

Why Good Health Policies Fail: Fixing the Hidden Evidence Gap

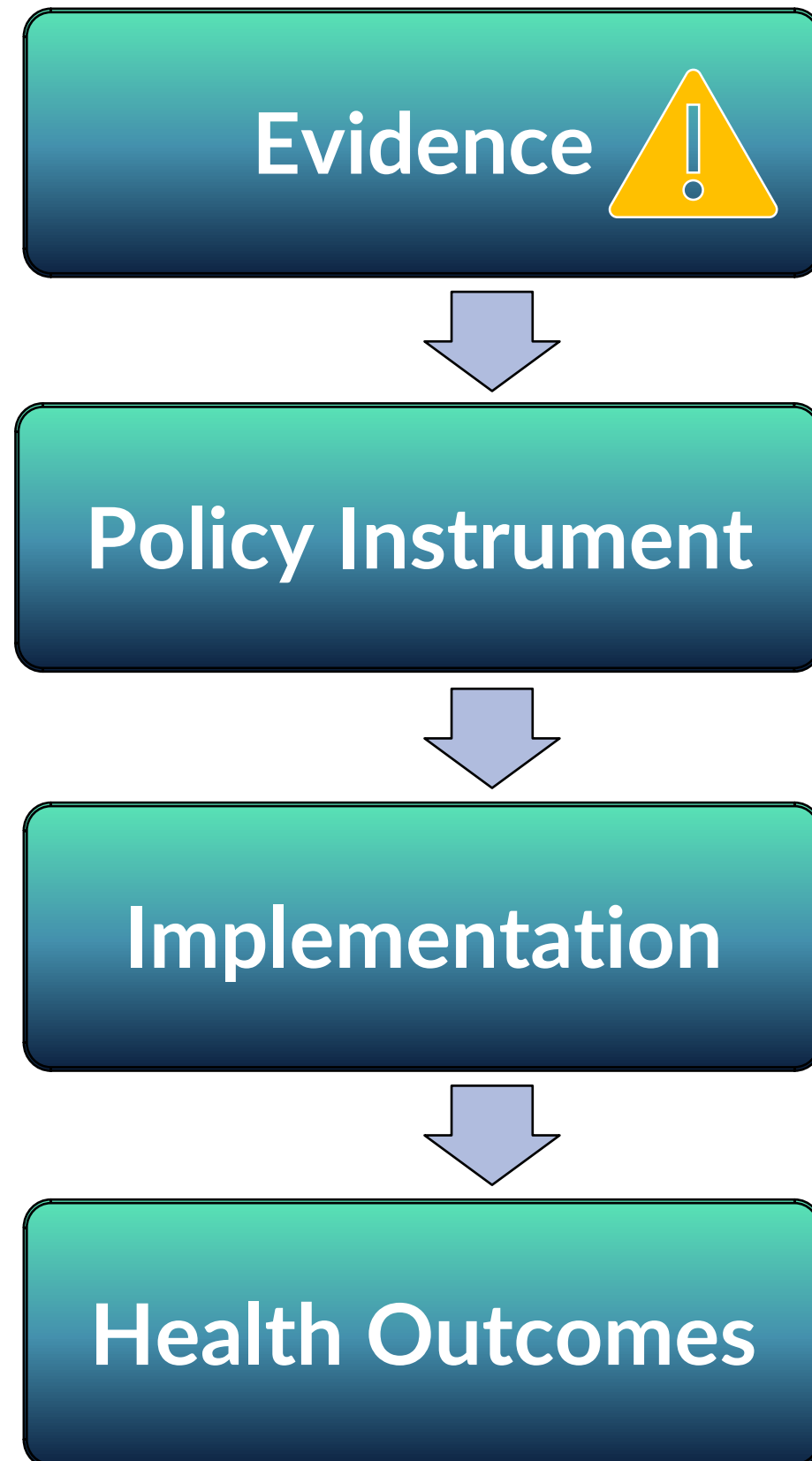
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Good Policy Instrument Under Performs

- E.g., Nepal's National Health Insurance Program – What went wrong?
 - Targeting Failure: Voluntary enrollment [?] misses the most vulnerable for catastrophic payment (e.g., Ghimire et al., 2019).
 - Calibration Failure: Benefit cap + under resources facility [?] weak financial protection (e.g., Shah et al., 2022).
- The policy instrument is well intended, but its design is built on fragile evidence

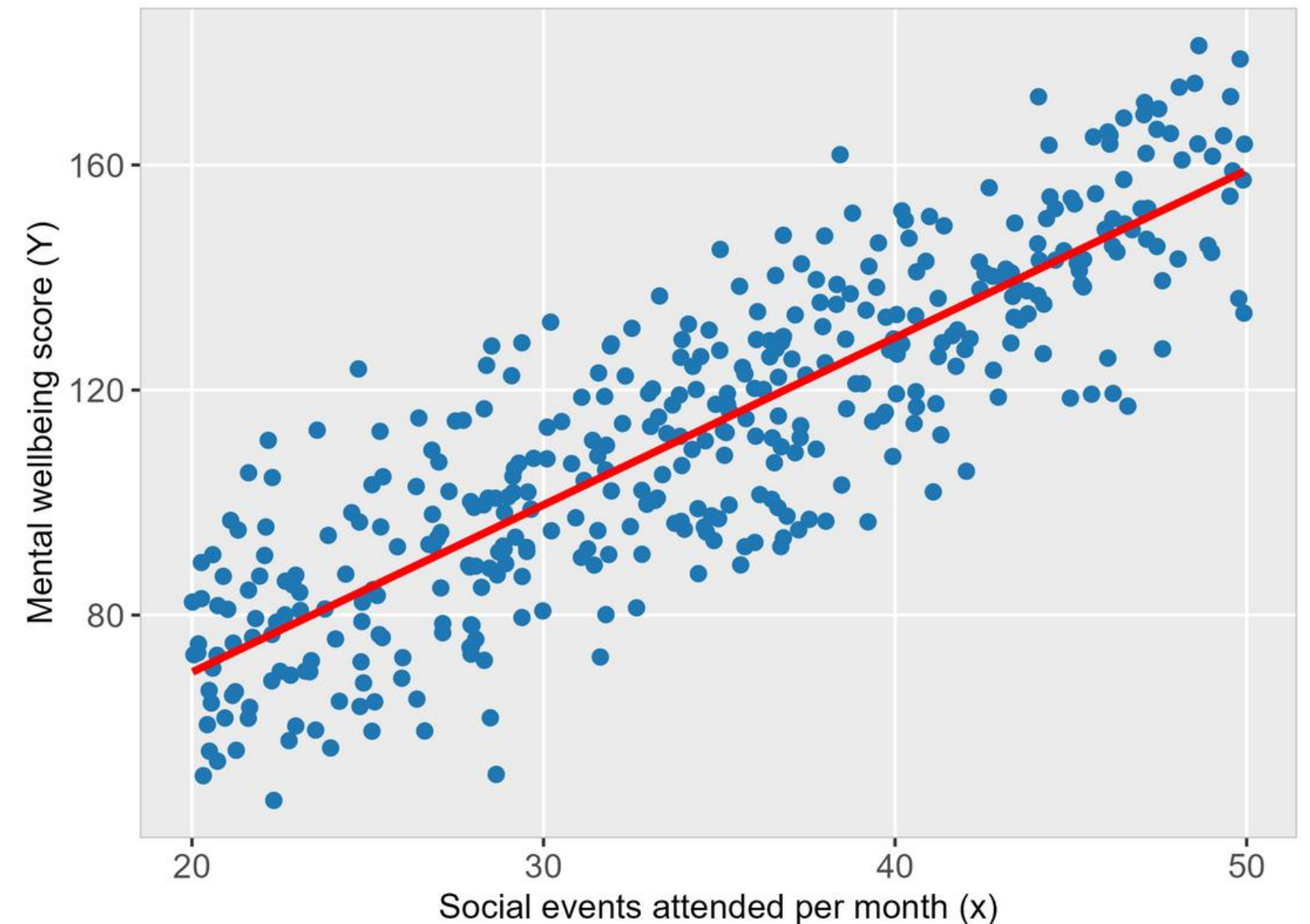
The Policy Chain: Evidence Under Pressure



- When evidence is weak the rest of the chain breaks – despite the strong instrument (e.g. Haber et al., 2022; Mitchel & Font, 2017)
- The Root Causes – evidence shortcuts. Why (e.g., Bandola-Gill et al., 2024)?
 - Policy Urgency
 - Data Quality
 - Deadlines
 - Short donor or project cycle
 - Analytic capacity
 - Publication incentives (effective results)
 - Political pressure (for actionable proof)

#1: Correlation Masquerading Causation

- **How it appears in Policy?**
 - Seeing a pattern in routine data
 - Designing instrument based on “what correlates”
- **Why it's tempting?**
 - Correlations is easy analysis
 - Fits timeline pressure
 - Looks convincing in dashboard
- **Why it fails?**
 - Correlation \neq confounding and selection



The Dashboard Illusion: A strong correlation can hide the real driver

#2: Measuring the Change NOT Impact

- **How it appears in Policy?**

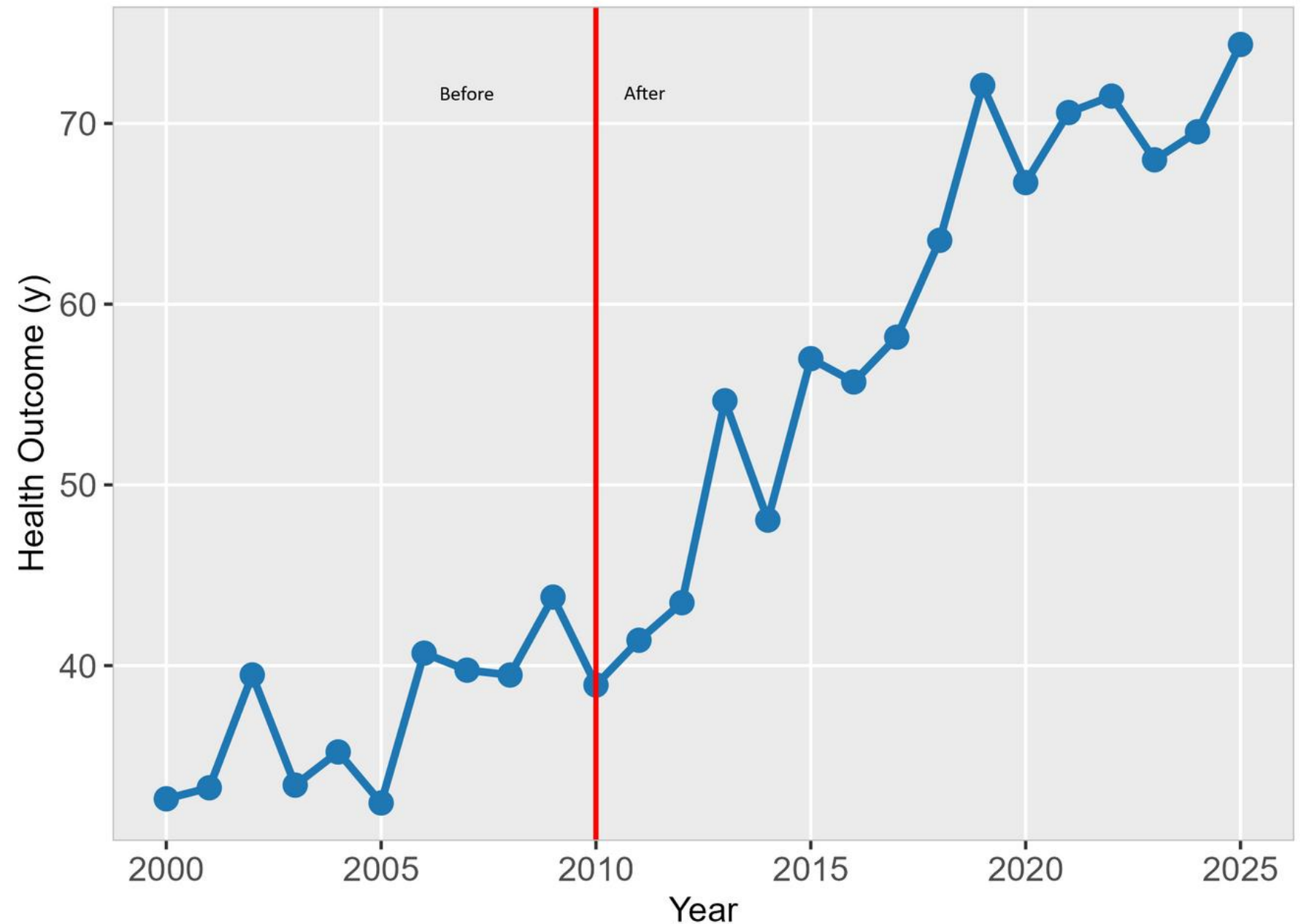
- Nationwide rollouts
- A few “pilot districts” selected purposively
- Pre-post comparison

- **Why it's tempting?**

- Politically expedient and easy to communicate
- Fits short donor reporting cycles.

- **Why it fails?**

- Correlation vs causation confusion
- False confidence for scale-up



Everything else changed too; without a comparison group this is an illusion

#3: Treating Weak Data as Precise Signals

- **How it appears in Policy?**

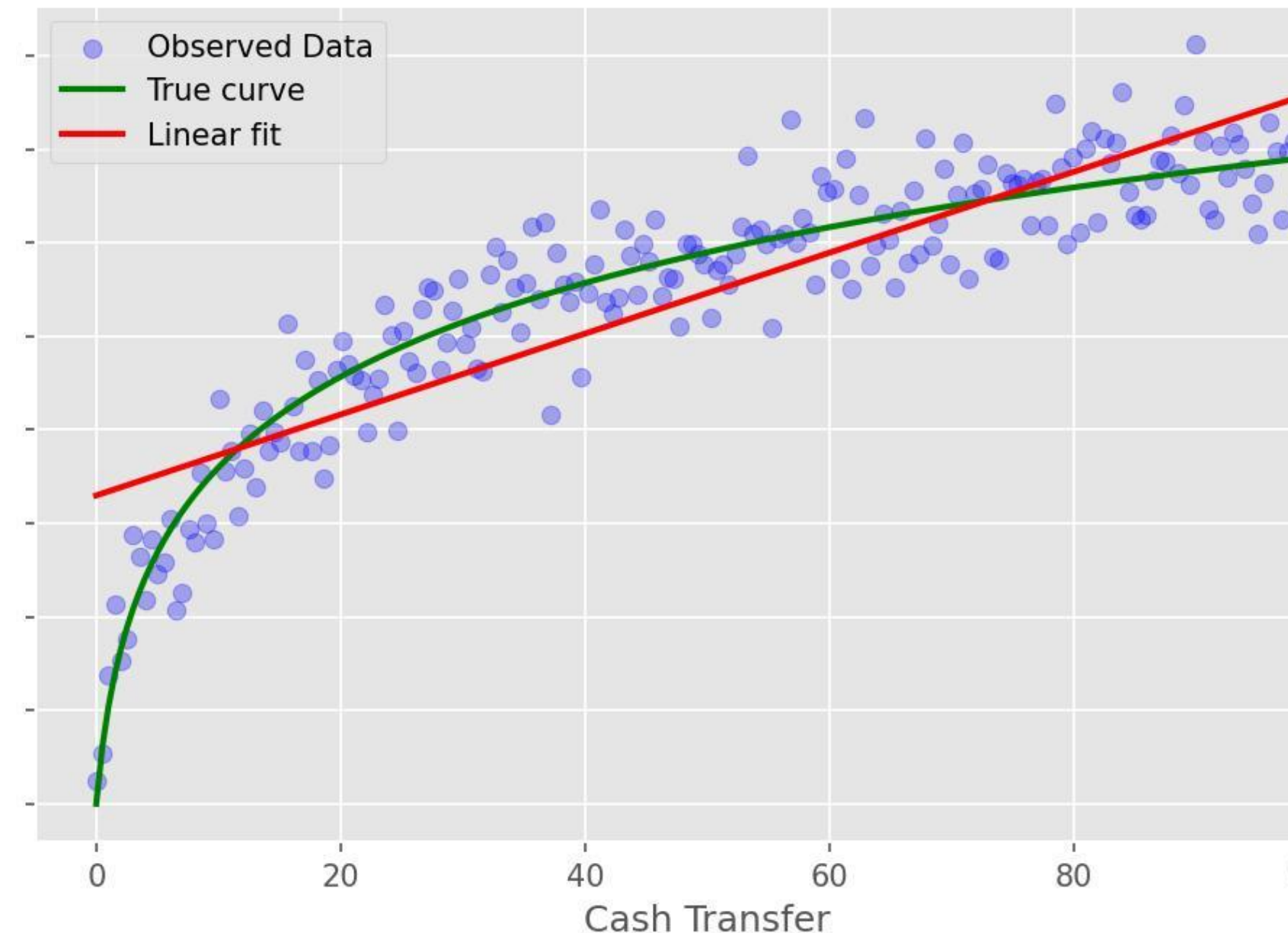
- Instruments based on volatile routine data
- Ranking based on indicators with random noise
- Ignoring uncertainty in model prediction

- **Why it's tempting?**

- Pressure to use data
- Numbers appear precise \square complex results feel scientific

- **Why it fails?**

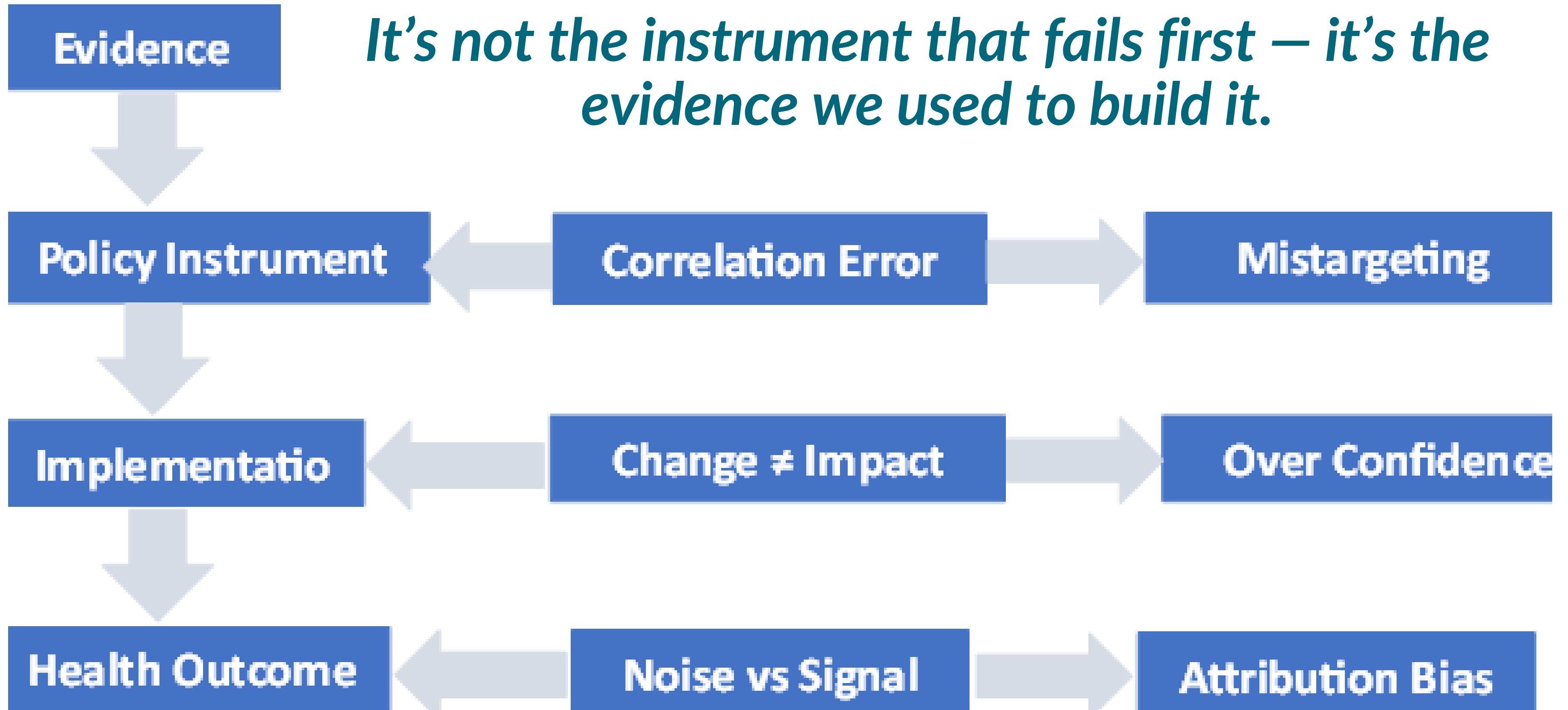
- Mistakes noise for a signal
- Mis-calibrate policy instrument



Noisy data → confident decisions → fragile instrument

How Fragile Evidence Breaks Good Policy?

It's not the instrument that fails first – it's the evidence we used to build it.



A Toolkit: Data & Analysis are Within Reach

- **Unlock Value from Open Data: Constraints \neq data absence.**
 - In Afghanistan, researchers combined mobile phone usage data with surveys to target cash transfers to the ultra-poor more accurately than traditional methods ([Aiken et al., 2023](#)).
 - In China, open GIS data was used to diagnose stark inequalities in health and education service ([Hu et al., 2023](#)).
- **Adopt a "Smart Analysis" Mindset.**
 - In Senegal, a study on sanitation privatization combined routine administrative data with DHS surveys in a quasi-experimental design to evaluate health outcomes ([Deutschmann et al., 2023](#)).
 - Across Africa, integrating conflict data with sequential DHS/MICS surveys has allowed for more dynamic forecasting of malnutrition, turning scattered data into an early-warning system ([Baker & Billing, 2024](#)).

The Key Shift: A Mindset for Causal Rigor

Robustness →

- Randomization
- Full Factorial Experiment
 - Natural Experiment
 - Regression Discontinuity Design (RDD)
 - Instrumental Variable (IV)
 - Difference-In-Difference (DID)
 - Matching-DID
 - Synthetic Control
 - Interrupted Time Series
 - Event Study
 - Matching
 - Weighting
 - Stratification
 - Panel Data Fixed Effect
 - OLS (Covariate Adjusted)
 - Association/Correlation Analysis
 - Mean Comparison

Feasibility →

The goal is not perfection, but direction: relentlessly moving up the ladder toward more credible causal evidence

The One Question that Changes Everything

- The Mantra - What is the counterfactual?
- What it means: *“What would have happened without the policy?”*
- Why it matters: You can't know if a policy worked unless you know what would have happened anyway.
- What it demands: Evidence that compares outcomes to a credible baseline scenario—not just a before-and-after snapshot.
- *“The quality of your policy instrument depends on the quality of the counterfactual that designed it.”*

A New Pact for Better Policy Instruments

- **For Researchers (Us)**

- Design for Causality: Plan the comparison first.
- Communicate Uncertainty: Report what we don't know, clearly.

- **For Policymakers (MoH)**

- Demand the Counterfactual: Make “Compared to what?” your standard question.
- Invest in Open Data: Treat data infrastructure as core policy capacity.

- **For Donors & INGOs**

- Fund Evidence Quality, not just intervention delivery.
- Protect Time for Rigor in project timelines.

***Better evidence is our most
powerful policy instrument.
Let's build it together.***

Thank You !



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Reference

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