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DETERMINANTS FOR HEALTH DECENTRALISATION IN PORTUGAL: POLITICAL, ECONOMIC AND TERRITORIAL FACTORS BEHIND LOCAL ADOPTION

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ABSTRACT – The decentralisation of health competences in Portugal was launched with the aim of bringing decision-making closer to local realities and strengthening municipalities' role in promoting population well-being. A regulatory framework introduced between 2018-2019 enabled the transfer of specific responsibilities from central government to local governments. However, by 2022, only around a quarter of eligible municipalities had accepted these competences, highlighting the existence of structural, political, and financial barriers to reform. While the effects of decentralisation on health system have been widely studied, there remains limited empirical evidence on the factors that influence local jurisdictions' willingness to assume new responsibilities. Addressing this gap, the present study analyses 201 eligible Portuguese mainland municipalities over the 2020-2022 period, modelling acceptance decisions based on demographic, political, financial, and health-related variables through binary logistic regression. Findings reveal that acceptance was more likely in municipalities politically aligned with the central government, with greater *per capita* financial resources, and with younger population profiles. In addition, regional dynamics emerged as an important contextual factor. These results highlight the need for decentralisation processes to account for territorial diversity, funding adequacy, and local capacity-building in order to ensure equitable and effective implementation.

Keywords: Decentralisation; health; municipalities; decision-making; social determinants of health.

RESUMO – DETERMINANTES DA DESCENTRALIZAÇÃO DA SAÚDE EM PORTUGAL: FATORES POLÍTICOS, ECONÓMICOS E TERRITORIAIS QUE SUSTENTAM A ADOÇÃO LOCAL. A descentralização das competências na saúde em Portugal foi implementada com o objetivo de aproximar a tomada de decisões das realidades locais e reforçar o papel dos municípios na promoção do bem-estar das populações. Um quadro regulamentar introduzido entre 2018-2019 permitiu a transferência de responsabilidades específicas da administração central para as autoridades locais. No entanto, até 2022, apenas cerca de um quarto dos municípios elegíveis tinha aceitado estas competências, o que evidencia a existência de obstáculos estruturais, políticos e financeiros à reforma. Embora os efeitos da descentralização no sistema de saúde tenham sido amplamente estudados, continuam a ser limitados os dados empíricos sobre os fatores que influenciam a vontade das autoridades locais de assumir novas responsabilidades. Para colmatar esta lacuna, o presente estudo analisa 201 municípios de Portugal Continental elegíveis durante o período de 2020-2022, modelando as decisões de aceitação com base em variáveis demográficas, políticas, financeiras e relacionadas com a saúde através de um modelo de regressão logístico binário. Os resultados revelam que a aceitação foi mais evidente em municípios politicamente alinhados com o governo central, com maiores recursos financeiros *per capita* e com perfis populacionais mais jovens. Além disso, a dinâmica regional emergiu como um importante fator contextual. Estes resultados sublinham a necessidade de os processos de descentralização terem em conta a diversidade territorial, a adequação do financiamento e o reforço das capacidades locais, a fim de assegurar uma implementação equitativa e eficaz.

Palavras-Chave*:* Descentralização; saúde; municípios; tomada de decisão; determinantes sociais da saúde.

HIGHLIGHTS

- Determinants of health decentralisation studied across Portuguese mainland regions.
- Higher funding and younger populations increase odds of accepting health competences.
- Political alignment and regional dynamics shape decentralisation choices.
- Local capacity support is key for effective health decentralisation.

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1. INTRODUCTION

Decentralisation, understood as the reorganisation of responsibilities across different tiers of government, has attracted growing attention in public policy discourse. This multifaceted phenomenon, marked by the transfer of competences and resources from central to subnational levels of governance, is neither uniform nor linear; rather, it reflects the institutional, political, and cultural particularities of each national context (Abimbola *et al.,* 2019; Oliveira *et al.,* 2024). Within the health sector, decentralisation is frequently advocated as a means of bringing decision-making closer to communities, thereby enhancing the responsiveness of services to local needs and promoting greater efficiency and equity in health systems (Nunes & Ferreira, 2022; Organisation for Economic Co-operation and Development [OECD], 2020).

Decentralisation can take a variety of forms, typically classified as administrative, political, or fiscal (see, *inter alia*, Monte *et al.*, 2022; Tselios, 2022). Administrative decentralisation entails the delegation of competences to subnational entities, which exercise operational autonomy while remaining under the legal authority of the central government. Political decentralisation involves the transfer of legislative powers and autonomous management to locally elected bodies. Fiscal decentralisation, in turn, grants subnational authorities the capacity to collect revenues and make independent budgetary decisions. These models often coexist and vary widely across European contexts, including Italy, Spain, and Germany, where the architecture of decentralisation reflects a combination of historical legacies and institutional arrangements (Oliveira *et al.*, 2024).

In Portugal, healthcare is predominantly delivered through a National Health Service (NHS) funded by general taxation and characterised, since its establishment in 1979, by strong centralised control over policy and resource allocation. Although the country is territorially organised into regions, districts, and municipalities, only the latter are directly elected and possess a legally defined set of responsibilities, albeit traditionally limited in scope. However, reforms introduced in 2018 and 2019 marked a significant shift, initiating a process of health sector decentralisation. Legal instruments – Law 50/2018 and Decree-Law 23/2019 – set out the transfer of competences to municipalities, particularly in areas such as the management of primary healthcare infrastructure (e.g., maintenance and investment), logistics (e.g., cleaning and utilities), and non-clinical personnel (operational assistants). Simultaneously, municipalities were mandated to develop Municipal Health Strategies, reinforcing their role in promoting population well-being and tackling health inequalities (Nunes & Ferreira, 2022; Oliveira *et al.,* 2022). This reform process remains ongoing, and its scope is still evolving.

Yet the implementation of these reforms has encountered significant obstacles. Portugal's marked territorial diversity, coupled with persistent economic and demographic asymmetries, may engender considerable variation in municipalities' capacity to assume new responsibilities, as differences in population density, ageing profiles, and available financial resources tend to play a critical role in shaping local responses (Capote, 2023).

In parallel, the financing arrangements underpinning the decentralisation process have come under scrutiny, criticised for their opacity and misalignment with local realities, thus hindering the delivery of effective and equitable reforms (República Portuguesa, 2023).

Despite some institutional progress, health decentralisation in Portugal remains highly contested. Advocates argue that municipalities, due to their proximity to communities, are better placed to integrate and respond to the social determinants of health, such as housing, access to essential services, and community engagement (OECD, 2020; Santinha, 2016).

Critics, however, raise concerns about the uneven capacities of municipalities, particularly in the face of population ageing, regional disparities, and increasing pressure on public resources (Rodrigues & Pedreiro, 2023). In practice, as corroborated by the study of Simões (2023), the decentralisation process has been marked by slow and uneven implementation, punctuated by successive legislative revisions. Notably, substantial disparities emerged in municipalities' voluntary acceptance of transferred health competences between 2020 and 2024 (see table I and fig. 1), pointing to underlying structural and political asymmetries.

While the international literature has provided extensive analyses of the consequences of decentralisation for health systems, research examining the specific factors that shape municipalities' decisions to accept new responsibilities remains limited. Understanding the motivations behind municipal decisions – whether to adopt, delay, or reject decentralised competences – is essential for identifying the constraints and enablers of policy implementation. Such an understanding also provides critical insights for the design of public policies that account for territorial diversity and are capable of fostering more equitable governance arrangements (Bruzzi *et al.,* 2022; Hao *et al.*, 2021).

This article aims to address this gap by examining the factors that influenced Portuguese municipalities' decisions to accept decentralised health competences during the 2020-2022 period, initially

established as the voluntary phase of the reform. Drawing on a quantitative analysis that integrates sociodemographic, political, economic, and health indicators, the study seeks to uncover patterns in local decision-making and to contribute to broader debates on health governance and decentralisation. The findings aim to inform future policy design, ensuring that decentralisation processes promote both territorial cohesion and health system equity.

Table I – Number of municipalities that implemented decentralised competences in the health area.
Quadro I – Número de municípios que implementaram a descentralização de competências na Área da Saúde.

Implementation process of competence decentralisation in the health sector (201 municipalities initially eligible)		
Year	Number of municipalities	Cumulative % of municipalities
2020	12	6.0
2021	8	10.0
2022	35	27.4
2023	124	89.1
2024	12	95.0
Did not assume	10	100.0

Source: Ministry of Health

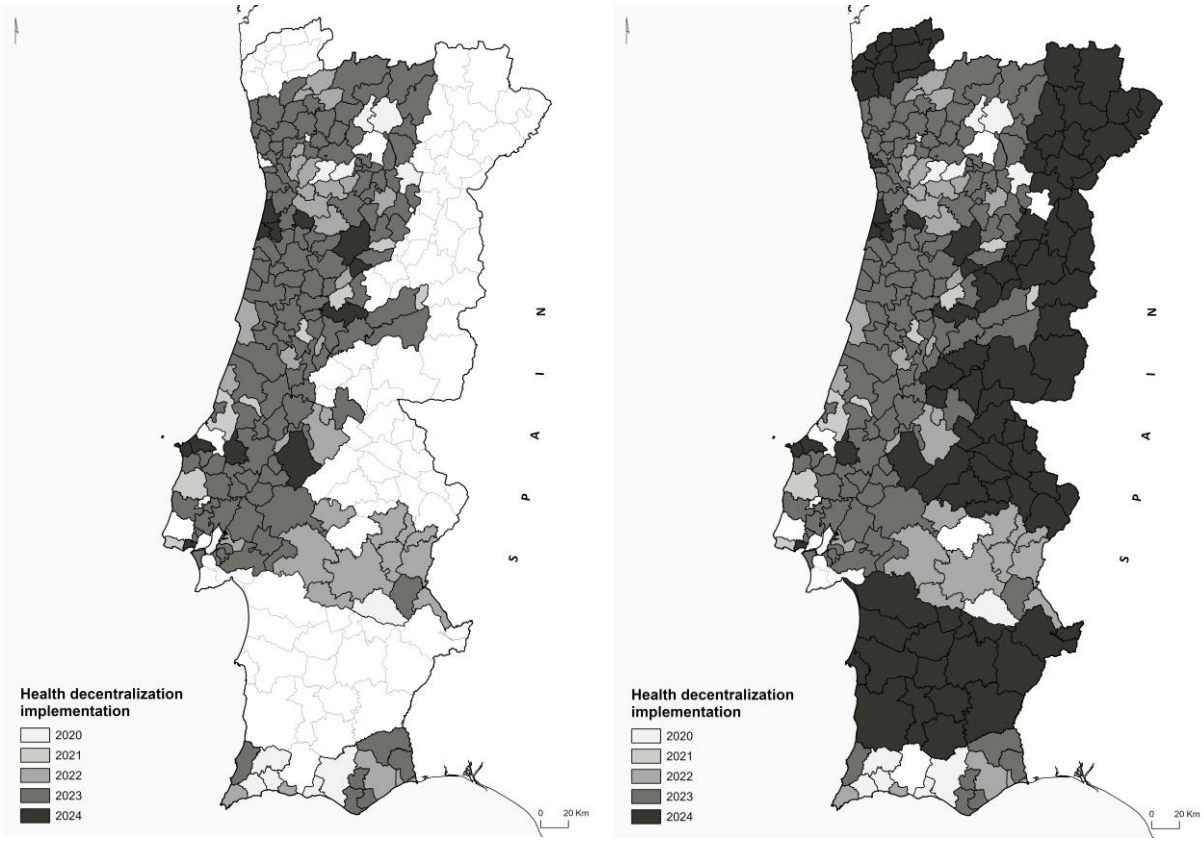

Fig. 1 – Geographical distribution of the process of implementing the transfer of competences in the Health Area. (cont.)
Fig.1 – Distribuição geográfica do processo de efetivação da transferência de competências na Área da Saúde. (cont.)
Source: Authors

Fig. 2 – Geographical distribution of the process of implementing the transfer of competences in the Health Area.
Fig.1 – Distribuição geográfica do processo de efetivação da transferência de competências na Área da Saúde.
Source: Authors

2. METHODS

2.1. Sample

The analytical sample comprises the 201 mainland Portuguese municipalities initially eligible to voluntarily accept the transfer of competences in the health sector. A total of 77 municipalities were excluded from the analysis because they were located in territories where Local Health Units (ULS) were already in place. The transfer of competences had become mandatory for these municipalities in 2024 under legislative provisions requiring the large-scale implementation of the ULS model across the entire mainland territory, which also entailed a restructuring of the decentralisation framework in the health sector for all Portuguese municipalities.

These municipalities lacked effective autonomy in the decision-making process, making them analytically distinct from those with discretionary authority. Focusing exclusively on municipalities with voluntary decision-making capacity allows for a more accurate assessment of the determinants influencing their choices.

The temporal scope of the study spans the period from 2020 to 2022 corresponding to the initial phase of health decentralisation. This interval was selected based on the extension of the voluntary adherence deadline to March 2022, as stipulated by Decree-Law 56/2020. Limiting the analysis to this timeframe ensures that only municipalities operating under voluntary conditions are considered, thereby avoiding confounding effects introduced by subsequent phases in which decentralisation became compulsory.

2.2. Data collection

To identify the factors influencing municipal acceptance of decentralised competences in the health sector, a set of eight indicators was selected and grouped into sociodemographic, political, economic, and health-related dimensions. Indicator selection was informed by a review of the relevant literature on decentralisation uptake and by the availability of reliable data at the municipal level.

Data were sourced from official and authoritative repositories, including the National Statistics Institute (INE) and legal instruments such as Ordinance 6541-B/2019, which defines the financial allocations transferred to municipalities under the decentralisation framework.

The selected indicators (Appendix A) and corresponding hypotheses were as follows:

i) Sociodemographic Factors

– Population density: we hypothesise that more densely populated municipalities may be more inclined to accept decentralised competences, as increased population heterogeneity often requires more locally responsive and tailored service provision (Wallis & Oates, 1988);

– Ageing index: municipalities with older populations may face greater health demands and service pressures, which decentralisation could potentially address through more targeted disease prevention and health promotion strategies (Andrews & Dollery, 2021).

ii) Political Factors

– Political party of the municipal executive: we expect that municipalities led by political parties aligned with the central government are more likely to accept decentralisation, due to greater perceived institutional alignment and the prospect of increased support (Cuadrado Ballesteros *et al.,* 2013). The data for this indicator correspond to the 2021 municipal election results. Comparison with 2017 showed that only three municipalities accepting decentralisation in 2020-2021 experienced changes in the municipal executive, indicating minimal impact on decision-making, as the decision to adopt health decentralisation had already been finalised.

iii) Health System Pressure

– Confirmed COVID-19 cases: the COVID-19 pandemic placed unprecedented strain on municipal resources and highlighted the importance of local public health governance. Higher case rates may have increased the perceived urgency or willingness to assume decentralised responsibilities (Biase & Dougherty, 2021).

iv) Human Resources and Accessibility

– Number of doctors and nurses per 1 000 inhabitants: uneven distribution of healthcare professionals across municipalities may influence perceptions of local capacity to deliver effective health services (Melo & Ferreira, 2025);
– Percentage of population within 15 minutes of a primary care provider: greater geographical accessibility to primary healthcare services may reduce the perceived need for structural changes, such as decentralisation, or conversely encourage it as a means to improve reach in underserved areas (Costa *et al.*, 2020).

v) Economic factors

– Municipal financial resources *per capita* the adequacy of financial transfers under the Decentralisation Financing Fund (FFD) is assumed to be a key enabler of decentralisation, with higher *per capita* funding potentially increasing municipalities' willingness to accept new responsibilities (República Portuguesa, 2023). Due to the unavailability of data on amounts transferred to municipalities, the indicator was constructed using the normative amounts specified in Ordinance 6541-B/2019, assuming that the resulting categorisation (comparing the top 25% of municipalities by *per capita* funding with the remainder) is similar to what would be obtained from the actual transfers.

The integration of these indicators enabled the construction of a comprehensive and up-to-date database, capturing the structural characteristics, contextual dynamics, and governance arrangements of municipalities during the study period. This approach supports the analysis of the territorial determinants of decentralisation acceptance and enables the identification of key patterns in municipal decision-making.

3. DATA ANALYSIS

The analytical strategy was structured in two main phases. First, a descriptive analysis was conducted to identify spatial patterns and temporal trends in municipal engagement with the decentralisation process. This provided preliminary insights into the heterogeneity of acceptance across municipalities. Second, a binary logistic regression model was developed to assess the statistical association between selected indicators and the likelihood of municipalities voluntarily accepting decentralised health competences. All analyses were performed using *IBM SPSS Statistics*, version 29.

3.1. Descriptive analysis

The descriptive phase aimed to explore how sociodemographic, political, economic, and health-related characteristics might shape municipal decisions. Notably, with the exception of the political affiliation of the municipal executive, the remaining indicators did not exhibit clear or consistent patterns of association with decentralisation acceptance. This heterogeneity points to the probable influence of unmeasured qualitative or contextual factors, such as local political leadership, administrative capacity, or prior experience with intersectoral governance.

In recognition of the growing relevance of Intermunicipal Communities (CIM) and Metropolitan Areas (AM) as key territorial governance actors in Portugal, an additional layer of analysis was undertaken to explore the relationship between decentralisation acceptance and regional affiliation. By disaggregating results by CIM/AM membership, the analysis captured the potential role of inter-municipal cooperation, horizontal political dynamics, and regional institutional capacity in shaping decisions at the local level. This broader spatial lens complements the individual-level municipal analysis and reinforces the importance of supra-municipal coordination mechanisms in decentralised health governance.

3.2. Logistic regression analysis

To identify the main predictors of decentralisation acceptance between 2020 and 2022, a binary logistic regression model was specified. The dependent variable was binary:

- 0 = Municipality did not accept the transfer of health competences.
- 1 = Municipality voluntarily accepted the transfer of health competences.

A total of eight independent variables were inserted into the model. For greater analytical clarity and comparability, three continuous variables were recoded into binary categories based on empirical distribution thresholds:

– Political party of the municipal executive: Categorised as 1 = Socialist Party (PS), which held central government during the reform period; 0 = Other parties (including PCP-PEV, PPD/PSD, CDS-PP, and independents).
– Municipal financial resources *per capita*: Dichotomised into 1 = Top 25% of municipalities with the highest *per capita* funding under the decentralisation framework; 0 = All others.
– Confirmed COVID-19 cases *per capita*: Categorised as 1 = Top 25% of municipalities with the highest reported case rates during the study period; 0 = All others.

The regression model was tested for compliance with key assumptions, including the independence of observations and adequacy of sample size relative to the number of predictors. These conditions were met, supporting the internal validity of the estimation.

In addition to reporting odds ratios, the model's overall explanatory power and classification accuracy were assessed using standard diagnostic measures (reported in the Results section). While the model achieved statistical significance, the modest classification rate suggests the presence of additional unmeasured variables or interaction effects that may influence municipal decision-making. These limitations are further considered in the Discussion section.

4. RESULTS

A full characterization of all variables is displayed in Appendix A.

4.1. Descriptive analysis

4.1.1. Political party of the municipal executive

Between 2020 and 2022, municipalities governed by executives affiliated with the Socialist Party (PS) were the most frequent adopters of decentralised health competences, accounting for 50.9% of all voluntary acceptances during the period.

The year-by-year distribution reveals distinct adoption patterns. In 2020, 21.8% of municipalities engaged with the decentralisation process, with PS-led municipalities comprising the majority (16.4%). This early stage coincided with substantial uncertainty regarding the implications of the reform, possibly limiting wider engagement.

In 2021, adoption rates reached their lowest point (14.5%), which may be attributed to the disruptive effects of the COVID-19 pandemic, as municipalities redirected attention to crisis management and public health emergencies. During this year, acceptance was equally distributed between PS-led and non-PS-led municipalities (7.3% each), suggesting a temporary neutralisation of political dynamics.

A significant increase occurred in 2022, with 63.6% of voluntary adoptions recorded that year, likely driven by the approaching deadline established by Decree-Law 56/2020. Interestingly, in this final phase, municipalities governed by other political parties exceeded PS-led counterparts in terms of new adoptions (36.4% vs. 27.3%), possibly reflecting a shift in strategic or institutional considerations as the deadline approached.

Despite these fluctuations, the Socialist Party maintained a dominant position throughout the analysed period. Figure 2 illustrates the relationship between political affiliation and acceptance rates, while figure 3 maps the geographic distribution of political control across municipalities, revealing regional patterns that may help explain local political behaviours.

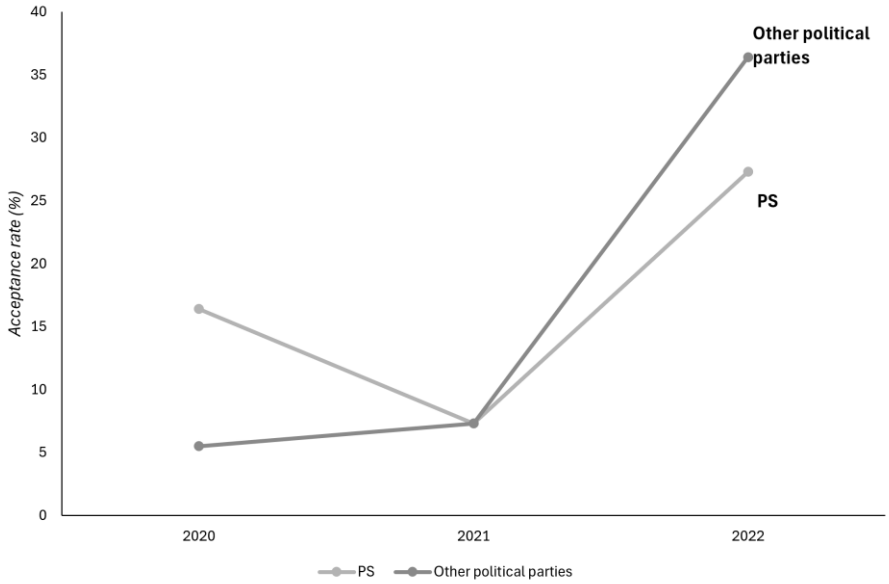

Fig. 2 – Evolution of Competence Transfer Acceptance Rates (%) by Political Affiliation (PS vs. other political parties), 2020-2022.

Fig. 2 – Evolução das taxas de aceitação de transferência de competências (%) por filiação política (PS vs. outros partidos políticos), 2020-2022.

Source: Authors

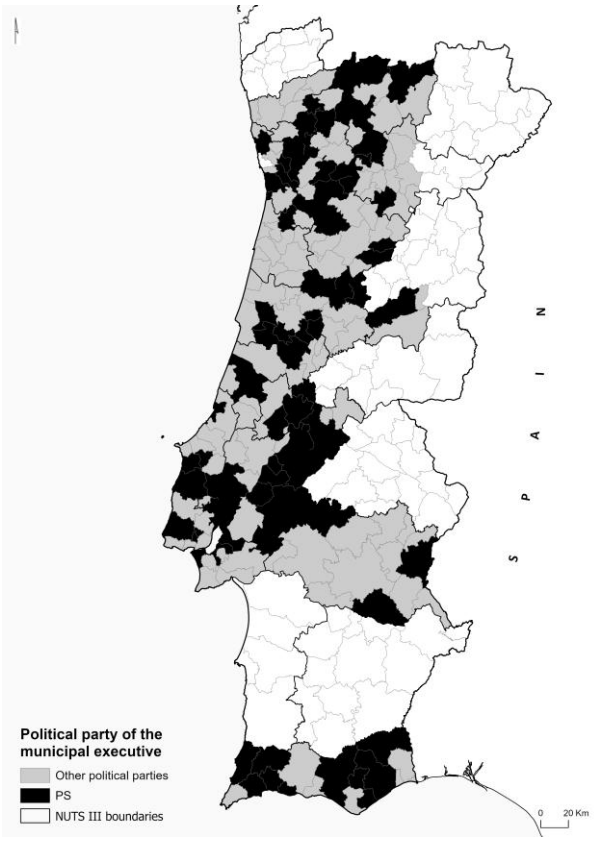

Fig. 3 – Political parties across the 201 initially eligible municipalities for health-sector competence decentralisation, by NUTS III Region.

Fig. 3 – Partidos políticos nos 201 municípios inicialmente elegíveis para a descentralização de competências nas Área da Saúde por NUTS III.

Source: Authors

4.1.2. Inter-Municipal Communities and Metropolitan Areas (NUTS III)

Analysis at the NUTS III level reveals pronounced regional disparities in the voluntary acceptance of health decentralisation. The Alentejo Central Inter-Municipal Community (CIM) registered the highest adoption rate, with 78.6% of its municipalities participating in the transfer of competences during the study period. High levels of adoption were also observed in Tâmega e Sousa CIM (63.6%) and Algarve CIM (56.3%). In contrast, markedly lower acceptance rates were recorded in Lezíria do Tejo CIM (9.1%) and the Greater Lisbon Metropolitan Area (11.1%), indicating more cautious or resistant engagement with the decentralisation process in these areas.

A closer examination of the regions with higher adoption rates suggests common characteristics such as low population density, ageing demographics, and limited geographical access to primary healthcare services. These conditions may have acted as motivating factors, encouraging municipalities to embrace decentralisation as a means of improving service responsiveness and addressing long-standing structural deficits. The territorial distribution of adoption rates across NUTS III regions is summarised in table II and depicted visually in figure 4. The results reflect both the socioeconomic diversity of Portuguese regions and the importance of inter-municipal dynamics, including the potential coordinating role of CIMs and AMs, in shaping local governance responses.

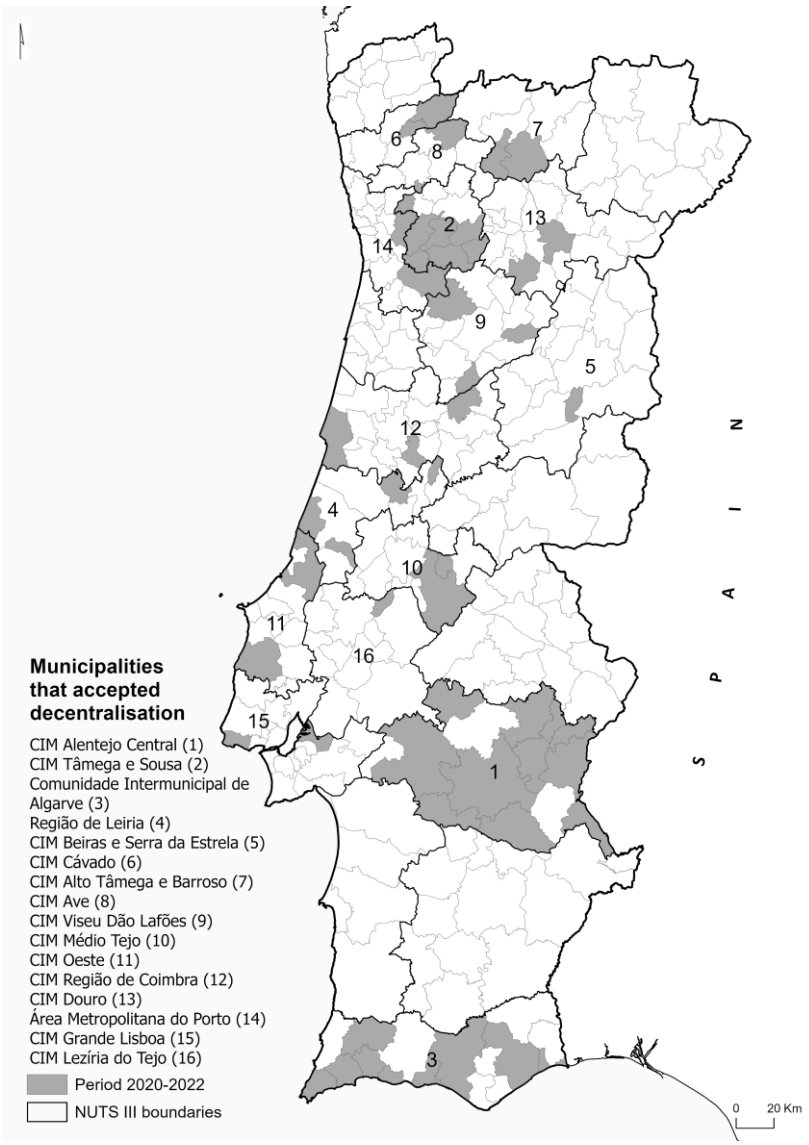

Fig. 4 – Municipalities where health competence transfers were implemented (2020-2022) by NUTS III.

Fig. 4 – Municípios onde se implementaram as transferências de competências em saúde (2020-2022) por NUTS III.

Source: Authors

Table II – Implementation of Health Competence Transfers (2020-2022) by NUTS III. (%)
Quadro II – Implementação das transferências de competências em saúde (2020-2022) por NUTS III. (%)

NUTS III	%
CIM Alentejo Central (1)	78.57
CIM Tâmega e Sousa (2)	63.64
Comunidade Intermunicipal de Algarve (3)	56.25
Região de Leiria (4)	40.00
CIM Beiras e Serra da Estrela (5)	33.33
CIM Cávado (6)	33.33
CIM Alto Tâmega e Barroso (7)	33.33
CIM Ave (8)	25.00
CIM Viseu Dão Lafões (9)	21.43
CIM Médio Tejo (10)	18.18
CIM Oeste (11)	16.67
CIM Região de Coimbra (12)	15.79
CIM Douro (13)	13.33
Área Metropolitana do Porto (14)	12.50
CIM Grande Lisboa (15)	11.11
CIM Lezíria do Tejo (16)	00.09

Source: Authors

4.2. Logistic regression model

The logistic regression model was developed to assess the factors associated with municipal decisions to voluntarily accept the transfer of competences in the health sector between 2020 and 2022. The model yielded a statistically significant result overall, with a likelihood-ratio chi-square statistic of x^2 (8) = 22.755, p = 0.004, indicating that the set of independent variables contributes meaningfully to explaining variance in the dependent outcome. Despite achieving statistical significance, the model's predictive capacity remains limited, correctly classifying only 15.5% of cases. The Nagelkerke R^2 value of 0.155 further suggests that the explanatory power is modest (table III). This limitation reflects the inherent complexity of the decentralisation process, which is likely shaped by a range of unobserved contextual, institutional, and political dynamics not captured by the included indicators.

Among the covariates analysed, two emerged as statistically significant predictors:

– The ageing index showed a negative association with decentralisation acceptance. Specifically, for each unit increase in the index, the odds of acceptance decreased by approximately 9.3% (Odss Ratio (OR) = 0.907, p = 0.017; 95% Confidence Interval (CI) [0.837, 0.983]). This suggests that municipalities with older populations were less likely to take on decentralised responsibilities, potentially due to greater service pressure or reduced implementation capacity.
– Conversely, municipal financial resources per capita displayed a positive and significant effect. Municipalities in the top quartile of per capita funding were over three times more likely to accept the transfer of competences than those with lower funding levels (OR = 3.122, p = 0.009; 95% CI [1.333, 7.314]). This finding reinforces the importance of fiscal capacity in enabling decentralised governance.

Other variables, while not statistically significant at conventional thresholds, provided suggestive insights:

– Political alignment appeared positively associated with decentralisation acceptance, indicating that PS-led municipalities were more inclined to engage with the reform, albeit without statistical confirmation;
– Population density and proximity to healthcare providers both demonstrated a slight negative effect on acceptance, whereas the density of healthcare professionals (doctors and nurses per 1 000 inhabitants) exhibited weak positive trends, none of which reached statistical significance.

Additionally, the number of confirmed COVID-19 cases per capita did not significantly influence acceptance, although this variable may interact with other local contextual factors not captured by the model.

The geographic distribution of the significant predictors across Portuguese municipalities is illustrated in figure 5, enabling to visualise potential spatial clustering or regional patterns in the influence of financial and demographic factors.

Table III – Logistic Regression Model.

Quadro III – Modelo de Regressão Logístico.

		2020-2022 Period	
	Odds Ratio (unadjusted)	Odds Ratio (adjusted)	95% CI for Odds Ratio (adjusted)
Model			
Constant		25.571	
Population density	.999	.999	[.998, 1.000]
Aging index	1.002	.907*	[.837, .983]
Political party of the municipal executive	1.619	1.789	[.913, 3.504]
Number of confirmed cases of COVID-19	1.458	1.405	[.556, 3.550]
Number of doctors per 1000 inhabitants	.849	1.005	[.779, 1.296]
Number of nurses per 1000 inhabitants	.933	.964	[.819, 1.134]
Percentage of the population within 15 minutes of a primary healthcare provider	.979	.978	[.948, 1.010]
Municipal financial resources *per capita*	2.810*	3.122*	[1.333, 7.314]
Model summary		x^2 (8) = 22.755 R2 Nagelkerke = .155	

Source: Authors

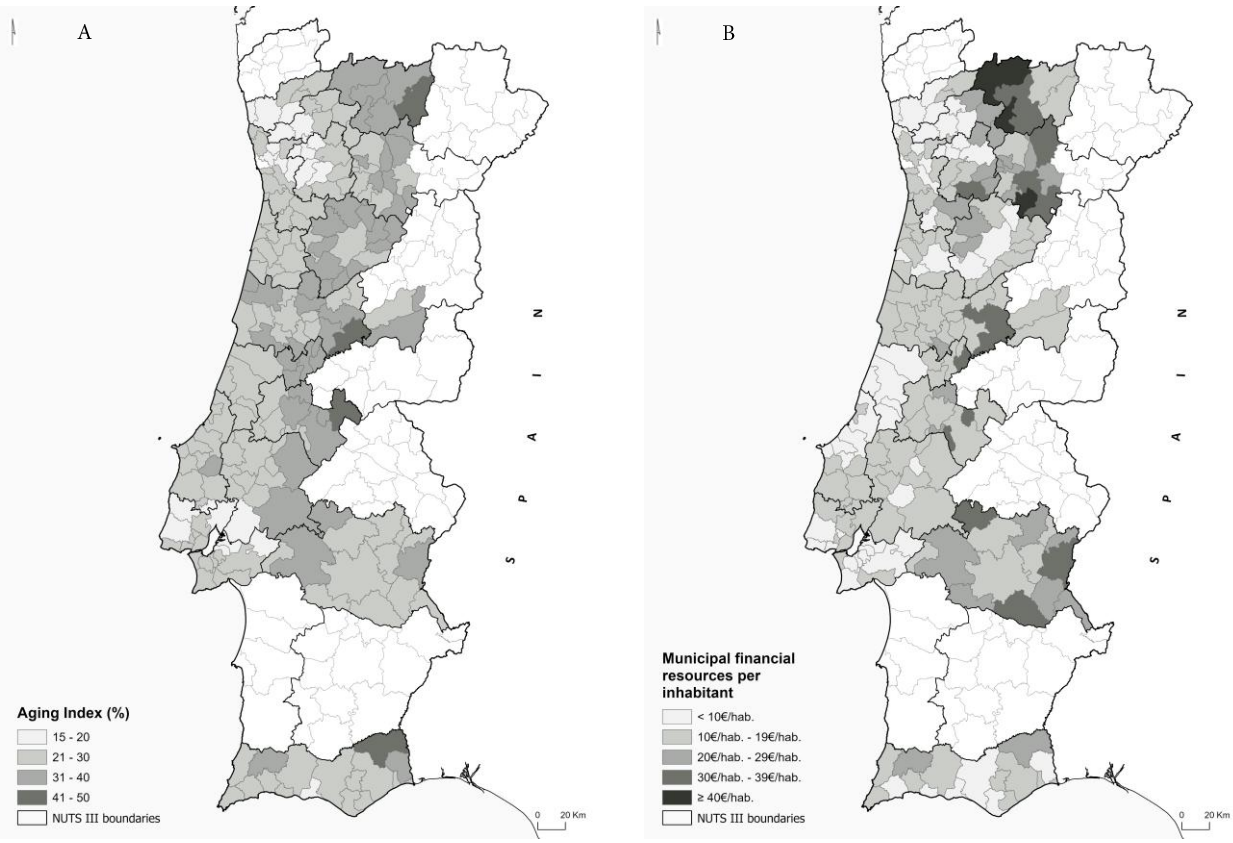

Fig. 3 – (A) Ageing index, and (B) financial value allocated per capita in the 201 municipalities initially eligible for the decentralisation of competences in the Health Sector by NUTS III.

Fig. 5 – (A) Índice de envelhecimento, e (B) valor financeiro atribuído per capita nos 201 concelhos inicialmente elegíveis para a descentralização de competências no Sector da Saúde por NUTS III.

Source: Authors

5. DISCUSSION

This study offers valuable insights into the drivers of municipal decision-making during the initial phase of health decentralisation in Portugal (2020-2022). The process of transferring competences to local

governments proved to be shaped by a set of political, demographic, economic, and territorial factors. As with decentralisation efforts elsewhere, the Portuguese experience highlights that implementation is rarely uniform or linear and often constrained by local capacity and broader systemic conditions (Busygina *et al.,* 2018; Cuadrado Ballesteros *et al.,* 2013). While decentralisation holds considerable promise for enhancing local responsiveness to health needs, it also faces significant challenges that may compromise its effectiveness or equity. In this context, five key dimensions merit close attention.

5.1. Political and ideological factors: alignment with the central government

Although political affiliation did not emerge as a statistically significant predictor in the regression model, the descriptive results indicate a noticeable tendency: municipalities led by the Socialist Party (PS), which formed the national government during the period under analysis, were more likely to accept decentralised competences. This pattern supports existing literature suggesting that ideological alignment between tiers of government eases decentralisation by reducing institutional friction and increasing trust in support mechanisms (Toubeau & Wagner, 2015).

In the Portuguese case, this alignment may have translated into greater confidence among PS-led municipalities in their ability to obtain financial or technical assistance from central authorities. It also raises questions about the extent to which decentralisation operates as a politically neutral reform, or whether it remains embedded in intergovernmental power dynamics.

5.2. Sociodemographic factors: the role of ageing

The ageing index was one of the few statistically significant predictors, with municipalities exhibiting lower levels of population ageing showing a greater propensity to accept decentralised health competences. This finding is consistent with studies highlighting the greater service pressure and operational complexity faced by ageing territories, which may inhibit their readiness or willingness to take on new responsibilities (Franco & Marques da Costa, 2022; Moreira, 2020).

Conversely, younger municipalities may perceive decentralisation as an opportunity to implement preventive and health-promoting policies, fostering life-course approaches to well-being (Ferreira *et al.*, 2021). However, the results also raise concerns about the equity of the reform: if decentralisation is more readily adopted by municipalities under less pressure, it may inadvertently reinforce what Hart (1971) termed the "inverse care law", where resources and responsibilities flow more easily to areas with fewer needs.

Thus, while decentralisation can be a tool for tailoring services to local contexts, its implementation must be carefully calibrated to avoid amplifying territorial health inequalities.

5.3. Economic factors: the challenge of funding

The logistic regression confirmed the strong predictive power of municipal financial capacity, with wealthier municipalities significantly more likely to accept decentralised responsibilities. This highlights a fundamental reality: adequate and transparent financial transfers are critical for successful and equitable decentralisation.

In Portugal, however, the funding methodology has been repeatedly criticised for lacking clarity and for insufficiently reflecting local needs (República Portuguesa, 2023). While international evidence recommends the use of objective criteria such as population, geography, and socioeconomic indicators (Abimbola *et al.,* 2019; Sumah *et al.,* 2016), the Portuguese framework remains empirically and politically contested.

From a policy perspective, the findings point to the pressing need for more predictable, needs-based, and transparent fiscal mechanisms, capable of ensuring that decentralisation does not exacerbate inequalities in municipal capacity or service delivery (Nunes & Ferreira, 2022).

5.4. Territorial dynamics: intermunicipal cooperation

Descriptive results also highlight the relevance of territorial governance structures, particularly the role of CIM and AM. Regions such as Alentejo Central, Tâmega e Sousa, and Algarve demonstrated higher rates of acceptance, suggesting that intermunicipal coordination may support shared learning, reduce uncertainty, or ease administrative burden-sharing.

These findings echo arguments by Mourão and Araújo (2023), who contend that decentralisation can encourage strategic regional planning and cooperation. Conversely, more complex urban regions such as

Greater Lisbon displayed lower acceptance rates, possibly due to the administrative fragmentation and higher transaction costs involved in adapting large-scale systems.

Such spatial patterns reinforce the need for decentralisation strategies that are place-sensitive, recognising the heterogeneity of local governance ecosystems and avoiding one-size-fits-all approaches.

5.5. Health system and human resources factors: a non-significant role

Surprisingly, none of the health system-related variables – including the number of doctors and nurses, geographical access to primary care, or COVID-19 incidence – emerged as statistically significant predictors. While this finding does not imply these factors are irrelevant in practice, it suggests that they were not central to the municipal calculus of decentralisation acceptance during the study period.

This result raises important questions. It may reflect the fact that decisions were shaped more by political or structural capacity considerations than by direct assessments of local health needs or service readiness. Alternatively, it could suggest a disconnect between decentralisation policy and the operational realities of local health systems, thus highlighting the need for more integrated planning and reform across sectors.

Furthermore, this can reflect the scope of the decentralisation process, which, in terms of human resources, is confined to transferring responsibility for operational assistants to local governments.

5.6. Strengths and limitations

This article offers a novel contribution to the literature by analysing, for the first time, the factors associated with municipal acceptance of health decentralisation in Portugal. The study covers the full set of eligible municipalities during the voluntary adherence phase (2020-2022), and applies a structured quantitative approach grounded in theory and policy.

Nonetheless, several limitations must be acknowledged. First, the model's predictive power was limited, suggesting that other relevant factors, such as disease burden, institutional legacy, or competing priorities (e.g., in education or social care), were not captured. Second, regarding political dynamics, the analysis was constrained by the lack of data on the composition of municipal assemblies, the political longevity of local executives, or their prior links to the health sector, all of which may influence policy preferences. Third, the short timeframe of the decentralisation process restricted the sample size and limited the capacity to observe temporal or causal relationships. A cross-sectional design, while analytically useful, does not fully capture longitudinal trends in policy adaptation or implementation.

Future studies should consider mixed-method approaches, including qualitative interviews with local policymakers, to unpack the political rationales and operational constraints behind decentralisation decisions. In addition, there is a pressing need to examine not only acceptance but also the quality and scope of implementation, including what municipalities actually did with the competences received, as highlighted by other studies on this topic (see, *inter alia*, Simões, 2023).

6. CONCLUSION

As the NHS undergoes reform, there is a renewed emphasis on fostering more effective, citizen-centred solutions. The decentralisation of health competences to municipalities reflects this ambition by enabling local governments to shape strategies tailored to specific territorial realities. More than a shift in administrative responsibilities, decentralisation creates opportunities to integrate health with broader social, economic, and environmental policies, contributing to a more all-inclusive and place-based vision of public well-being (Freitas *et al.,* 2020; Santinha, 2016).

However, the process of implementation has exposed substantial disparities in municipal engagement. This study has shown that the acceptance of health decentralisation was far from uniform and instead shaped by a set of interdependent factors. Understanding the rationale behind municipal decisions is therefore essential not only for evaluating the current reform, but also for guiding future policy design.

What drives Portuguese municipalities to accept, or reject, the transfer of health competences? How can empirical evidence be used to refine decentralisation mechanisms, ensuring they are responsive to local diversity without compromising equity? These questions remain at the heart of an important and ongoing policy debate, one that requires robust data, interdisciplinary dialogue, and greater engagement with the social and territorial dynamics underpinning governance.

Our findings suggest that political alignment, municipal financial capacity, population ageing, and regional cooperation frameworks all play key roles in shaping local decisions. In particular, the influence of financial resources highlights the need for decentralisation to be matched with adequate and equitable funding, while the effect of ageing demographics points to the challenges of local implementation in areas with heightened service demands.

If not carefully managed, however, decentralisation may inadvertently reinforce existing inequalities between territories, especially where acceptance of competences is concentrated in municipalities with fewer needs or greater resources. Policymakers must therefore take into account the heterogeneous conditions of municipalities and the strategic role of intermediate governance structures in promoting coordination and capacity-building.

It is also important to acknowledge that, unlike other areas transferred to local governments, such as social action, where municipalities already possessed experience, the health sector represented an entirely new field of action. The lack of prior experience and the absence of a clear regulatory framework may likewise have influenced municipal decision-making.

Ultimately, decentralisation can be a powerful tool for improving health governance, but only if grounded in territorial balance, institutional support, and evidence-informed design. Future stages of the reform should build on the lessons of this initial phase to ensure a more effective and balanced public health system across Portugal.

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REFERENCES

Abimbola, S., Baatiema, L., & Bigdeli, M. (2019). The impacts of decentralization on health system equity, efficiency and resilience: A realist synthesis of the evidence. *Health Policy and Planning, 34*(8), 605-617. https://doi.org/10.1093/heapol/czz055

Andrews, R., & Dollery, B. (2021). Guest editors' introduction: the impact of ageing and demographic change on local government. *Local Government Studies*, *47*(3), 355-363. https://doi.org/10.1080/03003930.2021.1906231

Biase, P., & Dougherty, S. (2021). Federalism and Public Health Decentralisation in the time of COVID-19. *OECD Working Papers on Fiscal Federalism*, *33,* 1-43. https://doi.org/10.1787/b78ec8bb-en

Bruzzi, S., Ivaldi, E., & Santagata, M. (2022). Measuring Regional Performance in the Italian NHS: Are Disparities Decreasing? *Social indicators research*, *159*(3), 1057-1084. https://doi.org/10.1007/s11205-021-02775-8

Busygina, I., Filippov, M., & Taukebaeva, E. (2018). To decentralize or to continue on the centralization track: The cases of authoritarian regimes in Russia and Kazakhstan. *Journal of Eurasian Studies*, *9*(1), 61-71. https://doi.org/10.1016/j.euras.2017.12.008

Capote, M. (2023). Descentralização e direitos dos cidadãos [Decentralisation and citizens' rights]. In A. D. Pereira, L. F. M. Almeida, & M. F. Ramos (Coords.), *Municípios e Saúde – Entre as lições da Covid-19 e os desafios da descentralização: Autarquias e Poder Loca l* [Municipalities and Health – Between the Lessons of COVID-19 and the Challenges of Decentralisation: Local Authorities and Local Government] (pp. 163-179). Almedina.

Costa, C., Tenedório, J. A., & Santana, P. (2020). Disparities in Geographical Access to Hospitals in Portugal. *ISPRS International Journal of Geo-Information*, *9*(10), 567. https://doi.org/10.3390/ijgi9100567

Cuadrado Ballesteros, B., García Sánchez, I. M., & Prado Lorenzo, J. M. (2013). The Impact of Political Factors on Local Government Decentralisation. *International Public Management Journal*, *16*(1), 53-84. https://doi.org/10.1080/10967494.2013.796270

Ferreira, D. C., Caldas, P., & Marques, R. C. (2021). Ageing as a determinant of local government performance: myth or reality? the Portuguese experience. *Local Government Studies*, *47*(3), 475-497. https://doi.org/10.1080/03003930.2021.1904397

Franco, P., & Marques da Costa, E. (2022). Regional disparities in health services provision in the European Union: When territory matters. *Finisterra – Revista Portuguesa de Geografia*, *LVII* (120), 45–71. https://doi.org/10.18055/Finis26994

Freitas, Â., Rodrigues, T. C., & Santana, P. (2020). Assessing Urban Health Inequities through a Multidimensional and Participatory Framework: Evidence from the EURO-HEALTHY Project. *Journal of Urban Health*, *97*, 857-875. https://doi.org/10.1007/s11524-020-00471-5

Hao, Y., Liu, J., Lu, Z., Shi, R., & Wu, H. (2021). Impact of income inequality and fiscal decentralization on public health: Evidence from China. *Economic Modelling*, *94*, 934-944. https://doi.org/10.1016/j.econmod.2020.02.034

Hart J. T. (1971). The inverse care law. *The Lancet*, *297*(7696), 405-412. https://doi.org/10.1016/s0140-6736(71)92410-x

Melo, W., & Ferreira, A. (2025). Regional Inequalities in the Allocation of Specialist Doctors Within the Portuguese NHS. *The International Journal of Health Planning and Management*, *40*(4), 825-837. https://doi.org/10.1002/hpm.3914

Monte, A., Iudicibus, A. De, Moccia, S., & Pennacchio, L. (2022). Speed of spending and government decentralization: evidence from Italy. *Regional Studies*, *56*(12), 2133-2146. https://doi.org/10.1080/00343404.2022.2045010

Moreira, M. (2020). *Como Envelhecem os Portugueses – envelhecimento, saúde, idadismo* [How the Portuguese age - ageing, health, idadism]. Fundação Francisco Manuel dos Santos.

Mourão, P., & Araújo, P. (2023). Regiões diferentes, efeitos fiscais diferentes: uma discussão em torno da importância dos desenhos da descentralização fiscal em Portugal [Different regions, different fiscal effects: a discussion on the importance of fiscal decentralisation designs in Portugal]. In J. Cadima Ribeiro (Coord.), *Regionalização e Descentralização em Portugal: Reforma do Estado, Aprofundamento da Democracia e Desenvolvimento* [Regionalisation and Decentralisation in Portugal: State Reform, Deepening Democracy and Development] (pp. 181-208). UMinho. https://doi.org/10.21814/uminho.ed.132.11

Nunes, A. M., & Ferreira, D. C. (2022). A Critical Analysis of Decentralizing the Portuguese Public Healthcare Provision Services. *International Journal of Environmental Research and Public Health*, *19*(20), 13390. https://doi.org/10.3390/ijerph192013390

Organisation for Economic Co-operation and Development. (2020*). Decentralisation and Regionalisation in Portugal: What Reform Scenarios?* OECD Multi-level Governance Studies, OECD Publishing. https://doi.org/10.1787/fea62108-en

Oliveira, M., Tavares, A., Vieira, A., Pacheco, M., Fernandes, A., Lourenço, A… & Herdeiro, V. (2022). *Sustainability and Resilience in the Portuguese Health System PORTUGAL Contributors to recommendations*. LSE. https://www3.weforum.org/docs/WEF_PHSSR_Portugal_2022.pdf

Oliveira, R., Santinha, G., & Sá Marques, T. (2024). The Impacts of Health Decentralization on Equity, Efficiency, and Effectiveness: A Scoping Review. *Sustainability*, *16*(1), 386. https://doi.org/10.3390/su16010386

Rodrigues, M., & Pedreiro, T. (2023). Os desafios da descentralização de competências na saúde para os municípios [The challenges of decentralising health competences to municipalities]. In A. D. Pereira, L. F. M. Almeida, & M. F. Ramos. (Coords.), *Municípios e Saúde - Entre as lições da Covid-19 e os desafios da descentralização: Autarquias e Poder* [Municipalities and Health – Between the Lessons of COVID-19 and the Challenges of Decentralisation: Local Authorities and Power]. (pp. 181-195). Almedina.

Santinha, G. (2016). Governance for health: Is the cultural 'lone ranger' behaviour still prevailing? Perspectives from policy-makers in Portugal. *Public Policy and Administration*, *31*(2), 147-168. https://doi.org/10.1177/0952076715595134

Simões, R. (2023). *Descentralização de competências na área da saúde nos municípios portugueses – um primeiro retrato* [Decentralization of competences in the area of health in portuguese municipalities - a first portrait]. [Dissertação de mestrado, Faculdade de Economia da Universidade de Coimbra]. Repositório da Universidade de Coimbra. https://hdl.handle.net/10316/112980

Sumah, A. M., Baatiema, L., & Abimbola, S. (2016). The impacts of decentralisation on health-related equity: A systematic review of the evidence. *Health Policy*, *120*(10), 1183-1192. https://doi.org/10.1016/j.healthpol.2016.09.003

Toubeau, S., & Wagner, M. (2015). Explaining Party Positions on Decentralization. *British Journal of Political Science*, *45*(1), 97-119. https://doi.org/10.1017/S0007123413000239.

Tselios, V. (2022). Does political decentralization affect income inequality? The role of governance quality. *Regional Studies*, *57*(5), 829-843. https://doi.org/10.1080/00343404.2022.2101634

Wallis, J., & Oates, W. (1988). Decentralization in the Public Sector: An Empirical Study of State and Local Government. In H. S. Rosen (Ed.). *Fiscal Federalism: Quantitative Studies* (pp. 5-32). University of Chicago.

LEGAL DOCUMENTS

República Portuguesa. (2023). Relatório n.º 4/2023-OAC 2ª Seção – O processo de transferência de competências para os Municípios – Lei n.º 50/2018, de 16 de agosto [Report 4/2023-OAC, 2nd Section – The Process of Transferring Competences to the Municipalities – Law No. 50/2018 of 16 August]. https://www.tcontas.pt/pt-pt/ProdutosTC/Relatorios/relatorios-oac/Documents/2023/rel-oac004-2023-2s.pdf

República Portuguesa. (2020). Decreto-Lei n.º 56/2020, de 12 de agosto. Prorroga o prazo de transferência das competências para as autarquias locais e entidades intermunicipais nos domínios da educação e da saúde [Decree-Law 56/2020, of 12 August. Extends the deadline for the transfer of competences to local authorities and intermunicipal entities in the areas of education and health]. https://diariodarepublica.pt/dr/detalhe/decreto-lei/56-2020-140087206

República Portuguesa. (2019). Despacho n.º 6541-B/2019, de 19 de julho. Mapa de encargos anuais com as competências descentralizadas - setor da saúde [Order No. 6541-B/2019, of July 19. Map of annual expenditures related to decentralised competencies – health sector]. https://diariodarepublica.pt/dr/detalhe/despacho/6541-b-2019-123328946

República Portuguesa. (2019). Decreto-Lei n.º 23/2019, de 30 janeiro. Concretiza o quadro de transferência de competências para os órgãos municipais e para as entidades intermunicipais no domínio da saúde [Decree-Law 23/2019, of 30 January. Implements the framework for the transfer of competences to municipal bodies and intermunicipal entities in the field of health]. https://diariodarepublica.pt/dr/legislacao-consolidada/decreto-lei/2019-118813666-118290863

APPENDIX

Table I – Characterization of indicators: definition and descriptive analysis.
Quadro I – Caracterização dos indicadores: definição e análise descritiva.

Indicator	Definition	Calculation formula	N		Mean	Standard Deviation
Population density	Total number of individuals / Area (km²)	N. º/ km²			396 980	952 183
Ageing index	(Number of people aged 65 or older / Number of people aged 0 to 14) * 100	%			26 726	5 732
Number of doctors per 1000 inhabitants	(Total number of doctors registered at the end of the year / Estimated resident population at the end of the year) * 1 000	N. º/1 000 hab.	201		3 279	3 361
Number of nurses per 1000 inhabitants	(Total number of nurses registered at the end of the year / Estimated resident population at the end of the year) *1 000	N. º/1 000 hab.			5 242	4 111
Percentage of the population within 15 minutes of a primary healthcare provider	(Resident population ≤ 15 minutes from a primary healthcare provider / Total resident population) * 100	%			94 309	11 974
			N		%	
Political party of the municipal executive (Local election results, 2021)	PS		85		42.3	
	PCP-PEV, PPD/PSD, CDS-PP, PPD/PSD e Outros, grupos de cidadãos e outros		116		57.7	
Number of confirmed cases of COVID-19	(Number of confirmed COVID-19 cases / Resident population) * 10 000	N. º / 10 000 hab.	25% of municipalities with the most COVID-19 cases	151	24.9	
			Remaining municipalities	50	75.1	
Municipal financial resources *per capita*	Financial amount allocated under decentralisation/ Resident population	€ / hab.	25% of municipalities with the highest *per capita* funding	50	24.9	
			Remaining municipalities	151	75.1	

Source: Authors