Innovation, Implementation and Scaling Evidence-Based Programs

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“Over the past three decades, hundreds of empirically supported interventions showing improved outcomes for children and families have been developed, yet few are actually assimilated into public child services systems …. Consequently, these practices have made little measurable public health impact” (Chamberlin, et al., 2012: 279).

“Based on our rough calculations, less than $1 out of every $100 of government spending is backed by even the most basic evidence” (Bridgeland and Orszag, 2013).

Prevention science has created a foundation for more effective, less expensive governance through a blueprint to solve longstanding social ills and create stronger cost accountability. A formula to grow cost-effective prevention science practices is simple yet provocative:

- **Invest first** in programs with empirically demonstrated success;
- **Innovate and evaluate** where current evidence is promising but unproven;
- **Replicate** effective innovations at scale by serving all who are eligible, and
- **Infuse** capacity to sustain large-scale replications.

Yet, despite significant scientific advancements in prevention and greater attention to the merits of science-based practice, impacts have been limited.

Why? A generation of trial and error reveals that for prevention science-based practices to be scaled proportionate to the problems they address, a forcing mechanism is required. Policies focused on driving the resources, systems and infrastructure necessary toward intentional expansion of small evidence-based programs is critical.

**Isolation is the barrier to scaling science-based programs**

The distinction between policies and programs is far more important than simply a semantic distinction. Policies affect everyone in a given geography (city, county, state or nation) and use fiscal, legal and regulatory mechanisms to achieve defined outcomes. By contrast, programs focus on problems specific to particular people, places and times.

Programs are thus innovations, adaptations or narrow replications; policies are implemented at scale. As such, programs are relatively easier to implement, and form the foundation for testing new science-based prevention practices. However, they often become isolated from the rest of policy-making landscape.

**Policies leverage science-based programs and practice**

On the right-side of the stylized example below, policies have high take-up rates and are reflective of evidence for interventions that are high quality and effective. For instance, policies ensuring safe drinking water, taxing cigarettes and punishing speeding are informed by evidence that rarely is challenged. But policies alone leave big gaps. Policy
effects vary across people and places, and implementation often does not adhere to best practice, leaving gaps. And, there isn’t a science-based policy solution for every problem.

Programs are intended to fill these gaps. The program to research pipeline begins with identification of unresolved issues and identification of barriers to more cost-effective practice. Theory-based solutions are tested as new programs serving small populations in a few places with rigorous evaluation. Less effective strategies are filtered out and best practices are established for effective programs which are replicated through an iterative process.

The challenge lies in leveraging policy to make science-based practices available to all eligible participants.

**How Policy can help to Scale Effective Programs**

Traditionally, the federal government, and to some extent state government, has focused on funding rigorous testing of new programs, seeding the field with evidence of effective, science-based practice. And, federal and state support in demonstration programs, and to a lesser extent implementation, has created a platform for successful scaling, which is shown above along the left-side of the figure. And, while evidence-based practice registries, knowledge translation and implementation science are critical tools to scale effective programs, more can be done.

Using the federal government as the mechanism to facilitate scaling of science-based programs does not always mean acting as a funder. By setting federal budget (policy) priorities focused on these scaling approaches, installing evidence-based innovation centers among federal agencies, re-directing existing federal resources toward scaling efforts, and building federal capacity to effectively translate science-based advances can leverage existing gains and advance cost-effective governance.

**In Summary**

The path to scaling evidence-based programming is clear: invest, innovate and evaluate, replicate, and infuse knowledge into science-based platforms at all levels of government to scale high-quality, cost-effective best practice.