SCOTTISH COLLABORATION FOR PUBLIC HEALTH RESEARCH AND POLICY (SCPHRP) RESEARCH METHODS SEMINAR SERIES

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An introduction to evaluability assessments

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My expertise

Conducting evaluability assessments for

- Scottish Government as part of an **Evaluability Assessment Collaborative**

- Local Authorities/Third Sector part of the **Public Health Intervention Responsive Studies Teams (PHIRST)**

- **Supervising Master's students to undertake them**

Range of evaluability assessments involving team at SCPHRP

1. Family Nurse Partnership

http://www.healthscotland.com/documents/26102.aspx

2. Free School meals

http://www.healthscotland.com/documents/24294.aspx

3. Pregnancy and parenting in young people strategy

http://www.healthscotland.com/documents/27289.aspx

4. Enhanced health visiting programme

http://www.healthscotland.com/documents/28090.aspx

5. Scotland's baby boxes

https://www.gov.scot/publications/evaluability-assessment-scotlands-baby-box-report-scottish-government/

6. No-One Left Behind Employability Service

http://phirst.nihr.ac.uk/wp-content/uploads/2022/09/NOLB-EA-Report.pdf

7. Health Issues in the Community programme

https://bmcmedresmethodol.biomedcentral.com/articles/10.1186/s12874-017-0334-4

WHAT IS AN EVALUABILITY ASSESSMENT?

a pre-evaluation activity designed to maximize the chances that any subsequent evaluation of programmes, practices, or policies will result in useful information

Leviton et al 2010

https://pubmed.ncbi.nlm.nih.gov/20235852/

Evaluability Assessment is a decision-making tool

Provides a clear set of recommendations based on:

- Goals of the intervention identified through theory of change

- What is already known from previous research on how it has been evaluated

- Evaluation questions that stakeholders want answered

- What data sources are available for an evaluation
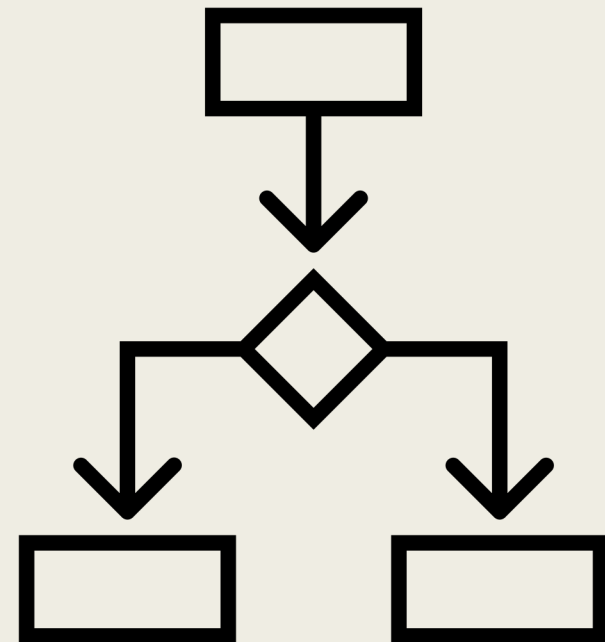
What can evaluability assessments offer?

1 Clarify intervention goals and likelihood of measurable impact, *before* resources are committed to a full scale evaluation

2 Avoid committing evaluation resources if little realistic expectation of benefit

3 Enable constructive engagement with stakeholders

4 Make evaluations more useful

Value of evaluability assessments

They can inform stakeholders about the potential feasibility, scope, approach, and value for money of an evaluation.

Evaluability assessment elements

Methods and approaches vary but include some core elements:

1. engagement with stakeholders from the outset
2. elaboration, testing and refinement of an agreed theory of change (programme theory)
3. identification and review of existing data sources
4. making of recommendations for or against evaluation

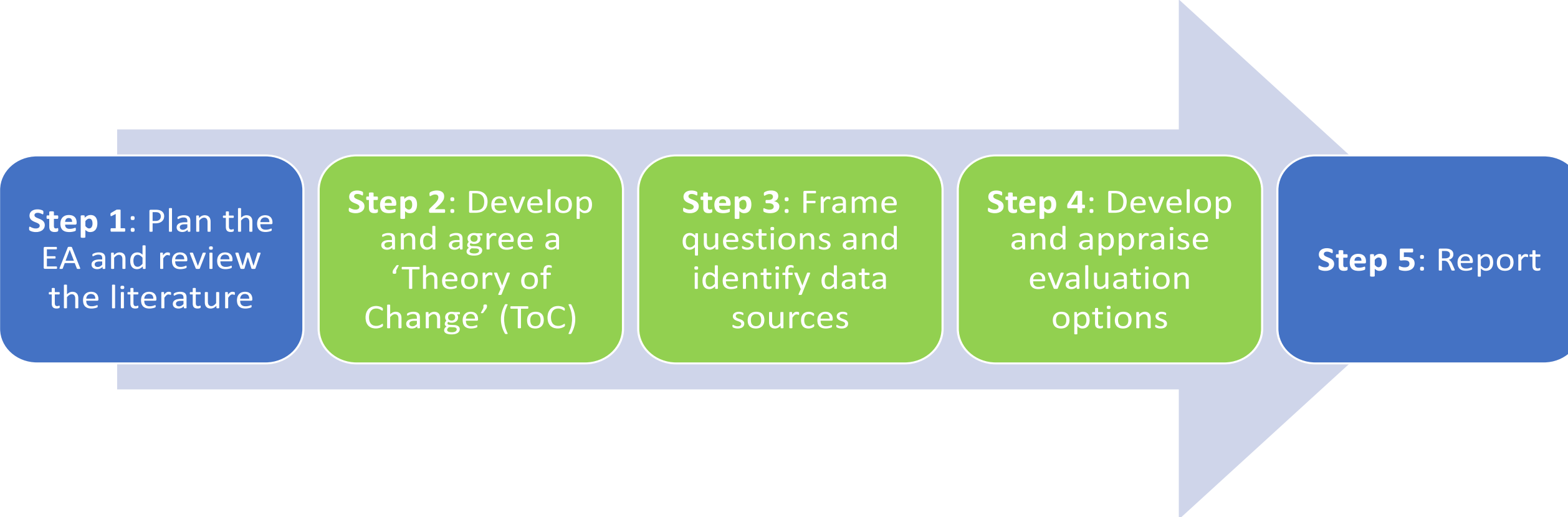# Who can undertake an evaluability assessment?

For large scale programmes, often done by a team external to the programme deliverers, or the funders. The team should have expertise in:

- evaluation methods

- programme theory

- intervention design

- outcomes and outcome indicators

- facilitation and working with a range of stakeholders

But anyone can undertake an evaluability assessment – for example as part of a PhD, or MSc or as practitioners.

Steps of Evaluability Assessment

Step 1: Plan the EA and review the literature

Step 2: Develop and agree a 'Theory of Change' (ToC)

Step 3: Frame questions and identify data sources

Step 4: Develop and appraise evaluation options

Step 5: Report

Workshop 1 → Workshop 2 → Workshop 3

Month 1 → Month 2 → Month 3

Example 1: Evaluability assessment of Family Nurse Partnership (FNP)

Family Nurse Partnership

Background

Developed in US and trials showed it can improve health behaviours in young first time mothers and reduced negative outcomes for children

Implemented in Scotland, but could it improve outcomes when we already have a high level of support?

We were asked by Scottish Government to undertake an Evaluability Assessment to determine the best way to evaluate it in Scotland (https://tinyurl.com/2j6rma6z)

Step 1. Plan EA; undertake rapid review

Identify stakeholders

Funders of the programme/evaluation

Policy makers

Implementors

People involved in delivery of the service

?Service users

Data analysts/people who know about the data available

Develop a timeline for undertaking the EA

Undertake a rapid review of literature/documents to identify programme theory and outcome indicators.

Stakeholders	Role in FNP
Scottish Government	Policy, funding the programme and the evaluation
Local Health Boards	Implementation
FNP National Unit	Development of service/programme theory Evaluation
FNP Education Leads	Education of FNP practitioners
FNP Policy Leads	Policy
Local FNP Leads	Delivery of service
National Services Scotland	None – but understood what data would be available for evaluation

FNP KEY STAKEHOLDERS

STEP 2. DEVELOP AND/OR AGREE PROGRAMME THEORY

What Difference Is The Policy/Intervention Likely To Make, For Whom, And What Are The Key Variations We Might Expect To Observe?

Methods:
Rapid Evidence Review,
Workshop 1 With Stakeholders
Programme theory already well developed

Key elements of a programme theory

Inputs:

what resources do you have to help you achieve your aim?

Activities:

what actions will you take and what things will you do?

Outputs:

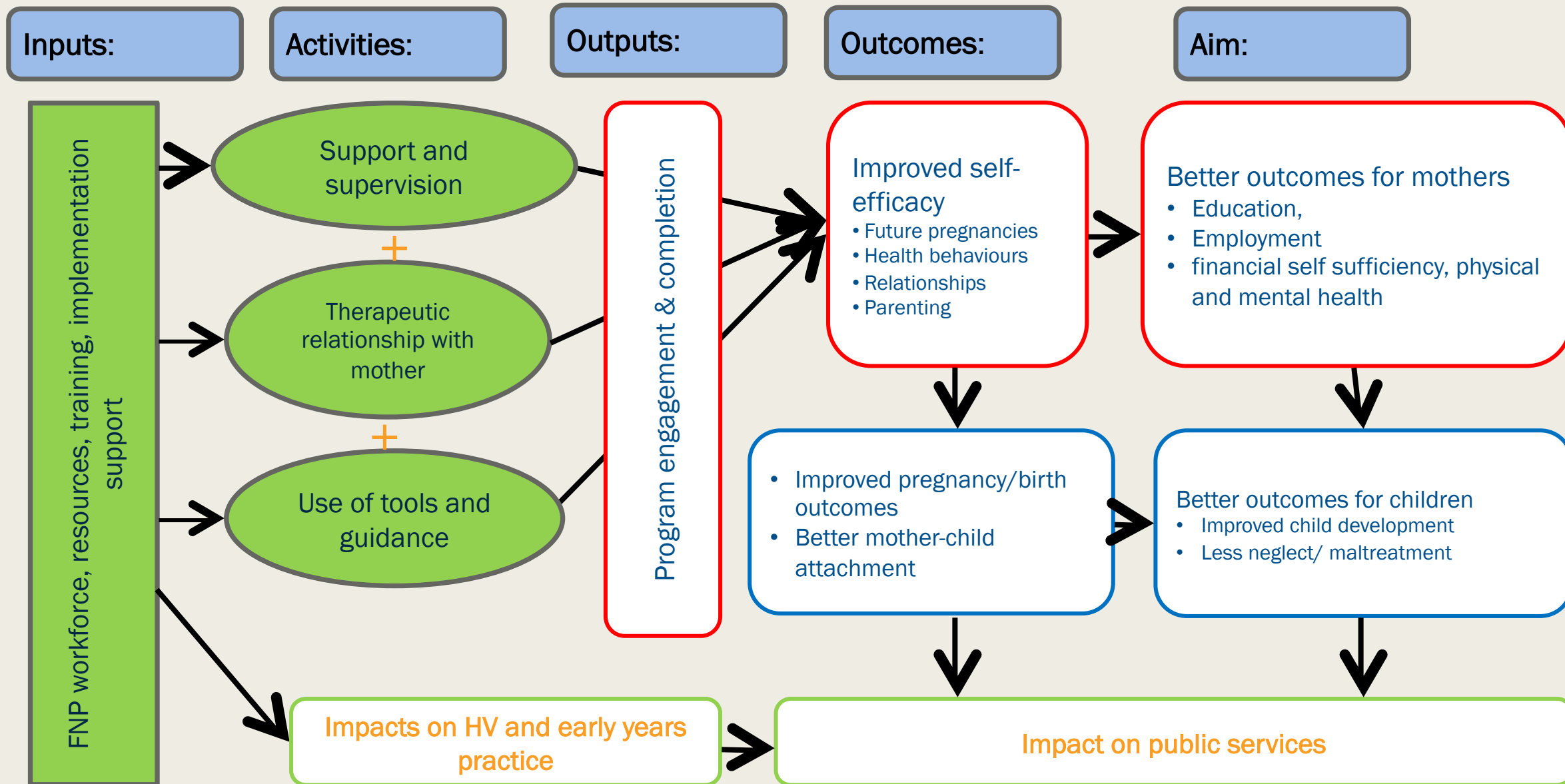what will you produce to help you achieve your aim?

Outcomes:

what are the changes you think will contribute to achieving your aim?

Aim:

what do you want to achieve?

Assumptions: what are the underlying beliefs on which your theory of change is based?

See: New Philanthropy Capital *Theory of change in ten steps*

Programme theory for FNP

Inputs:

Activities:

Outputs:

Outcomes:

Aim:

FNP workforce, resources, training, implementation support

Support and supervision

+

Therapeutic relationship with mother

+

Use of tools and guidance

Program engagement & completion

Improved self-efficacy
• Future pregnancies
• Health behaviours
• Relationships
• Parenting

Better outcomes for mothers
• Education,
• Employment
• financial self sufficiency, physical and mental health

• Improved pregnancy/birth outcomes
• Better mother-child attachment

Better outcomes for children
• Improved child development
• Less neglect/ maltreatment

Impacts on HV and early years practice

Impact on public services

As part of step 2, explore programme reality

Is the programme being delivered as intended?

Have all of the assumptions and external influences been identified?

Does further work need to be undertaken before it is ready to be evaluated?

In the case of the FNP, it was well established so no further work was deemed necessary

Step 3. Frame questions, and identify data sources

May need to:

- prioritise which outcomes stakeholders are interested in

- include process, impact, and economic evaluation questions

- Have people in the workshop who understand data sources

Methods: workshop plus follow up work to identify and confirm data sources

Deciding on FNP evaluation questions

Process evaluation (see report https://tinyurl.com/2j6rma6z)

Impact evaluation
• Have outcomes for young first-time mothers and their children exposed to the FNP programme improved by comparison with those receiving usual care?
•   Is there variation in outcomes within/between cohorts?
• Inequalities – are any positive benefits from the FNP programme evenly distributed?
• Has FNP influenced other services for young mothers and their children?

Economic evaluation (see report)

Prioritisation of outcomes

Process outcomes (outputs)

    Reach and engagement

Short term

    Improved self-efficacy

Medium term

    Mother-child attachment

    Improved maternal health

    Pregnancy outcomes (medium term outcome)

Long term

    Improved child health and development

    Impacts on other services

    Improved life circumstances

Identifying sources of data for prioritized outcomes

- The FNP national unit collected data on most outcomes.

- Other sources of data included Scottish Morbidity Record datasets held by ISD, and the Growing Up in Scotland (GUS) birth cohort survey

- Overall the data available for evaluation was good (this is not always the case)

Data to assess outcomes

Outcome	Outcome indicators	FNP	ISD	GUS
Reach and engagement		x		
Improved self-efficacy				
Mother-child attachment				
Improved maternal health				
Pregnancy outcomes (medium term outcome)				
Improved child health and development				
Impacts on other services				
Improved life circumstance				

STEP 4. DEVELOP AND APPRAISE EVALUATION OPTIONS

Impact evaluation options for FNP

1. Continue as now, with enhanced analytical plan to identify predictors of variation in outcomes

2. As 1, plus cluster-randomised controlled trial of FNP vs. standard home visiting practice

3. **As 1, plus natural experimental study**

4. Realist evaluation – what works for whom in what circumstances and why?

Outcome evaluation options

1. Continue as now, with enhanced analytical plan to identify predictors of variation in outcomes

2. As 1, plus cluster-randomised controlled trial of FNP vs. standard home visiting practice

3. As 1, plus natural experimental study

4. Realist evaluation – what works for whom in what circumstances and why?

Pros

- Stop-start recruitment should 'balance' participants and non-participants
- Range of methods for identifying impact and testing for bias
- Much larger numbers available than in a randomised trial
- Partly retrospective so results available relatively quickly
- Relatively cheap

Cons

- Choice of outcome measures constrained by routinely available data
- Analysis more complicated than in a randomised trial
- Relatively novel, so may lack credibility of a randomised trial
- Individual-level linkage required

What happened next?

Scottish Government commissioned a natural experiment of FNP as per the recommendations.

The protocol for the natural experiment has been published https://pubmed.ncbi.nlm.nih.gov/32935057/

FREE SCHOOL MEALS

https://www.healthscotland.com/documents/24294.aspx

Background

- Until January 2015, school meals were only provided free of charge to children whose parents were in receipt of certain benefits etc (targeted approach).

- Following positive results from an earlier trial, Scotland introduced free school meals for children in P1–P3 (5-7 years) in January 2015 (universal approach).

- The targeted system of free school meals remained for children in P4 and above.

Step 1. Plan EA; undertake rapid review

Stakeholders at workshop

- Education Scotland /HMI inspectorate – service implementation
- Scottish Government – policy makers

STEP 2. DEVELOP AND/OR AGREE PROGRAMME THEORY

What Difference Is The Policy/Intervention Likely To Make, For Whom, And What Are The Key Variations We Might Expect To Observe?

Methods:
Rapid Evidence Review,
Workshop 1 With Stakeholders
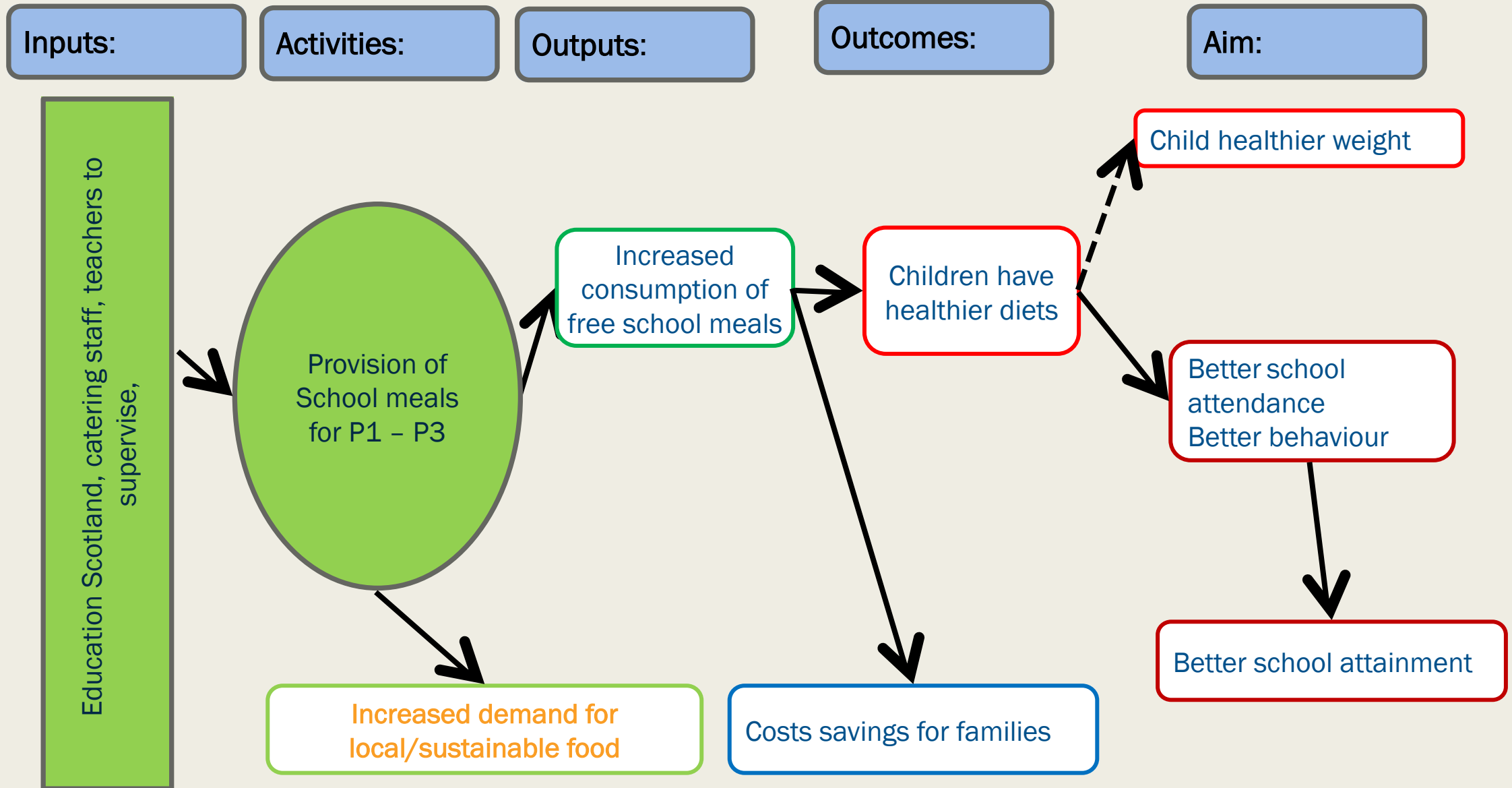*No programme theory had been developed*

Rapid review & consultation

Identified following potential outcomes:

- Increased school meal uptake
- Cash savings for families not already in receipt of free school meals
- Increased demand for food from local and sustainable sources
- Healthier diets
- Improved school behaviours
- Improved educational attainment

Theory of change for FNP

Inputs:

Activities:

Outputs:

Outcomes:

Aim:

Education Scotland, catering staff, teachers to supervise,

Provision of School meals for P1 – P3

Increased consumption of free school meals

Increased demand for local/sustainable food

Children have healthier diets

Costs savings for families

Child healthier weight

Better school attendance Better behaviour

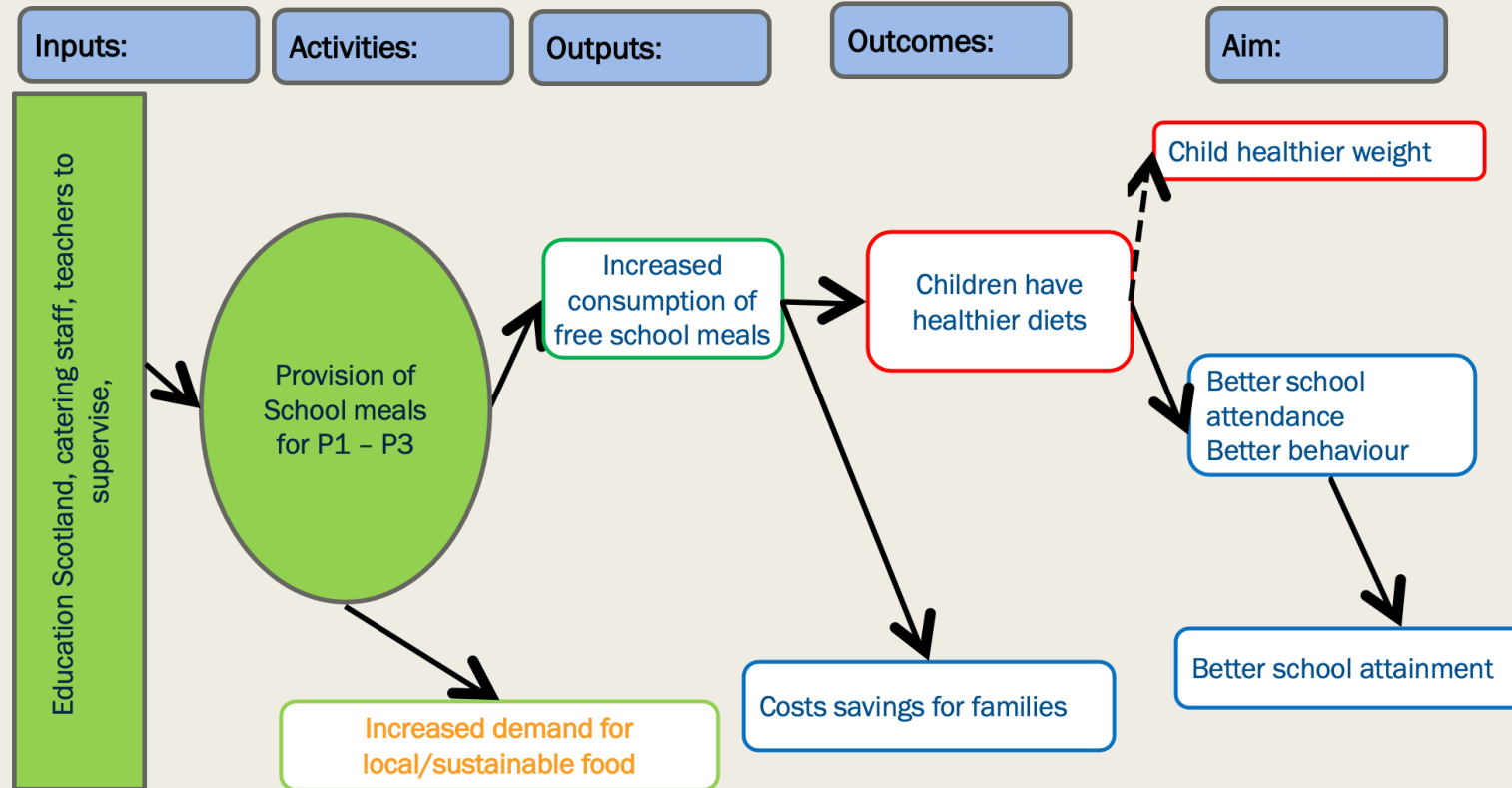Better school attainment

As part of step 2, explore programme reality

Is the programme being delivered as intended?

Have all of the assumptions and external influences been identified?

Does further work need to be undertaken before it is ready to be evaluated?
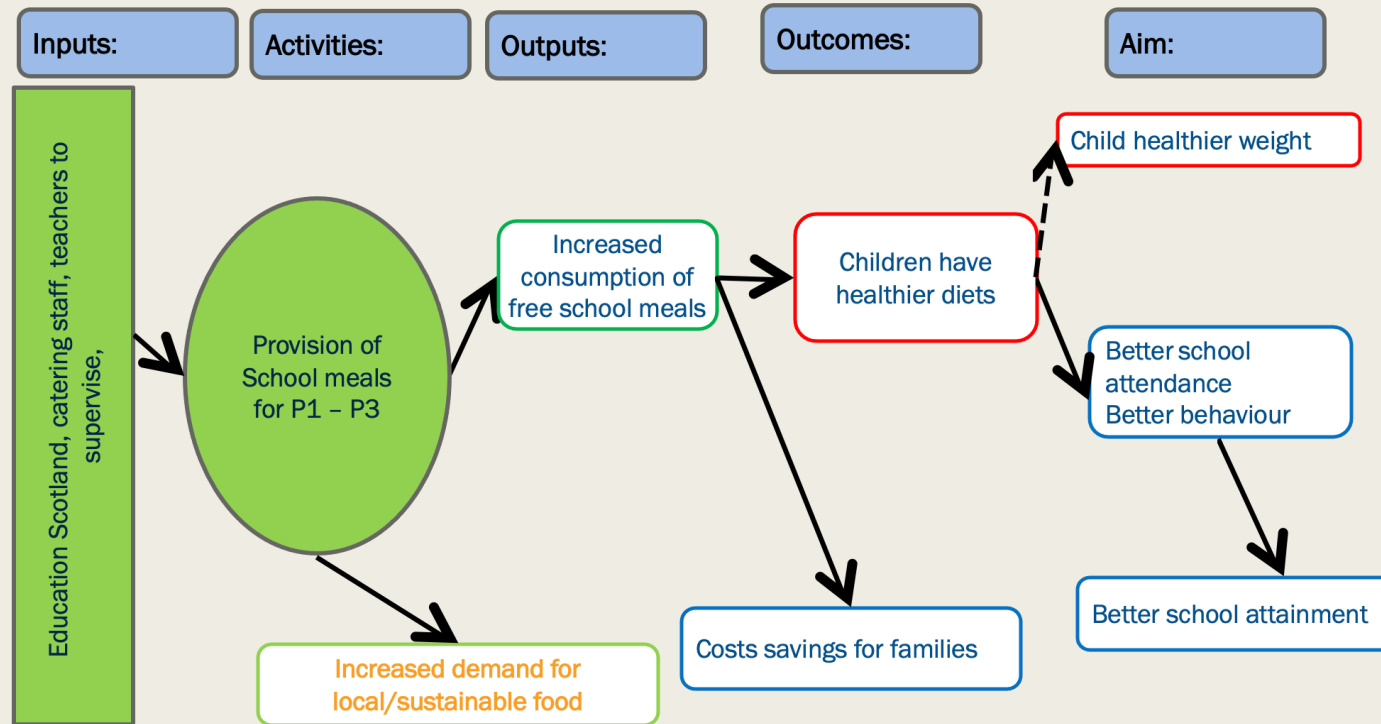
Underlying assumptions which need to be tested

Inputs:

Activities:

Outputs:

Outcomes:

Aim:

Education Scotland, catering staff, teachers to supervise,

Provision of School meals for P1 – P3

Increased consumption of free school meals

Increased demand for local/sustainable food

Children have healthier diets

Costs savings for families

Child healthier weight

Better school attendance
Better behaviour

Better school attainment

Underlying assumptions
- School meals are healthier than packed lunches.
- Children will eat the food provided.
- Children make healthy choices.
- Stigma/peer pressure will not affect P1–P3.
- Parents are supportive of UFSM policy.
- Schools provide a good lunchtime
- Children eat each day (food is 'balanced' over a week).
- No compensatory unhealthy eating later in the day.

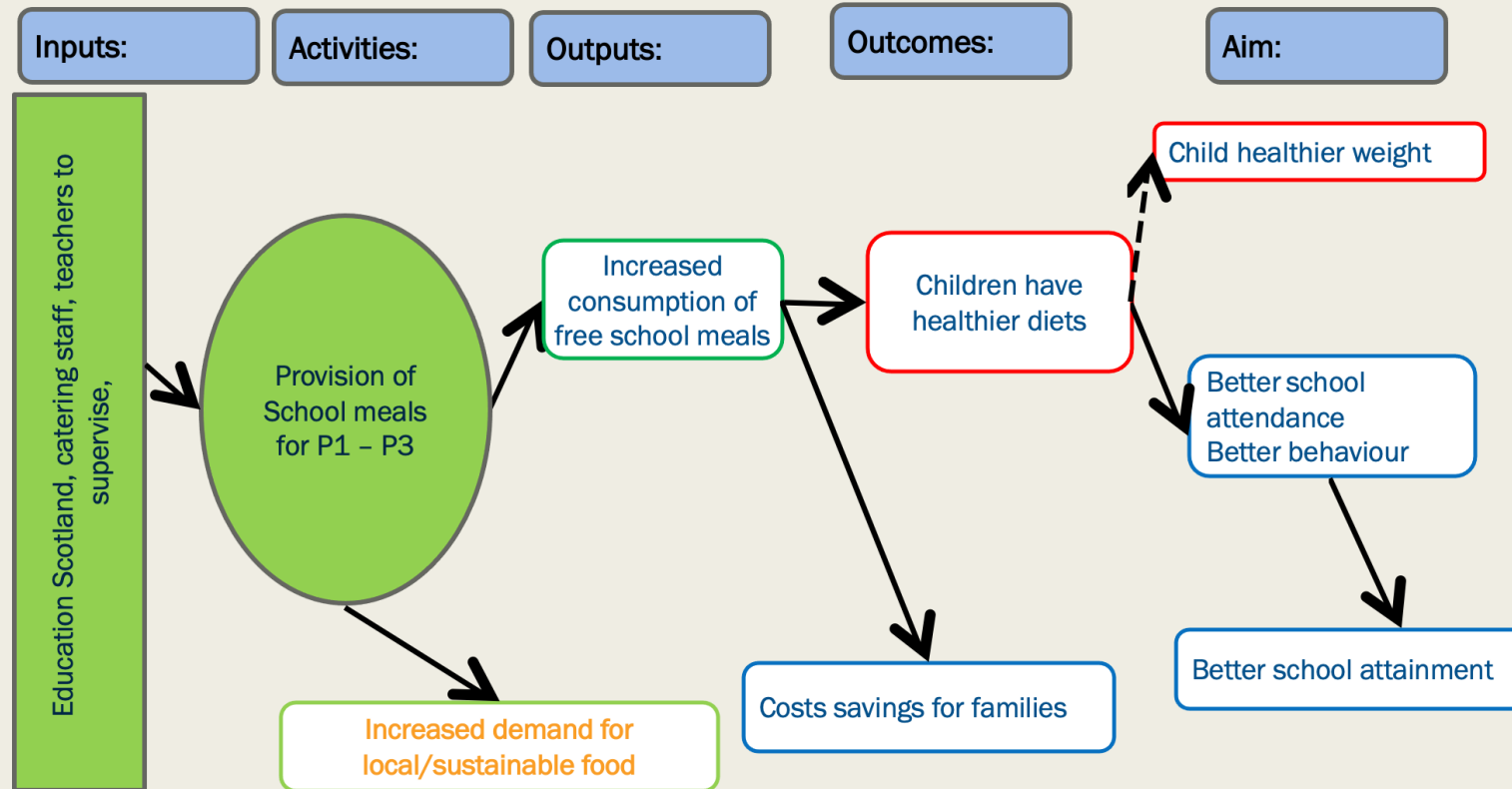# External factors which might affect implementation

Inputs: | **Activities:** | **Outputs:** | **Outcomes:** | **Aim:**

Education Scotland, catering staff, teachers to supervise,

Provision of School meals for P1 – P3

Increased consumption of free school meals

Children have healthier diets

Child healthier weight

Better school attendance Better behaviour

Better school attainment

Increased demand for local/sustainable food

Costs savings for families

External factors

- Other school food policy (local and national).
- School approach to school meals and nutrition education.
- Parental engagement in school /school meals.
- Other demands on dual facilities, e.g. PE.
- Child Healthy Weight initiatives in schools.
- Welfare reforms and wider economic context.
- Food availability and cost.
- Levels of early years provision.

Potential unintended consequences which need to be assesse

Inputs:

Activities:

Outputs:

Outcomes:

Aim:

Education Scotland, catering staff, teachers to supervise,

Provision of School meals for P1 – P3

Increased consumption of free school meals

Children have healthier diets

Child healthier weight

Better school attendance Better behaviour

Better school attainment

Increased demand for local/sustainable food

Costs savings for families

Potential unintended consequences

- Effect on claims for other benefits (e.g. clothing allowance) due to administrative link with FSM

- Other aspects of school life suffer (e.g. PE, breakfast clubs).
- School meal food quality suffers.
- Increase inequalities – greater benefits for the better-off families

- Current P4–P7 and other siblings are put off having school meals.
- Food waste increases.
- Parents' time freed up.

Step 3. Frame questions, and identify data sources

May need to:

■ prioritise which outcomes stakeholders are interested in

■ include process, impact, and economic evaluation questions

■ Have people in the workshop who understand data sources

Methods: workshop plus follow up work to identify and confirm data sources

Key evaluation questions

- Does school meal uptake increase?

- Who benefits most/least in terms of household finances and diet?

- Are school meals healthier than what children had before? What are the impacts of having school meals on P1 to P3 children's diets?

- What are the impacts of introducing FSM for all P1 to P3 on school life and classroom behaviours?

- Do those who stand to benefit the most from FSM (i.e. children eligible but previously not registered and those from families on low/insecure incomes) have better educational outcomes?

Data sources

Outcome	Data source available?
Increased school meal uptake	Yes, but enhanced data gathering required
Cash savings for families not already in receipt of free school meals	Possibly
Increased demand for food from local and sustainable sources	Difficult to assess
Healthier diets	Only whether they have been provided, not whether they were eaten
Improved school behaviours (P1-P3)	Not at that age
Improved educational attainment (P1-P3	Not at that age

Evaluation options for Free School Meals

1. Rely on existing routinely collected survey and administrative data on uptake of school meals and educational outcomes, and estimate the impact of FSM

2. As option 1 but also gather additional data by (a):

■   work with schools inspectorate to enhance data gathering in a sample of schools;

■   gather data in the Growing Up in Scotland survey on uptake of free school meals, and effects on older siblings and meals eaten at home;

■   collect qualitative data to explore families' responses to FSM

3. Enhance routine data gathering, as in option 2, but also conduct a new survey of families in participating schools to explore pupil and family-level outcomes.

Recommendation for Free School Meals

Option 2. As option 1 but also gather additional data by (a) working with the schools inspectorate to enhance data gathering in a sample of schools; (b) gathering data in the Growing Up in Scotland survey on uptake of free school meals, and effects on older siblings and meals eaten at home; 1 (c) collecting qualitative data to explore families' responses to FSM

- Pros: efficient way of widening the range of impacts that can be measured

- Cons: may be difficult to obtain a representative sample of schools, limiting generalisability; may not be feasible to adapt existing surveys very much; range of dietary, educational and financial outcomes that can be measured may still be quite limited.

What happened next?

Scottish government commissioned a process evaluation for FNP as an impact evaluation wasn't feasible at that time.

The Objectives:

1. To identify key variations in implementation, i.e. those that may impact on the intended outcomes described in the theory of change.

2. Identify factors that may be contributing to differences in UFSM uptake across schools and local authorities as monitored by the annual Healthy Living Survey on school meal uptake data.

3. Identify the common barriers and facilitators to implementation and describe how these were overcome or utilised by local authorities and schools.

4. Identify and measure any unintended consequences of implementation and uptake both positive and negative, and whether and how schools/local authorities attempted to mitigate any unintended negative consequences.

5.   Identify learning to improve further the implementation and uptake of UFSM for all P1–P3 pupils.

https://tinyurl.com/jp8f93tm

What happened in other EAs we did?

Topic	EA recommendation	SG decision	
Free School Meals	Primarily process evaluation	Commissioned process evaluation	✔
Family Nurse Partnership	Natural experiment plus process evaluation	Commissioned natural experiment plus process evaluation	✔
Pregnancy and parenting in young people strategy	Primarily process evaluation	No action as yet	
Enhanced Health Visitor	Natural experiment plus process evaluation	Commissioned natural experiment plus process evaluation	✔
Baby box	Evaluation should include both outcome and process evaluation elements	Commissioned outcome and process evaluation	✔

What lessons have we learned?

Decision makers like them!

- understand their own programmes better
- understand the constraints on evaluation design, and what an evaluation can and can't deliver
- existing outcome data can enhance evaluation options

Researchers benefit from them

- shared understanding of 'programme theory' and constraints on evaluation design
- what evaluation questions stakeholder want and need to inform service delivery and sustained funding

EAs most useful when..

- The intervention is well-defined, and ...
- resources have been earmarked for evaluation, but there is genuine uncertainty about whether and how best to evaluate

Thanks

- Please put questions in the chat and I can read them out and answer them

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SCPHRP
Scottish Collaboration for

THE UNIVERSITY of EDINBURGH

Seminar No 2. Feb 2023

21st Feb 2023

Xiaoyang Li

Interpretative phenomenological analysis (IPA) with a focus on caregivers experiences of people living with dementia in care homes

Details to follow soon on our EventBrite page or on twitter @SCPHRP