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Cancer Alliance local evaluation: Evaluation how to guide

Practical steps to undertaking evaluation

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Purpose

- This guide provides:
  - Step by step advice to support Cancer Alliances practically to establish and undertake local evaluation, and
  - Examples of approaches to dissemination of evidence.
- This guide is intended as a practical how to guide for both undertaking evaluation locally and externally commissioning an evaluation partner, and includes links to both the wider CADEAS suite of resources and readily available external resources where relevant.
- Examples presented throughout are for illustrative purposes only. Cancer Alliances should ensure that local evaluations are designed in line with, and to address, local priorities.
- This resource should be used in conjunction with the wider CADEAS suite of resources, available on the Cancer Alliance Workspace, here.

Background

- Evaluation examines the implementation and impacts of a policy or intervention to assess whether the anticipated effects, costs and benefits were in fact realised. Evaluation findings can identify “what works”, what doesn’t and why, highlight good practice, identify unintended consequences or unanticipated results and demonstrate value for money.
- Evidence generated through evaluation should be fed back into the programme or policy cycle to improve future decision-making.
- Evaluation data includes both quantitative and qualitative information. Both are important to understanding what worked, where, how, and why.
- In contrast to evaluation, monitoring generally focuses on quantitative metrics and can be defined as the formal reporting and evidencing to ensure that inputs and outputs are successfully delivered, and implementation milestones met.

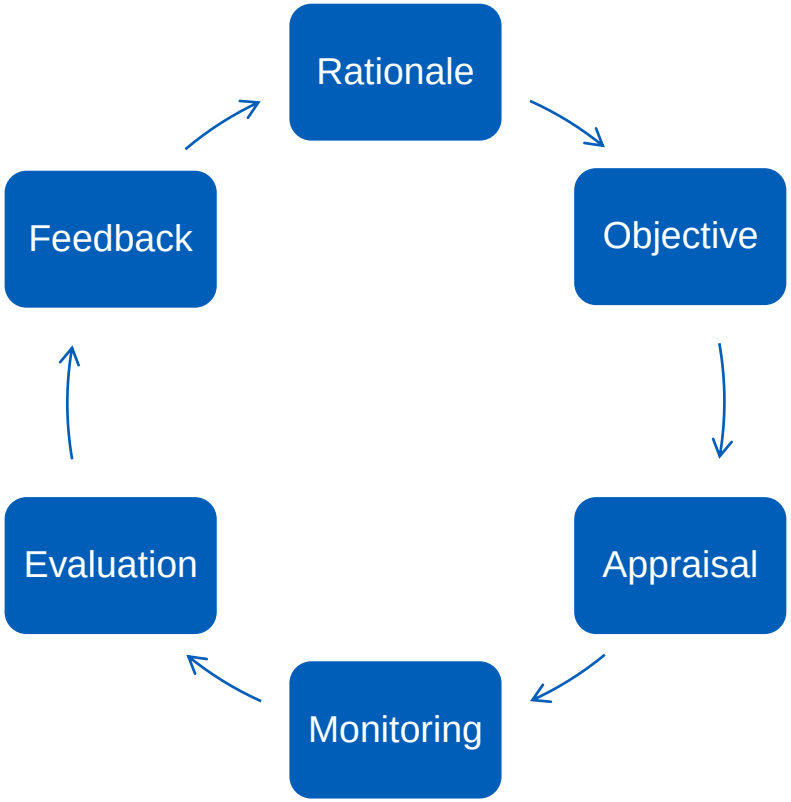
Why is evaluation important?

- By not undertaking evaluation, we will not know whether a policy or intervention was effective, or worse still, resulted in overall perverse, adverse or costly outcomes.
- Evaluation is a key enabler to improving cancer services, particularly where the evidence base is less established.
- Evaluation findings can also indicate where we can make changes to services and interventions, which can lead to better outcomes for both patients and staff, and therefore help commissioners and providers in their decision making and allocation of resources.
- Evaluation also contributes valuable knowledge to the evidence base, feeding into future policy development, both locally at the Cancer Alliance level and nationally, thus occupying a crucial role in the policy cycle.

The role of evaluation in a policy cycle

- Evaluation is an integral part of a broad policy cycle that can be formalised in the acronym ROAMEF: Rationale, Objectives, Appraisal, Monitoring, Evaluation and Feedback.
- The ROAMEF cycle demonstrates the integral role of evaluation across the policy cycle. While this cycle may suggest these phases occur sequentially, in practice this one-directional relationship rarely holds; the process is often iterative with significant interdependencies between these phases, and feedback loops.
- Evaluation should be considered early on in the policy process and prior to implementation as the way a policy is formulated or implemented can have an impact on the ability to evaluate.
- Thus, appraisal and evaluation phases are essential activities to support evidence-based decision making at all stages of the policy development cycle.

Figure 1: ROAMEF policy cycle



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Key steps to undertaking evaluation

This guide is structured around five key sequential steps to support the establishment and undertaking of evaluation. Simply, it sets out what to do, when, and how.

1. Develop a Theory of Change
2. Define your evaluation questions and approach
3. Data collection
4. Resourcing and conducting your evaluation
5. Review and share your evidence

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Step one: develop a Theory of Change

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Develop a Theory of Change

What?
- Develop a Theory of Change setting out the logic behind your project.

Why?
- Sets out what the problem is you are trying to solve, what you want to achieve, and how you are going to achieve it.
- A Theory of Change is a useful programme management tool, and is not just for evaluation.

When?
- During the planning and set-up stage of your project, before implementation.

Who?
- Project stakeholders should be involved.

How?
- A logic model is one way to describe a Theory of Change.

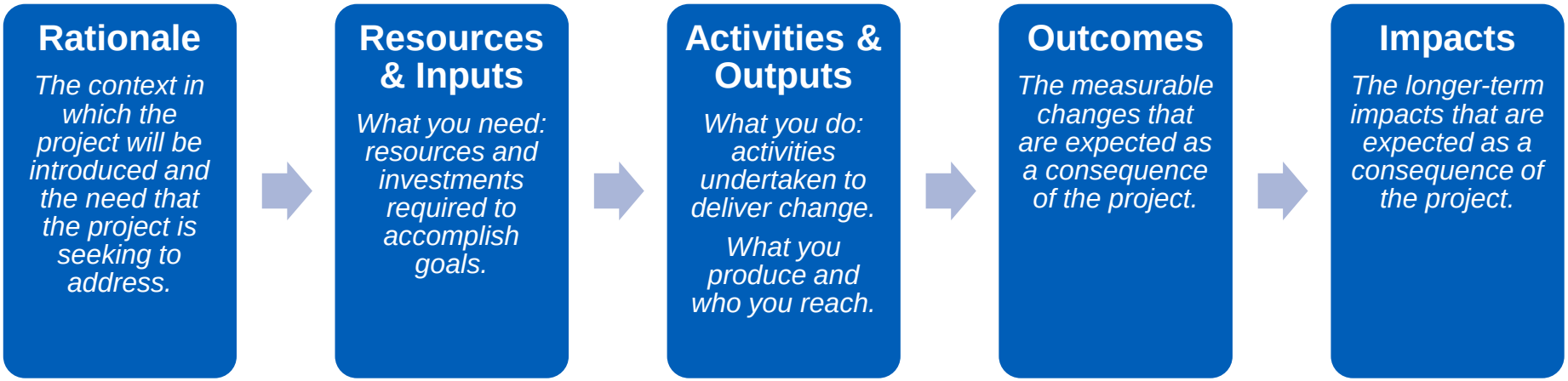
CADEAS supporting resources
- Blank logic model template
- Introduction to approaches to evaluation and data collection reference guide

What are you trying to achieve?

- When carrying out an evaluation it is important to identify:
  - The problem the project is seeking to address locally,
  - What the project seeks to achieve, and
  - How the project will achieve these objectives.
- Having a Theory of Change can help you to do this. A Theory of Change is a description of how and why a desired change is expected to happen in a particular context and is a useful approach for both project management and evaluation purposes.
- A logic model is one way to articulate your Theory of Change. A logic model is a graphic display or map of the relationship between a project's resources, activities and intended results, which identifies the project's underlying theory and assumptions.
- The term logic model is used in this guide to refer to both a Theory of Change and logic model.
- Next, we introduce the key steps to developing a logic model. Links to comprehensive logic model resources are provided throughout this section.

Logic models as a way to describe your Theory of Change

Figure 1 below sets out the main components of a simple logic model.



Two additional key elements of a logic model are:

- any assumptions that you are making should be explicit in the model. Your assumptions are important as this is principally the theory underpinning your project or intervention, and
- any external factors that may be out of your control but may influence how your project is implemented or its outcomes.

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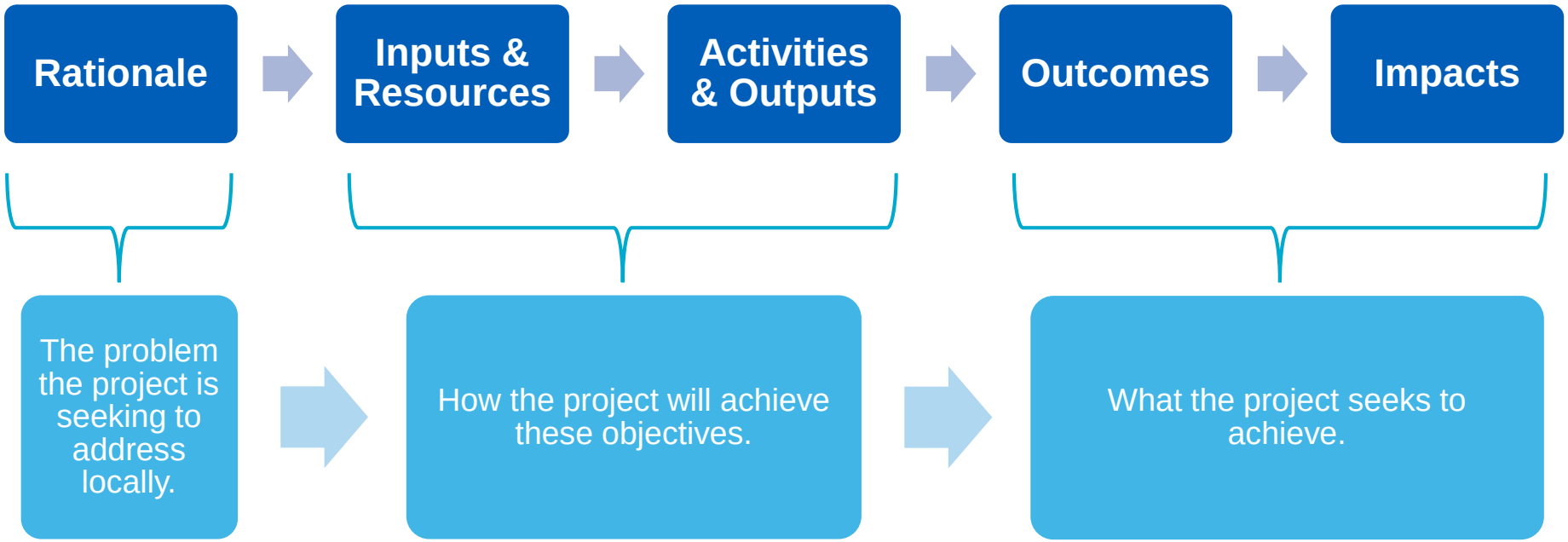
Developing a Theory of Change

It is sometimes helpful when thinking about a Theory of Change to consider 3 key questions:

- What is the problem the project is seeking to address locally (this is your rationale or situation)?
- What does the project seek to achieve (these are your expected outcomes and impact)?
- How will the project achieve these objectives (these are your inputs & resources and activities & outputs)?



Simplified example logic model I

- The next slide introduces a simplified example logic model, to demonstrate how a logic model can be used as a tool to articulate an intervention or programme of work.
- The logic model introduces the rationale, resources and inputs, activities and outputs, outcomes and longer term impacts for an intervention to *improve cancer screening uptake.*
- Key assumptions underpinning the Theory of Change and therefore the principles behind the project and what it intends to achieve are also set out for reference.
- A more detailed logic model can be found in the accompanying ‘Introduction to approaches to evaluation and data collection strategies’ resource.

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Simplified example logic model II

Rationale *The local context in which the project will be introduced*	**Resources & inputs** *What you need to accomplish goals*	**Activities & outputs** *What you do*	**Outcomes** *The measurable changes that are expected as a consequence of the project*	**Impacts** *The longer-term impacts that are expected as a consequence of the project*
Screening can lead to earlier detection of cancer Earlier detection of cancer can mean it is easier to treat and is associated with improved survival outcomes But, not everyone who is offered screening takes up the invitation	Time Money Analytical support Clinical expertise Service resource	Research to understand local need Targeted invitations to attend screening Targeted awareness campaign	Increase in proportion of target population who are aware of benefits of screening Demonstrable impact on uptake of screening based on local need Increase in people who are diagnosed and treated at an earlier stage, leading to fewer emergency presentations	More people living a better quality of life with and beyond cancer Increased survival
Assumptions	Investing time and resources can increase awareness of the benefits of screening	By increasing awareness of the benefits of screening more people will attend screening following an invitation	More people attending screening will result in more cancers being detected at an earlier stage and fewer emergency presentations	Cancers detected earlier will lead to more people living longer with a better quality of life with and beyond cancer

Involve your stakeholders

- When developing your Theory of Change it is important to involve your stakeholders to ensure that the Theory of Change reflects a common understanding of what the project or intervention is trying to achieve and how.
- To do this you will first need to identify who your stakeholders are. These could include both internal and external stakeholders; patients and the public; commissioners and providers; the NHS Cancer Programme or any combination.
- Involving your stakeholders at this stage with also make it easier when considering what type of evaluation you will need to undertake and the questions to address.
- Next, we set out how to define your evaluation questions and the type of evaluation you may wish to undertake.

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Step two: define your evaluation questions and approach

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Define your evaluation questions & approach

What?

- These are the specific questions that you and your stakeholders need to address. They may well be the questions that you are asking about your project already and should be focused on local priorities.
- These questions will help you to define the most appropriate approach to evaluation.

Why?

- Important to think about the key things you need to know about your project, how it is working and the difference it is making. This allows you to focus on your local priorities and answer the questions that are relevant to your local Cancer Alliance.

When?

- During the planning and set-up stage of your project, before implementation.

Who?

- Project stakeholders should be involved.
- Analytical support may be required to help define the questions and approach.

How?

- Use your logic model to help define the evaluation questions you want to address.
- Consider what your stakeholders need to know.

CADEAS supporting resources

- Evaluation Framework: evaluation questions, data collection methods and sources
- Introduction to approaches to evaluation and data collection reference guide

Define overarching evaluation themes: what do you need to know?

- When setting out what you want your evaluation to tell you there are broadly three principal groups of questions you could consider:
  - Process: How was the project delivered? What barriers and enablers were encountered?
  - Impact: What difference did the project make?
  - Economic: Did the benefits justify the costs?

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Define specific evaluation questions

- Once you have identified the type(s) of questions that you want to address you will need to define evaluation questions specific to your intervention. In doing this you should think about:
    - What do you and your stakeholders need to know, as per your local priorities? These may include some of the questions that you may be asking of your project anyway.
    - Your logic model can help you to define specific evaluation questions.
- The ‘Evaluation framework: evaluation questions, data collection methods and sources’ resource developed by CADEAS sets out a list of potential evaluation questions, by evaluation approach, for each of the required deliverables set out in the NHS 2019/20 Planning Guidance. While these questions are not intended as a comprehensive list, Cancer Alliances should use this resource at this stage of evaluation development.
- The following slides demonstrate how a logic model can be used to define specific evaluation questions and provides examples of the types of questions that you may wish to consider.
- The examples given are based on the logic model for increasing the uptake of cancer screening introduced on slide 13.

Refine your evaluation questions

As introduced on the previous slide your logic model can be used to help you to refine your evaluation questions. The table below links the principle types of questions to the different components of a logic model.

Overarching evaluation themes or questions	Link to logic model component
How was the project delivered? What barriers and enablers were encountered?	• Rationale • Inputs & Resources • Activities & Outputs
What difference did the project make?	• Outcomes and Impacts
Did the benefits justify the costs?	• Inputs & Resources • Outcomes and Impacts

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Refining your evaluation questions

Using the logic model introduced on slide 13 we focus on defining evaluation questions for a specific outcome:

Logic Model Outcomes	Evaluation Questions identified
Increase in proportion of target population who are aware of benefits of screening **Demonstrable impact on uptake of screening based on local need** Increase in people who are diagnosed and treated at an earlier stage Increased demand on services Fewer emergency presentations	• How many people in the target population took up the invitation for screening? • How many cancers were detected in the target population? • What was the experience of the participants that took part in the project?

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Approaches to evaluation

- The evaluation questions you are want to address will inform the evaluation approach required.
- The table below sets out the corresponding evaluation approaches for each of the overarching types of questions introduced earlier in this resource.

Overarching theme / evaluation questions	Evaluation Approach
How was the project delivered? Is the project working as intended? What works, what doesn't and why?	Process evaluation
What difference has the project made?	Outcome or Impact evaluation
Did the benefits justify the costs?	Economic evaluation

- These evaluation approaches are introduced in greater detail in the Introduction to approaches to evaluation and data collection reference guide.

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Step three: data collection

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Data collection

What?

- Data is the information or evidence that you need to collect in order to answer your evaluation questions. This may be quantitative, qualitative or both.

Why?

- It is important to collect the right data that will help you to answer your questions correctly.

When?

- Depending on the type of evaluation you would like to carry out you may need to collect specific information or data:

i. Before implementation to collect your baseline,
ii. During implementation, or
iii. After the project has been embedded.

Who?

- Evaluator (internal or external) will often lead this stage, although it is important key stakeholders are involved.

How?

- Use your logic model to help define the required data.

CADEAS supporting resources

- Evaluation Framework: evaluation questions, data collection methods and sources
- Navigating Information Governance reference guide

Data collection: sources

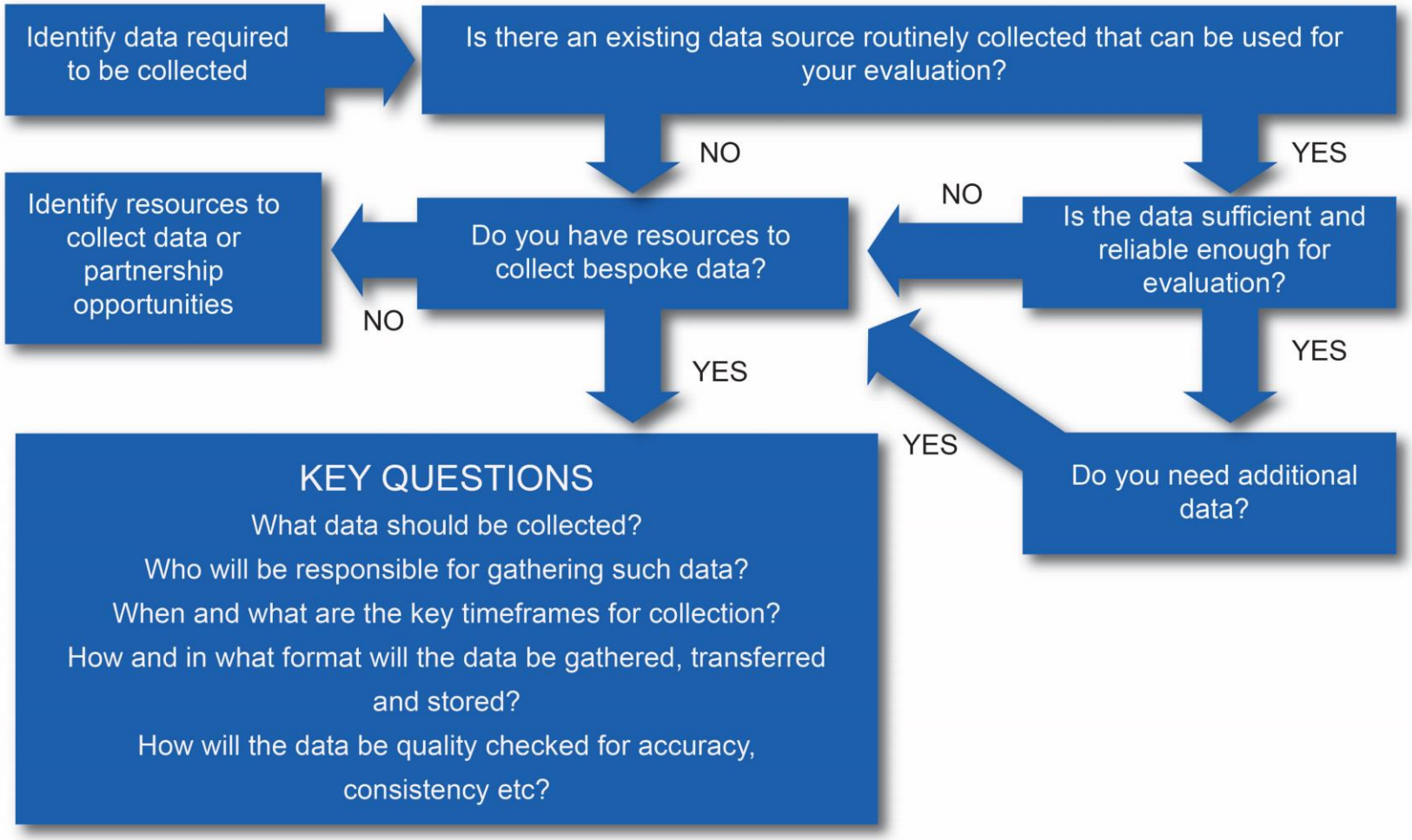
Types of information

- Data should be collected to provide a detailed description of the project throughout all stages of implementation, including:
    - the resources and investments,
    - how was it delivered including the process and activities, and
    - a measure of the expected outcomes including the experience of the participants and those involved in project delivery where possible.

Data sources and bespoke collection

- Some data are readily available nationally; CancerStats2, CADEAS data signposting guide
- There will be some data that you will need to collect yourself. A number of useful guides are available that you may find helpful, in particular those that have been developed by NHS Improvement: Measurement for Improvement: an overview, Seven steps to measurement for improvement and the Interactive improvement measurement tool.
- It is also important to include qualitative data from patients, carers and where applicable from staff. This can be collected through surveys, interviews and focus groups and is important for providing depth and context to an evaluation.
- There are several key aspects to consider when collecting data, as represented in the data developing decision tree on the next slide.

Data collection: decision tree



Data collection: mapping your data

- Having decided what type of evaluation to carry out and the questions you want to answer it is helpful to map your metrics against your logic model. Again we utilise the logic model introduced on slide 13 to demonstrate this.
- In slide 20 we used the outcome *'demonstrable impact on uptake of screening based on local need'* to refine the following evaluation questions:
  - How many people in the target population took up the invitation for screening?
  - How many cancers were detected in the target population?
  - What was the experience of the participants that took part in the project?

For each of these questions you need to consider:

- The metrics you require,
- The source of the data and whether it is routinely collected (see previous slide), and
- Finally, don't forget to collect qualitative data where appropriate.

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Data collection: mapping your data

Questions identified based on outcome '*Demonstrable impact on uptake of screening based on local need*'	Data identified
How many people in the target population took up the invitation for screening?	• Number of screening invites • Size of target population
How many cancers were detected in the target population?	• Number of screening uptake • Number of people diagnosed with cancer through screening programme • Number of people in target population diagnosed with cancer through the screening programme • Total number of diagnosis • Stage of diagnosis
What was the experience of the participants that took part in the project?	• Qualitative data on patient experience through interviews, surveys and/or focus groups

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Data Collection: establish your baseline

Once you have established what data you need – establish your baseline

- A baseline should established before the intervention is introduced. A baseline assessment provides a critical reference point, or benchmark, for assessing changes and impact, as it establishes a basis for comparing the situation before and after an intervention, and for making inferences as to the effectiveness of the programme.
- Ideally you should have more that one time point for your quantitative baseline data to ensure that your baseline isn't an extraneous timepoint in itself

Collect and Analyse your Data

- You will also need to decide how frequently data should be collected and reported. This will be determined by how readily available the data is, the length of the project, and over what period changes are anticipated.
- The Measurement for Improvement resources listed on slide 21 provide advice on how to do this.

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Step four: resourcing & conducting your evaluation

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Resourcing your evaluation

What?

- There are 2 principal ways to resource your evaluation:
  - Utilising established analytical resource, or
  - Commissioning an external evaluation.
- You should ensure that you have analytical resource to help develop the approach and input into the evaluation.

Why?

- Evaluation requires dedicated resource.

When?

- Before implementation.

Who?

- Project Delivery Team, i.e. those supporting the delivery and oversight of the project. This should include analytical support.

How?

Points to consider:

- What type of evaluation are you planning?
- What internal capacity and capability is available to carry out the evaluation?
- Do you have capacity internally that you can build on to develop evaluation expertise?
- How much budget have you allocated to commission an external evaluation?

CADEAS supporting resources

- Commissioning an evaluation reference guide

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Step five: review and share your evidence

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Review and share your evidence

What?

- Share your evaluation findings and learning with your stakeholders and other interested parties.

Why?

- It is important to review evidence at regular intervals, both as the project is being implemented – to drive improvements – and after, to understand whether anticipated impacts were achieved.
- Important to share learning – even when things do not go as planned.

When?

- At regular intervals as the project is being implemented.

Who?

- Involve your stakeholders in reviewing.
- Consider who would be interested in your findings.

How?

- Review the evidence against your logic model.
- Establish formal feedback loops to share emerging evidence – this should be a part of formal project management and reporting, set out from the project's inception.
- CADEAS will facilitate the sharing of evidence and best practice across Cancer Alliances.

Review evidence with your project team

- It is important that you review the evidence as the project progresses and not just at the end – interim reporting of how things are going can tell you a lot.
- Establishing local rapid feedback loops through already established project delivery groups, e.g. steering groups, provides a useful forum to share evidence and learning throughout the lifetime of a project and not just at its end. This allows you to collectively reflect on the emerging evidence and test it against your assumptions in your Theory of Change.
- Reflecting on your Theory of Change can be a helpful way to test if your assumptions have been correct and if the project is working as planned.
- This is particularly important for process evaluations where you are evaluating how things are working. Emerging evidence may tell you that things aren't going as planned and that you may need to change your approach.
- If you have commissioned an external evaluation you should ask your evaluator to meet with you on a regular basis to present their findings.
- The frequency of these meetings will again depend on the length of the project.

Share your evidence more widely

- It is important that emerging evidence is shared beyond the immediate project team.
- There are many ways this can be done, i.e. through newsletters, webinars, conference posters and presentations as well as journal articles.
- Further, CADEAS will facilitate the sharing of emerging evidence generated through local evaluations to both support Cancer Alliances and to inform national policy.

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Additional resources

The following is a select list of publicly available resources to support Cancer Alliances to establish local evaluations:

- HM Treasury The Magenta Book Guidance for evaluation
- The Evaluation strategy for new care model vanguards
- Better Care Fund How to... understand and measure impact
- Introduction to Logic Models on gov.uk
- Midlands and Lancashire Commissioning Support Unit Guide to using logic models
- NHS Improvement Measurement for Improvement: an overview,
- NHS Improvement Seven steps to measurement for improvement
- NHS Improvement Interactive improvement measurement tool.