by the day-to-day quality delivered by service providers.

1 | Introduction

Referred to as the 'second transboundary mega-crisis to hit contemporary societies in this century' (Boin et al. 2020), COVID-19 killed or caused a serious decline in the physical and mental health of millions of individuals worldwide. Vulnerable societal groups that originally were not the primary targets of policymaking efforts experienced particularly high infection and death rates. Examples include African American communities in the United States, migrant workers living in crowded spaces, the prison population, people with chronic medical conditions, and those in need of social care (Boin et al. 2020; Chen et al. 2021).

Between 30% and 60% of COVID-19-related deaths in Europe in Spring 2020 occurred in nursing homes (Bernardi et al. 2021; Pitkälä 2020). Aside from the effects derived directly from becoming infected, residents suffered from increased rates of anxiety and depression, as well as physical and cognitive decline directly associated with the isolation required during the more acute phases of the pandemic (Pitkälä 2020). Many of these conditions could have been prevented or mitigated by adequately preparing nursing home facilities and staff members for emergencies (Bach-Mortensen et al. 2021; Trabucchi 2020).

The COVID-19 crisis revealed a failed governance model in the eldercare sector and highlighted that nursing homes lacked the necessary preparation to handle an outbreak of this dimension. Most studies have tried to identify variables related to the performance of nursing homes (e.g., see Abrams et al. 2020; Bach-Mortensen et al. 2021). However, further research is needed on how perceptions of routine service quality provided by nursing homes and perceptions of political performance by governments affect individuals' evaluations of nursing homes' responses during the COVID-19 crisis.

Analysing the perceived performance of both direct service providers and the political actors responsible for these services is crucial, as the provision of these services involves public bodies operating at different levels of government as well as a diverse set of market actors that either deliver services directly or do so through agreements with the public sector. In many

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European countries, nursing home services have been marked by significant market participation, with a large share of facilities managed by private for-profit and non-profit organisations (Broms et al. 2020; Daly et al. 2022; Ranci and Pavolini 2015; Mercille 2024). This model reflects broader trends associated with New Public Management (NPM) reforms, which have reshaped the governance of a wide range of public policies (Lapuente and Van de Walle 2020; Lapuente et al. 2020).

Previous studies have shown that in routine contexts, beneficiaries of these services and their relatives interact with the direct providers (i.e., nursing homes), and as a result, their evaluations tend to focus on how well (or poorly) these direct providers perform (Broms et al. 2024). But what happens in times of crisis? This paper examines whether the assessments made by the relatives of nursing home residents during COVID-19 are shaped more by perceptions of performance management (i.e., the quality of routine service delivery) or by political management during the crisis—particularly the perceived actions taken by national and regional governments—even when these political actors are not directly responsible for day-to-day service provision. Accordingly, our research question is: *How did perceptions of routine service quality and government responses influence perceived nursing home performance during the COVID-19 pandemic?* This question is particularly relevant in the context of the COVID-19 pandemic, as governments played a central role in establishing the protocols and regulations that guided nursing homes' responses. At the same time, nursing homes differed considerably in their capacity to implement and comply with these measures, depending on their organisational resources, staffing levels, and managerial capabilities. As a result, evaluations of nursing homes' performance during the pandemic may reflect not only assessments of governmental crisis management, but also perceptions of the facilities' own ability to respond effectively to this emergency.

To respond to this question, we focus on the case of Spain: as of January 2021, 47.5% of the deaths from COVID-19 officially reported in Spain had occurred among nursing home residents. Hence, Spain could be considered as a case that illustrates the weaknesses of the nursing home governance system (García Rada 2020). Specifically, we examine how relatives of nursing home residents perceived the response provided by these facilities during the pandemic. Importantly, our study focuses on relatives of residents who were still living in nursing homes at the time of the surveys conducted in 2022 and 2024 across the 17 autonomous regions of Spain. Thus, the study examines the perceptions of families who continued to use nursing home services after the crisis. Whereas mortality rates capture the objective outcomes of crisis management, relatives' perceptions provide insight into how the performance of different actors is evaluated and how responsibility is attributed during a crisis.

In particular, we test three hypotheses: the first hypothesis argues that the perceived quality of the routine services provided by the facilities is associated with perceptions of their response during this crisis episode, whereas the second and third hypothesis expect the perceived performance of governments to affect that response. Thus, we examine whether, in times of crisis, evaluations of service providers are shaped primarily by perceptions of routine service quality, or by the attribution of political responsibility to governments.

Our study contributes to the existing literature by investigating variables that have received insufficient attention in crisis management studies, namely government performance and routine quality measures adopted by nursing homes. This study complements the growing literature that has assessed nursing home performance during the COVID-19 pandemic through objective indicators, such as mortality rates and the numbers of documented COVID-19 cases (e.g., Abrams et al. 2020; Alexeev et al. 2024). To this end, we examine how relatives of nursing home residents retrospectively evaluated the response of these facilities to the pandemic. These individuals are crucial actors whose perceptions matter, given their double role as external recipients of information and the 'eyes and ears' of their relatives who are receiving care (Hado and Feinberg 2020). The relevance of examining routine evaluation and control procedures becomes clear after considering that this sector is characterised by particularly low levels of information supplied to both direct beneficiaries and family members (Pérez-Durán and Grimmelikhuijsen 2025; Pérez-Durán and Hernández-Sánchez 2025).

Our research paper proceeds as follows: the next section examines aspects related to perceptions concerning the performance of nursing homes during COVID-19. Section 3 identifies determinants of performance in Spanish nursing homes during the COVID-19 outbreak, with a particular focus on the quality of the services implemented and the performance of different tiers of government. The paper then presents its methodology and discusses its results. It concludes by summarising its main findings and by suggesting ways to expand this research.

2 | The Performance of Nursing Homes During COVID-19: Examining the Perceptions of Family Members

Defined as 'institutions and living arrangements where care and accommodation are provided jointly to a group of people residing in the same premises, or sharing common areas, even if they have separate rooms' (Eurofound 2017), nursing homes are central to understand the impact of COVID-19 worldwide. The pandemic hit nursing home residents particularly hard due to their age and propensity to suffer from preexisting medical conditions (Barnett 2020). The fact that individuals with low incomes and levels of education were more likely to live in these facilities was another reflection of the more severe effects of the pandemic on groups with high vulnerability levels (Bernardi et al. 2021). Staff shortages, personal protective equipment shortages, the scarcity of personnel with specialised training in controlling infections, and the lack of physical space to ensure that residents kept the necessary personal distance to avoid contagion, especially in shared bathrooms and other common areas, partly explain the high transmission rates in these facilities (Davidson and Szanton 2020).

Most studies measuring the performance of nursing homes during the pandemic rely mainly on administrative data on the number of deaths and the documented cases by facility (e.g., Abrams et al. 2020; Costa-Font et al. 2021; Daly 2020; Alexeev et al. 2024). This literature has categorised the factors that influence the mortality rate of COVID-19 in nursing homes; these

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categories include the characteristics of the disease, aspects linked to the residents, facilities, and staff employed in them, as well as external factors such as the availability of equipment (Giri et al. 2021). These studies provide core insights into the organisational characteristics that are more likely to affect the quality of services, specifically during crises. For instance, they highlight that the location of the facility (both the specific state and the rural/urban cleavage) and its size matter when explaining why some facilities registered higher contagion rates than others in the United States (Abrams et al. 2020; Chen et al. 2021). Moreover, these studies remark that the nursing staff's low pay forced them to work in multiple nursing homes, thereby acting as important vectors in transmitting the disease, especially when visitor restrictions were in place (Chen et al. 2021).

Non-staff-related factors also played relevant roles in the spread of disease among nursing home residents. These include requirements that certain residents pay for routine hospital visits and the exposure of infected individuals to procedures such as dialysis (Ouslander and Grabowski 2020). Previous studies have also identified that larger nursing homes in urban areas with lower rates of African-American residents tended to have more infected residents. While smaller facilities were less likely to experience outbreaks, when they did so, these tended to spread faster among their residents (Giri et al. 2021). Other studies have examined the relationship between care home ownership and COVID-19 infection and mortality rates (Abrams et al. 2020; Chen et al. 2021). While some studies have reported higher infection and mortality rates among for-profit nursing homes during the COVID-19 pandemic (Abrams et al. 2020; Chen et al. 2021; Bach-Mortensen et al. 2021), other research has found that organisational characteristics, such as staff turnover, facility size, and the presence of nursing staff, are more strongly associated with mortality outcomes than ownership itself (Broms et al. 2024).

These previous studies have focused on explaining objective outcomes such as mortality rates, however, much less attention has been paid to how service users assign responsibility for those outcomes. This article addresses this gap by examining whether relatives attribute nursing home performance primarily to the facilities themselves or to the governments responsible for managing the crisis. In particular, this study contributes to the literature by examining two underexplored dimensions: the perceived quality of routine service provision and the political performance of different levels of government. First, we expect that relatives' perceptions are shaped by the quality of day-to-day care, reflecting their ongoing experiences with the services. Second, we argue that during crisis episodes, these perceptions shift, with greater responsibility attributed to political actors. This shift may occur because, regardless of who provides the service, government authorities act as political principals—they oversee service delivery and serve as the main decision-makers during crises (Bravo-Laguna 2024).

Furthermore, we acknowledge that assessing the perceived performance of nursing homes encompasses various aspects, including staff responsiveness, managerial actions, and government interventions. In our study, we focus on general perceptions of how nursing homes responded to the COVID-19 pandemic.

3 | Assessing the Effect of Perceived Management Performance Versus Political Performance

3.1 | Routine Service Quality

We begin by examining the relationship between routine service quality—understood as management performance—and perceptions of crisis response in nursing homes. A crisis can be defined as a serious threat to the functioning of a system that requires immediate decision-making under conditions of uncertainty (Rosenthal et al. 1989). Crises are understood as 'rude surprises' that disrupt day-to-day activities and demand preparedness as well as specific skills and capacities (La Porte 2007). The COVID-19 pandemic represents a clear example of a transboundary crisis, as it simultaneously affected multiple countries, policy sectors, and governance levels (Ansell et al. 2010).

While acknowledging the ways in which routine operations and crisis management differ in their environment and challenges, previous studies have explored the extent to which these contexts are interrelated. These studies suggest that arrangements that have been made for emergency preparedness purposes often end up predetermining the actions that shape crisis responses (Bravo-Laguna 2024; Nohrstedt et al. 2018; Béland et al. 2021).

In addition, previous studies show that even the highest-ranked nursing homes were not free from COVID-19 infections. Nevertheless, 'higher-quality' nursing homes tended to show lower average infection rates and COVID-related mortality rates than lower-ranked facilities (Ouslander and Grabowski 2020). In our research, we expect that the perceived quality of routine service delivery—prior to and during the early stages of the crisis—may influence how individuals evaluate the overall performance of nursing homes. In particular, we expect that nursing homes that are perceived to provide high-quality routine services were better equipped to make informed crisis management decisions and perform actions whose effects are perceived in a positive way by users. Thus, we expect that quality routine practices continue even after the threat unfolds, helping family members feel more confident and better informed about their relatives despite the challenges that social distancing poses. Following this logic, we derive the following hypothesis:

H1. *Nursing homes perceived as delivering high-quality routine services will also be perceived as having responded more effectively to the COVID-19 pandemic.*

3.2 | The Role of Central and Regional Governments

Existing studies have highlighted that institutions condition outbreak responses (Greer et al. 2022). In particular, government performance is a key determinant of how citizens perceive the capacity of long-term care services—such as nursing homes—to respond effectively to crises (Jugl 2023). Governments serve as central actors in funding, regulating, and coordinating eldercare, even when a substantial share of service provision is carried out by private providers (Yang et al. 2022). Empirical evidence shows that effective public

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interventions—such as tele-health services (Giri et al. 2021) or real-time infection monitoring systems (Wang et al. 2020)—can reduce contagion and mitigate crisis impacts. However, governmental preparedness varied considerably across countries. For instance, austerity policies in many EU states had previously weakened public health systems (Comas-Herrera et al. 2020), and in some cases, key data—such as confirmed COVID-19 cases in nursing homes—was not systematically collected or reported (Chen et al. 2021). In the case of EU governments, responses to the COVID-19 pandemic were rather uncoordinated, at times overlapping, and characterised by a high degree of regulatory variation that eventually led to spontaneous convergence around risk-averse approaches (Alemanno 2020).

Here we investigate the extent to which the perceived performance of different levels of government in the COVID-19 outbreak affected people's assessments regarding the response of Spanish nursing homes to this crisis. Although a high percentage of nursing home services in Spain are privately managed, the perceived performance of the governments that regulate these services may impact assessments of how nursing homes managed the pandemic. After all, governments are central actors in transboundary crisis management (Bravo-Laguna 2024). In the context of nursing homes, governments have a range of tools to facilitate communication between residents and families, including the publication of regulations, protocols, and guidelines that set the standards for visits (Hado and Feinberg 2020). Moreover, they can launch health education campaigns to raise citizen awareness regarding measures that could be taken to reduce the risk of infection (Wang et al. 2020). According to Boin and Rhinard (2023), the effectiveness and legitimacy of response actions are essential requirements for good crisis management: no matter how effective they are at containing the effects of a given crisis, actions that lack public support cannot be considered successful. Interestingly, the literature has associated countries with higher levels of centralisation, separate ministries of health (Jugl 2023), and (counterintuitively) lower levels of trust in government and interpersonal trust with faster responses to COVID-19 (Toshkov et al. 2022).

Either way, crises such as COVID-19 are extremely salient occurrences whose management is followed closely by public opinion. In such contexts, governmental actors tend to become the most visible crisis managers in the media. In this way, their actions may overshadow those of other actors involved in these events, thereby conditioning public perceptions regarding the performance of the entire crisis operation. Considering that two different levels of government (the central government and the regional governments) have prominent roles in the Spanish elder-care system, we propose the following hypotheses:

H2. *National governments perceived as having performed well during the COVID-19 pandemic will also be associated with more favourable assessments of nursing homes' crisis response.*

H3. *Regional governments perceived as having performed well during the COVID-19 pandemic will also be associated with more favourable assessments of nursing homes' crisis response.*

4 | The Spanish Case

This study focuses on Spain, which could be considered an extreme case that highlights the weaknesses of the nursing home governance system, allowing us to analyse the perceptions of nursing home residents' relatives regarding the response provided by the facilities. The Spanish Long Term Care (LTC) system is characterised by the participation of different levels of government. The central government regulates core aspects of LTC and information systems, while the regional governments are in charge of managing and implementing the day-to-day operations of these services. Nursing home services in Spain are implemented by the autonomous regions with the assistance of the private owners of these facilities (Perna et al. 2025). Around 3% of the Spanish population lives in nursing homes. However, the distribution of nursing home residents is uneven across autonomous communities: for example, of the total number of nursing home places/beds, Catalonia accounts for approximately 16%, Madrid 14%, Castilla-La Mancha 7%, and the Basque Country 5% (Costa-Font et al. 2021).

In 2020, the central government lacked strong mechanisms to coordinate this rather fragmented system characterised by significant differences across regions in procedural, implementation, and control systems (Daly et al. 2022). Existing research (Daly et al. 2022) has highlighted the delays and overall weaknesses that characterised the Spanish central and regional authorities' response to the first wave of COVID-19; for the first few months, the authorities viewed testing as a mitigation tool rather than as an essential element for preventing infection. Casualties were unequally distributed across regions. For example, the Madrid region recorded 5000 deaths. This figure was double the number of deaths registered in Catalonia, the Spanish region with the highest number of LTC facilities and residents.

In Spain, the management of the COVID-19 pandemic initially fell under the control of the central government, which re-centralised all health and care services. As the situation evolved, particularly during the second phase of the pandemic, decision-making powers and responsibilities were transferred back to the regional governments (Hernández-Moreno et al. 2023). Nursing homes were a critical element in negative assessments of the Spanish response. Despite the introduction of protocols to isolate infected residents and staff members, Spanish nursing homes experienced a particularly high number of COVID-related deaths, exacerbated by insufficient provision of personal protective equipment and testing kits. Other factors that influenced this negative outcome included shortages of doctors and nurses, staff turnover, and the numerous sick leaves filed by staff members (Comas-Herrera et al. 2020; García Rada 2020; Pitkälä 2020).

Nursing home care has never been a political priority for Spanish governments. This is evidenced by the low levels of public spending in this sector, its delayed regulation, and the relatively low professionalisation of Spanish nursing home staff, a situation that contrasts with better prepared European countries (Daly et al. 2022). For all these reasons, these factors make Spain an interesting case for understanding crisis responses in fragmented care systems—especially in other

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Southern European contexts that share similar institutional characteristics. The case of Italy provides an illustrative example, as it features similar levels of public spending in nursing homes (0.6% of its GDP, as opposed to the Spanish 0.7%), and shares with Spain its low professionalisation of nursing home workforce, decentralised coordination and high fragmentation of LTC policy across levels of government, and insufficient regulation of nursing care. Moreover, Italian policy had not set the protection of nursing homes as a priority nor recognised the relevance of nursing homes as social care institutions before and during the pandemic (Daly et al. 2022).

5 | Methodology

5.1 | Data

To analyse the perceived performance of nursing homes, a survey was fielded to a non-probabilistic targeted sample of the direct family members of the individuals residing in these facilities—all respondents had at least one parent living in a nursing home. For ethical reasons, we did not survey the residents, as 2022 was still very close to the pandemic. We selected family members as respondents because they are the ones who receive direct information about their relatives living in nursing homes and are, therefore, well equipped to evaluate the services provided (Hado and Feinberg 2020; Pérez-Durán and Grimmelikhuijsen 2025). Our survey closely reflects the distribution of nursing home service providers across Spain's autonomous regions. In our sample, 38% of respondents report having a relative in a public nursing home, while 62% have a relative in a private facility. At the national level, 27% of residents live in public institutions and 73% in private ones. Thus, the sample broadly mirrors the population distribution. Additionally, our sample reflects variations in the sociodemographic variables of the respondents and the residents (see Supporting Information 2).

The survey had two waves. The first was carried out by Kantar in December 2022. The second was conducted by Bilendi in July–August 2024. Thus, the samples are drawn from each company's online panel. Our survey includes 2060 observations, with 1009 coming from the 2022 wave and 1051 from the 2024 wave. The samples from each wave are independent of one another. Due to the complexity of the respondents' profiles and restrictions put in place by the first panel company, we could not survey the same individuals in both waves.[1] Our analyses combine both waves, as the two samples address the same, very specific social group, namely, direct relatives (sons or daughters) of nursing home residents. The distribution of respondents' relatives living in public and private nursing homes is the same in both waves: approximately 38% live in public nursing homes and 62% in private ones. To properly combine both waves, we checked the balance between the structural variables of the survey (the characteristics of the residents, their relatives, and the nursing homes). This analysis shows no statistically significant differences between the two samples, except for the variables of residents' age, respondents' age, and location, which supports our decision to merge both waves for our main estimations (see Table A1 in Supporting Information1). In addition, as we explain in the following sections, our analyses incorporate specifications in our estimations to control for this situation.

5.2 | Operationalisation

5.2.1 | Dependent Variable

To measure the perceived performance of nursing homes during the outbreak, we asked the following question: how do you evaluate the response of your relative's nursing home to the COVID-19 pandemic? We used a five-point response scale ranging from (0) extremely bad to (4) extremely good.

5.2.2 | Independent Variables

To measure the independent variables related to our three hypotheses, we included questions that allowed us to measure the perceived routine service quality provided by nursing homes (NH), perceptions concerning the national government's performance during the COVID-19 crisis, and perceptions concerning the regional government's performance in the same period.

- Perceived routine service quality index: we constructed an index based on eight items of service quality perception on a scale of one to five. Specifically, we asked family members about the quality of the following aspects: their relative's room; common areas; the quality and taste of the food served; the attention that the resident received from the NH management board; the attention that the resident received from care staff; the care staff's training; satisfaction with the activities organised by the NH; and the ease to contact the NH staff. We calculate the average of these eight items, generating an index with a range from one to five. This index has a Cronbach's alpha of 0.90.
- Perceived performance of central and regional governments: categorical variables based on two questions. First, 'how do you evaluate the Spanish central government's response to the COVID-19 pandemic?' Second, 'how do you evaluate the corresponding regional government's response?' Both questions have six possible response values: (1) extremely bad; (2) bad; (3) neither bad nor good; (4) good; and (5) extremely good; (6) don't know/no answer. The reference category is 'extremely bad' in both variables.

5.2.3 | Control Variables

As our control variables, we considered several indicators related to the nursing home residents, nursing home characteristics, and the relatives of the nursing home residents. Supporting Information 2 includes a detailed description of the operationalisation of the control variables. It also summarises the descriptive statistics for the dependent, independent, and control variables.

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6 | Analysis and Discussion

To conduct the analysis, we first estimated linear regression models to predict perceptions of nursing home responses to the COVID-19 pandemic. We included each independent variable separately, controlling for the indicators described in the previous section. We chose these models due to the distribution of the dependent variables (see Supporting Information 2) and because analysing their coefficients is more straightforward compared to doing so in multinomial logit models.[2] We included fixed effects by survey wave to address the fact that the samples do not include the same individuals. This way, the fixed effects allow us to control for our estimations based on the contingent changes that occurred during fieldwork in each wave. We used the R package 'lfe' to estimate the fixed effect linear regression models. Figure 1 shows the three linear regression models, including each independent variable separately. For the full specification of the models, see Table B1 in Supporting Information 1.

The analysis shows that the coefficients of our three independent variables are positive and statistically significant ($p < 0.05$). The findings suggest a positive association between respondents' favourable perceptions of service quality and nursing homes' performance during the COVID-19, as well as a positive association between a good evaluation of the performance of both national and regional governments during the pandemic and the respondents' perceptions of nursing home performance during the COVID-19 crisis.

Although the models provide evidence in favour of our three hypotheses, the results also indicate differences concerning the size of the effects. The strongest effects are those associated with perceptions of regional government performance during the pandemic, followed closely by perceptions of the national government's performance. In both cases, the results show that more positive evaluations of national and regional government responses to COVID-19 are associated with more favourable perceptions of nursing home performance during the crisis.

This might be explained by the fact that although the national government can regulate the general framework for long-term care policy, the primary responsibility for coordinating and implementing nursing home services lies with the regional governments, which can be direct service providers. This is particularly interesting after considering the temporary relocation of health and crisis management competencies from the regional to the central level during the pandemic (Hernández-Moreno et al. 2023). Despite this temporary centralisation of duties, our results suggest that respondents attribute substantial responsibility to the regional governments, which remained the primary authorities accountable for nursing home services. This finding aligns with recent evidence highlighting the increasing relevance of multi-level governance dynamics within the network of actors involved in healthcare provision (Comas-Herrera et al. 2020; Greer et al. 2022).

As for the effect of perceived routine service quality, the coefficient for this index is the lowest, indicating an average change of 0.5 points in the perception of nursing home performance for each additional point on the quality index. In a recent study, Jugl (2023) shows that administrative capacity (measured as the quality and effectiveness of government and public services) had no systematic effect on the speed of governments' reactions to the COVID-19 pandemic. Similarly, our results suggest that perceived routine service quality has

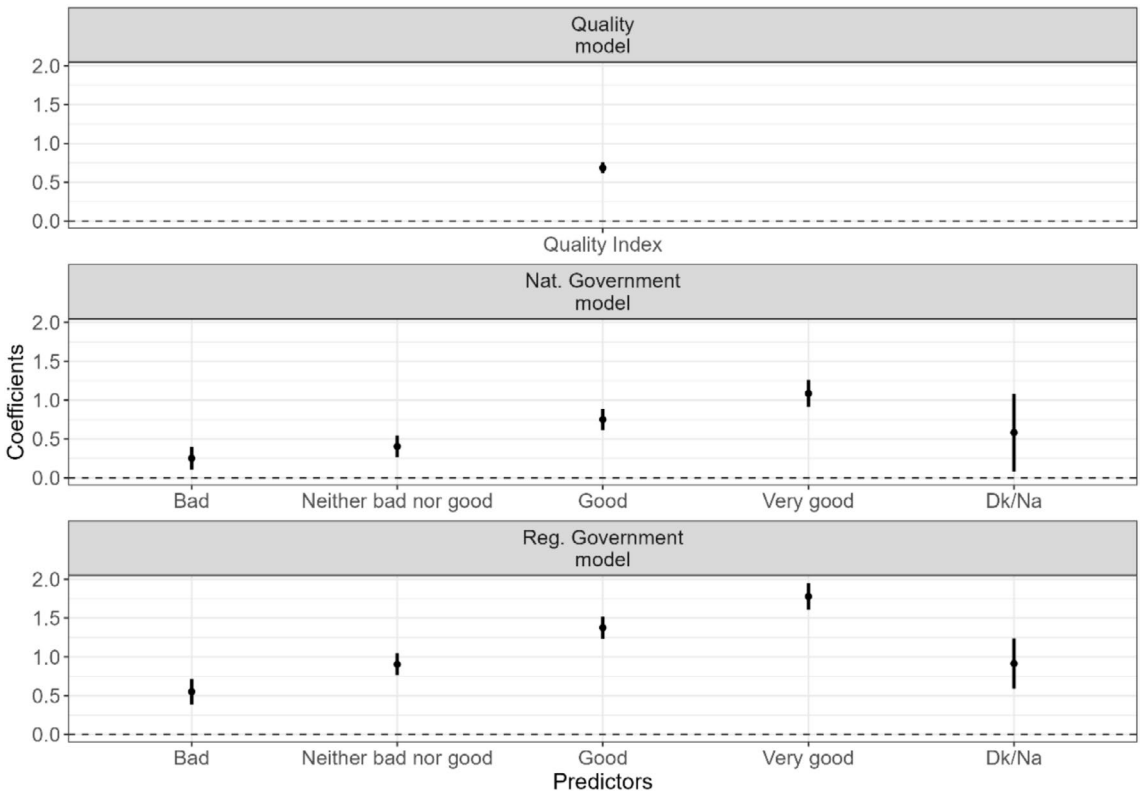


FIGURE 1 | Fixed effects linear models to predict perceived nursing homes' performance during COVID-19 crisis (95% confidence intervals).

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a relatively low impact on perceptions concerning crisis management. This hints that, during times of crisis, more responsibility is attributed to political actors, particularly regional governments, than to direct service providers. In the case of Spain, it is important to note that more than 70% of these providers are private. These attributions of responsibility may be explained by the fact that, regardless of the service providers' actions, governments are the primary actors in leading and regulating crisis responses.

Regarding our control variables, our results show that perceived familiarity with the Spanish legislation on long-term care for the elderly has a positive and significant effect ($p < 0.01$) on perceived nursing home performance during the COVID-19 pandemic in the three models.[3] This suggests that individuals with greater knowledge of the legal framework may have a better understanding of the operational challenges nursing homes faced during the crisis, potentially leading to more positive evaluations. Respondents also expressed more favourable assessments of nursing home management when facilities provided technological and digital tools that facilitated access to information. This finding is unsurprising given the social distancing measures and restrictions on in-person visits that characterised the pandemic period. The age of the resident was negatively associated with evaluations of nursing home management. This pattern may reflect the greater vulnerability of older residents and the greater difficulties they experienced during the health emergency.

The coefficient associated with private places in private nursing homes reaches statistical significance only in the specification that includes perceptions of central government performance and remains non-significant in the remaining models. Consequently, the findings do not provide consistent evidence that ownership status is systematically associated with relatives' evaluations of nursing homes' responses to the pandemic. While some previous studies have shown that for-profit nursing homes experienced higher infection and mortality rates during the COVID-19 pandemic than public and non-profit facilities (e.g., Bach-Mortensen et al. 2021), other studies demonstrate that factors such as staff turnover, facility size, and the presence of nursing staff are more strongly associated with mortality outcomes than ownership itself (Broms et al. 2024). Our findings are broadly consistent with this perspective, suggesting that ownership played a less important role in shaping relatives' evaluations than perceptions of routine service quality and, particularly, perceptions of government performance. Finally, it is worth noting that, despite substantial variation in regional responses, we found no significant differences in perceptions of crisis management across autonomous regions. This is a surprising finding, in light of the marked disparities in mortality rates among the Spanish regions with the largest populations of nursing home residents, particularly Madrid and Catalonia. These differences do not appear to be reflected in the evaluations provided by relatives whose family members survived the pandemic and continued residing in nursing homes. This finding suggests that objective performance outcomes and users' perceptions do not necessarily move in parallel. While mortality rates reveal important differences in the outcomes achieved across regional care systems, relatives' evaluations reflect how these systems were perceived and judged by those who continued to rely on them after the crisis.

6.1 | Robustness Checks

To check the internal validity and coherence of our estimations, we carried out several robustness analyses.[4] First, we conducted a collinearity analysis. The results of the VIF estimations of our main models show that all predictors have a VIF below 2.

Second, we ran an additional linear regression model with fixed effects by survey waves, where we included the three independent variables simultaneously. Figure 2 shows that the results are consistent with those of our main models in terms of direction, size, and significance ($p < 0.05$), with one exception: the effect of perceived national government performance during the pandemic is only significant for the 'good' and 'extremely good' categories. Thus, this secondary model supports our main findings.

Third, our results could potentially be influenced by two factors: the frequency of interactions between respondents and their relatives, and respondents' ideological orientation when evaluating the government's performance. If either of these factors biased the findings, we would expect that respondents with more frequent interactions would have a more favourable perception of nursing home performance during the pandemic. Likewise, it would be reasonable to expect that left-leaning individuals would evaluate the national government's performance more positively, given that it was led by the left-wing coalition of the Partido Socialista Obrero Español (PSOE) and Unidas Podemos—replaced with Sumar before wave 2. To assess this, we replicate the models using two distinct subsets: one including only respondents with high-frequency contact with their relatives, and another comprising only left-leaning individuals. The results show no statistically significant differences between the full sample, the high-frequency subset, and the left-leaning subset (see Figures C1 and C2 in Supporting Information 1). These findings support the consistency and internal validity of our results.

Fourth, although the two survey waves are statistically balanced, reflect the population distribution of nursing home residents in Spain, and include wave fixed effects to account for unobserved differences between samples, it remains important to test whether respondents in wave 1 differ from those in wave 2. To assess this, we replicate the main estimations using a linear regression model without wave fixed effects but including a binary indicator for the wave (wave 1 = 1), along with all other independent variables. The results show no statistically significant differences between respondents in the two waves (see Figure C3 in Supporting Information 1).

Fifth, we replicated our three main models by replacing one of our control variables—NH place/bed type—with NH ownership type to examine whether a different coding of this variable yields significant changes in our findings. The estimations from these secondary models show the same patterns as those found with our main models: the effects are positive and statistically significant ($p < 0.05$). They are more pronounced in the

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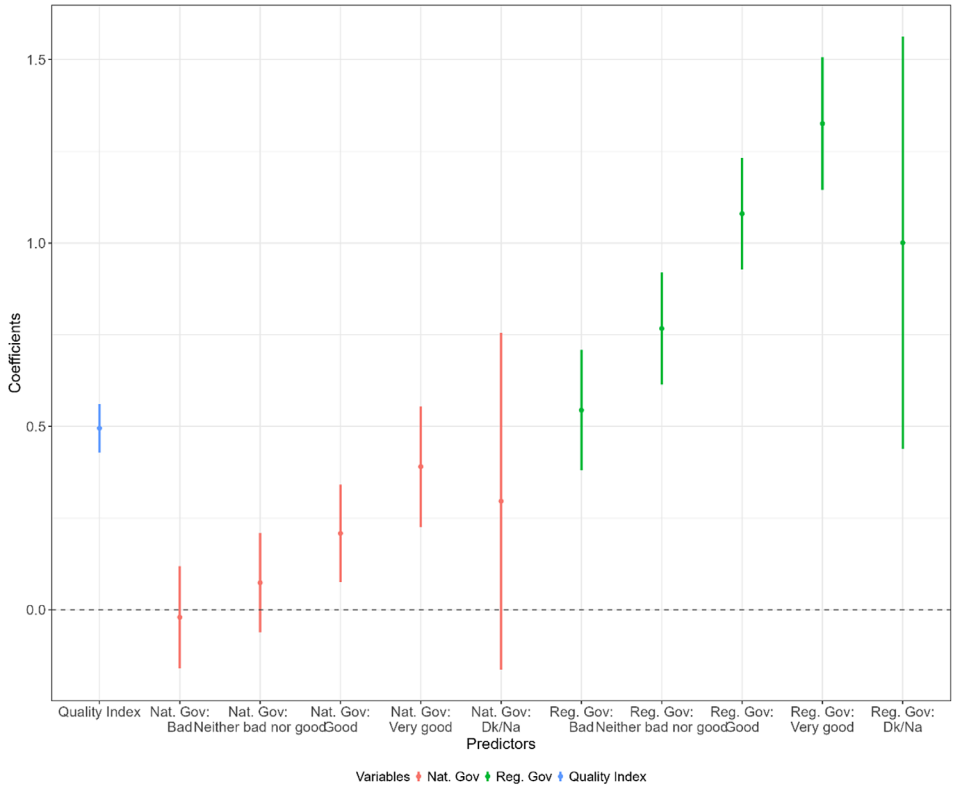


FIGURE 2 | Fixed effects linear models to predict perceived nursing homes' performance during COVID-19 crisis (95% confidence intervals). [Colour figure can be viewed at wileyonlinelibrary.com]

cases of perceptions of national and regional government performance during the pandemic (see Figure C4 of Supporting Information 1).

Finally, we replicated our main models using multinomial logit estimations to predict respondents' perceptions of the performance of nursing homes during the COVID-19 crisis (see Figure C5 of Supporting Information 1). The results align with our central estimations: the higher the perceived quality of the NH and the performance of central and regional governments, the greater the positive effect on the perceived performance of NHs during the pandemic ($p < 0.05$). Thus, the different robustness checks show that our findings have strong internal validity and are coherent across the different specifications of regression models.

7 | Limitations

A potential limitation of our study pertains to the time periods in which the surveys were conducted, namely in 2022 and 2024. This means that we do not have an accurate measure of service quality before the pandemic. Moreover, we cannot disentangle the direction of causality, as perceptions in terms of the response to the pandemic could in turn have involved respondents' perceptions regarding routine service. This limitation makes our study more correlational than causal, as we cannot establish a direct relationship between service quality before the pandemic and the outcomes observed. However, considering that implementing transparency measures requires time and that the first survey was conducted in December 2022, we assumed that our measurement would shed light on this dimension of nursing homes' responses to the outbreak. Future research could further investigate the temporal aspect of information provision.

A second limitation is linked to our focus on perceived quality rather than on more objective measures. We chose to proceed this way due to ethical reasons, since we did not want to ask respondents for the specific name of the nursing home where their relative was a resident. Moreover, unlike other countries (e.g., Broms et al. 2024), Spain lacks a common, publicly accessible database that would have allowed us to measure and compare the performance of nursing homes across facilities and regions objectively. But in any case, we believe that the accuracy and specificity of the core indicators gathered from our survey serve as suitable tools for measuring service quality.

A third limitation is that our analysis does not include questions to assess the impact of measures of preparedness for crisis situations, such as having emergency plans and protocols in place. For instance, previous studies highlight that the ability to detect, monitor, and isolate potentially infected or newly admitted residents, as well as the availability of adequate equipment, were critical factors in preventing the spread of infections (Daly et al. 2022). Finally, it is also important to note that the majority of the individuals who participated in the two surveys represent relatives of adults who were residing in these facilities at the time and, therefore, lived through the pandemic and survived it. We acknowledge this potential bias, as our study does not cover the perspectives of families whose relatives were not able to overcome the crisis. Hence,

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our results should be understood from the viewpoint of this specific population.

Two additional limitations of our study pertain to its vulnerability to recall bias and our use of commercial online panels. Concerning recall bias, survey methodology research has long warned that the accuracy of retrospective accounts may decline as the temporal distance from the event increases (Bell et al. 2019), particularly when recollections pertain to emotionally charged experiences (Ottenstein and Lischetzke 2020). However, recall bias seems to affect to a lower degree negative emotions with a high personal relevance, such as those arising in the context of our study (Ottenstein and Lischetzke 2020). At the same time, our questions focused on relatively stable and long-term patterns, such as the living conditions of close relatives and perceptions of government responses to a prolonged crisis that lasted for several years, where informant accuracy tends to be higher than in enquiries concerning interactions tied to narrowly bounded time periods and short-lived events (Freeman et al. 1987).

As for online panel respondents, we acknowledge that although quota controls were implemented to improve the sociodemographic composition of the sample (see Supporting Information 2), respondents may still differ from the broader population of nursing home relatives in unobserved characteristics. For example, online panel participants may differ in their levels of digital engagement. As a result, the study cannot claim full representativeness of the target population. However, given the study's primary objective of examining relationships between perceptions of service quality, government performance, and evaluations of nursing home responses, the findings provide important insights into the mechanisms that shape performance evaluations during times of crisis.

8 | Conclusions

A significant proportion of those most severely affected by the pandemic were older adults, particularly individuals residing in nursing homes (Comas-Herrera et al. 2020). Accordingly, this article examines how direct relatives of nursing home residents perceived the response of these facilities during the crisis. We focus on the case of Spain, where responsibility for managing residential care lies primarily with regional governments and where market provision is extensive, with more than 70% of nursing homes operated by private entities.

Our article provides empirical evidence that supports our hypotheses, showing that the perceived routine quality of services in care homes (H1), the perceived central government's response (H2), and perceived regional government responses (H3) are positively correlated with perceptions of the facilities' performance during the crisis.

Our main finding is that perceptions of government responses are more relevant, in terms of the size of the effect, than perceptions of the routine evaluation procedures implemented by nursing homes. In particular, the perceived performance of regional governments in the pandemic seems to have a higher impact on evaluations of nursing homes, reflecting their primary responsibility for managing long-term care services. This finding suggests that, in times of crisis, perceived performance is more closely tied to the actions of political authorities than to those of the entities directly responsible for service delivery. This supports the view that governments are understood as the principal actors responsible for leading and coordinating crisis responses. In line with previous studies highlighting the leading role of governments in managing transboundary crises (e.g., Bravo-Laguna 2024; Jugl 2023), our results indicate that the actions of governmental actors tend to dominate public evaluations of crisis responses. These findings suggest the desirability to place greater attention to multi-level dynamics in LTC policy framework and governance reforms related to pandemic preparedness in nursing homes.

A key policy implication of our findings is that government actors remain the primary targets of public accountability during crises, even when service provision is delegated to private organisations. These findings also have important implications for future pandemic preparedness in long-term care settings, suggesting that governments should maintain monitoring arrangements, including regular service quality inspections, transparent reporting systems, and accountability mechanisms that extend beyond public authorities to include residents and their families (e.g., Pérez-Durán and Grimmelikhuijsen 2025). More importantly, the results highlight the central role of family members in the governance of long-term care services (e.g., Shagalov and Polishchuk 2026). Families are not merely recipients of information; rather, they are actors capable of monitoring care provision, collaborating with service providers, and, in doing so, contributing to improvements in service quality. This points to the need for more participatory accountability mechanisms that incorporate the experiences of residents and their families into the evaluation of long-term care services.

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Ethics Statement

The project has received approval from the Ethics Committee of the Universitat Autònoma de Barcelona, reference CEEAH 6966.

Conflicts of Interest

The authors declare no conflicts of interest.

Data Availability Statement

The data that support the findings of this study are available from the corresponding author upon reasonable request.

Endnotes

[1] It is worth noting that, since the fieldwork was conducted by Kantar in 2022 and by Bilendi in 2024, and due to ethical constraints preventing access to respondents' identities, we cannot determine whether any individuals participated in both waves of the survey.

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[2]We included the replication of our main estimations using multinomial logit models as a robustness check of our results. See the robustness checks subsection.

[3]For more details of the control variables, please see Section B of Supporting Information 1.

[4]The complete specifications of the robustness checks are available in Section C of Supporting Information 1.

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Supporting Information

Additional supporting information can be found online in the Supporting Information section. **Table A1.** Balance between survey waves. **Table B1**. Linear regression models with fixed effects by survey waves to predict perceived nursing homes' performance during the pandemic. **Table B2**. Linear regression model with fixed effects by survey waves to predict perceived nursing homes' performance during the pandemic: all independent variables. **Table C1**. VIF of the variables included in Model 1. **Table C2**. VIF of the variables included in Model 2. **Table C3**. VIF of the variables included in Model 30. **Figure C1**. Fixed Effects Linear Models to Predict Perceived Nursing Homes' Performance during the Covid-19 Crisis (95% Confidence Intervals): Comparing Datasets—Interaction Frequency. **Table C4**. Fixed Effects Linear Models to Predict Perceived Nursing Homes' Performance during the Covid-19 Crisis (95% Confidence Intervals): Comparing Datasets—Interaction Frequency. **Figure C2**. Fixed Effects Linear Models to Predict Perceived Nursing Homes' Performance during the Covid-19 Crisis (95% Confidence Intervals): Comparing Datasets—Left-wing Respondents. **Table C5**. Fixed Effects Linear Models to Predict Perceived Nursing Homes' Performance during the Covid-19 Crisis (95% Confidence Intervals): Comparing Datasets—Left-wing Respondents. **Figure C3**. Linear Model to Predict the Effect of Survey Waves on Perceived Nursing Homes' Performance during the Covid-19 Crisis (95% confidence intervals). **Table C6**. Linear Model to Predict the Effect of Survey Waves on Perceived Nursing Homes' Performance during the Covid-19 Crisis (95% confidence intervals). **Figure C4**. Fixed Effects Linear Models to Predict Perceived Nursing Homes' Performance during the Covid-19 Crisis: Owner replacing Seat (95% Confidence Intervals). **Table C7**. Linear regression model with fixed effect by survey waves: NH's owner type replaces NH's seat type. **Figure C5**. Fixed Effects Multinomial Logit Models to Predict Perceived Nursing Homes' Performance during the Covid-19 Crisis (95% Confidence Intervals). **Table C8**. Multinomial logit regression model with fixed effect by survey waves: Quality index. **Table C9**. Multinomial logit regression model with fixed effect by survey waves: NH's performance during the pandemic. **Table C10**. Multinomial logit regression model with fixed effect by survey waves: NH's performance during the pandemic. **Table 1A.** Descriptive Statistics.

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