

Health impact assessment institutionalisation in France: state of the art, challenges and perspectives

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Health Impact Assessment Institutionalisation in France: state of the art, challenges and perspectives

HIA implementation has rapidly grown in France. The question arises as to whether such growth is paving the way towards institutionalisation. An analytical framework was built based on the literature and capturing key dimensions characterising HIA practice and institutionalisation. Collected data draw upon documented HIAs, evaluation reports, direct observations and workshops. HIA practice in France follows a stand-alone procedure and is based on a holistic model of health. Its largely concerns intermediate HIAs commissioned by municipalities with the support of regional health authorities. Mainly applied to urban planning, HIAs are usually conducted by private firms, and local health observatories. Levers for institutionalisation include: an enduring tradition of intersectoral collaborations for health; a growing culture of health promotion; supportive environmental regulatory requirements; and policy frameworks and mandates addressing health inequalities at a regional and municipal level. For HIA to be more institutionalised, there is a need to clarify its purpose, continue building capacity, promoting impact evaluations for evidence on HIA' potential to advance HiAP and obtain greater commitment from national authorities.

Key words: health impact assessment; institutionalisation; health promotion; intersectoral collaboration; capacity building

Introduction

Health impact assessment (HIA) has been defined as "a process which systematically judges the potential, and sometimes unintended, effects of a project, program, plan, policy, or strategy on the health of a population and the distribution of those effects within the population" in order to identify measures to adapt the design and the delivery of the initiative to both protect and to promote health (Winkler, M.S et al. 2021). HIA developed from two streams of influence: environmental health and health promotion (Harris-Roxas et al. 2012) and it includes elements from both traditions. HIA is particularly influenced by health promotion to the extent that it applies a holistic model of health which emphasises the importance of the social determinants of health and adheres to ethical principles such as equity and social justice, democracy and citizen participation, principles that distinguish HIA from other forms of impact assessment (Cave et al. 2021). It follows a structured stepwise process that uses an array of data sources and analytical methods, and it addresses the unequal distribution of impacts within a given population. It relies on inputs of a wide range of stakeholders (Lock 2000; Wise et al. 2009). As a result, it can fulfil a regulatory requirement, support a decision-making process, develop advocacy for better well-being and social justice, and empower populations (Harris-Roxas and Harris 2011).

HIA practice has rapidly developed in France over the last ten years (Jabot et al. 2020). The first HIA was undertaken in 2008 in Rennes and focused on a day-care centre (Moulin 2008). Although focused on environmental determinants, it helped to raise HIA awareness among municipal officials and led to a second HIA in 2011 on a railway station renewal project (Tollec et al. 2013). Integrating a wider range of determinants, this second HIA served as a model for other municipalities that would later embark on the process. In 2010, the Ministry of Health organised a seminar to raise interest in HIA among national-level stakeholders. Subsequently, the National Institute for Prevention and Health Education (NIPHE) funded a comprehensive HIA on a transportation project in Greater Paris. This was followed by a call for funding several HIAs in different regions and the organization of a package of training sessions for elected officials, staff from public institutions and future practitioners. Following these early years, HIA practice gathered momentum in 2016 thanks to the political will and interest of some Regional health agencies (RHAs) to put health on the political agenda and enhance proactive collaboration to this end. Since then, HIA has continued to grow,

particularly at the local level. The EHESP has been engaged in the process from the very beginning, conducting HIAs and providing training and tools. Around sixty HIAs have been launched in France since 2011, even though this number should be interpreted with caution for two reasons: there is no national HIA repository and some experiences qualified as HIAs do not necessarily meet practice standards.

HIA institutionalisation, that is, "the systematic integration of HIA into the decision-making process" (Wismar and European Observatory on Health Systems and Policies 2007), has progressed internationally with variations from one country to another. Different strategies have been proposed to advance towards this end institutionalisation, including promoting non-health sectors awareness and concern on health issues and the interest of using HIA, developing supportive policy or administrative frameworks to conduct HIA and implementing legal frameworks as permanent rules and procedures for mandated HIA (Banken 2001; Lee, Jennifer H et al. 2013). While legal frameworks constitute the most effective means to advance HIA institutionalisation, it has been noted that they may be insufficient as ongoing input, support and quality control by the health sector will be required (Cave et al. 2021). This finding has led some authors to propose the effective inclusion of health and health equity in environmental impact assessment (EIA), as an opportunity to advance health issues in decision making processes subjected to environmental regulatory requirements (Bhatia and Wernham 2009; Cave et al. 2021).

Literature published in different countries over the last fifteen years provides some insight on contextual and process factors that have helped or hindered HIA integration into the decision-making process. There appears to be a broad consensus regarding the need for a strong political commitment and public support for HIA institutionalisation (Finer et al. 2005; Davenport et al. 2006; Wismar et al. 2007; Wismar and European Observatory on Health Systems and Policies 2007; Mannheimer et al. 2007; Ahmad et al. 2008; Morgan 2011; O'Mullane and Quinlivan 2012; Negev et al. 2012; Harris and Haigh 2015; Morteruel et al. 2020). A mandatory legal framework is also identified as an enabling factor as it provides legitimacy within the policy process, facilitates working relations and supportive infrastructures, and clarifies under which circumstances HIA is required (Knutsson and Linell 2010; Fakhri et al. 2015; Winkler et al. 2020; Iglesias-Merchan and Domínguez-Ares 2020; Diallo and Freeman 2020), notably in countries lacking a tradition of HIA (Negev et al. 2012). In addition, authors point to well-established policy and administrative frameworks allowing HIA integration into existing

formal procedures and putting health authorities to work with other agencies (Finer et al. 2005; Davenport et al. 2006; Ahmad et al. 2008; Morgan 2011; Dannenberg 2016). The existence of a regulatory foundation in other impact assessment procedures such as Strategic Environmental Assessment (SEA) and EIA may also contribute to HIA institutionalisation (Fehr et al. 2014; McCallum et al. 2017). In Europe, progress in use of integrated assessments could contribute to further HIA recognition and development (Wright et al. 2005). The application of Directive 2014/52/EU encourages a greater consideration for health in SEA and EIA and, in some countries, it has led to specific actions (creation of working groups, production of guides...) that have provided the actors in charge of conducting these assessments with an holistic view of health and new tools to integrate such views into their practice (Baumgart et al. 2017; Roué Le Gall et al. 2017; Cave et al. 2021). Strategic mandates such as the Healthy Cities Network have also proven to be highly supportive to HIA development at a local level in decentralized countries (Johnsdatter Kræmer et al. 2014; Mattig et al. 2017).

Other enabling factors contributing to HIA mainstreaming in decision making include the existence of organisational schemes and structures facilitating intersectoral work and collaboration across stakeholders' structures and institutional cultures (Davenport et al. 2006; Mannheimer et al. 2007; Ahmad et al. 2008; Negev et al. 2012; Johnsdatter Kræmer et al. 2014; Diallo and Freeman 2020; Morteruel et al. 2020). These organisational schemes facilitate high-quality relationships across sectors and promote the establishment of shared goals and values that have proved essential to consolidate HIA practice (Haigh et al. 2013; Mattig et al. 2017; Winkler et al. 2020). Authors also agree on the importance of assuring sustainable funding and capacity building efforts (Fakhri et al. 2015; Winkler et al. 2020; Morteruel et al. 2020). More precisely, other authors recognise the appointment of a HIA unit or team at an strategic level to steer and guide HIA capacity building and development (Davenport et al. 2006; Wismar et al. 2007; Ahmad et al. 2008; Morgan 2011), the provision of an evidence base, practical tools and guidelines (Johnsdatter Kræmer et al. 2014; Dannenberg 2016) and the delivery of other capacity building and training initiatives to effectively conduct HIAs (Finer et al. 2005; Mannheimer et al. 2007; Huang 2012; Fischer et al. 2021).

Given that HIA is rapidly growing in France, the question arises as to whether such growth might be paving the way towards institutionalisation. This article aims to describe how HIA practice is developing in France and to assess how institutionalised it has become in accordance with key enabling factors described in the literature.

Methods

A literature review was conducted to clarify concepts and to identify key context and process factors facilitating HIA institutionalisation. We searched articles in English, French and Spanish published in the Pubmed and Scopus databases using the free text terms "health impact assessment", "implementation", "institutionalisation" and "effectiveness" in the title, abstract and keywords. Obtained results were subsequently refined using the database filters in accordance with the objectives of the review and non-relevant articles were removed. By using the term "effectiveness" we sought to capture articles that discuss enabling factors for effective HIA practice following Davenport at al. (2006) definition of a successful HIA as "one where its findings are considered by decision makers to inform the development and implementation of a policy, program or project". Thirty-five articles were finally selected for full reading according to the review objectives of identifying key contextual and process factors leading to HIA institutionalization.

On this basis, an analytical framework to characterize HIA implementation and institutionalization in France was developed based on two analytical frameworks that have capitalized on the experiences of several countries. We first studied the conceptual framework by Wismar et al. (2007) aimed at mapping and assessing enabling factors for effective implementation and institutionalization of HIA in Europe. Drawing on concepts developed in health system research, the authors propose four main dimensions, subdivided in detailed tasks, to assess the degree of HIA institutionalization in a given country. These include: stewardship, financing, capacity building and delivery. Secondly, we reviewed the framework developed some years later by Lee et al. (2013) based on a study conducted in nine countries and the European Union. The aim was to gain a better understanding of the enabling factors contributing to effective HIA implementation and institutionalization. The framework covers five main areas: degree of and mechanisms for institutionalization; political setting and context; framing and type of HIA; implementation, resource requirements and structures; and outcomes and conclusions. While these two frameworks share some features they also present some differences insofar as they have been carried out some years apart, which allowed its authors to develop an analytical framework in line with newly cumulated experience

in a wider sample of countries. In recent years, some other authors have published new studies to identify enabling factors that could contribute to wider and more effective implementation of HIA in specific countries and contexts (Haigh et al. 2015; Linzalone et al. 2018; Fakhri et al. 2015). Drawing on these works, we built up an analytical framework distinguishing implementation, i.e. HIA practice, from institutionalisation, i.e. its systematic integration by various means into routine decision making. In addition and, based on our previous work (Jabot et al. 2020), we further explored the dimensions of governance and capacity building to cover certain aspects not fully described in the frameworks reviewed. The proposed framework integrates two main parts (Table 1). The first includes the key elements characterizing HIA practice: nature of the submitted proposal, type of HIA, stakeholders involved, governance mechanisms, and HIA teams' profiles. The second focuses on the mechanisms and levers facilitating HIA institutionalisation. It covers four main dimensions: stewardship, means of endorsement, provision of funding and capacity building. Published reports on HIAs conducted in France were subsequently analysed following this analytical framework.

The selection of HIA reports for analysis was made on the basis of identified HIA experiences that qualified as such in relation to practice standards (Bhatia R, Farhang L, Heller J, Lee M, Orenstein M, Richardson M and Wernham A. 2014; Green et al. 2018; Winkler, M.S et al. 2021). Reports were retrieved from the EHESP HIA platform or from institutional websites of regional health authorities and other institutions conducting HIAs in France. Of the 65 HIAs launched between 2011 and 2020, 49 had been completed but only 43 had been documented. We discarded two experiences that did not follow the minimum practice standards. The 41 remaining HIAs were submitted for analysis, 17 of them (shades lines) in greater detail based on the direct knowledge of the authors of this article as a result of their involvement in their implementation or evaluation (Table 2). Data extraction and content analysis were conducted in accordance with the proposed conceptual framework. If data were missing, supplementary information was requested directly from HIA corresponding authors by email or direct exchanges during seminars organized in different locations in France and in which the authors of this article participated.

Finally, results were related to the international literature and more precisely, to the findings of the review conducted by Linzalone et al. (Linzalone et al. 2018) shedding some light on the main contextual elements contributing to HIA institutionalisation and

their relative weight. Our final discussion captures the enabling factors and obstacles that, according to these authors, help to anchor HIA in institutions and routine decision-making practices.

Results

HIA implementation in France

More than two thirds of documented HIAs are applied to urban development projects and, to a lesser extent, to social or transportation policies and public infrastructure-related projects. Most HIAs are commissioned by the local government authorities and usually undertaken in partnership with RHAs and with their financial support. However, it is noteworthy to mention one HIA that was conducted in 2019 on the initiative of a group of public health practitioners following an advocacy purpose (Jabot et al. 2019). Most HIAs are conducted by private firms, independent consultants and local health observatories. Universities are more rarely involved. Eleven regions out of 16 have carried out at least one HIA, although a great disparity is found across regions, ranging from a single experience in some regions to more than 20 documented HIAs in the four most committed regions (graph 1). Three of them have also commissioned process and impact evaluations of completed HIAs.

As in other countries, HIA is essentially implemented as a stand-alone procedure (Lee, Jennifer H et al. 2013; Roué-Le Gall and Jabot 2017), generally rooted in a holistic model of health and undertaken in compliance with the Gothenburg Consensus values of democracy, equity, sustainable development and ethical use of evidence. Nevertheless, and consistent with the literature (den Broeder et al. 2017), insufficient resources and time often constrain practitioners' ability to properly address citizen participation and equity issues (Parry and Wright 2003; Gauvin et al. 2012; Chadderton et al. 2013; Rococo et al. 2021). Current practice largely concerns intermediate HIAs and involves the collection of available evidence and new quantitative and qualitative data. Some piloting experiences have required extended resources and timeframes. Quantitative modelling, risk assessment and cost-effectiveness analyses are less

frequently applied, reflecting a preponderance of a health promotion approach in France.

Following the "decision-support model" as described by Harris-Roxas & Harris (Harris-Roxas and Harris 2011), HIAs are not mandatory and they are often commissioned by public authorities interested in putting health and healthy urban planning (HUP) on the agenda. They are carried out in collaboration with the proponents of the project and with a degree of flexibility in terms of the procedures and methods applied and in terms of what is considered as a reliable source of evidence.

HIA governance is often shared between three entities: a RHA that very often provides funding, a municipal authority responsible for the pending decision, and a HIA team. RHAs are generally represented by the health promotion and/or the environmental health departments while the municipality can be represented by different service sectors. Other stakeholders may include representatives of health promotion associations or other bodies specialising in population health surveillance and monitoring, environment or urban planning, and researchers and professionals from different sectors, as well as citizen representatives. Relationships between all these stakeholders vary across regions and they are regulated through two governing bodies: a steering committee (comprising the RHA, some local elected representatives and occasionally other stakeholders), and a technical committee which assists the HIA team throughout the process.

HIA institutionalisation

The degree of HIA institutionalisation was examined through four main dimensions following the analytical framework developed for this study.

Political commitment and stewardship

HIA development in France should be placed with regard to the regional and municipal authorities' growing interest on Health in all policies (HiaP) and HUP approaches, respectively. Within this context, HIA is increasingly perceived as an effective procedure for advancing healthy public policies and thereby, translating HiAP and HUP into action. The enactment of the Grenelle II Law in 2010 prompted interest in integrating health considerations into environmental impact assessment (Roué-Le Gall and Jabot 2017). In 2015, the Ministry of Health commissioned an expert report aimed

at disseminating existing methods and tools to assess the health impacts of urban development projects (Haut Conseil de la Santé Publique (HCSP) 2017). Public authorities' interest in HIA also arises from the recognition of its potential to make health promotion more tangible, to promote intersectoral collaboration for health and to enhance citizen participation. Contrarily to other countries, no dedicated HIA team has been appointed at a national level to provide HIA advocacy, expertise and support for commissioning, supervising and conducting HIAs. The initial involvement of the NIPHE was stopped when it was restructured in 2016 and no other central government entity has taken over.

Means of endorsement

As stated before, there is no statutory requirement to undertake HIA in France. Nevertheless, there are some supportive policies and administrative frameworks at a regional level (health and environmental health programmes) and at a municipal level (intersectoral local health plans). Recent legislative and policy documents endorsing public commitment to reducing health inequalities also legitimize HIA as an effective procedure for putting health equity on the political agenda. This is the case of the Health System Modernization Act (2016) and the National Health Strategy 2018-2022, neither of which refer explicitly to HIA provisions but they do recognise the need to reduce health inequalities by taking action on the social determinants of health.

Funding

In addition to political will and supportive frameworks, the sustained and systematic use of HIA is dependent on the availability of resources. There is no dedicated budget at a national level although in recent years some funding has been provided ad-hoc by the NIHPE and other public agencies to promote HUP initiatives. In addition, some RHAs are currently financing HIA implementation schemes in close collaboration with municipalities and other local stakeholders. At sub-regional and municipal levels, HIA practice is also being financed through funds transferred by the National Agency for Urban Renewal.

Capacity building

Capacity building initiatives in other countries include the establishment of dedicated support units, the training of HIA practitioners and the provision of relevant documentation, guidelines and tools (Wismar and European Observatory on Health Systems and Policies 2007; Lee, Jennifer H et al. 2013). There is no dedicated HIA unit in France with the exception of a team of university professors at the EHESP. Several universities have included a HIA training module within their master programmes. Moreover, as part of HIA implementation schemes in place, some regions offer practical training sessions integrating 1-2 day workshops to put theory into practice. Dedicated seminars are also held in different locations and a number of public institutions provide relevant documentation and guidance on their websites. The EHESP offers a mentorship programme offering technical assistance and advice throughout the HIA procedure for a given project. In addition, since 2018 it has administered a website platform for providing HIA documents and tools, sharing experiences and promoting a community of practice.

Discussion

This study has shown important advances in HIA deployment in France in the last decade, although progress is still needed in order to advance towards institutionalisation. According Linzalone (Linzalone et al. 2018), a strong political will is the very first condition to meet this end insofar as it triggers, through a "cascade mechanism", other key factors including supportive regulatory frameworks, the facilitation of intersectoral action for health, the provision of resources, and the investment in capacity building. Following these elements, this study has also provided some relevant insights on the growing political interest that HIA raises in France and on some contextual factors that might enable its steady institutionalisation in formal decision-making settings in the coming years.

A strong political will at the local and regional levels

There is significant and shared interest in HIA among decisions makers in France. However, it is at the local and the regional levels that such interest is most noteworthy and effective. Within this context and, as in other European countries, the health sector is playing a driving role by ensuring HIA advocacy, providing dedicated funding and building partnerships through proactive policies and strategies (Finer et al. 2005;

O'Mullane 2013; Berensson and Tillgren 2017; Jabot et al. 2020). This is favoured by a long-standing and close collaboration between the regional and the local authorities on social and health issues. Such collaboration was strengthened in 2009 as a result of a territorial reform that created joint local policy schemes aimed at improving health and reducing health inequalities at the local level. In addition, in some regions, the health sector is forging partnerships with other public institutions to provide new sources of funding. It is worth mentioning the alliance established in the Ile de France region between the RHA and an environmental regional agency. If political will is key for HIA development (Pursell and Kearns 2013), this enduring tradition of intersectoral partnerships is actually the foundation on which HIA is progressing in France.

A growing culture in health promotion

Even though the classical biomedical approach to health prevails in France, the progressive introduction of health promotion values on the political agenda has cleared the way for a proactive action on the social determinants of health (Porcherie et al. 2017). In accordance with health promotion approaches, HIA is at the crossroads of multiple concepts and values, including equity, participation, holistic approach, interdisciplinarity, and sustainable development. These underlying principles and HIA methodology awake a growing interest and its practice brings together a wide range of actors evolving in distinct spheres (Jabot and Roué Le Gall 2017). These conditions contribute to a general consensus on the relevance of adopting HIA in France. It is also worth noting that HIA and HiAP are not explicitly mentioned in national policy documents or strategies. However, intersectoral action for health, a common principle for HIA and HiAP, has been promoted in France for a while, and more recently it has been widely acclaimed in the context of the RHAs reform. It can be concluded that, while HIA is not currently portrayed as an effective tool to advance HiAP, one might expect that such a link won't take long to be made, as it happened in Ireland (Kearns and Pursell 2011).

Bridging the gap between EIA and HIA

HIA is the result of the dual heritage of environmental health and health promotion traditions and its evolution is largely influenced by the administrative and legal frameworks in place in different contexts (Lee, Jennifer H et al. 2013). In some countries, HIA practice evolves as an stand-alone procedure (O'Mullane and Quinlivan

2012; Berensson and Tillgren 2017; Diallo and Freeman 2020; Morteruel et al. 2020), while in others, it is integrated into existing IA frameworks (Kang et al. 2011; Chang et al. 2017; Fischer et al. 2021). In France, HIA has mainly developed in the field of urban design in parallel with healthy urban planning (HUP) approaches. Within this context, new regulatory frameworks have increased awareness of health issues in urban planning and have contributed to changes in routine practice of the institutions responsible (Roué-Le Gall and Jabot 2017). In addition, the recommendations of the High Council for Public Health to conduct HIAs on urban development, housing and urban mobilityrelated projects have also promoted HIA practice in France (High Council for Public Health 2017). HUP and HIA approaches are gradually converging, bringing together actors in the fields of the environment and the health sectors. The regional environmental health programmes implemented across all French regions offer frameworks that can provide clarity, legitimacy and funding opportunities for HIA applied to land use planning. HIA development in France is the result of active advocacy by health promotion actors at the Regional Health Agencies, while delivery and managing functions are shared with environmental players. Within this configuration, methods and tools applied by environmental players are rooted in a professional culture marked by the notion of risk and far removed from principles and values linked to health promotion (Jabot et al. 2020). In contrast, health promotion actors in line with HIA principles develop qualitative and participatory approaches but they don't always address the determinants of the physical environment, as was also noted in England (Fischer et al. 2021). Even though health concerns have been associated with environmental issues for several years, and in particular in the context of the European Union EIA Directive (2011/92/EU) amended by 2014/52/EU, the representations of health do not fully overlap for those working in EIA and HIA. In addition, consideration for human health in EIA remains a challenge due to the regulatory context, the weakness of health expertise and the lack of guidance (Cave et al. 2021). In the field of health promotion, over the past decade there has been a growing awareness of the highly complex nature of health. It has been portrayed as "an emerging product of systemic interplay of many continuously co-changing biocognitive-social techno-environmental factors" and a call for a paradigm shift embracing a complexity science perspective that requires revised theories, frameworks and tools has been made (Keshavarz Mohammadi 2020)(Keshavarz Mohammadi 2020). The study of the social determinants of health has greatly expanded, including the

commercial determinants of health (Kickbusch et al. 2016), racial, gender and sexual discrimination (Krieger 2020), health literacy (Kendir and Breton 2020), and other issues, as well as explanatory models that generate health inequalities (World Health Organization 2010). For example, health promotion professionals apply some tools, such as the Swiss Model for Outcome Classification in Health promotion and Prevention (Spencer et al. 2008) to address causality and to obtain an overall view of potential impacts. Within this context, the health sector and HIA practitioners are expected to contribute to EIA through their expertise and experience in qualitative and participatory approaches. This will facilitate an enhanced holistic and dynamic analysis of impacts through various determinants of health while improving health knowledge and new knowledge-for-action (Cave et al. 2021). In a context of constrained resources, it is not desirable to require parallel procedures and EIA and HIA practitioners have an interest in joining forces and to progress towards mutual acculturation. This rapprochement could lead HIA practitioners to be more focused in the analysis of different options and not only in improving the proposal (Fischer et al. 2021). As pointed out by Kim and Haigh (2021), EIA and HIA are based on distinct paradigms and research traditions. Even though there is still progress to be made to build up an interdisciplinary view of health and integrated methods, as in other countries (Chanchitpricha and Bond 2018; Fischer et al. 2021), an ongoing rapprochement between these two fields in France constitutes an opportunity for the future development of HIA (Roué-Le Gall and Jabot 2017; Cave et al. 2021).

A "background noise" that should pay off

HIA practice is steadily growing in France; training activities are in place and HIA-dedicated sessions are being included in national conferences to disseminate knowledge and to encourage the sharing of experiences. In addition, some national entities and institutions have put HIA on their agendas. Although national authorities are not taking the lead in promoting HIA, all these trends contribute to a background noise that keeps stakeholders alert and may ultimately open a window of opportunity. In addition, environmental regulatory requirements have increased awareness about the relevance of including health in urban planning procedures. Following all these developments and, as documented in other countries, it can be expected that HIA practice will grow and consolidate in France in the coming years through a bottom-up strategy engaging

municipal and regional actors (Mattig et al. 2017). Bearing in mind that today HIA is conducted voluntarily and that a legal mandate would not attract much interest, along with the EHESP's efforts to build a community of practice, a greater political commitment from the national health authorities would certainly help to encourage HIA development.

The way forward

This study has shown important advances in HIA deployment in France in the last decade. Nevertheless, to realise its full potential, HIA still needs further development and institutionalisation. Some challenges need to be met in France to advance towards this end in the coming years. First, there is a need to clarify HIA purpose, methods and processes in order to avoid confusion with other procedures applied in local decisionmaking contexts such as public consultations, community needs assessments, HUP and risk evaluations. These efforts will contribute to showing HIA distinctiveness and to undertaking HIA only where relevant. Second, HIA credibility should be enhanced through a systematic use of solid methods and procedures and an adequate adaptation of international standards to the French politico-administrative context. Likewise, a clear definition of good practice needs to be agreed by all institutions and practitioners. Third, impact evaluations providing evidence on HIA effectiveness and added value should be encouraged to prevent decision makers from thinking that the resulting recommendations could have been identified through routine planning processes, as pointed out by the literature (Harris-Roxas et al. 2014, p.) and confirmed in the few HIA evaluations recently conducted in France (Jabot 2021; Rivadeneyra-Sicilia 2021). Fourth, there is also a need to seize opportunities to demonstrate HIA contribution to HiAP and thereby, its potential for improving public decisions in terms of intersectoral action for health, enhanced transparency and accountability, citizen participation and health equity. Finally, it is also necessary to make clear HIA contribution to strengthening public mandates and strategic priorities in the political agenda in the fields of environmental health, sustainable development, prevention and health promotion.

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	Intervention	Decision level (national, regional, local)						
		Type of proposal (policy, plan, project, legislation)						
		Intervention sector						
	Type	Mandated, decision-support, advocacy, community-led						
		Stand-alone, integrated						
ion		Underlying model of health						
ntat		Rapid, intermediate, comprehensive						
Implementation		Alignment with practice standards						
dwj	Governance	Commissioners' and other stakeholders' profile						
		Governance bodies and functioning						
		Citizen participation						
	HIA teams	Profile (associations, consultancy firms, universities)						
		Outsource or in-house HIA						
		Practitioners' background, experience, competencies						
	Stewardship	Political commitment						
		Central government leadership (HIA-dedicated unit, lead agenc						
l u		team)						
atio	Means of endorsement	Legislation						
nalis		Policy or administrative frameworks						
tion	Funding	Budget						
Institutionalisation		Human resources						
In	Capacity building	Training & mentorship						
		Validated procedures, tools, guidelines, resources						
		Health intelligence for HIA (technical leadership and expertise)						

Table 1. Analytical framework (adapted from Lee et al, 2013 & Wismar 2007

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	Intervention	Decision level (national, regional, local)							
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g		Central government leadership (HIA-dedicated unit, lead							
[j.		agency or team)							
sat	Means of endorsement								
Institutionalisation		Policy or administrative frameworks							
on	Funding	Budget							
uti		Human resources							
tit	Capacity building	Training & mentorship							
		Validated procedures, tools, guidelines, resources							
_		Health intelligence for HIA (technical leadership and							
		expertise)							

 Table 2. Detail of HIAs submitted for analysis

HIAs	Year ¹	Topic	Proposal ¹	Level ²	Status	Type of HIA	HIA team ³
EIS de la Halte ferroviaire de Pontchaillou	2011	Urban redevelopment	Pr	L	Stand-alone	Intermediate	University
EIS des projets urbains intégrés	2013	Social	Ро	R	Stand-alone	Intermediate	University
EIS du projet de transports de Plaine Commune (Paris)	2013	Transportation	Pr	L	Stand-alone	Intermediate	RHA/RHO
EIS de Borderouge - Trois Cocus (Toulouse)	2013	Urban redevelopment	Pr	L	Stand-alone	Rapid	University
EIS de la circulaire DGAS-SDA n°2002-595 relative aux maisons relais	2015	Social housing	R	R	Stand-alone	Rapid	RHA / RHPA
EIS Cœur de Quartier (Nanterre)	2015	Urban redevelopment	Pr	L	Stand-alone	Intermediate	University
EIS du quartier des Buers (Villeurbanne)	2016	Urban redevelopment	Pr	L	Stand-alone	Intermediate	RHO
EIS du Parc du Zénith (Lyon)	2016	Urban redevelopment	Pr	L	Stand-alone	Intermediate	RHO
EIS de la construction d'un équipement scolaire et de loisirs (Bressuire)	2016	Infrastructure	Pr	L	Stand-alone	Intermediate	Private firm
EIS de l'intégration d'une maison de santé dans le quartier Bellevue (Nantes)	2016	Infrastructure	Pr	L	Stand-alone	Intermediate	Private firm
EIS du projet d'aménagement de la ZAC* Saint Sauveur (Lille)	2017	Urban redevelopment	Pr	L	Stand-alone**	Comprehensive	University
EIS Heritage de la candidature aux JO 2024 (Paris)	2017	Urban development and Employment	Pr	L	Stand-alone	Rapid	RHO / City
EIS de la ZAC des Vergers du Tasta (Bruges)	2017	Urban redevelopment	P	L	Stand-alone	Intermediate	Joint team (RHA, RHO, REPA, UPA, Metropolitan area, City)
EIS du programme d'accompagnement à l'habitat de la copropriété Palmer (Cenon)	2017	Housing	Pr	L	Stand-alone	Rapid	Metropolitan area / Private firm
EIS du projet d'aménagement du quartier Monplaisir (Angers)	2017	Urban redevelopment	Pr	L	Stand-alone	Intermediate	Private firm

2017	Preventive programme	Prog	L	Stand-alone	Intermediate	RHO / consultant
2018	Urban redevelopment	Pr	L	Stand-alone	Intermediate	RHPA/University
2018	Urban redevelopment	Pr	L	Stand-alone**	Comprehensive	University
2018	Urban redevelopment	Pr	L	Stand-alone	Intermediate	Private firm
2018	Urban redevelopment	Pr	L	Stand-alone	Intermediate	Private firm
2018	Urban redevelopment	Pr	L	Stand-alone	Intermediate	University
2018	Urban redevelopment	Pr	L	Stand-alone	Intermediate	Private firm
2019	Urban redevelopment	Pr	L	Stand-alone	Intermediate	RHO
2019	Urban redevelopment	Pr	L	Stand-alone	Intermediate	RHO
2019	Urban redevelopment	Pr	L	Stand-alone	Intermediate	RHO
2019	Politics	Po	N	Stand-alone	Rapid	University
2019	Urban redevelopment	Pr	L	Stand-alone	Rapid	University
2019	Transportation	Pr	L	Stand-alone**	Comprehensive	University
2019	Urban redevelopment	Pr	L	Stand-alone**	Intermediate	Private firm
2019	Urban redevelopment	Pr	L	Stand-alone**	Comprehensive	Municipality
2019	Urban redevelopment	Pr	L	Stand-alone	Rapid	RHO / UPA
2019	Urban redevelopment	Pr	L	Stand-alone	Intermediate	Private firm
2019	Transportation	Pl	L	Stand-alone	Intermediate	Private firm
2019	Urban redevelopment	Pr	L	Stand-alone	Intermediate	RHO
	2018 2018 2018 2018 2018 2018 2018 2019 2019 2019 2019 2019 2019 2019 2019	programme 2018 Urban redevelopment 2019 Urban redevelopment	programme 2018 Urban redevelopment Pr 2019 Urban redevelopment Pr	programme 2018 Urban redevelopment Pr L 2019 Urban redevelopment Pr L	programme 2018 Urban redevelopment Pr L Stand-alone 2018 Urban redevelopment Pr L Stand-alone** 2018 Urban redevelopment Pr L Stand-alone 2019 Urban redevelopment Pr L Stand-alone** 2019 Urban redevelopment Pr L Stand-alone** 2019 Urban redevelopment Pr L Stand-alone 2019 Urban redevelopment Pr L Stand-alone	programme 2018 Urban redevelopment Pr L Stand-alone Intermediate 2019 Urban redevelopment Pr L Stand-alone Rapid 2019 Urban redevelopment Pr L Stand-alone Rapid

EIS du projet de réhabilitation du groupe scolaire Andersen (Poitiers)	2019	Infrastructure	Pr	L	Stand-alone	Intermediate	Private firm
EIS de l'Île de Nantes	2019	Urban redevelopment	Pr	L	Stand-alone	Intermediate	RHO
EIS du projet des Iles de Mars –Olympiades Pont de Chaix	2020	Urban redevelopment	Pr	L	Stand-alone	Intermédiaire	UPA
EIS du projet de requalification de la rue des français libres (Cancale)	2020	Urban redevelopment	Pr	L	Stand-alone	Rapid	University
EIS de la reconversion de la caserne Marceau (Limoges)	2020	Urban redevelopment	Pr	L	Stand-alone	Intermediate	RHO
EIS du projet de requalification des espaces publics des pieds d'immpeubles du Pontreau (Niort)	2020	Urban redevelopment	Pr	L	Stand-alone	Intermediate	Private firm
EIS d'actions en faveur du patrimoine naturel (Nord Est Béarn)	2021	Environmental policy	Prog	L	Stand-alone	Comprehensive	Private firm/ UPA

^{*}ZAC Zone d'aménagement concertée, Spatial developement area

^{**} Stand-alone HIA also integrating data or estimations resulting from an EIA procedure

¹Year of publication of the report ²Proposal: Po Policy; Prog Programme; Pr Project; R Reglementation

³Level: N National; R Regional; L Local

⁴HIA Team RHA Regional health agency RHO Regional health observatory; RHPA Regional health promotion association; UPA Urba planning agency

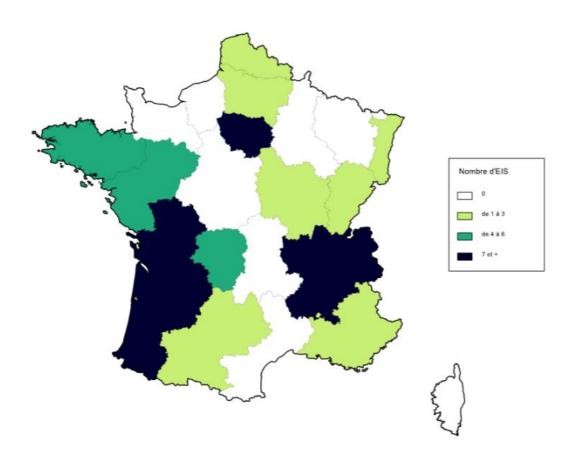


Figure 1. Regional distribution of HIAs carried out in France between 2011 and 2021