From longstanding recognition to limited practice: Social Determinants of Health in National Spatial Planning Frameworks

Background and rationale

The links between spatial planning and health are not new. For decades, planning theory and practice have recognised that the spatial organisation of territories plays a decisive role in shaping living conditions, environmental quality, access to services, mobility patterns, and social opportunities (Gonçalves et al., 2021; Barton & Grant, 2006). These territorial factors are now widely conceptualised as Social Determinants of Health (SDH), reflecting a well-established understanding that population health outcomes are largely produced by structural and contextual conditions rather than by individual medical care alone (WHO, 2025).

This perspective has been formally consolidated through the emergence of the Health in All Policies (HiAP) approach (WHO, 2014). HiAP promotes the systematic consideration of health implications across all public policy domains, recognising that sectors such as housing, transport, education, labour, and spatial planning exert a profound influence on health and health inequalities. Rather than positioning health as the exclusive responsibility of healthcare systems, HiAP reframes it as a cross-cutting societal outcome shaped by policy choices that structure everyday environments. Within this framework, spatial planning assumes a central role, as it provides the institutional and regulatory mechanisms through which multiple sectoral policies are spatially articulated and materialised (Greer et al., 2022).

International agendas and policy frameworks, particularly at the European and global levels, have repeatedly highlighted the importance of embedding health considerations into spatial and territorial development (Corburn, 2015). These frameworks emphasise that planning decisions related to land use, infrastructure provision, accessibility, and environmental protection are key levers for addressing SDH and reducing health inequalities (Giles-Corti et al., 2016). However, while the normative alignment between spatial planning and HiAP is well established, far less is known about how these principles are translated into practice within core planning instruments (Pineo et al., 2020).

Despite long-standing conceptual recognition, there remains limited empirical evidence on how contemporary spatial planning systems operationalise SDH within their planning frameworks and guidelines (Santinha, 2016). Much of the existing literature assumes that the integration of health into planning follows naturally from shared objectives and policy discourse, yet offers little comparative insight into whether and how health features are systematically embedded in spatial planning documents (Carmichael et al., 2012; Alexandropoulou et al., 2023).

This gap is particularly relevant at the national level. National Spatial Plans (NSPs) constitute the backbone of planning systems in many European countries, setting strategic orientations and guiding lower-tier spatial plans as well as sectoral policy alignment (Nadin & Stead, 2008). As such, NSPs provide a privileged analytical lens for assessing whether health is addressed merely as a rhetorical concern or as a structuring element of territorial development frameworks. Understanding how SDH are recognised and translated within NSPs is therefore critical for evaluating the actual capacity of spatial planning to act upon structurally produced health inequalities.

Against this background, the objective of this paper is to examine how and to what extent SDH are recognised and translated within NSPs in selected European countries, and to assess whether these planning frameworks provide the necessary conditions to move from conceptual alignment with HiAP principles to territorially grounded practice. While current debates on territorial resilience and uncertainty provide an important contextual backdrop, the analytical focus of the paper remains on the operationalisation of the planning-health nexus within national spatial planning systems.

Methods

The study analyses four NSPs currently in force and publicly available online, corresponding to Portugal, Ireland, Estonia, and Lithuania. These cases were selected to reflect variation in institutional contexts,

planning traditions, and territorial challenges, while ensuring comparability across European planning systems. A systematic qualitative content analysis was conducted using MAXQDA software, following a structured and transparent analytical procedure. The analysis unfolded in two complementary phases.

In the first phase, the study examined whether and how SDH are incorporated into NSPs. An analytical framework was developed by the research team to identify key domains associated with SDH. The analysis combined an initial keyword search with a full document review and manual coding, ensuring that references were accurately contextualised and assigned to predefined categories. Within each domain, references to SDH were classified as explicit (directly mentioned in objectives, policies, or instruments), implicit (referred to indirectly or contextually), or absent. This classification enabled a detailed assessment of both the visibility and depth of health-related considerations.

Importantly, SDH integration was examined across the main stages of the planning cycle: the diagnostic phase, where territorial challenges are identified; the strategic phase, where objectives and priorities are defined; and the operational phase, where measures and instruments are specified. This distinction was essential to assess whether health considerations are confined to problem framing and strategic discourse or translated into concrete planning guidance.

In the second phase, the analysis focused on collaborative governance mechanisms relevant to acting on SDH. The study examined references to forms of collaboration involving multiple actors, including governmental and non-governmental bodies, the private sector, and civil society. Particular attention was given to interministerial and intersectoral coordination, multilevel governance arrangements, public participation, and international and European Union-level cooperation. As in the first phase, keyword searches were combined with systematic reading to ensure analytical consistency and cross-country comparability.

Results

The results reveal distinct national patterns in the way SDH are prioritised within NSPs. In Portugal and Ireland, attention is predominantly directed towards socio-economic factors, reflecting concerns with social inequalities, living conditions, and access to services. In contrast, in Estonia references associated with mobility and transport are more prominent, while in Lithuania SDH are more frequently linked to environmental dimensions, such as territorial quality and exposure to environmental risks. These differences suggest differentiated territorial agendas shaped by specific socio-economic, institutional, and environmental contexts.

The explicit integration of health into planning instruments varies considerably across the countries analysed. Portugal stands out for displaying a more systematic and explicit presence of health-related considerations, particularly associated with access to services and most visible in the operational phase of the plan. This pattern indicates a more concrete translation of health concerns into planning measures.

In the remaining countries, the presence of health is more limited and assumes distinct configurations. In Ireland, although references to health are relatively scarce, they are mostly explicit and distributed across diagnostic, strategic, and operational phases, suggesting a transversal (though not strongly action-oriented) approach. In Lithuania, health appears explicitly only in specific domains, remaining absent from most of the plan's structuring axes. In Estonia, references to health are few and largely implicit, concentrated mainly in diagnostic and strategic sections, with little translation into operational measures.

Regarding collaborative governance mechanisms, a common tendency emerges towards valuing international cooperation and coordination at the European Union level, particularly in Ireland, Estonia, and Lithuania. Multilevel governance is also acknowledged in all cases, although with varying intensity. By contrast, interministerial and intersectoral cooperation remains weakly articulated across all four countries, revealing persistent limitations in horizontal coordination between sectors with direct relevance for SDH.

The Portuguese case further stands out for giving greater prominence to public participation and citizen involvement, with references appearing not only at the strategic level but also in relation to operational actions. In the remaining cases, public participation is more limited and largely declarative.

Conclusions

Overall, the findings indicate that differences in the integration of SDH within NSPs are not merely discursive, but reflect varying institutional capacities to translate long-recognised planning-health linkages into territorial practice. Portugal and Ireland display more advanced stages of SDH integration, albeit through different planning logics and with uneven emphasis across the planning cycle. Estonia and Lithuania remain more distant from an approach capable of systematically linking spatial planning to health-relevant territorial outcomes.

These results suggest that, despite decades of conceptual alignment between spatial planning and health, NSPs still struggle to operationalise SDH in ways that shape concrete spatial interventions. This paper provides comparative evidence on the extent to which national spatial planning frameworks are equipped to address structurally produced health inequalities. In an era marked by socio-environmental uncertainty, strengthening the translation of SDH from recognition to practice remains a key challenge for spatial planning systems seeking to support healthier and more equitable territorial development.

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