

Why Good Health Policies Fail: Fixing the Hidden Evidence Gap

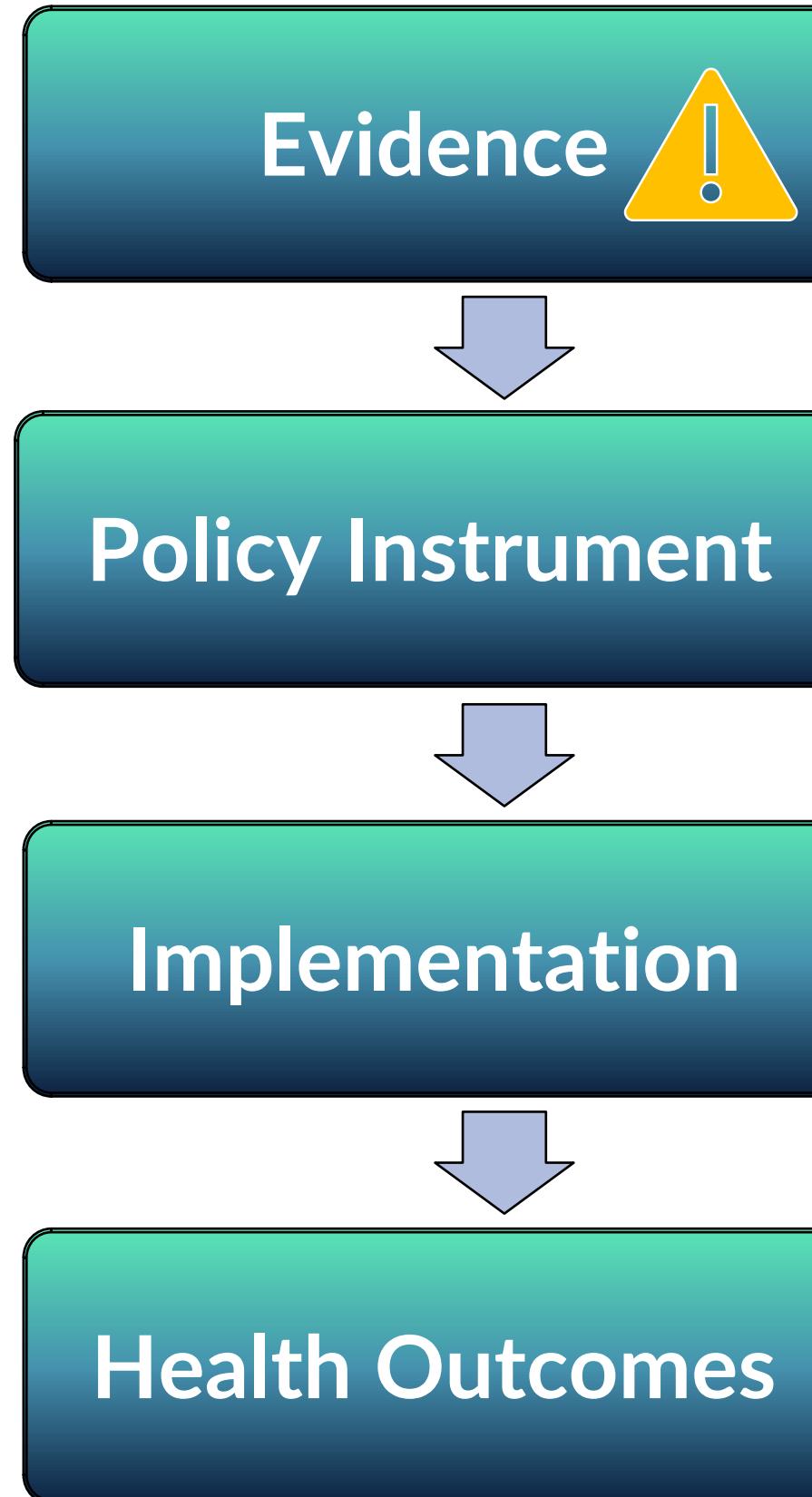
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Good Policy Instrument Under Performs

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

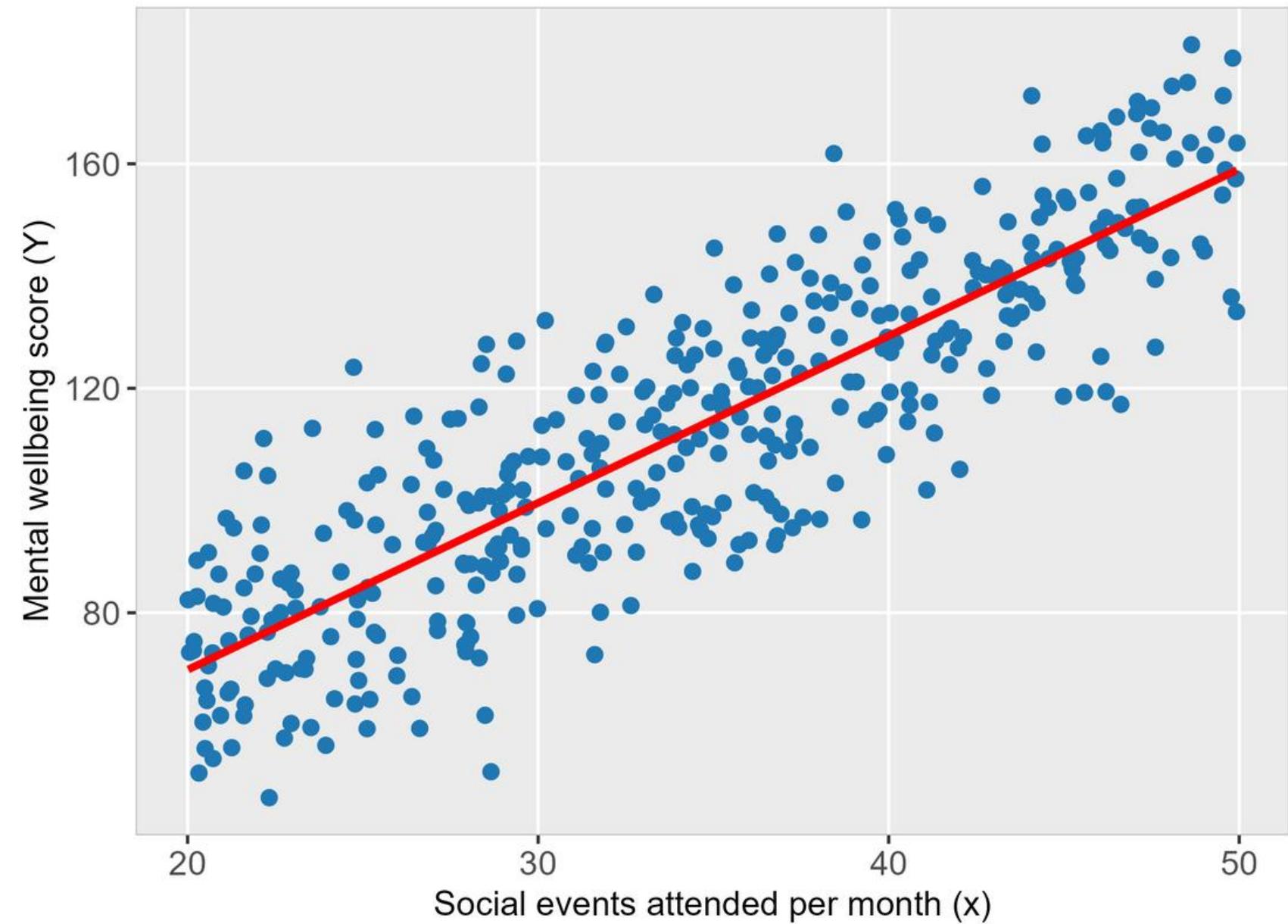
The Policy Chain: Evidence Under Pressure



- 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

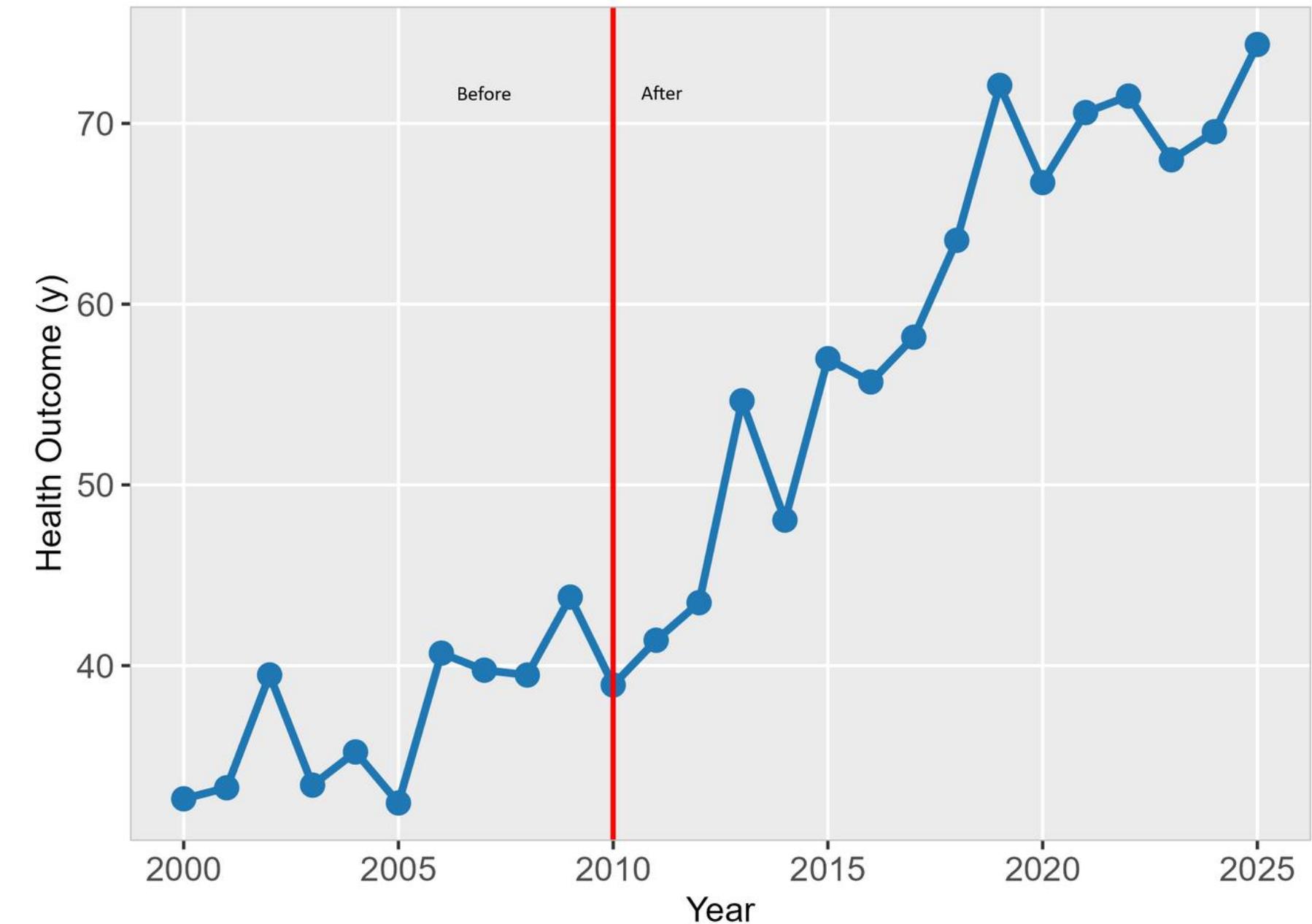
- **How it appears in Policy?**
 - Seeing a pattern in routine data
 - Designing instrument based on “what correlates”
- **Why it's tempting?**
 - Correlations is easy analysis
 - Fits timeline pressure
 - Looks convincing in dashboard
- **Why it fails?**
 - Correlation \square confounding and selection



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?**

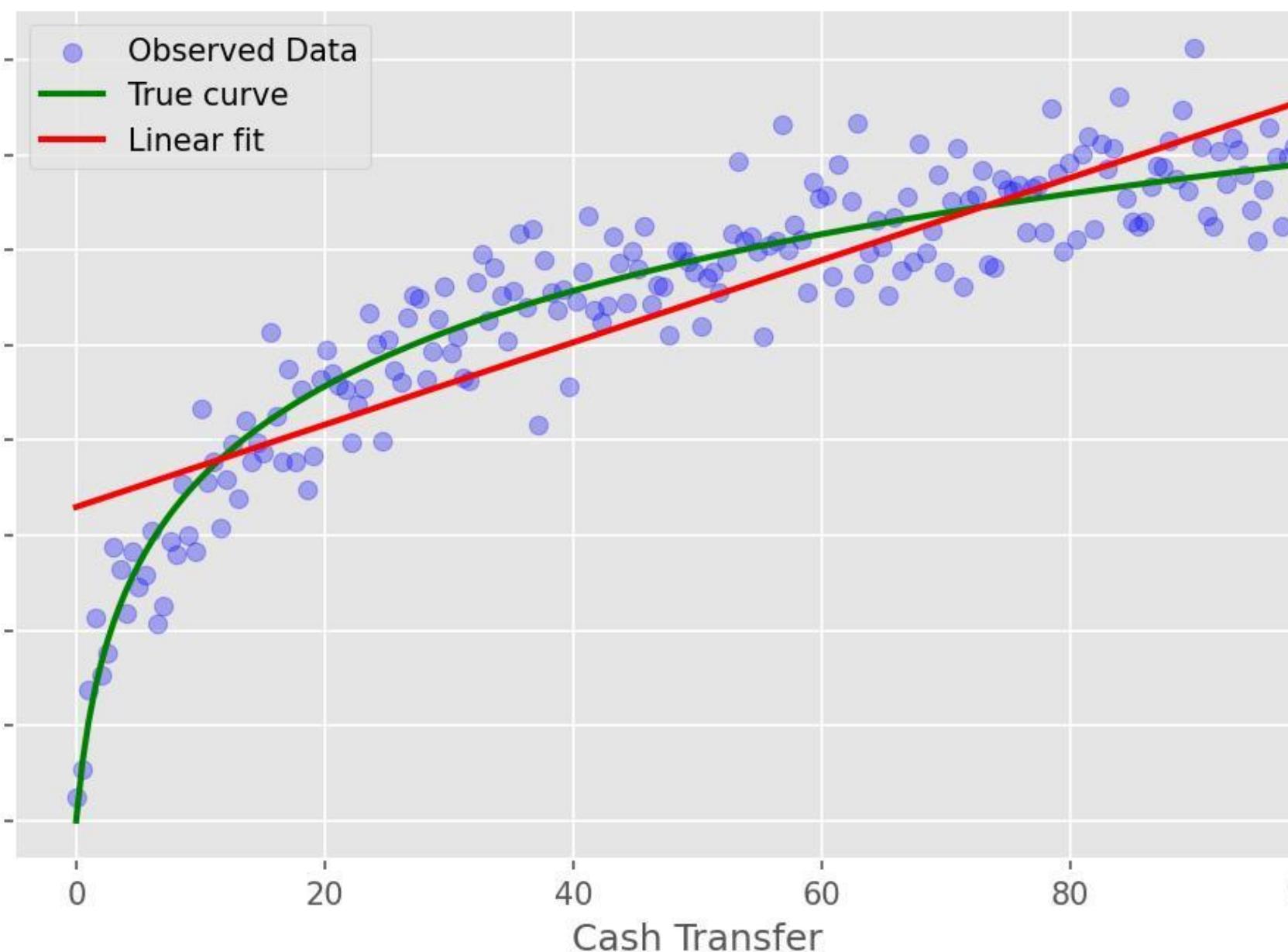
- Instruments based on volatile routine data
- Ranking based on indicators with random noise
- Ignoring uncertainty in model prediction

- **Why it's tempting?**

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

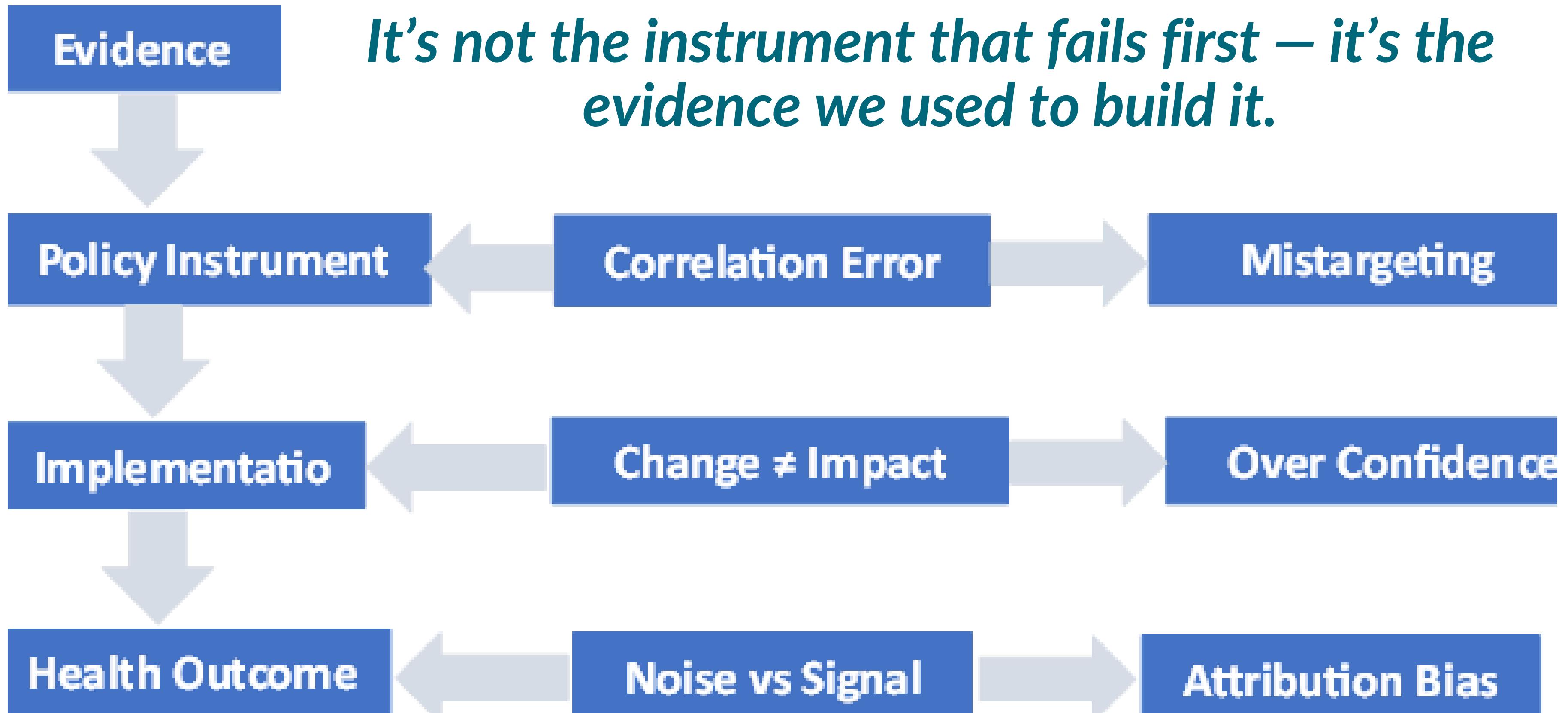
- **Why it fails?**

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



Noisy data → confident decisions → fragile instrument

How Fragile Evidence Breaks Good Policy?



A Toolkit: Data & Analysis are Within Reach

- **Unlock Value from Open Data: Constraints ≠ 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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