I want to talk to you this morning about how we can adapt our work on evidence, evaluation and implementation to achieve a better fit with the big changes occurring in today’s intervention landscape.

**Evolution of tools to meet changing challenges**

Now, I’m old enough -- though many of you are not -- to remember the olden days, when policymaking was based on politics, anecdotes, fads, and good intentions.

That began to change, starting sometime in the 1960s, more rapidly thereafter, with a push toward

actually using evidence in making decisions about resource allocation and selecting interventions for implementation

Congressman Paul Ryan, now Speaker of the House, had described today’s Zeitgeist very simply: “If we want to make government more effective, we need to know what works.”

But it’s important to note that the prevailing evidence push -- from both government and philanthropy -- has been largely focused on a very narrow range of evidence.

The current knowledge development enterprise invests almost exclusively on determining what programs work

I contend that the prevailing **Focus on what programs work is too narrow**

If we are to address serious problems

like poverty,

like race- and income-based disparities in health and education,

we have to acknowledge that the most effective interventions consist of far more than individual, circumscribed programs.

The narrow focus on what programs work is actually keeping us from getting better results.
- Our program-centric focus is based on an erroneous assumption: that if we know from RCTs that it works here it will work there -- or everywhere that assumption explains our repeated disappointment when efforts to replicate "what works" turn out not to achieve the same outcomes as the original -- even when implemented with fidelity to the original!

- Our program focus ignores the evidence that individual, stand-alone programs usually don’t achieve ambitious goals:
  - no proven early childhood curriculum can produce school readiness;
  - no model parenting class will reduce child abuse in neighborhoods of concentrated poverty

- Our reliance on programs that have been shown to work in the past also discourages innovation and the learning from real-time experience and new research that could lead to the adaptations that could achieve greater impact.

The story of the Nurse Family Partnership illustrates this point. NFP fields nurses to make home visits to low-income mothers pregnant with their first child, and is famous as the early childhood program that has been most reliably shown to work and to be worthy of replication.

Three randomized trials conducted by NFP on three different populations in the 1980s and 1990s provided a major impetus for putting home visiting on the national social policy agenda.

Without them, we might not be seeing a one and a half billion dollar federal investment in home visiting today.

We also would not be seeing some of the enthusiasm for public investment in support of young families, so often based on the presumed certainty provided by these randomized experiments, which have removed some of the risk from the selection of models for implementation, funding, and scaling.

But that certainty has its dark side. When it turns out that the original home visiting model brings only modest results, often because it cannot respond to families struggling with

- maternal depression,
- domestic and neighborhood violence,
substance abuse and homelessness,
community providers are often discouraged from adapting the intervention, for fear that adaptation will undermine, rather than strengthen, the impact of the proven model.

This story suggests to me that we must make what has worked in the past a starting point rather than an end point.

What can be done to help funders and community organizations to learn from the explosion of scientific knowledge and from the systematic collection of practice-based evidence so they might strengthen past practices, tailor them to particular resources, contexts and target populations and connect them to other sources of community supports? Can we put our knowledge to work so that families would not have to rely on a patchwork of disconnected programs, each with its own eligibility criteria and each focusing on a single isolated problem? Couldn’t we help communities to use a broad array of evidence to achieve significantly better results than we’ve gotten in the past?

I believe we could do all that with a more inclusive approach to evidence and evaluation, because yesterday’s tools no longer fit the times. Our knowledge development enterprise must help us to understand, evaluate, and implement interventions that are complex, context-dependent, adaptive and interactive. We need an expanded tool kit to understand the world of today and to improve the world of tomorrow.

Don Berwick, the health policy guru and my colleague in our little group that call ourselves the “Friends of Evidence,” describes our situation this way:

The world we live in is a world of true complexity, strong social influences, tight dependence on local context -- a world of uncertain predictions, a world less of proof than of navigation, less of final conclusions than of continual learning.

To understand and work in the world we live in today, we need **A more inclusive approach to evidence**

To get better results we must be willing to shake the intuition that certainty should be our highest priority, that knowing what programs work in isolation is more important than drawing on, generating and applying a broader range of evidence. Tomorrow’s evidence must be generated and applied to take account of at least five factors that we have largely neglected in the past:

- the complexities of the most promising interventions
- the practice-based evidence that spotlights the realities and subtleties of
implementation that account for success
repeatedly we learn from both practitioners and participants about the critical impact of such factors as front-line discretion, and the relational trust that emerges when a provider is seen as doing more than a 9-5 job

- We have to recognize the importance of fitting interventions and strategies to the strengths, needs, resources and values of particular populations and localities;
  the story of how Mark Zuckerberg’s millions, even when combined with the commitment of a powerful governor and mayor couldn’t fix Newark’s school system, suggests that the best laid plans won’t work when they are parachuted in without reference to who and what is already on the ground.

- A fourth often neglected factor is the heavy context-dependence of many of the most promising interventions, especially those that are complex, multi-faceted, or place-based
  As Patrick McCarthy, president of the Annie E. Casey Foundation, puts it, “an inhospitable system will trump a good program every time.”

- A last factor that a more inclusive approach to evidence would take into account is the systematic learning and documentation that could inform future action
  newer approaches to generating and applying evidence will lead not only to greater results for individual initiatives, but must be designed to contribute to the knowledge base that others can draw on in the future.

**Tomorrow’s knowledge development enterprise would enrich and inform our ability to achieve greater results at scale**

- We would invest in identifying the common elements of diverse attempts to reach similar goals

  Efforts to identify the underlying principles of what’s working may be more promising than concentrating on programs as models to be replicated. Some of this work is currently being undertaken. For instance,

    The National Scientific Council on the Developing Child reviewed the evidence on commonalities among the child care environments that promote healthy development, and found that the critical elements were ensuring “that relationships in child care are nurturing, stimulating, and reliable, [leading to] an emphasis on the skills and personal attributes of the
caregivers, and on improving the wages and benefits that affect staff turnover.” (Contrast this finding with the policies that predominantly define “quality” in terms of adult-child ratios, group size, and physical facilities.)

To take another example, the Center for Juvenile Justice Reform at Georgetown University, in a review of 548 programs aimed at reducing recidivism among delinquent youth, found that work with juvenile offenders was much more likely to be effective and to reduce recidivism when the intervention took a therapeutic approach to changing behavior rather than a control or deterrence philosophy—a finding still often not reflected in practice and policy.

- **We would clearly define the theories that support our actions.** When our actions are informed by the research findings that connect our actions with their expected results, we can have much greater confidence in these connections -- even when they are too complex to be proven.

- **We would work to make our systems more hospitable to interventions that are evolving and improving**

  The National Implementation Network has found that “Organizational and system changes are essential to the successful use of innovations, because innovative practices do not fare well in existing organizational structures and systems.

- **And lastly our knowledge development enterprise would take seriously the challenges of implementation.**

Two weeks ago, Jim Kim, the president of the World Bank, speaking to the National Academy of Medicine, insisted that sustained improvement in health outcomes are constrained much less by a lack of basic science than by our poor understanding of what he called “the science of delivery.”

An example of what happens when implementation and “the science of delivery” are taken seriously comes from the Carnegie Foundation’s Pathways Improvement Communities, created to address the problem of the extraordinarily high failure rates among the half-million community college students annually assigned to remedial math instruction as a prerequisite to taking degree-level college courses. Traditionally these courses have been a massive obstacle to opportunity. Only about 20 percent of those enrolled ever make it through them.
Education reformer Tony Bryk, president of the Carnegie Foundation for the Advancement of Teaching, created what he calls a *structured network*, of faculty members, researchers, designers, students and content experts. Members of the network met frequently and provided a safe environment for participants to analyze the primary causes of the problem, devise strategies, rapidly test improvement hypotheses, compare results and discover patterns in the evidence that came out of their daily work. They have been able to dramatically improve outcomes -- tripling the student success rate in half the time. And these improvements occurred for every racial, ethnic and gender subgroup and at virtually every college where the innovation has been implemented.

**We must deploy an expanded approach to evidence to solve big problems**

I conclude with the contention that by taking an expanded approach to evidence, we can solve big problems. Of course, solving big problems takes political will, not just a larger evidence tool kit. But by becoming smarter in how we approach evidence, we can contribute to strengthening the needed political will. To quote Don Berwick once more, “People committed to science ought to supply not just skepticism but also hope.”