
A research brief on the work is available at www.rand.org/t/RB9952.
Statewide data showed need for early childhood supports, especially for at-risk children

Rigorous research documents the short- and longer-term benefits from early childhood programs
- Well-designed home visiting programs
- High-quality preschool programs

State can expect positive return
- $4 to $6 for every $1 in proven nurse home visiting program
- $2 to $4 for every $1 in one-year preschool program
Second study asks: How can NH be strategic in making new early childhood investments?


- A research brief on the available at [www.rand.org/t/RB10055](http://www.rand.org/t/RB10055).

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**Key Findings**

1. New Hampshire currently serves New Hampshire
   - **Strategic investments going forward should involve public funds particularly to the districts where children are most at risk of poor academic outcomes.**
   - **Access to district preschool programs is not aligned with the greatest need but with current low rates of enrollment.**
   - **There is tremendous variability across New Hampshire communities—Claremont, Manchester, Nashua, and Coös county in Coös and the state's contribution to home visiting is modest,** which is due in part to the substantial share of children in the state who are at risk of adverse developmental outcomes because the state's youngest children and their families face various circumstances, median family incomes are as much as two times the state median, and the child poverty rate is below 5 percent. At the other extreme, about 40 districts (the 25 percent of districts with the highest rate of 30 percent in Mississippi and New Mexico.**
   - **The KIDS COUNT indicator of child well-being, which compares 13 indicators across economic, educational, health, and family and community.**
   - **The full report, *Advancing Investments in Evidence-Based Early Childhood Programs in New Hampshire*, is available at www.rand.org/t/RR2955.

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**Advancing Investments in the Early Years**

Landscape of Need for Early Childhood Investments

Evolutionary changes from development, science, psychology, and medicine have increased the importance of the first 5 years of life for the cognitive, social, emotional, behavioral, and physical development of children. New Hampshire is one of seven states that does not use state dollars to fund preschool, either through public schools or private programs. **The RAND study also estimated that New Hampshire would gain from further investments in two types of evidence-based early childhood interventions: home visiting and preschool education, with estimated returns of $2 to $6 in benefits for every $1 invested. Despite these potential benefits, New Hampshire has failed to adopt an evidence-based approach to its early childhood programs. The recommendations below chart a strategic course to reach the national and state goals set for New Hampshire’s children ages 0 to 5.**

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**Advancing Investments in Evidence-Based Early Childhood Programs in the Granite State**

The national and international body of evidence has continued to accumulate the benefits of investing in early childhood interventions: home visiting and preschool education, with estimated returns of $2 to $6 in benefits for every $1 invested. Despite these potential benefits, New Hampshire has failed to adopt an evidence-based approach to its early childhood programs. **The RAND study also estimated that New Hampshire would gain from further investments in two types of evidence-based early childhood interventions: home visiting and preschool education, with estimated returns of $2 to $6 in benefits for every $1 invested. Despite these potential benefits, New Hampshire has failed to adopt an evidence-based approach to its early childhood programs. The recommendations below chart a strategic course to reach the national and state goals set for New Hampshire’s children ages 0 to 5.**

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**Advancing Investments in the Early Years**

Opportunities for Strategic Investments in Evidence-Based Early Childhood Programs in New Hampshire (Lynn A. Karoly, RAND Corporation, 2019), is available at www.rand.org/t/RR2955.
Second study asks: How can NH be strategic in making new early childhood investments?

• Examine local-level data to understand the variation across the state in the factors that place child and families at risk and where investments are being made

• Gather more in-depth information on four focal communities that are making advances in early childhood services

• Draw on findings from indictors and focal communities to make recommendations for a strategic approach to further investments in early childhood programs

Focus:

Evidence-based home visiting

High quality 4K (and 3K) preschool
## Focus on two types of early childhood interventions

<table>
<thead>
<tr>
<th>Home Visiting</th>
<th>Preschool Education</th>
</tr>
</thead>
<tbody>
<tr>
<td>Typically targeted; universal models available</td>
<td>May be targeted or universal</td>
</tr>
<tr>
<td>Parent focus</td>
<td>Child focus; family involvement usually included</td>
</tr>
<tr>
<td>May begin prenatally or soon after birth; regularly scheduled visits for 2 to 3 years</td>
<td>Academic- or calendar-year programs for part-day or school-day; 1 or 2 years before K</td>
</tr>
<tr>
<td>Quality considerations:</td>
<td>Quality considerations:</td>
</tr>
<tr>
<td>✓ Education/training of home visitor</td>
<td>✓ Education/training of classroom teachers</td>
</tr>
<tr>
<td>✓ Curriculum</td>
<td>✓ Structural features of programs</td>
</tr>
<tr>
<td>✓ Retention and visits received</td>
<td>✓ Process features of programs</td>
</tr>
<tr>
<td>Experimental evaluations in multiple sites for varied models</td>
<td>Quasi-experimental evaluations in states and localities of different models</td>
</tr>
<tr>
<td>Cost per year per family: $3,500 to $5,000</td>
<td>Cost per year per child: $8,000. to $12,000</td>
</tr>
<tr>
<td>MIECHV – Healthy Families America (HFA) Comprehensive Family Support Services (CFSS) Early Head Start</td>
<td>Head Start District preschool programs Private provider programs</td>
</tr>
</tbody>
</table>
Four focal communities

Identified communities with:

- Family Resource Center with home visiting through MIECHV and Comprehensive Family Support Services
- Early Head Start/Head Start
- School districts with preschool enrollment
- Spark NH regional partnership or coalition
Four communities provide an array of early childhood programs

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Claremont</th>
<th>Manchester</th>
<th>Nashua</th>
<th>Coös</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total population</td>
<td>13,028</td>
<td>110,601</td>
<td>87,642</td>
<td>32,119</td>
</tr>
<tr>
<td>Population under age 5</td>
<td>771</td>
<td>6,238</td>
<td>4,877</td>
<td>1,267</td>
</tr>
<tr>
<td>Family Resource Center</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Healthy Families America</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>CFSS</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Project LAUNCH</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Early Head Start/Head Start</td>
<td>HS</td>
<td>EHS &amp; HS</td>
<td>EHS &amp; HS</td>
<td>HS</td>
</tr>
<tr>
<td>Publicly funded preschool</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Coalition/Partnership</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>

SOURCE: RAND analysis of data from the American Community Survey and focal community interviews.
Key findings

- Tremendous variability in risk factors across local communities
Wide range in child poverty rate across districts

Poverty rate for children 5 to 17

- State average = 9.1%
- Minimum = 1.0%
- Maximum = 27.6%

25% of districts have a rate of 12.6% or higher

SOURCE: RAND analysis of data from the U.S. Census Bureau.
Key findings

• Tremendous variability in risk factors across local communities

• Home visiting services statewide reach only a fraction of those who could benefit; further work needed to map gap in services relative to need
Key findings

• Tremendous variability in risk factors across local communities

• Home visiting services statewide reach only a fraction of those who could benefit; further work needed to map gap in services relative to need

• Little is known about district preK across all districts; focal communities show
  – Serve children with disabilities and typically developing peers
  – Mostly part-day and part-week; features consistent with high quality
District preschool enrollment has been increasing

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Districts with preschool enrollment (N)</td>
<td>88</td>
<td>91</td>
<td>94</td>
</tr>
<tr>
<td>District preschool enrollment (N)</td>
<td>3,670</td>
<td>3,894</td>
<td>3,876</td>
</tr>
<tr>
<td>Statewide estimated 4K district enrollment rate (%)</td>
<td>22 to 24</td>
<td>22 to 27</td>
<td>–</td>
</tr>
</tbody>
</table>

NOTE: There are 154 elementary and unified school districts.

SOURCE: RAND analysis of data from the US and NH Departments of Education.
School district preschool programs vary across across 4 focal communities

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Claremont</th>
<th>Manchester</th>
<th>Nashua</th>
<th>Coös</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ages of children enrolled</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>With special needs</td>
<td>3K and 4K</td>
<td>3K and 4K</td>
<td>3K and 4K</td>
<td>3K and 4K</td>
</tr>
<tr>
<td>Typically developing</td>
<td>3K and 4K</td>
<td>3K and 4K</td>
<td>4K</td>
<td>4K</td>
</tr>
<tr>
<td>Program hours and days</td>
<td>Part-day and part-week</td>
<td>Part- or full-day, part- or full-week</td>
<td>Part-day and part-week</td>
<td>Part-day and part-week</td>
</tr>
<tr>
<td>Families pay sliding scale fee</td>
<td></td>
<td></td>
<td>4s</td>
<td></td>
</tr>
</tbody>
</table>

SOURCE: RAND analysis of focal community interviews.
Key findings

• Tremendous variability in risk factors across local communities

• Home visiting services statewide reach only a fraction of those who could benefit; further work needed to map gap in services relative to need

• Little is known about district preK across all districts; focal communities show
  – Serve children with disabilities and typically developing peers
  – Mostly part-day and part-week; features consistent with high quality

• Estimate of district 4K enrollment rate shows no relationship with community need factors
4K enrollment rate is not linked to need

- 4K enrollment rate can be computed for 69 of 154 districts
- Uncorrelated with district child poverty rate

SOURCE: RAND analysis.
Head Start has limited reach

Head Start
5 agencies in 35 communities with 1,183 slots

Early Head Start
3 agencies in 13 communities with 385 slots

SOURCE: RAND analysis.
Key findings

- Tremendous variability in risk factors across local communities

- Home visiting services statewide reach only a fraction of those who could benefit; further work needed to map gap in services relative to need

- Little is known about district preK across all districts; focal communities show
  - Serve children with disabilities and typically developing peers
  - Mostly part-day and part-week; features consistent with high quality

- Estimate of district 4K enrollment rate shows no relationship with community need factors

- Scope for expanding evidence-based programs in a strategic fashion
Focal communities demonstrate promising strategies and common challenges

• Promising strategies
  – Combining universal and targeted approaches
  – Institutionalizing collaboration across birth-to-five service areas
  – Leveraging multiple resources in the public and private sectors
  – Importance of leadership

• Common challenges
  – Engaging children and families in programs
  – Recruiting and retaining qualified program staff
  – Addressing potential displacement of services
  – Need for appropriate facilities
  – Using evidence
  – Building useful data systems
Recommended approach for strategic early childhood investments

- Focus first on communities with greatest need but low rates of current access
  - Maximize return on investment measured in first study
  - May be universal or targeted programs

- Requires public and private funding, particularly from state government

- Fund pilot communities if not yet ready for statewide expansion

- Continue current regional community of practice

- Support local investments with state-supported infrastructure
  - Data systems
  - Quality assurance
  - Workforce development
Advancing Investments in the Early Years

Opportunities for Strategic Investments in Evidence-Based Early Childhood Programs in New Hampshire

Lynn A. Karoly

B y some measures, New Hampshire’s children ages 5 to 8 are relatively well-off compared with their counterparts in other states. New Hampshire ranks first nationally on the 2018 Annie E. Casey Foundation KIDS COUNT composite index of child-well-being, which comprises 36 indicators related to economic status, education, health, and family and community.1 For example, New Hampshire’s child poverty rate stood at 8 percent in 2016, compared with the national average of 19 percent and the highest rate of 30 percent in Mississippi and New Mexico. This pattern of better outcomes than the national average holds for each of the indicators in the KIDS COUNT index, several of which are outcomes specific to children younger than age 5, such as the prevalence of low-birth-weight babies, preschool attendance, and the test birth rate.

At the same time, New Hampshire’s consistently high ranking on the Casey Foundation index, which is based on state averages, conceals the high levels of poverty and material hardship for a subset of the state’s children living in both rural and urban communities. For example, the statewide poverty rate for children under age 5 was 11.8 percent in 2021, but was nearly 50 percent in Colebrook, a rural community in Coos County, New Hampshire’s largest, least populated, and poorest county (the countrywide poverty rate for children under age 5 was 8.7 percent). This rate was 39.9 percent in Manchester, the state’s largest city.2 These two communities, at opposite ends of the rural-to-urban continuum, are illustrative of disparities in well-being across a state where children are relatively well-off on average.

With a growing recognition of the importance of the early years and the lifelong detrimental effects of growing up living in poverty, leaders in the public and private sectors across New Hampshire have sought to increase investments in early childhood programs that promote the cognitive, social, emotional, and physical well-being of at-risk children

Key Findings

• There is tremendous variability across New Hampshire communities in the extent to which the state’s youngest children and their families face risks and stressors that can compromise healthy child development.

• Home visiting programs serve up to 1,100 families and children in New Hampshire each year, far below the estimated 9,200 who could benefit. Further work is needed to map where the gap in services relative to need is greatest.

• There is little information about the nature and quality of school district preschool programs, which reach about 4,000 children annually, both children with special needs and their typically developing peers.

• Access to district preschool programs is not aligned with the districts where children are most at risk of poor academic performance because of high rates of poverty and other disadvantages.

• To maximize the expected return, there is scope for expanding evidence-based home visiting and preschool programs in a strategic fashion, focusing first on those communities with the greatest need but with current low rates of enrollment.

• Strategic investments going forward should involve public funds at the state and local levels, as well as private contributions from philanthropy and business, to (1) expand access to high-quality evidence-based home visiting and preschool programs, starting in those communities with the greatest access gap; (2) continue strategies to realize an effective and efficient integrated early childhood system; and (3) build the data systems and other infrastructure at the state level to support informed decisions about future investments and to ensure that quality is achieved and expected impacts are realized.

The RAND study pointed to the substantial share of children in the state who are at risk of adverse developmental outcomes because of low family income and other factors that can compromise healthy development in the first few years of life. Further, available funding streams—primarily federal funds—for early childhood interventions such as Early Head Start, Head Start, and home visiting through the Maternal, Infant, and Early Childhood Home Visiting (MIECHV) program are not sufficient to reach all New Hampshire children and families who could benefit.

The RAND study also estimated that New Hampshire would gain from further investments in two types of evidence-based early childhood interventions: home visiting and preschool education, with estimated returns of $2 to $6 in benefits for every $1 invested. Despite this potential return, New Hampshire has fallen behind other states that have recognized the value of further investments in early childhood programs. The state’s contribution to home visiting is modest, and New Hampshire is one of seven states that does not use state dollars to fund preschool, either through public schools or private programs.

Given the unmet need and potential for positive economic returns, the RAND Corporation was asked to identify ways that New Hampshire can be strategic in making new early childhood investments, with a focus on evidence-based home visiting and high-quality preschool. RAND researchers assembled data across communities in the state (defined by school districts) to understand the variation in the factors that place children and families at risk and where publicly funded early childhood programs are currently available. Recognizing the limitations of the available community-level data, in-depth information was also collected for four communities—Claremont, Manchester, Nashua, and Coös County—to understand local implementation of early childhood programs, including innovative strategies and challenges. Analyses of the indicators and fiscal community expectations support recommendations for strategic investments in evidence-based early childhood programs in New Hampshire.

Landscape of Need for Early Childhood Investments

Extensive research from developmental science, psychology, neuroscience, and other fields documents the importance of the first five years of a child’s life for their cognitive, social, emotional, behavioral, and physical development, with implications for their school readiness and educational outcomes, as well as their lifelong health and well-being. This same research points to factors that can compromise healthy development, including risk factors at birth, such as limited family resources (e.g., because of single parenthood, teen parenthood, or low family income more generally) and being born with a low birth weight.

The indicators the RAND team assembled for the 354 New Hampshire elementary and unified school districts demonstrate that there is tremendous variability across communities in the extent to which the state’s youngest children and their families face various risks and stressors. As one outcome, the indicators for birth outcomes, family demographics, and economic status show that some communities have no or few new mothers or young children facing adverse circumstances, median family incomes are as much as two times the state median, and the child poverty rate is below 3 percent. At the other extreme, about 40 districts (the 25 percent of districts with the worst outcomes) see half or more of new births to unmarried women and about one-third or more of new mothers living in near poverty. One-quarter of districts also have more than one in three children

Key findings:

• There is tremendous variability across New Hampshire communities in the extent to which the state’s youngest children and their families face risks and stressors that can compromise healthy child development.

• Home visiting programs serve up to 1,100 families and children in New Hampshire each year, far below the estimated 9,200 who could benefit.

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• Access to district preschool programs is not aligned with the districts where children are most at risk of poor academic performance because of high rates of poverty and other disadvantages.

• To maximize the expected return from investments in evidence-based early childhood programs, focus first on those communities with the greatest need but with current low rates of enrollment, while also building infrastructure at the state level to support an efficient and effective system of early childhood services.

www.rand.org
# Illustrative local indicators

## Indicators of Need
- Family income, poverty rate
- Births to women in poverty
- Low birth weight babies
- Teen birth rate
- Free and reduced-price lunch eligibility
- Female-headed household
- Opioid-related deaths
- Reading and math achievement
- High school dropout

## Indicators of Current Investments
- Families served by home visiting
- Early Head Start / Head Start slots
- Licensed Plus ECE providers
- NAEYC accredited providers
- Public preschool enrollment
- Availability of full-day kindergarten

NOTE: Bold items available for 154 elementary and unified school districts.