



2014



Mathematica informs evidence-based decision making through rigorous studies and analyses. Mathematica's *Facts & Findings* is a snapshot of some of this year's significant research results.

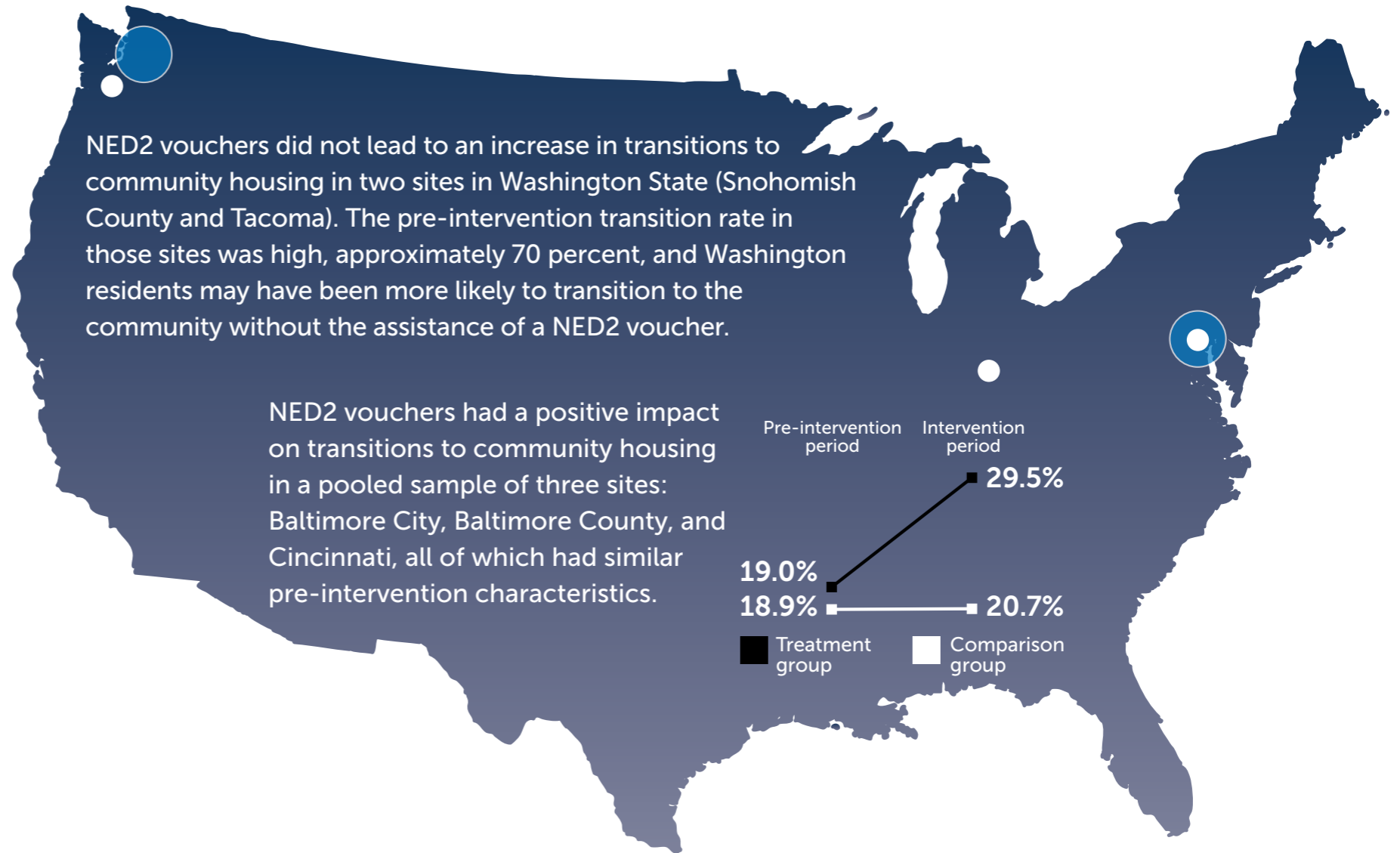


# Disability



**Project:** Non-elderly Disabled Category 2 (NED2) Housing Choice Voucher Program: An Implementation and Impact Analysis  
January 2014

**Synopsis:** The NED2 Housing Choice Voucher Program is a collaboration between the U.S. Department of Housing and Urban Development (HUD) and the Centers for Medicare & Medicaid Services (CMS) designed to facilitate the transition from institutions to community-based settings. The two agencies made 948 vouchers available to non-elderly people with disabilities, entitling them to a rental subsidy and the community-based services and supports necessary for independent living. In five sites that received the most NED2 vouchers, Mathematica evaluated the impact of the vouchers on the likelihood that residents in nursing facilities would transition to community housing.

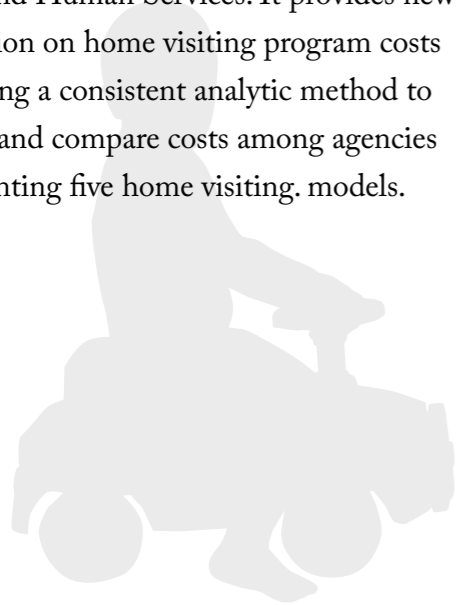


# Early Childhood



**Project:** Costs of Early Childhood Home Visiting  
June 2014

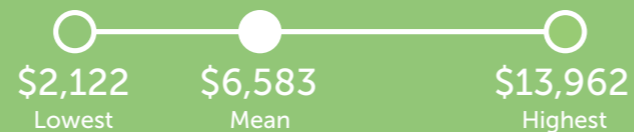
**Synopsis:** Home visiting programs offer a promising method for delivering support services to at-risk families and children, and for preventing child maltreatment. As interest in scaling up home visiting programs grows, program administrators and policymakers are seeking more information about the cost of implementing these programs. With support from the Doris Duke Charitable Foundation and in collaboration with Casey Family Programs, Mathematica Policy Research and Chapin Hall at the University of Chicago conducted a study of the costs of implementing evidence-based home visiting programs. The study included agencies that participated in the initiative, Supporting Evidence-Based Home Visiting to Prevent Child Maltreatment initiative, a five-year grant program launched in 2008 by the Children's Bureau of the Administration for Children and Families, U.S. Department of Health and Human Services. It provides new information on home visiting program costs by applying a consistent analytic method to estimate and compare costs among agencies implementing five home visiting models.



Agencies participating in the study offered one of five home visiting program models: (1) Healthy Families America, (2) the Nurse-Family Partnership, (3) Parents as Teachers, (4) SafeCare, and (5) the Positive Parenting Program.

On average, the 19 programs in the analysis enrolled a family for 44 weeks and spent \$6,583 serving that family. Average costs per family ranged widely among agencies in the study, from a minimum of \$2,122 to a maximum of \$13,962.

### Agencies' Average Cost per Family



### Average Allocation of Costs Across Program Components

72 percent of costs were allocated to activities related to direct services



28 percent of costs were allocated to program management and administrative activities



# Education



**Project:** Race to the Top and School Improvement Grants

April 2014

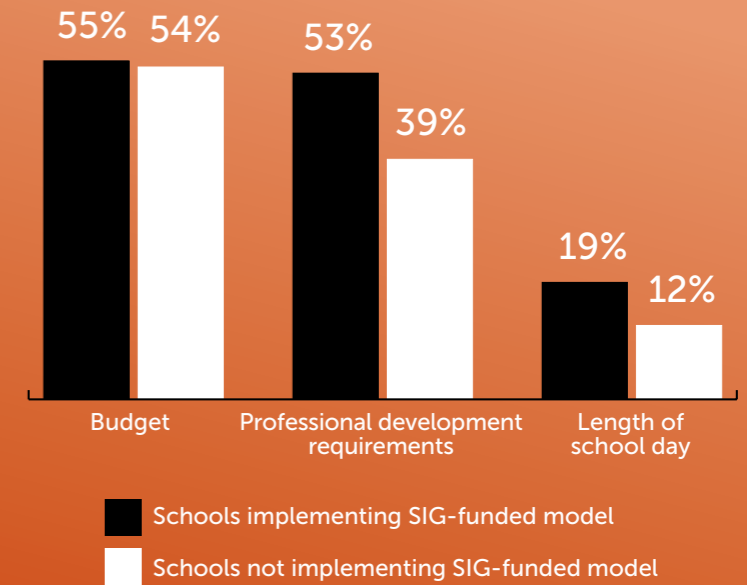
**Synopsis:** The growing interest in education reform—and in turning around the nation’s struggling schools in particular—has led the U.S. Department of Education to invest heavily in grants to states through the Race to the Top (RTT) and School Improvement Grants (SIG) programs. RTT encourages states to implement education policies in six core areas, including teacher evaluations. The SIG is intended to improve student achievement in low-performing schools by promoting the implementation of four school intervention models: transformation, turnaround, restart, and closure. Three evaluation briefs have been released. Findings from each are summarized to the right.



An evaluation brief on SIG implementation showed that budgeting was the most common area in which schools implementing and not implementing a SIG-funded model reported having operational authority.

An evaluation brief on the adoption of school improvement practices promoted by SIG showed that over 96 percent of low-performing schools surveyed adopted three practices:

- using data to inform and differentiate instruction
- expanding technology access for teachers or using computer-assisted instruction
- providing ongoing professional development in which teachers work collaboratively or that school leaders facilitate



An evaluation brief on states’ teacher evaluation policies showed that on average, states reported requiring less than half of the eight teacher evaluation policies aligned with criteria in the RTT application, although RTT states required more policies than did non-RTT states.

Round 1 & 2 RTT states	3.7
Round 3 RTT states	3.6
Non-RTT states	2.2

# Family Support



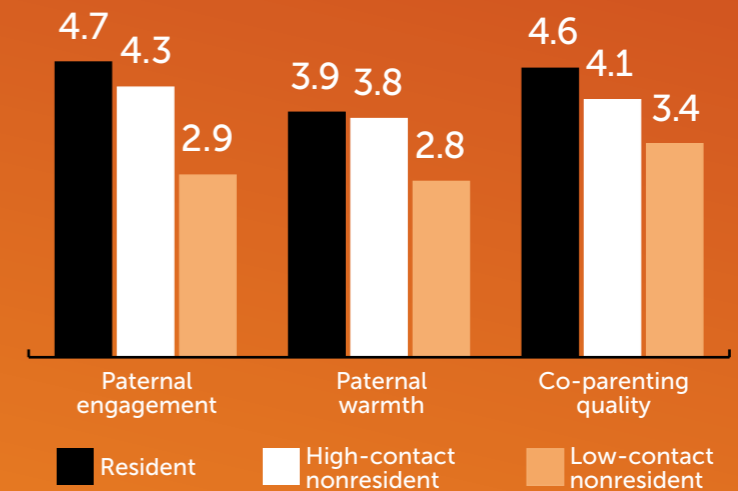
**Project:** Limited Father Involvement:  
Which Families Are Most at Risk  
June 2014

**Synopsis:** The Building Strong Families (BSF) program sought to improve family stability, increase father involvement, and promote child well-being by educating unmarried parents in relationship skills. Mathematica found that after three years, the program had little effect overall on the families it served. To understand this limited success and explore directions for future program improvements, we examined BSF families with particularly poor outcomes - those in which the father was nonresident and had little contact with his children three years after entering the program.

Low-contact, nonresident fathers often had relatively poor relationships with their children and co-parents.

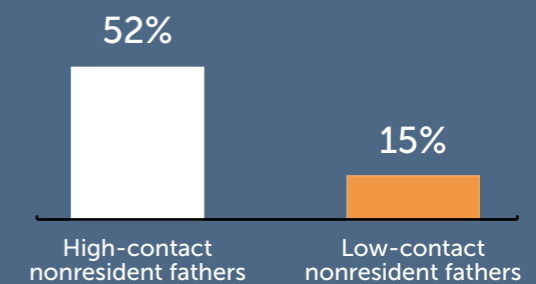
BSF families most at risk of having fathers with little contact after three years include those in which the quality of the relationship was initially poor, the father had a child by another partner, or the father showed signs of psychological distress at program entry. These families may need additional program supports.

**Level of Paternal Engagement, Warmth, and Quality of Co-parenting Relationship, by Father's Residence Status and Level of Contact**



Low-contact, nonresident fathers often provided little financial support for their children.

**Contributed at least half the cost of raising their child**



# Health Care Quality



## Project: Behavioral Health Quality Measures

**Synopsis:** Given the prevalence of mental health and substance use disorders—and the toll they take on the nation’s health care system—there is an urgent need for measures that can be used to assess the quality and outcomes of behavioral health services and thereby ensure high-quality, effective care. Mathematica is leading the way in developing behavioral health quality measures that apply to a range of populations and health care settings, and that rely on a variety of data sources, including claims, medical records (including electronic health records), and surveys. Many of our measures have been incorporated into major national and state quality-reporting programs, helping policymakers, providers, and other stakeholders target quality improvement efforts.



**Psychosocial care:** Mathematica is developing and testing a measure of the delivery of evidence-based psychotherapy for adults with post-traumatic stress disorder.

**Inpatient psychiatric facilities:** Mathematica developed measures for CMS that are used to assess whether hospitalized individuals receive appropriate and timely screening for the risk of violence, suicide, substance abuse, and metabolic disorders. We also developed a measure to assess whether individuals discharged from inpatient psychiatric facilities receive timely follow-up care in the community.

**Care of veterans:** For the Department of Veterans Affairs, Mathematica developed quality metrics for and conducted on-site quality assessments at over 100 psychiatric residential treatment facilities, in order to identify quality improvement strategies.

Measures for **health plans:** Mathematica developed a suite of measures for health plans to assess whether people with serious mental illnesses and substance use disorders receive care for a range of comorbid conditions that contribute to premature mortality, including tobacco use, unhealthy alcohol use, diabetes, and hypertension.



# Health Reform



**Project:** Children's Health Insurance Program (CHIP) Drives Uninsured Rate Down Among Low Income Children, Improves Access to Care, Eases Financial Burden on Families

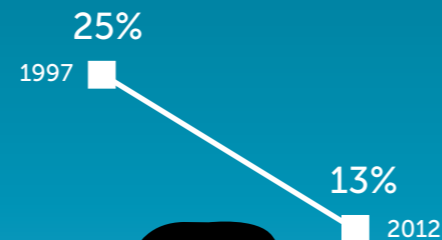
October 2014

**Synopsis:** CHIP was created as part of the Balanced Budget Act of 1997. It was reauthorized in 2009 to provide health insurance to millions of uninsured children with a family income above the Medicaid limits but still too low to afford private coverage. More than eight million children were enrolled in CHIP at some point in federal fiscal year 2013. As part of its reauthorization in 2009, the legislation known as CHIPRA provided significant, new financial support for CHIP and introduced new initiatives to increase enrollment, improve retention, and strengthen access and quality in Medicaid and CHIP. CHIPRA also included a mandate to evaluate the expanded program in order to determine whether it was meeting its goals and to inform decisions about the program's future. Mathematica conducted this evaluation and **found that CHIP did expand coverage for its target population of low-income children, increased their access to health care, and reduced the financial burden and stress on their families.**

Coverage rates improved for all ethnic and income groups, and disparities in coverage narrowed significantly for Hispanic children.

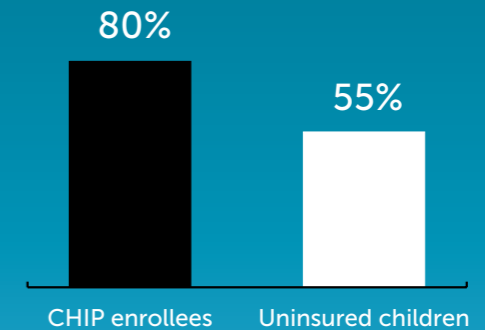
The percentage of uninsured low-income children decreased from 1997 to 2012.

## Uninsured low-income children



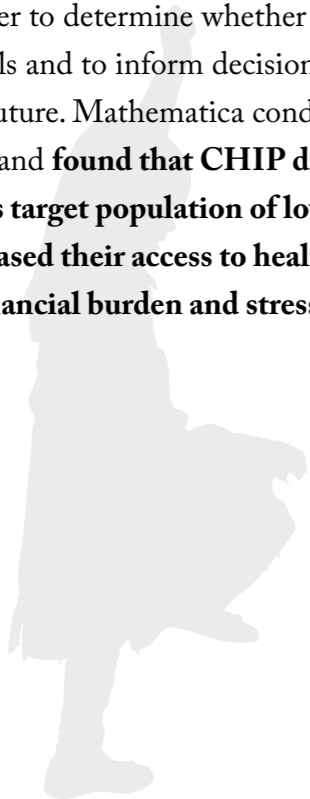
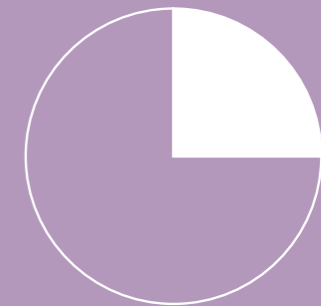
Access and health care outcomes for children in CHIP were substantially better than for uninsured children, and comparable to outcomes for children with private coverage.

## Received a well-child checkup in the past year



Children enrolled in CHIP were also more likely to receive a range of health services, including mental health visits, specialty care, and prescription drugs compared to uninsured children.

Despite relatively high rates of contact with providers, nearly one in four CHIP enrollees still had an unmet need for health care. Unmet needs were similar for children with private coverage, suggesting that access could be improved for the broader population of children not just those in CHIP or Medicaid.



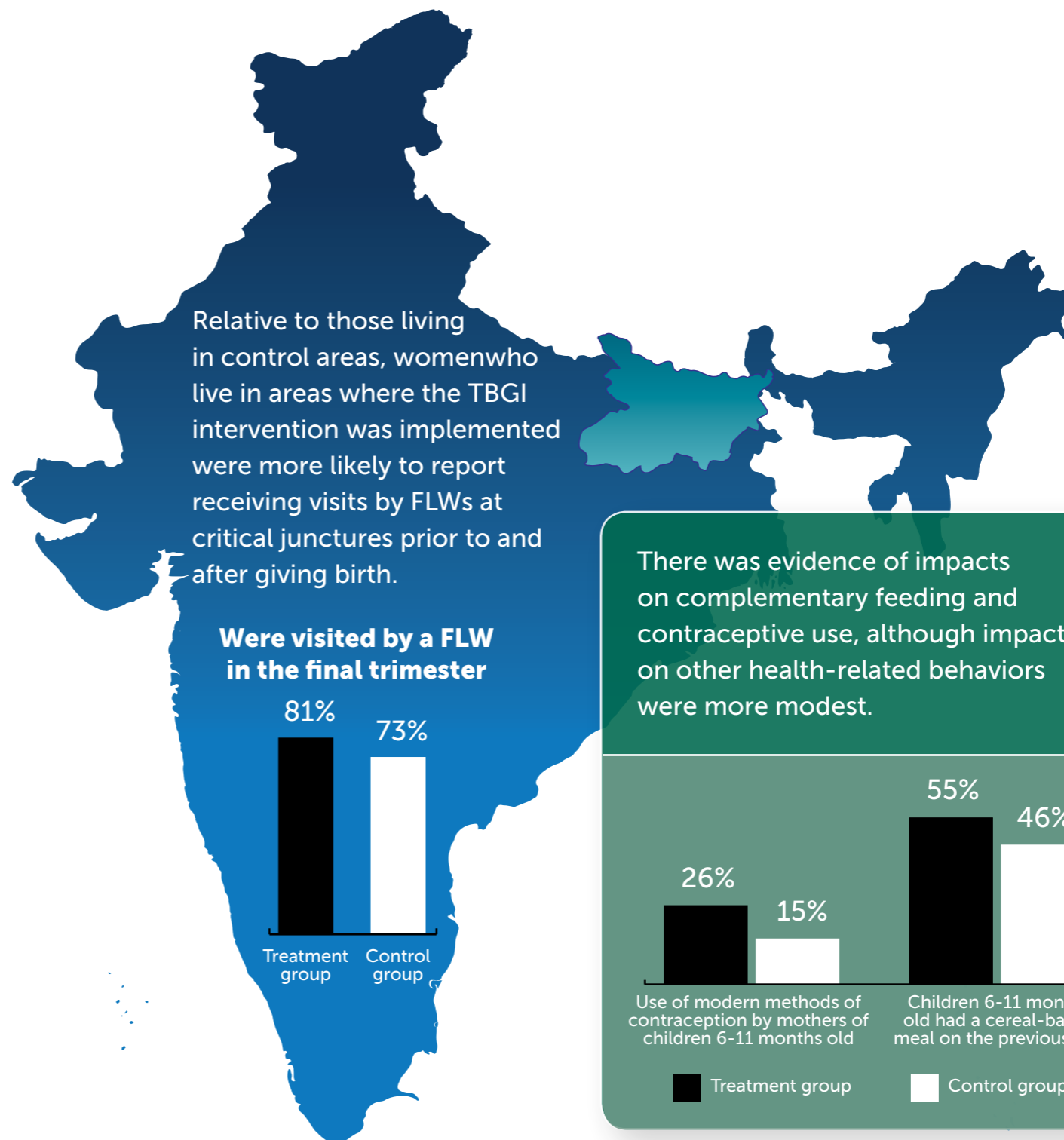


# International



**Project:** Evaluation of the Team-Based Goals and Incentives Intervention in Bihar  
February 2014

**Synopsis:** Funded by the Bill & Melinda Gates Foundation, the Ananya program seeks to address some of the most important family health challenges in Bihar, one of India's poorest and most populous states, through an integrated set of demand and supply side interventions. The Team-Based Goals and Incentives (TBGI) intervention, tested as part of Ananya, is designed to improve maternal and child health outcomes by motivating front-line health workers to work together as a team to achieve certain health coverage targets. Working closely with CARE (the implementing partner), Mathematica conducted a randomized evaluation of the TBGI intervention. Treatment sites received the intervention and the core Ananya package of interventions, and control sites received the core Ananya interventions only. Data were collected in the treatment and control sites one after year of implementation, and the information will be used to understand the program's impact on the interactions between front-line health workers and intervention participants, and on health outcomes such as birth preparedness, antenatal and newborn care, child nutrition, immunizations, and family planning. A second, two-year follow-up now underway is examining the longer-term effects of the intervention.



# Labor

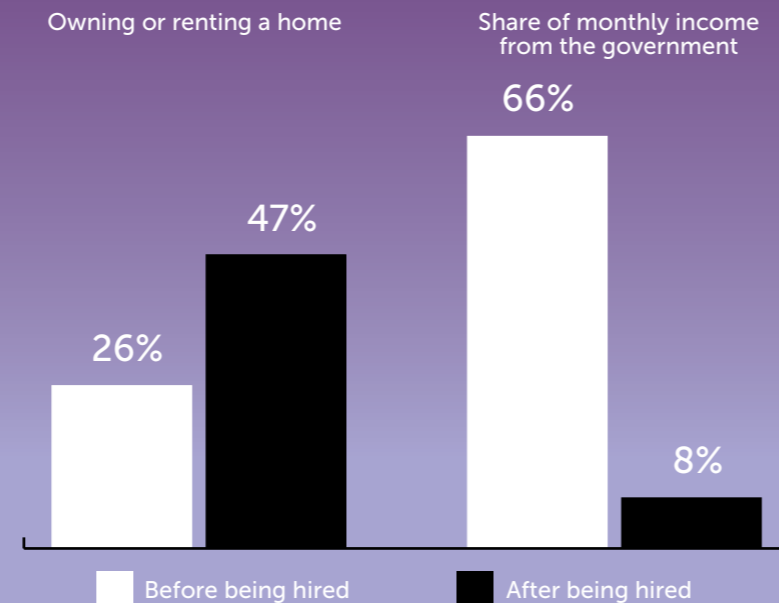


**Project:** Social Enterprise Strengths and Challenges  
March 2014

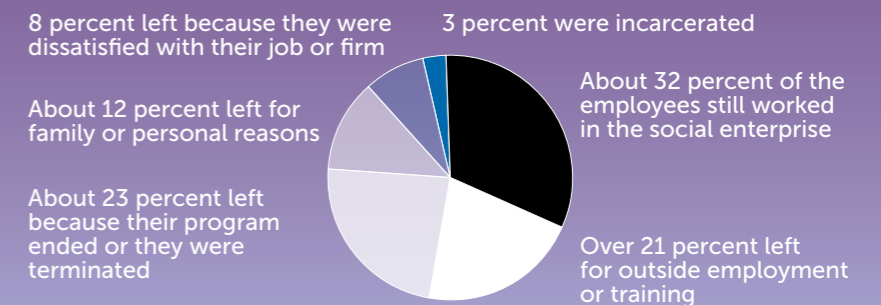
**Synopsis:** Social enterprises are businesses that deliberately hire individuals who face barriers to employment, such as a prison record, homelessness, substance abuse, or living below the poverty line. REDF provides funding, business expertise, and access to networks for organizations that are interested in launching social enterprises that improve employee earnings and help jobs seekers to use fewer government benefits and services. In 2011, REDF selected Mathematica to evaluate social enterprises to learn about what is working in the program and what needs improvement.



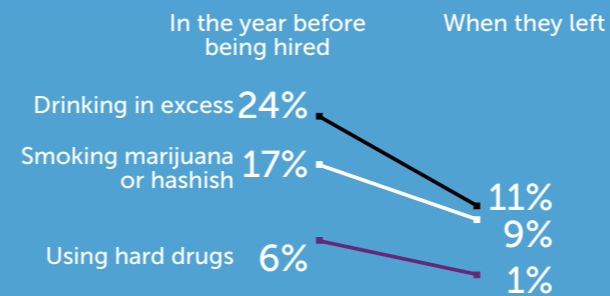
Most employees valued their social enterprise jobs, perhaps because their lives seemed to improve after being hired. For example, the share of individuals with stable housing increased by about 75 percent (from 26 percent to 47 percent), and the share of income that workers received from the government fell from 66 to 8 percent of their monthly income when they were employed.



## Over half the employees were still working about six months after starting a social enterprise job.



## Rates of substance abuse also declined among workers.



# Nutrition



**Project:** The impact of Playworks on students' physical activity during recess: Findings from a randomized controlled trial

Forthcoming in spring 2015 in *Preventive Medicine*

**Synopsis:** Regular physical activity for school-age children has been linked to health and academic benefits. Playworks is a school-based program that seeks to promote physical activity among these children by placing full-time coaches in low-income schools to provide opportunities for organized play throughout the school day via activities during recess, game time in classrooms, and junior coach programs. In an article to be published in *Preventive Medicine*, the Mathematica authors describe findings from this first-ever, randomized controlled trial of the Playworks program.

