C-DIAS
Center for Dissemination & Implementation At Stanford

Can Rollout Designs Offer a Better Fit for Real-World Implementation?

The Public Health Problem

Traditional parallel group-designed trials are often logistically unrealistic, ethically problematic when withholding effective services for control groups, and poorly suited to evaluating policy or large-scale change.

This can lead to low partner engagement, delayed results, or flawed conclusions.

Background

Rollout designs–including stepped wedge trials–introduce services in phases across sites. They ensure all groups eventually receive the intervention, enable comparison over time and across settings, and allow researchers to study implementation and sustainment outcomes.

What This Article Addresses

This paper defines rollout designs and clarifies when they are necessary due to practical or ethical constraints. It also clarifies why they may have stronger statistical power and how they help evaluate real-world implementation strategies across different phases.

What They Did *(Methods)*

The authors reflect on five real-world rollout designs and identify the key drivers behind choosing rollout designs, including ethical concerns (e.g., withholding services), operational constraints (e.g., staffing, funding), and scientific value (e.g., site-level outcomes, implementation fidelity).

What They Discovered *(Findings)*

Ethical concerns matter: When effectiveness is already established, denying services for the sake of a control group is problematic.

Power gains & data richness: Designs that allow both within-site and between-site comparisons often have greater statistical power.

Real-world adaptability: Rollout designs can flex with evolving policies or site readiness.

Opportunities for Action

The study findings highlight opportunities for:

Health care leaders and providers
- Collaborate on rollout design planning to ensure readiness and equity.
- Use rollout design timelines to learn from early adopters and refine implementation.

Policymakers and payors
- Encourage staggered rollout designs when budget or staffing limits exist.
- Invest in systems that track implementation outcomes over time.

Researchers
- Use rollout designs to evaluate both implementation and effectiveness.
- Leverage designs like stepped wedge, head-to-head, or sustainment-focused rollouts.

Patients and families seeking recovery
- Advocate for faster, phased implementation of proven practices.
- Ask for transparent updates on when programs will reach different locations.