

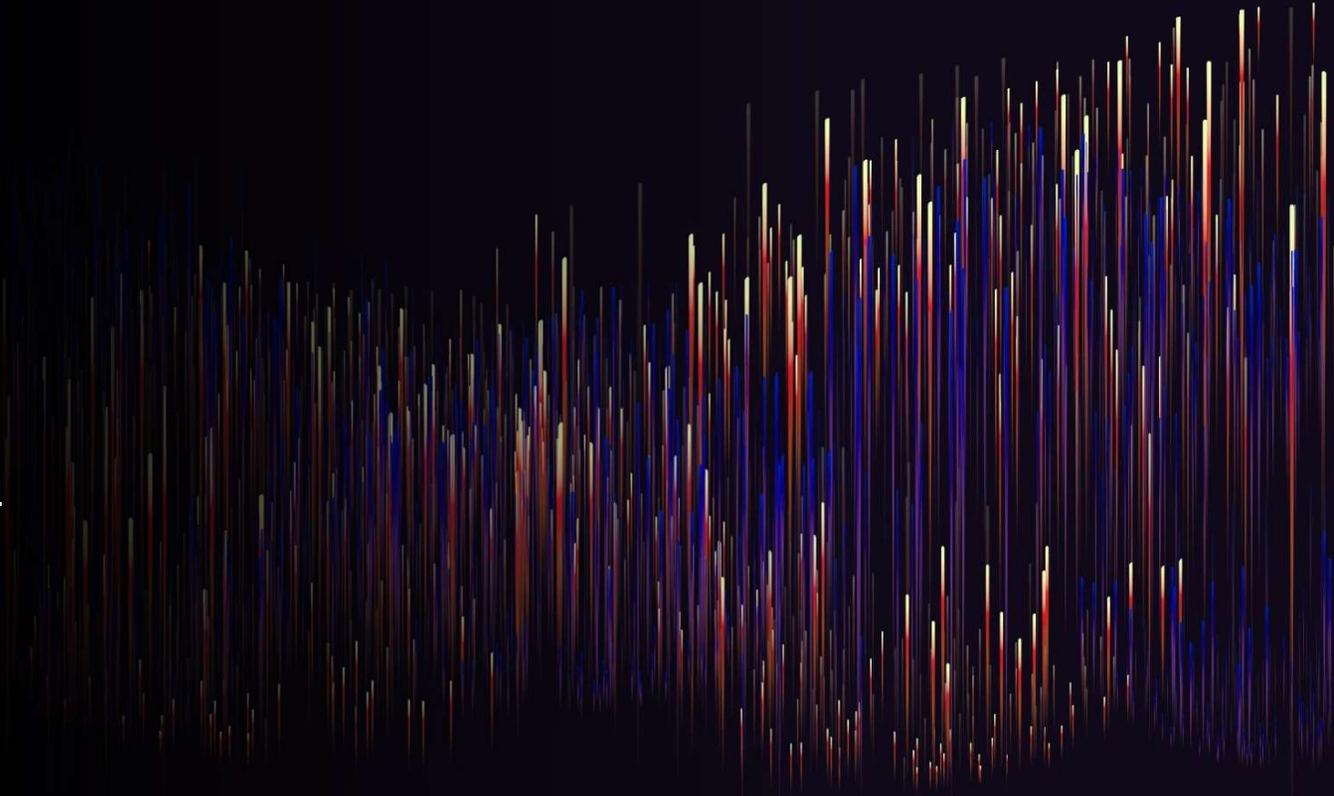


Process Tracing as a practical evaluation method

CES-BC Webinar

October 15, 2021

Tom Aston and Alix Wadson



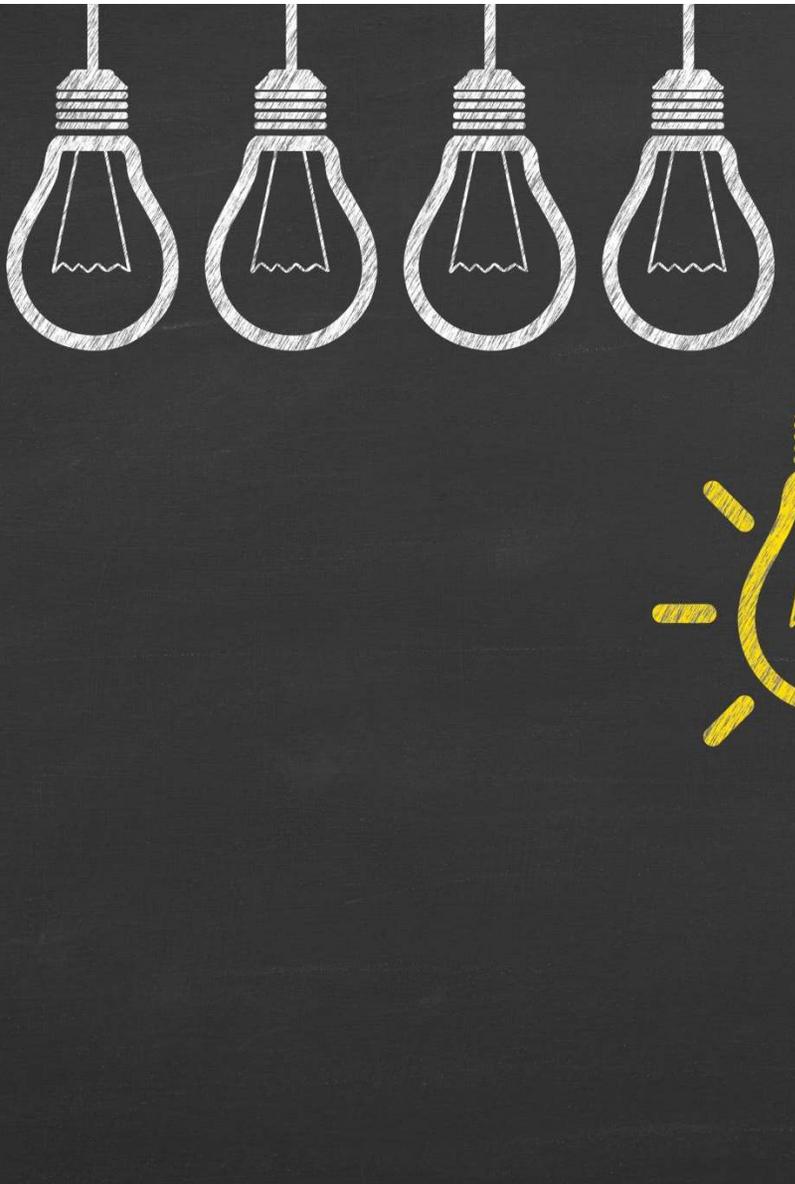
It's nice to meet you!



Alix Wadeson
Independent M&E consultant
Vancouver, Canada



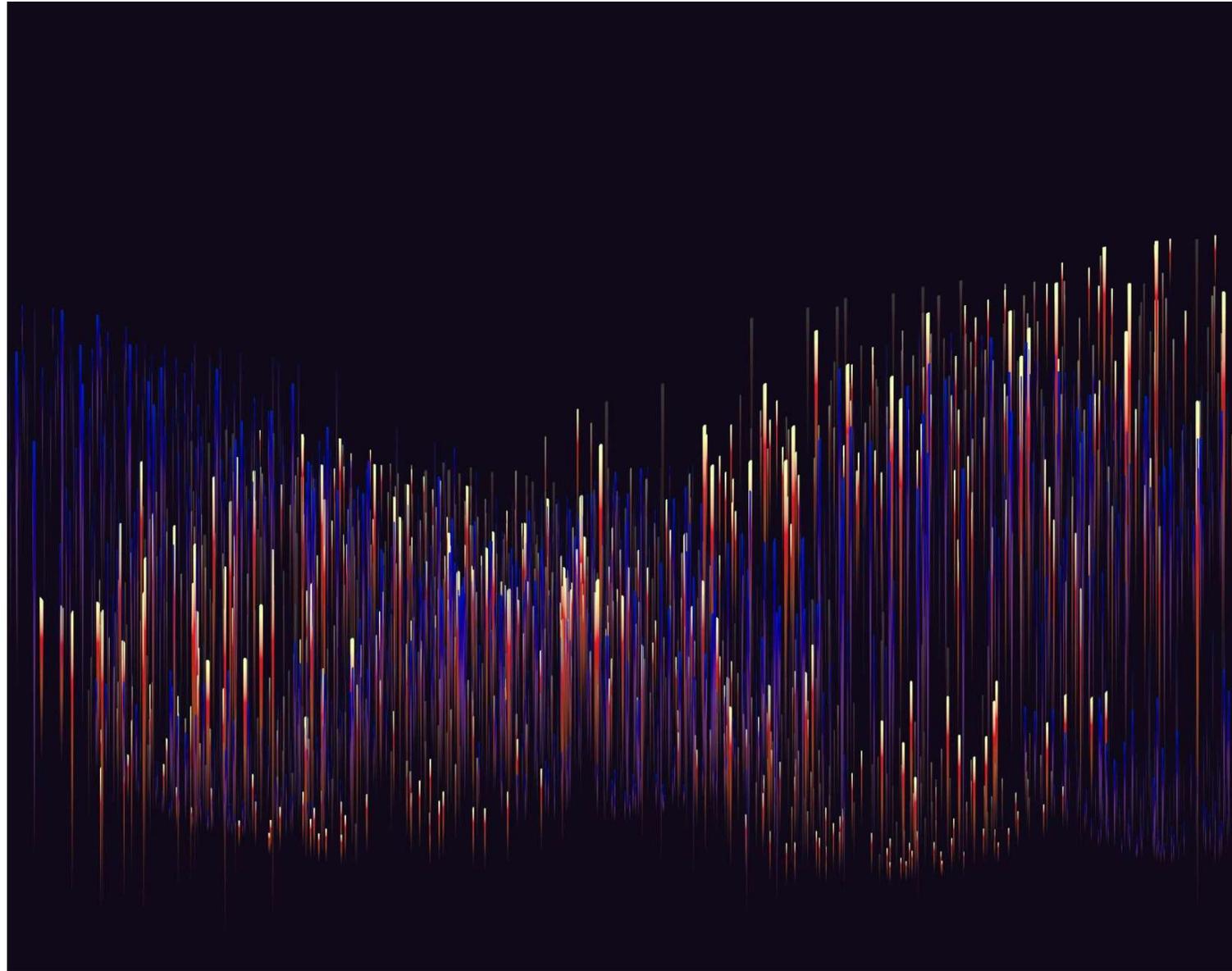
Tom Aston
Independent M&E consultant
London, UK



Background & purpose

- Our paper: '[Process Tracing as a Practical Evaluation Method: Comparative Learning from Six Evaluations](#)' discusses our experience over several years applying different forms of Process Tracing (PT) evaluation
- Also combine PT with elements of Outcome Harvesting, Contribution Tracing & [Contribution Rubrics](#).
- Today's brief webinar will provide an overview of PT.
- We will offer practical recommendations and resources to explore for the use of PT adapted to different contexts, outcomes, and capacity levels for complex interventions.

Process Tracing Overview



What is process tracing?

- Process Tracing is a **single-case, theory-based method**.
- At the heart of the method is the **idea of tracing causal mechanisms that link causes with their effects** (i.e., outcomes) (Beach and Pedersen, 2019).

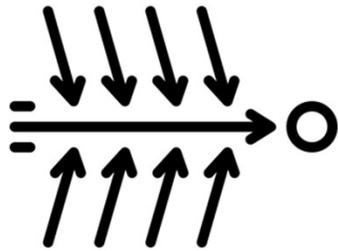
Start with an outcome

- An outcome is a **behaviour change**
- PT requires us to choose an observable outcome we believe is linked to an initiative/project/programme in order to infer causality and our contribution.

Examples:

- Government revised its methodology for calculating membership of the National Health Insurance Scheme (NHIS)
- District assemblies increasingly responded to citizens' concerns
- Co-financing of select infrastructure from cooperatives, communities, and other actors

Contribution



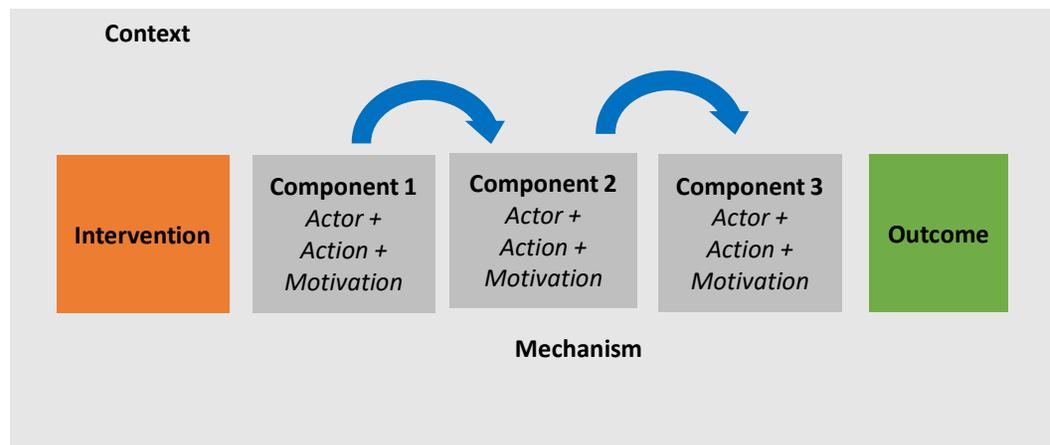
Created by priyanka
from Noun Project

Consider how you think change happened:
who did what, with whom, when and where?

Make a claim
for how you believe you and your partners contributed to an outcome.

Causal Mechanisms

- **Describe the key steps that explain the outcome** in a logical sequence of cause and effect (necessary to achieve outcome).



- ♦ Components consist of **actors** and their **actions** (and assumed **motivations**).

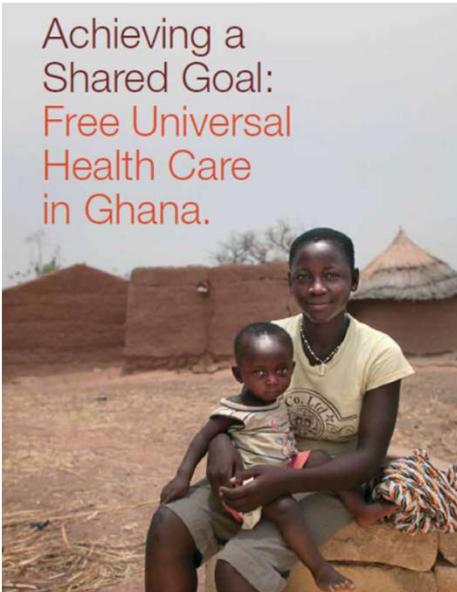
A case example

Ghana health insurance



From Stedman-Bryce (2013)

Achieving a
Shared Goal:
Free Universal
Health Care
in Ghana.



Essential Services
Platform of Ghana



Findings

- Only 18% covered (67% claimed by the Government)
- Only 29% from poorest households

Make the claim more specific



THE CAMPAIGN HAS SUPPORTED REFORMS IN THE HEALTH SYSTEM.

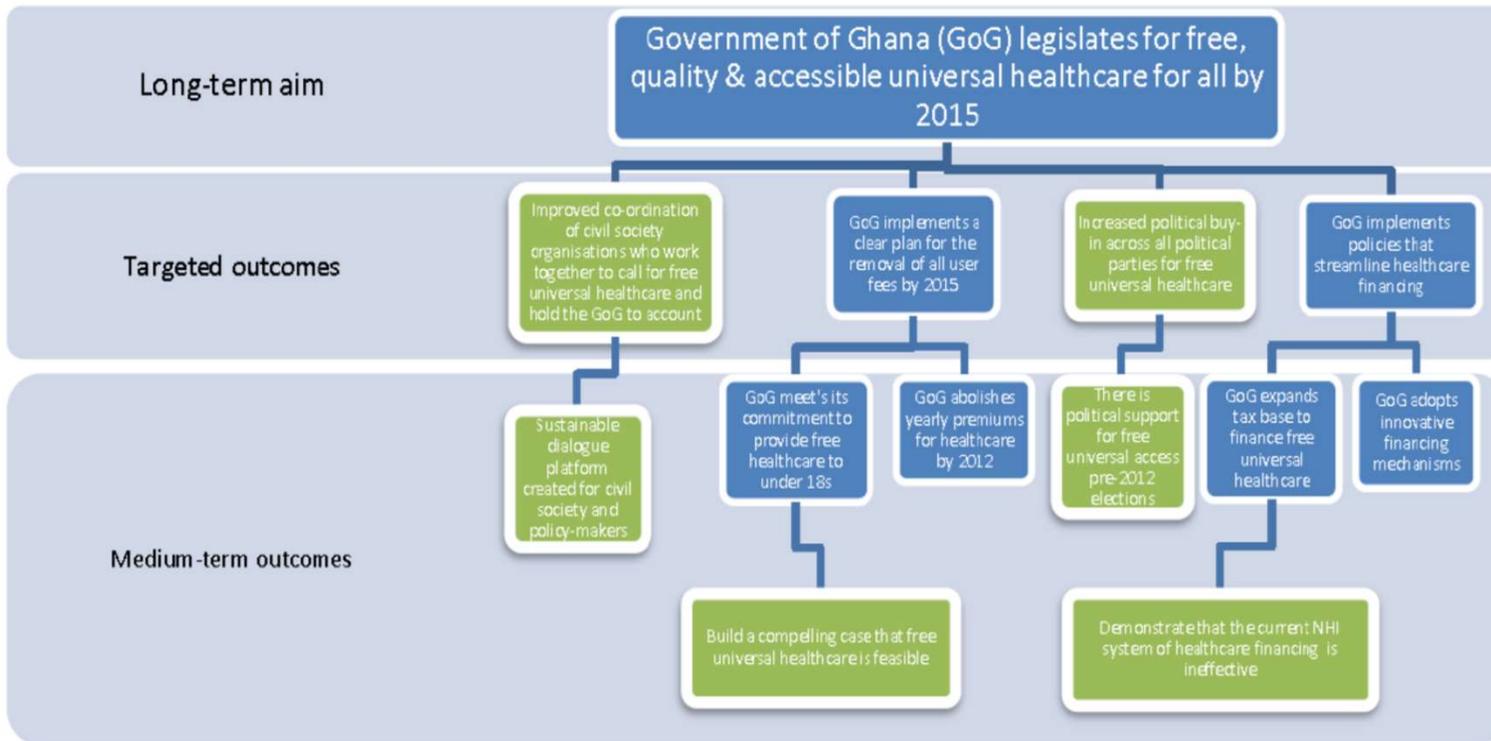


THE CAMPAIGN HAS SHOWN THE CURRENT HEALTH INSURANCE-BASED SYSTEM TO BE INEFFECTIVE IN DELIVERING UNIVERSAL HEALTHCARE.



THE CAMPAIGN LED THE GOVERNMENT OF GHANA TO REVISE ITS METHODOLOGY FOR CALCULATING MEMBERSHIP OF THE NATIONAL HEALTH INSURANCE SCHEME (NHIS).

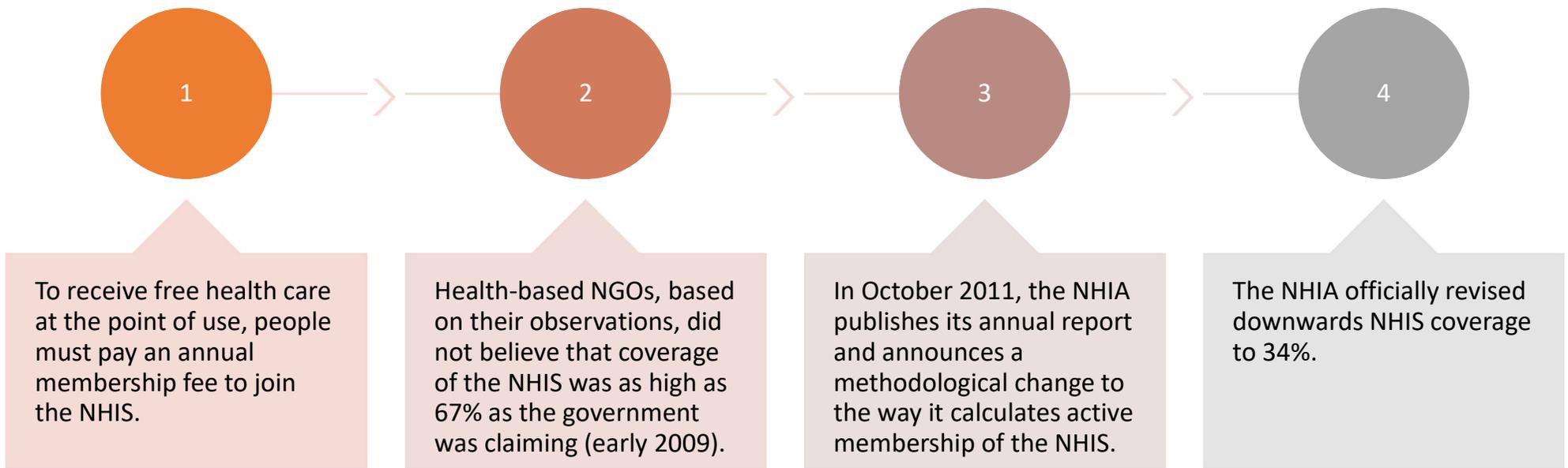
Oxfam's Contribution Claim in Ghana



The campaign led the Government of Ghana to revise its methodology for calculating membership of the National Health Insurance Scheme (NHIS)

Put change in context

- Politically charged context (Presidential elections in 2012)
- The campaign comprised over 500 organisations, representing every region of Ghana (reach and visibility)
- No other campaign was openly critiquing NHIS coverage data
- Ghana was held up as a good example of insurance-based health care by World Bank.



Key steps (components)

Evidence I would need/expect to see

- | | |
|---|--|
| 1 | The methodology was revised. |
| 2 | Full / partial adaptation of the methodology happened sometime after the campaign published its report. |
| 3 | The campaign and its report had sufficient reach for the NHIA to have had, at least potentially, access to the report. |
| 4 | The majority of the stakeholders responsible for the campaign believe in the contribution claim. |

Evidence I would want/love to see

- 1 NHIA policymakers and / or other government representatives agree that the campaign's report influenced their decision to change their methodology.
- 2 Government publishes a statement quoting the campaign's report as a contributing factor in their decision to change their methodology.

Timeline



9th March 2011 'Achieving a Shared Goal' published

Counter statement: Quotes from NHIA Director

‘factual inaccuracies, hearsay and innuendoes’

‘setting the record straight’

It refers to Oxfam’s ***‘blatant aversion to health insurance,’*** how ***flawed analysis*** is ***‘Oxfam’s stock in trade’***

Timeline

- 
- 9th March 2011** 'Achieving a Shared Goal' published
 - 17th March 2011** NHIA published counter statement

Quotes from NHIA Newsletter

“The chickens are coming home to roost as the Oxfam-led coalition squirm in their own broth...Oxfam’s wounds are self-inflicted. The humanitarian aid organisation squandered its credibility over this issue. **The offensive against the NHIS was desperate and error-strewn.** Oxfam frequently exploits images of desperately needy Africans and other non-white people to solicit assistance from well-meaning philanthropists. One only hopes that such resources are spent entirely on the needy rather than ideologically driven ‘Don Quixotic’ campaigns, such as the **attack on the NHIS.** And who will vouch that their willing pawns in its ill-advised campaign offered their services for charity?”

Timeline

- 
- 9th March 2011** 'Achieving a Shared Goal' published
 - 17th March 2011** NHIA published counter statement
 - September 2011** NHIA Newsletter

Quotes from NHIA Annual Report

“The NHIA undertook methodology and data validation exercise, during the first quarter of 2011, to ascertain the accuracy of the 2010 membership database. During the exercise, it **was realised that** the old methodology of calculating active membership was riddled with inherent challenges. In order to mitigate these challenges, a **new and appropriate methodology was used** to determine the 2010 active membership. This new approach is based on the sum of the number of new members registered for a given year and the number of renewals made for that year.”

Timeline

- 
- 9th March 2011** 'Achieving a Shared Goal' published
 - 17th March 2011** NHIA published counter statement
 - September 2011** NHIA Newsletter
 - October 2011** NHIA Annual Report published announcing new methodology

Need to see
testimony

*“I would say ‘yes’, since **these changes came after the campaign’s report**, I would agree it was one of the factors that led to the change in methodology by NHIA in how they calculate coverage of the national health insurance scheme.”*

Key Informant, Ghana Health Service

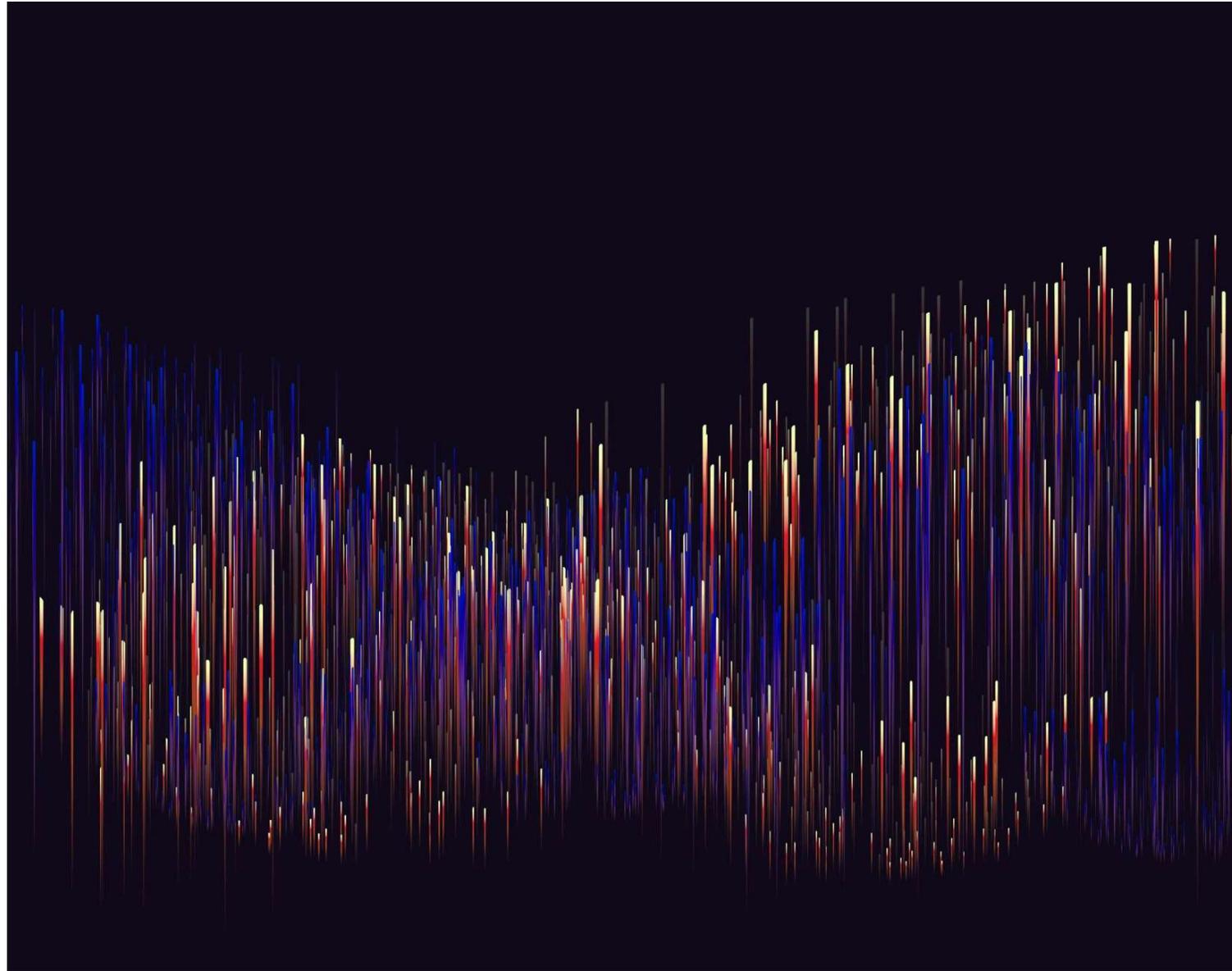
Want to see
testimony

"I'm sure you all know about what has been come to be known as 'the Oxfam Report'. This report declared that coverage of the NHIS was as low as 18 per cent. This was actually very helpful and prompted us to revise our figures. We now know that 34 per cent of the population are covered, not 67 per cent as previously thought. In Ghana we are now doing a lot more to improve our monitoring and evaluation and in this way civil society is helping us."

**Ghana Delegation, World Health Organisation
and World Bank Ministerial Meeting**

Email correspondence

Process Tracing Tests



The Four Process Tracing Evidence Tests

Hoop



Failing test **reduces confidence in your proposed explanation.**

Passing test simply means the **proposed explanation is still plausible.**

*Evidence here is necessary. If you don't find this evidence, parts or all of your explanation are inaccurate.

Smoking gun



Passing **increases confidence in your explanation** and may reduce confidence in alternative explanations.

Failing test simply means you **cannot increase confidence in the explanation.**

* Evidence here is unique. Evidence should make a clear connection between your explanation and the outcome.

Straw-in-the-wind



Passing or failing the test **makes no significant difference** to the plausibility of the explanation.

*Evidence here is neither necessary nor unique. It is neutral, coincidental, or irrelevant to proposed and/or alternative explanations.

Doubly decisive



Passing test fully **confirms your explanation** and **rules out alternative explanations.**

Failing test simply means you **can't fully rule out alternative explanations.**

*Evidence here is highly unique. You are very unlikely to find this evidence, it is extremely rare.

A murder case

- Netflix show [*Making a Murderer*](#), an American true crime documentary which tells the story of Steven Avery, a working-class man from a small town in Wisconsin.
- He served 18 years in prison for the wrongful conviction of sexual assault and attempted murder.
- He was later charged and convicted for the murder of another woman, with his teenage nephew convicted as an accessory in the murder.
- We'll use this murder case as the basis to go through expect to find (hoop) and love to find evidence (smoking gun).

Hoop test: What we expect/need

 It represents our **expectations**

 Its value lies in that evidence is **highly likely under the theory** we are testing

 **Powerful only** when evidence is **not observed (evidence of absence)**

 **Observation** of the evidence (passing the Hoop Test) is **necessary** to retain the explanation as a causal candidate, necessary **not to lose confidence** in it; but does not greatly increase it (not sufficient to confirm)

 It has **disconfirmatory** but not confirmatory power

 Evidence in a Hoop Test is highly **sensitive** If the claim is true, the evidence will show it

Expect to find in a murder

- In the murder, you might expect to find evidence that the accused can be **placed at the scene of the crime**, that the timing matches, that the **police sketch looks like the suspect**. These might be “hoop tests,” because if the suspect can’t be placed at the scene of the crime or the timing doesn’t match, for example, you should probably rule out the suspect.
- Ultimately, it’s evidence you need, because **if you don’t find it or this evidence doesn’t fit, your explanation is implausible, and your case falls apart**. “Hoop tests” are thus useful to disconfirm a hypothesis, but they aren’t enough to confirm a hypothesis.



How well does the evidence fit the explanation?

Smoking gun: What we want to find



It represents our **dreams** – what we would love to find!



Its value lies in that evidence is **highly unlikely under any other theory**



We can't explain the evidence unless the theory is true



It has **confirmatory** power (but not disconfirmatory).



Observation of the evidence (passing the smoking gun test) is **sufficient** to prove or greatly increase our confidence in the theory, but not necessary for it; if the test fails the explanation is still a causal candidate.



Evidence is highly **specific**. If it's observed, it means that the theory is true; if not, it might still be.

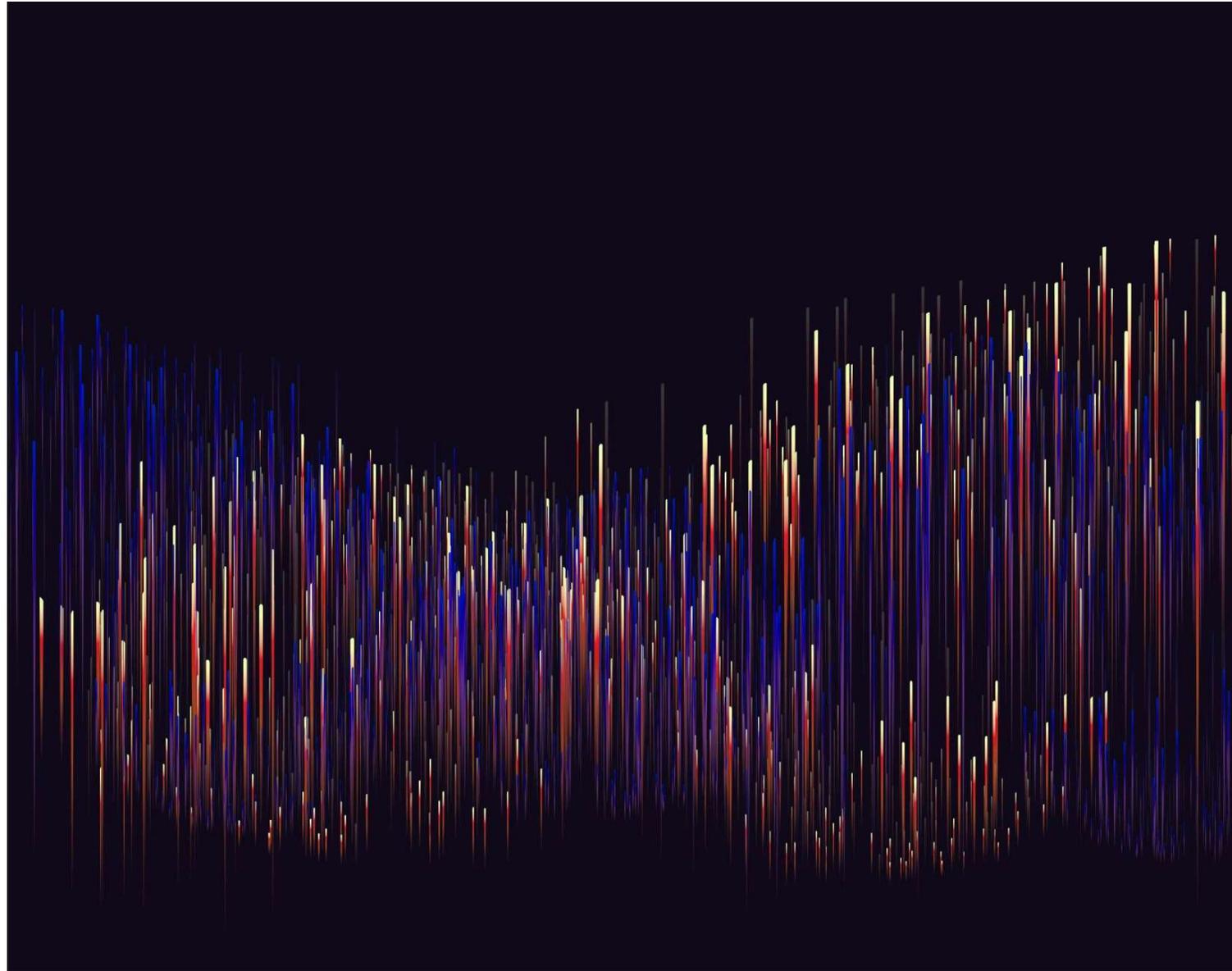
Powerful only when evidence is **observed** (if not, **absence of evidence**).

Want to find in a murder

- You might then search for more compelling evidence that **specifically links the accused to the details of the crime** such as fingerprints, eyewitness testimony or even confessions, but which is far less common. This is evidence you hope to find but don't necessarily expect to find. This is a "smoking gun" test.
- **Fingerprints ought to be highly specific** to a particular person. Ultimately, it's evidence that's unique. Murderers don't always leave fingerprints, so they're less common.
- Seeing a **photo or video of the suspect's smoking gun aimed at the recently deceased would be even less common evidence.**
- It's partly this **rarity that makes it strong evidence.**



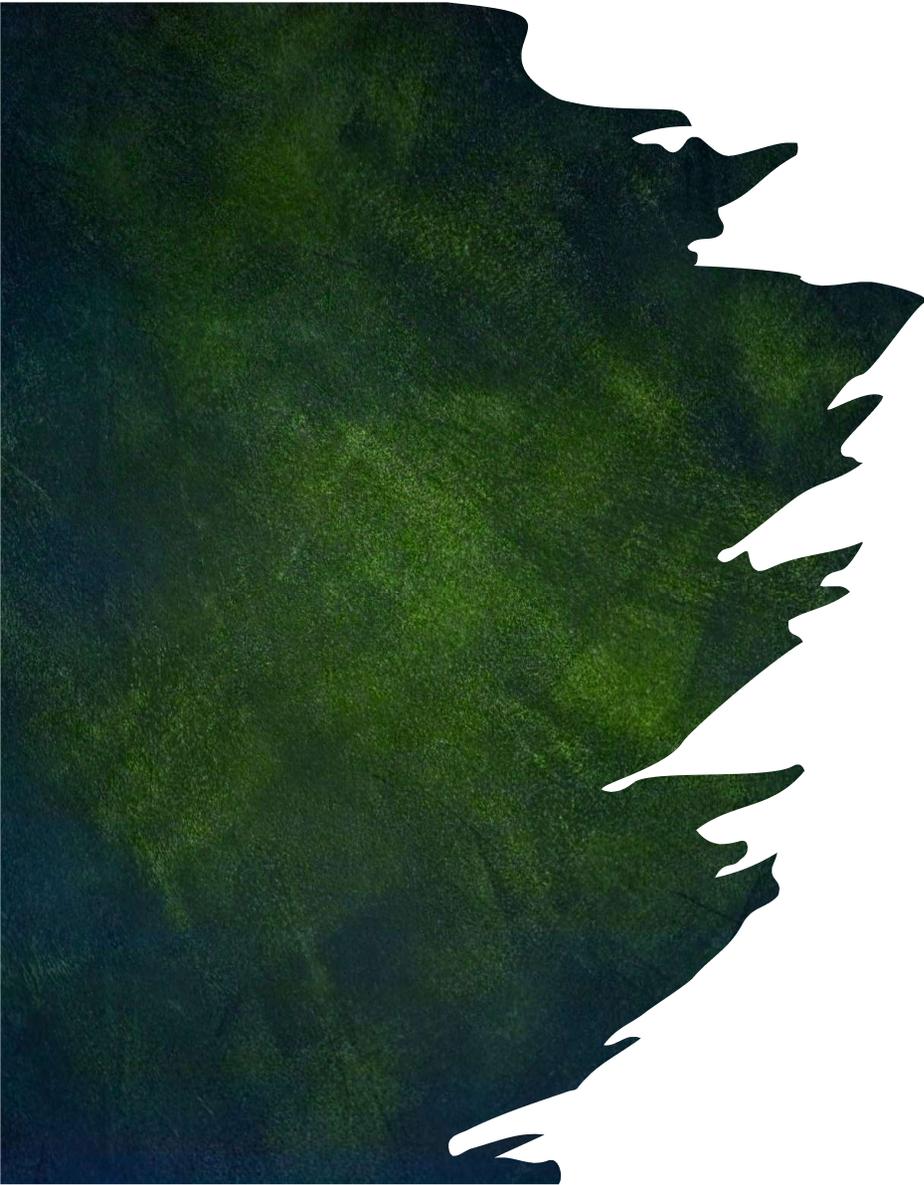
Practical
tips, recs &
resources
for applying
Process
Tracing





1. Context, context, context!

- The **context of an initiative and its stakeholders is vital** to Process Tracing across the evaluation: from stakeholder involvement to evidence selection, to evidence grading and determining probative value.
- Making all evaluation **decisions through a highly context-specific lens** is essential to the success of this method and the quality of analysis.
- **A Theory of Change is a key foundation** for Process Tracing evaluation.
- A **context-aware Theory of Change** should identify **causal pathways, assumptions, actor dynamics, and interrelationships** at play in each unique context.



2. Highly participatory Process Tracing is worth the effort, with controls for bias integrated.

- Process Tracing can **benefit greatly from stakeholder participation** - different staff working across an implementing organization and partner representatives too.
- Often means **extra time and effort but** brings benefits to the evaluation process and its outcome.
- A participatory form of process tracing provides the benefits of **building evaluation capacity, ownership and utilization**.
- **Who to involve depends on the intervention** - a mix of perspectives & capacities with inputs from technical staff and those who manage and implement programming directly.
- **Mitigating bias remains important:** supported by including assessment of alternative claims; ensuring enough diverse stakeholders are involved; using evaluators as critical friends; peer review of the evaluation; blindfolding for data collection; and being transparent about methodological concessions.



3. Evidence tests and rubrics to achieve practical rigour

- We argue that a **good level of rigour** can be achieved by using **Process Tracing tests** for evidence grading with simplified **contribution rubrics** to assess confidence levels.
- Such an approach is likely to be **practical** for teams with lower technical M&E capacity
- **Process tracing tests can enhance utility** of both the evaluative process & findings



4. Integrate elements of different complementary approaches to enhance evaluation practice and quality

- We see significant **potential for blending different methods** with Process Tracing.
- Borrowing from Realist Evaluation we see advantages of **making the “reasoning” of actors more explicit** through *because* statements to underpin actor and activity descriptions in mechanisms.
- Using outcome statement templates from Outcome Harvesting can help **make contribution claims more specific and thus more testable**.
- There are various other methods that can likely enhance the value of Process Tracing and vice versa. What matters is **finding the right fit**.



5. Document and share experiences using Process Tracing

- We can only stand to gain by **promoting transparency and dialogue on evaluation findings and processes**, including the challenges we face.
- There are still **few publicly available evaluations applying Process Tracing** for complex interventions.
- Evaluators sharing and **discussing our work openly in different forums** can support improvement and use of Process Tracing (in all forms).
- Should continue to **identify ways in which Process Tracing can be used to support higher-quality program implementation**, monitoring and adaptation, in addition to evaluation.
- Encourage **more exploration and documentation**, as we and others, continue to apply Process Tracing to evaluate 'how' and 'why' change happens.

Practicalities of applying process tracing

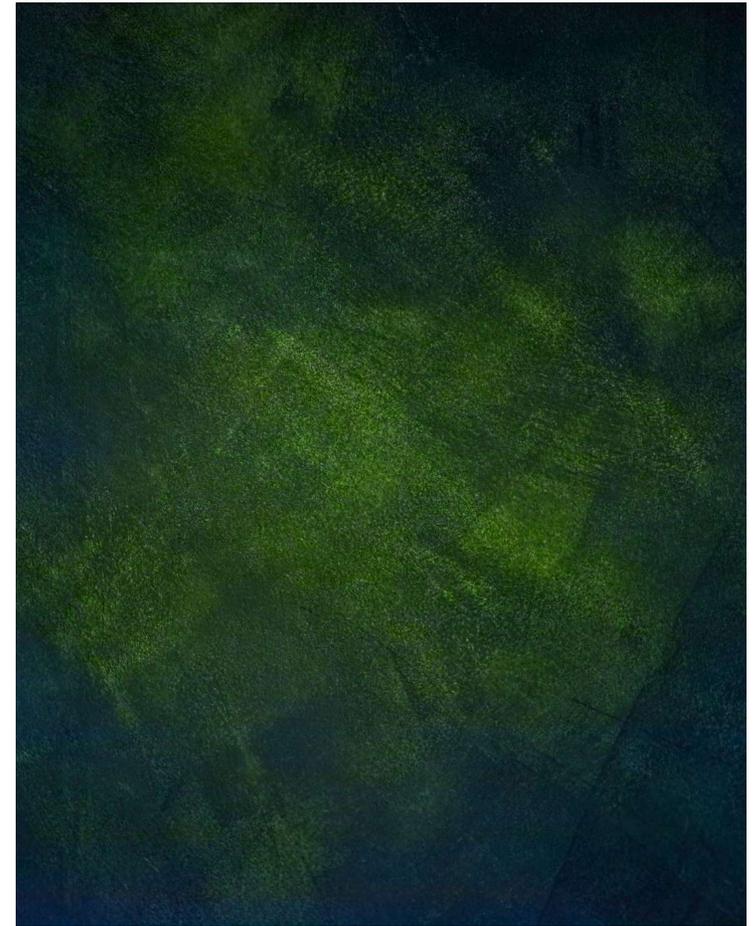
Stakeholder buy-in
and
communication

Capacities

Human
Resources

Budgeting

Timeframe



Recap: Q&A Verbal or in the chat

Process tracing is a **case-based approach to causal inference** which focuses on the use of clues within a single case to adjudicate between alternative possible explanations.

Process tracing helps to explain changes and causation based on a single case - an **observed outcome**.

We can examine an observed outcome connected to a project/intervention to help assess and explain contribution - the **contribution claim**.

Developing **alternative claims - rival and complementary** - adds rigour to the assessment of our contribution claim and helps mitigate bias.

Process tracing tests are very useful to determine necessary and unique evidence to increase (or decrease) confidence in a contribution claim and causal mechanism.

This supports one to **confirm or disconfirm** a contribution claim and causal mechanism, and helps to rule out (or not) alternative claims.

Resource materials and keeping in touch

- CES-BC will email our 'go-to' PT resource pack
- Includes relevant books, guides, evaluation examples, blogs and our paper.
- Ranges from in-depth reading to bite-sized pieces.

Please keep in touch with us!

Tell us about your experiences with process tracing or combining it with other methods.

Follow us on twitter:

@traffyaston

@alixwadeson

Connect with us on LinkedIn:

- <https://www.linkedin.com/in/alix-wadeson-11275452/>
- <https://www.linkedin.com/in/tom-aston-consulting/>

Or write us a good old-fashioned email:

- alixwadesonconsulting@gmail.com
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Webinar Close



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