

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

New Hampshire is often hailed as a state where children's well-being is high relative to other states. However, a 2017 RAND study pointed to the substantial share of children in the state who are at risk of adverse developmental outcomes because of low family resources 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 focal community experiences 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 children's lives 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,

### 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.
- There is little information about the nature and quality of school district preschool programs, which reach about 4,000 children annually, including 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 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.

or low family income more generally) and being born with a low birth weight.

The indicators the RAND team assembled for the 154 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. At one extreme, 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 5 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

under age 5 in single-parent families. Median family income falls as low as 40 percent of the statewide median, and the child poverty rate reaches up to three times the state average.

These contrasts are evident in the figure, which maps the poverty rate for children ages 5 to 17 across New Hampshire school districts as of 2017 using estimates from the U.S. Census Bureau’s Small Area Income and Poverty Estimates (SAIPE) Program. Districts with poverty rates below the state average are shown in gradients of green shading, and those with above-average rates are shaded in gradients of purple. Overall, the child poverty rate for the state was 9.1 percent in 2017. Across districts, the poverty rate ranged from 1 percent to nearly 26 percent. One in four districts had a poverty rate that exceeded 13 percent.

### Publicly Funded Home Visiting Programs

New Hampshire has had a long track record of implementing home visiting, most recently using the Healthy Families America (HFA) evidence-based model supported by a federal MIECHV grant. Home visiting services are also provided through state contracts for Compre-

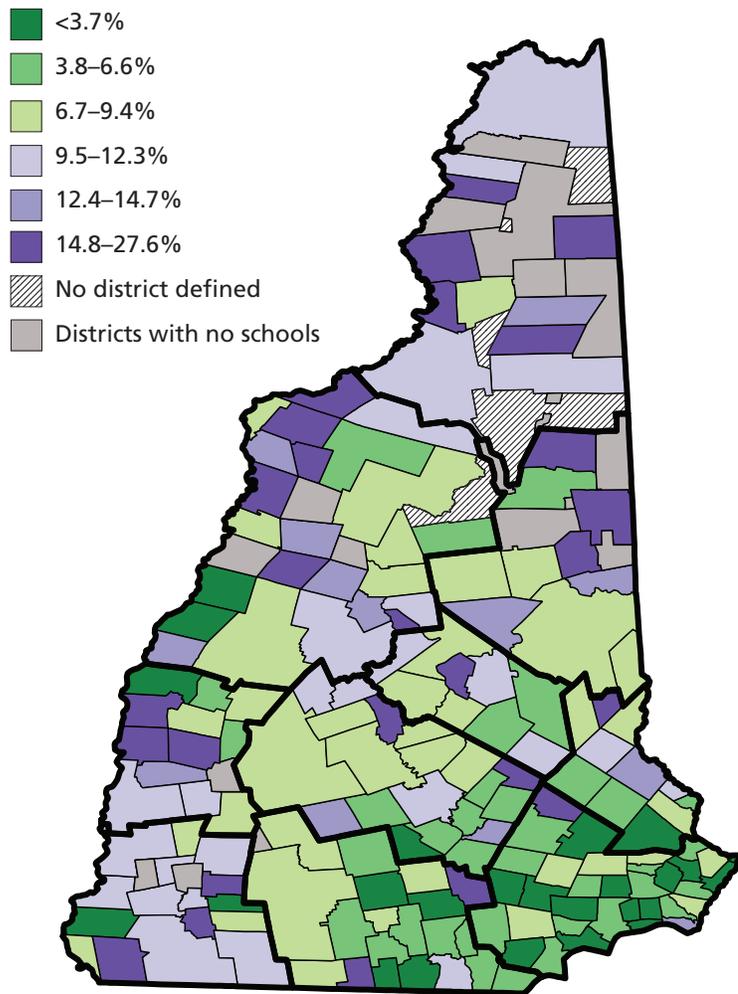
hensive Family Support Services (CFSS). Home visits may begin as early as the prenatal period. HFA continues until the child reaches age 3, and the CFSS home visits may continue until the child is age 21. A third funding stream, Early Head Start, includes a home-based option that involves home visiting from birth to age 3. The Early Head Start programs are found in 13 sites statewide located in Belknap, Hillsborough, Merrimack, and Strafford counties. New Hampshire has ten counties, and the agencies offering home visiting through HFA and CFSS contracts operate in all of them.

In most communities, the HFA and CDSS home visiting services are provided by one or more Family Resource Centers (FRCs), which also support other related support services for families with young children. (Some of those services may include a home visiting component.) This potentially allows for a more comprehensive set of services than what any given home visiting funding stream can support. At the same time, the programs are not necessarily following a specific evidence-based home visiting model or even a common model across FRCs.

Together, those three funding streams reach about 1,100 families per year, far below the estimated 9,200 families who could potentially benefit. Because of limitations on data access, it was not possible to map the location of the participating families and determine whether home visiting services in New Hampshire are concentrated in those communities where the need is greatest. Even without this information, given the potential need for home visiting services, it is evident that the current levels of funding are not sufficient to reach all families and children who could benefit.

### Poverty Rates in New Hampshire, by School District, 2017

Percentage of children ages 5–17 living in poverty



SOURCE: RAND analysis of 2017 Census Bureau SAIPE data.

### Publicly Funded Preschool Programs

Although New Hampshire does not have a state-funded preschool program, there are publicly funded preschool options through Head Start and district-funded preschool programs. In addition, some private early learning programs may accept child care subsidies, making them more affordable (but not necessarily fully subsidized) for at-risk children.

#### Head Start

New Hampshire has five Head Start grantee agencies that have programs across 35 communities covering much of the state. Extensive community needs assessments are used to ensure that Head Start sites are located where they can serve eligible children in the community and surrounding area. However, because the program is not fully funded to serve all eligible children, there are districts and clusters of districts with above-average child poverty rates with no Head Start program, especially in Coös, Carroll, and Grafton counties.

#### District-Funded Preschool

Enrollment data for New Hampshire’s 154 elementary and unified school districts show that as of October 2017, 94 districts reported enrollment of at least one preschool-age child, for a total enrollment of nearly 3,900 children (see Table 1). Further, district enrollment data indicate an increase in preschool enrollments in recent years, a period of declining K–12 enrollments.

Beyond the enrollment count and counts of preschool-age children identified with special needs, little is known about the nature or quality of district preschool programs. The data gaps include the breakdown in preschool enrollments by age, special education status, and program hours and days. The four focal communities provide some insight into the nature of district preschool programs (with

## New Hampshire School District Preschool Enrollments, by School Year

	2015–2016	2016–2017	2017–2018
Districts with preschool enrollment (N)	88	91	94
District preschool enrollments (N)	3,670	3,894	3,876
Statewide estimated 4K district enrollment rate (%)	20 to 24	22 to 27	–

SOURCE: New Hampshire Department of Education enrollment data and author’s estimates.

NOTE: Enrollment figures are as of October 1 in each school year. – = unable to estimate.

White Mountains Regional School district serving as the study’s focus in Coös County):

- For the most part, the preschool programs in the four districts evolved over time, from an initial focus on serving children with special needs to more broadly serving children in the community in integrated classrooms, where possible.
- All districts serve children one and two years before entering kindergarten (i.e., 3K and 4K). With the exception of Manchester, all of the district-based programs operate with a part-day schedule, and often for only part of the week (two, three, or four days per week).
- The program features for teacher qualifications, class size, and teacher-child ratio are all consistent with standards for high-quality preschool, as defined by the National Institute for Early Education Research.
- In most cases, the preschool rooms are part of an elementary school, but there was one site located at a high school and used for field experience for students in an education career program, as well as several in stand-alone facilities.
- To cover the cost of the preschool program, the four focal districts used federal Title I funds and funds for special education students, along with district funds and, in some cases, funds raised from philanthropies and private companies.

Although the division of the state-level preschool enrollment total by special education status is not reported, other data indicate that the total preschool enrollment figure is higher than what would be expected if these district programs served only children with identified special needs. In particular, the RAND team estimates that about one in four grade 1 students, counting both students with special needs and their typically developing peers, were enrolled two years earlier in a district 4K program (i.e., one year before entering kindergarten) (see Table 1).

Extending estimates of the 4K enrollment rate to the district level, there is almost no correlation between the district poverty rate and the estimated 4K enrollment rate for the districts where this comparison can be made. This indicates that that current enrollment in district-funded preschool programs is not aligned with the districts where children are most at risk of poor school performance (as indicated by the poverty rate) or where student performance indicators are below average, and thus increased preschool attendance could improve academic performance. Thus, there is scope for expanding preschool access in a strategic fashion, focusing on those districts with the greatest need—as measured by indicators such as the child poverty rate and student performance on statewide assessments—but with current low rates of enrollment.

### Private Early Learning Programs

In addition to Head Start and district-funded preschool programs, licensed private home- and center-based child care and early learning programs also serve children one or two years prior to kindergarten entry, some in programs that provide high-quality learning environments. At present, information is not systematically collected from each licensed provider to record annual enrollments of preschool-age children and various program features (e.g., hours per week, weeks per year) and indicators of program quality.

New Hampshire’s quality rating improvement system (QRIS) has rated about 26 percent of licensed centers in the middle quality tier known as Licensed Plus. That designation requires no direct observational assessment of quality, but instead relies on a document review against the QRIS standards. The top quality tier, reserved for programs accredited by the National Association for the Education of Young Children, is a more rigorous assessment of quality, but just 8 percent of licensed centers currently have that designation.

Thus, at least some of the private licensed programs are providing publicly subsidized high-quality preschool for their enrolled children, but the number of additional children served beyond those in Head Start and district programs is not readily known. Further, because Child Care Scholarship subsidy funds are not an entitlement, funding is not sufficient to reach all income-eligible children. In fact, estimates indicate that, at most, one in five 3- and 4-year-olds who meet the income requirement receives a child care subsidy. Those who receive a Child Care Scholarship may not be fully subsidized, as many families still face parent co-pays and provider fees to make up for the difference in the provider’s fee rate and the reimbursement they receive from the Child Care Scholarship program. These fees may be unaffordable for some families or consume a large share of their budget.

### Insights from Early Childhood Programs in the Focal Communities

The information gathered about home visiting and preschool education programs in the focal communities provides a deeper understanding of the varied strategies that communities are using as they implement programs locally—both innovative approaches and challenges. Promising strategies include the following:

- **Combining universal strategies with targeted approaches.**

One example is the FRC in Coös County, which has raised local funds to support a voluntary initial home visit for families of all newborns in the county. Another example is the movement toward universal developmental screening through the state’s Watch Me Grow program. Families and children identified as facing potential challenges based on a universal home visit soon after birth or a universal screening can then be referred to more-specialized services to meet their needs.

- **Institutionalizing collaboration across birth-to-5 service areas.** The work of the Coös Coalition for Young Children and Families is illustrative of the collaborative approach to strengthening early childhood systems by building opportunities for leaders and practitioners in the same community to work together and advance their respective services in a coordinated, high-quality fashion. However, it can be costly in terms of time and other resources to build bridges across agencies and organizations, and it can be challenging to sustain a collaborative once it is in place.
- **Leveraging multiple resources in the public and private sectors.** In most cases, the home visiting services, preschool programs, and other early childhood services being provided in the focal communities relied on multiple sources of funding from both the public and private sectors. The FRCs, for example, had multiple sources of government funding. District preschool programs often tapped federal and local public funds. Members of the Coös Coalition for Young Children and Families and outside observers credit the multiyear core funding from the Tiltonson Fund, which has supported coalition leaders and partner organizations, as a critical factor in the progress that the county has made in moving toward a well-integrated and supportive early childhood system.

Given the study's focus on four local communities with a high incidence of at-risk children, it may not be surprising that there are also commonalities in the challenges they face as they implement early childhood initiatives. The challenges include engaging children and families, recruiting and retaining qualified program staff, meeting needs for appropriate facilities, addressing potential displacement of services, undertaking program monitoring and evaluation, and building useful data systems.

## A Strategic Approach to Advancing Early Childhood Investments

The 2017 RAND study showed the expected economic returns from expanding evidence-based home visiting programs and high-quality preschool programs, also informed by research evidence. The findings in this study point to a strategic approach to these investments, namely focusing first on those communities with the greatest need but with current low rates of access to early childhood programs. This approach has the potential to maximize the return on the investment

by starting with those children and families where there is the greatest potential to improve outcomes.

This approach is effectively targeting communities for future investment. However, targeting in this way does not preclude the implementation of universal programs within the identified communities, such as a voluntary initial home visit for all newborns or universal eligibility for publicly funded preschool delivered through schools or private programs. Within the universal programs, there may also be varied intensity of service options depending on a child's or family's need, such as continued home visiting services or more-specialized learning supports in a preschool program for children with special needs. Communities may also seek to tailor the evidence-based programs they offer to the context in their community.

A strategic approach to new investments in early childhood programs should include the following features:

- **Investments from the public and private sectors.** The focal communities demonstrate that federal and local funding support some investment in early childhood programs. But without new funding from the state, it is unlikely that significant investments in early childhood programs can advance. Private-sector funds from philanthropy and the business sector could further add to the early childhood initiatives, leveraging the public-sector funds for greater impact.
- **Funding for pilot communities.** State funds could be used to collaboratively or competitively award funds to local communities to invest in adding or expanding evidence-based early childhood programs. Ideally, a plan for evaluation would be required, either for each community or as part of a pooled evaluation across the pilot sites.
- **Continuation of a community of practice.** A current set of state-fostered communities of practice brings together a set of regional initiatives and demonstrates the value of collective efforts to address the need for a well-integrated and effective early childhood system within cities, counties, or the state as a whole. The present set of regional initiatives covers a portion of the state and could be expanded to new pilot communities and other communities making advances in early childhood.
- **Support for local-level investments with improved state-level infrastructure.** Infrastructure components such as data systems, accountability systems, and workforce development systems are best implemented at the state level to support common metrics, accountability rubrics, and consistent workforce development.

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This brief describes work done in RAND Education and Labor documented in *Advancing Investments in the Early Years: Opportunities for Strategic Investments in Evidence-Based Early Childhood Programs in New Hampshire*, by Lynn A. Karoly, RR-2955-EH, 2019 (available at <http://www.rand.org/t/RR2955>). To view this brief online, visit [www.rand.org/t/RB10055](http://www.rand.org/t/RB10055). The RAND Corporation is a research organization that develops solutions to public policy challenges to help make communities throughout the world safer and more secure, healthier and more prosperous. RAND is nonprofit, nonpartisan, and committed to the public interest. RAND's publications do not necessarily reflect the opinions of its research clients and sponsors. RAND® is a registered trademark. © RAND 2019

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