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# **MATHEMATICA** Policy Research

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## **Commission on Evidence-Based Policymaking**

### **Using Evidence to Improve Programs and Inform Policy Decisions**

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For nearly 50 years, Mathematica has been dedicated to delivering high quality evidence and objective analysis to help policymakers and public program leaders uphold their missions to improve public well-being. As senior fellow and director of human services research in Mathematica's Chicago office, I want to thank you for the opportunity to contribute to the important work of the Commission with my testimony today.

Earlier this month, Mathematica President Paul Decker emphasized the importance of evidence-based policymaking in a letter submitted during the Commission's open comment period. Today, I will underscore several of Paul's key points while also highlighting my own experience in evaluating policies and programs for vulnerable youth and at-risk families. I will focus my comments today on:

- Effectively translating research evidence into actionable policy changes and program improvements
- Expanding access to administrative data in support of that research
- Ensuring that evidence used in policymaking is rigorous

**I begin by highlighting how research can, and should, be translated into actionable policy changes and program improvements.** I have seen this happen firsthand. For example, Mathematica is working with the U.S. Department of Health and Human Services, Office of Adolescent Health to expand the use and understanding of evidence-based programs to prevent teen pregnancy. Over the years, we have identified dozens of these programs that have demonstrated evidence of success in reducing sexual risk behaviors among adolescents. This is important because the federal government has invested millions of dollars to disseminate

knowledge about these programs and to implement and evaluate them in communities around the country. Currently, we are designing new evaluations of teen pregnancy and other risk prevention programs that build on this growing portfolio of research.

In work we are doing for the Administration for Children and Families (ACF), we are studying interventions designed to help former foster children who are at risk of homelessness and face significant challenges in the transition to adulthood. We provided evaluation technical assistance to state and local grantees as they developed comprehensive and innovative programs to support at-risk youth in making a successful transition to independent adult life. This project is helping strengthen these grantees' interventions and evaluation plans, build their local evaluation capacity, assess the evaluability of their programs, and document the progress they make during the planning period. It also provides insight into potential designs and implementation of broader programs intended to reduce homelessness among former foster youth. A key lesson from this is that building evidence can take significant upfront work with programs to make sure we evaluate approaches that are innovative, well implemented, and significantly different from existing services.

Also for ACF, Mathematica is evaluating the effectiveness of maternal, infant, and early childhood home visiting programs, which are designed to achieve better outcomes for mothers, fathers, and their babies. Adverse birth outcomes, such as low birth weight and preterm birth, are more common in the United States than in other developed countries, and they extract emotional and economic costs from families and communities. Our studies are providing evidence on which programs are effective in improving children's health and development, as well as other outcomes.

**Conducting this work effectively, however, requires expanded access to sophisticated administrative data.** For child welfare agencies in particular, the ability to link administrative data across systems and apply them to decision making can have a real impact on vulnerable children and families. Although administrative data give agencies the ability to inform program development and improve outcomes, expanded access comes with challenges, such as maintaining confidentiality and understanding the meaning and usefulness of data in the various human services systems. Learning to use these data effectively and efficiently requires expert guidance from state and local leaders who specialize in data systems, policy, and practice.

In one project for Casey Family Programs, we are examining administrative data in two states to identify children and youth who are heavy users of child welfare, Medicaid, and other services. Identifying subpopulations of children and youth who are continuously using intensive

services may shed light on those who lack support at critical junctures, are placed in overly restrictive environments, receive too many ineffective services, or are in need of better and different ways to meet their extensive needs. We expect this project to help child welfare and allied agencies achieve better outcomes for youth and families by tailoring more effective services to them earlier. We also expect that our findings will demonstrate the need for service coordination across systems to identify better strategies to serve these children.

Our project team has encountered some barriers in accessing the data, however. First, we live in a world of decentralized data, where each state or county collects and stores data in a different way. This leads to the need for many months of work to understand each data set, what it can provide for analysis, and what may be missing or inaccurate. Second, the privacy protection laws—important for preventing the misuse of information—can create long delays in access for legitimate policy research. We should seek ways to standardize data across jurisdictions, while allowing for some state flexibility, and also find ways to fast-track policy research requests while continuing to protect privacy.

**Evidence used in policymaking must be rigorous, using a strong research methodology and starting with a carefully designed research question.** I also support Paul’s view that too often, policy is made using subjective judgment or poorly designed research. While randomized controlled trials (RCTs) are the “gold standard” of research methodology, high quality research can also encompass a wide range of research methods. Program managers seeking to refine a program may use descriptive or non-experimental analyses that help generate hypotheses about what is working and what is not. They may also use machine-learning methods and big data to predict which services might be most effective for each program participant based on his or her characteristics and needs. These managers could then propose changes to their program and evaluate these changes using an RCT or a quasi-experimental design (QED) before deciding to roll out the change widely.

For another ACF project, I am working with a team of researchers to explore the potential of advanced research methods and data to address unanswered questions about the incidence of child maltreatment. Although research on child maltreatment has advanced substantially over the past 20 years, new data and innovative research tools make it possible to better understand the incidence of maltreatment and related risks and, in turn, to improve practices and policies. Our findings will inform the direction of future research. We will draw on existing administrative data, innovative methods, and advanced statistical techniques by identifying and prioritizing key research questions and exploring innovative methodological approaches. In each design option, we will discuss primary research questions; describe how to access, use, and link relevant data

sources; identify relevant survey items and statistical analysis plans; pre-test instruments; estimate statistical power, respondent burden, and needed resources; and discuss the barriers, challenges, and feasibility.

The common thread running through all of the points and examples cited above is the importance of strengthening partnerships between the research community and the public policy and program communities. Working together more effectively and efficiently will help us achieve our shared mission to improve public well-being. Researchers can provide critical insights at all stages of policy and program design and improvement. In the same vein, government agency staff can be important partners throughout the research process by contributing vital perspectives on identifying and implementing evaluations and providing access to key data.

Fostering a culture of evidence throughout our federal, state, and local governments is essential to ensuring that policies and programs are developed and refined to meet the needs of our fellow citizens. I am honored to be able to present this testimony to the Commission today, and we at Mathematica look forward to following the Commission's work in the months ahead. I am happy to respond to any questions about my remarks today. Thank you.