HEALTHCARE **R**ESPONDING
TO VIOLENCE AND **A**BUSE

Developing programme theory for the evaluation of complex health system interventions for intimate partner violence

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Learning objectives

1. To understand what programme theory is and sources of theory
2. To understand the stages involved in developing programme theory for a complex intervention
3. To begin to draft some programme theory for your HERA2 intervention
4. To understand how to use programme theory to plan your evaluation and select appropriate methods

1. ***What do you think programme theory is and how can it help in the evaluation of complex interventions?***

2. ***Where do the 'theories' come from?***

What is programme theory?

All interventions are driven by theoretical assumptions about how to address a problem, but not always explicitly articulated

- Move away from measuring ***did we get from A to B?***
- To understanding ***how did we get from A to B?***
- "Surface" assumptions on which the intervention is based
- Programme theory is the scaffolding for the evaluation
- Data collected at multiple points in intervention
- Track each link in the chain of assumptions to find out whether the theories on which the intervention is based are realised

Where do the theories come from?

- Formative research (e.g. health systems readiness in HERA1)
- Consult key stakeholders (practitioners, policy makers, researchers, women survivors, NGOs)
- Existing research (e.g. previous evaluations of interventions, systematic reviews, epidemiological studies)
- Experiential knowledge (planner/practitioner experience)
- Common sense logic
- Middle range theories from social science (e.g. sociology, psychology, political science, economics)

Intervention theory: an example from HERA1

Theorising training for primary health care providers to improve their response to women affected by domestic violence and abuse (DVA)

Sources of theory for training: educational theory

Kolb's 1984 educational theory:
Experiential learning – learning by doing, immerse learners in an experience and encourage reflection

Research shows:
Improves learning outcomes, acquisition of new skills, attitudes, and ways of thinking

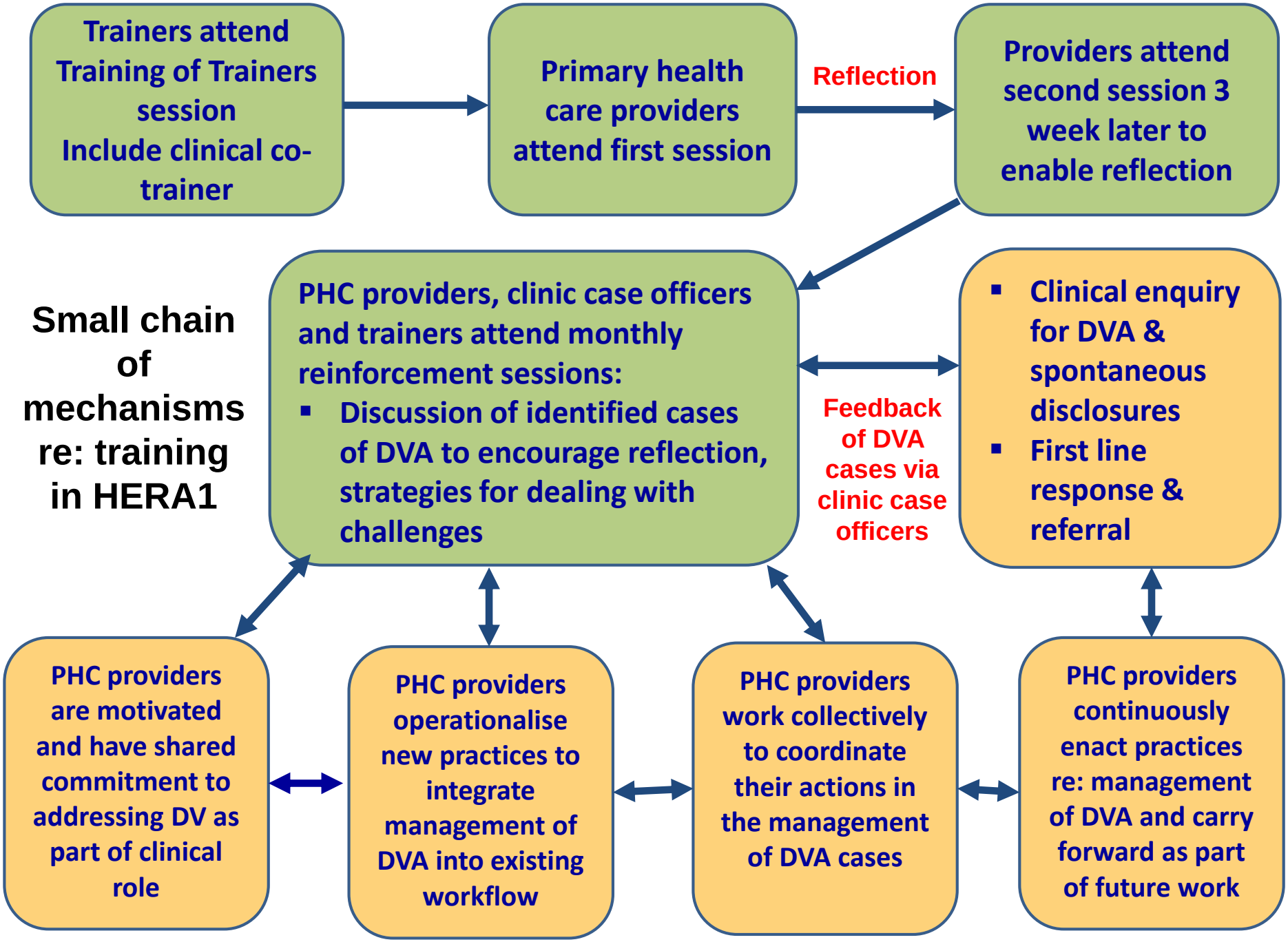
- Balance between experiential activities and theory/content
- Make connections between learning & bigger picture
- Learning activities must be personally relevant to student
- Absence of judgement, safe space to learn at own pace
- Time to reflect on learning & obtain feedback

Sources of theory for training: research

- HERA1 Phase 1 formative research – interviews with PHC providers & stakeholder meeting in Palestine
- Prior training activities described as too theoretical and focused on treating injuries and referring to MoH
- Need for practical training, communication skills building
- Need to address fears of PHC providers (i.e. retaliation)
- UK IRIS highlighted importance of having a clinical co-educator & reinforcement training activities to sustain changes in practice

HERA1 – Health System Long-Term Outcomes

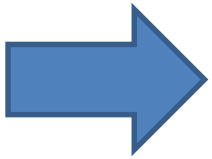
- Increased comfort and feelings of preparedness to detect and manage cases of domestic violence (DV)
- Increased identification & referral of DV cases
- PHC providers feel safe and supported when managing cases of domestic violence
- A greater understanding of their role and the role of others within the HERA referral pathway
- Reinforcement training becomes routinised in the clinics
- Improved coordination and follow-up of domestic violence cases within the health system


Trainers attend Training of Trainers session
Include clinical co-trainer
Primary health care providers attend first session
Reflection
Providers attend second session 3 week later to enable reflection
Small chain of mechanisms re: training in HERA1
PHC providers, clinic case officers and trainers attend monthly reinforcement sessions:
Discussion of identified cases of DVA to encourage reflection, strategies for dealing with challenges
Feedback of DVA cases via clinic case officers
Clinical enquiry for DVA & spontaneous disclosures
First line response & referral
PHC providers are motivated and have shared commitment to addressing DV as part of clinical role
PHC providers operationalise new practices to integrate management of DVA into existing workflow
PHC providers work collectively to coordinate their actions in the management of DVA cases
PHC providers continuously enact practices re: management of DVA and carry forward as part of future work

I-Decide, a web-based DV intervention for women Hegarty et al 2015

Intervention components "A"

- Information on healthy relationships
- Danger assessment
- Decision aid to weigh up priorities
- Tailored safety planning
- Links to resources



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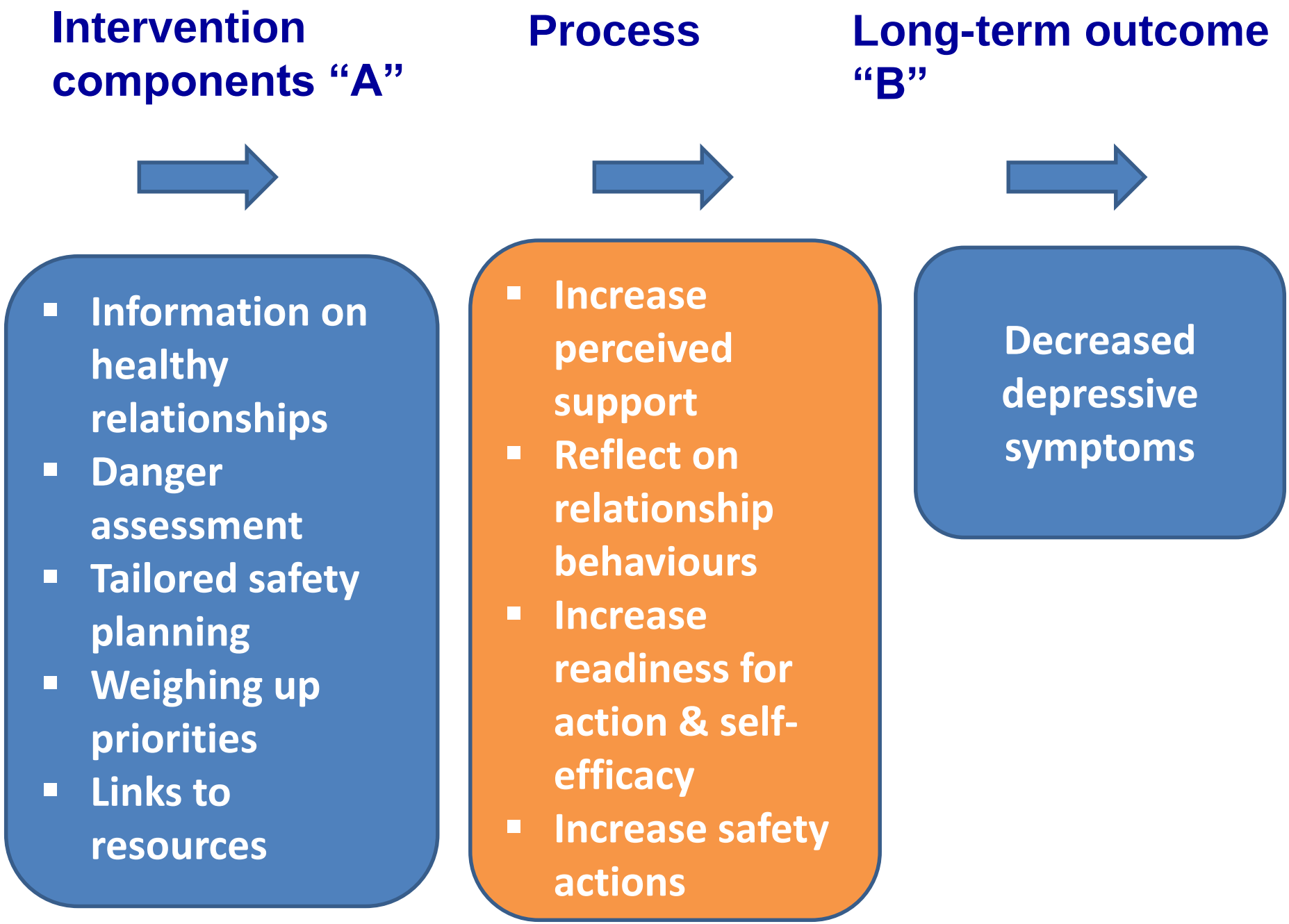
Long-term outcome "B"

Decreased depressive symptoms


Intervention components "A"
Process
Long-term outcome "B"
Information on healthy relationships
Danger assessment
Tailored safety planning
Weighing up priorities
Links to resources
Increase perceived support
Reflect on relationship behaviours
Increase readiness for action & self-efficacy
Increase safety actions
Decreased depressive symptoms

What comes first – intervention or theory?

- Ideally, you start developing your intervention from the programme theory
- However, most HERA2 interventions (except Sri Lanka) will modify or adapt an existing intervention
- Can develop programme theory for an existing intervention, as adaptations for different contexts is needed
- Can also develop programme theory for a completely new intervention

Steps in Developing a Theory of Change – inspired by work of the Aspen Institute

Participatory approach with key stakeholders/formative research HERA1

1. Gain consensus on the *longer-term outcomes* that the intervention will achieve

e.g.

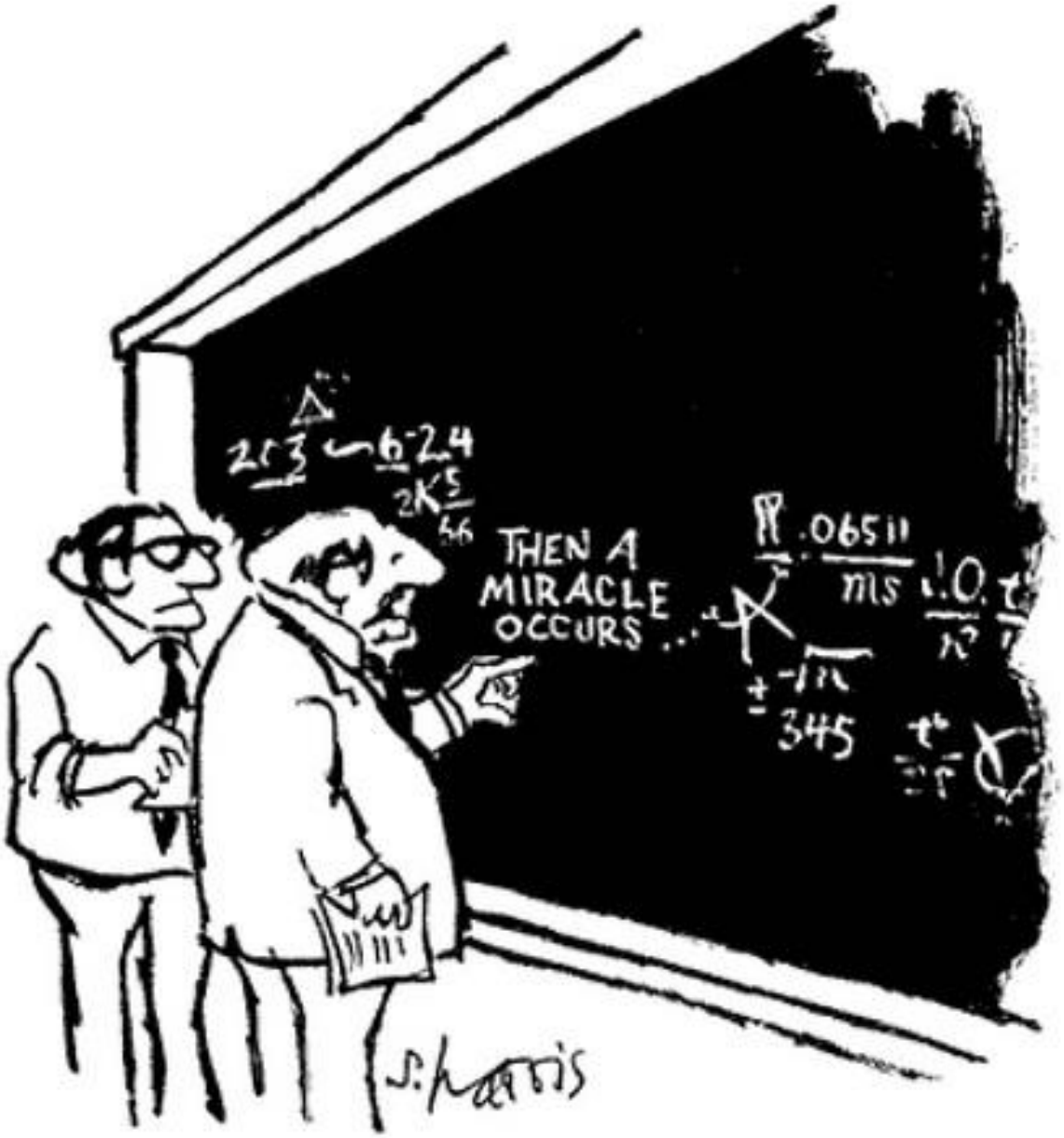
- *Increased identification and referral of DVA cases to clinic case officer/NPV person*
- *PHC providers feel safe and supported in managing cases of DVA*
- *Women experience a non-judgemental response from PHC providers and other professionals*
- *Women find the referral pathway safe and acceptable*

Tips: might be at the health system level, community or individual (provider/woman) level. Outcomes should also be important to key stakeholders

Group work (10 mins)

- **Work in country teams for your HERA2 intervention – external delegates choose a team to work with**
- **Identify and write down *one* *or* *two* long term outcomes of your intervention**
- **Can be at the provider/woman/system level/community level**
- **Don’t worry about perfect wording – can be refined**

I have my long-term outcomes
How do I get from A to B?



"I think you should be more explicit here in step two."

2. Articulate the causal pathway - *intermediate outcomes* that need to occur

e.g.

- *PHC providers attend 1st session*
- *PHC providers attend 2nd session 3 weeks later*
- *PHC providers, clinic case officers attend monthly reinforcement sessions*
- *PHC providers are motivated and develop a shared commitment to addressing DVA as part of their clinical role*

Tips: Think about what needs to happen & what needs to be in place to achieve the longer-term outcomes. Programme activities produce intermediate outcomes e.g. delivering training is a programme activity.

3. Define *program activities* required to bring about intermediate outcomes

e.g.

- *Leaflets and posters placed in pilot clinics to raise awareness of DVA*
- *Training team deliver ToT and provider sessions as intended*
- *MoH mobilise existing resources to enable initial and reinforcement training sessions to occur*
- *Clinic case officers for DVA provide feedback on identified cases for reinforcement training sessions*

Tip: What <u>actions</u> or <u>resources</u> are needed to move from one intermediate outcome to another?

4. **Articulate *'assumptions'* about internal and external conditions that may affect the intervention**

e.g.

- *PHC providers are able to obtain confidential space in the clinic*
- *Clinics have the resources to absorb the intervention*
- *Women patients have the means (i.e. finances, access to transport, freedom etc) to attend follow-up appointments*

Tip: Often outside control of intervention, but important to try to capture in the evaluation. Ask, <u>what</u> or <u>who</u> can affect achievement of the intermediate outcomes

5. Think about the rationale – 'evidence' for the causal pathway

e.g.

- *Evidence that political will and endorsement by MoH supports implementation and sustainability – Garcia Moreno 2015, Colombini 2017*
- *Kolb's 1984 experiential learning cycle*
- *IRIS findings from UK primary health care*
- *Formative research phase from HERA1*
- *Stakeholder meetings*

Tip: this stage often comes later. Research team look at draft ToC and think about the evidence that helps to explain connections between things, how things work

6. *Define indicators* – collect data to track progress along intervention pathway

- ***Number and types of training sessions delivered and attendance by different PHC providers***
- ***Documentation of DVA cases, referrals offered and taken up 4 months post training compared to one year prior***
- ***PHC providers' understanding of their role and responsibilities, and that of others in managing DVA cases***
- ***Changes in PHC providers' perceptions of personal safety and support when managing cases of DVA***

Tips: Who and what will be impacted? How does the indicator need to change for us to claim that we achieved the intermediate outcome? How long will it take to bring about the change? When should we measure the indicator and how many times? Who will collect the data? What data collection methods (e.g. interviews, surveys, records, observation etc…)

Theorise negative mechanisms – "Dark Logic" – Bonell 2015

Examples from Palestine (Sources: stakeholder meeting and Phase 1 formative research)

- Publicising the role of PHC clinics in the management of DVA, via social protection committees and the wider community, might pose a risk to women as it is likely to result in the prevention of women attending the pilot clinics

- Using a clinic case officer that lives in the same village as women poses a risk, as women may be more reluctant to disclose and seek help, confidentiality may be compromised – placing both woman and case officer at risk of retaliation

Group work (20 mins)

- **Choose *one* of your long-term outcomes. Use post-its and begin to map out your intervention theory**
- **What programme activities will produce which intermediate outcomes?**
- **Are there any internal or external factors that might negatively affect implementation of your intervention?**
- **Don’t worry about perfect wording at this stage – can be refined**
- **Place them in rough order on the flip chart**

Some caveats

- A ‘theory’ doesn’t necessarily enhance potential intervention effectiveness
- Propensity to select ‘*off-the-shelf*’ or popular theory which may be inappropriate
- Multiple theories may be required
- Reliance on individual level theorising instead of community/organizational/system level
- Mechanisms of change contingent on ***context*** – past theory and evidence may not be relevant
- Theorise potential harmful outcomes *“dark logic”*

Summary

- **Testing intervention theory:**

  - What mechanisms produced intended/unintended outcomes?

  - Did planned activities achieve the expected outcomes?

- **Process evaluation:**

  - Did implementation occur as expected (need to distinguish between implementation failure and theory failure)

  - Sub-group analysis (did intervention work differently for different people/settings/geographical locations)

- **Contribution to generalizable knowledge** about how complex social interventions work

- **Development of new or modified theory**

Time for a break
30 minutes

Using programme theory to plan your evaluation using appropriate indicators and methods

What is evaluation?

A process *that attempts* ***to determine*** *as systematically and objectively as possible the relevance, effectiveness and* ***the impact of activities*** *in the light of their possible objectives"*

Dictionary of Epidemiology 5th Edition, 2008

"The objective of evaluation is ***to improve decision-making****"*

Best Practice Guidelines for Evaluation, OECD 1998

How to use a ToC for an evaluation

1. *Purpose and scope*
2. *Research questions*
3. *Design and methods*
4. *Data analysis and interpretation*

1. Define evaluation purpose and scope

"evaluate **changes** in the identification of DV, first-line support and referral; and changes in sexual and reproductive health and occurrence of violence…, surface intervention **mechanisms** and understand the change process in the health system"

"…test [intervention] **feasibility** and **acceptability** in RHS"

"explore **feasibility**, **acceptability**, and **sustainability**… and perceived **effect**iveness"

"evaluate the **process** of incorporating [the intervention] within SRH/ANC setting, assess intervention **effect** on women's health and DV"

1. Define evaluation purpose and scope

1. What resources (budget, staff, time) are available for the evaluation?
2. Why are you planning the evaluation?
   - For accountability?
   - To document the programme's results to an organisation or funder?
   - To improve the intervention?
   - Something else?

1. Define evaluation purpose and scope

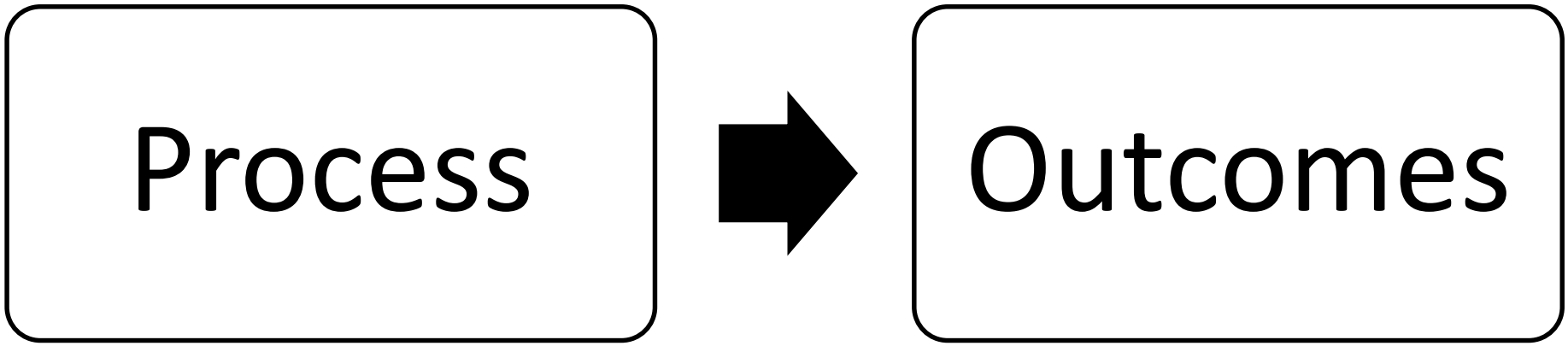
3. Who will use the evaluation results?
   - Local commissioners of SRH services/DV services?
   - National Health authorities?
   - Funders?
4. What will they do with it?
   - Make decision (funding, scale up)?
   - Change process (policy and practice)?
5. What questions do they have about the intervention?

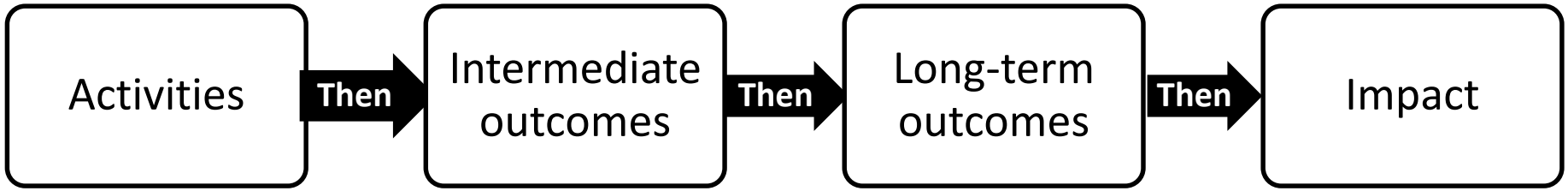
Group work (15 mins)

1. Use your protocol, ToC map, proforma section A
2. Talking in pairs, clarify:
   - Evaluation resources
   - Why are you planning the evaluation
   - Primary users of the evaluation
   - What will they do with it.
   - What questions do your primary users have about the intervention
3. Make a list of primary intended users and their uses for the evaluation
4. Agree revised evaluation purpose and scope.

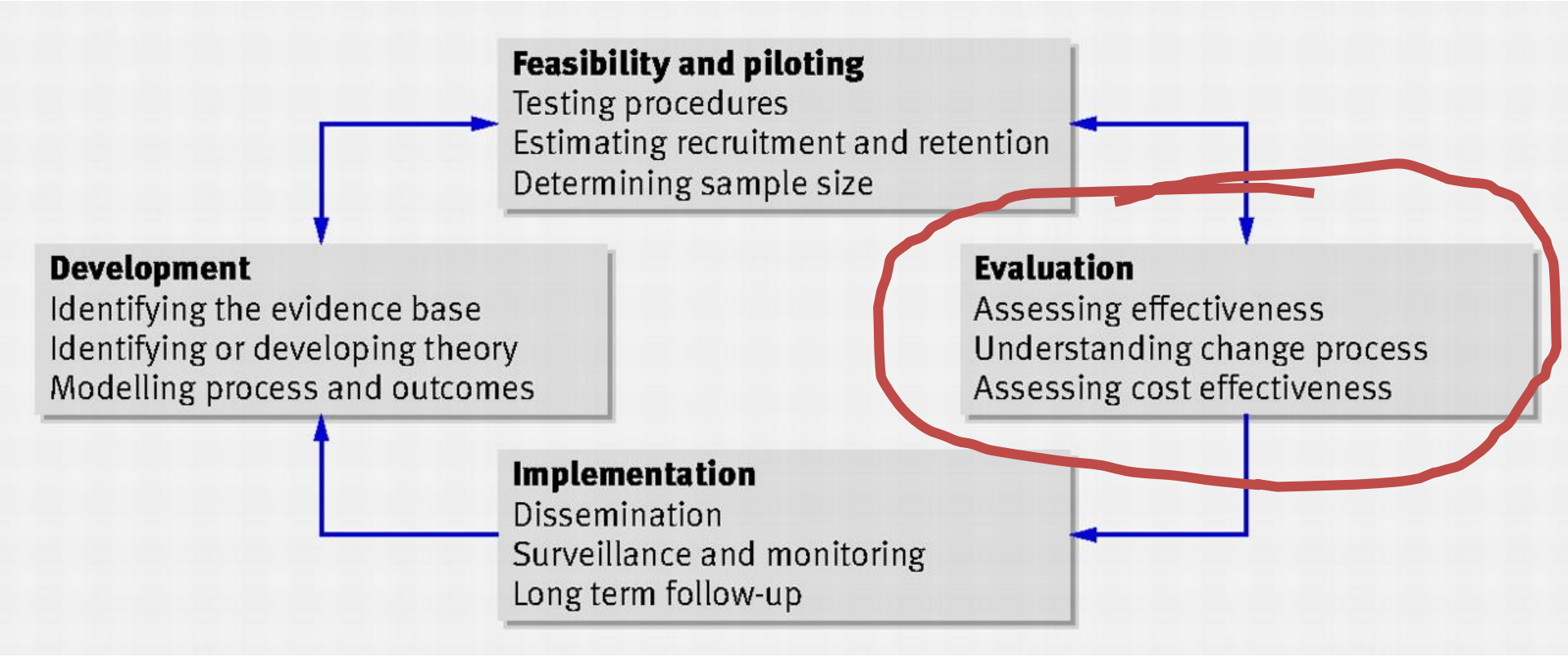
Who do you need to discuss with to get clarity?

2. Determine type of evaluation





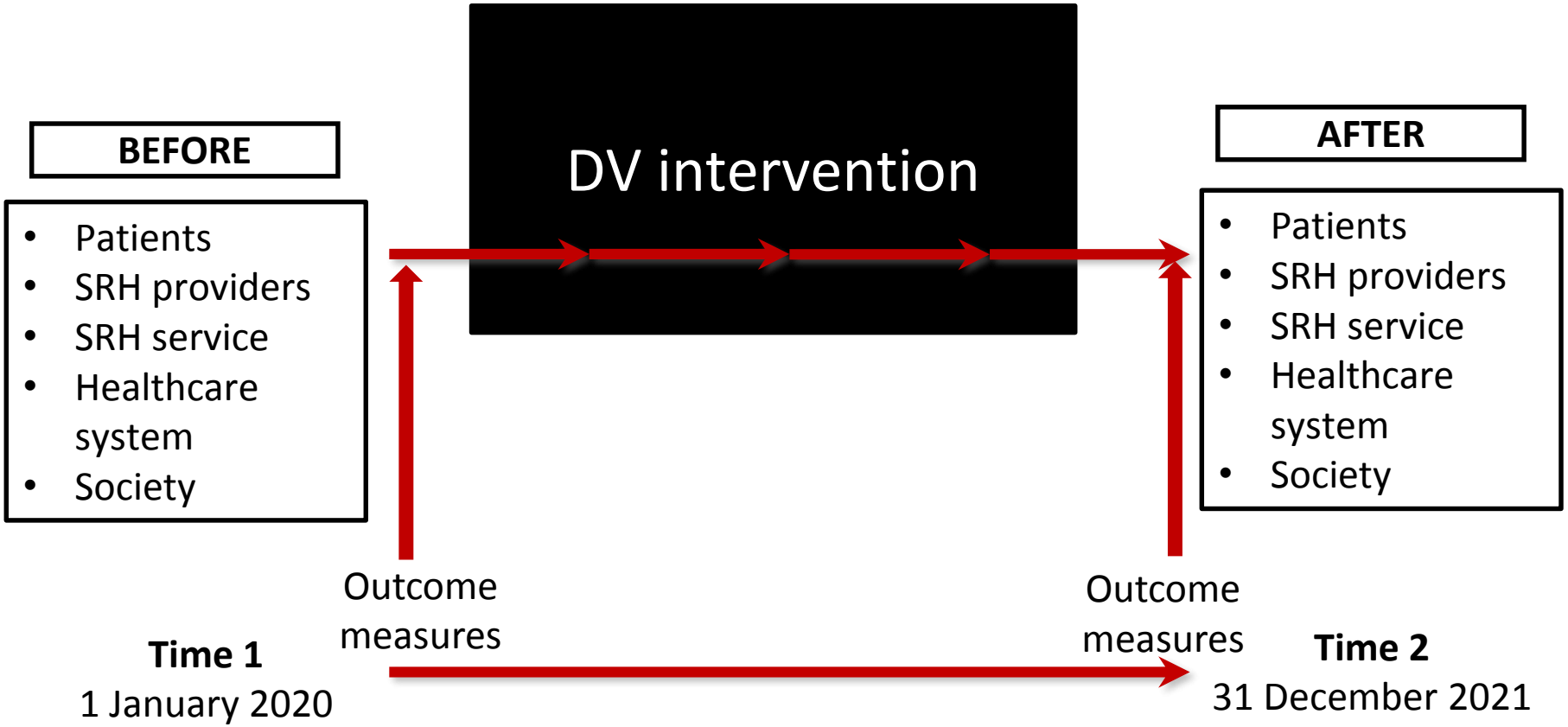
2. Determine type of evaluation



2. Determine type of evaluation

Process evaluation	**Outcome evaluation**
To inform changes or improvements in the intervention's operations	To identify the results or effects of the intervention
To document what the intervention is doing and to what extent and how consistently the intervention has been implemented as intended	To measure intervention beneficiaries' changes in knowledge, attitudes, behaviours and/or conditions that results from an intervention
Does not require a comparison group	May include comparison group
Includes quantitative and qualitative data collection	Typically require quantitative data and statistical methods

3. Develop research questions



3. Develop research questions

Research questions for **outcome evaluation** ask about:

In outcomes:

- Knowledge
- Skills
- Attitudes
- Opinions
- Behaviour
- Conditions
- Status

3. Develop research questions

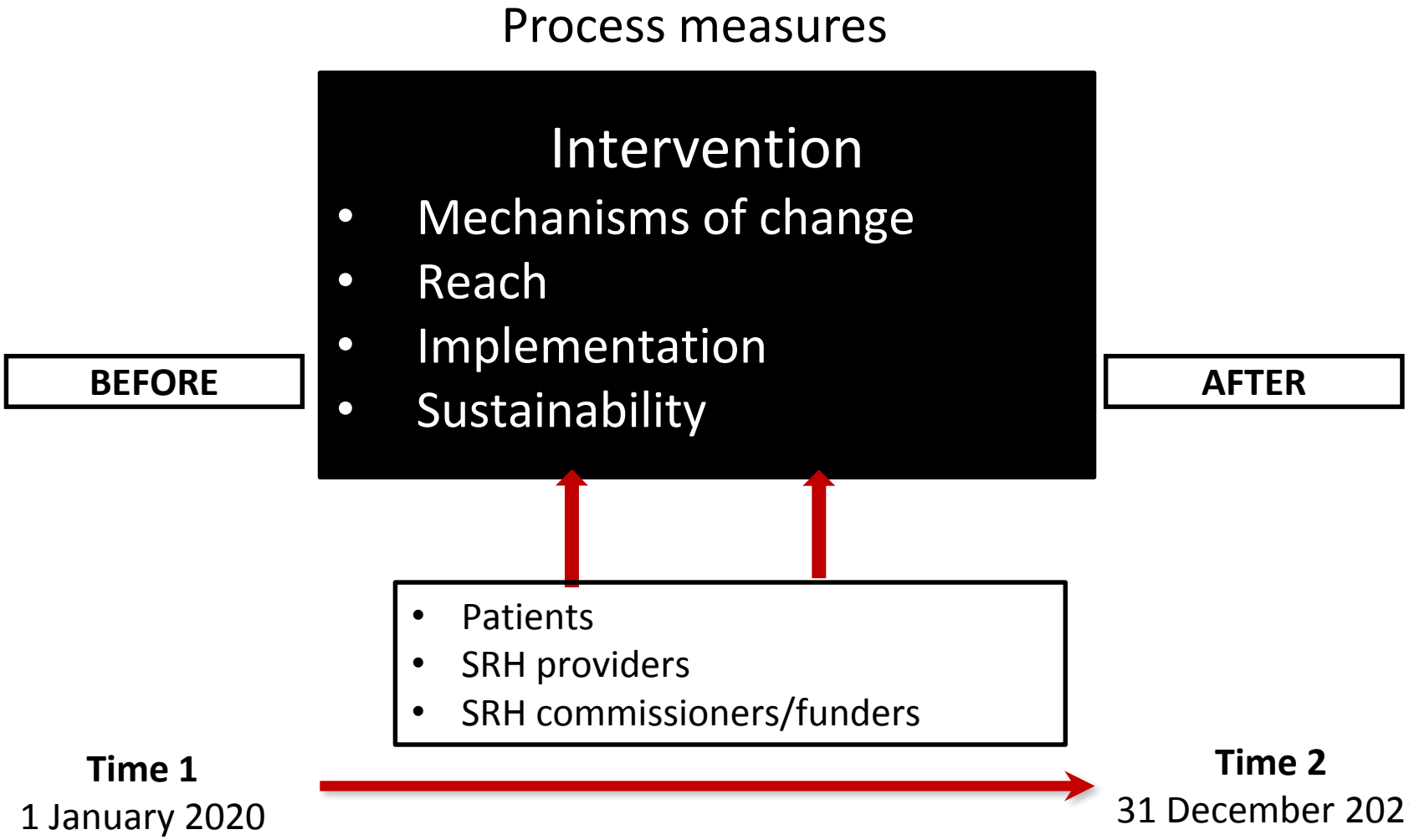
Template for developing questions for outcome evaluation

Did [**model, program, program component**] have a [**change, effect**] on [**outcome(s)**] for [**individuals, groups, or organizations**]?

Examples:

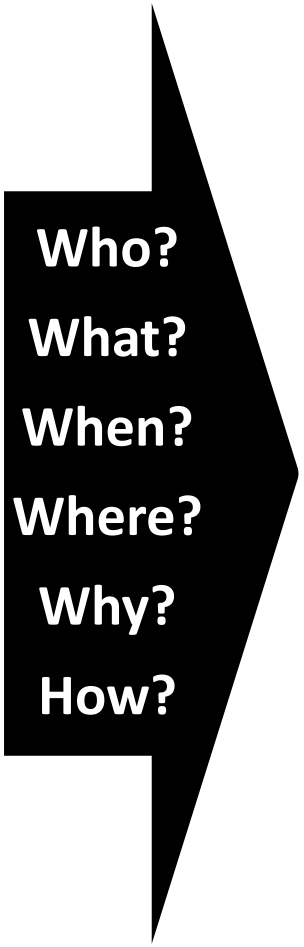
- Did the intervention change the rates of DV referrals?
- Did DV training change SRH providers' preparedness for clinical enquiry about DV?

2. Determine type of evaluation



3. Develop research questions

Research questions for **process evaluation** ask:



About:

- Resources
- Activities
- Stakeholder views

Use exploratory verbs: report, describe, discover, seek, explore

3. Develop research questions

Template for developing general questions for process evaluation

[Who, what, where, when, why, how] is the **[program, model, component]** for **[evaluation purpose]**?

Examples:

- How is the intervention being implemented?
- How do patients and SRH providers describe their intervention experiences?
- What resources are needed for implementing the intervention in clinics?

3. Develop research questions

Examples of specific questions for process evaluation

General question	to	Specific question
How is the intervention being implemented?		What variations in training reach occur by site? Why are variations occurring? Are they likely to effect intervention outcomes?
		To what extent are SRH providers receiving the required training?
How do patients and SRH providers describe their intervention experiences?		To what extent is the intervention acceptable to patients? To what extent is the intervention acceptable to SRH practitioners?
What resources are needed for implementing the intervention in clinics?		What recommendations do patients offer for future implementation? What recommendations do SRH providers offer for future implementation?

4. Define indicators

Example	Data collection
% of SRH providers attended: • Training for trainers • 1st training session • 2nd training session • Refresher session of those eligible	Training reports Attendance register
SRH providers preparedness to enquire about DV	PIM questionnaire Qualitative interview
Woman's experiences of DV referral	Questionnaire Qualitative interview
Number of DV referrals	Patient record Routine data from DV service

Group work (20 mins)

1. Use your protocol, ToC map, proforma section B.
2. Draft at least two questions for your outcome evaluation (column 1).
3. Draft at least two questions for your process evaluation (intermediate outcomes) (column 1).
4. Looking at the intermediate and longer-term outcomes in the ToC map – what indicators (data you will collect) to determine whether the outcome has been achieved (column 2)

5. Choose methods

	Quantitative Data	Qualitative Data
Deals with…	Numbers, data that can be measured Quantitative → Quantity	Descriptions, experiences Qualitative → Quality
Addresses questions:	How much?	Why? How?
Type of information:	• Events: identification/referral no • Individual characteristics: age, weight, gender • Service attributes: cost, waiting times	• Multiple perspectives: SRH providers, patients • Stories: experiences of using an intervention • Viewpoints: champions vs sceptics

Benefits of mixing methods

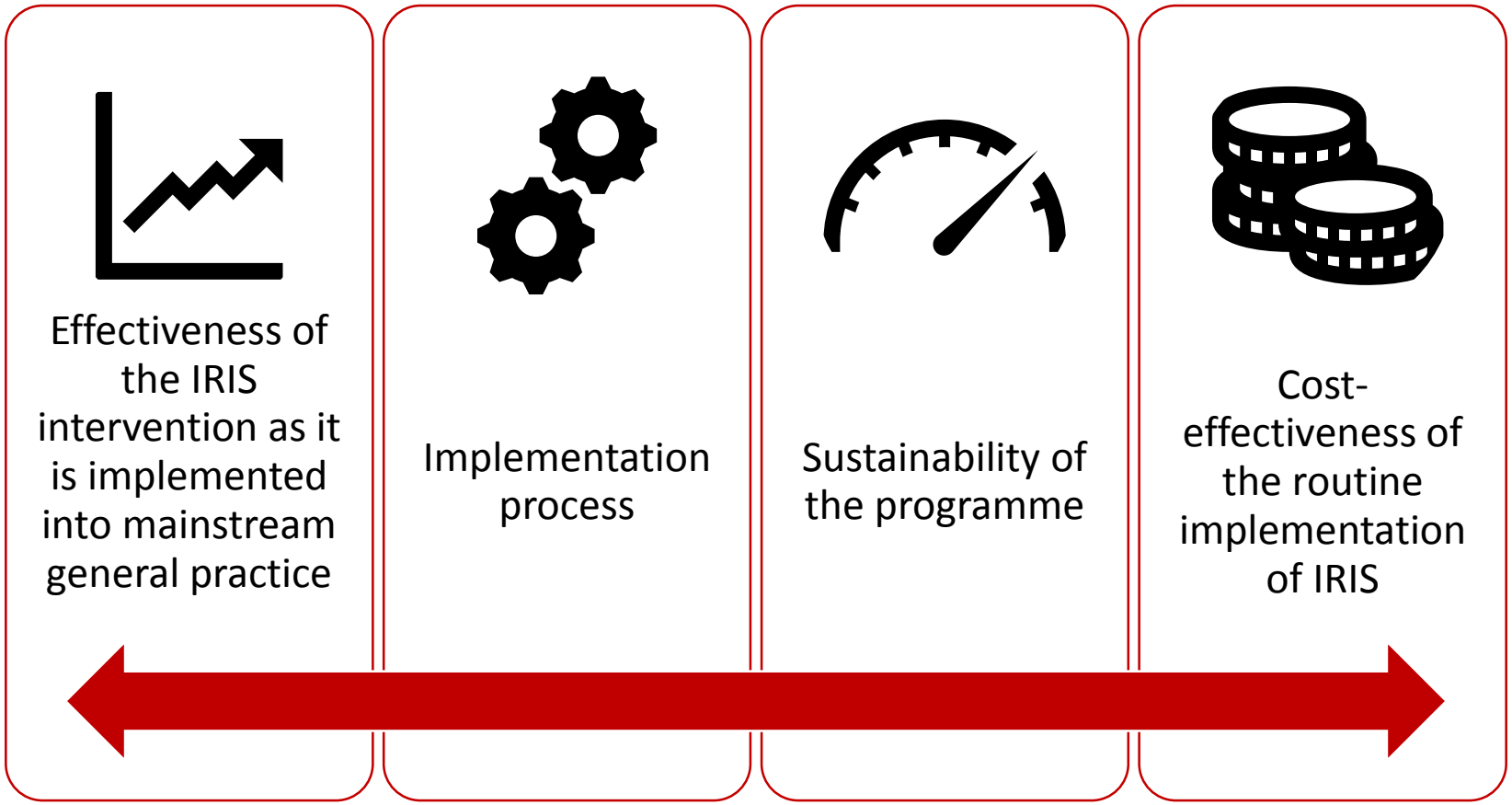
- Typically used in evaluation of complex interventions
- Using qualitative data to inform quantitative measures or instruments
- Using qualitative data to question and/or aid the interpretation of quantitative findings
- Using qualitative data to explore process in evaluations of interventions
- Using quantitative data to assess the generalizability of qualitative findings
- Using multiple qualitative methods

Group work (10 mins)

Talking in pairs, briefly describe a mixed methods study that you are aware of

- what methods were used?
- why you think this combination of methods was used?

Mixed methods evaluation of the implementation of IRIS

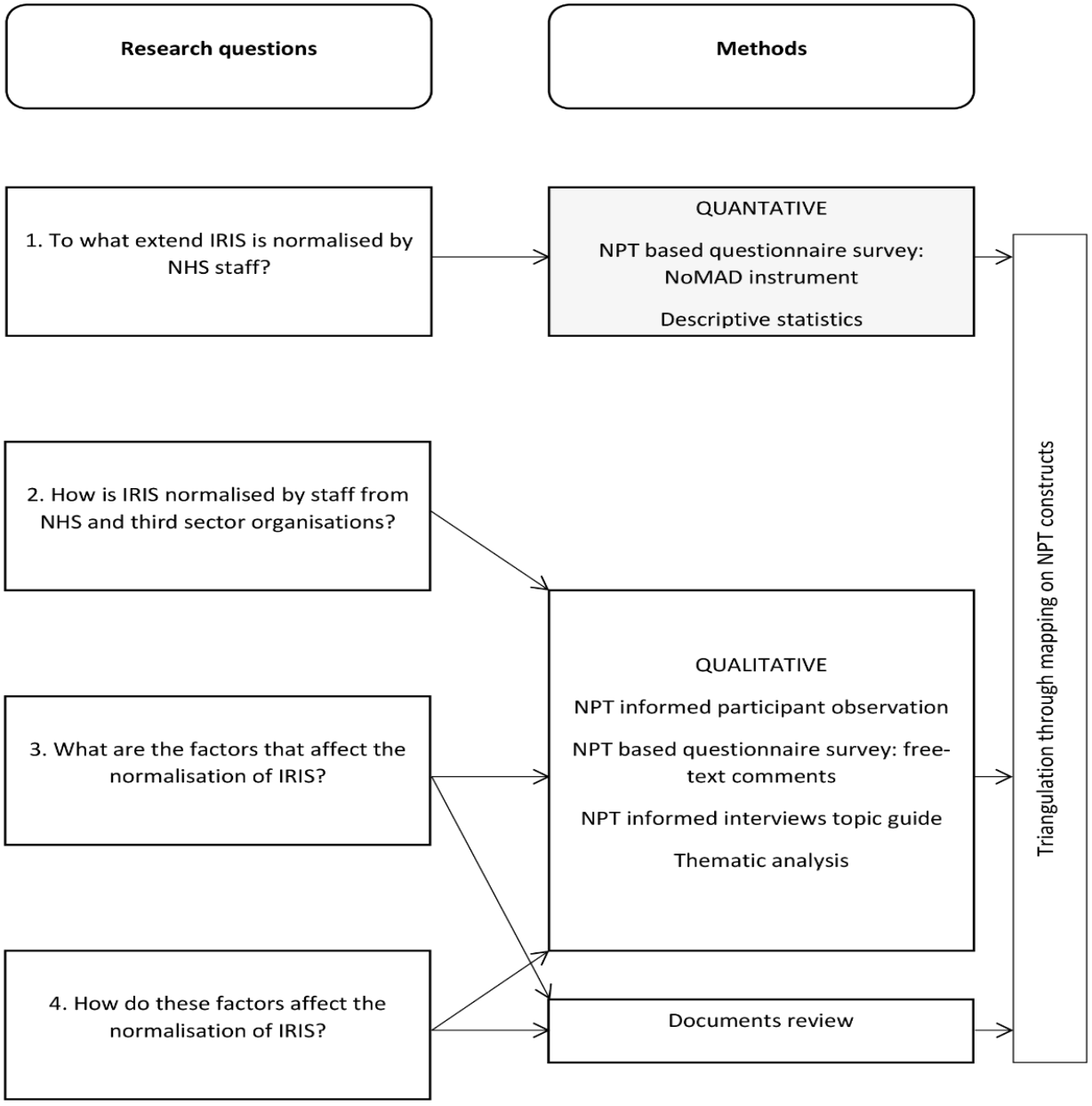


Outcome evaluation

Questions	Indicator	Time point	Data collection			
			Source	Method	Sample	Instrument
Did IRIS change the rates of DV referrals?	referrals received by 3 DV agencies	monthly, 12 mos before session 1 – 12-36 mos after session 1	annual reports from DV agencies	data extraction	registered female patients aged 16+ in 205 GP practices across 5 boroughs	routine data
Did IRIS change the rates of DV identification?	recorded identification of new DVA cases	monthly, 12 mos before session 1 – 12-36 mos after session 1	electronic medical records (EMIS database)	EMIS software	registered female patients aged 16+ in 205 GP practices across 5 boroughs	routine data

Process evaluation

Questions	Indicators	Time point	Data collection			
			Source	Method	Sample	Instrument
Why do the referral rates vary within and across practices?	Embeddedness of IRIS in daily work of NHS and third sector staff	anytime after session 1	questionnaire free text comments	online survey	GP practice staff in 205 GP practices across 5 boroughs	NOMAD
			quali interview Participant observation documents	TA Participant observation review	GP practice staff, DV agencies staff GP practice staff, DV agencies staff	topic guide observation guide extraction form


Research questions
Methods
1. To what extend IRIS is normalised by NHS staff?
QUANTATIVE
NPT based questionnaire survey: NoMAD instrument
Descriptive statistics
2. How is IRIS normalised by staff from NHS and third sector organisations?
3. What are the factors that affect the normalisation of IRIS?
QUALITATIVE
NPT informed participant observation
NPT based questionnaire survey: free-text comments
NPT informed interviews topic guide
Thematic analysis
4. How do these factors affect the normalisation of IRIS?
Documents review
Triangulation through mapping on NPT constructs

“If I knew then what I know now…”

1. 6 months for ethics and governance approvals
2. Routine data
3. Poor engagement of GPs
4. Relationship between researchers evaluating outcomes and processes

Acknowledgements

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