

Health Innovation
Kent Surrey Sussex



Real-world Evaluation Guide

For early-stage innovators

Foreword

“Too often innovators come to us believing that they have carried out a robust evaluation of their product/service offer and are disappointed to realise that due to some elements of the process, the data is not useable or does not hold the value they hoped it would. To this end we have commissioned this Real-world Evaluation Guide. We hope that innovators who are about to carry out their first evaluation will use this guide to ensure they understand what they are evaluating, the process and the set up, so that the evidence collected helps move them a step closer to their readiness for adoption.

I want to see good technology fast tracked for adoption and to do this the evidence of their impact in the real world needs to be measured, but in the right way. This guide will help to achieve that and therefore we at Health Innovation Kent Surrey Sussex are delighted to present it.”



Nuala Foley,
Associate Director
Commercial and Enterprise

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Problem definition:

How do you know your innovation is relevant to the NHS?

Why is it important?

It is about being relevant to the NHS, showing clearly that your innovation will solve a problem it is experiencing. You need to justify the cost of change, if the relevance or the benefits of your innovation are unclear, why would an organisation implement and buy it? As healthcare priority-setting aims to address the inevitable ethical trade-offs between maximising health and promoting health equity (Sabik & Lie, 2008), linking your innovation with a current NHS issue will help clinicians/decision-makers understand and resonate with your product.

How?

How do you know it is a problem? What evidence do you have?

Have you clearly defined the problem you are trying to solve?

Will the potential benefits of your innovation impact the same organisations or a different part of the system?



Is the problem a priority identified in local/regional strategies? Can your innovation tackle a problem defined as an area for improvement for the health system (at local or national scale)?



How big a problem is it? Is it a local issue, a regional challenge, a nation-wide problem?

Are social care/voluntary sector/other public bodies involved or likely to be impacted by your innovation?

What health care settings is the problem relevant for? Primary care, secondary care, community care, GP practices, ICS?

A problem statement can help you summarise answers to these questions into a succinct and impactful document.

Identify the gap:

- Present what is happening/will likely happen if the problem is not addressed, so you can identify a gap between the current and expected outcomes, e.g. worse health outcomes, larger costs, inefficiencies in provision of care, etc.

Explain the problem:

Use the 5Ws and H Framework: What? Why? Who? When? Where? How?

Explain the problem's impact:

Health outcomes, quality of life, economic impact, efficiency, workforce, etc.

Evidence your assertions:

Present relevant research or data, citing reliable sources, not marketing statements. E.g. Health think tanks such as King's Fund, Nuffield Trust, the Health Foundation

Present your solution/innovation:

Be clear and concise.

Explain why your proposed solution is beneficial:

Compared to the current situation or potential competitors. Do not mention features without an explanation of the benefit/impact of those features.

Conclusion:

Summarise the problem and the solution, focusing on the importance of fixing the problem using your innovation.

Useful tools and signposting

The resources below will help you to better understand the priorities of the NHS.

- [NHS Long Term Plan](#)
- [NHS England » NHS Long Term Workforce Plan](#)
- [NHS England » Delivery plan for recovering access to primary care](#)
- [For adults: NHS England » Core20PLUS5 \(adults\) – an approach to reducing healthcare inequalities](#)
- [2024/25 priorities and operational planning guidance \(england.nhs.uk\)](#)



If your innovation has a local or regional focus, consult the strategy of the relevant Integrated Care Systems (ICSs) or Integrated Care Boards (ICBs) for example:

- [Our strategy - ICS \(surreyheartlands.org\)](#); [Our strategy - Sussex Health & Care \(ics.nhs.uk\)](#)

Common pitfalls and tips

Go beyond anecdotal evidence

Do not rely only on anecdotal evidence, such as an example in a trust, patient's story, or personal experience. Anecdotal evidence is a starting point but needs to be complemented by broader data.

Broad understanding of the issue

In the early stage, you may not be able to conduct in-depth market research (resource intensive, not as useful if the product is not ready for testing), so focus on estimating the size of the problem and the opportunity cost if it is solved.

Size and scope of the problem

It is important to ascertain if the problem only concerns an isolated site as this will impact your ability to spread and bring in investment and/or revenue.

Evidence gathering:

What evidence do you need? How do you gather evidence?

Why is it important?

An evidence-based approach to demonstrate the impact of your innovation is important to build credibility and to be able to withstand critiques and questions. It is essential as there are high standards in healthcare and a high threshold for adoption of change due to the duty of care for patients.

How?



What is “the best available evidence”?

The hierarchy of evidence is a core principle of Evidence-Based Practice (EBP) and attempts to answer this question. EBP hierarchies rank study types based on the rigour of the research studies. Different hierarchies exist for different question types, and even experts may disagree on the exact rank of information in the evidence hierarchies. Figure 1 presents a classification adapted from the National Health and Medical Research Council (NHMRC, 2009).

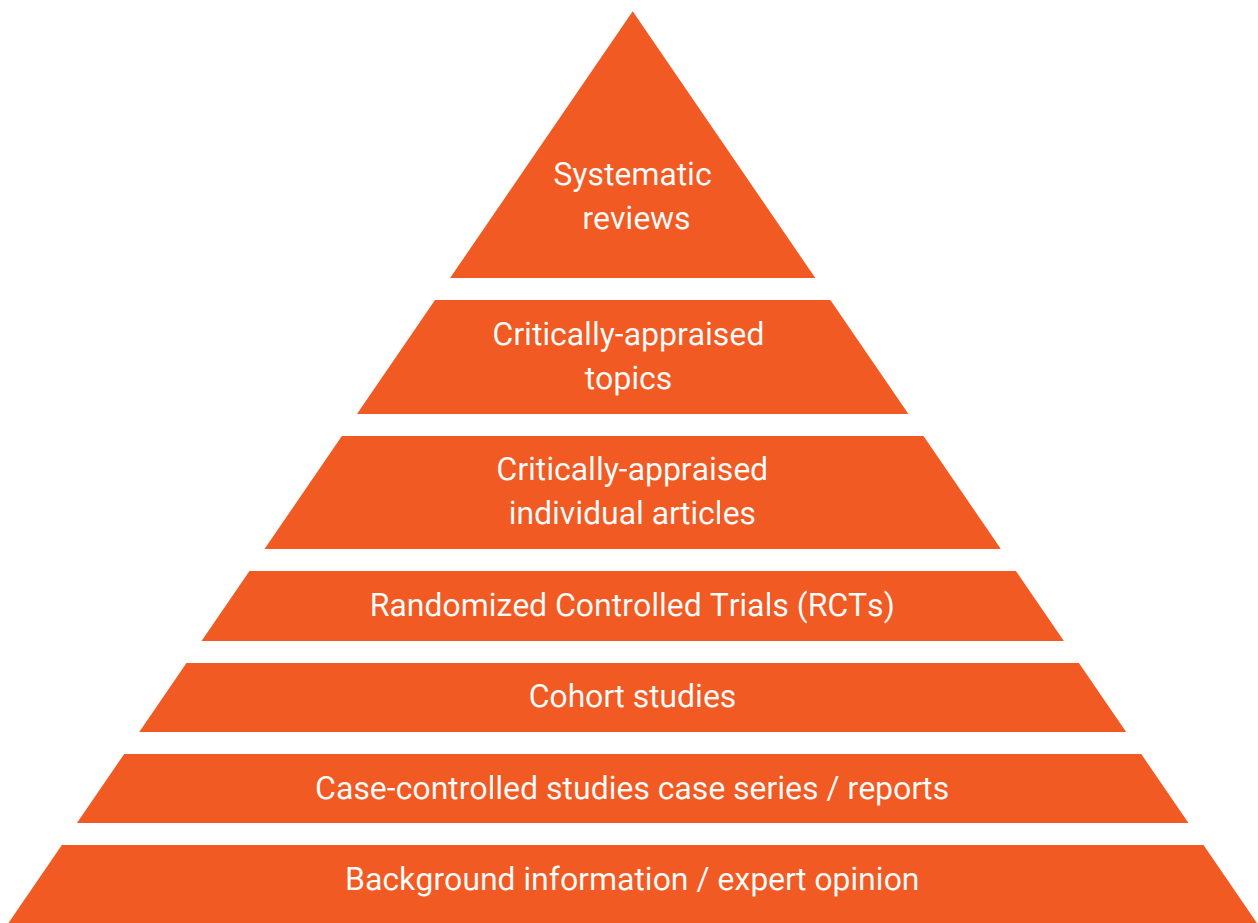


Figure 1: The evidence hierarchy, adapted from National Health and Medical Research Council (2009).

This is not included in this guide to suggest that only systematic reviews or RCTs are worth conducting, but more for you to have an awareness of how evidence can be perceived depending on the study design. This is especially important when engaging with NHS staff/clinicians who will be familiar with this classification, this may help you anticipate questions about your evidence or frame your current evidence in the context of a long-term evidence generation strategy.

For most innovations, systematic reviews may not be applicable if there is no published literature relevant to them.

Although evidence from a RCT is often considered the gold-standard for medical research, it will not be applicable to all innovations. For example, innovations aiming to improve process efficiency or patient satisfaction (without impacting the treatment or care pathways) may not be suitable for an RCT. If your innovation requires conducting a clinical trial, early-stage testing can be beneficial to understand the potential of the innovation and to help plan a future trial.



What is the concept of risk-based stratification? How does this relate to evidence generation?

With risk-based stratification, the level of evidence needed is proportionate to the risk to the service users and to the system. This is presented in the Evidence Standards Framework for digital health technologies (DHT) (National Institute for Clinical Excellence, 2022) and illustrated in Figure 2. You can use this methodology to reflect on the level of risk introduced by your innovation and how this should be accounted for in the study design/evidence gathered.



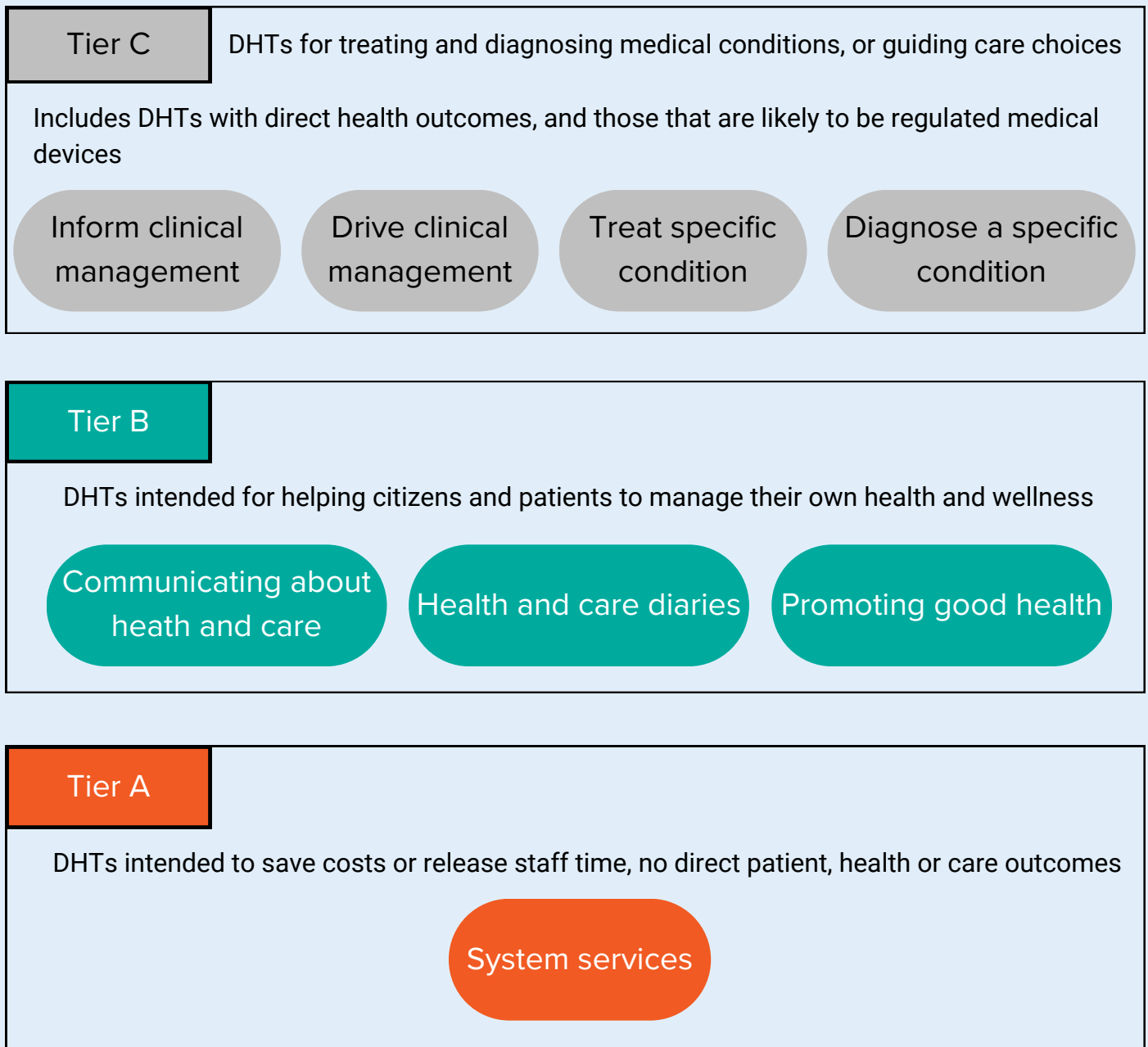
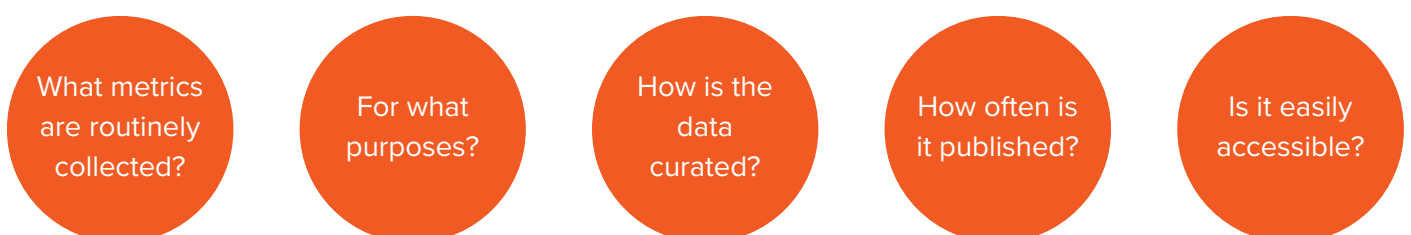


Figure 2: NICE classification by intended purpose and stratified into risk tiers (aimed at DHTs).

What data is available in the clinical area of interest? What is the quality of the data?

What routinely collected research health data could be utilised to build evidence for your innovation. Assess the following:



NHS Digital and NIHR are good places to start, charities may also list or publish relevant data. Sources to help in this research are listed under 'Piloting your innovation' - common pitfalls and tips.

Useful tools and signposting

Risk-based stratification:

- [NICE E4E: Overview | Evidence standards framework for digital health technologies | Guidance | NICE](#)

Research available datasets:

- [HDRUK Innovation Gateway | Homepage \(healthdatagateway.org\)](#): not a repository for data but a metadata catalogue. It is a portal listing the datasets available for research. It also features tools to guide research projects.
- [Fundamentals of using routinely collected healthcare data in research 28 June 2021 - NHS Digital](#): series of webinars hosted by the NIHR Research Design Service. They cover topics such as using routinely collected healthcare data in research, discovering what healthcare data available and healthcare data which can be accessed from NHS Digital.
- [Clinical Practice Research Datalink | CPRD](#): a real-world research service supporting retrospective and prospective public health and clinical studies.
- [Data set catalogue - NHS Digital](#): catalogue of the datasets that are readily available to request through the Data Access Request Service (DARS). These may be provided either in the Secure Data Environment (SDE; [The NHS England Secure Data Environment - NHS Digital](#)), as an extract, or through the DigiTrials Outcomes service ([How NHS DigiTrials can support your trial - NHS Digital](#)).



Common pitfalls and tips

Do your homework

Increasingly, more and more high quality, curated linked datasets are available for researchers and innovators. Some of these are listed in the 'Useful tools and signposting' section.

Speak to your stakeholders

Some clinical areas are perceived as data rich whereas others are notoriously not well-reported. Engagement with NHS staff/clinicians can help you gather expert knowledge and opinions on the data available and its limitations.

The best can be the enemy of the good

The evidence standards are high but you have to start somewhere. Be pragmatic in what data you can collect in the short vs medium vs long term. Start with what is manageable but plan ahead to grow the evidence.

It is not a one size fits all

The appropriateness of a data collection plan depends on what you are trying to achieve with this evidence. Focus on clearly defining what questions this evidence will answer.

Align your ambitions with your resources

Evidence gathering takes time and resources, this can be done through internal or external resources but needs to be budgeted. Think about what can be dedicated to exploring evidence gathering and check that the activities planned are realistic.

Piloting your innovation:

How do you select a 'good' site? How do you plan a successful pilot?

Why is it important?

Pilots are often smaller-scale commissions to test how the innovation performs in a real-world environment. It is an excellent opportunity to demonstrate that your innovation can achieve what it sets out to do and will deliver benefits to the NHS. It is also an opportunity to learn more about your innovation, possibly trying different configurations or use-cases, and understanding the strengths and weaknesses to support future development.

How?

Is the site representative?

Of the UK population:

Upon engaging with a site, assess how the local population compares with the UK average in terms of ethnicity, gender, age distribution, deprivation, etc. This can be assessed for the population in general or for patients accessing a particular department. Demographic and socio-economic factors are all health drivers, therefore findings from an outlier site, for example a private hospital in an affluent area, should be interpreted with caution as they may not be generalisable to NHS sites. A good pilot site should encompass as diverse a population as possible, to demonstrate that the innovation is flexible, could work in different settings and localities, and does not exclude certain cohorts of patients.



Of the current standard practices:

Consider whether the site has under-performed or is an exemplar in delivering care in the area that your innovation addresses. For example, a best-in-the-country performing site is likely to have more experienced staff, and access to more resources which will impact the outcomes measured during the pilot and reduce generalisability.



The patient mix or the site performance should not be reasons not to go ahead with a site. Differences with the average UK site are to be expected but you will need to document these and determine how they might impact the overall findings.

Are there other transformation projects taking place in the site?

Other simultaneous changes can influence the results of a pilot, both positively and negatively. These can be documented and included as limitations of the pilot. Furthermore, major projects can often overrun and draw in more staff and more resources, which could pose risks to the successful implementation of your pilot. If possible, avoid implementation in busy periods (e.g. winter) or during periods of great change, to mitigate the project management risks to your pilot and limit the influence of confounding factors.



Who are the key stakeholders to engage with?

Identify and engage with the key stakeholders presented in Table 2, to help with the pilot set-up and implementation.



Site key stakeholders

Chief Financial Officer (CFO)

The CFO is likely required to approve funding for the pilot, if this is applicable, and is likely to also carefully review any financial impact of the intervention once the pilot has been completed.

Data Protection Officer (DPO)

DPOs are often required to sign-off on any data sharing agreements that may be necessary for data to be processed and analysed as part of the pilot. This can also be done by Caldicott Guardian (CG) or Chief Information Officer (CIO).

Information Governance (IG) team / department

Each NHS organisation, if large enough, usually has an IG team, who manages the process of finalising data sharing agreements (or other IG-related documents) up to the point of final review and signature by the DPO/CG/CIO.

Senior clinicians

Usually, a senior clinician in the relevant team/department will need to be bought into the pilot to champion it within the organisation. They will manage clinical risks and oversee its implementation.

Have you built a project and evaluation plan?

Before starting a pilot, it is important to put forward a project plan. This should include clear, measurable goals and objectives for the pilot, it should ensure that it incorporates a measurement or evaluation plan, it should clearly state the timescales, and any resources (including staff, data etc.) required to complete the project. This plan should be confirmed with the relevant involved parties at the site prior to the start of the project. More details on how to write a project plan are provided in the 'Designing the evaluation' section.

How are you engaging with the site?

All plans and documentation should be shared with the sites ahead of time, to ensure that they are informed and consent to all aspects of the pilot. Often sites will have experience of piloting other innovations and may be able to advise in helping to overcome barriers or reduce delays. Alternatively, they may identify risks or limitations which are best to mitigate before the launch.

Have you budgeted the costs of the pilot for the site?

The typical costs associated with a pilot are:

- Commercial costs (e.g. unit price, licence costs, hardware costs etc.) if the site is paying for your solution.
- Site staff costs (e.g. project management time, time required for site staff training on the innovation, any additional time taken by site staff to perform tasks with the innovation).
- Data collection costs (e.g. staff time from the business intelligence team, costs of developing and implementing any data collection tools, costs of time spent driving engagement).

Whenever the site has to deploy a resource to facilitate the implementation or to use the innovation, this bears a cost to the site. Sometimes these costs are not necessarily measured in financial values, such as the hours spent by a staff member to complete a task. Nonetheless, it is common practice to monetise these costs wherever possible by incorporating unit costs – such as the hourly pay rate of a staff role using the standard NHS salary bands. Unit costs may be available directly from the pilot site themselves, but other information is available from standard unit cost databases for healthcare.

Useful tools and signposting

- Demographic and service data interactive tool: [SHAPE Atlas](#)
- Some previous best practice examples (e.g. [NHS App pilot study](#))
- Where to apply for funding: [Apply for funding – UKRI](#) ; [SBRI Healthcare – Overview; Funding opportunities | NIHR](#) ; [Innovate UK Business Growth \(ukri.org\)](#)
- [Caldicott Guardian role – UKCGC](#)



These are a few examples but speak to your local Health Innovation Network as they can help you identify more local funding opportunities.

- Unit cost databases for healthcare: [PSSRU](#); [GMCA](#)

Common pitfalls and tips

Stakeholder buy-in takes times

Be aware that you will need to invest time and effort to engage and build the relationships.

Plan ahead

Produce the data collection plan before delivery and agree this with all stakeholders. Do not leave it to the last minute!

Think about the costs

Research grant opportunities to fund the pilot so you can support technical development and time investment from the site. Some sites may agree to provide an in-kind contribution to the pilot (e.g. commit some clinical/staff time) but this needs to be discussed and agreed at an early stage.

Designing the evaluation:

How do you design the pilot evaluation? How do you gather relevant data?

Why is it important?

- Good evaluation design will lead to better evidence being produced, improving credibility, and supporting future deployment and spread.
- Retrofitting an evaluation once the pilot is already conducted is hard, not always possible and resource intensive. You can avoid this by dedicating time at, or before, the start to design and plan it.

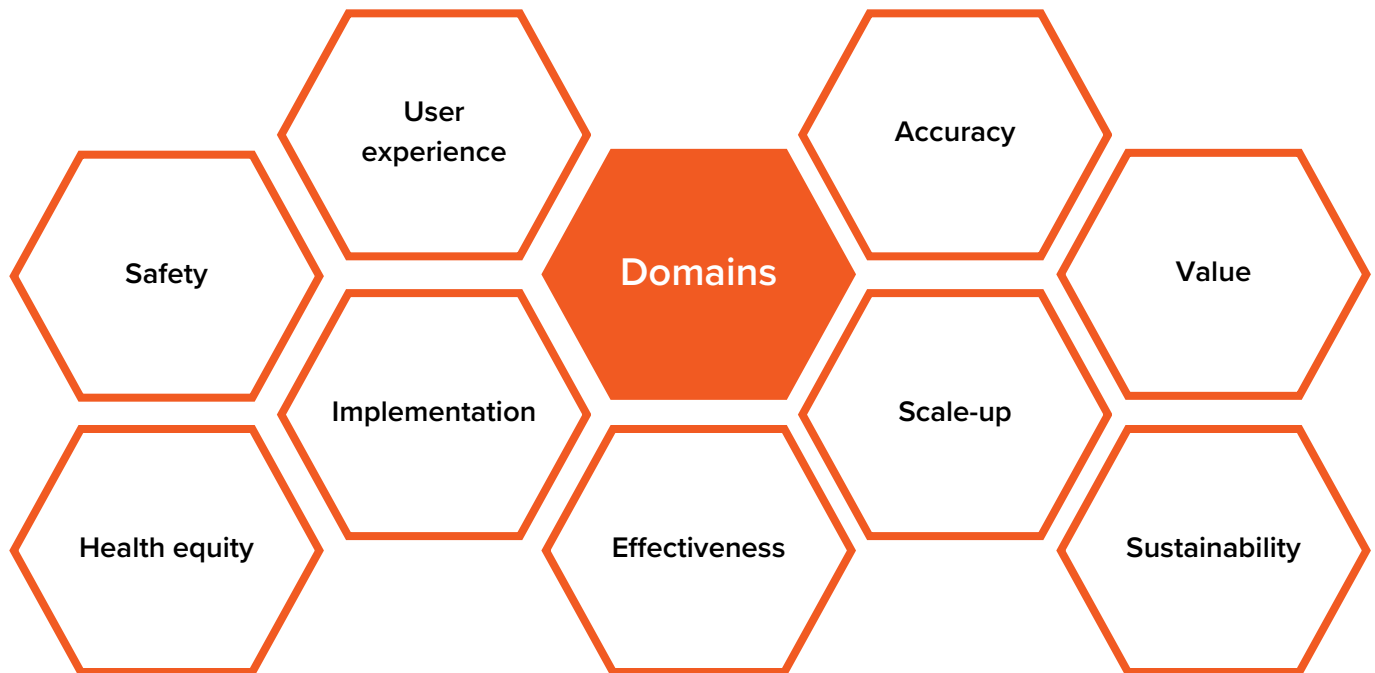
How?

Follow the recommendations below when designing and planning your evaluation pilot:

How are you engaging with the site?

Your value proposition can be a starting point to identify what expected outcomes you want to evidence through the evaluation. Engagement with varied stakeholders, via a logic model workshop for instance, is also recommended to capture potential impacts of the pilot and how these could be measured.

Different evaluation domains can be considered at this stage:



Safety

Consider the key risks and the assurance management required to mitigate them.

Accuracy

Consider in a real-world environment and understand the reproducibility of results previously generated under controlled conditions.

User experience

Consider your innovation's usability, acceptability, and the reported satisfaction of your users. This can include feedback from patients, NHS staff in contact with your innovation and NHS staff not using your innovation but impacted by it (upstream/downstream impact).

Health equity

Consider how your innovation is impacting access, outcomes, and quality of care for patients of particular demographics or socio-economic characteristics. Is your innovation at risk of widening health inequalities?

Effectiveness

Consider the clinical and operational aspects of implementing your innovation.

Implementation/fit with site

Consider factors such as integration, interoperability and training required for the implementation of your innovation. Barriers to embedding your innovation in clinical pathways and whether these may differ by sites can also be explored.

Value

Consider the resource impact of implementing your innovation.

Sustainability

Consider what environmental impact your innovation has in terms of greenhouse gas emissions, air pollution, water pollution (including with chemicals and pharmaceuticals), reduced biodiversity, waste production.

What is a logic model?

A logic model is a tool to help you visualise the process of change. It represents how things like inputs, outputs and activities relate to each other and identify how an innovation will produce short, medium, and long-term outcomes. Logic modelling applies a 'IF THEN' logic to design changes (Figure 3).

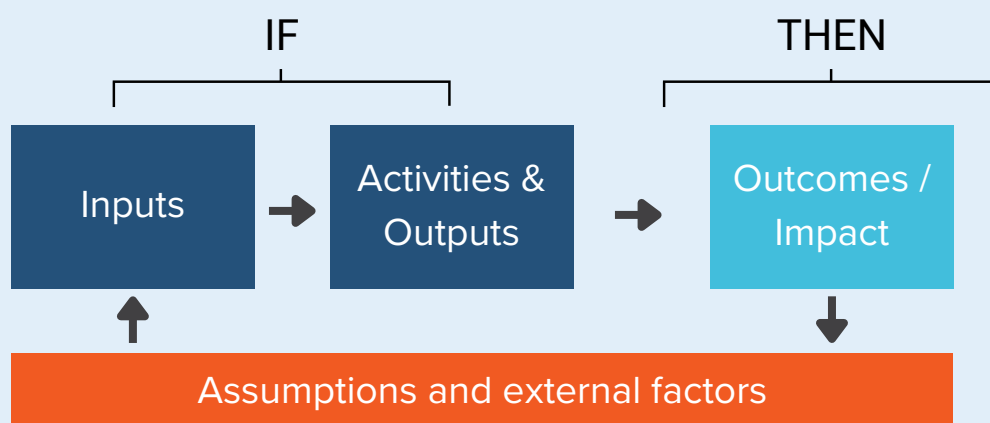


Figure 3: Components of a logic model ([Midlands and Lancashire Commissioning Support Unit, 2016](#)).

Why?

A logic model can help in evaluating the impacts and outcomes of your innovation being implemented. It can serve as a dynamic reference for implementation management by defining roles of all involved, ensuring actions and aims have logical links and making interdependencies clear.

How?

For evaluation, it is used early on as part of the hypothesis development. It is best done as a collaborative process, as it is rare for all the knowledge required to be found just in one place or one person's knowledge. Figure 4 presents the stakeholders you may want represented in the logic model workshop. Brainstorm with your stakeholders to populate the logic model, starting with the expected impacts, to then cover, outputs, activities and finally inputs. Remember to document the assumptions and external factors. Make time to detail the metrics to collect to evidence the potential outputs. Be flexible and iterate on the draft logic model as the implementation progress.

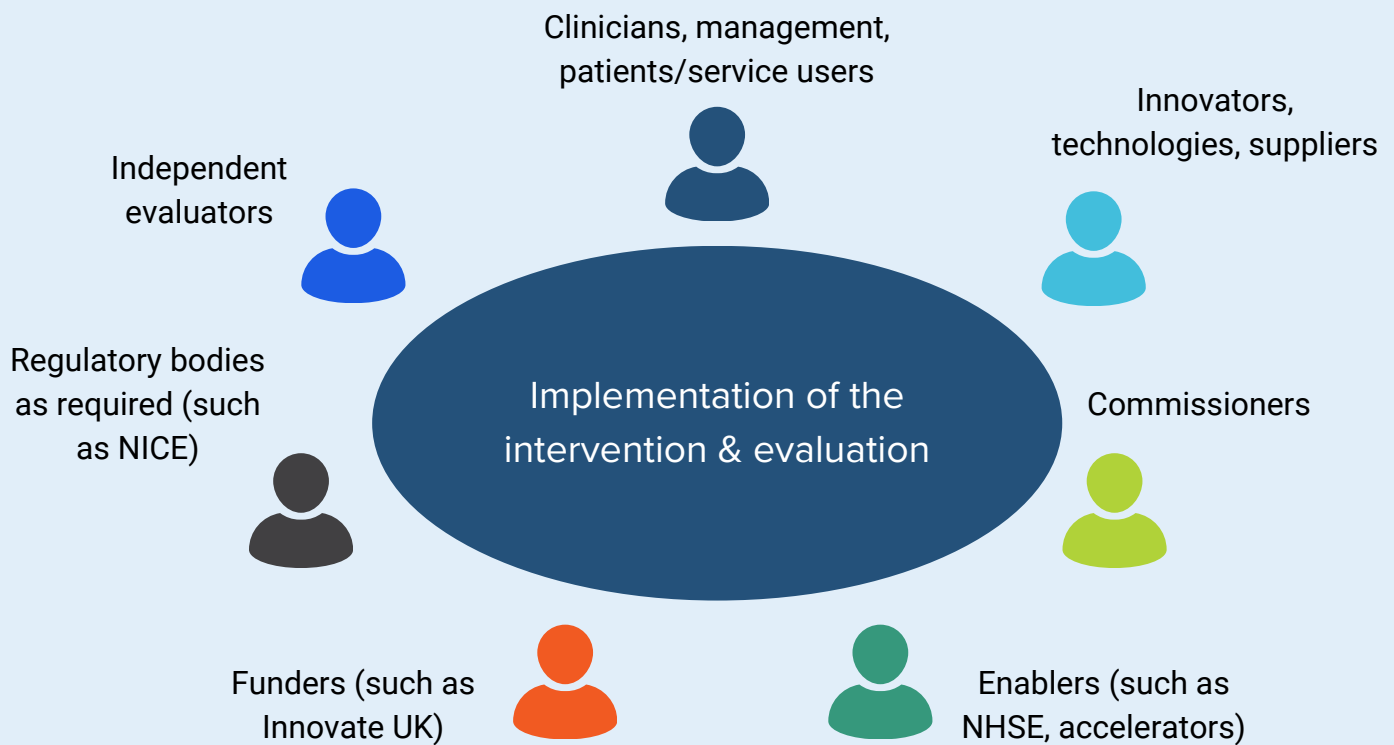


Figure 4: Stakeholders to involve in the logic model workshop

Find more resources:

- [Logic Model Guide AGA 2262 ARTWORK FINAL 07.09.16 1.pdf \(midlandsandlancashirecsu.nhs.uk\)](#)
- [Using logic models to assess digital health products - NHS Digital](#)
- [PowerPoint Presentation \(nuffieldtrust.org.uk\)](#)

Select an appropriate evaluation design

The evaluation design should consider the following elements:

- The evaluation questions and their associated evaluation domains
- Evaluation timeline
- Available budget
- Potential implementation blockers, including timelines, and their impact on the evaluation

Table 1 presents a summary of the evaluation designs and the type of question they can answer. It is not an exhaustive list, further resources listing the type of designs are included in the 'Useful tools and signposting' section below.

Table 1: Type of designs for an early-stage evaluation (non-exhaustive)

Study	Methods	Questions
Descriptive studies	<ul style="list-style-type: none"> • Clinical audit • User feedback surveys • Monitoring and analysis of usage data • Behavioural change and techniques review 	<ul style="list-style-type: none"> • How many people are using your innovation? • How many people stay engaged with your innovation? • How often do they use it? • Do they like your innovation?
Comparative studies	<ul style="list-style-type: none"> • Before and after study • Randomised controlled study • Case control study • A/B testing 	<p>What is the difference in health outcomes between the two groups:</p> <ul style="list-style-type: none"> • People using your innovation and people using a rival product? • People using 2 versions of your innovation? • People using your innovation now and how • People did before your innovation was available?
Qualitative studies	<ul style="list-style-type: none"> • Ethnographic study • Focus group • Interview study • Usability testing 	<ul style="list-style-type: none"> • What was the overall experience of the users on your innovation? • How did users feel during their journey using your innovation? • What do users want to see in a new version of the innovation?

Determine the data sources you can use

Data may be obtained through a combination of data sources (Table 2). Engagement with the site will provide clarity on what data can be sourced. You may want to consider if the data required to answer the evaluation questions is already published and readily available to avoid intensive data access activities.

Table 2: Examples of different types of data sources.

Type of data source	Example
Primary data sources	<ul style="list-style-type: none"> • Observational studies • Interviews • Focus groups • Surveys • Any data collected specifically for the evaluation from evaluation participants, for example time-motion studies, bespoke data collection
Real world data sources	<p>Data routinely collected from or processed as part of any local operations system, for example, patient record systems. This may include:</p> <ul style="list-style-type: none"> • Patient demographics • Patient outcome data • Time to referral/diagnosis
Secondary data sources	<ul style="list-style-type: none"> • National datasets • Published literature

Consider whether your project is research:

Not all projects are classed as research, they can also fall under “service evaluation” or “clinical audit”. A well-used distinction is the following:



Research is designed and conducted to generate new knowledge.



Service evaluations are designed to answer the question “What standard does this service achieve?”.



Audits are designed to find out whether the quality of a service meets a defined standard.

The Health Research Authority (HRA) has devised a decision tool to help you assess whether your project is considered research: [Is my study research? \(hra-decisiontools.org.uk\)](https://hra-decisiontools.org.uk).

The NHS Research Ethics Committee and HRA are only required for research projects, however local NHS organisations will need to agree to participate in any audit or service evaluation and may have separate processes for this. Even if your project is not classed as research, you still need to carefully consider any ethical issues that could arise.

You may need to obtain different approvals from regulatory bodies depending on the type of evaluation. The evaluation design should specify the arrangements required to ensure the evaluation is conducted ethically and legally.

Plan the Information Governance (IG) process:

To gain access to site data, you should enquire about the information governance process requirements. Depending on the local arrangements and the data required, the evaluators may have to submit some of the documents presented in Table 3.

Table 3: A list of data governance agreements and their relevance within the evaluation.

Agreements	Description
<p>Data protection impact assessment (DPIA)</p>	<p>A DPIA must be used if personal data processing may result in a “high risk to the rights and freedoms of individuals” (NHS Digital, 2022). Though completing a DPIA, compliance with the Data Protection Act (2018) can be achieved, minimising risks to data protection.</p> <p>The DPIA must depict how and why your innovation is going to be used to process data by detailing the following (Information Commissioner’s Office, 2023b):</p> <ul style="list-style-type: none"> • How data will be collected, stored, and used • The volume, variety, and sensitivity of the data • The relationship between the innovator and the individuals involved • The intended outcomes for the innovator, the individuals involved, and the wider society where applicable <p>When considering the impact that the processing of data has on the individuals involved, the following types of harm must be considered (Information Commissioner’s Office, 2023b):</p> <ul style="list-style-type: none"> • Allocative harms: result from allocating goods and opportunities among a group • Representational harms: reinforcing stereotypes or underrepresentation of a population
<p>Information sharing agreements (ISAs)</p>	<p>ISAs highlight the process of sharing data between two parties (NHS England and NHS Improvement, 2019). The Information Sharing Policy by NHS England and NHS Improvement (2019) highlights the factors to consider when deciding whether to share or receive personal data.</p>
<p>Data sharing agreement (DSA)</p>	<p>A DSA will likely be required if patient-level data is obtained for the evaluation. Personal data, collected for example for the health inequalities analysis should also be considered regarding DSAs. DSAs can be used to outline the purpose of data sharing within the evaluation and provide clarity on the roles and responsibilities of this. The Data sharing agreement template created by NHS England (2020) sets out guidance regarding how to complete a DSA.</p>
<p>Data Processing Agreement (DPA)</p>	<p>A DPA is an agreement between a data controller (such as NHS local trusts) and a data processor (such as a third-party service provider). It regulates any personal data processing conducted for business purposes. Data processing includes any operation in which data is collected, translated, communicated, and/or classified to produce meaningful information.</p>

Information governance can be a significant hurdle for a pilot and the evaluation, causing delays in deployment or in data access, so it is important to dedicate time at the design phase to understand the documentation needed at your site. Requirements are likely to vary between sites, but what you can do to prepare is to determine the type of data you want to request and for what purposes. Figure 5 provides an overview of the types of data as well as the key principles of General Data Protection Regulation (GDPR), more resources are included in the 'Useful tools and signposting' section.

Personal data: any information relating to an identified or identifiable natural person ('data subject').

Pseudonymisation: the processing of the personal data in such a way that the data can no longer be attributed to a specific data subject without the use of a additional information, as long as such additional information is kept separately.

Anonymisation: information which does not relate to an identified or identifiable natural person or to a personal data rendered anonymous in such a manner that the data subject is not or no longer identifiable. GDPR does not apply.

Principles of General Data Protection Regulation (GDPR):

Article 5 of the UK GDPR sets out seven key principles, requiring for personal data to be:

1. Processed lawfully, fairly and in a transparent manner in relation to individuals.
2. Collected for specified, explicit and legitimate purposes and not further processed in a manner that is incompatible with those purposes.
3. Adequate, relevant and limited to what is necessary in relation to the purposes for which they are processed.
4. Accurate and, where necessary, kept up to date.
5. Kept in a form which permits identification of the data subjects for no longer than is necessary.
6. Processed in a manner that ensures appropriate security of the personal data, including protection against unauthorised or unlawful processing and against accidental loss, destruction or damage.
7. The controller is accountable for and able to demonstrate compliance with the other principles.

Figure 5: Types of data and key principles of GDPR ([University College London, n.d.](#))

The resources above should be considered as a starting point as it is a complex topic, but focusing on clearly defining what data you want to access and identifying the IT/IG team able to support your request will help you to comply effectively with IG requirements.

Establish good project governance:

Your project plan should clearly present the roles and responsibilities of the project partners, as well as the activity timeline and a description of the outputs to be produced. This reduces the risk of some tasks being overlooked. Irrespective of defined project roles, open communication, constructive challenging, and transparency should be encouraged between all parties. Regular communication will help highlight any interdependencies, such as receiving data in timely manner for analysis prior to report writing.

Useful tools and signposting

Guides for evaluation:

- [Plan - NHS Evaluation Toolkit](#)
- [NHS England » Impact Framework](#)
- [Planning an evaluation: evaluation in health and wellbeing - GOV.UK \(www.gov.uk\)](#)

Evaluation design resources:

- [Engineering Better Care \(iitoolkit.com\)](#): A toolkit which addresses people, systems, design, risk, and management perspectives within an evaluation.
- [NICE META Tool](#): A platform which can be used to understand the evidence required to highlight the value of a technology to the NHS.
- [Overview | NICE real-world evidence framework | Guidance | NICE](#): A guide to follow when carrying out health technology evaluations.
- [The Green Book \(2022\) - GOV.UK \(www.gov.uk\)](#): HM Treasury guidance on measuring costs and benefits.
- [The Magenta Book - GOV.UK \(www.gov.uk\)](#): HM Treasury guidance on what to consider when designing an evaluation.
- [A Researcher's Guide to Patient and Public Involvement \(nihr.ac.uk\)](#): Guidance surrounding Patient and Public Involvement (PPIE) activities within research.



Common pitfalls and tips

Estimate the site involvement

Do not underestimate the staff involvement required for the evaluation. Confirm the evaluation plan, especially data collection requirements, with the site team.

Plan the evaluation output

Who do you want to share it with? What sort of output will they want? Reports are generally useful, but you may also wish to publicise the outputs in a more digestible format (e.g. slide decks / infographics). Plan for academic publications if they are relevant.

Be realistic with what you want to measure

Based on the duration of your pilot and the resources allocated. As a rule of thumb, your evaluation budget should represent between 15% and 30% of your total pilot budget, if you are unable to allocate this, you may need to reassess your desired outputs.

Prioritise uptake and outcomes measurement

Where possible, detail the metrics you will collect and how they will be used to answer the evaluation questions.

Presenting the findings

How do you draw conclusions and share your results? How do you embed evaluation?

Why is it important?

Clear presentation of the findings can be used to support the spread of your innovation, it can be a tool to engage with sites and stakeholders. Transparent reporting is also key to maintain credibility.

Evaluation is not just a one-off exercise – the process of continuous monitoring and improvement is key. Engaging in post-market surveillance is expected from innovators so embedding evaluation into the day-to-day business activities can help with this.

How?

Getting the messaging right:

Provide an honest, unbiased assessment of the results. Ensure that negative results are included and addressed. Acknowledging the realities of an imperfect solution and ensuring that these are rectified is often a powerful story to tell. Positive results are important to highlight, but also consider the strength of the evidence when presenting your findings. Conclusions should be clear and concise – although any limitations and caveats should also be disclosed.

Are you transparent with the methodology and the evidence base?

A transparent methodology is also important to include, it should be possible for readers to trace the analysis steps and understand the strength of the evidence, any limitations, or assumptions, and how results were derived. Any sources, for data or literature, should be clearly stated.

Have you tailored the output to your audience?

The output itself can vary. Reports are typically considered more 'robust', as they often go into much greater detail and provide a richness of information that can instil confidence. The most important factor is the audience – if the intention is to provide the findings to other prospective sites, then some will prefer a report, a presentation, or a visually-appealing short summary. Given the variation in the likely audience, it is often prudent to produce the outputs in multiple formats so that they can be shared together and the recipient can choose to review the most useful for themselves.

Have you captured the learning points?

Summarising your learnings as part of any report on the pilot can be of great interest to the NHS. It may be that these learnings can help greatly improve the implementation or success of the innovation in any future sites, so sharing it can be beneficial. It also promotes values of openness and transparency, which are both highly desirable for providers in the health and care sector.

Have you built an action plan?

As part of the reporting on the pilot, an action plan can be put together to address and respond to any learning points as well as any negative feedback or outcomes. For example, if staff or patients feedback that the innovation is difficult to use, then further work may be required to unpick this in more detail and then to design a means of improving the experience – such as, in this case, through better standardised training or tweaks to the innovation itself. Failing to follow-up on the pilot can be a quick way to lose momentum, you want to be able to demonstrate a plan or progress in direct response to the pilot to help accelerate your spread in the NHS.

Are you willing to commit resources to continuous evaluation?

A pilot is rarely a one-off exercise. The healthcare innovation marketplace is often crowded, and so continuous evaluation is key to ensure that your innovation continues to improve and remains competitive. A single study is also unlikely to evidence every point or uncover every improvement – often studies can raise as many questions as they answer, and follow-up studies are often required to go into further detail and address these unanswered questions. Moreover, it is important to maintain up-to-date evidence given the pace of change in healthcare. It is always recommended that processes are set up to ensure continuous data collection in all available implementation sites, to ensure that the evidence is constantly being refreshed and monitored.

Useful tools and signposting

- [NHS England » Step 4 – Share your impact with others](#)
- [Guide to reporting, communicating and acting - NHS Evaluation Toolkit](#)
- [The Magenta Book - GOV.UK \(www.gov.uk\)](#)



Common pitfalls and tips

Get the tone right

Your evaluation report should not be a piece of marketing, it should be as objective as possible in reporting what happened, e.g. the impact of your innovation. Stay away from sensationalised language and do not make unsubstantiated claims.

Avoid drawing conclusions that do not match the evidence

Maybe the evidence is not strong enough, in which case a further study may sometimes be required. This is normal! Unsupported concluding statements can undermine the entire study and raise doubts about the innovation.

Do not be afraid of 'negative' results

These can be areas for improvement and, if addressed, can create an excellent story of quality improvement that is really convincing to NHS partners.

Think about the key messages for your different audiences

Commissioners, NHS staff, patients/public – why should they care about the evaluation findings? How is it helping them to meet their goals?

Evaluation is often key in a competitive marketplace

If your latest evidence is several years old then you might start to fall behind compared to alternatives in the market.

Quality improvement is a common approach in the NHS

Utilising this, through repeated evaluations, will build confidence in and credibility for, your innovation with NHS stakeholders.

Get in touch

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