

Health Impact Assessment in Town Planning

Research Report on Health Impact Assessment (HIA) Practice in England

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Contents

Executive Summary	3
Glossary	6
1. Introduction	7
2. Methodology	8
3. Health in impact assessments	10
4. Enablers and barriers of HIAs	20
5. Quality review of HIAs	22
6. Discussion	28
7. Recommendations	30
Annex 1. Key HIA literature	35
Annex 2. HIA Quality Review Table	36
Annex 3. Definitions of health	39
Annex 4. Case studies of HIAs reviewed	41
Annex 5. Local Authority Triggers for HIA	45

Executive Summary

Introduction

The National Planning Policy Framework (NPPF) for England (1) and the Health and Social Care Act 2012 (2) set out the policy basis for improving the use of health impact assessment (HIA). To date, it has remained unclear how frequently HIA is used in town planning across the country and how effective it is. HIA can be an important and potentially powerful decision support tool, and help demonstrate health benefits in a local plan or development project. For this reason, Public Health England (PHE) commissioned the University of Liverpool to review the practice of HIA in England.

This report informs an associated guide published by Public Health England. It has also been subject to review by a range of national and local practitioners and stakeholders involved in planning, HIAs and other types of impact assessment.

Methods

It is within this context that this report takes stock of current HIA practices in town planning in England. For this purpose, a review of existing evidence is provided and a list of barriers and enablers is compiled for effective application of HIA. An HIA quality review table is introduced, which was designed, based on various existing review packages and with input from an expert project management stakeholder group. The review table was used to evaluate a total of 40 English HIAs. These included 20 exemplar cases of how HIA is used in each; a) local plan making; and b) in planning applications for development projects.

Based on the quality review, four good practice cases described in further detail, one representing each of four different types of HIAs. A discussion of the results follows. Finally, conclusions are drawn and recommendations are provided for national and local stakeholders and practitioners, including PHE.

Findings

The key findings from the research are:

- **Influence of HIA policy and guidance:** For HIA types prepared next to (or integrated with) existing statutory impact assessments, on average, slightly higher scores were achieved in those situations where a local planning authority (LPA) had adopted HIA policy and local guidance such as HIA supplementary planning documents. However, in development projects, the quality of HIAs was lower in situations where an SPD HIA or policy was in existence, presumably as more HIAs are prepared, including by authorities that do not have knowledge and experiences with HIA.
- **Existence of local expertise and capacity:** HIAs are prepared more consistently in local authority areas that have HIA SPDs or HIA policy in place. It is also important to develop HIA expertise and associated capacity through, for example, training and guidance once HIA requirements have been put in place.

- **HIA trade-offs and stakeholder expectations:** There is some concern with regards to equal weight not always being given to social, economic, and environmental determinants of health. While standalone HIAs often focus mainly on social and behavioural aspects, HIAs integrated with other IAs at times appear to subordinate environmental to other aspects.
- **Stage of applying HIA:** None of the HIAs reviewed considered any alternatives or options in their assessment, neither of local plans or of development projects. This is associated with problem-driven approach used by HIA, where the focus is on optimising a given development option. This is problematic, as HIA currently does not contribute much to the discussion of the best possible plan or project alternative / option.
- **Spatial planning and health linkages:** HIAs can provide important leverage in the planning process by enabling linkages between spatial policy areas and health outcomes.

Recommendations

To increase influence on decision making:

Start health proofing early to add impact to problem driven HIA

HIA has an assessment tradition which is problem driven. It aims to improve a plan / project by 'health proofing' it, i.e. by optimising it from a health perspective rather than assessing options. This can mean HIA is applied at the end of the plan / project preparation process, after important decisions are reached. To increase the influence of HIA on the choice of a preferred plan or project option, HIA should engage closely with other IAs that are applied earlier. In this context, HIA should also embrace an impact driven approach.

To establish win-win-win solutions:

Balance the three-legged sustainability stool

HIA needs to be sensitive to potential trade-offs between the economic, social, and environmental dimensions of different health determinants. Currently, and particularly when Integrated Impact Assessment (IIA) is applied (notably in the context of new housing development), negative impacts are consistently predicted in local plan making with regard to environmental aspects, while positive impacts are routinely anticipated for economic and, to a lesser extent, social aspects. For sustainable development, win-win-win solutions for all dimensions should be sought; an impact driven HIA is well placed to contribute towards this.

To ensure best practice:

Develop consistent guidance, actionable ideas, accessible evidence, leadership, and collaboration

There is an urgent need to develop HIA guidance for specific situations. HIA should make concrete suggestions for the development of health initiatives, for example, sustainable transport and green infrastructure.

In project development, existing HIA cases are currently poorly accessible and, as a consequence, not well known. Therefore, an English HIA (planning) repository is needed. Furthermore, non-technical summaries (NTS) that are prepared for project EIAs accessible through the web pages of the Institute of Environmental Management and Assessment (IEMA) should clearly state when an HIA has been prepared. This is not presently given.

In local plan preparation, and in the absence of PHE being a statutory consultee, it is prudent to include Directors of Public Health and their teams in at least the screening and scoping stages of SA / SEA or IIA. Planning and public health officers have started to collaborate more closely through HIA, and effort should be put into developing this important relationship further. HIA capacity building in both, town planning and public health will be a critical component for more effective HIA and consideration of health in other impact assessments at both, plan and project level.

The research team and PHE recognise there are still research gaps which, if addressed in the future, can help improve the quality and coverage of HIAs in the planning system. This will then help to ensure key health outcomes can be obtained from the plan-making and development project process.

Glossary

A glossary of terms is presented early on in this report for convenience of reference to the reader given the number of terms used throughout.

EIA	Environmental Impact Assessment
EqIA	Equalities Impact Assessment
HIA	Health Impact Assessment
HUDU	Healthy Urban Development Unit
HRA	Habitats Regulation Assessment
IEMA	Institute of Environmental Management and Assessment
IIA	Integrated Impact Assessment
JSNA	Joint Strategic Needs Assessment
LGA	Local Government Association
MHCLG	Ministry of Housing, Communities and Local Government
NPPF	National Planning Policy Framework
NTS	Non-Technical Summary
PHE	Public Health England
SA	Sustainability Appraisal
SDS	Spatial Development Strategy
SEA	Strategic Environmental Assessment
SP	Strategic Plan
SPD	Supplementary Planning Document
TCPA	Town and Country Planning Association
TIA	Transport Impact Assessment

1. Introduction

The use of health impact assessment (HIA) in town planning in England has received increasing attention over the past few years, particularly since 2012. This was the year when the English National Planning Policy Framework (NPPF) (1) was introduced by the Ministry of Housing, Communities and Local Government (MHCLG), with health being reflected in one of its twelve core principles and requirements for health and wellbeing needs to be considered. In the same year, the Health and Social Care Act 2012 (2) received Royal Assent, establishing a duty on local authorities to improve the health of people in their areas (Section 12). Further planning guidance introduced in 2017 enables the use of an HIA when significant health impacts are identified in a development project (3). These set out the necessary legislative and policy drivers for local authorities on HIAs in planning.

A previous Department of Health-commissioned research in 2006 usefully set out recommendations, including relating to the use of HIAs in town planning, on the need for guidance on how and when to undertake an HIA, set out methods to focus on screening and scoping stages, integrate with other forms of assessments, and strengthen capacity skills (4).

The above factors helped frame the parameters for undertaking further research into the practice of HIAs as local authority public health teams explore how best to achieve health outcomes through the planning process. PHE commissioned the University of Liverpool in the Autumn of 2019 to prepare a report on the state of practice of HIAs. The main aim was to gain a better understanding of current practices, as well as key barriers, and enablers for bringing HIA effectively into the planning process.

In order to achieve this aim, the research pursued the following objectives:

- To gain an up to date nationwide picture across England of the use and application of HIA in town planning by looking at the different types of HIAs currently applied in local plan making and in development projects
- To clarify key public and population health, well-being, and inequality issues to be included in the design of an HIA quality review table for evaluating current HIAs as well as for potential consideration in HIA screening
- To identify criteria that support an effective application of HIA in town planning
- To use the findings to recommend help inform the development of further PHE advice to local authorities within the existing policy context

2. Methodology

Rapid literature review

A rapid review of existing application of HIA as well as health in other IAs related literature, with a particular focus on practices in England. The main focus was on emerging evidence for England from 2012 onwards, i.e. the year of the introduction of the NPPF and the Health and Social Care Act 2012. A list of key literature sources relating to the application and evaluation of HIAs in the UK and England context is presented in Annex 1.

HIA quality review

To enable an evaluation of the quality of HIAs, a review table was designed. The starting point of this was existing review tables, including for EIA in the UK (6), SEA in England (7), HIA in the UK (8), and HIA in Wales (9). Furthermore, evidence from evaluations of existing HIA frameworks were considered (10). The content of the review table is based on various sources that describe what health issues should be considered in town planning (9,11) . The review table designed and used is presented in Annex 2¹. The HIAs for review were identified based on:

(a) systematic screening of:

- Local and other strategic plan making exercises of the 325² local authorities in England responsible for local plan making.
- Non-technical summaries of EIAs listed on the IEMA's web-pages.

(b) recommendations from key stakeholders.

Forty HIAs were evaluated with regards to their consideration of health, health inequalities, and mental health and wellbeing as defined in Annex 3. Evaluation was divided into six main categories:

- A baseline description.
- Identification and evaluation of key issues and options.
- Determination of potential significance of health impacts.
- Consultation processes.
- Presentation of information and results.
- Alternatives, mitigation, recommendations on preferred options, and monitoring.

These categories were represented by 45 questions. Each question was scored as follows:

- A – the work has generally been well performed,
- B – the work was performed satisfactorily, however with omissions or inadequacies,
- C – the work was performed unsatisfactory because of omissions or inadequacies,
- D – task not attempted,
- N/A – question not applicable.

¹ None of those involved in the preparation of the HIAs had access to the review table when preparing reports

² These do not include National Park Authorities and Development Corporations

Each HIA was reviewed by two researchers who agreed on categories and final scores. These were not necessarily average grades, as e.g. one unsatisfactory or not attempted task could lead to an overall downgrading.

The review framework on four IAs from each type and the results were fed back during a November 2019 workshop with 20 planning and public health experts, and a further 12 local planning and public health practitioners prior to completing the remaining 36 IAs.

Limitations of the quality review

Two types of HIAs were difficult to allocate without the support of the project stakeholders for two reasons. Firstly, HIAs prepared alongside EIAs. None of the Non-Technical Summaries (NTSs) listed on the IEMA's web-pages mentioned any HIAs. Secondly, there is no national repository or data collection for HIAs submitted in the planning system. There could be no systematic collection then selection of HIA examples without a repository. Although they should be publicly available as part of submitted planning application documents, standalone project HIAs were only able to be identified and sourced when highlighted by contacts in local authorities.

HIA case studies

One case study for in-depth review was selected from each of the 10 HIAs of every HIA type. The highest scoring assessments were used and different regions are also represented. The case studies are presented in Annex 4.

Practitioners workshops

The quality review framework was initially tested during a November 2019 London workshop to a group of 20 planning and public health experts, and a further 12 local planning and public health practitioners prior to completing the remaining 36 IAs. Interim conclusions and recommendations from the research were presented for feedback to a group of local authority planning and public health practitioners from the North West of England in March 2020.

3. Health in impact assessments

This section first introduces those impact assessments tools currently used in local plan making and development projects in England in order to assess health and other (in particular environmental and social) effects. Tools include EIA, SEA/SA, IIA, and HIA as well as Equalities Impact Assessment (EqIA)³. Secondly, how health effects are considered is reflected on. In this context, it is important to clearly understand what health means. Commonly used definitions of health were used to inform the project. These are presented in Annex 3.

3.1 IAs that consider health currently used in plan-making and projects in England

Strategic Environmental Assessment (SEA), Sustainability Appraisal (SA) and Integrated Impact Assessment (IIA)

SEA for certain plans and programmes was formalised in the UK in 2004 following the European Directive 2001/42/EC (SEA Directive). SEA requirements revolve around an assessment process which is basically identical with the one for EIA (introduced below).

In England, in town planning / local plan making, SEA subsequently became applied within an overall framework of SA (12). SA predates the SEA Directive and has been applied, first as environmental appraisal, since 1993, following Department of Environment guidance (13) and then as SA since 1998, following Department of Environment, Transport, and the Regions guidance (14). The way SA is conducted is not legally prescribed and it is through SEA that the assessment process is defined and standardised in English practice.

The SEA Directive states that human health effects should be included in SEA. SA which includes SEA is structured along the lines of social, economic and environmental sustainability outcomes with an implicit understanding that all of these are wider health determinants.

IIA is a tool which has emerged in recent years and in which several other impact assessments are integrated (not necessarily in one process, but at a minimum in one comprehensive report), including SEA/SA, HIA, EqIA, Habitats Regulation Assessment (HRA); its purpose being to identify likely significant effects on Natura 2000 or European sites, including Special Areas of Conservation, Special Protection Areas and Ramsar, and to devise possible avoidance and mitigation measures), Transport Impact Assessments (TIAs) and others. Importantly, whilst SEA and SA are always fully integrated, other assessments are usually prepared in parallel, and IIA aims to integrate them.

Environmental Impact Assessment (EIA)

EIA is used in development planning for certain project proposals. It was first formalised in the UK in 1987, following European Directive 84/337/EEC (EIA Directive). This Directive was subsequently amended three times (in 1997, 2003 and 2009) and was codified in 2011. A new EIA Directive (2014/52/EU) was released in 2014. This latest Directive was transposed into UK legislation in 2017. The latest changes made to the EIA Directive are of particular importance

³ Tools are presented here according to their time of introduction

from a health point of view, as for the first time human health is explicitly mentioned (prior versions made reference to 'human beings' only).

EIA following Directive 2014/52/EU is first and foremost established as an assessment procedure, covering the following stages:

- screening (is EIA required for a particular project),
- scoping (what issues and alternatives may potentially be included in EIA),
- assessment of environmental effects of alternatives and preparation of an EIA report on significant environmental effects and mitigation,
- consideration of EIA results in decision making,
- monitoring and follow-up (compliance with what is set out in the EIA and accuracy of predicted effects).

At various points of the EIA process, there should be an opportunity for consultation of statutory and non-statutory bodies and public participation. The process introduced here for EIA is at the heart of most other currently used impact assessment tools, including an HIA.

Health Impact Assessment (HIA)

HIA is the dedicated impact assessment instrument for the advancement of health and well-being. In town planning in England, it is currently not legally required, even though its use is recommended in the Planning Practice Guidance on Promoting Healthy and Safe Communities (3). There are currently different interpretations of HIA and, as a consequence, there are different ways for conducting it.

As there are no formal requirements defining an HIA in practice. The most widely used definition of HIA goes back to the WHO Gothenburg consensus (15). According to Quigley et al (16) "*HIA identifies appropriate actions to manage those effects*", and is '*a combination of procedures, methods and tools that systematically judges the potential, and sometimes unintended, effects of a policy, plan, programme or project on both, the health of a population and the distribution of those effects within the population. HIA identifies appropriate actions to manage those effects*'.

Undertaking an HIA should mean taking a multidisciplinary perspective. Relevant disciplines to engage with HIA include e.g. 'public health, social and political sciences, environmental health, urban planning, epidemiology and statistics' (17). Similar to the other impact assessment tools, HIA is meant to consist of completing a staged process (see the one introduced for EIA above) and the application of a range of suitable methods.

Whilst conceptually this process is at the heart of an HIA, the extent to which it is followed in practice varies considerably. In this context, three main types of HIA are currently distinguished in England that use this procedure to different degrees. Table 1 shows the main differences.

Table 1: Types of HIA applied in planning in England

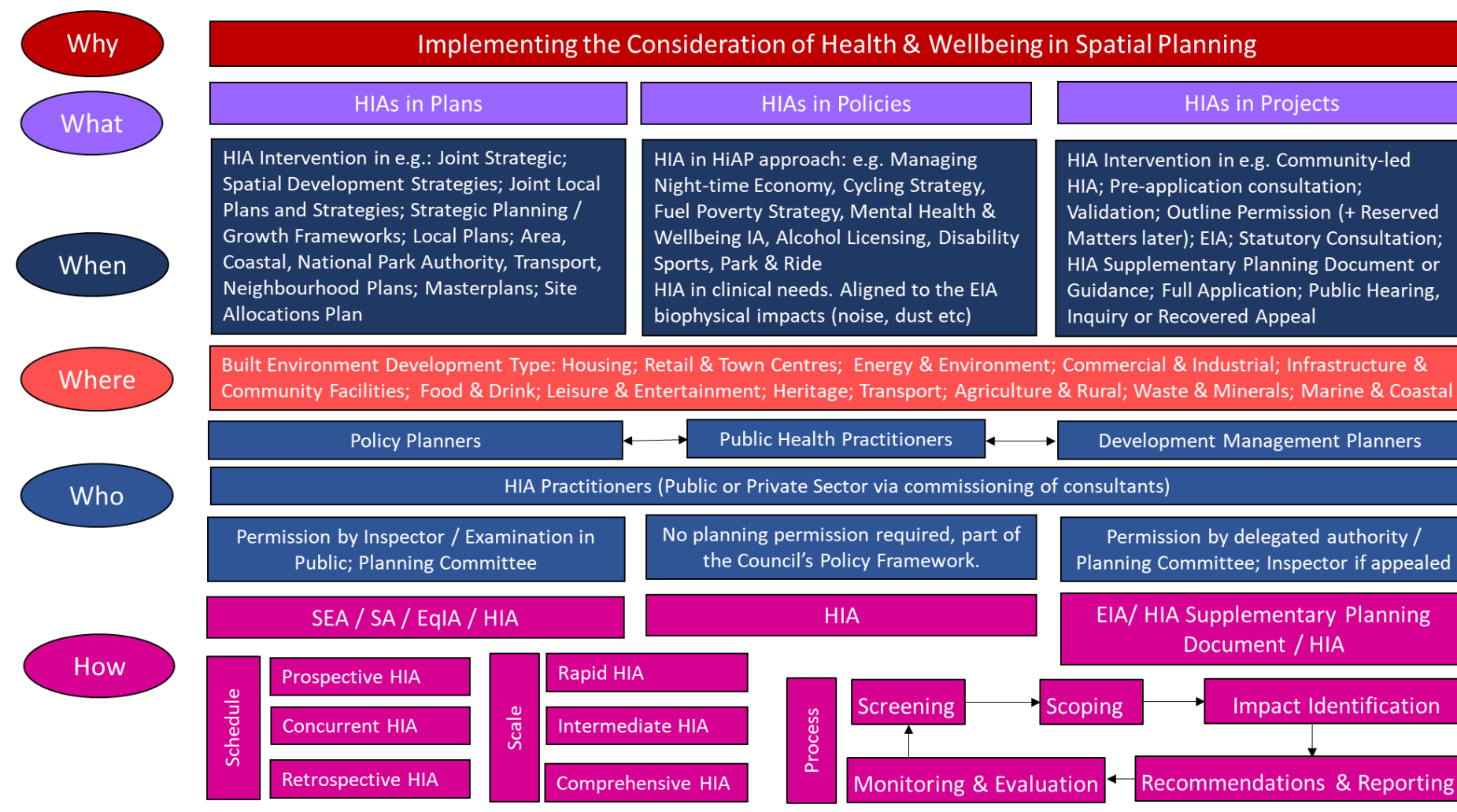
Scale		Schedule	
Comprehensive / full	Duration between 6 months and a year	Usually prospective (applied in parallel or integrated with a plan or project preparation process)	Conducted as a participatory process, similarly to how most EIAs and SEAs would be done.
Intermediate / Desktop	Duration of more than 3 months	Usually concurrent (feeding into a plan or project preparation process)	Conducted as a desktop exercise, but going beyond completing a checklist
Rapid / Desktop	Duration of 1-6 weeks	Usually retrospective (applied to a finished plan or project)	Usually based on checklists; probably the best-known example in England is London HUDU HIA guidance (11)

With regards to the use of rapid HIA tools, such as the one published by the London Healthy Urban Development Unit (HUDU) (11), common triggers for undertaking an HIA have been said to include: major developments of 10 or more housing units, hot food takeaways, commercial development over 2 hectares, and sensitive or vulnerable host communities (18).

With regards to local plan making, aligned to SA is the local authority duty, in response to the Equalities Act (19), to undertake an Equalities Impact Assessment (EqIA) of a local plan.

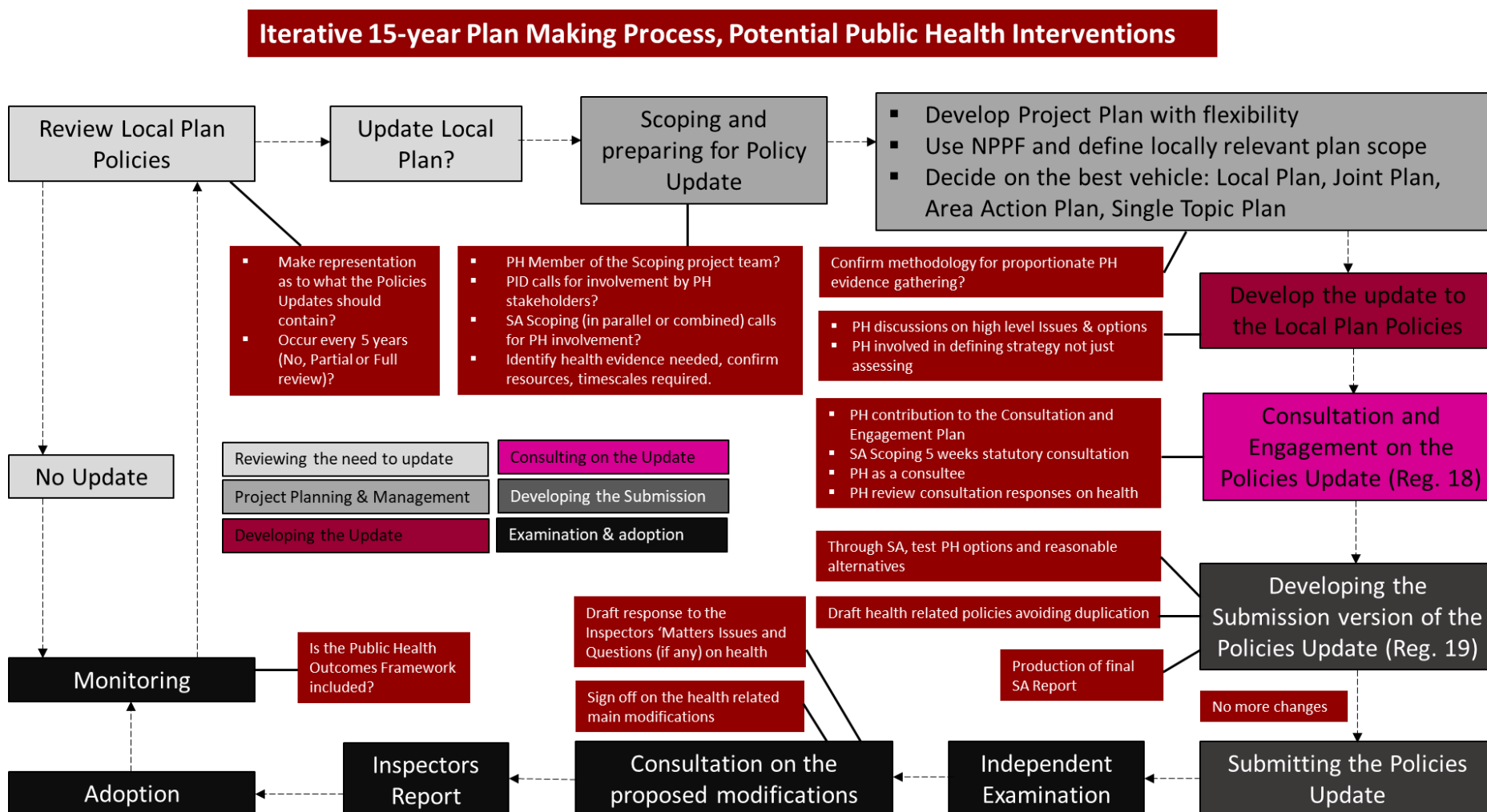
EqIA aims at ensuring that decisions do not discriminate against anyone based on protected characteristics: age, disability, gender (including reassignment), marriage and civil partnerships, pregnancy and maternity, race, religion and faith, sex and sexual orientation. Figure 1 illustrates the context for HIA within town planning. It highlights an additional situation in which it can be applied in addition to local plan making and project development, namely in policies that influence town planning. In the context, HIA of policies can focus on both, wider determinants of health and clinical needs. It is an area that Public Health practitioners should also engage with. However, it is not assessed further in the context of this research project. Figures 2 and 3 illustrate how HIA can input into the local plan making and planning application processes.

Figure 1. The application of HIA in Town Planning

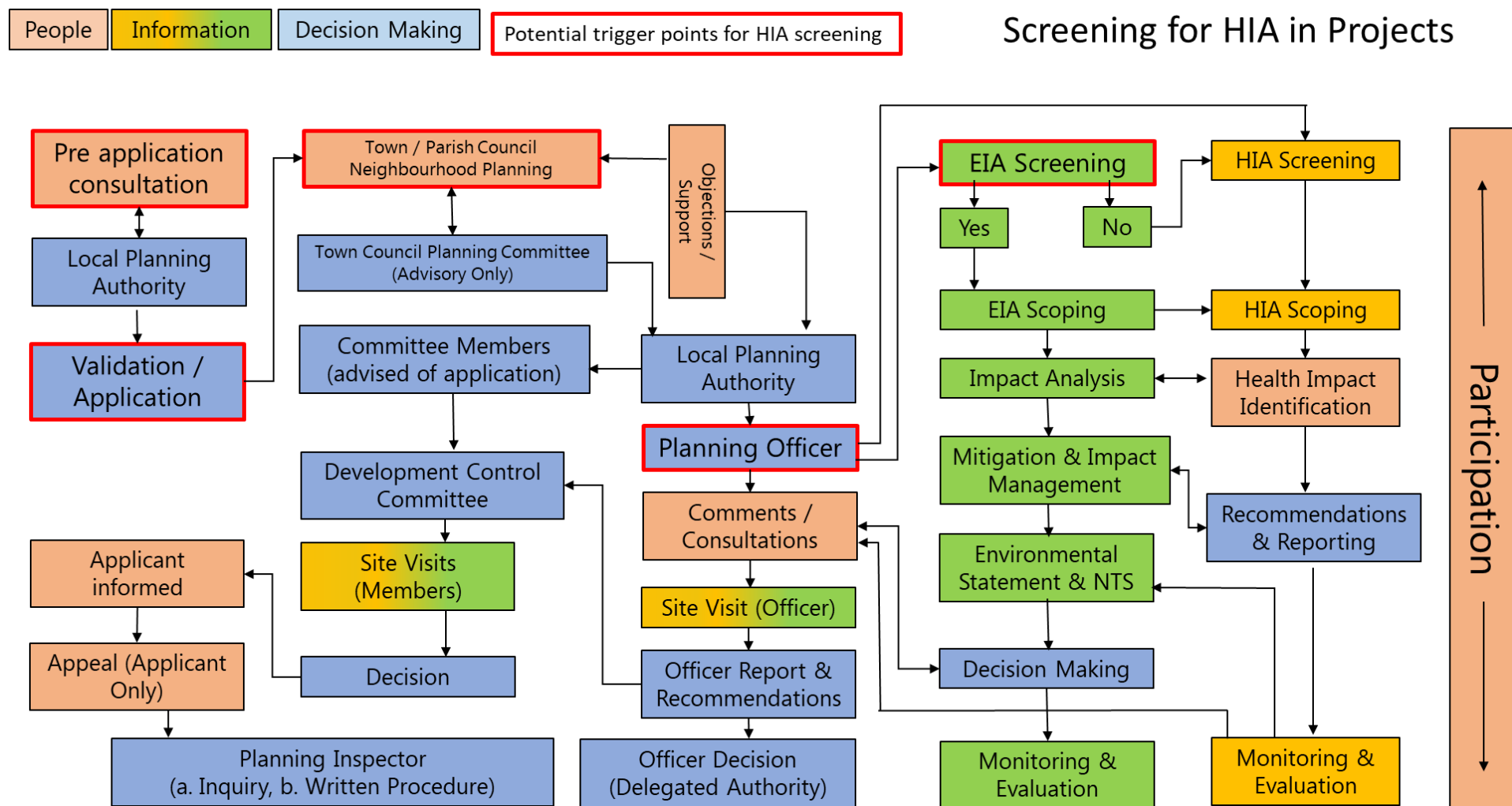


Source: Authors own

Figure 2. HIA input to local plan-making process



Use of health impact assessments in town planning
 Figure 3. HIA input to planning application processes



3.2 Existing evidence for how comprehensively health is covered in impact assessments

Strategic Environmental Assessment (SEA), sustainability appraisal (SA) and integrated impact assessment (IIA)

SEA/SA is routinely applied in all local plan making exercises of the 325 local authorities in England with responsibility for preparing local plans (some of which are involved in preparing combined and / or strategic plans). Furthermore, SEA is also systematically applied to transport, waste, minerals and some other plans. Several 1,000 SEAs have been applied since SEA was introduced into UK law in 2004.

In SEA/SA in England, a wider definition to health has been routinely used, covering elements not just of bio-physical, but also of social and behavioural determinants of health (12, 21, 28). In addition, specific health and wellbeing objectives are routinely used (29). Overall weaknesses of SEA (with implications for an effective consideration of health effects) have been said to include (30):

- Alternatives are often poorly defined, and there is a need to put more effort into the development of feasible and realistic alternatives.
- The impact of both, public participation and SEA on the plan is frequently unclear.
- Whilst, generally speaking, the presentation of baseline data is currently done well, significance identification and impact evaluation are poorly established and baseline data are not used in the assessment of effects.
- The relationships with other policies, plans, programmes and IAs are rarely fully elaborated, and tiering – both between different administrative levels and planning tiers – is not well established.
- Uncertainties are only rarely mentioned and addressed.

A current project for the Local Government Association (31) on health in strategic plan making in England provides for some additional evidence on IIAs that are used in particular in the preparation of Strategic Plans (SPs); 34 are currently prepared in England. SPs can be:

- Statutory joint or aligned local plans (currently 9 completed and 7 under preparation in England).
- Statutory joint strategic plans (currently 5 in preparation/ under review in England).
- Statutory Spatial Development Strategies - SDSs (London Plan complete and Liverpool City Region SDS under preparation).
- Non-statutory frameworks (11 prepared in England, of which 8 complete).

Whilst all of the 23 statutory SPs come with an EqIA, only a few of the 34 SPs use HIAs. However, all SPs have some explicit health plan objectives and all of them include the preparation of SA/SEA. These assessments provide evidence for the health baselines and health effects (both positive and negative) of different options considered in SPs.

Emerging evidence from this project is particularly useful with regards to devising appropriate methods for use in different situations of HIA application. A key topic in all SPs are sites for new housing developments. Whilst the 18 joint /aligned local plans provide for clear geographical locations of new (housing and other) development sites (similar to their non-joint/aligned

counterparts), other SPs frequently only indicate potential locations without outlining any concrete sites or boundaries. However, both types of SPs routinely use a matrix approach to appraisal for assessing impacts (indicating an impact driven approach). Using this method in SPs is, however, problematic as, in the absence exact sites (and associated mitigation measures), effects can often vary between very negative and very positive.

In joint/aligned plans where clear boundaries can be drawn around proposed development sites, the range of potential effects is likely to vary less. Matrix based predictions are, therefore, more precise and less uncertain in the latter plans. More suitable methods for SPs are those that aim at predictions of a general, rather than specific nature; these can include overall carbon emissions or likely time spent for commuting by x number of people. In joint / aligned local plans, issues to be considered may include, for example, the number of trees or sq. m. of hedges removed. The conclusion from this observation is that in SPs that are not joint or aligned local plans, the focus should be on pro-actively advising how development should be pursued for enhancing positive outcomes and avoiding negative effects. This reflects the problem driven approach frequently used by HIA, rather than impact driven approach usually used by SEA/SA.

Environmental Impact Assessment (EIA)

Initially, EIA practice following the original European Directive from 1984 covered bio-physical determinants of health (e.g. air, water, soils, noise and other emissions). Following the latest 2014 revision, and the explicit mentioning of 'human health', a broader approach to population and human health should be used. This means that in addition to biophysical determinants, socio-economic and behavioural determinants of health should be considered. This raises important questions, not least when HIA is applied next to EIA, as EIA and HIA tend to be applied slightly differently [20,21], with the former adopting an impact-driven approach (focusing particularly on negative impacts) and the latter a problem-driven approach (where the starting point is the current health baseline and the approach followed is on how to improve it).

Overall, what is of key importance is that through EIA, negative health effects can be reduced and positive health outcomes be enhanced in about 350 to 450 projects in England a year (22). However, EIA requirements only apply to the biggest / most substantial projects, which means that the lion share of planning applications are not subject to EIA (22).

In 2019, of the total planning applications (440,098) submitted in England, 378 had an accompanying ES, which is 0.08% (23). This does not mean, however, that those other planning applications do not potentially affect health (or the environment). Accordingly, health effects should also be considered in those. Over 12,000 EIAs have been conducted in England since EIA became a formal requirement following the EIA Directive nearly 30 years ago, and this means that there has been significant scope for the health sector to influence large development projects and help them to become healthier (24).

Fischer [25] reviewed 20 randomly-picked post-2012 EIA reports on development projects ranging from housing to hospital extensions with regards to how health was covered. Eleven had health (population and human beings) chapters and all 20 made explicit reference to health through coverage of other (mainly bio-physical) determinants of health in other chapters. Next to a range of bio-physical aspects (including emissions / contamination risk and noise) that were covered in all EIAs, other aspects assessed included: safety (accidents), in particular during construction (five EIAs), health care and services (in particular in residential

developments; covered in eight EIAs), and health and safety, for example with regards to electromagnetic radiation (seven EIAs). One EIA included a consideration of health effects from economic benefits and one discussed recreational aspects. Two of the EIAs came with separately prepared HIAs; one for a road project and one for a carbon capture facility. Both used a risk analysis approach with regards to the impacts of emissions on the human health of residents and construction workers.

A recent University of Liverpool Masters-level dissertation (26) looked at the connections made between green infrastructure and health in 30 English post 2012 EIAs, 15 from residential / housing and 15 from transport projects. In both samples only three of the 15 EIAs made an explicit connection between planned green infrastructure and health benefits. This evidence suggests that there is scope for improving the consideration of health in EIA.

Other weaknesses of EIA practice (with implications on the effective consideration of health) up to 2015 were identified by Jha-Thakur and Fischer (27), based on a survey with 181 respondents, a workshop with 25 experts, and a systematic literature review. They include:

- An insufficient coverage of alternatives (following the 2014 revision of the EIA Directive, there should now be an assessment of at least the preferred alternative and the zero-alternative – i.e. development of the environment in the absence of the project); most pre-2017 (the year the revision was introduced into UK practice) EIAs only assessed the effects of the preferred alternative, often advising that other alternatives were considered in other 'pre-studies'.
- An insufficient distinction between relevant and irrelevant data; often, the sections / chapters presenting the environmental baseline take up most of an EIA report, but are not used when assessing potential effects.
- Insufficient or missing monitoring and follow-up.
- Little consideration of cumulative effects, and in particular in the context of the interaction of effects on the various environmental topics covered.
- Weak quality control.
- Insufficient impact of public participation.

Health Impact Assessment

In local plan making, there are indications that the application of HIA within SEA/SA has been increasing over the last quarter of a century. For example, whilst a comprehensive review of practice in 2011 established that only 6 of 83 adopted core strategies (of what were then local development strategies and what are now referred to as local plans) came with an HIA (i.e. about 7%) (32), a recent systematic review of local plan appraisal practices in 2019 found that 16 out of a sample of 117 local plans (i.e. about 14%) had HIAs prepared. As explained above, at a minimum, those include SEA inclusive SAs, HIAs and EqlAs. HIA in plan making appears to routinely consider biophysical, socio-economic and behavioural determinants of health (21,28).

With regards to the application of HIA in EIA, there are currently no reliable figures (submissions of HIAs in town planning are not recorded centrally but individual local authorities may do so through Authority Monitoring Reports), but a random scan of 20 recent EIAs found that 2 had included the preparation of HIA (i.e. 10%) (25). Furthermore, over half had at least a chapter on population and human beings (including human health). There are, therefore, indications that consideration of health has increased in EIA, since the last major review by

IEMA in 2011 which established that 13% of all EIAs included a chapter on population and human beings and another 6% one on human health. In development planning, coverage of determinants of health is varied, and many HIAs appear to focus on issues such as health risk and health and safety.

About 30% of local authorities are establishing HIA requirements for development projects [18]. Annex 5 shows a sample of local HIA 'triggers' required in local plans. Most are based on the number of residential units or new commercial floorspace. Other triggers include impacts on vulnerable people, proximity to wards with high levels of deprivation, healthcare provision, loss of open space, and hot food takeaways.

The focus of standalone HIAs is often on guiding future action for making development healthier (21). There appears to be an increasing practice of HIA as a standalone assessment in town planning (i.e. HIA is not being associated with SEA/SA or EIA). Table 2 summarises the main differences between HIA, SEA and EIA as well as SA.

Table 2: Main Differences between HIA and SEA/SA and EIA

	HIA	SEA / EIA	SA
What determinants of health are considered?	Main focus on social and behavioural determinants	Main focus on bio-physical determinants	Focus on bio-physical, social and behavioural determinants
Evidence for how trade-offs are dealt with	Due to main focus on social and behavioural determinants, trade-offs often not explicitly covered	Due to main focus on social and behavioural determinants, trade-offs often not explicitly covered	Trade-offs in recommendations often made at expense of bio-physical aspects
Problem or impact driven	Problem driven	Impact driven	Impact driven
Focus on positive or negative impacts	Positive impacts	Negative impacts	Both, positive and negative
Type of methods	More qualitative than quantitative	More quantitative than qualitative	More qualitative than quantitative
Integration of HIA	Often applied outside the planning process and ex-post with the aim of guiding decision makers towards making development more healthy	Often appears to be bolted on, i.e. it is conducted at the end of the SEA/EIA process and used to further mitigate health impacts	

4. Enablers and barriers of HIAs

This section introduces enablers for, and barriers to, an effective application of HIA. Considering similarities with other impact assessments tools and their engagement with health, reference is not just made to HIA work, but also to publications on e.g. SEA/SA and EIA.

4.2 Enablers

Enablers are identified following the empirical research presented above and Montañó and Fischer (33), Yu and Fischer (34), Therivel and Fischer (35), Fischer et al (21,28), Carmichael et al (36), Nieuwenhuijsen et al (37); Bond et al (38); Harris-Roxas et al (39); Negev et al (40); Richardson et al (41); and York Health Economics Consortium (4): These are:

- Existence of situation specific guidance which reflects best practice in a particular area of application and which explains how to do things instead of just what to do; in this context, guidance should cover assessment processes, issues to be covered, and methods/techniques to be used.
- Existence of clear explanations on what substantive issues and what reasonable alternatives to consider (and why).
- Existence of explanations on why certain methods and techniques are more suitable for application in a specific plan situation.
- Appreciation of what the different expectations of different stakeholders are.
- Need to clearly distinguish between relevant and irrelevant information.
- Need to provide decision makers with clear recommendations to which they can respond.
- A context which is supportive, a high level of commitment and leadership; an adequate institutional capacity for conducting HIA, including HIA expertise.
- Commonly agreed on and consistency of aims and objectives as well as actions across administrations and sectors.

Plan making-specific enablers:

- Take account of and be clear about the 'strategicness' of the plans being assessed; at more strategic levels, when e.g. sites are not yet clearly determined, a problem driven approach to assessment may be more suitable and in less strategic situations, an impact driven approach may be more appropriate.
- If using HIA, do not conduct it after the plan and associated SA/SEA have been drafted. An integrated SEA/SA or EIA and HIA are preferable.

Development project-specific enablers:

- Make clear linkages between health-related initiatives (e.g. sustainable transport and green infrastructure) and health benefits.

4.3 Barriers

Barriers are identified following the empirical research presented above and Carmichael et al (36); Bond et al (38); Harris-Roxas et al (39); Povell et al (41); Grant and Barton (43); Nieuwenhuijsen et al (37); Fischer et al (21); Gachedchiladze and Fischer (44) and include:

- Ambiguity of health definitions and use of different terminology.
- Public health officers' lack of understanding of the planning system and planners' lack of understanding of health.
- Lack of institutional commitment.
- Absence of clear guidelines.
- Limited resources and timescales, including the late timing of involvement, and lack of consensus as to what the level of involvement by PH officers should be.
- Limited commitment to involvement and agreement for statutory HIA SPDs.
- Silo thinking of different impact assessments.
- Poor quality documentation.
- Gaps in local evidence resulting in exclusion of health considerations, in particular with regards to mental health.
- Trade-offs that favour socio-economic over biophysical issues.
- Reluctance to assess impact significance of certain issues (e.g. equity) due to the subjective nature of values, such as fairness, social justice, and wellbeing.
- Missing interconnections and linkages between different health determinants.

Considering enablers and barriers closely when engaging with HIA is important for being able to deliver effective HIA.

5. Quality review of HIAs

5.1 Overview of quality review

As explained in the methodology, quality reviews were conducted for 40 HIAs, including 10 HIAs prepared within the context of IIAs, 10 HIAs prepared within SEAs/SAs, 10 HIAs prepared next to EIAs and 10 standalone development project-related HIAs. The HIAs were sourced from publicly available information from local authority websites.

Table 3 (Quality Review Summary) shows the results of the review. In summary:

- Twenty seven HIAs used the London HUDU Rapid HIA model. 12 HIAs were of an intermediate nature and one was a comprehensive HIA (underlying plan currently at the scoping stage).
- Thirty one HIAs were undertaken concurrently with the plan making or project planning process.
- Five HIAs were prospective to the plan or project, and four were undertaken retrospectively; all at plan level.
- Ten of the plan HIAs and 17 of the project HIAs were undertaken by external consultants.
- Of the 13 HIAs that were prepared in-house by local authorities (one of which was community driven), 12 were undertaken collaboratively between local authority planners and public health officers.
- Three types of HIAs overall obtained average grades of around the B mark ('work is performed satisfactorily, however with omissions or inadequacies'). These included those prepared in the context of IIAs, SEAs/SAs and EIAs.
- For one type, the standalone HIAs, the average grades were lower and around the C mark ('work is performed unsatisfactory because of omissions or inadequacies'). This is a reflection of nine of those HIAs being rapid HIAs, and therefore not following a comprehensive HIA procedure, which is at the heart of the HIA quality review table used.

Four highly scoring HIAs are presented in Annex 4 in further detail, representing each type of HIA. Cases include:

- North East of England HIA in IIA from 2017, which scored A-B and which represents an intermediate and concurrent approach
- West Midlands rapid HIA from 2016 which was prepared next to a SA/SEA conducted in a retrospective manner and which scored A-B
- South East of England HIA in EIA from 2013, which scored A and which represents an intermediate and concurrent approach
- Yorkshire and the Humber standalone HIA from 2013, which scored A and which represents an intermediate and concurrent approach.

An important conclusion from this observation is, that generally speaking, standalone rapid HIAs are likely to score poorly when evaluated on the basis of a review table which is based on a comprehensive procedure (screening, scoping analysis and report preparation, influencing of decision, follow-up and monitoring, as well as consultation and participation).

Table 3. Quality Review Summary

Legend: R/I/C (Rapid / Intermediate / Comprehensive); P/C/R (Prospective / Concurrent / Retrospective)

PLAN (shaded cells selected for case study)											
IIA	DATE	GRADE	HIA SPD	TYPE	TIMING	SEA / SA + HIA	DATE	GRADE	HIA SPD	TYPE	TIMING
		A-D	Y/N	R/I/C	P/C/R			R/I/C	P/C/R		
1 London SE*	2019	B	N	R	C	North West**	2013/18	C	N	C	R
2 London N	2016	A-B	Y	R	C	London N ~	2019	B	N	I	C
3 East England	2018	C	N	R	C	London SE	2013	B	N	R	C
4 North East	2017	A-B	N	I	C	W Midlands	2016	A-B	Y	R	R
5 South West	2019	B-C	N	R	C	London SW	2016	B-C	N	R	C
6 South	2012	B-C	N	R	C	South West**	2014/18	B	N	I	R
7 E Midlands	2017	C	N	R	C	E Midlands	2018	C	N	R	C
8 W Midlands (joint)	2016	A-B	Y	I	C	E Midlands	2018	A-B	N	R	C
9 North West*	2017	A	N	C	C	Yorkshire & the Humber	2016	A-B	N	R	C
10 W Midlands	2016	B	N	R	R	North East	2017	B	N	R	C

PROJECT (shaded cells selected for case study)											
EIA + HIA	DATE	GRADE	HIA SPD	TYPE	TIMING	HIA (no EIA)	DATE	GRADE	HIA SPD	TYPE	TIMING
				R/I/C	P/C/R			R/I/C	P/C/R		
1 South West	2017	A	Y	I	C	South West	2013	C	Y	R	C
2 E Midlands^	2013	A-B	N	R	P	South West	2013	D	Y	R	P
3 South West	2019	C	Y	I	C	London SW^^	2019	B	N	R	C
4 East	2012	B	N	I	P	London N	2019	C	Y	R	C
5 South East~~	2017	B	N	R/I	R/C	London N	2018	C	Y	R	P
6 South East	2019	C	N	R	P	North West	2019	C	N	R	C
7 South East	2013	A	Y	I	C	South East	2016	C-D	Y	R	C
8 South East	2014	B	Y	I	C	Yorkshire & the Humber	2017	C	Y	R	C
9 South West	2019	B	Y	R/I	C	Yorkshire & the Humber~	2013	A	Y	I	C
10 South East	2018	C	Y	I	C	London E	2019	B	N	R	C

* Emerging plan currently at scoping stage; ** in 2 parts (HIA of local plan and HIA of Site Allocations); ~HIA of local plan not SA; '~~retrospective of existing New Town, concurrent with project application and policy (non planning) for service delivery; ^ prospective HIA for a NSIP, ES not reviewed for this research; ^^ no SPD but advised to undertake HIA at pre app consultation; ~ community led HIA; NB. SPD if published on website as of Feb 2020

5.2 Key Findings

Key findings are subsequently provided for each category of HIA.

HIA in IIAs for (local and strategic) plans (10 in total)

No	Observations (Positive)
7	Prepared within the context of SEAs/ SAs and integrated with Equalities Impact Assessment (EqIA), in one case also with Rural Proofing (the assessment of effects on rural areas)
10	Integrated with the recommendations and objectives of the Joint Strategic Needs Assessments (JSNAs) and the Health and Wellbeing Strategies (HWSs)
10	Offered definitions of health, health inequalities and wider determinants of health
10	Considered health and well-being objectives, standards and targets, established at international, UK and regional/local levels
1	Outlined community consultation and emphasised the role of the public in decision making
9	Prepared prior to any major decisions being made on subsequent project development except for one, where a housing-led building programme was already underway
7	Developed in-house approaches for ensuring health considerations were met

No	Challenges
10	Impacts on BAME communities, vulnerable groups or the cultural determinants of health were narrowed to Travellers and Gypsies, the elderly, and the disabled
4	For some controversial policies, in particular with regards to housing allocations, potential negative health impacts were only assessed with a short-term perspective in mind (during construction).
10	Mental health not well considered; limited to aging populations and dementia
5	No inclusion of baseline data from the Scoping Report, so reports cannot be comprehended as standalone documents, but have to be read in conjunction
8	Monitoring poorly described, with a few mentioning the use of individual council's existing annual monitoring reports; none discussed the Public Health Output Framework or offered reporting programmes with dedicated leads
7	Use of a rapid approach to assess a large number of policies (in one case 700), making them (at least in parts) incomprehensible
10	No suggestions made on how to create win-win solutions when assessments found both, positive and negative impacts, for example, in discussions of preferred options; in one case a policy on tourist accommodation was said to result in positive impacts on the local economy and the tourist experience; however, there were negative impacts on the provision of affordable homes and on health due to additional pressures on existing facilities and services
10	No information on sensitive receptors
10	Health is mainly considered in relation to the siting and consideration of health care and leisure facilities

HIAs for Plans (10 in total)

No.	Observations (Positive)
6	HIAs state that they were leading to an increase in collaborative working between planners and public health practitioners
6	HIAs reflect recommendations and objectives of JSNAs and HWSs
6	HIAs are said to enhance participatory working through stakeholder workshops, using a critical appraisal approach; they also lead to statements in plans committing to collaborative working
5	HIAs involve comprehensive community consultation programmes
2	HIAs recommend that councils adopt HIA SPDs
1	HIA included an appraisal of the council's SA's HIA SPD
6	HIAs included commitments to Health in All Policies
6	HIAs included statements of advice as to where additional HIAs can be undertaken, and advocate a greater consideration of health
1	HIA used the Wales HIA Toolkit (for scoping and screening)
2	HIAs advocate the use of the Public Health Outcomes Framework for monitoring
1	HIA states that it is the first time since the 1950s that the local plan has a dedicated chapter to Health and Wellbeing because of the outcome of the HIA.
8	HIAs separate clinical needs and public health needs
8	HIAs separate health and care facilities from wider determinants of health

No.	Challenges
9	HIAs are prepared retrospectively and are not part of the SEA / SA process
9	Time constraints means rapid HIA models are used, rather than intermediate models.
9	External consultants do not include public health practitioners
1	HIA undertook an assessment of the health of the local authority area rather than conducting an impact assessments
1	HIA was dealing with the siting of health care facilities only
1	HIA found negative impacts of a new housing development with regards to flooding, air quality and waste, but stated that the impacts were positive because of the new housing being created
10	HIAs showed little understanding of waste and occupational health and safety impacts on health
10	Generally speaking, SAs/SEAs do not reflect on the outcomes and recommendations of the HIA and HIAs appear to be 'bolted-on' rather than being integrated.

HIAs prepared in association with project EIAs (10 in total)

No	Observations (Positive)
10	Impacts during construction are separated from impacts during operation
10	Undertaken for a variety of projects, including housing, hotels, offices, university campuses, healthcare facilities, gyms and sports facilities, cinemas, healthy new towns, retail, community centres, public realm developments, green infrastructure, schools, highways and railway routes
5	Applying a community consultation led approach (triangulation of community voices, community profiling and expert knowledge)
10	HIA comprehensively covers air quality, dust, noise, vibrations, waste and health and safety during construction
1	HIA applies a healthy pathways approach to the assessment of options, meaning that consideration of health and wellbeing as well as mental health and wellbeing is integrated with NHS infrastructure service provision; impact magnitude, significance, and duration are of a qualitative approach
1	HIA health codes assigned to governance structures when developing new towns
3	HIAs starting from the position of building social cohesion and young peoples' health needs
3	HIAs seeking to secure health considerations through section 106 agreements
6	HIAs prepared in association with project EIAs are the strongest type of HIA for monitoring arrangements
7	HIAs provide for comprehensive literature reviews
4	EIAs led to an improved understanding of mental health and wellbeing effects
10	Generally speaking, HIAs in association with project EIAs considered innovative concepts, such as lifetime accessible homes, lifetime neighbourhoods, co-living units, community orchards, green roofs and food roof gardens

No	Challenges
10	No consideration of project options or alternatives
6	Negative impacts on biodiversity identified in EIAs not considered and reflected on in HIAs
2	HIAs using old guidelines
6	Generally speaking, HIAs in association with project EIAs are lacking the use of maps or detailed design narratives or illustrations
1	HIA for outline planning application notes that details will be offered during reserved matters stage which could affect the recommendations of the HIA
10	Relationships between HIA and EIA remain unclear and at times the two appear disjointed.
5	HIA triggered because of a provision of health care facilities only
6	Community consultation conducted during EIAs is not reflected on in the associated HIAs
1	Residents' relocation strategy arising due to refurbishment of existing housing covered in the EIA; however, health impacts of relocation / resettlement are not reflected on in HIA
8	HIAs find it difficult to forecast health impacts for longer term projects (e.g. for 20 years).

Project Standalone HIAs (10 in total)

No	Observations (Positive)
7	Prepared in response to local HIA requirements (e.g. policy or SPD)
1	A police architect was used to design out crime
1	A local apprentice scheme was secured for the construction phase through a section 106 agreement.
1	Housing developments to include not only cycle routes but cycle storage and EV charging points.
1	HIA triggered because of a pre-application consultation
1	Screening resulting in HIA being recommended; whilst there is no formal requirement to do so, the developer undertook one in order to highlight the project's positive health impacts
4	Innovative concepts being discussed, including district heating systems, healthy streets, combined heat pumps, solar panels, sustainable urban drainage systems (SUDs), responsibly sourced materials, waste minimising water fixtures and fittings
3	Using a range of sources in their approaches, adapting Ireland, Wales and London toolkits
1	Community-led HIA conducted via a neighbourhood planning process; project proposal ended up being rejected - in part because of predicted negative health impacts

No	Challenges
1	Written in the style of a marketing brochure to promote positive health benefits of a project; negative short term impacts due to construction being ignored
7	Standalone HIAs being weak on the description of baseline profiles
8	HIAs usually including either poor quality maps or no maps at all
4	HIAs had a focus on proximity to and capacity of health care facilities only
1	A housing development with no affordable units is portrayed as positive as it is in an area of predominantly social housing
1	Housing developments without parking are marketed as being sustainable transport, 'car free' or 'car lite' developments without providing any evidence
1	Assumed beneficial health impacts are used to justify building on the Green Belt
1	HIA assessing the impact of a 16-storey new build, but without analysing health impacts of tall building developments in low density areas

6. Discussion

This section discusses the findings by using the enablers for, and barriers to an effective application of HIA introduced in the previous section as a starting point.

Existence of up-to-date HIA policy and guidance

With regards to whether or not HIA is applied, the existence of guidance is important. 27 of the 40 reviewed HIAs (both, local plan and project related) made reference to the London HUDU rapid HIA tool and all HIAs mentioned at least one other guidance. With regards to development projects, whilst about 30% of local authorities had SPDs for HIA in place (18), in our randomly selected sample seven of the 10 standalone HIAs and 6 of the HIAs prepared next to EIAs were produced in local authority areas that had HIA SPDs.

Whilst the influence of guidance and the existence of HIA SPDs on the quality of HIA reports is difficult to establish, there is some emerging evidence. For the three HIA types prepared next to (or integrated with) statutory impact assessments tools (i.e. IIA, SEA/SA and EIA), on average, slightly higher scores were achieved in those situations where a LPA HIA SPD or HIA policy was in place.

In this context, an HIA SPD can be regarded as an expression of commitment to HIA. In standalone HIAs (i.e. in project development situations), the picture was reversed and the quality of HIAs was lower in situations where an SPD HIA or policy was in existence. The interpretation here is that preparing an HIA when it is not required shows a high level of commitment from those responsible for triggering it. Commitment can be lower in situations where there is a duty to prepare an HIA.

This is in line with observations for other impact assessments tools where the quality of, for example, pilot IAs (of which only a few are usually prepared) tends to be high, and observed average quality becomes lower once formal requirements are in place and many more IAs are prepared, including by those authorities that are not IA pioneers and have little expertise. However, only in the presence of formal requirements are impact assessments tools consistently applied. Impact assessments tools that are not formally required tend to be disbanded if there is a failure to formalise them after a piloting/testing period. This was described, for example, by Fischer (45) for policy level impact assessments in transport planning. With regards to guidance, it is important to note that only tailor-made guidance that is able to provide specific instructions in a particular situation is likely to improve impact assessments quality overall (34).

Existence of local expertise and capacity

HIAs are prepared more consistently in local authority areas that have HIA SPDs or HIA policy in place. It also highlighted the importance of developing HIA expertise and associated capacity through, for example, training and specific guidance once HIA requirements have been put in place. This is in line with earlier observations on other IA tools (46). Expertise is in fact one of the strongest explanatory factors for good quality IAs and one of the highest scoring HIAs in the whole sample was prepared by a team led

by an international renowned HIA expert. This is in line with observations made elsewhere on the effectiveness of impact assessments tools (34). Finally, for local plan practice, the results of the quality reviews suggest that HIAs that were jointly prepared by planning and public health officers were of a particularly high quality.

HIA trade-offs and stakeholder expectations

Whilst the importance of having consistent aims and objectives of different health determinants is widely accepted, there is currently little evidence for whether and how this is operationalized in practice. Based on the results of the HIA quality reviews (Table 4) there is some concern with regards to equal weight not being given to social, economic, and environmental determinants of health. This is particularly evident in situations where HIA is integrated with other IAs in IIA (standalone HIAs often focus mainly on social and behavioural aspects). In particular, in the context of new housing developments, it is observed that environmental aspects are systematically subordinated to economic aspects and associated impact matrices persistently show negative impacts on environmental aspects, whilst mostly depicting positive economic and, to a slightly lesser extent, social impacts. Whilst in this context assessments refer to the need for mitigation at later (project) stages, no reflections are attempted on whether mitigation will be possible or what potential trade-offs might mean for health. An example of a way forward which would address this issue is provided by a good practice HIA which clearly stated that there was no consensus of stakeholders on whether predicted impacts were acceptable. A list of mitigation measures was subsequently provided in case the associated project was implemented.

HIA methods and techniques

Whilst different levels of strategicness are reflected to some extent, with project level HIA using – in parts – different methods / techniques than plan level HIA (e.g. risk analysis in the former and more discursive approaches in the latter), none of the HIAs considered any alternatives or options in their assessment. This is associated with the problem-driven approach used by HIA, where the focus is on optimising a given development option. This is problematic, as HIA currently does not contribute much to the discussion of the best possible plan or project alternative / option. The latter is at the heart of the impact driven approach used in SEA/SA and EIA. In this context, HIA is consistently prepared late in plan and project preparation. Even when conducted in a concurrent manner, it focuses on a preferred alternative / option, attempting to optimise it from a health perspective.

Spatial planning and health linkages

HIAs provide for linkages between health-related initiatives (e.g. sustainable transport or green infrastructure) and health benefits. However, frequently relationships are implied rather than explicit and specific, meaning that whilst requests are made to develop sustainable transport or green infrastructure, these are currently not site or quantity specific. This is in line with other HIA recommendations such as requests for adequate provisions for health facilities. Here, HIA would not normally suggest, for example, a particular site where these should be developed. This can be described as somewhat non-ambitious, especially given the presence of other impact assessments tools that can make site specific suggestions.

7. Recommendations

7.1 Conclusions

HIA has been gaining in importance in town planning in England over recent years. Following the release of both, the NPPF and the Health & Social Care Act in 2012, HIA has been increasingly gaining awareness among local authority public health and planning teams, and frequently and routinely applied in both, plan making and development projects. This is frequently happening next to, or integrated with other impact assessment tools, including IIA, SEA/SA, EIA, EqlA and others during the planning applications process for development projects. Yet, despite its widespread use, understanding of how frequently it is used and how it should be applied remains poor.

It is in this context that this report starts to fill the current gap in knowledge by systematically reviewing HIA practice in England, both in plan making and project development. Based on reviews of 40 HIAs, representing different situations of application (local plan related HIA in IIA and HIA next to SEA/SA, as well as project plan related HIA next to EIA and standalone HIA) and based on advice and comments by public health and planning experts, new insights have been gained into the practice of HIA in town planning in England.

7.2 Recommendations

The recommendations of this study are as follows.

Embed the use of HIAs earlier in the planning process

HIA overall is based on an assessment tradition which is problem-driven. This means it aims to improve a plan or project in making it healthier by 'health proofing' it. In this context, it does not assess different options / alternatives, but focuses on optimising the plan / project from a health point of view. However, this means HIA is usually applied at the end of the plan / project preparation process; once many important decisions have already been taken and, consequently, these cannot be influenced further. In order to influence plans and projects better, and also to affect the choice of a preferred plan or project option, HIA should engage more closely with other IAs that are applied earlier and, in that context, use an impact-driven approach.

Provide greater clarity on consideration of health issues

HIA should become more sensitive to the potential trade-offs between different health determinants' dimensions, including economic, social, and environmental dimensions. Currently, and in particular in IIA situations of application (and most notably in the context of new housing development sites), negative impacts are consistently predicted in local plan making with regard to environmental aspects, while positive impacts are usually anticipated for economic and, to a lesser extent, social aspects. However, in the interest of sustainable development, win-win-win solutions for all aspects should be sought and HIA with its problem-driven tradition is well placed to contribute to this.

Development of consistent national guidance and best practice on HIAs

There is an urgent need to develop HIA guidance for specific situations. In this context, HIA needs to learn to make concrete suggestions for the development of health initiatives, including, for example, sustainable transport and green infrastructure. In project development, existing HIA cases are currently poorly accessible and, as a consequence, not well known; an HIA in England repository is needed. In this context, and as a recommendation from this project, non-technical summaries that are prepared for project EIAs and that are accessible through IEMA's web-pages should clearly state when an HIA has been prepared; such data is not presently given.

In local plan preparation, and in the absence of PHE being a statutory consultee, it is prudent to include Directors of Public Health and their teams in at least the screening and scoping stages of SA / SEA or IIA. Planning and public health officers have started to collaborate more closely through HIA and an effort should be put into developing this important relationship further.

Finally, planners and public health officers and practitioners need training on how to use HIA in, for example, different local plan IIAs and SEAs/SAs as well as in specific project situations, both next to EIAs and as standalone HIAs. In this context, HIA capacity building in town planning will be a critical component for more effective HIA.

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Annex 1. Key HIA literature

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Annex 2. HIA Quality Review Table

Quality review table for HIA reports for local plans (incl. spatial development frameworks/strategies) and development proposals 4.

(1) Baseline description of the development proposal or local plan / integration process of health		
Grade		
Comments		
<i>The SA/SEA/EIA/HIA report:</i>		
Describes the overall purpose, aims and objectives of the development proposal or local plan		
Clearly states who owns the development proposal or local plan and who is responsible for conducting the project or plan making process		
Clearly states what other projects, plans, programmes and policies are/may be relevant and the relationships with them		
clearly refers to any available HIA supplementary planning guidance or states that there is none		
Describes how SA/SEA/EIA/HIA and development proposal or local plan processes were integrated (impact assessment should take place during development proposal or local plan preparation)		
With a view to avoiding duplication, describes what issues are addressed in other assessments or elsewhere		
Provides information on relevant aspects of the current state of physical and mental health, and well-being of those possibly affected (communities/ population) by the development proposal or local plan, indicating knowledge and data gaps as well as unknowns		
Provides information on sensitive receptors, i.e. people with an increased sensitivity potentially affected by the local plan or development proposal (found in e.g. schools, day care centres, hospitals, nursing homes)		
Provides information on health & well-being objectives, standards and targets, established at international, UK and regional/local levels, and shows how these have been taken into account		
Evaluation of Section (1)		
(2) Identification & evaluation of key issues/options		
Grade		
Comments		
<i>The SA/SEA/EIA/HIA report:</i>		
Describes the options / alternatives that were considered, taking objectives & scope of development proposal or local plan into account		
Provides a definition of health and well-being which is being used (and which should include mental health)		
Lists the health and wellbeing issues considered in assessment and explains why they were chosen		
Provides information on the likely negative and positive effects / opportunities of the development proposal or local plan and the considered options / alternatives on: <ul style="list-style-type: none"> • mental health and wellbeing (including, for instance, avoiding stress) • economic determinants of health (satisfying employment; unemployment; affordable housing; poverty; sustainable and affordable transport; effects from compulsory purchase) 		

⁴ This review table has been inspired by Lee and Colley [3], Fischer [7], Jacobson et al [8], Green et al [9] and Mindell et al [10].

<ul style="list-style-type: none"> • social determinants of health (education for different groups; inequality; social exclusion; crime rates) • cultural determinants of health (healthy lifestyles [walking/cycling]; leisure (open areas, sport); food • health of BAME) communities and/or vulnerable groups • (occupational) health and safety • access to health- and social care activities/services • houses and buildings: healthier built environments • sustainable transport • community cohesion and sustainability, community isolation, loss of, or access to, community facilities • biophysical determinants of health (soils; climate/ flooding; air; water; flora and fauna/biodiversity) • noise and light pollution, vibrations, smell • waste 		
lays out what matters are more appropriately assessed at other levels or layers of decision making, with a view to avoiding duplication		
Evaluation of Section (2)		
(3) Determination of potential health impact significance		
<i>The SA/SEA/EIA/HIA report:</i>	Grade	Comments
Explains and justifies (with regards to its appropriateness) the methodology for assessing health impacts and their significance		
Identifies if the expected change and magnitude (if possible in a quantified manner) in community / population physical and mental health and well-being can be considered acceptable (or desired), given consultation responses, objectives and standards and the policy context		
Identifies which options / alternatives in the long-term, (without significant short-term detriment) are most likely to significantly: <ul style="list-style-type: none"> (a) narrow health inequalities? (b) lead to an increase in healthy lifestyles? (c) lead to more safe and cohesive communities? (d) Improve socioeconomic conditions for people? (e) Improve environmental conditions for people? (f) Improve access to good quality health and social care? (g) lead to improved mental health and wellbeing? 		
Identifies the probability, duration (short, medium and long-term permanent and temporary), frequency and reversibility of effects, both positive and negative of the different options / alternatives		
Identifies the negative and positive secondary, cumulative & synergistic nature of effects and opportunities of the various options / alternatives		
Evaluation of Section (3)		
(4) Consultation process		
<i>The SA/SEA/EIA/HIA report:</i>	Grade	Comments
Describes how authorities that are responsible for or have a role in health protection, health promotion and health care were consulted when scope and level of detail of information in assessment were identified		
Describes how the draft development proposal or local plan and SA/SEA/EIA/HIA report were made available to authorities and the public likely to be affected or having an interest and were allowed to express their opinions within an appropriate time frame		
Includes or makes reference to a statement of community involvement or states that none was produced		

Confirms that consultation results on the development proposal or local plan and SA/SEA/EIA/HIA are to be considered in decision-making		
Evaluation of Section (4)		
(5) Presentation of information and results		
<i>The SA/SEA/EIA/HIA report:</i>	Grade	Comments
Has been prepared before any important decisions on the development proposal or local plan are made		
Provides information on any difficulties (such as technical deficiencies or lack of know-how or missing / inadequate data) and uncertainties encountered in compiling the required information		
Once a decision has been made, is accompanied by a statement summarising how physical and mental health and well-being considerations have been integrated into the development proposal or local plan and how the SA/SEA/EIA/HIA report and the results of the consultations have been taken into account and the reasons for choosing the development proposal or local plan as adopted in the light of the other reasonable alternatives / options dealt with		
Evaluation of Section (5)		
(6) Alternatives, mitigation, recommendations on preferred options, monitoring		
<i>The SA/SEA/EIA/HIA report:</i>	Grade	Comments
Presents an outline of the reasons for selecting the options / alternatives dealt with, and describes how the assessment leading to these reasons was undertaken		
Provides recommendations that are: <ul style="list-style-type: none"> • specific, measurable, appropriate, realistic & time bound • clearly linked to the impacts identified • preventing or mitigating potential negative impacts and maximising positive impacts and opportunities • clear about who is expected to take action 		
Provides information on the measures envisaged to prevent, reduce and as fully as possible offset any (significant) adverse effects on community / population health of implementing the project or plan and enhance positive outcomes		
Describes the measures envisaged concerning monitoring of the significant effects relevant to population and human health of the development proposal or local plan implementation in order, <i>inter alia</i> , to identify at an early stage unforeseen adverse effects		
Shall explain how monitoring and follow-up is done, in order to be able to undertake appropriate remedial action; the what, how, and who of monitoring need to be specified		
Shall explain how existing monitoring arrangements may be used, if appropriate, in order to avoid duplication		
Evaluation of Section (6)		

Scoring system**Grade A** – The work has generally been well performed**Grade B** – Is performed satisfactorily, however with omissions/ inadequacies.**Grade C** – Is unsatisfactory because of omissions or inadequacies.**Grade D** – Task not attempted at all.**n/a** – not applicable.**?** - unclear

OVERALL GRADE FOR SA REPORT = -----

Additional notes:

Annex 3. Definitions of health

Definitions of health differ and are ambiguous, contested, and controversial. In the context of HIA, the definitions of the United Nations World Health Organisation (WHO) for health, mental health, Healthy Urban Planning (HUP) and Health in All Policies (HiAP) are of particular importance. Furthermore, in England, definitions from the Department of Health and Social Care (DHSC) for wellbeing, mental wellbeing, public health and health inequalities are widely used. Subsequently, definitions are introduced, and important associated research work is highlighted.

Health Consideration	Definition	Source
Health	<p><i>'Health is a state of complete physical, mental and social wellbeing and not merely the absence of disease or infirmity. [emphasis added]</i></p> <p>The enjoyment of the highest attainable standard of health is one of the fundamental rights of every human being without distinction of race, religion, political belief, economic or social condition.'</p>	World Health Organisation (WHO) [47]
Wellbeing	<p>'Wellbeing comprises an individual's experience of their life; and a comparison of life circumstances with social norms and values.</p> <p>Wellbeing exists in two dimensions: Subjective wellbeing asks people directly how they think and feel about their own wellbeing and includes aspects such as life satisfaction (evaluation), positive affect (hedonic), and a judgement on whether their life is meaningful (eudemonic).</p> <p>Objective wellbeing is based on assumptions about basic human needs and rights, including aspects such as adequate food, physical health, education, safety etc. Objective wellbeing can be measured through self-report (e.g., asking people how they view their health), or through more objective measures (e.g., mortality rates and life expectancy).'</p>	Department of Health and Social Care [48]
Public Health	<p>'The science and art of promoting and protecting health and well-being, preventing ill-health and prolonging life through the organised efforts of society and has three domains of practice'.</p> <ul style="list-style-type: none"> • Health protection – biophysical: infectious diseases, air quality, noise, chemicals. • Health improvement – inequalities, lifestyles, family/community, risk factors. • Improving services – service planning, efficiencies, equity, clinical effectiveness 	<p>Acheson, 1988 [49]</p> <p>Fac. of Public Health. [50]</p>
Mental Health	<ul style="list-style-type: none"> • 'Mental health is more than the absence of mental disorders. 	WHO [51]

	<ul style="list-style-type: none"> • Mental health is an integral part of health; indeed, there is no health without mental health. • Mental health is determined by a range of socioeconomic, biological and environmental factors. • Cost-effective public health and intersectoral strategies and interventions exist to promote, protect and restore mental health' 	
Mental Wellbeing	<p>'Part of overall wellbeing and is more than just the absence of mental illness. It is a positive state of mind and body, underpinned by social and psychological wellbeing. It enables and supports good relationships, improved resilience, improved health, meaning, purpose and control. It is predictive of improved healthy life expectancy, quality of life and life satisfaction, and is inextricably linked with physical health and living with, and recovering from, both physical and mental illnesses.'</p>	DHSC [48]
Health Inequalities	<p>Marmot [52] undertook a strategic review into the health inequalities in England and found that:</p> <p>'Inequalities in health arise because of inequalities in society – in the conditions in which people are born, grow, live, work, and age. So close is the link between particular social and economic features of society and the distribution of health among the population, that the magnitude of health inequalities is a good marker of progress towards creating a fairer society. Taking action to reduce inequalities in health does not require a separate health agenda, but action across the whole of society.</p> <p>The Review also recommended six policy objectives to target health inequalities –</p> <ul style="list-style-type: none"> • 'Giving every child the best start in life. • Enabling all children, young people and adults to maximize their capabilities and have control over their lives. • Creating fair employment and good work for all. • Ensuring a healthy standard of living for all. • Creating and developing sustainable places and communities. • Strengthening the role and impact of ill-health prevention' 	<p><i>The Marmot Review: Fair Society, Healthy Lives and Health Equity in England: The Marmot Review 10 years on</i> [52,53]</p>

Annex 4. Case studies of HIAs reviewed

HIA in Plan Making and with Integrated Impact Assessment (IIA)

Brief summary
This IIA (532 pages) for a local plan included both qualitative and quantitative assessment and was integrated with SEA, SA, HIA and EqlA. It was undertaken by a consultancy in 2016 and it is currently published for consultation. The HIA is concurrent and intermediate and fully integrated. The specific HIA approach is explained on 2 pages in the IIA. The LPA does not have SPD or local policy for the use of HIA in place.
What was the setting and population covered?
This is an IIA of a city council's local plan in the North East of England region. At the early stages of the plan making process, the Director of Public Health undertook a Rapid HIA to inform the IIA, setting out the factors that can influence health and well-being. High level impacts on the health inequalities of Local Plan themes were identified at this stage. The IIA evaluated the 15-year local plan, consisting of 52 policies and site allocations individually and as a whole against 21 environmental, social and economic objectives, one of which was specific to health. Eight of the objectives were assigned criteria relevant to health. These were decided upon in consultation with the Director of Public Health. The local plan has 12 strategic priorities, two being specific to health. Its site assessment criteria include proximity to schools, town and district centres, rail stations, green space, GP surgeries, and community facilities, whether the site is within one of the city's 10 most deprived wards.
What was it seeking to achieve?
The methodology used is explained, and is colour coded; it is based on a (++ , + , 0 , ? , - , --) grading system. It identifies the expected magnitude of change in terms of housing allocations and employment land use. Out of 105 policies, 17 were found to have negative impacts on healthy lifestyles because of the loss of open space; 5 policies were found to have negative impacts due to an increase in traffic, congestion, and noise. Impacts over time were identified, highlighting their significance in terms of health as well as cumulative impacts.
What did it do?
The IIA and integrated HIA scored well for its approach to the consultation process with health professionals. It had a logical layout with ease of navigation and was prepared prior to important decisions being made. The IIA highlighted the relationship between health and education with specific policies for its main education institution in terms of education, skills and health and community facilities, as well as recognizing health inequalities. The IIA provided information on the negative and positive effects of the local plan and scored highly for economic, social, cultural and biophysical determinants of health. It discussed mental health and well-being in terms of access to open space and local food growing as well as access to health and social care activities, healthier built environments, sustainable transport, community cohesion, noise and light pollution, vibrations and odours. It explained the reasons for selecting options which were linked to the identified impacts.
What was the outcome?
The local plan passed its examination by the Planning Inspector and was adopted by the LPA in 2017.
What did we learn?
Weaknesses in appraising health impacts on BAME communities and vulnerable groups. Reference is made to Travellers and Gypsies and the disabled. The IIA did not address issues of occupation health and safety or waste. It is not clear who is expected to act or offer any offset measures. It does not offer any information on how monitoring will occur, who will undertake the monitoring, or any timescales for follow up. Although it does include a set of indicators, they are not aligned to the Public Health Outcomes Framework (PHOF).

What is the single most important one line of advice which we can give to others starting a similar project?

Collaboration with the Director of Public Health at an early stage to shape the strategic options

HIA in Plan Making aligned with SEA / SA

Brief summary

This rapid and qualitative desktop HIA from 2016 was prepared next to a SA/SEA for a local plan and an associated area action plan. It was conducted in a retrospective manner. The HIA has 13 pages and the SA/SEA 231 pages. The LPA has an HIA SPD in place and the HIA was prepared in-house, as was the SA/SEA.

What was the setting and population covered?

This rapid HIA from the West Midlands was prepared next to the SA/SEA for a city council's local plan. It was published at the same time as the SA/SEA. In the HIA, key health issues of the local population were identified and the links between planning and health were explained. In this context, healthy communities (physical activities, crime) and health inequalities were mentioned as important objectives. The assessment focused on physical activities, housing, employment, accessibility, access to health food, crime reduction and community safety, and social cohesion and social capital, as well as environmental impacts.

What was it seeking to achieve?

The ultimate aim of the HIA was to assess the potential of the local plan to positively influence the health and wellbeing of the population and to explore possibilities for reducing health inequalities.

What did it do?

The appraisal methodology included the five procedural stages of screening, scoping, appraisal, reporting and monitoring. This follows the HIA SPD. A qualitative approach was used with expert knowledge (Public Health Practitioner) being at the heart of the assessment. It is said that this is the first time that specific policy guidance on health and wellbeing has been considered in a local plan since the 1950s.

What was the outcome?

Suggestions were made for improving levels of physical activity and accessibility (also focusing on sustainable transport, - including walking and cycling), the development of green infrastructure, health and social care provisions, energy efficient homes, age friendliness, job opportunities, accessibility to employment and training opportunities, childcare facilities, consistent access to healthy food, crime reduction through design, and other measures (e.g. speed limits), and the reduction of pollution and noise levels. There is also a call for an extensive engagement with local communities when planning new projects.

What did we learn?

Of particular benefit was that a Public Health Practitioner was seconded to the Planning Department from the public health team. Annual Monitoring Report data will be used and reference made to the progress of health impacts through the Public Health Outcomes Framework Indicators. There was no explanation as to why the health and well-being issues used were chosen in the HIA. No BAME impacts were assessed; only impacts on the elderly, travellers and gypsies. The HIA should have been concurrent to part of the SA process, but was only applied retrospectively. The former approach would also have allowed for public consultation to be considered.

What is the single most important one line of advice which we can give to others starting a similar project?

A Public Health Practitioner was seconded to the Planning Department from the public health team and helped to produce an overall high quality HIA.

HIA of a project conducted within an EIA

Brief summary
This mainly qualitative HIA of 154 pages (+ four annexes) was included as an Annex of an EIA for a housing development masterplan, produced in 2013. It was of the intermediate type and was conducted in a concurrent manner with the EIA. The HIA was prepared by an independent charity. The local planning authority has an HIA SPD in place.
What was the setting and population covered?
Over 1,000 new houses and other uses, including retail and community facilities, as well as open and green spaces are planned. An SPD HIA is in place and was used. Additionally, national and international good practice guidance was consulted. New residents, workers, and visitors, as well as existing residents nearby were at the heart of the assessment which looked at construction and operational phases.
What was it seeking to achieve?
The HIA states that the main aim was to 'health proof' the master plan of the housing development. It aims to inform development in order to maximise positive and minimize negative impacts of the operation phase and do the same for existing and new populations during construction and operation. Mitigation measures for negative impacts were suggested and indicators were identified for monitoring. In order to obtain a clearer idea about impacts, a health impact matrix was used. Impacts on different groups (including residents, workers and visitors, gender, age, disability ethnicity, faith and other groups) were assessed in terms to 15 determinants of health. An overall score was also provided. In this context, a scoring system of +++, ++, + ~, -, --, --- was used.
What did it do?
A process was followed, consisting of screening, scoping, baseline assessment and community profiling, stakeholder consultation and involvement, evidence and analysis, health impact statement, and follow-up. The HIA included sections on background to the development, methodology of the HIA, policies of relevance, a comprehensive community profile section, health proofing of the masterplan, community consultation feedback, impacts, optimisation and monitoring sections. Expert knowledge and experience of those conducting the HIA (which included an international renowned HIA expert) was at the heart of the assessment. Importantly, a master class was held on how to undertake a comprehensive HIA.
What was the outcome?
A set of mitigation and enhancement measures were devised. Overall, moderate to major beneficial effects on health and well-being were predicted - particularly for the operational phase. There were negative effects predicted on some people, in particular during the construction phase.
What did we learn?
It is difficult to assess effects on new residents when, at the time of the HIA, it was not yet known who they would be. In addition, ward level data was usable only to a limited extent when looking at assessing impact on those living near the new development. Community consultation included questions to the community on health and well-being. Health proofing of developments can be an effective way to optimise development and enhance positive outcomes whilst reducing negative effects.
What is the single most important one line of advice which we can give to others starting a similar project?
Health proofing by an acknowledged HIA expert can be a good way to optimize a master plan from a health perspective.

Standalone HIA for a project

Brief summary
This standalone 78 pages qualitative HIA was produced in 2013 for a mining project. Considering our definition, it was of the intermediate type (even though the cover page states 'rapid') and was conducted in a concurrent manner with the project planning process. The local planning authority has an HIA SPD in place and the HIA was prepared by an HIA steering group (consisting of representatives of those affected; the developer and the council).
What was the setting and population covered? [Word limit: 100]
The HIA was conducted for a planned a surface mine of nearly 140 ha. It is located about 3 km from the town centre of the next major town. There is a farm close to the site boundary and a Gypsy and Traveller site is located approximately 1 km away. Whilst mining activities would occur Monday to Friday 7:00-19:00 and Saturday 7:00 to 12:00, maintenance activities are said to occur every day of the week, including Sundays.
What was it seeking to achieve? [Word limit: 100]
This is a community driven HIA that critically reflected on project assumptions with regards to no significant health impacts being expected to be the outcome of the project. Whilst expert input was at the heart of the HIA, results from interviews and a survey were also important information sources in the assessment of impacts.
What did it do? [Word limit: 200]
The HIA is said to have followed Irish HIA guidance and a rapid HIA guide, as well as Welsh guidance on the health impacts of mining. Information collected from focus groups, interviews and scoping surveys was used to inform the HIA. Information was grouped into six sections, based loosely on the broader determinates of health: travel and transport; air quality; jobs and economic growth; noise and vibration; site safety; and other impacts. An impact table document was prepared on this basis and a + and – scoring system. The HIA process applied included screening, scoping, appraisal, reporting, and evaluation. The main parts of the report included an introduction, site description, findings, and recommendations.
What was the outcome?
An important finding of the HIA is that there was a lack of unanimity in the team conducting the HIA. As a consequence, the Steering Group was unable to make recommendations on the potential overall impact on health and wellbeing related to the proposed development. However, in case the scheme went ahead, a number of recommendations were still provided for enhancing positive outcomes and reducing negative impacts.
What did we learn?
This was a Community-led HIA which was produced to critically reflect on the health assumptions behind the project (which were that there were no significant negative health impacts). Advice from Council Planning Officers and Public Health Analysts was sought. Whilst there was no agreement amongst team members on the health impacts overall, the HIA enabled a better appreciation of both negative and positive impacts of the development. At the end, the project did not obtain planning permission.
What is the single most important one line of advice which we can give to others starting a similar project?
There may be disagreement amongst those involved in the HIA on impact significance, but measures for project optimization may still be proposed.

Annex 5. Local Authority Triggers for HIA

Local Authority	Key Triggers	Source for supplementary planning documents, practice notes, strategies, policies or other planning guidance
Basildon	Draft Policy HC1 Health and Well-being Strategy Requiring all developments of 50 homes or more, 1,000m ² of floorspace or more, or fall within the A5 use class, set out in policy R16, to be accompanied by a Health Impact Assessment prepared in accordance with local guidance.	Basildon Borough Revised Publication Local Plan 2014 – 2034 (October 2018)
Bristol	Local Plan Policy DM14: The Health Impacts of Development <ul style="list-style-type: none"> Residential developments of 100 or more units Non-residential developments of 10,000 sqm or more Other developments where the proposal is likely to have a significant impact on health and wellbeing 	Bristol Local Plan: Site allocations and Development Management Policies (2014)
Camden	Local Plan Policy C1: Health and Wellbeing Proposals for major development schemes which are regarded as: <ul style="list-style-type: none"> Developments of 10 or more homes or a floorspace of 1,000sqm or more, including student housing and non-residential developments Any development that gives rise to significant health impacts When there are sensitive or vulnerable populations that may be affected by a proposed scheme 	Camden Local Plan (2017), with further detail included in the Planning for Health and Wellbeing CPG (2018) SPD
Central Lincolnshire	Local Plan Policy LP9: Health and Wellbeing <ul style="list-style-type: none"> Development of 25 dwellings or more Development of 0.5 ha or more for any other [i.e. non-residential] development 	Central Lincolnshire Local Plan (2017), with further guidance outlined at: Health Impact Assessment for Planning Applications – Guidance Note [accessed: April 2020]
Cornwall	Local Plan Policy 16: Health and Wellbeing <ul style="list-style-type: none"> Significant major development proposals (no formal trigger) 	Cornwall Local Plan (Strategic Policies 2010-2030)
Coventry	Local Plan Policy HW1: Health Impact Assessments All major development proposals as defined as: <ul style="list-style-type: none"> The use of land for mineral-working deposits Waste development All forms of residential development where: 	Coventry City Council Local Plan (2017), with further detail included in the Health Impact Assessment SPD [accessed: April 2020]

Use of health impact assessments in town planning

Local Authority	Key Triggers	Source for supplementary planning documents, practice notes, strategies, policies or other planning guidance
	<ul style="list-style-type: none"> (i) Number of homes to be provided is 150 or more (ii) Site area is 5 ha or more ▪ All forms of urban development (not involving housing) where: (iii) The area of development exceeds one hectare (iv) In the case of industrial estate development exceeds 5 ha 	
East Devon	Health Impact Statement Guidance <ul style="list-style-type: none"> ▪ Developments over 200 dwellings and/or 10,000 sqm of employment floor space ▪ On sites greater than 2 ha ▪ Smaller developments if they are adjacent to or part of a larger scale development nearby ▪ Applicant assistance from the Environmental Health team 	East Devon Health Impact Assessment webpages [accessed: April 2020] with more details in the East Devon District Council (DC) Health Impact Statement Guidance (2017)
Greater London Authority (all LPAs no. 33)	London Plan Policy 3.2 Improving Health and Addressing Health Inequalities <ul style="list-style-type: none"> ▪ The impacts of major development proposals on the health and wellbeing of communities should be considered, for example through the use of Health Impact Assessments (HIA) (no guidance on formal triggers) 	The London Plan (2016) and reinforced in The London Health Inequalities Strategy (2018)
Greater Norwich (Broadland, Norwich and South Norfolk)	Joint Core Strategy Policy 7: Supporting Communities HIAs will be required for large-scale housing proposals: <ul style="list-style-type: none"> ▪ In areas providing over 500 dwellings ▪ In areas of particular complexity that will be masterplanned ▪ Over 100 dwellings in areas not identified in the Joint Core Strategy 	Local Plan: Joint Core Strategy for Broadland, Norwich and South Norfolk (2014) with more detail available in the Health Impact Assessment Advice Note (2012)
Hackney	Local Plan Policy LP9: Health and Wellbeing <ul style="list-style-type: none"> ▪ 50 housing units or more ▪ Non-residential developments of 10,000 sqm or more ▪ Proposals for takeaways, betting shops & payday loan shops of any size 	Hackney Local Plan: Hackney a Place for Everyone (2018)
Halton	Local Plan Policy CS22: Health and Well-being Large scale major developments as defines as: <ul style="list-style-type: none"> ▪ Residential developments greater than 200 dwellings or 4ha ▪ All other developments of 10,000 sqm or 2 ha or more 	Halton's Local Plan Core Strategy (2013) with more detail available in Health Impact Assessment: Local guidance for

Local Authority	Key Triggers	Source for supplementary planning documents, practice notes, strategies, policies or other planning guidance
		developers and their agents wanting to conduct a health impact assessment (2014)
Islington	Core Strategy Policy CS 19: Health Impact Assessments <ul style="list-style-type: none"> Seen as part of community obligations in S106 Large developments of over 200 units or over 10,000 sqm Developments where potential health issues are identified 	Islington's Core Strategy: Your Neighbourhood Your Islington (2011) with more detail available in HIA for major applications: guidance and screening [accessed: April 2020]
Knowsley	Local Plan Policy CS2: Development Principles <ul style="list-style-type: none"> HIA to be applied in line with the 5 Development Principles set out in the Local Plan (no formal trigger) 	Knowsley Local Plan Core Strategy (2016)
North Norfolk	Local Plan Policy SD 5 <ul style="list-style-type: none"> Larger scale housing development currently over 500 dwellings (all residential proposals of 50 units or more are required to use the Norfolk Health Protocol) Local Plan Policy ECN2 <ul style="list-style-type: none"> New employment development on designated Employment Areas 	North Norfolk Local Plan 2016-2036 (2019) with further guidance available in the Health Protocol and Planning Checklist: Planning in Health (2019)
North Somerset	Core Strategy Policy CS26: Supporting healthy living and the provision of health care facilities <ul style="list-style-type: none"> All large-scale developments (no formal trigger) 	North Somerset Core Strategy (2017) with further guidance available at the North Somerset Health Impact Assessment webpages [accessed: April 2020]
Portsmouth	Core Strategy Policy PCS14: a healthy city <ul style="list-style-type: none"> From all new major development proposals (no formal trigger set) <p>IIA are required to assess how policies, projects, service, functions or strategies can impact on:</p> <ul style="list-style-type: none"> Communities and Safety Regeneration and Culture Environment and Public Space Equality and Diversity 	<p>Portsmouth's Core Strategy: The Portsmouth Plan (2012)</p> <p>Portsmouth City Council's Integrated Impact Assessment (IIA) webpages [accessed: April 2020]</p>
Sedgemoor	Local Plan Policy D28: Health and Social Care <ul style="list-style-type: none"> HIA may be requested to support major planning applications 	Sedgemoor in Somerset Local Plan 2011-2032 (2019)

Local Authority	Key Triggers	Source for supplementary planning documents, practice notes, strategies, policies or other planning guidance
Somerset West and Taunton	Local Plan Policy CF2: Planning for healthy communities <ul style="list-style-type: none"> All strategic development proposals relating to Healthy Urban Planning 	West Somerset Local Plan to 2032 (2016)
South Cambrdge	Local Plan Policy SC2: Health Impact Assessment <ul style="list-style-type: none"> Development of 20 or more dwellings Applications for 1,000 sqm or more floorspace <p>*For developments over 100 dwellings or 5,000 sqm a full HIA is required. For developments between 20 and 100 dwellings or 1,000 to 5,000 sqm of floorspace an extended screening or rapid HIA can be undertaken</p>	South Cambridgeshire Local Plan (2018) with more detail available in the South Cambridgeshire District Council, Local Development Framework HIA SPD (2011)
Stoke	Healthily Urban Planning SPD Key Issue 2: HIA <ul style="list-style-type: none"> Residential developments where the number of proposed units is 200 or more or, where the number of units is not given, a site area of 4 ha or more Non-residential developments where the floor area to be created is 1,000 sqm or more, or where the floorspace to be constructed is not given, a site area of 2 ha or more 	The City of Stoke on Trent Local Development Framework Healthy Urban Planning SDP (2012)
Sunderland	Core Strategy Strategic Policy SP7: Healthy and safe communities <p>HIA will be required for large-scale development as defined as:</p> <ul style="list-style-type: none"> Residential schemes for 100 dwellings or more Student accommodation schemes for 100 bed spaces or more Any other form of development which has the potential to have a significant impact on health 	Sunderland City Council Core Strategy and Development Plan (2015-2033) with further guidance outlined in the Health Impact Assessment Developer Guidance (2020) which includes a Health Impact Assessment Matrix
Torbay	Torbay Local Plan Policy SC1: Healthy Bay <ul style="list-style-type: none"> 30 or more residential dwellings Non-residential development creating over 1,000 sqm of floorspace If there are good reasons to indicate that a proposal may give rise to a significant impact on health 	Torbay Local Plan (2012-2030) with further detail included in Healthy Torbay Supplementary Planning Document SPD (2017)