PHIRST Insight

Protocol: Residential Amenity Space and Place Quality SPD (Supplementary Planning Document): Brent Council

Version 4

Funder	National Institute for Health and Care Research (NIHR) PHIRST
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Glossary of key terms and abbreviations

Place Quality Intervention: comprises four elements; 1) new guidance in the form of a Supplementary Planning Document (SPD) on Residential Amenity Space and Place Quality, 2) a mandatory Amenity Space Quality Statement template for applicants to complete, 3) training for planning officers to assess applicants' adherence to this guidance using a scoring system and 4) the introduction of a Community Review Panel to review planning applications.

CRP: Community Review Panel.

DIICE: Dissemination, Impact, Involvement, Communication and Engagement.

GDPR: General Data Protection Regulation.

NPT: Normalisation Process Theory.

PIRIT: Public Involvement in Research Impact Toolkit.

PPI-E: Participant and Patient Involvement, Engagement and Participation.

QRP: Quality Review Panel.

SPD: Supplementary Planning Document.

Background:

The way in which health is considered within the planning system in the UK includes how it can contribute to preventing non-communicable diseases, reducing health inequalities and ensuring planetary health[1]. There is a responsibility for planning departments and policy makers to consider these elements as an individual's place of residence can influence their exposure to important health determinants, such as traffic, noise and air pollution, access to green space and physical activity opportunities[2, 3]. This is particularly important for city-dwellers, whose reliance on planning processes and decisions for access to environments that are supportive of health is paramount[4], with 7 in 10 people estimated to be living in a city by 2050[5]. Considering health in planning does not happen by default, and having a health-focused regulatory planning framework is important[6]. However, urban planning policies across six urban cities of London, Delhi, Sao Paulo, Melbourne, Copenhagen and Boston were found to increase inequalities and not to foster good health and wellbeing[7]. In addition, national and international evidence reviews have consistently concluded that there remains a need to build capacity for city planning that enhances health and tackles inequalities[8]. Further, there remains a lack of evidence-based quantitative indicators to facilitate the implementation of health considerations into planning[9].

Within the English planning system, local plans in local authorities are one way to try and encourage healthier place making. A recent review of such local plans found that in London only 45.9% of local plans linked to a joint health and wellbeing strategy; 32.4% included a design quality policy which related to health; and 43.2% included a policy requiring the use of health impact assessment in planning applications. Importantly, 73% of local plans in London included a strategic objective for health, yet only 54.1% included a strategic spatial policy on health[10]. This reflects a gap between simply outlining aims and taking action by developing strategic policy on health[10, 11]. A further challenge to better integration of health into planning may be the gap that has been identified between planning and public health departments[12]. Collaboration between health and planning teams takes many forms and requires a shared understanding of the different ways in which health can influence the planning process[12]. For example, specialist posts have been created in some UK local authorities to sit across both planning and health to facilitate collaboration[13], whereas others in Australia have developed collaborative governance networks to formalise collaboration[14].

Amenity spaces, which promote enjoyment of life, are one important area when considering the health impacts of urban development. They are designed to elicit positive feelings through architecture, streetscapes and the absence of noise and pollution[15]. Communal residential amenity space is generally considered to be the shared space within or between buildings including but not limited to, green infrastructure [16]. Green infrastructure can be defined as, "an interconnected network of greenspace that conserves natural ecosystem values and functions and provides associated benefits to human populations"[17]. This is different to private residential amenity space, which is space solely for use by each individual dwelling's occupiers, such as balconies, terraces or gardens[16]. Both communal and private residential space are the focus of the current evaluation.

Amenity space is important as it affects people's experience of a place in densely populated urban environments, and can thereby affect their subsequent physical and mental health and wellbeing outcomes [18]. For example, housing which faces open space improves views and air quality[19, 20] and lack of outdoor communal space has been found to predict poor mental health[21]. Provision of high quality communal space has also been associated with decreased feelings of loneliness[22] and enhanced wellbeing[23]. The importance of amenity space was highlighted during the COVID-19 pandemic, when a lack of amenity space was a key driver of inequalities between city dwellers and countryside residents, through their differing access to residential and public green space and space to be social distanced outside of the home[24]. This also highlighted the need for decentralised access to shared green space, rather than relying on larger, centralised urban parks[25].

Planning Applications and amenity space in Brent Council:

Brent is a London borough with a population of 339,800 recorded in the 2021 census. The population had grown by 9.2% in the 10 years since the previous census, a much higher rate than 6.6% for England as a whole[26]. Brent has a relatively youthful population: the average age of its residents is 36 years and nearly one in four are under 18 years of age. It is one of the most densely populated areas of the country[26].Brent also has one of the most ethnically diverse populations with residents speaking 149 different languages and 64% coming from Black, Asian and other minority ethnic backgrounds[27]. Thirty-three percent of households in Brent live in poverty, when accounting for housing costs and more than a quarter of those in work earn less than the London living wage[28]. The cost of living is exceptionally high in Brent and is seen as a key determinant of the high levels of poverty reported in Brent Poverty Commission's Fairer Future report. Within this report, poverty is defined as, 'not having enough money to afford what makes for a socially acceptable standard of living or to participate fully in society' and statistically poverty is defined as below 60% of median incomes[28].

Health is determined by many interacting social, demographic, and economic factors, including environmental noise, density of alcohol and fast-food outlets, affordability of home ownership and fuel poverty[29], as well as the laws which govern these determinants[30]. Brent faces specific challenges relating to health inequalities, such as the fact that it is located in an urban location with a low land availability and extremely high level of population growth, as well as the ethnic diversity of the population[31]. Thus, Brent has a high annual housing target, which has increased from 1065 homes in 2014/15 to 2350 from 2019/20[31]. The borough will also deliver a minimum of 46,018 new homes by 2041, which will need to be supported by social and community infrastructure[31].

Health inequalities have been exacerbated by the effects of the COVID-19 pandemic[28]. Brent Council has conducted extensive consultations with residents, including with young people and those living in marginalised communities, as to how these health inequalities should be tackled. From a residents' perspective improving public amenity space and the quality of housing emerged as key mechanisms for improving health and wellbeing and reducing inequalities[31].

The planning team within Brent Council, with input from the Public Health team, has introduced a new intervention to improve place quality and increase the provision of amenity space within developments. [32]. The new intervention (hereby known as the Place Quality Intervention) comprises four elements; 1) new guidance in the form of a Supplementary Planning Document (SPD) on Residential Amenity Space and Place Quality, 2) a mandatory Amenity Space Quality Statement template for applicants to complete, 3) training for planning officers to assess applicants' adherence to this guidance using a scoring system, and 4) the introduction of a Community Review Panel (CRP)

to review planning applications. This is not a law or policy, but is strong guidance to improve amenity space provision in residential developments.

1) Supplementary Planning Document (SPD) on Residential Amenity Space and Place Quality: This guidance outlines requirements for the consideration of shared amenity space within a variety of development sizes and typologies and is aimed at planning officers, planning applicants, design teams and consultants. For private amenity space, these requirements include the provision of sufficient amenity space in all new dwellings. This private amenity space should be accessible through a living space, with no level changes, maximise daylight and sunlight, have a minimum depth of 1.5m without being affected by swinging doors, have a practical shape and utility as well as an appropriate balance of being open whilst maintaining privacy. Where planning applicants are unable to achieve this, this should be made up for through the provision of additional communal amenity space and/or indoor space.

Communal amenity spaces are safe and secure social spaces accessible to, or located within a development. The requirements for communal amenity space state that it should be easily accessible, benefit all residents and be usable and enjoyable for them. It should provide a safe and attractive environment to meet diverse and ever-changing needs of residents. It should also be positioned to be overlooked by residents to create a sense of community and allow for appreciation from the inside. The communal amenity space should be accessible and inclusive for all residents and meet light, noise and pollution requirements. The space should support play and informal social activity for all age groups[16]. These align with the London Plan policies on housing quality and standards and inclusive design[33].

2) Mandatory Amenity Space Quality Statement template: This template[16] is mandatory for all applicants submitting major planning applications (10 dwellings or above). Applicants must address questions relating to each section of the residential amenity space and place quality SPD. The aim of the template is to help planning applicants, developers, design teams and consultants adhere to the new guidance, to inform pre-application discussions and help development plans to be considered qualitatively. The template will also be incorporated into the assessment of planning applications using a scoring system[16].

3) Training sessions for planning officers: Training was delivered to 20 Development Management officers in the Planning Team upon the introduction of the new Supplementary Planning Document on Residential Amenity Space and Place Quality. The aim of this was to familiarise planning officers with the SPD and to teach them how to interpret the Place Quality Framework and Toolkit, as well as how to use these to complete the Amenity Space Quality Statement template and apply the scoring system. This was conducted in a practical manner, with officers taking part in focused workshops where they appraised previous applications through the prism of the new framework. Following a session on “what good looks like”, they carried out exercises to build their understanding of healthy places principles using the Place Quality criteria to assess the qualities and deficiencies of a place of their choosing. In addition to the full training for planning officers, external presentations were delivered to other teams, such as South Kilburn Estate Regeneration, Regeneration and Public Health to familiarise them with the new intervention.

4) Introduction of a Community Review Panel (CRP): The idea of introducing a CRP was conceived alongside the development of the new Amenity Space and Place Quality SPD. This was put into place via *Frame Projects*, a project management consultancy, who facilitated the recruitment process and now oversee the organisation of CRP training, induction and meetings. The CRP consists of 11 members of the community in Brent recruited to represent different geographical locations throughout the borough, different demographic characteristics, such as gender, age and ethnicity, as

well as differing employment statuses, backgrounds and circumstances. The panel were provided with a 2.5 hour induction training evening led by an independent Chairperson from a different Council. This consisted of presentations from elected officials and Brent Council employees from the Planning Team, as well as from *Frame Projects* who introduced the purpose and procedures relating to panel membership. Panel members were also given the opportunity to share their reasons for wanting to be involved and to take part in group discussions. The CRP will meet monthly from April 2024 to provide feedback to developers/planning applicants who are developing a planning application. Scrutiny of plans for amenity space will form part of this process. After each panel meeting has taken place, *Frame Projects* will summarise the discussion and feedback and provide this in report form to the developers/planning applicants, within 10 working days.

This Place Quality Intervention, comprising the four elements described above, fits into the overall planning process as visually represented in Figure 1. This process consists of five stages. Stage 1 involves high level discussions between the developers/planning applicants, elected officials and the Head of Planning at Brent Council, then Stage 2 is development of the Planning Performance Agreement which is an agreement between Brent Council and the developer/planning applicant. This is followed by Stage 3 consisting of CRPs, QRPs, statutory public consultations and a series of thematic meetings with internal and external stakeholders specialising in relevant issues, such as healthcare and waste management (see Figure 1). Stage 4 consists of the planning submission and meetings of delegated authority officers or planning committee members, as well as a statutory public consultation. Stage 5 comprises of post-determination negotiations.

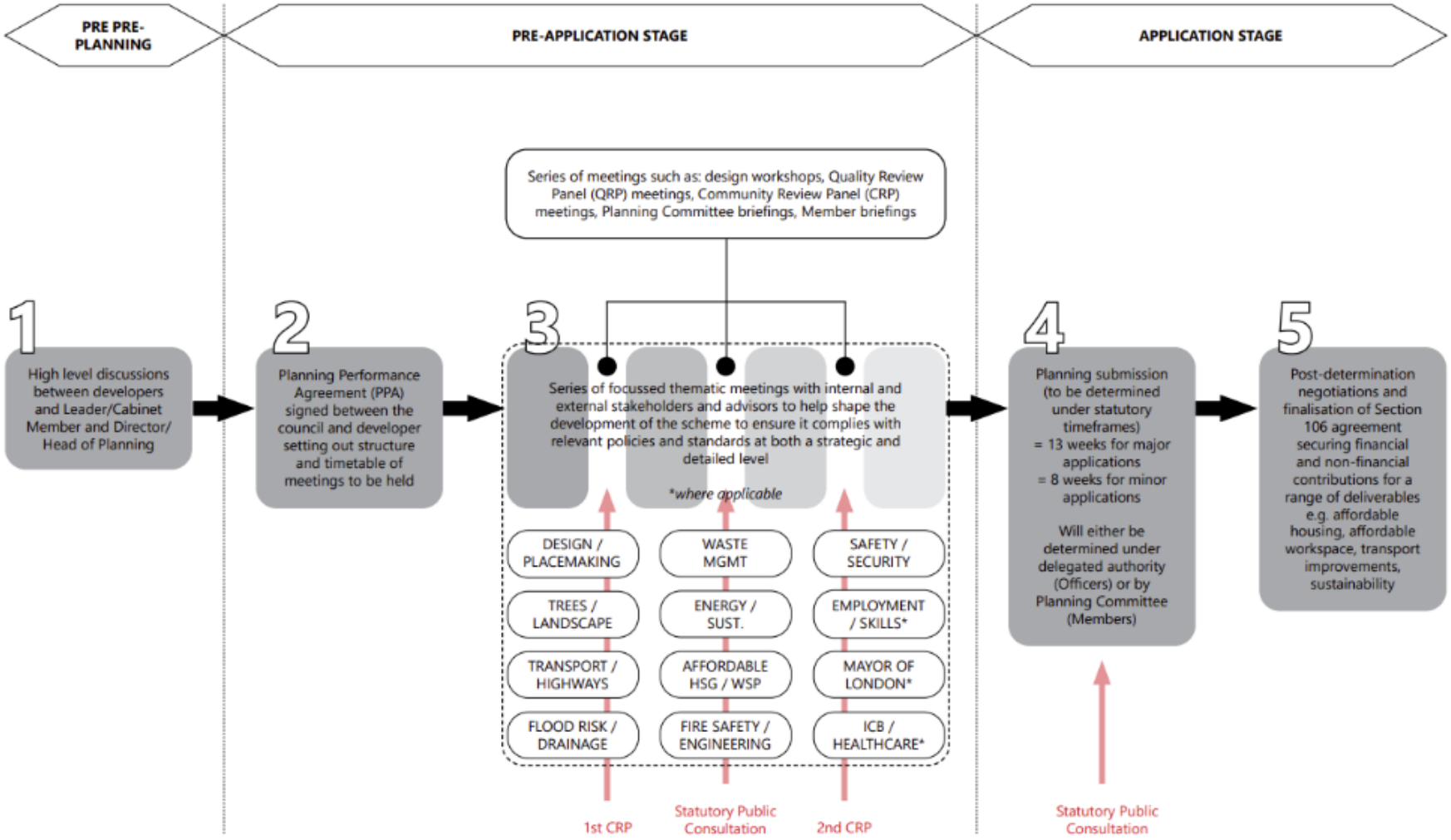


Figure 1. The five-stage planning process in Brent Council (created by John Stiles, Brent Council).

Aim and research questions:

The primary aim of this evaluation is:

- to assess the extent to which the new residential Place Quality Intervention is being integrated into the planning application process.

A secondary aim is:

- to explore the impact of the new residential Place Quality Intervention on collaboration between planning and public health departments within Brent Council.

Main research questions:

1. To what extent do stakeholders (e.g. planning officers, planning applicants and committees/panel members) understand and apply the new residential amenity space and place quality guidance (SPD) when preparing, submitting and assessing applications?
    a. Has planning officers' understanding and application of the SPD and template improved over time?
    b. How do those submitting development applications understand and use the SPD and template?
    c. How and to what extent has the addition of the Community Review Panel affected consideration of health and wellbeing in the planning application process?
    d. What are the barriers and facilitators to stakeholders adhering to the SPD?
    e. How do motivations for adherence to the SPD differ according to the type of developer?

2. Does consideration of health and wellbeing in planning applications vary according to:
    a. Whether applications were approved or not?
    b. Whether applications were submitted before or after implementation of the Place Quality Intervention in June 2023?
    c. Which type of developer submitted the application?

3. Do stakeholders perceive positive or negative unintended consequences from implementation of the Place Quality Intervention?

4. How and to what extent has collaboration between stakeholders within the planning and public health teams been perceived to have changed as part of the process of implementation of the new Place Quality intervention?
    a. What are the barriers and facilitators to collaboration between planning and public health teams?

Intervention logic model:

The Place Quality Intervention logic model (see Figure 2) was co-produced with practice colleagues in the Brent planning and public health teams using Miro an online software[34]. The logic model development was informed by the academic literature and the knowledge and experience of our practice colleagues, as well as the Brent Residential Amenity Space and Place Quality SPD[16]. This logic model will be revisited and edited in an iterative process, informed by the findings of this research project

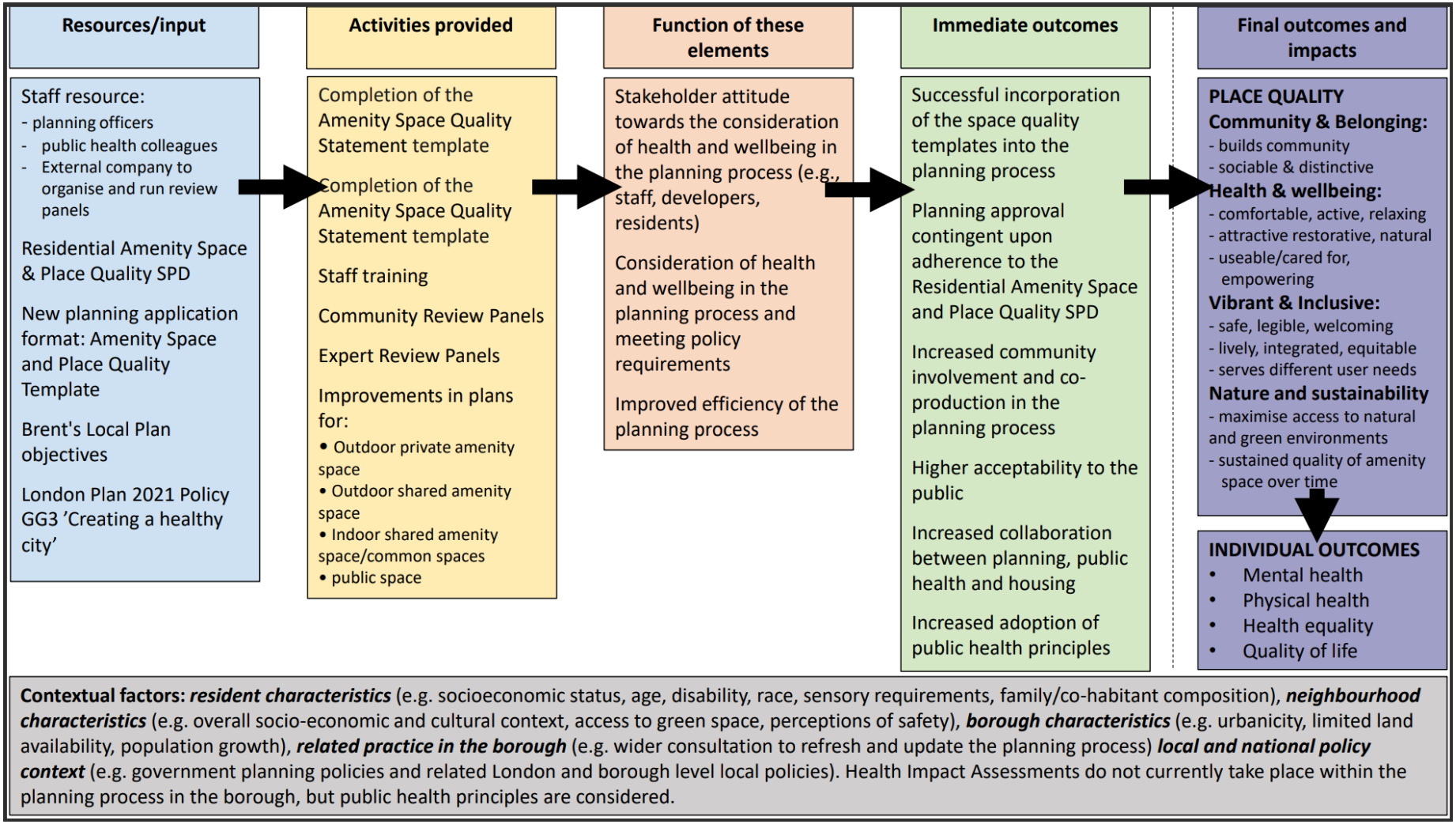


Figure 2. Co-produced logic model of the Place Quality Intervention

Resources/input:

The resources going into the Place Quality Intervention are the new Residential Amenity Space and Place Quality SPD guidance itself, the staff resource in the form of planning officers and public health colleagues, and the new planning application format in the form of the Amenity Space and Place Quality Template. Brent's Borough Plan and Local Plan objectives and the London Plan 2021 Policy of 'Creating a healthy city' are also key policy drivers and motivations behind the introduction of the new SPD.

Activities provided:

The main activities are the completion of the Amenity Space Quality Statement template by developers/planning applicants and the scoring of the template by Planning Officers, as well as staff training on how to use and implement these. Other activities include community involvement and improvements in plans for amenity space, with the aim of facilitating implementation.

Immediate outcomes:

The immediate outcomes anticipated have been derived from the academic literature and based on the knowledge and experience of our practice colleagues. These include increased collaboration between planning, public health and housing teams, and increased adoption of public health principles into planning in Brent. Other immediate outcomes relate to the planning process itself and include successful incorporation of the Amenity Space Quality Statement template into the planning process, increased community involvement and co-production in the planning process and higher acceptability of the new developments/ planning process to the public.

The dotted line between intermediate outcomes and final outcomes represents the time involved in the practical process of building the developments. Building must begin within three years of the planning application receiving approval, with completion usually occurring several years later.

Final outcomes and impacts:

The longer-term outcomes are informed by the Place Quality Framework within the Amenity Space and Place Quality SPD[16]. The framework (Figure 3) pictorially outlines the potential positive outcomes of improved place quality. This highlights three main outcomes relating to place quality, including: (i) an improved sense of community and belonging; (ii) enhanced health and wellbeing; and (iii) improved vibrance and inclusivity, as well as an overarching improvement in residents' access to nature and green environments and sustainability:

- **Community and belonging** refers to whether a space is distinctive in its design to support a sense of pride and identity, whether the design encourages people to spend time and interact there and whether there are activities to build community and belonging as well as a central 'heart' of the development[16].
- **Health and wellbeing** refers to whether the planning proposal adheres to light, noise and air quality requirements, with active design principles to encourage walking. It is also concerned with whether it maximises green and natural space and features and is an aesthetically pleasing design that is engaging for the user. This element also refers to the convenience of the space, the input of residents into its use, design and maintenance and the provision of community activities[16].
- **Vibrance and inclusivity** are the terms used to characterise amenity space which addresses the needs of different groups of people and brings them together holistically in a safe and welcoming manner[16].

- **Nature and sustainability** refers to sustainable development within cities with amenity space designed to contribute positively to the environment, such as through the provision of community gardens, as well as the sustained quality of such space over time[16].

The individual outcomes which may be enhanced as a result of improvements in amenity space and place quality, based on academic literature, are mental and physical health, health equality and quality of life.

Figure 3. Place Quality Framework [16]

Contextual factors:

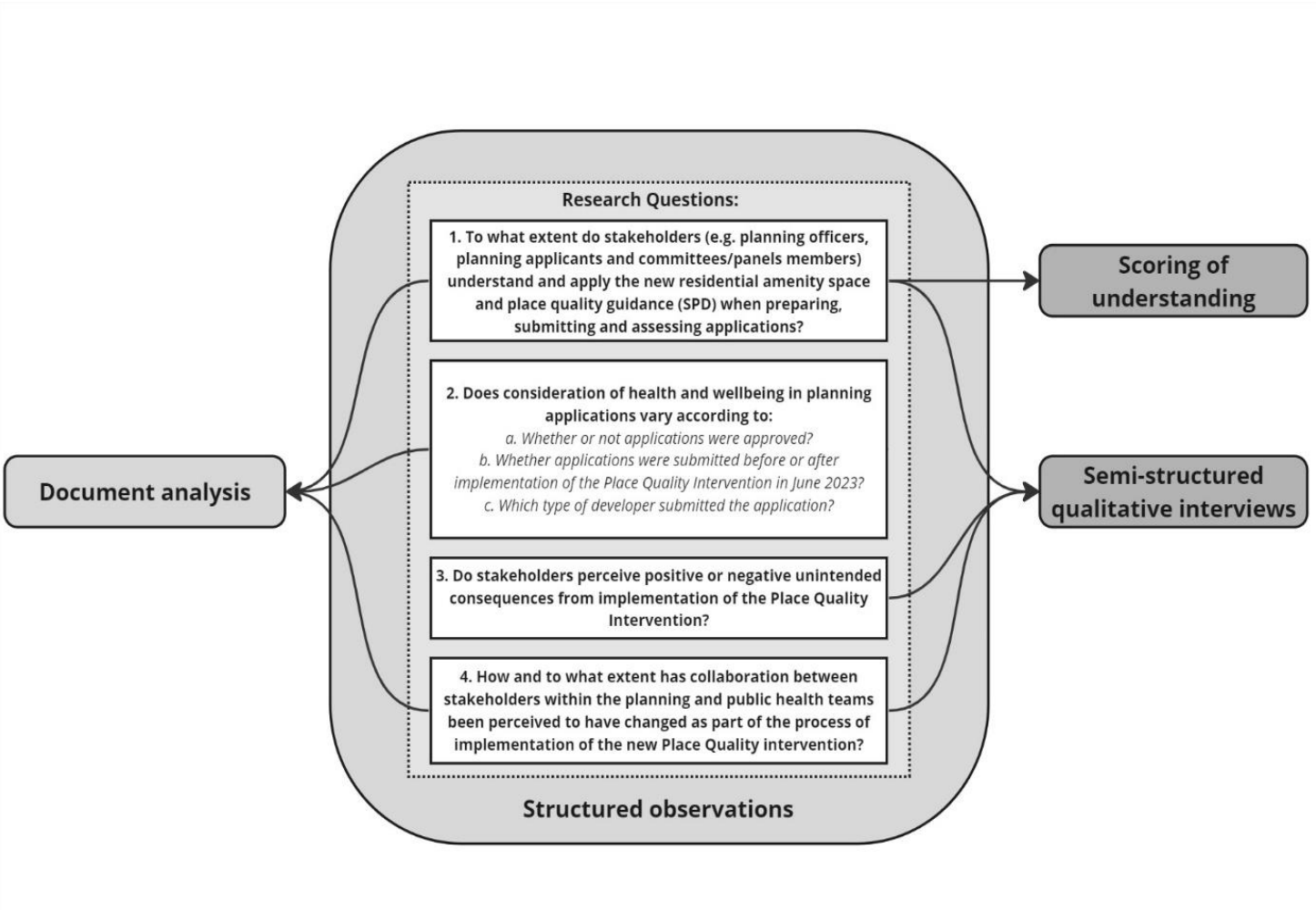
There are many contextual factors operating at different levels which may interact with the intervention to affect the implementation of the Place Quality Intervention and both immediate and longer-term outcomes. These include resident characteristics, neighbourhood characteristics, borough characteristics and related practice and local and national policy contexts, which are frequently changing. For example, planning departments in England are sometimes underfunded and understaffed[35] which may affect stakeholders' ability to implement new guidelines.

Evaluation design

A mixed method formative process evaluation of the implementation of the Place Quality Intervention within Brent Council's planning process will be conducted. This will consist of a measure of planning officers' understanding of the Place Quality guidance, alongside qualitative interviews, observations and document analysis. Normalisation Process Theory will be employed as a framework to guide the evaluation[36].

Methods:

Figure 4 shows which research methods will be used to address each research question. These research methods will each be described in more detail within the sections below.



Theoretical framework:

Normalisation process theory has been frequently and effectively used within process evaluations to assess the implementation of a wide range of health interventions[36]. This theory focuses on both the mechanisms that characterise implementation processes and the dynamic implementation context which interacts with these implementation processes. Extended normalisation process theory can be utilised to understand how an intervention can become normalised through the social process of collective action[36]. Given this, normalisation process theory is a helpful framework for judging the success of the implementation of the space and quality guidance. Thus, this evaluation will be guided by the four main components of normalisation process theory; coherence (sense-making), cognitive participation (engagement), collective action (to enable implementation) and reflexive monitoring (both formal and informal)[37].

Scoring of understanding:

At the end of the training sessions for planning officers held in September 2023 (described above), the Planning Officers completed the template to assess the provision of amenity space and place quality in a sample planning application. This was then scored using a simple system of levels to assess their baseline understanding of the Amenity Space and Place Quality SPD. This measure will be repeated with all planning officers at one year after the initial training in September 2024 by applying it to another example planning application.

Qualitative interviews:

Qualitative, semi-structured interviews will be conducted with stakeholders in the London Borough of Brent. These will include members of the Planning, Public Health and Housing teams within Brent Council, developers who are in the process of making planning applications according to the new application process, developers who have made applications prior to the introduction of the new residential amenity space and place quality policy, CRP members and local elected members (councillors and politicians).

Interview participants will be provided with an information sheet one week in advance and informed consent will be collected verbally at the beginning of the interview. Participants will be informed that they can withdraw at any point prior to anonymisation of data. Interviews will last up to one hour and will either take place face to face or online via Microsoft Teams, according to participants' preference and availability. If interviews take place face to face, the University of Bristol's lone worker policy will be followed to ensure researcher safety. All interviews will be audio recorded and transcribed.

Interview topic guides will be informed by the four components of Normalisation Process Theory and will also interrogate each aspect of the logic model. Interviews will explore the barriers and facilitators to adherence to the SPD, the extent of adherence by different stakeholders throughout the planning application process, perceptions of the SPD and its impact among different stakeholders and the role of Local Authority health and planning teams within the implementation of the SPD.

Brent Planning and Housing teams members of staff (N=8-10):

Interviews will be conducted with members of staff within the planning and housing teams. These will be with staff at various levels, including management, planning officers and development management staff. Three members of planning team staff and two members of public health team staff are known to the research team and will be interviewed. Other interviewees will be recruited purposively through an introductory email via these contacts.

Brent Public Health staff (N=4-5):

Interviews will be conducted with members of staff within the public health team. These will be with staff at various levels, including management. Two members of staff are known to the research team and will be interviewed. Other interviewees will be recruited purposively through an introductory email via these contacts.

Developers/planning applicants in Brent (N=15-20):

Interviews will be conducted with developers/planning applicants, or individuals associated with relevant developments (e.g. architects, environmental consultants) in the Brent London borough. Within Brent Council, developers/planning applicants are defined as 'anyone who builds something', which could encompass private organisations, such as development companies and public organisations, such as the council or NHS trust. Development companies also vary according to the

steps of the development process that they oversee. For example, some companies manage delivery, planning, development and construction management, whereas others use contractors, such as landscape architects and planning consultants, to manage elements of the planning and delivery.

Developers/planning applicants will be purposively sampled to represent maximum variation in neighbourhood characteristics, development types and individual characteristics. Some interviewees will be approached directly by the planning team at Brent Council, whilst snowball sampling will be employed for individuals associated with related developments.

Participants will comprise up to 10 individuals who have been involved in submitting planning applications, or are in the process of submitting applications, since the SPD has been in place and 10 developers/planning applicants who been involved in submitting planning applications prior to the SPD being introduced. Participants will be recruited via email, with help from the members of the planning team who are known to the research team. The planning team will facilitate purposive sampling of a wide range of developers/planning applicants.

Quality Review Panel (QRP) (N=5)

Interviews will be conducted with panel members from the QRP. These will comprise a mix of architects, health and wellbeing experts and sustainability experts. The panel Chair will also be interviewed.

Participants will be recruited purposively face to face during observations of the CRP and through snowball sampling via email, facilitated through our contacts in the planning team.

Community Review Panel (CRP) (N=8-10):

Interviews will be conducted with Brent residents who are involved in consultation as members of the CRP. These will comprise different age, socioeconomic and ethnic groups. They will also vary according to the characteristics of where they live, such as the location of their dwellings (inner/outer London), type of development (houses/flats) and size of development. Two interviews will be conducted with the organisers of the CRP from Frame Projects and the independent chair.

Participants will be recruited purposively face to face during observations of the CRP and through snowball sampling via email, facilitated through our contacts in the planning team. A £30 high street shopping voucher will be given to the public CRP members to thank them for their time.

Local elected members in Brent (N=3-5):

Interviews will be conducted with elected members who are involved in the planning process. These will comprise of current cabinet members for regeneration, housing and health, as well as ward counsellors for Wembley Park and South Kilburn.

Participants will be recruited purposively via email, with help from the members of the planning team who are known to the research team and have an established relationship with the elected members.

Document analysis:

Document analysis is a form of qualitative analysis where documents are reviewed in a systematic procedure to uncover meaning and develop understanding[38]. Atkinson and Coffey[39] define documents as “social facts that convey meanings and knowledge between social agents and decision makers”.

Within this project, document analysis of Brent Council's website content and policy documents relating to planning applications will be conducted to examine the integration of the new SPD and consideration of health and wellbeing into the planning documents and information available to developers/planning applicants. Planning applications before and after the introduction of the new residential amenity space and place quality requirements and a selection of approved and rejected applications will also be examined and compared. Reports relating to the above planning applications will also be analysed, including CRP reports and the Planning Committee's reports.

This analysis will use a systematic procedure, following the READ approach. This begins with 'Ready your materials' through locating and accessing all relevant documents from the website and via our practice partners in the planning team at Brent Council. We anticipate locating one website, four policy documents (space and place quality SPD[16], Brent Local Plan[31], Brent Joint Health and Wellbeing Strategy[40], Sustainable Environment and development SPD[41]), and 15 planning applications along with Planning Officers' associated reports (five before the SPD introduction, five after the introduction of the SPD but before the introduction of the Amenity Space Quality Statement template, and five after the introduction of both the SPD and the template). For each of these applications, we will also analyse QRP Reports and Planning Committee reports created as part of the assessment process of planning applications. After all documents have been accessed, we will undertake the 'Extraction' step of the READ approach(READ)[42]. This will involve a skim read of the documents to identify potentially relevant text to take forward to the analysis stage. The 'Analysis', and 'Distillation' steps of the READ approach[42] are detailed in the 'Analysis' section below.

Structured observations:

Throughout the process of applying for planning permission, meetings occur with different groups approximately every two months (see Figure 1). Observations of these meetings at each stage of the process will be undertaken for two different development sites. These will be chosen, with the help of the planning team, to represent differing development size, location and target communities, as well as differing developers/planning applicants in terms of company size and aims. For both of these developments, five meetings will be observed throughout the planning application process (see Figure 1)(10 meetings in total). Meeting locations vary as a mix of face to face and online.

Observations will monitor interactions relating to the amenity space and place quality SPD and health and wellbeing in general, as well as characteristics of the meeting, including location, agenda and number of attendees. Detailed field notes will be taken by the researcher in attendance and meetings will occur either face to face or online using Normalisation Process Theory as a guide. Interactions will be monitored for the extent to which they include and/or foster coherence (sense-making), cognitive participation (engagement), collective action (to enable implementation) and reflexive monitoring (both formal and informal) within the implementation process[36].

Analysis:

Interviews, documents and field notes from observations will be analysed using framework analysis[43]. Framework analysis is valuable for applied policy research and follows five key steps; data familiarisation, framework identification, indexing, charting, mapping and interpretation[43].

Transcripts, documents and field notes will be uploaded to NVivo 14 software[44] for analysis.

After the initial data familiarisation through repeated reading of transcripts, we will use the Normalisation Process Theory coding manual for qualitative research as the deductive framework. This outlines 12 primary Normalisation Process Theory constructs and 16 sub constructs for coding. It

also organises these constructs or codes into those relating to implementation context, implementation mechanisms and implementation outcomes[37]. Data will be coded then charted within tables to show the distribution of data assigned to each code. In addition, an inductive process will be implemented for any data which does not fit the framework and requires a new higher-level theme. These data will be discussed among the research team before the coding tree is amended.

Study team debriefing sessions will take place regularly during data analysis to ensure transparency and reflexivity. These study team debriefing sessions will also be used to undertake mapping and interpretation of the data to examine the relation between different codes and, thus assess the implications and meaning of these data in relation to the extent to which the Place Quality Intervention has become embedded in the planning process in Brent. Analysis of qualitative data will also incorporate knowledge of contextual factors at all levels to facilitate interpretation of the data.

Data from interviews, document analyses and observations will be triangulated to enhance trustworthiness and internal validity and to check for data saturation as part of the distillation step of the READ approach to document analysis[42]. Document analysis of policy documents and SPDs will be conducted first so that any pertinent data can be added to the interview topic guides. The remaining data collection will be conducted concurrently, but as and when potentially interesting data are found in the interviews, observations and remaining document analyses, these will inform and be added to the interview topic guides for the remaining interviews.

Co-production and Public Participation Involvement and -Engagement activity:

Co-production and PPI-E has been key to the design of this project. This was facilitated through the development of a Task and Finish Group consisting of four academic partners, four practitioners from Brent planning and public health teams and one public representative. This group met bi-weekly during the first 12 weeks of the project.

Firstly, the logic model was co-produced using online software Miro[34]. The logic model was developed by a researcher (HL) using academic literature and the Place and Space Quality SPD. This was then viewed and discussed within a Task and Finish Group meeting. Practitioners were then given access to the Miro 'board' to make any additions or edits, before meeting again to discuss and finalise these changes.

This protocol has been co-produced with the practitioners and public partner. This took place during several research management group meetings, plus an in-person meeting in Brent to finalise research questions and methods. Brent practitioners also provided tours of different housing developments during this trip to allow researchers and the public representative to familiarise themselves with the context.

We will also form an advisory group to contribute to our co-production processes and provide expert advice. This group will meet quarterly from May 2024 and will consist of the following members, with the potential to add more during the study if required:

- Hani Salih (Quality of Life Foundation)
- Dr Paul Pilkington (Public Health Wales)
- Dr Michael Chang (Office for Health Improvement and Disparities)
- Julia Thrift (Town and Country Planning Association)
- Public partner

Public involvement and co-production will be prioritised throughout the project through the involvement of public partners on the study management and advisory groups and the creation of a PPI-E panel comprised of Brent residents. These public partners, alongside practitioners, will advise on recruitment, help with interpretation of study data and help with enhancing dissemination materials and plans. All public involvement will be tracked using the Public Involvement in Research Impact Toolkit (PIRIT)[45].

Data management:

The University of Bristol has overall control of the study data. Data in this study will comprise interview recordings and transcripts, planning officer worksheets, relevant documents, including publicly available policy documents and meeting reports and observation notes. Data collection, storage and processing will adhere to the Data Protection Act 2018 and the General Data Protection Regulation (GDPR) 2016 to ensure compliance.

To ensure compliance, we will use Dictaphones to audio record face to face qualitative interviews, and the inbuilt recording function within university-approved online software. Interviews will be transcribed using Microsoft Teams, which has been approved by the university for this purpose. The interviews will be anonymised after the transcription process and checked by the researcher. All transcripts will be stored securely on the University of Bristol network.

All consent forms will be stored securely for ten years, before being destroyed (deleted or shredded). Qualitative anonymised data will be stored securely in 'data.bris', a restricted access, publicly available Research Data Repository. Only approved researchers will be granted access, and it will not be possible to identify an individual participant from the published dataset. This will be made explicit on the consent forms.

Sponsorship, ethics and regulatory approvals:

Ethical approval:

Ethical approval will be sought from the Faculty of Health Sciences Ethics Committee at the University of Bristol. This scrutiny from the ethics committee alongside PPI-E involvement, will ensure that the risk of adverse consequences is minimised.

Adverse Event Reporting:

The responsibility of managing intervention-related incidences of adverse events, such as untoward medical occurrences, lies with Brent Council.

If an adverse event affecting a study participant occurs during or as a result of a qualitative interview, the study team should create a record of this. This record should include details of the nature, severity and causality of the event and should be reviewed by the Chief Investigator of the study. If such an event is classed as 'serious', these will be reported to the study sponsor within 24 hours of the study team being alerted to the incident.

Timelines and milestones:

The timeline runs up to July 2025 and is depicted in the project GANTT Chart (Figure 5). Data collection will run from June to December 2024, whilst analysis will be completed by April 2025, followed by the study reporting and dissemination by July 2025 and beyond.

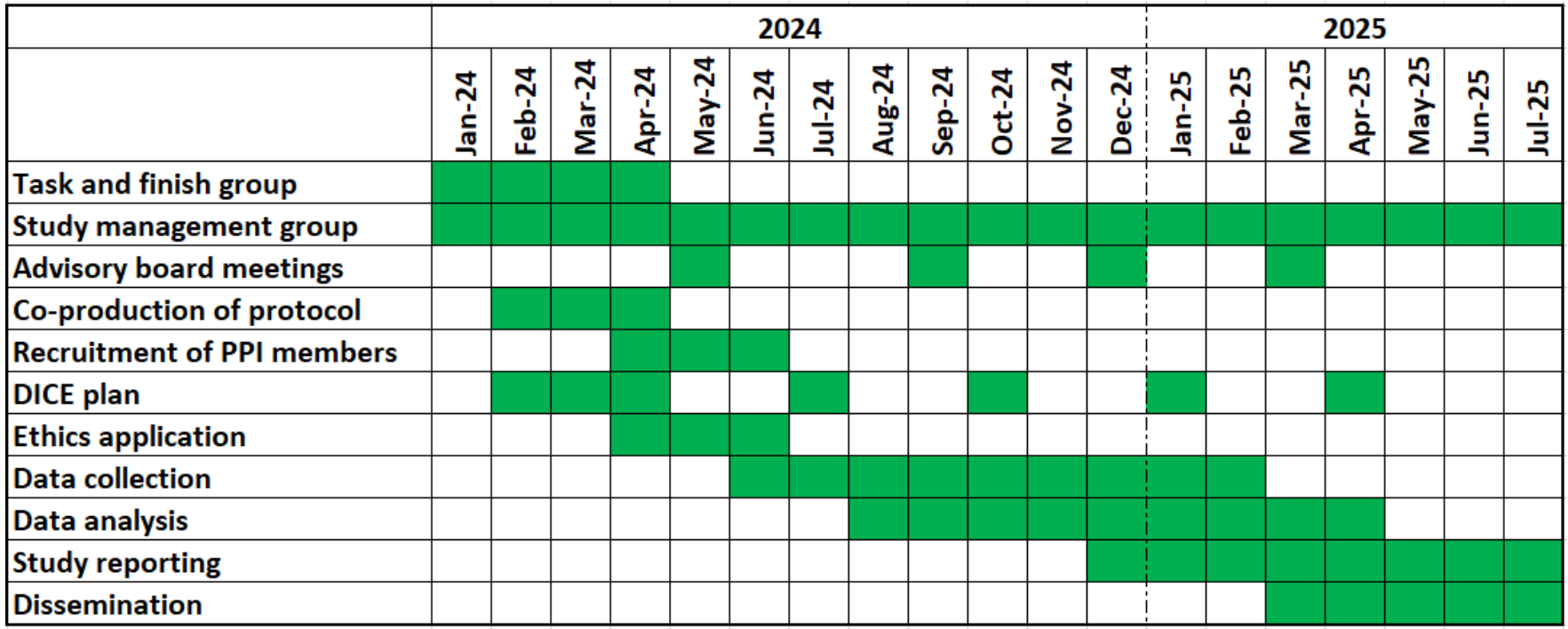


Figure 5. Project GANTT chart

Outputs:

The PHIRST Insight template for Dissemination, Impact, Involvement, Communication and Engagement (DIICE) has been completed. The planned outputs for dissemination are as follows:

- Main output:
    - End of study report with different sections tailored to different audiences, such as Planning and Public Health teams within the council, developers/planning applicants, the general public and policy makers.
- Other outputs:
    - Provision of evidence for the need for a future post-occupancy evaluation plus advice/a plan on how to do this.
    - Presentations at relevant meetings within Brent.
    - Academic peer reviewed publications
    - Presentations of findings at national conferences
    - Tweets on study progress
    - Narrated slide deck

All outputs, apart from academic peer-reviewed publications, will be co-produced with Brent Council and PPI-E members to ensure relevance and appropriateness for the target audience and to maximise impact.

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