

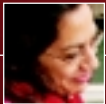


Collecting Information

Conducting Research

Producing Results

Creating Resources



35

Y E A R S

MATHEMATICA
Policy Research, Inc.

To find out more about who we are and what we do, please contact:

Communication Services

Telephone: 609-275-2372

Fax: 609-799-0005

E-mail: info@mathematica-mpr.com

Monthly e-newsletter subscriptions:

www.mathematica-mpr.com/email.htm

Mathematica has been collecting
information, conducting research,
producing results, and creating
resources for policymakers for

35 *years*

Our multidisciplinary staff has the
wide-ranging, integrated expertise
needed to answer the most challenging
social policy issues facing our nation.

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Celebrating a Generation of Research, Results, and Resources

A nation facing change needs innovative thinking built on solid evidence that informs the major questions confronting decision makers. How can we enhance the quality of education in traditional and nontraditional settings, improve the delivery of health care for children and seniors, and reshape the way the nation responds to the needs of its most disadvantaged citizens?

For 35 years, clients have turned to Mathematica Policy Research, Inc., to provide the data, research, and analysis required for effective and cost-efficient action. Over the years, Mathematica's work has provided essential information for policymaking, implementation, and further assessment and has produced better results for all Americans.

Today this work is more relevant than ever. The first economic downturn in a decade, escalating health care costs, and new spending demands after September 11 have strained state and federal budgets and placed a premium on finding more effective ways to invest public resources. The foundation of strong policymaking is sound, objective information based on high-quality data and rigorous research that draws from the broadest range of analytical perspectives. This is the service we offer, and our clients rely on our reputation for excellence and integrity in everything we do to help them address important social concerns, identify emerging policy issues, and evaluate ongoing programs.

Finding answers to important social questions is not an easy task. The process requires teamwork across disciplines and areas of expertise, teamwork that is exemplified by the collaborative research our staff of talented economists, survey researchers, sociologists, and statisticians do every day. By working together to examine issues and programs from a wide array of viewpoints, we produce the substantive knowledge required to mediate debate over social policy and bring our leaders together in finding solutions.

This report surveys the recent work Mathematica® has done to help our clients move effective policymaking forward. It demonstrates the depth and breadth of our expertise and shows how we continue to build on our commitment to providing data, research, results, and resources for the future.

MATHEMATICA Inc.

Mathematica, Inc., is the employee-owned parent company of Mathematica Policy Research, Inc., and the Center for Studying Health System Change.

MATHEMATICA Policy Research, Inc.

Mathematica Policy Research, Inc., strives to improve public well-being by bringing the highest standards of quality, objectivity, and excellence to bear on the provision of information collection and analysis.

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The Center for Studying Health System Change (HSC) informs health care decision makers about changes in the health care system at both the local and national levels and the effects of such changes on people. HSC seeks to provide objective, incisive analyses that lead to sound policy and management decisions, with the ultimate goal of improving the health of the American public.

Statement from the Chair



Academic institutions are constantly striving to develop successful interdisciplinary curricula and research activities—on the whole, unsuccessfully. In the social sciences, these efforts tend to be centered in schools of public policy, where the need for an intellectually integrated response to issues of public importance is particularly clear. Fundamentally, insights into policy problems require the analytical and methodological tools of multiple disciplines. But the long-term commitment of faculty members to their individual field—be it economics, or psychology, or sociology—usually precludes truly integrated approaches to public policy issues in universities.

However, in think tanks in general and in Mathematica in particular, these barriers are genuinely broken down. The way in which the economists, psychologists, survey researchers, sociologists, and statisticians at Mathematica work together on evaluating the effectiveness of social policies on public well-being is a marvel to behold! The standard disciplinary boundaries are not visible in their reports on the assessment and impact effects of a vast range of public programs.

The company's sterling reputation is a function of each of the individuals, but it is also a function of their intellectual ability to integrate their work with that of other fields. It is why clients react positively to Mathematica—and it is why the public well-being is served so well by the firm.

Beyond the intellectual synergies, the staff is unique in its ability to work as a team. In the past year, substantial resources were spent to expand Mathematica's base of policy research and data collection activities—and the results were spectacularly successful. The caliber of the company's interdisciplinary intellectual efforts underlies these results. However, although these efforts were a necessary ingredient for success, in and of themselves they were not enough. It was the genuine pulling together of all the participants—the energizing effects of warm camaraderie—and the parameters of excellence and objectivity championed by Chuck Metcalf and the company's other leaders that motivated the actual results.

I have been part of several organizations in my professional life. I consider Mathematica's ability to integrate both fields of knowledge and people unique. That the firm has maintained these characteristics during its rapid growth over the past decade is particularly remarkable. Pride is what we all feel—and it is appropriate that we do so!

Anja A. Summers

President's Message

When I wrote the president's message for Mathematica's 30th anniversary report, I spoke about change—both in the company and in the broader world of social policy formulation. Recent world and national events have created more profound change than any of us could have imagined a few years ago, shaking the country deeply and creating an environment of great uncertainty. Economic recession, corporate scandals, and defense and homeland security concerns have led to new priorities in Washington and state capitals. These concerns have also shaped the domestic social policy agenda on issues like rising unemployment and its impact on workers with low skills or little experience, growing concerns with public health, escalating health care costs, and changing mandates for our nation's schools.

At the same time, attitudes toward policy issues have shifted and new questions have emerged. Just as welfare-to-work was gaining acceptance with most Americans, the nation's first recession in a decade raised new issues about whether former welfare recipients could break the cycle of dependency and move into the mainstream labor market. Likewise, incremental steps to reform the health care system have been overshadowed by steep cost increases and concerns about health care choices. New initiatives in social policy, like efforts to encourage abstinence among teens and promote healthy marriages for adults, have generated added controversy and debate.

In this changed environment, the need for reliable, high-quality, and objective analysis to shed light on the most effective ways to invest public resources has never been greater. Strong research mediates policy debates, tones down political rhetoric, and engages people in substantive collaboration on addressing controversial issues. Mathematica's mission—to improve public well-being by bringing the highest standards of excellence to bear on our work—has guided our contribution to changing policy environments no matter which way the political winds blow. For 35 years, our clients have trusted us to help solve their most vexing problems through solid, reliable evidence. Our commitment to “getting it right” has been paramount in guiding the company's mission to contribute openness and objectivity to the formulation of sound social policy.

Much of our work lies at the forefront of current debates. The company's approach is to think holistically, integrate multiple research strategies, and synthesize information from multiple domains. For example, the staff contributing to our studies on strengthening healthy families brings a range of expertise to the table, including knowledge of low-income families, education, employment, child development, substance abuse, mental health, and child support policy. Our work will provide critical insights on emerging questions about program effectiveness.

We also assess program implementation and specialize in providing our clients with flexible yet powerful analyses that do not intrude on operations. Staff in our research and survey divisions work closely together to design and conduct surveys in-house, so that we can synchronize data

collection to better meet our clients' needs. In addition, we provide innovative survey design ideas to help our clients collect high-quality data.

One of Mathematica's hallmarks is the value we place on teamwork. We collaborate with others, inside and outside the organization, to complement our broad interdisciplinary skills and bring the best thinking to bear on current policy concerns and longer-term knowledge formulation. Through our work with research and academic partners, expert panels, funders, practitioners, legislators, community-based organizations, and systems and technical experts, we constantly strive to expand awareness of what works. We also value sharing data with other scholars so they can test and replicate our results. To ensure that the knowledge we produce is widely distributed, we have increased our investment in communicating our findings on important social issues to policymakers, practitioners, and the public.



Over the years, our experience has grown as we have addressed different policy agendas. The company was formed as a division of Mathematica, Inc., in 1968; by 1975, Mathematica Policy Research, Inc., was incorporated under its present name. In 1986, the firm became independent, employee-owned, and empowered to define and further its own mission. Our partner company, the Center for Studying Health System Change (HSC), established by the Robert Wood Johnson Foundation, was founded in 1995 to provide authoritative information on how changes in the health care system were affecting individuals and families.

As we continue to grow and respond to the challenges facing our nation, we retain our focus on important issues related to the well-being of children and families, individuals, and elderly people. Throughout our evolution, we have maintained a constancy of mission: bringing policy insight, analytical skill and experience, and an unbiased eye to issues of consequence in the making of public policy. Our core commitment to excellence and objectivity is absolute as we address the high-profile concerns confronting the nation and the enduring issues that need continuing attention.

Charles E. Metcalf

About Mathematica Policy Research

Mathematica Policy Research is a leader in policy research and analysis. For 35 years, we have been turning our research into a resource for policymakers and providing our clients with the precise, objective information they need to make good policy decisions. In health care, welfare, education, nutrition, employment, early childhood development, and other social policy areas, we gather information and conduct research to help delineate how changing programs and policies will affect the well-being of our country's citizens.

Our uniquely broad perspective on the dynamics of social change starts with the multifaceted experience of our staff. From nationally known experts to the best of a new generation of social scientists, our professional staff includes more than 100 demographers, economists, education specialists, statisticians, survey researchers, sociologists, physicians, and systems analysts. This extensive expertise allows us to deliver fully integrated services, encompassing all facets of research design, survey data collection, statistical services, analysis, and interpretation and dissemination of results to our clients.

Mathematica's professional staff is located in our corporate headquarters in Princeton, NJ, and in Washington, DC, and Cambridge, MA. We also maintain survey operations centers in Princeton and in Columbia, MD.

To make the most of our expertise, we have organized Mathematica into two mutually supportive divisions: the Research Division and the Surveys and Information Services (SIS) Division.

The Research Division

The Research Division is nationally recognized for work that spans the range of social science research, from implementation and evaluations of large-scale, multiyear demonstrations of new policy initiatives to quick-turnaround assessments of ongoing or proposed programs. The division focuses on program evaluations for federal and state governments, the traditional centers of policymaking. It also conducts research for foundations, a significant force in shaping our nation's social agenda.

Researchers bring to each project a thorough understanding of the approaches they study and their role in the broader system, as well as the techniques necessary to develop, monitor, and evaluate programs and practices with rigor and objectivity. Our staff excels in interpreting and communicating their findings to a range of audiences, including administrators, policymakers, and technical staff. The division's specific capabilities include:

- Designing demonstrations and experiments
- Evaluating programs quantitatively, through econometric and statistical analyses of impacts, benefits and costs, quality, and value of output
- Evaluating implementation and operations qualitatively, using process and case-study analyses
- Using microsimulation to predict the effects of proposed changes
- Designing and programming systems to support research
- Conducting policy analyses to better understand the implications of policy choices
- Communicating research findings clearly

The Surveys and Information Services Division

The SIS Division specializes in high-quality data collection, the backbone of program monitoring and analysis. From physicians to unemployed workers to disadvantaged youth, our surveys capture the experiences of Americans affected by today's policies. Division staff members develop statistical samples and design questionnaires. They also collect, process, and analyze data that support the research conducted by Mathematica and other organizations.

The division's data collection capabilities include 200 in-house computer-assisted telephone interviewing stations in the two survey operations centers. This technology improves the quality of data, permits more detailed questioning, and increases the overall speed of the data collection effort. We also work with a network of thousands of field interviewers to conduct in-person interviewing, often using computer-assisted technology. Our survey professionals, survey methodologists, systems specialists, and statisticians offer clients unparalleled expertise in the following areas:

- Constructing sophisticated, cost-effective samples and maintaining their integrity
- Developing questionnaires and survey approaches
- Conducting telephone, mail, web, and in-person data collection
- Developing sample tracking and database systems
- Conducting focus group discussions
- Extracting and coding data from clinical, claims, school, and administrative records
- Conducting statistical synthesis of survey data

The quality of public education and a looming teacher shortage rank high on the list of our country's educational concerns. Our evaluation team is working in five cities across the country to evaluate the Teach for America program, which recruits recent college graduates from all academic majors for two-year teaching stints in urban and rural public schools.

Senior researcher Daniel Mayer (photo this page), shown meeting with Patricia Burrell, principal of the Alexander Hamilton School in Baltimore, interviewed superintendents and principals to design the impact evaluation.

Survey researcher Kathy Sonnenfeld (photo opposite page) administers tests to students while vice president Paul Decker looks on. The survey team is collecting data for the evaluation in elementary classrooms across the country.





Leading the Drive Toward Scientifically Based Education Research

Integrating Powerful Techniques and Building the Evidence

Although education and child development are perennial policy concerns, new legislation has elevated the importance of rigorous education research in the public's mind. The federal No Child Left Behind Act (NCLB) passed by Congress in 2002 has increased the demands on schools to help close the achievement gap between disadvantaged students and their peers. The legislation is based on four principles:

- Stronger accountability for results
- Increased flexibility and local control
- Expanded options for parents
- Emphasis on proven teaching methods

To provide information for reliable decisions that promote higher achievement and use public dollars wisely, the legislation also calls for heavier reliance on "scientifically based research," especially research using random assignment to measure effects of policies and programs.

Scientifically based methods have been the hallmark of Mathematica's studies in education and child development for decades. In the past 10 years, we have conducted nearly all the large-scale random assignment studies of federal



education programs. Our high-quality, empirical research has been a valuable resource for policymakers. More recently, we have responded to new federal imperatives by designing the first rigorous studies launched under NCLB in crucial policy areas of school reform, education technology, and teacher training. These projects advance our tradition of integrating the most sophisticated and powerful techniques into studies measuring the effects of education policies.

The backbone of scientifically based research is its reliance on random assignment or well-constructed comparison groups to measure program effects with painstaking attention to alternative hypotheses and explanations for what is being measured. Our studies of initiatives to promote infant and child development, help high school students stay in school, and prepare youth to attend college have combined random assignment designs with field investigations of program services. This blending of quantitative and qualitative assessments produces the most complete, objective information for making informed decisions about effective programs and policies.

Examining Issues Across the Age Range

Our studies of educational interventions span the years from early childhood to young adulthood. For example, our Early Head Start evaluation found that participating infants and toddlers performed significantly better in cognitive, language, and social-emotional development than their peers who did not participate. Responding to interest in the interaction between the home environment and learning, we also found the program had important impacts on many aspects of parenting and family life.

What students do after school has long been a source of national concern, and Mathematica's research has shown that 21st Century after-school programs, which received \$1 billion in federal funding in 2002, changed where and with whom students spent some of their after-school time and increased parental involvement in school activities. But our analysis also revealed that after-school programs had only limited influence on academic performance and other program objectives. Our findings have translated into efforts to refocus the program on the goal of improving students' academic outcomes.

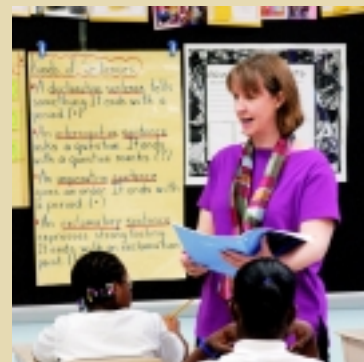
Helping students graduate from school and strengthening their educational transitions are important concerns in communities across the nation. Our random assignment study of federal dropout prevention programs focused on identifying effective strategies for retaining students. We found that programs geared toward improving instruction—rather than focused on providing student services—had the most impact, but we also identified the need for more accurate ways to profile students at risk of dropping out. Our study of the Upward Bound

program found that the program encouraged more students with college potential to attend a four-year college when they might otherwise have attended a community college or not gone at all.

Sharpening the Focus on Teachers

Improving teacher preparation and training are critical elements of federal education reform initiatives, but teacher shortages and the need to find highly qualified candidates are complicating these efforts. To study the relationship between teacher quality and student achievement, we are evaluating Teach for America in one of the first uses of scientific research principles in the classroom. The Mathematica team, which randomly assigned students to teachers in participating schools, is currently documenting the program's impact in five cities across the country. We are also studying the impact of alternative teacher certification on student performance and designing an analysis of alternative certification programs to assess their effectiveness in addressing teacher shortages.

To provide the most complete picture of educational effectiveness, we integrate data from a variety of sources, including students, parents, teachers, principals, and staff members, enabling us to explore a wide range of issues. We also use innovative videotape and observational techniques to gather information, blending this information with questionnaires, cognitive tests, and other methods. To help people make well-informed decisions, we are reviewing and synthesizing the evidence from previous random assignment and quasiexperimental studies in education. We are skilled in using high-quality statistical and econometric tools and existing data sets to investigate education policy questions. Through these and other techniques, we are generating reliable, nonpartisan data and critical insights into policy issues at the top of the national agenda.





Studying New and Continuing Challenges in Health Care

Integrating Wide-Ranging Expertise

At a time when health care costs are consuming more than one-tenth of our gross domestic product and straining state and federal budgets, policymakers need timely and reliable information on the effectiveness of health care investments and an accurate analysis of what needs remain unmet. Our multidisciplinary health research and survey staff members are examining critical issues related to access and quality of care, adequacy of insurance coverage, and outcomes for different groups. We are also answering pressing questions about the capabilities of the health system and care for vulnerable populations, including minority, elderly, disabled, and low-income people.

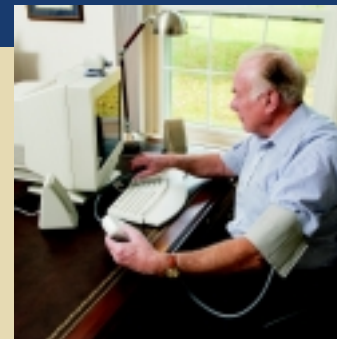
Over the past two decades, debate has focused on assessing the number of Americans who lack insurance and the potential threats that limited access poses to their health. Policy responses have included expanded eligibility for Medicaid and introduction of the State Children's Health Insurance Program (SCHIP). States have also been testing new options for expanding insurance access, with some considering universal coverage for their insured populations. We helped inform this discussion by simulating a single-payer plan in Maine and examining its impacts on different groups as well as the state economy. We have also analyzed state programs that allow people with disabilities to retain their Medicaid coverage when they return to work.

Interactive technology holds promise for helping people with chronic illnesses better manage their diseases and prevent costly complications.

Vice president Judith Wooldridge, senior researcher and M.D. Arnold Chen, and senior researcher Lorenzo Moreno are evaluating a pilot project that uses “telemedicine” to monitor patients with diabetes who live in areas where they have trouble accessing care.

Insurance coverage does not always guarantee access to care, however. We are conducting two large-scale evaluations of SCHIP to document how programs reach out to families to increase coverage, when and why families join or leave the program, and what services they access while enrolled. We are also evaluating a nationwide program that helps state and local coalitions expand enrollment in Medicaid and SCHIP. To evaluate initiatives for our country’s youngest citizens, we are studying how the Healthy Start program is organized to improve infant outcomes.

Mathematica is also analyzing emerging issues in mental health and substance abuse policies. To help inform questions surrounding the consequences of parity legislation, we are evaluating how these laws affect the availability of employer coverage, as well as access, utilization, and spending, for mental health services in Vermont and California. We have also estimated the number of



From their homes, patients like George Mertz (above) enter blood pressure and blood glucose readings into a web-based clinical system and interact with an on-line nurse/case manager. The Centers for Medicare & Medicaid Services is testing this team approach to determine if it delivers better care more cost-effectively.

people with public and private mental health coverage, including the number with employer-based behavioral health coverage subject to state parity laws. Each year, we collect extensive data on use of the nation’s publicly funded substance abuse treatment centers.

Delivering Medicare Services More Effectively

The resources needed to sustain the Medicare program, a major component of federal health expenditures, will continue to expand as baby boomers reach retirement and the elderly and disabled population grows. We have been at the forefront of tracking and disseminating information about changes in Medicare+Choice—the program’s managed care option—and how the changes affect



enrollees. As HMOs reduce Medicare benefits or withdraw from certain markets, we are documenting changes in benefits, the number of managed care organizations participating, reasons for withdrawals, and effects on beneficiary choice and enrollment. These trends have produced declining enrollments, greater difficulties in accessing care, and serious hardships for low-income Medicare beneficiaries who lack drug coverage and other benefits.

A large part of the medical care provided in the United States goes to a relatively small number of people with extensive needs—for example, 49 percent of Medicare expenditures are devoted to 6 percent of beneficiaries. We are helping federal policymakers identify models for coordinating care and managing chronic illnesses for elderly and disabled Medicare beneficiaries through evidence-based protocols focused on increasing effectiveness and quality of care. We are also studying how web-based systems, such as telemedicine, and other advanced technology can be used to improve care for those with poor access.

Options for Long-Term Care and People with Disabilities

To improve the ability of our health care system to meet the needs of an aging population, we are analyzing long-term care issues. In a study for the Robert Wood Johnson Foundation, we are looking at the growing need for long-term care and the infrastructure needed to provide adequate care in the future. Our staff is also examining consumer-directed care, an option states introduced in response to demand from people with disabilities who want to manage their own care. These programs give Medicaid enrollees cash rather than services so they can hire and pay helpers to assist them with daily activities like bathing and meal preparation. Our research has shown that participants are more satisfied, have fewer unmet needs, and are no more likely to suffer adverse health consequences than people in the traditional program.

The growth of the long-term care sector has also focused attention on the need to train and supply more workers, and we are designing a new survey of long-term care aides. A parallel project is examining community-based care systems—an important component of the long-term care continuum.

Dealing with the High Cost of Prescription Drugs

Rising costs have fueled the debate over a Medicare prescription drug benefit. Our study of elderly and disabled people eligible for both Medicaid and Medicare—a vulnerable population with high medical and long-term care needs and low incomes—helped clarify several issues. We found wide variation in their use of prescription drugs by race, age, and other characteristics not fully explained by the prevalence of chronic diseases.

We are developing information about use of prescription drugs by the Medicaid population nationwide to provide information state policymakers need to tackle rising drug costs. Through studies of other options for containing prescription drug costs, such as discounts from pharmaceutical manufacturers and rebates available to safety net providers, our staff is seeking to illuminate policy choices.



To make decisions about health care delivery and health reform, policymakers need complete, accurate, and timely data. For many years, we have analyzed large claims databases, linked databases, and helped convert data into policy-relevant information (see page 33).

Spotlight on Public Health

Many programs geared toward ensuring public health and safety—for example, by preventing and tracking infectious disease and injuries—have until recently operated out of the public gaze. The vital role of public health programs in protecting people against disease outbreaks and potential bioterrorism has raised their profile.

Public health departments across the country have received increased funding to help monitor and recognize the onset of unexpected epidemics, and we are helping the Centers for Disease Control and Prevention (CDC) assess core functions of public health, as well as the effectiveness of programs in using laboratory surveillance and other monitoring functions to track the spread of disease. Another survey project is studying job stress and psychological well-being of employees working near the World Trade Center on September 11. To improve the health of underinsured and low-income women, we are working with the CDC to disseminate best practices to states in screening for breast and cervical cancer in this population. We have also examined disease prevention and health promotion programs related to behavior and lifestyle interventions, to help ensure good health for all Americans.

Our wide-ranging study of welfare reform in New Jersey is helping the state understand how recent changes have affected the well-being of children and families.

The project is directed by Anu Rangarajan, associate director of research (photo opposite page). Here, she is shown interviewing eight-year-old Darius Navarro and his mother Sonja, who recently received a high school diploma through an alternate route.

Ethnographer Allison Zippay of Rutgers University (photo this page), conducting an in-depth interview with new mother Omaira Andino, is collaborating with the research team to shed light on the circumstances of people who are no longer connected to employment or the safety net.





Assessing Progress Toward Welfare Policy Goals at the State and Federal Levels

Integrating Welfare Reform's Many Goals into Our Research

The 1996 welfare reform law brought sweeping changes to the nation's welfare system and marked a dramatic turning point in our country's poverty policy. The Temporary Assistance for Needy Families (TANF) program now focuses on encouraging employment, reducing teen pregnancy, promoting sexual abstinence among youth, and fostering the formation of healthy marriages. Mathematica conducts studies that span all the goals of TANF. We have provided objective, informed answers to many important questions surrounding the new system, which has generated debate over what states should do and the potential consequences of their policy choices.

We are conducting several major evaluations that will answer critical questions about what works best to promote the goals of welfare reform:

- Our evaluation of abstinence education is measuring program impacts on teenage sexual activity and related outcomes. It is also examining the design and implementation of local efforts to promote abstinence (see page 38).
- Our study of efforts to promote employment for rural welfare recipients is examining three distinct programs focused on the unique needs of people who live outside our nation's densely populated areas.



- In our evaluation of the Building Strong Families demonstration, we are helping states test innovative programs to help low-income unmarried parents develop the skills and knowledge they need to achieve healthy marriages, if they choose this path, and to improve child outcomes (see page 37).
- Our national evaluation of the Welfare-to-Work grants program has greatly expanded what is known about options for providing employment services to the most disadvantaged welfare recipients, the challenges communities face in implementing programs, and the status of recipients after participation.

Meeting the Needs of States

Mathematica's research to help states make decisions often involves using multiple methods of inquiry and adjusting research strategies to address issues as they emerge. The flexibility of this approach has yielded important insights in Iowa and New Jersey.

Our Iowa study began in 1994 by looking at the effectiveness of incentives and sanctions in the state's welfare reform program. In response to concerns raised by legislators and Iowa's human services department, we then added focused short-term studies. For example, when early impact findings showed that families were getting jobs but not leaving welfare, we examined postemployment services to ease the transition from welfare to work, shedding light on the challenges local offices faced and making recommendations to improve future efforts. When our survey of working families revealed that some reported very low incomes—so low that it seemed inconceivable that they could make ends meet—we conducted in-depth case studies with these families. The findings showed that their circumstances varied greatly from month to month, and they used a variety of strategies to patch together resources, sometimes effectively and sometimes not. As such, they may have struggled tremendously in one month but not in the next.

As much as our work in Iowa is notable for its depth, our work in New Jersey is remarkable for its breadth. In 1998, we began a five-year longitudinal study of the people, programs, and places affected by welfare reform. Our work revealed that many former recipients were not taking advantage of supports like food stamps, child care subsidies, and Medicaid, and that many long-term recipients faced major employment barriers. We conducted a special analysis of families no longer connected to the welfare system or employment, finding that about half experienced hardships. Many had untreated mental health problems, suggesting a need for enhanced efforts to serve this group. We have analyzed a host of other policies related to time limits, family and child well-being, work supports, special populations, and related issues in Virginia, Nebraska, Pennsylvania, and other states.

While Mathematica's state-level research concentrates on frequent feedback to policy-makers and program operators, the findings often have national ramifications. For example, our Iowa research revealed that women participating in the welfare reform program were less likely

than those in the traditional program to have married in the time between our initial interview and followup—a result with implications for federal efforts to increase marriage among TANF recipients. To shed light on the changing composition of the welfare caseload, our New Jersey study looked at the so-called “child-only” cases, which do not include an adult in the cash grant.



Our research revealed that this part of the caseload is made up of groups with widely varying economic circumstances and needs: nonparent caretakers (mostly grandparents), immigrant parents, and disabled parents collecting Supplemental Security Income (SSI). This finding is prompting state and federal policymakers to look more closely at the diverse needs of child-only cases.

Building Knowledge from the Ground Up

As caseloads decline and time limits approach, the continued success of welfare reform depends more and more on innovative approaches for families that have not succeeded in finding employment through existing programs. We developed a road map for integrating mental health services into TANF employment programs and making key decisions on how to provide services. We also provided the first cross-site analysis of the characteristics, costs, and outcomes of transitional employment programs, which expand on the “work first” approach by providing a wage, a flexible environment, and individualized services to help the hard-to-employ bridge the gap between welfare and work. The findings have informed debates about the merits of creating a large-scale transitional jobs program.

Increasingly, our clients are asking us to help them improve the quality of their own research and operations. We are providing technical assistance to six states conducting consistent surveys of families receiving TANF. This federally funded project will help states collect data that will provide insight into their caseloads and allow them to collaborate on a comprehensive cross-state comparison of families still on TANF. Our survey and research divisions have worked jointly to provide states with assistance in survey design and development and data analysis.

Recognizing our knowledge of practices that lead to high performance, the District of Columbia asked us to provide technical assistance to contractors charged with helping TANF recipients move from welfare to work. In recognition of its improved operations, the district subsequently earned a high-performance bonus of \$4.6 million from the federal government.

Researcher Myoung Kim (photo this page) briefed directors of food banks and soup kitchens, including Peter Wise of the Trenton Area Soup Kitchen, on our study of hunger in America. The research showed that more than 7 million people, including many women, children, and seniors, seek assistance from private charitable organizations every week.

One of the challenges in research of this type involves randomly assigning and interviewing people on site when they arrive to pick up food. Survey associate Marcia Giletto and survey specialist Linda Mendenko (photo opposite page) use cell phones, connected to interviewers at our Princeton survey operations center, to help ensure that soup kitchen clients can be asked sensitive questions without being overheard.





Nutrition in America: Studying Partnerships that Get Food to the Needy

Integrating Private- and Public-Sector Assistance

There is broad agreement in the United States about the goal of ensuring everyone has access to safe, nutritious food, and recent Mathematica research has helped document the effectiveness of federal partnerships with private, nonprofit charitable organizations in delivering essential food services to our neediest citizens. The federal government provides assistance under the Food Stamp and other nutrition assistance programs, while a wide-ranging network of private charitable organizations, known collectively as the Emergency Food Assistance System (EFAS), makes large amounts of food available through food pantries, emergency kitchens, and other venues. EFAS also supplies additional food assistance in cases where federal assistance is not sufficient for one reason or another.

As a company, we are well positioned to assess the integration between public and private nutrition assistance. Our researchers are experts on the Food Stamp Program, which we have been studying for more than 25 years, and we compile many of the statistics the government makes available about the program, including client profiles and participation data. Through microsimulation modeling, we help legislators understand what would happen under proposed revisions, including how different groups would be affected, before they vote to make changes. In the debates over reauthorization of the Food Stamp Program, our



assessments of the most likely effects of different options provided the baseline data, and we responded to the need for quick feedback during policy debates by turning around new and revised estimates rapidly—often in less than 24 hours.

We have also produced insights into specific aspects of the Food Stamp Program. After the Personal Responsibility and Work Opportunity Reconciliation Act of 1996 (PRWORA) imposed time limits on food stamp receipt, we gave policymakers information needed to understand who was affected by the new law. Our study suggested that although time limits were intended to encourage the able-bodied to seek work, supports to help this group move into employment were often in short supply. Many people subject to time limits could not work because of serious issues like substance abuse, medical or mental health problems, and homelessness.

The poor health status and social isolation of many elderly people contribute to a significant underenrollment of eligible senior citizens in food stamps. To address this issue, we are evaluating six pilot programs designed to increase the elderly's use of the Food Stamp Program. The programs are testing models that reduce the information applicants must provide to verify eligibility, supply one-on-one help with completing the application process, and provide applicants with packages of commodities instead of traditional food stamp benefits.

We are also helping the Food Stamp Program better serve people who lost jobs in the recent recession by assessing an innovative Virginia program developed to help the unemployed cope with widespread plant closings in rural communities. The program opens doors to government and private-sector resources to assist laid-off workers in obtaining food stamps and other supports at one-stop service centers. The centers integrate economic and employment assistance.

Hunger Amid Plenty: Nongovernmental Solutions

Despite the substantial contribution of the Food Stamp Program to alleviating hunger, 31 million Americans remain classified by government statistics as “food insecure,” and more than 7 million people use emergency food assistance every week. To provide a comprehensive picture of the situation and an assessment of how the private charitable system works in tandem with federal programs, we interviewed staff at a national sample of food pantries, emergency kitchens, and food banks, as well as clients at food pantries and shelters. These interviews helped us shed light on who is using the system, their levels of need, and their experiences with both public and private food assistance systems. We found that while the private system is much smaller than federal programs, it provides important services in local communities, distributing roughly 2.9 billion pounds of food, or 2.2 billion meals per year.

In a related study, we examined emergency food providers affiliated with America's Second Harvest network, the largest organization of these groups in the country. More than 23 million low-income people received emergency food assistance through Second Harvest's network in 2001, and recipients represented a broad cross-section of America, including women, children, and elderly people. The system also served significant numbers of working poor and homeless people. Beyond profiling the system nationally, we produced reports detailing conditions at the local level to document the degree of hunger and the need for food assistance in communities across the nation.

Broad Scope, Deep Analysis

Beyond studying hunger in America, our researchers have analyzed every major nutrition program in the United States. We have extensive experience with programs for children, including infants and toddlers, and we are currently conducting three studies of the National School Lunch Program, which plays an important role in schoolchildren's nutrition. In response to growing concerns about hungry children in the summer, we completed the first major study in 15 years of the Summer Food Service Program, which serves meals at playgrounds, schools, and recreation centers. The findings showed that about half the meal sites are run by schools, raising important implications for how the program is aligned with other school-based nutrition programs. In studies related to growing concerns about children's diets, including high rates of obesity and poor eating habits, we have monitored trends over time to document consumption of different foods and their contribution to overall nutrition.

In our studies, we use innovative statistical procedures and other methods to produce information that helps programs run more effectively. Our work in the challenging field of small area estimation uses statistical models to combine data from different sources, time periods, and geographic areas to provide reliable numbers for program funding and other purposes. For example, we calculate annual state-level estimates of the percentage of eligible people participating in the Food Stamp Program as well as the number eligible for the Special Supplemental Food Program for Women, Infants, and Children (WIC). In another study of WIC, we are looking at innovative practices used by local WIC agencies, such as nutrition education to help people consume a healthier diet and reduce obesity. This study is identifying promising programs, with an eye toward whether they are replicable in other communities.



Senior fellow Bill Borden (left) and program analyst Brandon Kyler have traveled to all 50 state capitals to help Unemployment Insurance directors meet federal requirements for submitting information on their program performance. Some of this work involves developing custom software applications that help states map their data to the federal reporting system.

Our in-depth knowledge of government operations and data is helping streamline programs and achieve greater cross-agency consistency. We are also conducting rigorous studies of programs to improve the U.S. workforce.





The 21st Century Workforce: Determining What Works in Employment Programs

Integrating Evidence to Guide Policy

Shifting labor markets, changes in worker demographics, and a continued need for a well-educated, computer-literate workforce will drive the evolution of the 21st century workplace. Preparing the workforce for the dynamic global economy requires highly focused and effective programs to address the needs of a wide range of individuals, including high school dropouts and other disadvantaged youth, unemployed and dislocated workers, minorities, and people with disabilities. To monitor the effectiveness and cost-efficiency of these programs, federal and state governments need high-quality performance measures and validation systems.

Mathematica has been on the forefront of labor research initiatives for more than three decades. We have conducted rigorous evaluations of major work-related programs and demonstration projects serving diverse groups, performed detailed field research, and provided essential information on program operations. We have also helped design and implement performance measurement and data validation systems from the federal level to the local level. Based on these efforts, we are helping policymakers determine optimal approaches for getting people into the workforce and keeping them there.



High school dropouts and disadvantaged youth have long been a focus of concern in workforce efforts. Since 1964, Job Corps has been a central part of our nation's efforts to improve their education and job prospects by making them more responsible, employable, and productive. Serving over 60,000 new participants each year, Job Corps is one of the most intensive programs aimed at this group. Our long-term comprehensive study found that the program makes a difference in participants' educational attainment and earnings over the four-year follow-period.

We have evaluated many other programs designed for disadvantaged youths, including the Quantum Opportunity Program. Using comprehensive case management to provide year-round services to at-risk youth throughout high school, the program aims to increase graduation rates and enrollment in postsecondary training. Early indications point to encouraging effects, although the final results will provide greater insight into the value of this approach.

Assisting Adult Workers

Rapidly changing economic conditions and labor market demands require adult workers to develop skills that help them maintain their productivity. The Workforce Investment Act of 1998 mandated that local agencies funded by the U.S. Department of Labor (DOL) use training vouchers, or Individual Training Accounts (ITAs), to provide employment and training to workers facing permanent layoffs. We are evaluating different approaches for providing ITAs. The first part of our study documented program models offered in 13 sites. In phase two, we are comparing the effects of three approaches offered side by side at six different sites.

For individuals who want to start their own small business but lack credit and business expertise, DOL has launched a microenterprise development initiative, in which one-stop career centers offer technical assistance and training and the Small Business Association's Microloan program provides financing. In two urban and four rural sites, we are assessing how effectively this interagency model is working.

Getting unemployed people back to work quickly and efficiently is an important goal for the Unemployment Insurance (UI) system. Our study of people who exhausted UI benefits in the late 1990s found that changes in recipient characteristics, which mirrored broader changes in the labor market, were a strong factor in increasing the number of exhaustees. It also highlighted the fact that even though UI recipients were having difficulty finding jobs, they were less likely than recipients from 10 years earlier to seek reemployment services from the Employment Service office or a one-stop career center. These findings are helping DOL reevaluate its approach, while another project is looking at consumer satisfaction, operational issues, and differences between claimants who file for UI through the internet and those who file by telephone.

Striking the right balance between providing support and promoting independence is an important goal of efforts to facilitate employment for people with disabilities. The State Partnership Initiative of the Social Security Administration is testing innovative ways to encourage people with disabilities to become employed, and we are evaluating projects in 18 states to assess the cost and effectiveness of projects and outcomes for participants. We are also profiling participant characteristics, services received, and employment outcomes, while helping states refine their evaluation designs to produce policy-relevant information.

Sharpening Program Performance

As policymakers seek ways to comply with the Government Performance and Results Act of 1993 and cut costs, assessing the effectiveness of programs and systems in the labor arena has taken on increasing importance. The Workforce Investment Act provided guidelines and performance measures for these programs. We are evaluating initiatives to monitor and improve system performance, test measures and systems, improve the quality of performance data, and help program managers align data with federal requirements.

For DOL, we have provided performance measurement assistance for many programs from the ground up. This process includes analyzing requirements, developing specifications for new performance and reporting systems, designing data validation strategies, and creating software that is now used by all 50 states, program grantees, and other entities to report and validate their data. We have also fielded pilot tests, led working groups, conducted on-site training, and provided technical assistance on a long list of DOL-funded programs, including UI, the Workforce Investment Act, the Employment Service, Welfare-to-Work, Trade Adjustment Assistance, Youth Opportunity, Senior Community Service and Employment, Migrant and Seasonal Farmworkers, and Native American programs.

We are building on our experience to analyze the UI Performs program, the management system developed by federal and state partners that integrates all UI planning, measurement, enforcement, and incentives. The goal is to determine whether the program helps states better serve UI customers. Looking ahead, new mandates from the Office of Management and Budget are likely to increase the need for common performance measures and cross-agency consistency in the future.





Collecting and Managing High-Quality Information

Integrating Innovative Techniques and Superior Sample and Survey Design

Increasingly, government agencies at all levels and major national organizations are turning to Mathematica because of our reputation for finding reliable answers to complex research questions underlying social policy issues. That reputation rests on our ability to:

- Help clients clarify their objectives
- Develop sound and cost-effective sampling plans and data collection strategies that measure the relevant issues
- Create surveys that will pass muster with policymakers and the media
- Handle the extraordinary challenges that high-stakes survey efforts require

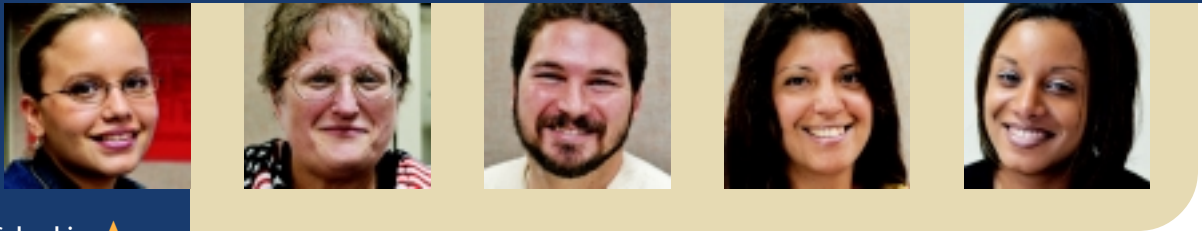
Sampling: Making the Right Decisions

Policy development begins with high-quality information derived from rigorous and innovative sampling techniques. When America's Second Harvest wanted to investigate hunger in America, it turned to us for help. Our statistical services group designed a two-part study of (1) agencies—including soup kitchens, food banks, and pantries—that

Highly trained staff conduct and monitor computer-assisted interviews from Mathematica's survey operations centers near Princeton, NJ, and Columbia, MD. The centers, which also house specialized locating and data coding/editing departments, employ a large cadre of in-house and field interviewers.

In the photo on the opposite page, bilingual interviewer Norma Rodriguez confers with supervisor Nancy Catraba.

distributed food, and (2) clients—homeless people and other families and individuals—who received food. Implementing this plan required an inventory of agencies and clients to contact, but no such lists existed. We compiled a roster of over 30,000 agencies across the country, verified their contact information, and mailed each one our questionnaire. Then we selected a sample for a client survey. When people arrived to pick up food or meals at a selected facility, trained interviewers used procedures developed by our statistical group to randomly select and interview almost 33,000 people. This process was challenging because many locations were crowded and full of activity, and random selection is usually not conducted at a service delivery site. Through careful groundwork and well-honed implementation strategies, our staff overcame the complexities of gathering accurate information in this type of environment.



Above, Columbia staff pause for a photo (left to right): Yaritza Melendez, bilingual interviewer; Joyce Markowitz, interviewer and locater; Wade Bouton, locater; Tatianna Vasquez, bilingual locater; Daria Fenderson, data coder, interviewer, and locater.

Finding the Missing Sample Members

For a survey to be effective, a rigorous sampling plan must be combined with the ability to locate sample members. We collected precise data on the outcomes of those who have navigated the educational pipeline in a study for the Andrew W. Mellon Foundation to assess the long-term benefits of attending college. Collecting quality data was of utmost importance, since one goal of the project was to examine the impact of race-sensitive undergraduate admission policies, a topic that has been a flashpoint of controversy.

The project presented a formidable challenge: locating nearly 65,000 people, using addresses that were largely over 25 years old. This study called for interviewing the entering classes of 1951, 1976, and 1989 at 32 colleges and universities. The task was further complicated because many women had married and changed their

names, and international students had returned to their home countries. Using reverse directory databases, professional licensing agencies (for nurses, lawyers, and teachers, for example), and solid detective work, our expert staff found almost 90 percent of the sample. The results appear in *The Shape of the River*, a book examining the admissions policies of several institutions and following the fortunes of their minority graduates over a period of years, authored by William G. Bowen and Derek Bok.

Gaining Support

Achieving high survey response rates can be difficult when potential sample members are struggling with unemployment, poor health, or other issues that create instability at home. Our Fragile Families study, conducted with researchers at Princeton and Columbia universities, is examining a hotly debated policy issue, the role of unmarried fathers in the lives of their children. This survey involves sampling mothers of newborns in 18 cities and attempting to interview both the mother and father. Initially, many mothers were unwilling to identify their baby's father, but we were able to work with them to gain their cooperation and interview about 80 percent of the fathers. Through extraordinary efforts, our staff followed up with more than 90 percent of the mothers and 73 percent of the fathers 12 months later. Supported by the high-quality data we collected, the research team secured additional funding for child development tests, parent/child observations, and interviews with child care providers, to explore child neglect, family formation and disruption, and domestic violence.

Establishment studies, in which the sampled unit is not a person but a business, hospital, or other institution, present particular challenges for identifying respondents. We achieve extremely high response rates in these types of surveys, which require identifying individuals within the organizations and obtaining their cooperation during busy work days. In 1997, we began conducting an annual census for the federal government of almost 20,000 substance abuse treatment centers. Through working closely with the centers to refine our data collection techniques, we increased the initial response rate from 86 percent in the 1997 survey to 96 percent in 2002.

Asking the Right Questions

To ensure that a survey fully supports their policy research needs, clients rely on our design expertise and substantive knowledge to ask the right questions in the right way. Recognizing our long-standing experience in studying low-income populations, the federal government asked us to develop a state-level questionnaire to examine employment barriers for TANF households (see page 19). The questionnaire needed to assess real—but sometimes hidden—barriers, such as learning disability, depression, substance abuse, and domestic violence. The questionnaire has been a valuable resource for state and federal policy initiatives.



We also have a long track record of using innovative techniques to collect data about the needs of people with disabilities. These studies traditionally required talking with a proxy—someone who answered for the disabled person—but we were one of the first firms to modify survey procedures so that people with disabilities could speak for themselves. The Social Security Administration contacted us when it wanted to know how SSI benefits for disabled children were affecting families. After designing a sampling plan and questionnaire and training a large cadre of interviewers on the needs and life circumstances of low-income families with disabled children, we interviewed nearly 9,000 family members—including parents of disabled children, young adults with disabilities, and some proxy respondents—using computer-assisted telephone and personal interviewing.

Using the Latest Technology

Most of our studies use sophisticated computer-assisted telephone and personal interviewing technologies, increasingly in combination with web-based data collection. In addition, we are exploring the next generation of self-administered surveys, using personal digital assistants and other technology, which show promise for getting more precise answers to questions about sensitive topics. To enhance in-person interviewing, we are testing the ability of the latest pen tablet PCs to promote interactions between interviewers and respondents, particularly during complex interviews that involve collecting observational data or navigating freely around several types of data collection forms. All of our innovations are thoroughly tested before use operationally to ensure our clients benefit from state-of-the-art techniques that support high-quality data collection.

To ensure that the knowledge we produce is widely distributed, we use multiple strategies to reach policymakers, practitioners, and the public.

Here researcher Gretchen Kirby (left) confers with senior fellow LaDonna Pavetti on a congressional briefing they conducted on transitional jobs programs, which provide hard-to-employ welfare recipients with paid work coupled with services to address their lack of experience and training.



At Mathematica, we understand the importance of bridging the gap that sometimes exists between the dissemination of research and its assimilation by policymakers. Our staff uses multiple strategies to ensure policymakers are aware of and can easily use our results. We also have a commitment to making sure our findings extend beyond policy debates and become part of the broader body of knowledge.

To reach the legislative community, we regularly accept invitations to testify before congressional committees and conduct briefings. We also publish issue and policy briefs on topics in the public eye and disseminate these publications widely. Our staff serves as an ongoing resource for the media to help interpret stories of national interest.

Through our website, www.mathematica-mpr.com, we share information about hot policy topics and timely research news. The site also provides on-line

access to research summaries and ordering information for in-depth reports and publications. And our monthly e-newsletter keeps interested parties up-to-date on our latest work.

To contribute to the broader knowledge base, we present our work at national conferences of researchers, practitioners, and policymakers. By publishing in peer-reviewed journals, we ensure that our research becomes part of the social science literature. Each year, our staff publishes dozens of scholarly articles in such forums as the *Journal of the American Dietetic Association*, *American Journal of Clinical Nutrition*, *American Journal of Public Health*, *New England Journal of Medicine*, *Health Affairs*, *Economic Policy Review*, *Journal of Public Policy Analysis and Management*, *Journal of the American Statistical Association*, *Education Statistics Quarterly*, and others.

Every manager knows that an important part of running a business or program involves checking performance statistics regularly. A growing part of our work has involved setting up and overseeing systems to provide quick-turnaround information on the quality of public services, program operations, and databases.

These “decision support” systems provide ongoing data—on an annual, quarterly, monthly, or more frequent basis—to managers on whether a program is meeting its goals, which components may need attention, and what remedies may be most effective. Our work draws on the integrated talent of Mathematica’s research, surveys, statistical services, and information systems development staff.

We tailor these systems to inform a manager’s day-to-day operational questions, with the output designed to specifications. Quality and performance are usually measured using the program’s own administrative data or, alternatively, through ongoing collection of original data.

These systems, which are less expensive than full program evaluations, can flag a component that is not working well. Managers can follow up with a closer look, using in-house experts or Mathematica staff.

We have been conducting this type of work for DOL since the 1980s (see page 27). Other examples of our expertise include:

- Monitoring outcomes in substance abuse treatment facilities. The National Treatment Outcomes Monitoring System, a surveillance system for the Substance Abuse and Mental Health Services Administration, helps evaluate the quality, appropriateness, and cost of different types of treatment. We are teaming with Synectics for Management Decisions, Inc., to develop and operate the system.
- Measuring the quality of Medicare. To study the quality of health care received by over 40 million Medicare beneficiaries, we are developing a system for the Centers for Medicare & Medicaid Services (CMS) to provide Medicare managers with periodic quality measures. This information will be used by administrators to monitor patient safety, use of services, and outcomes.
- Improving the quality of state Medicaid databases. For a decade, we have helped CMS diagnose and remedy defects in administrative databases used to monitor Medicaid program operations.
- Improving public health surveillance. The public health system has assumed a higher profile on the national agenda. We are revising performance indicators used by the CDC to assess public health surveillance systems.
- Monitoring market performance. For nearly 20 years, we have helped the National Science Foundation (NSF) monitor the labor market for scientists and engineers. The Science and Engineering Statistics (SESTAT) system combines several of NSF’s survey databases and produces annual reports for officials to evaluate the diversity of the science and engineering workforce.
- Assessing government outsourcing. To ensure the integrity of our country’s benefits system, the Employee Benefits Security Administration requires employer-sponsored pension and health plans to document plan characteristics and management of funds. For the past several years, we have monitored the performance of the vendor that processes these forms.

Strength in Numbers: Community Collaborations and Partnerships Expand the Knowledge Base

Community strategies show promise for tackling the problem of domestic violence.

In a study for the CDC, survey associate Milena Rosenblum (bottom left), senior clinical researcher and M.D. Douglas Fleming (center), and associate director of SIS Anne Ciemnecki are evaluating a new prevention-focused initiative being tested in neighborhoods across the country.

Here, they confer with officer Thomas Moody of the West Windsor, NJ, police department, on the community response teams—representing law enforcement, the medical community, faith-based, and other groups—at the heart of this new approach.



As government resources shrink, communities are taking more responsibility for solving common problems. By working toward shared goals, citizens, businesses, and government can maximize their efforts. Many of our studies analyze initiatives to build partnerships and communities, both in the delivery of services and in the accumulation of information for research and policy analysis.

A key area of public concern involves the well-being of children and families. Our understanding of children's chances for a successful adulthood is evolving along with recognition that the community is a vital part of every child's growth. Our Early Head Start evaluation assembled the largest consortium ever created to collaborate on a process and impact study of a federal initiative that serves low-income pregnant women and families with infants and toddlers. Several tiers of research partners at the local and national level provided added expertise and disseminated information.

This multifaceted collaboration resulted in a wealth of information that benefited educators, program staff, practitioners, parents, researchers, and local, state, and federal policymakers. Public use files allow others to test, replicate, and build on the results. We are coordinating a follow-up effort to examine fatherhood, children with disabilities, child care, parenting, risk and protective factors, school readiness, and methods and measures.

Working Together

Complex problems that affect children and families often lack easy solutions. One of these issues is domestic violence. A new project for the CDC is evaluating a program to prevent domestic violence in communities across the country.

The initiative is attempting to mobilize a cohesive network of community stakeholders to work together proactively. Local groups—including law enforcement, the medical profession, schools, government, domestic violence agencies, and faith-based groups—provide education, training, and model program development. The study's goal is to

track progress over a five-year period, produce a directory of models in different states, and make public use files available as a resource.

Building Ideas

Although long-term care is a national problem, community approaches may offer the best solution. A study for the Robert Wood Johnson Foundation is examining strategies for addressing this dilemma through coalitions charged with improving care and developing a coordinated system locally. Our work will develop tools to track these models and serve as a resource for broader information sharing.

Children and adults without health insurance are another source of concern. We are documenting the efforts of state and local coalitions to increase enrollment in SCHIP and Medicaid. We are also analyzing initiatives to encourage city-based coalitions to increase access to care for low-income and uninsured people. These projects are identifying ideas that can be replicated in other communities, contributing to the next generation of programs.

At a broader level, tracking community change is the goal of our research partner, the Center for Studying Health System Change (HSC). HSC's flagship Community Tracking Study (CTS) is documenting changes in health care markets across the country as well as national trends through surveys of consumers and physicians in 60 nationally representative communities every two to three years and site visits to 12 of these communities every two years. Mathematica staff members work together with HSC to play a key role in data collection and analysis. HSC places a high priority on making data available in a timely and accessible way, producing easy-to-use public use files, national tracking reports, and community profiles. In addition, an interactive web-based system, CTSonline, allows users to create customized tables from the CTS surveys. In an ever-expanding circle of knowledge, researchers across the country have built on HSC's data and published related analyses.

New policy initiatives seek to improve family well-being by ensuring that children grow up with involved, committed, and responsible parents, particularly when the mother and father are unmarried.

Senior fellow Barbara Devaney (left) and senior researcher Robin Dion brief staff member Greg Page on our wide-ranging Building Strong Families project.



Current policy debates about welfare reform are increasingly going beyond employment to consider family issues. One-third of all births in the United States are to unmarried women, and the proportion is even larger within certain groups. Many children of unmarried couples flourish, but research clearly shows that, on average, they are at greater risk of living in poverty and developing social, behavioral, and academic problems. Research also shows that most of these couples are romantically involved at the time of their child's birth, deeply interested in the well-being of their child, and want and expect to marry. Nevertheless, they rarely marry and their hopes are seldom realized.

To address this pressing social problem, PRWORA focused three of its four policy goals on family formation. The Administration for Children and Families of the U.S. Department of Health and Human Services charged us with developing a conceptual framework for designing, implementing, and evaluating interventions to strengthen families with children born out of wedlock.

Our work entailed integrating a wide variety of perspectives, approaches, and information from the fields of sociology, demography, psychology, and economics. The goals included identifying:

- Challenges low-income unmarried parents face in forming healthy relationships
- Public policies that may act as disincentives for marriage in this group
- Interventions that could strengthen and support unmarried parents and enhance their potential for entering and sustaining healthy marriages

Our conceptual framework for this study has been disseminated and used as a resource by organizations and agencies interested in developing interventions for these families.

Our early work in this area involved bringing together experts from diverse disciplinary backgrounds and reviewing the literature on marriage interventions and the characteristics and needs of unmarried-parent families. We then documented the practices of existing programs and provided technical assistance to state and local governments interested in policies, programs, and services to address or promote healthy marriages.

The Next Steps

Following on the heels of this work, our large-scale Building Strong Families project represents an important opportunity to learn whether well-designed and sensitive interventions can help couples fulfill their aspirations for a healthy, stable, and committed marriage. Building on the foundation in our conceptual framework, we are helping agencies in six sites develop programs and determine their effectiveness with couples who choose to participate. Our survey and research divisions are working closely together on the longitudinal data collection, which includes in-depth interviews with couples, administrative data, and direct assessments of children's well-being.

To carry out this far-reaching project, we have mobilized staff from a range of backgrounds, including researchers known for their work with low-income families in the context of welfare, child development, fatherhood, family formation, employment programs, and public policy. Bringing together this expertise ensures that this important initiative benefits from the collective experience we have gained in each area.

Evaluating Programs Designed to Help Youth Make Healthy Choices

High-quality research mediates policy debates, tones down political rhetoric, and engages people in substantive collaboration on controversial issues.

To address concerns about the public health and other adverse consequences of early sexual activity for young people, senior researchers Christopher Trenholm and Amy Johnson are studying abstinence education programs to provide much-needed evidence on effective programs to help youth make healthy choices.



Healthy exploration can be a positive tool in an adolescent's life for discovering and developing his or her identity. When exploration involves risky behavior, the consequences may be negative. One of the most serious threats to the health and safety of youth is sexual activity. In 1999, two-thirds of all high school seniors reported having had sexual intercourse, and one in five seniors had sex with four or more partners. Nearly 480,000 babies were born to teens in 2000, and most of these births occurred outside marriage. Furthermore, 20 percent of sexually active teens contract a sexually transmitted disease each year, and the consequences can be life-threatening. Developing programs to educate youth about the dangers of early sexual activity and sexually transmitted diseases, as well as the importance of delaying childbearing, are important social policy concerns.

We have a long history of contributing solid empirical research in this area. One of our early flagship studies examined programs to help teenage parents develop life and job skills and delay further childbearing. We have also studied early intervention strategies to improve teenage mothers' employment, education, and fertility outcomes and their children's health and well-being. A current rigorous study of adolescent pregnancy prevention is following girls for five years to measure their academic performance, sexual activity, and pregnancy status. This long-term controlled study will yield definitive findings on program outcomes in the context of other youth development activities.

To address concerns about the public health and other adverse consequences of early sexual activity for young people, policymakers have expanded the availability of abstinence education programs

nationwide. With funds authorized by PRWORA, Mathematica was commissioned to study the nature and underlying theories of the programs, the range of approaches used, and the effects of selected programs on young people's knowledge, attitudes, and behavior regarding sexual health and abstinence.

Our research is the most rigorous and far-reaching examination of these programs to date. The study is particularly crucial because abstinence education lacks an existing body of high-quality impact research and conclusive evidence on effectiveness. Previous studies have had a range of methodological limitations. Few studies of abstinence programs have employed an experimental design that uses a control group to measure program effects, and few assessments have tracked subjects long enough and at the appropriate ages.

Integrated Perspective

In the course of the project, we have integrated advice from a range of external reviewers to ensure the design meets the highest standard of objectivity and that research methods are the most appropriate for achieving the study's goals. Before embarking on the study, we examined background characteristics and mediating factors on short- and long-term program outcomes based on a comprehensive review of the literature on youth risk behaviors.

One of the most powerful features of our study is the use of an experimental design to measure program effectiveness at each site, which allows us to compare outcomes for youth randomly assigned to the program or to a control group. The research also uses large sample sizes of between 400 and 700 youth per site, maximizing the likelihood of detecting real impacts and increasing the reliability of findings. We are also incorporating longitudinal tracking to

evaluate the impact on students, providing the most complete information available about program impacts on behaviors that may occur over time to capture the critical decision points for youth. The findings will provide high-quality, much-needed evidence to help guide future policy debates.

We are also examining the effectiveness of programs in achieving short-term goals related to changing knowledge, values, and attitudes. Several special-focus reports will address questions of interest to Congress and the U.S. Department of Health and Human Services. The final report will focus on longer-term behavioral outcomes. Through these and other studies, we are contributing much-needed information to the heated debate over the best approaches for reducing teen sexual activity and high rates of exposure to the risk of sexually transmitted diseases.



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Designer: Joyce Hofstetter
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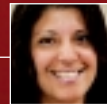


Collecting Information

Conducting Research

Producing Results

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Policy Research, Inc.

www.mathematica-mpr.com

Princeton Office

PO Box 2393
Princeton, NJ 08543-2393
(609) 799-3535
Fax: (609) 799-0005

Washington Office

600 Maryland Avenue, SW, Suite 550
Washington, DC 20024-2512
(202) 484-9220
Fax: (202) 863-1763

Cambridge Office

50 Church Street
Cambridge, MA 02138-3726
(617) 491-7900
Fax: (617) 491-8044