



Strengthen the Evidence for
Maternal and Child Health Programs

NATIONAL
PERFORMANCE
MEASURE

15

Continuous and Adequate Insurance Evidence Review

A photograph showing several hands of different ages (adults and children) reaching out and touching on a light-colored wooden surface. In the center, there is a white paper cutout of a family (two adults and two children) and a small, realistic red heart. The hands are arranged in a circle around these central elements, symbolizing care and support.

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EXECUTIVE SUMMARY

Introduction. Adequate insurance is one of fifteen Maternal and Child Health (MCH) National Performance Measures (NPMs) for the State Title V MCH Services Block Grant to States program.¹ NPM 15 is the percentage of children, ages 0-17, who were continuously insured in the past year with adequate coverage, based on three criteria: whether their children’s insurance covers needed services and providers, and reasonably covers costs.² This evidence review will focus on strategies, programs, and policies that Title V programs can support and/or implement to ensure comprehensive health insurance coverage and continual access to affordable care for children and adolescents.

Overview. In the United States (U.S.), the number of uninsured children rose from a historic low of 3.6 million (4.7%) in 2016 to 4.4 million (5.7%) in 2019 (Alker & Corcoran, 2020).³ Over that same period, underinsurance among all U.S. children rose from 30.6% to 34% (+ 3.4%), a relative increase of 11.1%, representing an additional 2.4 million children (Yu et al., 2022). This means millions of children and families lacked adequate and continuous health insurance coverage even before the rapid spread of the COVID-19 pandemic and the beginning of the economic crisis when many parents became unemployed and lost access to job-based health insurance.⁴ On all measures of care, children who are uninsured persistently lag behind those children with public or private coverage. Children with inadequate insurance are more likely to delay or forego care and are less likely to have access to a medical home model of care, receive needed referrals, receive care coordination, and receive family-centered care than children with adequate insurance coverage (Kogan et al., 2010).

Comprehensive health care coverage can help children receive the health care they need when they need it, especially primary preventive care, including finding and treating preventable delays or diseases; protect families’ financial stability; and improve children’s long-term health, economic, and educational outcomes (Lu et al., 2015; Zhang, 2012;

1 <https://mchb.hrsa.gov/programs-impact/title-v-maternal-child-health-mch-block-grant>

2 <https://mchb.tvisdata.hrsa.gov/PrioritiesAndMeasures/NPMDistribution>

3 <https://www.childrensdefense.org/state-of-americas-children/soac-2021-child-health/>

4 *ibid*

Murphey, 2017).⁵ There is also evidence that participation in Medicaid and the Children’s Health Insurance Program (CHIP) improves children’s health, supports school readiness, reduces school absenteeism, contributes to higher academic and graduation rates, and leads to higher wages and better health in adulthood (Wagnerman et al., 2017). In the midst of declining rates of children’s health coverage, new strategies need to be considered to improve access to affordable, quality coverage for all children, particularly those from low- and moderate-income families who are being left behind (Rubin et al., 2020).

Evidence-Based Strategies. This report highlights evidence from the last decade since the Patient Protection and Affordable Care Act of 2010 (ACA) was enacted that demonstrates effectiveness in increasing health coverage and strengthening care for children and youth. Peer-reviewed studies were identified by searching five online databases. Sixteen studies (n=16) met the inclusion criteria.⁶ Interventions were categorized along a continuum from evidence against (least favorable) to scientifically rigorous (most favorable). Each included study was rated on its own merit, and also rated as an intervention type to speak to the public health impact.

The evidence ratings include:⁷

EVIDENCE RATING	DEFINITION
Evidence Against ↓	Studies with this rating are not good investments. These strategies have been tested in many robust studies, are not effective, and sometimes produce harmful results.
Mixed Evidence ★	Strategies with this rating have been tested more than once and results are inconsistent or trend negative; further research is needed to confirm effects.
Emerging Evidence ★ ★	Strategies with this rating have limited research documenting effects. These strategies need further research, often with stronger designs, to confirm effects.
Expert Opinion ★ ★ ★	Strategies with this rating are recommended by credible, impartial experts and are consistent with accepted theoretical frameworks. However, the strategies have limited research documenting effects; further research, often with stronger designs, is needed to confirm effects.
Moderate Evidence ★ ★ ★ ★	Strategies with this rating are likely to work, but further research is needed to confirm effects. These strategies have been tested more than once and results trend positive overall.
Scientifically Rigorous ★ ★ ★ ★ ★	Strategies with these ratings are most likely to make a difference. These strategies have been tested in many robust studies with consistently positive results.

⁵ <https://www.mchevidence.org/tools/npm/15-adequate-insurance-coverage.php>

⁶ Refer to the methods section in the full report for the inclusion and exclusion criteria.

⁷ <https://www.mchevidence.org/tools/>

Summary of Evidence-Based/Informed Strategies. The table below summarizes the evidence-based and evidence-informed strategies (n=16) to increase the number of children who are adequately insured by setting, target audience, intervention type, and overall evidence rating.⁸

Summary of Evidence-Based/Informed Strategies to Increase Adequate Insurance for Children					
SETTING	STUDY	TARGET AUDIENCE	INTERVENTION TYPE	OUTCOME	EVIDENCE RATING
Community-Based	Flores (2016; Flores (2018)	Parents and children	Outreach using parent mentors	Obtaining coverage and increasing access to the health care system	Moderate evidence
	Harding (2017)	Practice members, ⁹ children and families	Outreach using enrollment assistants	Obtaining coverage and increasing access to the health care system	Emerging evidence
	Phillips (2010)	Children and families	Outreach using mini-grant opportunities	Obtaining coverage and increasing access to the health care system	Emerging evidence
	Ray (2016)	Children and families	Outreach using a data system	Obtaining coverage and increasing access to the health care system	Emerging evidence
	Caskey (2019)	Children with chronic diseases	Care coordination using community health workers	Addressing underinsurance (covering needed services and providers; reasonably covered costs)	Emerging evidence
	Chao (2014)	Children and families	Multicomponent ¹⁰	Obtaining coverage and increasing access to the health care system	Emerging evidence
	Fuld (2013)	Young children with special health care needs	Multicomponent ¹¹	Obtaining coverage and increasing access to the health care system	Emerging evidence

⁸ Refer to the full report for an expanded summary table that also describes the interventions, components, and findings.

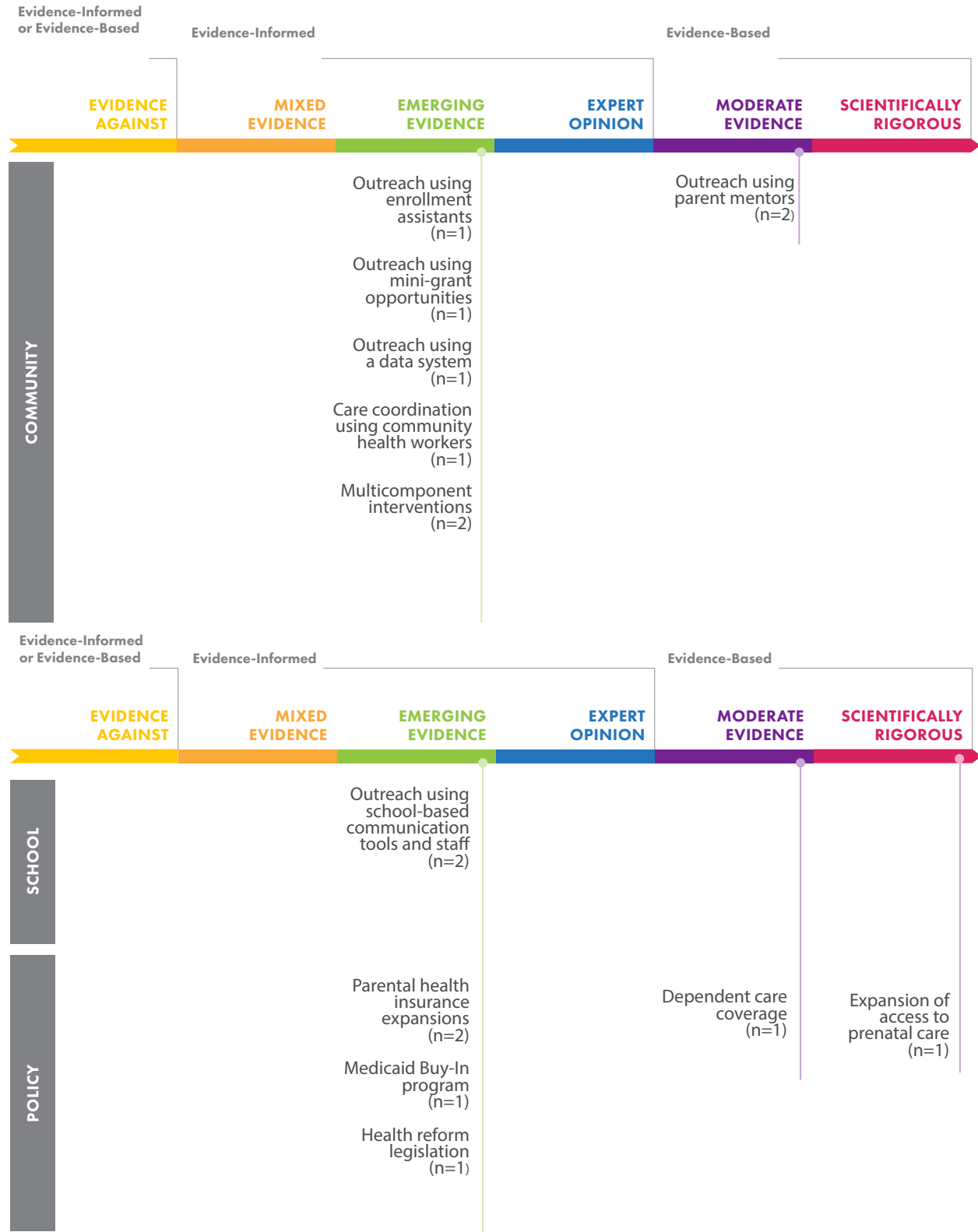
⁹ Practice members include managers, clinicians, clinical and non-clinical staff, enrollment assistants, etc.

¹⁰ Main components include: care management + education and parent engagement + partnerships.

¹¹ Main components include: educational messaging + data from program databases + counseling using program staff (child benefit advisors).

Summary of Evidence-Based/Informed Strategies to Increase Adequate Insurance for Children					
SETTING	STUDY	TARGET AUDIENCE	INTERVENTION TYPE	OUTCOME	EVIDENCE RATING
School-based	Aller (2014)	Children and families	Outreach using school-based communication tools	Obtaining coverage and increasing access to the health care system	Emerging evidence
	Jenkins (2018)	Children and families	Outreach using school staff	Obtaining coverage and increasing access to the health care system	Emerging evidence
Policy	Swartz (2017)	Pregnant women and their infants	Expansion of access to prenatal care	Obtaining coverage and increasing access to the health care system + Addressing underinsurance (covering needed services and providers; reasonably covered costs)	Scientifically rigorous
	Wisk (2018)	Adolescents, young adults, and their families	Dependent coverage expansion	Obtaining coverage and increasing access to the health care system	Moderate evidence
	DeVoe (2015); Guy (2017)	Parents and children	Parental health insurance expansions	Obtaining coverage and increasing access to the health care system	Emerging evidence
	Hirschi (2019)	Children with disabilities	Medicaid Buy-In program	Obtaining coverage and increasing access to the health care system + Addressing underinsurance (covering needed services and providers; reasonably covered costs)	Emerging evidence
	Smith (2019)	Parents and children	Health reform legislation	Obtaining coverage and increasing access to the health care system	Emerging evidence

Evidence Continuum. The intervention types are visually plotted along the evidence continuum by setting below.



Key findings. Overall, 9 key findings emerged from the analysis:

1. In terms of setting, eight studies (50%) were community-based, six studies (37.5%) were policy focused, and two studies (12.5%) took place in schools.
2. In the community and school-based studies, outreach was the primary strategy used to insure uninsured and underinsured children and improve access to a comprehensive array of needed and affordable services, supports, and providers.
 - a. Peers and professional staff, such as parent mentors, enrollment assistants, community health workers, child benefit advisors, and school nurses and administrative staff, were trained to outreach to parents to help them obtain and renew coverage for their children.
 - b. Technology and tools, such as data systems and communication channels, assisted in the identification of uninsured children who were eligible for public insurance.
 - c. A proactive approach was taken to identify and outreach to uninsured and underinsured children and facilitate their enrollment into public insurance.
 - d. Community-health centers serving low-income populations are well-positioned to support families navigating the complexities of enrolling in public insurance.
 - e. Medicaid/CHIP outreach can be viewed as a continuum of activities from initial contact with a target population, to facilitating enrollment, to addressing access barriers, and, ultimately, ensuring appropriate utilization of care (Phillips, 2010).
3. The policy-focused studies examined the impact of expansion initiatives and health reform legislation on children’s insurance coverage and service utilization.
 - a. Parental coverage expansions increased the likelihood of children gaining coverage.
 - b. Dependent coverage expansion for young adults prevented the loss of coverage in young adulthood.
 - c. A Medicaid Buy-In program created a pathway to Medicaid for children with disabilities whose family income is too high for Medicaid.
 - d. The expansion of access to prenatal care for low-income immigrant women (Emergency Medicaid Plus) resulted in increased utilization and improved health outcomes for the women and their infants.
 - e. Adult-oriented health reform legislation, such as an individual mandate, Medicaid expansion, and minimum essential benefits, can reduce uninsurance and positively affect children’s access to care.
 - f. The children’s health insurance landscape is ever evolving with policy reforms being debated and considered with legislative reauthorizations, changes in administration, national trends, and advocacy efforts.
4. Thirteen studies and policy initiatives (81%) were focused on obtaining coverage, increasing access, and getting children into the health care system. One study (6%) examined underinsurance and measured whether children’s insurance covered needed services and providers, and reasonably covered costs. Two studies (13%) were dually focused on both obtaining coverage and addressing underinsurance for children and youth.
5. Attention was given to overcoming enrollment barriers experienced by families and preventing gaps in coverage that result when parents are unable to renew their children’s coverage.

6. Thirteen studies (81%) focused on extending insurance coverage to healthy children and adolescents. Three studies (19%) focused on getting coverage or increasing benefits for children and youth with special health care needs (CYSHCN), children with chronic diseases, and children with disabilities.
7. With states having the flexibility to implement different policies regarding expanding public insurance eligibility and subsidizing options for children and families, there are opportunities for states to learn from one another.
8. Of the 16 studies included in this evidence review:
 - a. The rating of *scientifically rigorous* was given to one study (6%).
 - b. The rating of *moderate evidence* was given to two studies (13%).
 - c. The rating of *emerging evidence* was given to 13 studies (81%).
 - d. The rating of *mixed evidence* was not given to any studies.
 - e. The rating of *evidence against* was not given to any studies.
9. Overall, the evidence base for the included insurance interventions seems to be *emerging*. Most of the articles were published in the last five years and some were pilot studies. Read the discussion section to learn more about effective strategies and promising practices to ensure adequate and continuous health insurance coverage for more children and youth.

Discussion and implications. A Title V-Medicaid partnership is especially important for improving quality and assuring access to public health coverage. This includes expanding and ensuring coverage for CYSHCN. One of Medicaid’s critical roles is to provide financial coverage for important preventive and primary care services and specialty services for those eligible; Title V is essential to help translate those funds into a system of care that is accessible. The partnership among Title V and Title XIX agencies is required to be documented with the intended result that the partnership will be complementary, reduce duplication, and increase the effectiveness of both parties.¹² A robust interagency agreement (IAA) can be a key factor in assuring coordination and mutual support between agencies to ensure coverage and care for more children, youth, and their families.

With the recent economic downturn and the sudden surge of children without employer-sponsored insurance due to the COVID-19 pandemic, Medicaid and CHIP will be tasked with filling a coverage gap to prevent a national crisis of pediatric uninsurance (Strane et al, 2020). Some short-term strategies include improving remote screening mechanisms to identify families at risk for gaps in insurance, connecting families with resources in their communities, and helping families learn about and enroll in Medicaid or CHIP (Gautam & Tumin, 2020). A long-term strategy that is already in place allows state and local policymakers to provide opportunities to streamline application and enrollment processes for social services by sharing eligibility determinations across programs.¹³ As we set the policy agenda for a post-pandemic economic recovery, new, bolder approaches will be needed to prevent erosion of children’s coverage gains and also lead us towards achieving universal and affordable coverage and care for all children and youth in the years to come (Strane et al., 2020).

¹² The Title V (MCH) – Title XIX (Medicaid) Interagency Agreement (Title V-XIX IAA) is a tool that assures the legislatively mandated relationship among the State Title V Block Grant Program and the State Medicaid Agency is enacted.

¹³ <https://www.cbpp.org/research/poverty-and-inequality/opportunities-to-streamline-enrollment-across-public-benefit>

From evidence to action. The final section of this document provides recommendations for intervention implementation strategies and recommendations for development of evidence-based or informed strategy measures (ESMs). This section also directs the reader to implementation resources, additional promising practices, and sample ESMs currently in use by Title V agencies with the goal of providing states a structured and practical approach to support integrating evidence into their work.

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INTRODUCTION

Strengthen the Evidence for Maternal and Child Health (MCH) Programs is a Health Resources and Services Administration (HRSA)-funded initiative that aims to support states in their development of strategies to promote the health and well-being of MCH populations in the United States (U.S.). This initiative, carried out through a partnership among the Georgetown University National Center for Education in Maternal and Child Health (NCEMCH), the National Maternal and Child Health Workforce Development Center (NMCHWDC) with assistance from the Association of MCH Programs (AMCHP), CityMatCH, and the Georgetown University Center for Child and Human Development (GUCCHD), was undertaken to facilitate implementation of the transformed State Title V MCH Services Block Grant to States program (hereafter referred to as the MCH Block Grant).¹⁴

One goal of the Strengthen the Evidence initiative is to conduct reviews that provide evidence of the effectiveness of possible strategies to address the National Performance Measures (NPMs)¹⁵ selected for the current five-year cycle (2020 to 2024) of the MCH Block Grant program. States are charged to select five NPMs, according to their identified priority needs, and incorporate evidence-based or evidence-informed strategies to achieve improvement for each NPM selected.

According to HRSA's Maternal and Child Health Bureau (HRSA MCHB), the 15 NPMs were determined using the following criteria:¹⁶

- There is a large investment of resources by states on MCH issues;
- The measure is considered to be modifiable by Title V activities;
- States could delineate measurable activities to impact the measure;
- Significant disparities are shown to exist in MCH population groups;
- Research indicates that the condition or activity has large societal costs; or
- Research indicates that health promotion of the behaviors, practices, or policies has resulted in improved outcomes.

NPM 15: Continuous and adequate insurance is the percentage of children, ages 0-17, who were continuously insured in the past year with adequate coverage, based on 3 criteria: whether their children's insurance covers needed services and providers, and reasonably covers costs.¹⁷ Comprehensive, affordable health insurance is an essential element of a broader set of policies needed to promote the health and well-being of children and adolescents (Alker et al., 2020). Health coverage is critical to ensure children receive the preventive and medical care they need to achieve and maintain good health. Adequate insurance is a complex topic that includes coverage, benefits, costs, and access. There is vast evidence reporting on the benefits of insurance coverage for children's access to and

¹⁴ <https://mchb.hrsa.gov/programs-impact/title-v-maternal-child-health-mch-block-grant>

¹⁵ The first NPMs for MCH were instituted in 1997. The three-tiered performance measurement system includes national outcome measures (NOMs), NPMs, and evidence-based/informed strategy measures (ESMs) (Kogan et al., 2015).

¹⁶ <https://mchb.tvisdata.hrsa.gov/PrioritiesAndMeasures/NationalPerformanceMeasures>

¹⁷ <https://mchb.tvisdata.hrsa.gov/PrioritiesAndMeasures/NPMDistribution>

utilization of care and the associated improvements in health outcomes (America’s Health Rankings, 2021).¹⁸

For the most part, studies and policy initiatives have focused on increasing access and getting children into the system, as opposed to addressing issues of underinsurance or unstable insurance coverage.¹⁹ However, the COVID-19 pandemic precipitated policy changes with public health programs and led to the establishment of the Families First Coronavirus Response Act (FFCRA), which incentivizes states to keep eligible children enrolled in Medicaid and the Children’s Health Insurance Program (CHIP).^{20, 21} This evidence review will focus on strategies, programs, and policies to increase health insurance coverage and ensure continual access to affordable care for children and adolescents.

See Appendix A: Key Terms and Acronyms for a description of important insurance-related concepts and abbreviations of terms used throughout this report.

ONLINE TOOLS

The report is supplemented by implementation resources for Title V programs that can be found in the MCH Evidence website’s NPM 15 Toolkit at <https://www.mchevidence.org/tools/npm/15-adequate-insurance-coverage.php>.

These resources include links to introductory information, a summary of the evidence, examples of promising practices, sample evidence-based or informed strategy measures (ESMs), links to current, related ESMs in process across the country, learning opportunities, and resources from the leading proponents of children’s health insurance coverage and care.

18 https://www.americashealthrankings.org/explore/health-of-women-and-children/measure/ade_cont_insur/state/AI1111

19 <https://www.kff.org/coronavirus-covid-19/issue-brief/analysis-of-recent-national-trends-in-medicaid-and-chip-enrollment/>

20 <https://www.kff.org/coronavirus-covid-19/issue-brief/analysis-of-recent-national-trends-in-medicaid-and-chip-enrollment/>

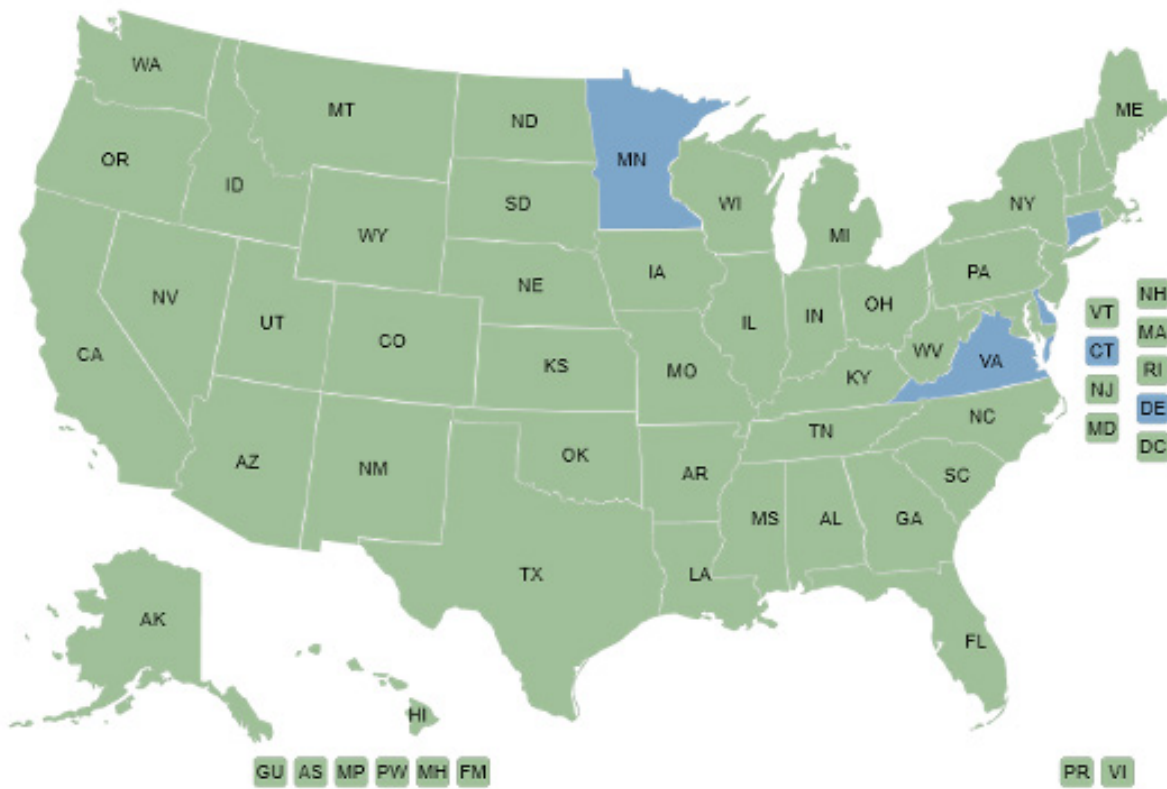
21 See the “COVID-19 and Insurance” section in the Discussion for more information.

BACKGROUND

This section lists Title V programs that selected NPM 15, summarizes the most recent national data, provides an overview of uninsurance and underinsurance, and describes the benefits of health insurance coverage and access to care for children and youth.

National Performance Measure

Continuous and adequate insurance as a National Performance Measure. Continuous and adequate insurance is one of the 15 MCH NPMs. For 2020, four states, Connecticut, Delaware, Minnesota, and Virginia, selected NPM 15.



Evidence-based or Informed Strategy Measure

Insurance Evidence-based or informed Strategy Measures (ESMs). Across the states that chose adequate insurance as one of the NPMs, there are seven ESMs that have been chosen by Title V agencies to monitor progress in advancing NPM 15. These ESMs fall into three categories:

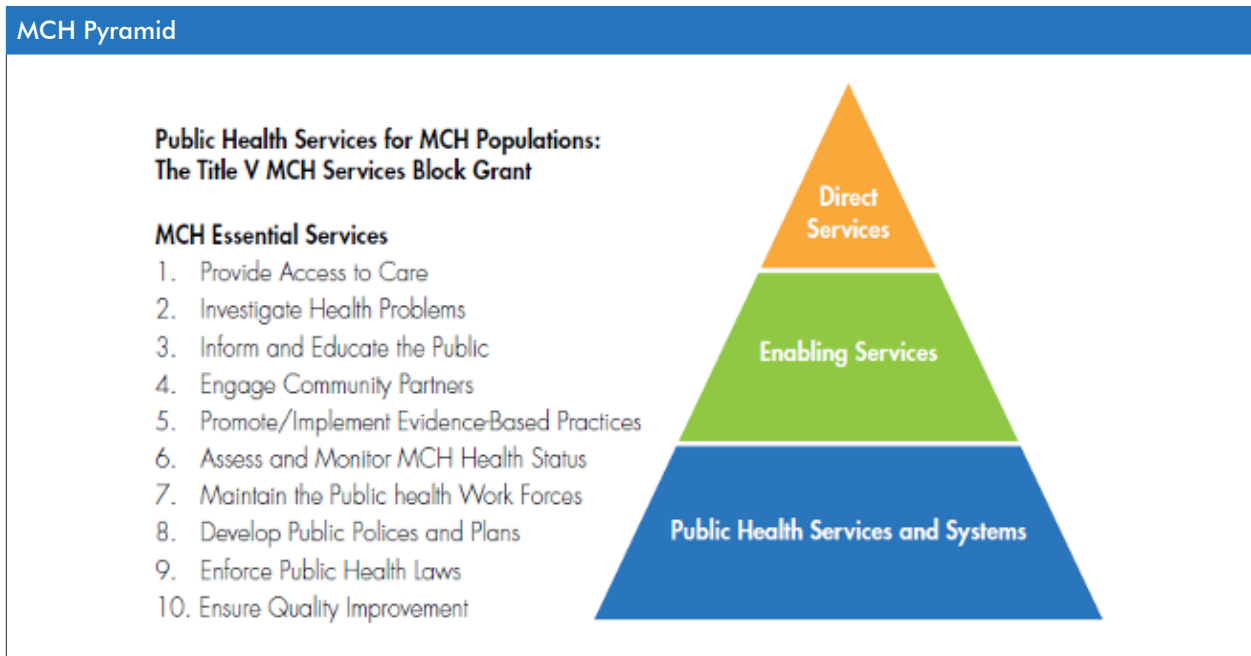
- Zero represent activities directed to professionals (e.g., training activities, technical assistance),

- One is directed to families and their children (e.g., outreach materials to families, family-to-family support, development of care coordination plans), and
- Six represent activities related to systems-building (e.g., engagement of stakeholder groups, quality improvement initiatives, collaboration between systems of care).

Findings from this report – specifically the evidence-based and evidence-informed interventions identified – can be used by Title V programs as models to strengthen current ESMs or develop new measures to affect change for each of these categories.

Against a matrix of the “MCH Pyramid,”²² the conceptual framework for services of the Title V MCH Block Grant program, of the seven ESMs that focus on NPM 15:²³

- Five measure activities related to public health services and systems (foundational level of the pyramid),
- Two measure strategies related to enabling services (middle level of the pyramid), and
- Zero Title V programs are currently funding strategies related to direct services in regards to ensuring adequate and continuous insurance coverage (gap-filling level of the pyramid).

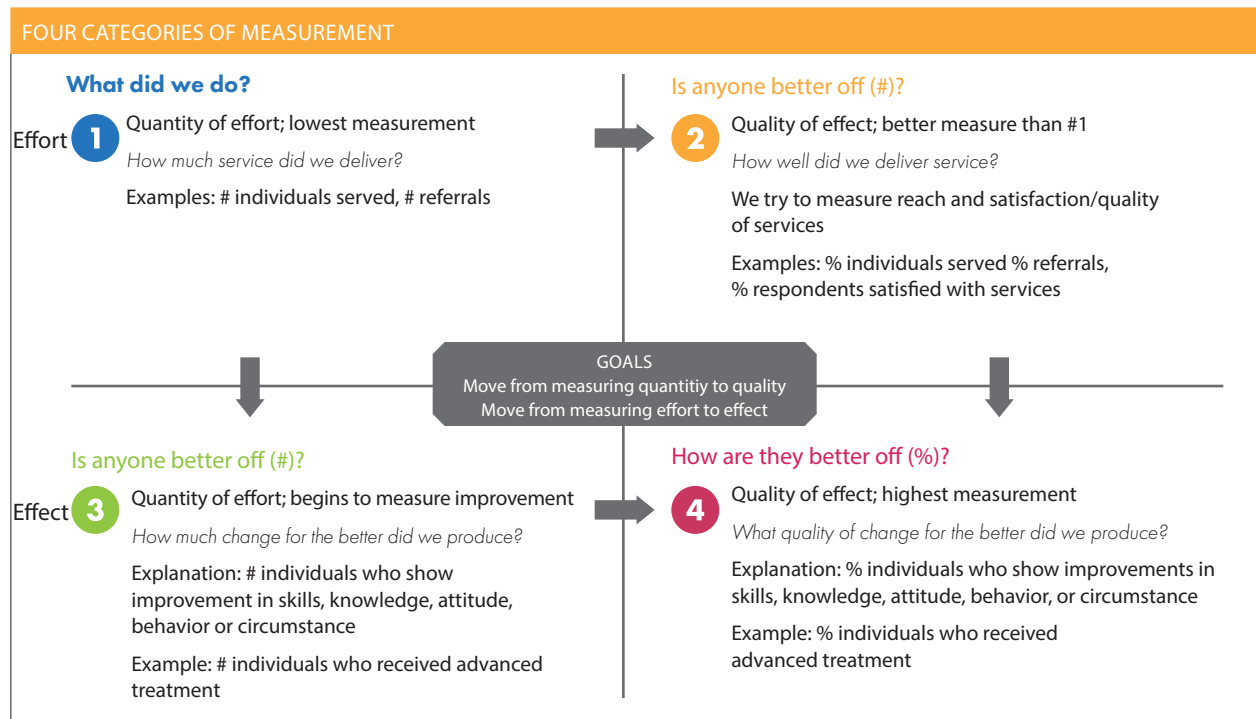


22 Title V Maternal and Child Health Services Block Grant to the States Program: Guidance and Forms for the Title V Application/Annual Report (OMB No. 0915-0172).

23 The conceptual framework for the services of the State Title V MCH Block Grant is envisioned as a pyramid with three tiers of services and levels of funding that provide comprehensive services. A goal is to “move on down” the pyramid with more states and jurisdictions engaging in public health services and systems. See <https://mchb.tvisdata.hrsa.gov/Glossary/Glossary> for a graphical representation of the pyramid.

The MCH Evidence Center uses Results-Based Accountability (RBA)²⁴ as a conceptual framework to track how ESMs are measured. This framework consists of increasing levels of measurement across four quadrants (Quadrant 1 being the simplest measurement and Quadrant 4 being the most complex). States and jurisdictions should focus efforts in expanding how they measure programs by focusing efforts to measure Quadrant 2 and 4 activities across the RBA measurement scale.^{25, 26}

- Six current adequate insurance ESMs measure effort:
 - Five ESMs fall within Quadrant 1 (measuring the quantity of agency effort) and answer the question “what did we do?” (e.g., counts and “yes/no” activities).
 - One ESM falls within Quadrant 2 (measuring the quality of effort) and answer the question “how well did we do it?” (e.g., reach, quality of materials, satisfaction of intervention).
- One current adequate insurance ESM measures effect (e.g., increases in skills/knowledge, change in behavior or circumstance):
 - Zero ESMs fall within Quadrant 3 (measuring the quantity of the effect) to answer the question “is anyone better off?” (e.g., numbers of providers with increased knowledge).
 - One ESM falls within Quadrant 4 (measuring the quality of the effect) and answer “how are they better off?” (e.g., percentages of families whose self-efficacy improved).



24 RBA is described in the RBA Implementation Guide <https://clearimpact.com/results-based-accountability/implementation-guide/>

25 ESM Review & Resources: National Summary <https://www.mchevidence.org/documents/ESM-Review-National-Summary.pdf>

26 To search the MCH Library to find state ESMs, visit: <https://www.mchlibrary.org/evidence/state-esms.php>

Details of interventions tracked through ESMs can be found through the MCH Digital Library’s search page and used as models when considering new programs.²⁷ The final section of this report, **From Evidence to Action**, outlines how to translate the evidence base into meaningful, achievable, and measurable strategies and directs readers to sample ESMs based on this report.

National Survey Data

NPM 15 is measured through data collected from the National Survey of Children’s Health (NSCH). The NSCH provides “rich data on multiple, intersecting aspects of children’s lives, including physical and mental health, access to quality health care, and the child’s family, neighborhood, school, and social context.”²⁸ It is funded and directed by HRSA MCHB and fielded annually by the U.S. Census Bureau. Data from the NSCH are used to monitor progress toward the goal of increasing the percent of children ages 0-17, who are continuously and adequately insured.²⁹

To qualify on this measure, the child must meet the following two criteria:

- 1) Have continuous insurance in the past 12 months, and
- 2) Have current insurance which is adequate for the child’s healthcare needs.

The child’s current insurance was considered adequate when the following criteria were met:

- a) The child currently has health insurance coverage, AND
- b) Benefits usually or always meet child’s needs, AND
- c) The insurance usually or always allows the child to see needed providers, AND
- d) The insurance either has no out-of-pocket expenses or out-of-pocket expenses are usually or always reasonable.

According to data from the 2018 and 2019 NSCH, 66.8% of children in the U.S. have current insurance that is adequate and were continuously insured in the past year.³⁰ Considering special health care needs (SHCN) status,³¹ 67.8% of children and youth without SHCN (non-CYSHCN) and 62.1% of CYSHCN have current insurance that is adequate and were continuously insured in the past year.³²

27 <https://www.mchlibrary.org/evidence/state-esms.php>

28 <https://www.childhealthdata.org/learn-about-the-nsch/NSCH>

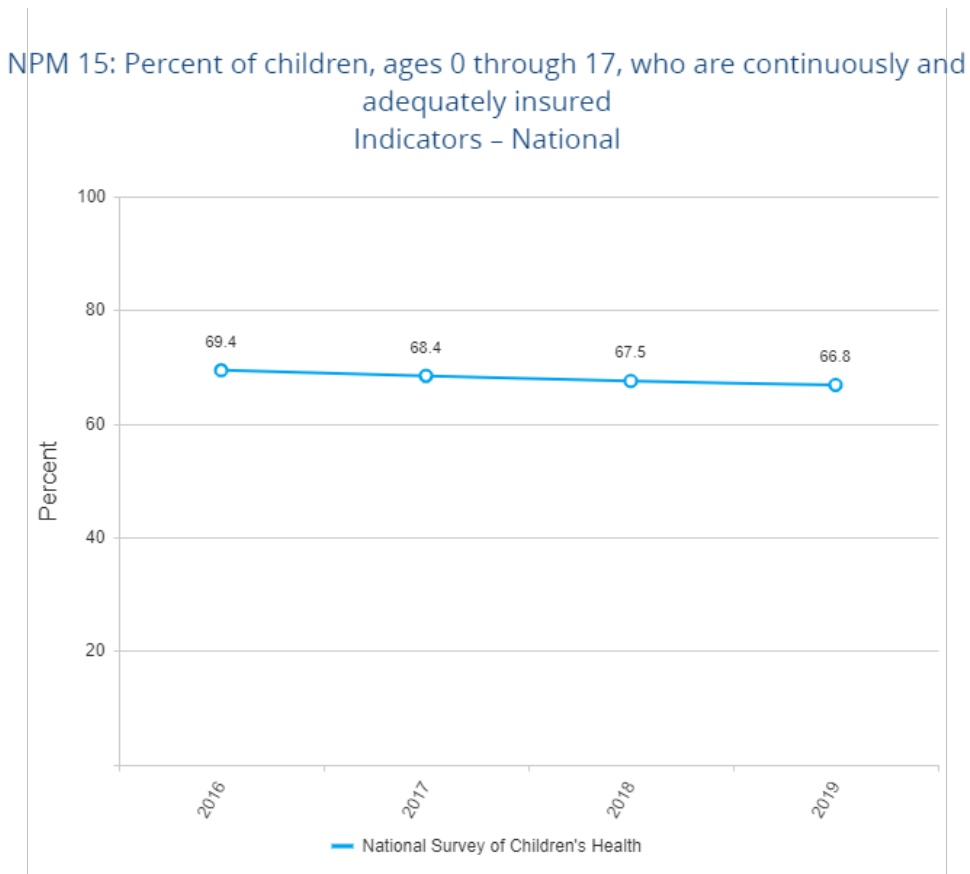
29 NPM 15 is related to Access to Health Services Objective 1 from HealthyPeople2030: Increase the proportion of persons with health insurance, and Objective 6: Reduce the proportion of persons who are unable to obtain or delay in obtaining necessary medical care, dental care, and prescription medicines.

30 Child and Adolescent Health Measurement Initiative. 2018-2019 National Survey of Children’s Health (NSCH) data query. Retrieved [02/02/21] from [<https://www.childhealthdata.org>].

31 Children and youth with special health care needs (CYSHCN) are those who “have or are at increased risk for chronic physical, developmental, behavioral or emotional conditions and also require health and related services of a type or amount beyond that required by children generally. An estimated 13.5 million children in this country, or approximately 20% of U.S. children under 18 years of age, have a SHCN. CYSHCN and their families often need services from multiple systems – health care, public health, education, mental health, and social services (MCHB, 2020) (<https://mchb.hrsa.gov/maternal-child-health-topics/children-and-youth-special-health-needs>).

32 Child and Adolescent Health Measurement Initiative. 2018-2019 National Survey of Children’s Health (NSCH) data query. Retrieved [02/02/21] from [<https://www.childhealthdata.org>].

The graphic below shows trend data from 2016 to 2019.³³



History

Over the last 40 years, many lessons have been learned from studies of health insurance for children (Jeffrey & Newacheck, 2006; Lohr et al., 1986; Szilagyi et al., 2009). First, a substantial body of evidence demonstrates the lack of health insurance among children and adolescents is associated with delays in needed health care; foregone care, lack of receipt of preventive, acute, or chronic services; lower quality of care; and in many cases suboptimal health outcomes (Committee on Consequences of Uninsurance Institute of Medicine (IOM), 2002; Lewit et al., 2003). Although not all uninsured children suffer such adverse consequences, the lack of insurance increases their risk of poor health outcomes. Second, many studies have demonstrated that lack of health insurance among CYSHCN represents a particularly risky situation (Jeffrey & Newacheck, 2006; Committee on Consequences of Uninsurance IOM, 2002), because these children often require substantial and costly care from primary, specialty, and ancillary services to address their chronic health concerns (Homer et al., 2008; Perrin et al., 2007; Perrin, 2008).

³³ <https://mchb.tvisdata.hrsa.gov/PrioritiesAndMeasures/NationalPerformanceMeasures>

Children are insured either as dependents under a tax-advantaged, employer-sponsored health plan or through publicly-funded insurance made available through Medicaid, CHIP, or a subsidized health plan purchased through a health insurance Marketplace (Alker et al., 2020). Health insurance coverage – through both public and private sources – has a substantial impact on access and utilization and also protects families against burdensome expenses (Jeffrey & Newacheck, 2006). Families from low- and moderate-income backgrounds without affordable employer coverage for their children rely primarily on Medicaid and CHIP. Expansion of Medicaid and the establishment of CHIP represents a significant success story in the national effort to guarantee health insurance for children and youth (Alker et al., 2020). However, coverage gaps remain and reforms are still needed to ensure coverage, access, continuity, and comprehensiveness so all children can reach their full potential (Alker et al., 2020).

See **Appendix B: History** for more information on the evolution of public health insurance programs, namely Medicaid and CHIP, and legislative efforts, such as the Patient Protection and Affordable Care Act of 2010 (ACA), to increase children’s coverage and care.

“All children need access to comprehensive, affordable health coverage that is easy to get and to keep.”
-- Children’s Defense Fund, 2021³⁴

Overview

Continuous and adequate insurance coverage is critical to ensure the health and flourishing of children (Yu et al., 2022). On all measures of care, children who are uninsured persistently lag behind those children with public or private coverage. Children with health insurance are more likely than those who are not covered to receive early care for health problems, and they are at lower risk for hospitalization (Garfield, 2016; Murphey, 2017). Children with inadequate health insurance are more likely to delay or forego care and are less likely to have access to a medical home model of care, receive needed referrals, receive care coordination, and receive family-centered care than children with adequate insurance coverage (Kogan et al., 2010). Underinsurance can leave a family unprotected from the financial risk of illness or disease (America’s Health Rankings, 2021). Historically, public health insurance coverage has been connected with better protection against out-of-pocket costs, as well as improved access to and satisfaction with health care (King, 2016; Kogan et al., 2010; Oswald et al., 2007; Yu et al., 2022).

Discontinuous insurance coverage, including change in coverage type and gaps in coverage,³⁵ are associated with limited health care access and greater likelihood of unmet health care needs for children (Tumin et al., 2019). In particular, children with unstable insurance coverage are less likely to see a doctor, have a usual source of care, and have their prescriptions filled than children whose coverage is stable (Osorio & Alker, 2021; Storms, 2013). Gaps in coverage result in missed

³⁴ https://campaignforchildren.org/wp-content/uploads/sites/2/2021/12/Fact-Sheet_Covering-All-Kids.pdf

³⁵ Gaps in coverage are defined as being uninsured for one or more months during the year (Osorio & Alker, 2021).

opportunities to detect and treat health issues and child development concerns early and to reduce health care costs when care is delayed due to lack of insurance (Brooks et al., 2019a). Gaps in coverage are more likely to impact children in communities of color, especially Latino and Black children, children who live in the South and Midwest, families with low or moderate income, and children living in families who have trouble affording care (Alker & Osorio, 2021b; Osorio & Alker, 2021).

Uninsurance Rates. In recent years, child uninsurance has increased, reversing gains achieved after passage of the ACA, and participation in Medicaid and CHIP has fallen (Alker & Corcoran, 2020; Gaffney et al., 2021; Haley et al., 2019; Yu et al., 2022):³⁶

- After reaching a historic low of 3.6 million uninsured children in 2016, the number of uninsured children began to increase in 2017 as Medicaid enrollment began to decline, reaching 4.4 million uninsured children in 2019. This increase of a full percentage point (4.7% to 5.7%) translates to 726,000 children losing health insurance between 2016 and 2019 (Alker & Corcoran, 2020).³⁷
- This means millions of children and families lacked health insurance even before the rapid spread of the COVID-19 pandemic and the beginning of the economic crisis when many parents became unemployed and lost access to job-based health insurance.³⁸
- Between 2016 and 2020, there was a significant increase in the proportion of uninsured children (6.1% [95% confidence interval (CI), 5.5-6.7] to 7.2% [95% CI, 6.6-7.9]; 19% increase; P=.004) (Lebrun-Harris et al., 2022).
- In states that have not expanded Medicaid, the rate of uninsured children is more than twice as high than in expansion states.^{39, 40}
- According to census data, children of color lack health insurance at the highest rates with 9.5% of Hispanic children and 6% of Black children lacking health insurance in 2020 (Keisler-Starkey & Bunch, 2021).⁴¹
- Children in the South have the highest uninsurance rate at 7.7% in 2020 (Keisler-Starkey & Bunch, 2021).
- For children in poverty, the uninsured rate in 2020 was 9.3%, compared with 7.0% for those with family incomes within 100% and 399% of poverty and 2.2% for those with incomes 400% of poverty or higher.⁴²

36 From 2017 to 2019, the percentage of children enrolled into Medicaid and/or CHIP decreased by 0.9% (to 33.5%), whereas children covered by employer-sponsored insurance increased by +0.7% (to 48.1%). This was likely due to the coupled effects of (1) gains in family employment and income (before the coronavirus pandemic) pushing children over Medicaid/CHIP income eligibility cutoffs and (2) concerted policy efforts to undermine Medicaid/CHIP outreach, enrollment, and benefit renewal (Alker & Corcoran, 2020).

37 <https://www.childrensdefense.org/state-of-americas-children/soac-2021-child-health/>

38 ibid

39 ibid

40 A provision of the ACA called for the expansion of Medicaid eligibility in order to cover more low-income Americans. In June 2012, the Supreme Court ruled that states could not be forced to expand their Medicaid programs, so it was left to each state to determine whether to participate or not (<https://www.healthinsurance.org/glossary/medicaid-expansion/>).

41 https://campaignforchildren.org/wp-content/uploads/sites/2/2021/12/Fact-Sheet_Covering-All-Kids.pdf

42 <https://www.census.gov/library/stories/2021/09/uninsured-rates-for-children-in-poverty-increased-2018-2020.html>

“While the uptick in uninsured children may appear small, it came in the midst of historic economic growth and halts 20 years of progress in children’s coverage.”

-- Children’s Hospital of Philadelphia PolicyLab, 2021⁴³

Underlying the rise in uninsurance among children was a decline in take-up of Medicaid and CHIP coverage:

- An estimated 2.3 million children (57.7% of all uninsured children) were eligible for Medicaid or CHIP but remained uninsured in 2019 (Haley et al., 2021).
- An estimated 91.9% of Medicaid and CHIP-eligible children without other coverage participated in the programs in 2019, compared with 93.4% in 2016 (Haley et al., 2021).
- Participation fell in both expansion and non-expansion states, but the drop was larger in non-expansion states (Haley et al., 2021).
- More than half of American Indian/Alaska Native, Black, multiracial, and Hispanic children rely on Medicaid and CHIP as their source of health coverage (Brooks, 2020).⁴⁴
- Children in low-income families are far more likely to be covered by Medicaid and CHIP than private insurance. In 2019, 72% of children in low-income families had public health insurance coverage.⁴⁵

According to Alker and Brooks (2022), as of June 2021, over 40 million children were enrolled in Medicaid or CHIP⁴⁶ for their health insurance.⁴⁷ Children’s enrollment increased by 11% between February 2020 and June 2021.⁴⁸ Now about half of the nation’s children are covered by Medicaid or CHIP.⁴⁹ The growth in Medicaid enrollment is the result of income and job losses experienced by families during the COVID-19 pandemic and an impactful federal provision (FFCRA) enacted in 2020 requiring states to keep children and adults continuously covered by Medicaid during the COVID-related public health emergency. Once the provision is lifted, coverage losses will be exacerbated in states that make less of an effort to avoid them and have policies that create more barriers to enrollment and retention. As many as 6.7 million children could be at very high risk of

43 <https://policylab.chop.edu/PolicyLab-Coverage-Brief>

44 <https://www.childrendefense.org/state-of-americas-children/soac-2021-child-health/>

45 *ibid*

46 States set their own eligibility requirements for Medicaid and CHIP, and these thresholds range widely. Eligibility usually depends on a child’s age, the number of people in the household, and the family’s income (<https://theconversation.com/health-insurance-coverage-for-kids-through-medicaid-and-chip-helps-their-moms-too-178249>) (<https://www.kff.org/medicaid/state-indicator/medicaid-income-eligibility-limits-for-children-ages-1-5/?currentTimeframe=0>).

47 Georgetown University Center for Children and Families analysis of February 2020-June 2021 Centers for Medicare and Medicaid Services State Medicaid and CHIP Applications, Eligibility Determinations, and Enrollment Data, available at <https://data.medicaid.gov/dataset/6165f45b-ca93-5bb5-9d06-db29c692a360>. The dataset does not include child enrollment for Arizona and consequently, the authors have added Arizona state administrative enrollment data to the estimate. See the methodology section for more details (Alker & Brooks, 2022).

48 *ibid*

49 Georgetown University Center for Children and Families analysis of June 2021 Centers for Medicare and Medicaid Services State Medicaid and CHIP Applications, Eligibility Determinations, and Enrollment Data and Census Bureau Current Population Survey, 2021 Annual Social and Economic Supplement (CPS ASEC), Table H-01. According to the CPS ASEC, there are an estimated 76.1 million children (ages 0-18) in the U.S. (Alker & Brooks, 2022).

losing coverage.⁵⁰ This could have the effect of more than doubling the number of uninsured children, which stood at 4.4 million in 2019. State and federal action are needed to minimize coverage losses for millions of vulnerable children and their families (Alker & Brooks, 2022).

Underinsurance Rates. Tremendous effort has been devoted to decreasing the number of uninsured children in the U.S., but considerably less attention has been given to the problem of underinsurance (America’s Health Rankings, 2021). According to Yu and colleagues (2022):⁵¹

- Among 73.3 million children aged 0 to 17 years in the U.S. in 2016-2019, just over two-thirds (67.6%; 95% CI, 67.0% to 68.1%) had continuous and adequate insurance coverage, whereas almost one-third (32.4% [23.7 million]) were underinsured.⁵²
- From 2016 to 2019, underinsurance among all U.S. children rose from 30.6% to 34% (+ 3.4%), a relative increase of 11.1%, representing an additional 2.4 million children.
- Significant growth in underinsurance was observed among more complex CYSHCN, children identified as White⁵³ or other and/or multiracial, children living in households with income $\geq 200\%$ of the federal poverty level (FPL), and those with private insurance.⁵⁴
- Increased child health complexity and private insurance were significantly associated with experiencing underinsurance.
 - More complex CYSHCN had nearly twice the odds of being underinsured than non-CYSHCN.
 - Children with private-only insurance were >3 times as likely to be underinsured than children with public-only insurance.
 - Children with a mix of private and public insurance had more than twice the odds of being underinsured than children with public-only insurance.
- The rise in insurance inadequacy is mainly due to the increase in the proportion of children who had unreasonable out-of-pocket expenses.

Similarly, Gaffney and colleagues (2021) found that:⁵⁵

- Adolescents, children in non-English speaking families or those with middle incomes (200%-399% of the FPL), and Hispanic and White children were more likely to be inadequately insured.

50 People can lose coverage in one of two ways – either getting lost on the way to a new source of coverage because their income has gone up since they enrolled or they remain eligible but lose Medicaid due to a “procedural denial” (Alker, 2022). Available at: <https://ccf.georgetown.edu/2022/04/14/lessons-from-the-pandemic-childrens-coverage-improvements/>

51 Yu et al. (2022) conducted a secondary analysis of U.S. children in the NSCH combined 2016-2019 dataset who had continuous and adequate health insurance.

52 The proportion of children with continuous and adequate insurance coverage in 2019 is now within the SE of the Kogan et al. (2010) pre-ACA examination of underinsurance which used data from the 2007 NSCH (Yu et al., 2022).

53 Changes in sources of child insurance (Alker & Corcoran, 2020) could potentially explain the finding that underinsurance rose significantly among children traditionally viewed as more socioeconomically advantaged, that is, White children living in middle-income households with high parental educational attainment (Yu et al., 2022).

54 The rise in out-of-pocket costs is likely due to the broader pattern of commercial insurance plans becoming more expensive and transferring costs to individuals and families, as well as increases in premiums, copayments, and deductibles. These trends may help explain why children with private insurance were significantly more likely to be underinsured, further building the evidence base that public insurance better protects families from out-of-pocket costs (Yu et al., 2022).

55 Gaffney et al. (2021) used data from the 2016 to 2019 NSCH to examine trends and correlates of both medical underinsurance and underinsurance among U.S. children.

- Of children in Medicaid expansion states, 30.9% were inadequately insured versus 35.3% in non-expansion states.
- Among insured children, inadequate insurance was more common when insurance was private vs. public (34.8% vs. 17.5%).
- Rates of inadequate insurance were higher among children with medical problems (e.g., 55.7% of children with diabetes and 39.9% of children with autism were inadequately insured, compared with 31.5% of children with no medical condition).
- Of CYSHCN, 37.4% were inadequately insured.

Most recently, Lebrun-Harris and colleagues (2022) found that between 2016 and 2020, there was a significant decrease in the proportion of children with adequate and continuous insurance (69.4% [95% CI, 68.4-70.3] to 67.4% [95% CI, 66.4-68.4]; 3% decrease; $P=.004$). In the midst of declining rates of children’s health coverage and insurance adequacy, new strategies need to be considered to improve access to affordable, quality coverage for all children, particularly those from low- and moderate-income families who are being left behind (Rubin et al., 2020). The COVID-19 pandemic further highlighted the importance of a system that provides all children with continuous, stable coverage that is not necessarily tied to employment (Rubin et al., 2020).⁵⁶ Reforms that achieve seamless and universal coverage could improve access for individuals throughout the life course (Gaffney et al., 2021).

“Underinsurance was significantly associated with increased health complexity, private insurance coverage, older child age (≥ 6 years of age), non-Black racial identity, U.S. nonnative status, and family income $\geq 100\%$ federal poverty level.”
-- Yu et al., 2022, pg. 3

Health Insurance Coverage

Comprehensive health care coverage can help children access the health care they need when they need it, especially primary preventive care, including finding and treating preventable delays or diseases; protect families’ financial stability; and improve children’s long-term health, economic, and educational outcomes (Lu et al., 2015; Zhang, 2012; Murphey, 2017).⁵⁷ Insurance coverage by itself, however, does not guarantee that children will receive appropriate and timely care. Benefits packages and access to physicians, hospitals, and other health care providers are critical components of the children’s coverage story. Reaching children who are eligible for assistance, but remain uninsured, extending coverage to their families, and maintaining meaningful coverage for children and families who are enrolled are enduring coverage challenges (Mann et al., 2003).

There is growing evidence that when children (particularly those eligible for public insurance) have coverage, they are more likely to get care, and they are also more likely to have improved outcomes—in health, of course, and in other important areas of life as well (Murphey, 2017). More

⁵⁶ <https://policylab.chop.edu/PolicyLab-Coverage-Brief>

⁵⁷ <https://www.mchevidence.org/tools/npm/15-adequate-insurance-coverage.php>

specifically, children with health coverage are more likely to receive preventive services, including immunizations, miss fewer days of schools and have better educational outcomes, and grow up to be more economically secure and more likely to contribute to their communities (Lu et al., 2015; Zhang, 2012; Murphey, 2017). There is also evidence that participation in Medicaid and CHIP improves children’s health, supports school readiness, reduces school absenteeism, contributes to higher academic and graduation rates, and leads to higher wages and better health in adulthood (Wagnerman et al., 2017).

“When children have health insurance, they are more likely than uninsured children to be healthy and to get medical care. They are also more likely to have improved outcomes related to education and economic security that benefit society as a whole.”

-- David Murphey, 2017⁵⁸

There are three categories of health insurance coverage (America’s Health Rankings, 2021):⁵⁹

1. **Adequate insurance coverage:** “Adequate” means the coverage is consistent and meets the child’s health needs.⁶⁰ The Child and Adolescent Health Measurement Initiative⁶¹ measures health insurance adequacy through:
 - a. Coverage of needed services (benefits adequacy),
 - b. Choice of providers (provider adequacy),^{62, 63, 64} and
 - c. Reasonable coverage of costs (no or reasonable out-of-pocket expenses).
2. **Inadequate insurance coverage or underinsurance:** Underinsurance is described as insurance that exists but is inadequate.
 - a. Many studies report high rates of underinsurance, but there is no standardized definition or consensus on how to measure underinsurance. Various definitions include discontinuity in coverage, the exclusion of certain benefits in plans such as immunizations, and measures related to out-of-pocket costs and affordability.
 - b. Varying definitions result in varying estimates of prevalence, making it a challenge to grasp the true magnitude of the problem (Committee on Adolescence and Committee on Child Health Financing, 2009).
 - c. A widely accepted definition identifies underinsured children as those children who

58 <https://www.childtrends.org/publications/health-insurance-coverage-improves-child-well>

59 <https://www.mchevidence.org/tools/npm/15-adequate-insurance-coverage.php>

60 <https://www.kidsdata.org/topic/455/cshcn-insurance-adequacy/table#fmt=608&loc=1,2&tf=139&ch=198,199,172,173>

61 <https://www.childhealthdata.org/browse/survey/results?q=4829&r=1>

62 Child’s insurance covers needed providers; there is enough workforce to meet the demand; and there are enough providers in a network to deliver services to enrollees.

63 “Network adequacy” refers to a health insurance plan’s ability to deliver the benefits promised by providing reasonable access to enough in-network primary care and specialty physicians, and all health care services included under the terms of the contract. This includes ensuring consumers have access to the care they need within a reasonable period of time (<https://content.naic.org/cipr-topics/network-adequacy>).

64 The definition of how many providers in a network is enough to meet the need varies by state. Rather than require states to adhere to national standards related to time, distance, number of providers in a network, etc., states have been encouraged to develop standards that best suit their state’s specific needs e.g., In some rural areas, families may be better served using telehealth services, rather than driving long distances to see a provider.

live in families who cannot afford clinician-recommended health care despite having insurance coverage for their children (Kogan et al., 2009; Pascoe, 2021; Voorhees, 2008).

3. **Lack of insurance coverage or uninsured:** This population is also considered to have inadequate insurance coverage.
 - a. Uninsured children are those who lack health coverage through either private (e.g., private purchase or employer-sponsored) or public (e.g., Medicaid or CHIP) insurance during the previous 12 months.⁶⁵

“Continuous” refers to having insurance coverage without any lapses or gaps (in the past 12 months), irrespective of coverage.

Research shows that individuals with continuous coverage experience fewer unmet health needs and are in better health than those who cycle on and off coverage (Brooks & Gardner, 2021). Gaps in coverage are associated with financial exposure for the family and disrupts care for children and youth (Brooks & Gardner, 2021). A change of coverage source is common especially for children and families eligible for public insurance (Liu et al., 2005). Even with strong outreach and enrollment efforts, a substantial portion of children will lose their health insurance at least once before they reach adulthood (Storms, 2013). Unstable insurance coverage, known as “churn”, is inefficient and keeps children from getting the care they need (Storms, 2013).⁶⁶ Improving continuity of coverage for publicly insured children is needed, especially for CYSHCN who are more likely to obtain their coverage through public programs (Guevara et al., 2014; Liu et al., 2005) where families must prove eligibility at regular intervals to renew coverage (Storms, 2013). Continuous coverage drives more efficient health care spending and improves health status and well-being (Brooks & Gardner, 2021).

“Consistent access to health care, including management of chronic conditions and care coordination, improves health status and well-being and drives more efficient health care spending.”
-- Tricia Brooks & Alexa Gardner, 2021, pg. 1

See **Appendix C: Types of Health Insurance** for an overview of pediatric health insurance coverage options and how these coverage options, particularly public insurance, have reduced the rates of uninsurance and underinsurance and improved health outcomes for children and youth.

See **Appendix D: Mental Health Needs and Coverage** for an overview of children’s mental, emotional, and behavioral health issues and the need for children’s mental health coverage and services.

The discussion section further explores the need for parity with physical and mental health coverage and strategies being used by states to increase access to comprehensive and affordable behavioral health coverage and care.⁶⁷

⁶⁵ <https://www.urban.org/research/publication/uninsurance-among-children-1997-2015-long-term-trends-and-recent-patterns>

⁶⁶ Churn includes moving between different insurance plans or between insurance and uninsurance.

⁶⁷ <https://www.cdc.gov/childrensmentalhealth/access.html>

See **Appendix E: Oral Health Needs and Dental Coverage** to learn more about the importance of oral health and the need for dental coverage for professional oral health services for children and youth.

The discussion section further explores the need for dental coverage, barriers to care including cost considerations and lack of access, and policy recommendations.

Children and Youth with Special Health Care Needs

CYSHCN, by definition, require more health care services than their typically developing peers.⁶⁸ Since CYSHCN require more health care services and may be more vulnerable when they are unable to access them, the consequences of uninsurance for CYSHCN are concerning. Research suggests that uninsured CYSHCN are less likely than those who are privately insured to have a usual source of care and receive all needed routine and specialty care; more likely to have an unmet health or dental need; report difficulty receiving referrals for and accessing specialists, therapy services, and prescription medications; delay or forego care; live in families reporting financial problems or where family members reduce or stop working because of the child’s health care needs; and report ease of use problems with care as compared to CYSHCN with health insurance.⁶⁹ Innovative strategies are needed to ensure that CYSHCN have access to adequate health insurance coverage and high quality care for their medical needs.

The Catalyst Center. Given the importance of health insurance coverage for CYSHCN, the goals of the Catalyst Center (National Center for Health Insurance and Financing for Children and Youth with Special Health Care Needs) are to promote universal, continuous, and affordable coverage for all CYSHCN, close benefit and financing gaps, promote payment for additional services, and build sustainable capacity to promote financing in care. Supported with funding from HRSA, the Catalyst Center is part of the Boston University School of Social Work, Center for Innovation in Social Work & Health. Visit their website for more information, resources, and examples of innovative strategies: <https://ciswh.org/project/the-catalyst-center/>. The Catalyst Center is committed to promoting strategies and sharing ideas that can make the health care system work for everyone.

“Health insurance coverage, affordability, and benefit package contents are especially important for children with special health care needs.”
-- Elizabeth Williams & MaryBeth Musumeci, October 2021⁷⁰

Coverage Inequities

The ACA helped to significantly reduce racial and ethnic disparities in health insurance coverage

⁶⁸ <https://ciswh.org/wp-content/uploads/2015/04/inequities-fact-sheet.pdf>

⁶⁹ *ibid*

⁷⁰ <https://www.kff.org/medicaid/issue-brief/children-with-special-health-care-needs-coverage-affordability-and-hcbs-access/>

and to improve access to care, especially in states that expanded eligibility for Medicaid programs (Baumgartner et al., 2020; Baumgartner et al., 2021; Gunja et al., 2020). Medicaid and CHIP are primary sources of health coverage for children from low-income backgrounds, especially children of color, because they are more likely to be economically disadvantaged (Brooks & Gardner, 2020). Families without employer-sponsored insurance or whose children have disabilities will often turn to Medicaid.⁷¹ Therefore, these coverage sources offer an opportunity to both assess and address existing health inequities for children and youth from the most vulnerable backgrounds (Brooks & Gardner, 2020).

Populations disproportionately affected by inadequate health insurance include (America's Health Rankings, 2021):

- Children ages six years and older compared with children under six years;
- Children in non-English speaking families;
- Racial and ethnic minorities: Hispanic and non-Hispanic Black children compared with non-Hispanic White children;
- Noncitizen children living in mixed-eligible households with citizen siblings who are insured (Jewers & Ku, 2021);
- CYSHCN compared with children and youth without SHCN;
- Children with "fair" or "poor" health compared with children in "very good" or "excellent" health; and
- Children living in the Midwest compared with children living in the Northeast.

A study by Soylu and colleagues (2018) found evidence of racial and ethnic differences in health insurance adequacy and consistency among children:

- Black and White children living in households below 300% FPL were less likely to have adequate coverage than children living in households at or above 400% FPL;
- Similarly, Hispanic and White children in poorer households were less likely to have consistent coverage than children living in households at or above 400% FPL;
- Older children were more likely to have inadequate health insurance than younger children; and
- There were significant connections between maternal health and children's coverage -- Hispanic and White children who had mothers with "poor" mental and physical health were less likely to have adequate coverage than children who had mothers with "good" or "excellent" mental and physical health.

Among children with continuous coverage:

- Those with private insurance are less likely to have adequate coverage of out-of-pocket expenses than those with public coverage (34.8% vs. 17.5%) (Gaffney et al., 2021),⁷² but they are more likely to have adequate coverage of providers compared with children with

⁷¹ <https://healthpayerintelligence.com/news/how-to-improve-childrens-health-insurance-coverage-nationally>

⁷² Gaffney et al. (2021) used data from the 2016 to 2019 NSCH to examine trends and correlates of both medical uninsurance and under-insurance among U.S. children.

public insurance (America’s Health Rankings, 2021).

Among children with medical conditions:

- 55.8% of children with diabetes and 39.9% of children with autism were inadequately insured, compared with 31.5% of children with no condition.
- 37.4% of CYSHCN were inadequately insured (Gaffney et al., 2021).

Of children in Medicaid expansion states:

- 30.9% were inadequately insured vs. 35.3% in non-expansion states (Gaffney et al., 2021).

Children with public coverage were more than twice as likely to have adequate insurance than children with private coverage. However, children with public coverage were also less likely to have consistent coverage, a sign of possible churn (Wagnerman & Gardner, 2018). The FFCRA, established during the COVID-19 pandemic, works to improve public enrollment and prevent churning by incentivizing states to ensure continuous coverage to current Medicaid enrollees for the duration of the declared public health emergency (Corallo & Moreno, 2022; Corallo & Rudowitz, 2021).⁷³ Additional policies are needed to address the struggles of families from economically disadvantaged backgrounds (Soylu et al., 2018).

Given the growing number of uninsured children below the FPL, it is essential to structure outreach and enrollment efforts with children and families from lower income backgrounds at the fore (Alker & Osorio, 2021 a). Since taking office, the Biden administration has taken a number of steps to improve coverage, including a special open enrollment period, funding new outreach and advertising efforts, and issuing executive orders to reverse Trump administration rules that undermined insurance markets and other ACA improvements (Baumgartner et al., 2021).

“The Affordable Care Act’s coverage expansions have been a key tool for increasing coverage and improving racial and ethnic health care equity.”
-- Baumgartner et al., 2021, pg. 8

Methods

This section describes the approach used for the evidence review. It includes information on the search terms used, the databases searched, inclusion and exclusion criteria, the multi-phase screening process, grey literature resources, and the evidence continuum used to rate the level of evidence for the studies.

⁷³ <https://www.kff.org/coronavirus-covid-19/issue-brief/analysis-of-recent-national-trends-in-medicaid-and-chip-enrollment/>

Approach

Children’s health insurance is a complex topic with access, enrollment, policy, legislation, insurance type, and continuity of care all impacting the adequacy and affordability of coverage and care for children and youth with and without SHCNs. Given this complexity, the MCH Evidence Center team first consulted experts in the field, including leaders and staff from HRSA MCHB and colleagues from the Catalyst Center, to learn more about current issues, challenges, and state experiences regarding ensuring adequate coverage and care and how best to approach this review. Team members found and reviewed a large number of background documents and resources during the initial stages of discovery and fact-finding. Once team members were versed in the terminology and breadth of the topic, search terms were created, and the research team engaged in a multi-phase review of the literature to identify effective and promising strategies and policies for NPM 15.

Databases and Search Terms

In order to pare down the vast volume of literature on this topic (without inadvertently excluding important studies), the team agreed to limit their search to the years 2010-2021 -- beginning with the ACA enacted by the 111th U.S. Congress and signed into law by President Barack Obama on March 23, 2010. The following databases were included in the preliminary search: PubMed, JSTOR, PsycINFO, the Cochrane Database of Systematic Reviews, and the Cumulative Index of Nursing and Allied Health Literature (CINAHL).

A project librarian, with expertise in MCH issues, compiled search strategies, which varied according to the controlled vocabulary, indexing, and syntax used by the individual databases. The terms “children’s health insurance” and Children’s Health Insurance Program (a major subject heading (MeSH) term) were at the core of an earlier search strategy compiled by the previous Johns Hopkins University (JHU) team, and they were included in a broad search for all article types across the years 2010-2021. However, once the MCH Evidence Center team began adding related terms (including keywords recommended by HRSA MCHB and the Catalyst Center), the search results quickly mushroomed into tens of thousands of studies. In consultation with its content advisors, the team then agreed to limit the PubMed studies published between 2010-2015 to clinical trials, RCTs, reviews, systematic reviews, and meta-analyses. However, the other searches were not restricted by article type (including PubMed articles indexed between 2016-2021), since those results were more manageable in size.

In addition to running general searches in all five databases, we conducted separate searches for articles related to COVID-19, as well as oral health and dental coverage (these topics are addressed in subsections of the report). We also encouraged our expert advisors to share any additional keywords that would help inform our searches during the initial phase of the project. As a result, we added supplemental searches to capture terms for underinsurance, out-of-pocket, churn, gaps, discontinuity, minimum essential coverage, and periods without coverage.

Table 1: Detailed Search Strategies highlights the search terms used for each database. The general searches used for this evidence analysis review were performed on March 11-12, 2021,

and May 5, 2021, with supplemental searches conducted April 13-14 and June 14, 2021. A total of **3,872** de-duplicated articles were identified across the databases. Of these, **1,456** article titles seemed relevant to children’s health insurance interventions and strategies and were selected for abstract review. Of these, a total of **282** articles were flagged for full review by members of the team, and after extensive review and discussion, **16** studies were selected for inclusion in the final results.

Inclusion and Exclusion Criteria

The following inclusion criteria were used:

- Studies focused on strategies, programs, and policies to increase children’s health insurance coverage and/or continual access to affordable care for children and adolescents.
- Studies reporting on interventions and policies to increase access to insurance coverage, providers, and services.
- Studies reporting on interventions to decrease out-of-pocket costs for families.
- Studies focused on children and adolescents ages 0-17. If a study included both children and adults, outcomes needed to be reported for children separately.
- The components of the intervention and results were clearly described and could be replicated.
- Studies published from 2010 to present with the ACA as the marker.
- Studies described interventions that fall within the scope of Title V MCH Block Grant programs as deemed by the authors and reviewers.
- At a minimum, studies included a control and intervention group, an appropriate comparison group, or a pretest-posttest design to assess intervention effectiveness.
- Studies were conducted in the U.S. given the uniqueness of the insurance and health care systems.
- Studies were published in English.
- Studies were published in peer-reviewed journals and/or authoritative sources (e.g., white papers).
- Grey literature was included as promising practices.

The following exclusion criteria were applied:

- Studies that focused solely on uninsurance or underinsurance rates or shared other data (e.g., outcomes for publicly vs. privately insured children) without highlighting a strategy, program, or policy to increase coverage and/or access to affordable care.
- Articles published before 2010.
- Studies outside of the U.S.
- Articles that did not describe an intervention or strategy to support increased access to adequate and continuous insurance coverage for children and adolescents.
- Articles on forthcoming studies.
- Articles reporting on study protocols only.

Screening Process

A multi-phase, sequential process was used to sort and identify articles. The research team first

evaluated the search-result titles, color-coding them based on whether they should be 1) excluded, 2) flagged for an abstract review, 3) reviewed for background information, or 4) assessed for “special population” significance. This same basic screening technique was applied during each stage of the process, with those that passed the abstract review moving on to a full-text review, and those that met the final inclusion criteria being described in the final study tables. The team met weekly to discuss their studies, findings, and questions.

Literature Searches and Review Process

A multi-phase, sequential process was used to sort and identify articles including the following steps:

- **Article title review:**
 - The initial literature searches (performed March 11-12, 2021) yielded **1393** articles:
 - **403** from CINAHL
 - **29** from JSTOR
 - **234** from PsychINFO
 - **727** from PubMed/Cochrane
 - Following de-duplication, there were **1335** article titles, which were divided equally among 6 members of the team for an initial title review.
- **Article abstract screening:**
 - Articles that were clearly off-topic, focused on adults only, or otherwise failed to meet the inclusion criteria were excluded, leaving **506** articles that then moved on to the abstract-review phase.
 - Add-on searches:
 - A supplemental PubMed search using the terms underinsurance and out-of-pocket (performed April 13, 2021) yielded an additional **23** studies that also moved onto the abstract-review phase, bringing the total to **529** articles.
 - A separate search of all PubMed article types published between 2016-2021 (eliminating the top-tier evidence studies captured earlier) yielded an additional **2,203** titles. Two team members culled through these additional titles and abstracts, which left **698** articles to be divided for abstract review among the full team. Of those, **60** moved on to the full-text review stage; 56 were flagged as background; and 31 moved on to the “special populations” review. The remainder were marked for exclusion.
 - The Catalyst Center and HRSA MCHB staff suggested adding five additional terms to the PubMed search strategy, which yielded an additional 64 articles to be searched; **2** of these moved on to the abstract and full-text review phases and 2 were coded for the background.
 - Separate PubMed searches for COVID-19 and children’s dental insurance (performed March 12) yielded an additional **247** articles, of which **165** (153 dental care and 12 COVID-19) moved on to the abstract review phase.
- **Full text review:**
 - Of the 529 abstracts from the initial search, 116 articles were coded green for full-text review; 97 were coded blue for background review; 31 were coded grey for special population review; and the remaining 285 were coded orange for exclusion.

- With abstracts from the add-on searches as well, **180** total articles were flagged for a full-text review and another **64** were flagged as special population studies in need of full review; 158 articles were flagged as relevant background and discussion material.
- From the separate COVID-19 and dental searches, **38** (30 dental care and 8 COVID-19) articles moved on for full review.
- In the end, **16** studies met all the inclusion criteria and were selected for final inclusion in the evidence report, with other articles informing the background and discussion.⁷⁴
- Team members extracted relevant data from the selected studies to populate sort-and-classify study tables that outlined the study setting, target audience, intervention type, description, key components, findings, and evidence rating. This provided a final opportunity for the team to meet and assess/reassess whether each of the studies described an evidence-based or evidence-informed intervention, strategy, program, or policy that focused on ensuring coverage and care and could be replicated, included an evidence-based strategy or intervention that could be replicated.

See **Figure 1: Flow Chart of the Review Process and Results** for a visual display of these identification, screening, eligibility, and inclusion steps.

Grey Literature

A search of the grey literature was conducted to augment the peer-reviewed publications.

Appendix F: Select Grey Literature Resources lists key websites and publications that highlight promising practices, provide statistics and data analysis, summarize state and federal efforts, address public policy, and link to additional resources. This grey literature includes select websites and publications from nonprofit organizations, foundations, and state and federal government agencies.

The grey literature search was restricted to the years 2010-2021, although most of the included materials (n=18 items) were published between 2019-2021 to spotlight the most current resources. The search strategy included a review of the literature published by child health agencies, organizations, and institutions; a review of the Catalyst Center’s online resources and literature library; and recommendations from team members and colleagues were also incorporated, as relevant.

Evidence Continuum

An evidence continuum was created⁷⁵ to assess evidence-based and evidence-informed strategies, along with criteria for each category along the continuum. The Robert Wood Johnson Foundation (RWJF) What Works for Health evidence ratings⁷⁶ were adapted to create an evidence continuum

⁷⁴ Due to time and resource constraints, included studies were divided among 6 team members and each member summarized and rated an equal share of the studies. Weekly meetings occurred to discuss evidence ratings and the team came to consensus on the ratings for the vast majority of studies; therefore, issues around inter-rater reliability were likely diminished.

⁷⁵ The former Strengthen the Evidence for MCH Programs initiative research team at JHU originally adapted the RWJF evidence ratings to create the evidence continuum for the evidence analysis reports.

⁷⁶ <http://www.countyhealthrankings.org/take-action-improve-health/what-works-health/our-ratings>

tailored toward the Strengthen the Evidence initiative. The evidence ratings include:⁷⁷

EVIDENCE RATING	DEFINITION
Evidence Against ↓	Studies with this rating are not good investments. These strategies have been tested in many robust studies, are not effective, and sometimes produce harmful results.
Mixed Evidence ★	Strategies with this rating have been tested more than once and results are inconsistent or trend negative; further research is needed to confirm effects.
Emerging Evidence ★ ★	Strategies with this rating have limited research documenting effects. These strategies need further research, often with stronger designs, to confirm effects.
Expert Opinion ★ ★ ★	Strategies with this rating are recommended by credible, impartial experts and are consistent with accepted theoretical frameworks. However, the strategies have limited research documenting effects; further research, often with stronger designs, is needed to confirm effects.
Moderate Evidence ★ ★ ★ ★	Strategies with this rating are likely to work, but further research is needed to confirm effects. These strategies have been tested more than once and results trend positive overall.
Scientifically Rigorous ★ ★ ★ ★ ★	Strategies with these ratings are most likely to make a difference. These strategies have been tested in many robust studies with consistently positive results.

Using an “evidence-informed” approach, a continuum of evidence model was developed to help states use the best available MCH science, while also encouraging innovation in evidence-informed programming.⁷⁸ **Evidence-based** strategies are generally those that have either moderate evidence or are scientifically rigorous, while **evidence-informed** are those that have emerging evidence or are based on expert opinion.⁷⁹ Evidence-informed is meant to convey that there is information suggesting that a certain strategy could be effective in addressing a NPM. Even though these strategies have not been rigorously tested or evaluated, they may incorporate a theoretical model from other effective public health practices or apply a novel approach grounded in scientific theory.

More specifically, evidence-based strategies have a majority of studies showing statistically significant or favorable findings. These studies tend to be peer-reviewed with results mostly drawn from a mix of RCTs, quasi-experimental studies with pre-post measures, with or without control groups, and/or time trend analyses. Evidence-informed strategies have a growing evidence base consisting of a varying mix of statistically favorable, unfavorable, and/or not significant findings. These studies can include peer-reviewed results as well as grey literature with a mix of study designs. Evidence against is a unique category wherein strategies could be labeled as evidence-based or evidence-informed, based on the state of the research, study design, and outcomes, with the preponderance of studies not having statistically significant findings or demonstrating unfavorable effects. See **Table 2: Evidence Rating Criteria** to learn about the evidence criteria applied to the studies. Evidence ratings were given for each included study as well as the different intervention types.⁸⁰

⁷⁷ <https://www.mchevidence.org/tools/>

⁷⁸ The former Strengthen the Evidence for MCH Programs initiative worked to develop a continuum of evidence consistent with the evidence-informed approach.

⁷⁹ This evidence-informed approach was defined by the McMaster group: McMaster University. Health Evidence Glossary. Available: <http://www.healthevidence.org/glossary.aspx#E>

⁸⁰ The evidence continuum was originally created to be applied to intervention types; however, the rating scale was also used to rate each study in this review making some of the overarching criteria difficult to apply at times.

Results

This section provides an overview of the study characteristics, intervention components, data sources, outcome measures, study results, and limitations. The studies included in this evidence review varied in terms of the setting, intervention type, sample, design, and data sources. However, they represent attempts by researchers working in states, jurisdictions, and communities to ensure adequate and continuous insurance for children and adolescents. Interventions were grouped by setting and intervention type. The different strategies are then rated for their collective level of evidence.

Characteristics of Studies Reviewed

Table 3: Study Characteristics features the characteristics of the studies selected for the evidence review, including setting, target audience, sample size, age range, and study design. Of the 16 included studies, five were review/evaluation studies, which provided analysis of various state-based insurance programs and services. Three studies were randomized controlled trials (RCTs), three used cross-sectional designs, and three used quasi-experimental study designs. The three remaining studies utilized other research designs, including an observational cross-case comparative design, retrospective cohort with a pre/post comparison, and a randomized natural experiment. Due to the nature of NPM 15 and its focus on the U.S. health insurance system, all 16 studies were conducted in the U.S.

For the intervention setting, of the 16 studies, eight (50%) were community-based, six were policy-focused and two were conducted in an elementary school setting. The target sample of the majority of the studies included children who receive public insurance ($n=6$) or were uninsured ($n=5$). Three studies focused on low-income children and families, while the remaining two studies focused on families using community health centers and parents and caregivers of children with disabilities.

Twelve studies (75%) utilized target populations who were primarily school-aged children and adolescents. One study targeted pregnant women and infants, while the remaining three studies focused on parents and children but did not disclose specific ages. The sample sizes for all studies ranged from 44 subjects to a quasi-experimental study with 210,200 pregnant women and their infants. The average sample size across studies was 26,000 with a median of 615.

Intervention Types and Components

Table 4: Intervention Descriptions details the interventions, comparison groups, study lengths, and data collection points. Of the 16 studies, half (eight) had a comparison group. The comparison group for most of the studies were children or parents receiving standard care as opposed to the intervention.

The study lengths ranged from three months to 13 years, with an average length of 4.5 years and median of three years across all studies. Data collection mainly occurred at baseline, at different points during the intervention, and at follow-up. Long-term follow-up sometimes occurred, depending on the study length. Studies using national databases typically assessed outcomes monthly or every six months throughout the study period. The one included study using an observational design

collected data over a three-day period at four clinics participating in the study.

All 16 studies fall into one of three settings: Community-based, school-based, or policy-focused. Studies conducted in a community or school-based setting used outreach as the primary strategy to increase the number of children who are adequately insured. Care coordination and interventions using multicomponent study designs were also identified in this setting. Policy-focused studies mainly examined the impact of expansion initiatives as the primary strategy to address NPM 15.

Community and School-Based Interventions. The majority of interventions (n=10, 63%) were conducted in a community (n=8) or school-based (n=2) setting.

1. **Outreach using parent mentors** (n=2). Parent mentors are a special category of community health workers in which parents who have children with particular health conditions or risks apply their relevant experience, along with additional training, to assist, counsel, and support other parents of children with the same health conditions or risks. Parent mentors are trained to assist families in getting insurance coverage, accessing health care, and addressing social determinants of health.
2. **Outreach using enrollment assistants** (n=1). Some community health centers have specialized staff, called enrollment assistants, who are dedicated to assisting patients with the health insurance application process. Enrollment assistants can help to determine insurance eligibility and/or guide patients through application processes, including assistance with completing application forms, understanding requirements, and providing appropriate documentation.
3. **Outreach using mini-grant opportunities** (n=1). Mini-grant programs provide small grants to community-based organizations in an effort to involve the community in local health promotion efforts. Mini-grant programs generate community-based outreach efforts as a strategy to encourage the appropriate utilization of primary and preventive care services for children enrolled in Medicaid. This type of intervention demonstrates how a state Medicaid agency (or a Title V agency) can step outside its usual administrative role to play an important part in supporting local outreach and marketing efforts to promote Medicaid/CHIP enrollment and utilization.
4. **Outreach using data systems** (n=1). Data systems are an outreach method for enrolling and retaining eligible children in public health insurance; it can also monitor outcomes and provide feedback to community outreach partners to enable follow up with families when needed. One study created a data system that included a checkbox survey which allowed data to be entered in a uniform format and force vital data points to be completed. The data are then transmitted to the state to obtain timely application determination information on enrollments. The system is also easily replicable for use by other organizations enrolling children in health insurance.
5. **Care coordination using community health workers** (n=1). A comprehensive care coordination demonstration project can provide services for children and young adults with chronic health conditions who are insured by Medicaid. Care coordination as a Medicaid add-on benefit could support adequate insurance coverage by ensuring access to health care and social support services and reducing out-of-pocket costs for CYSHCN. One study's program focused on addressing social determinants of health, caregiver wellness, and mental

health needs in addition to chronic disease management. The program provided access to multiple services, including care coordination delivered by community health workers, mental health services, and disease-specific health education.

6. **Multicomponent interventions** (n=2). Some interventions use models that incorporate a broad array of services and supports. One study aimed to connect children and their families to health insurance and a medical home utilizing a combination of care management, education, and parent engagement to connect children and their families to health insurance. Another study used a model based on a combined approach of educational messaging to clients, individual counseling to facilitate enrollment and renewal of health insurance, as well as data from program databases and staff from children's programs to proactively identify uninsured and underinsured children and facilitate their enrollment into public insurance.
7. **Outreach using school-based communication tools and staff** (n=2). School-based settings serve as another approach to determining effective ways to identify children who do not have health insurance. One study used existing school communication to identify children who are currently uninsured and may be eligible for state-subsidized health insurance. Additionally, based on the self-identified status of the children not having health insurance, application assistance was also provided to promote enrollment. Another study worked with school nurses and staff by providing a series of regional trainings on how to use required health assessment forms and how to identify uninsured children who could be eligible for public insurance programs.

Policy-Focused Interventions. While most of the included children's health insurance interventions were conducted in a community or school-based environment, there were six (n=6; 37%) policy level interventions that focused on expansion initiatives and health reform.

1. **Expansion of access to prenatal care** (n=1). For low-income immigrant women, Emergency Medicaid, a federal safety net program for those poor enough to qualify for Medicaid but who cannot meet the citizenship requirements, covers the cost of a birth but not prenatal care or postpartum contraception. As a result, one study piloted a program to expand access to prenatal care for all recent and unauthorized immigrant women. When parents have health coverage, their children are more likely to have health coverage. Therefore, Medicaid expansion to cover prenatal care can have multigenerational consequences for women and their families.
2. **Dependent coverage expansion** (n=1). Several states, including Massachusetts, New Hampshire, and Maine, adopted state dependent coverage expansion (DCE) policies that extended dependent coverage for policyholders' children through age 26, with the Massachusetts policy accompanied by other health reforms later incorporated into the ACA. These include an individual mandate, Medicaid expansion, creation of a health insurance exchange with subsidies, and prohibition of pre-existing condition exclusions.
3. **Parental health insurance expansion** (n=2). Numerous states implemented policies expanding public insurance eligibility or subsidizing private insurance for parents with the aim of jointly insuring the parent and child. One study examined Oregon's Medicaid expansion initiative, which provided a rare opportunity to investigate a potential causal relationship between coverage for parents and children. Specifically, the study looked at the effect on a child's health insurance coverage status when a parent randomly gains access to health insurance or a parent obtains coverage.

4. **Medicaid buy-in program** (n=1). The Massachusetts Medicaid Buy-In program, called **MassHealth CommonHealth**, allows families of children with disabilities to buy into the state's Medicaid program to cover more services, including services provided insufficiently (such as therapies) or not covered at all (such as home nursing) and to defray many of the costs that private insurance does not cover.
5. **Health reform legislation** (n=1). In 2006, Massachusetts passed major health reform legislation (individual mandate, Medicaid expansion, and minimum essential benefits), which served as the model for the ACA. This study compared pre and post ACA mandates and compared them to post ACA data on insurance and access rates for children.

Data Sources and Outcomes

Data sources, outcome measures, and study results are presented in **Table 5: Data Sources and Outcome Measures**. Data sources were primarily from national (e.g., NSCH, Medicaid Expenditure Panel Survey-Insurance Component) and state surveys or questionnaires (n=10). Six studies used enrollment and/or claims data from Medicaid, CHIP, and regional or state sources. Observational and in-person or telephone family interview data was used in four studies. Five studies used more than one data source.

The outcome measures across the studies included enrollment or insurance status (n=13), utilization by type of care (primary, preventative, hospital, specialty) (n=5), satisfaction (n=4), expenditures (cost to plan or out-of-pocket for family (n=4), health screening (n=2), access to care (n=2), health status (n=2), quality of care (n=1), outreach strategy (n=1), quality of life (n=1), missed school days (n=1), or the churn rate in insurance coverage (n=1). Most of the studies, 14 of 16 (87%), reported using a combination of these outcome measures.

The results ranged from a positive trend to significant increase in enrollment or insurance coverage for children across all the included studies. The community-based outreach interventions (parent mentor, enrollment assistants, community-based organizations, and state data system partnerships), particularly those that used more than one outreach strategy (Flores, 2016; Flores, 2018; Fuld, 2013, Chao, 2014), had a significant effect on enrollment primarily into Medicaid or CHIP compared to more traditional outreach methods, and especially for children in minority groups or harder to reach populations, such as migrants. Community-based outreach strategies also showed a positive effect on access to and quality of care, a reduction in churn rate, and high parent satisfaction.

The school-based outreach strategies showed promise to increase applications for enrollment in public insurance through specific school query and communication about insurance status and eligibility (Aller, 2014) and in the rate of accessing well-child visits (Jenkins, 2018). A significant increase in enrollment was found in one study using school nurses and administrative staff as a trusted source of information (Jenkins, 2018).

Policy changes in the form of expansion of coverage in individual states in several forms showed a positive trend to increase enrollment, access, and adequacy of insurance for children that impacted some outcome domains. Three studies showed expansion of parental and child coverage in states had a positive trend to a measurable increase in the rate of child coverage (DeVoe, 2015; Guy,

2017; Smith, 2019). One study (Swartz, 2017) examining expansion of access to prenatal care for immigrant women resulted in a significant increase in adequate prenatal care, well-child visits, and reduced incidence of infant mortality and extreme low birth weight. One study (Wisk, 2018) showed dependent care coverage expansion resulted in significant retention of coverage for youth and young adults. One study (Hirschi, 2019) found expanding coverage through a Medicaid Buy-In program for children with disabilities resulted in a trend of improved access to care for benefits that were previously limited in scope or unavailable; however, barriers to care remained for some families.

Limitations

Table 6: Limitations describes the limitations reported for each study. Ten studies cited data quality issues as a limitation, including variations in quality of data input; omitting the collection of race, ethnicity, or income data; open-ended survey questions interpreted differently by respondents; or poor participation in follow-up surveys. Nine studies also sampled limited geographic areas or were conducted in one state, limiting generalizability of their results. Six studies had small sample sizes or sampled a non-representative group (of a state or nationally). Five studies did not know if all beneficiaries were indeed eligible for benefits or if they also had access to additional coverage. Four studies had limitations in the adherence to protocol across sites or within programs. One study cited economic impacts on insurance rates. One study acknowledged that other health policies implemented at the same time in a state may have impacted their data and outcomes.

Evidence Rating and Evidence Continuum

The assignment of evidence ratings was based on study design and the results described within each individual study. We think a study can be judged on its own merit with regard to the evidence it is contributing to the children's adequate insurance research literature. Therefore, each individual study was rated, and intervention types were also grouped and rated as a category to speak to the public health impact.

Table 7: Individual Evidence Ratings lists the studies selected for inclusion and provides the individual evidence rating for each study.

The following **table** summarizes the evidence-based and evidence-informed strategies to increase the number of children and adolescents who are adequately and continuously insured by setting, target audience, intervention type, outcome, description, components and findings, and overall evidence rating. The strategies are arranged by setting, intervention type, and the strength of the evidence ratings from most favorable to least favorable.

Figure 2: Evidence Continuum visually displays the intervention types along the evidence continuum by setting.

Summary of Evidence-Based/Informed Strategies to Increase Adequate Insurance for Children						
Setting	Study	Target Audience	Intervention Type	Outcome	Description, Key Components, and Findings	Evidence Rating
Community-based	Flores (2016); Flores (2018)	Parents and children	Outreach using parent mentors	Obtaining coverage and increasing access to the health care system	<ul style="list-style-type: none"> Parent mentors are a special category of community health workers in which parents who have children with particular health conditions/risks leverage their relevant experience, along with training, to support other parents of children with the same health conditions/risks In the Kids' Health Insurance by Educating Lots of Parents (Kids' HELP) program, parent mentors are trained, using community case manager training, to assist families in getting insurance coverage, accessing health care, and addressing social determinants of health Parent mentors are more effective than traditional outreach and enrollment methods⁸¹ in insuring uninsured minority children, improving health care access, achieving parental satisfaction, reducing unmet healthcare needs, providing children with primary care providers, and improving the quality of well-child and subspecialty care, and are inexpensive and highly cost-effective 	Moderate evidence
	Harding (2017)	Practice members, ⁸² children and families	Outreach using enrollment assistants	Obtaining coverage and increasing access to the health care system	<ul style="list-style-type: none"> Community Health Centers (CHCs) serving low-income populations are well-positioned to support patients navigating the complexities of the public health insurance application process and prevent lapses in coverage Specialized staff, called enrollment assistants, can help to determine insurance eligibility and/or guide patients through application processes, including assistance with completing application forms, understanding requirements, and providing appropriate documentation Enrollment assistants are valuable resources, and CHCs are effective at helping patients with public health insurance 	Emerging evidence
	Phillips (2010)	Children and families	Outreach using mini-grant opportunities	Obtaining coverage and increasing access to the health care system	<ul style="list-style-type: none"> Small grants to community-based organizations have been shown to be effective in garnering the involvement of the local community in health promotion efforts 	Emerging evidence

81 Such as radio, television, and newspaper ads, messages on public transit, websites with application links and order forms or materials for community-based organizations, and outreach at day care centers.

82 Practice members include managers, clinicians, clinical and non-clinical staff, enrollment assistants, etc.

Summary of Evidence-Based/Informed Strategies to Increase Adequate Insurance for Children						
Setting	Study	Target Audience	Intervention Type	Outcome	Description, Key Components, and Findings	Evidence Rating
					<ul style="list-style-type: none"> The Georgia Utilization Mini-grant Program leveraged modest funding and resources to promote community involvement to improve enrollment and utilization of Medicaid and CHIP services for children It demonstrates how a state Medicaid agency can step outside its usual administrative role to play an important part in supporting local outreach and marketing efforts to promote Medicaid/CHIP enrollment and utilization Funded community-based organizations improved utilization of children's health services by developing innovative staffing patterns, creating new data systems for scheduling appointments and maintaining records, and forging new collaborative relationships to leverage financial support 	
	Ray (2016)	Children and families	Outreach using a data system	Obtaining coverage and increasing access to the health care system	<ul style="list-style-type: none"> Florida Covering Kids & Families (FL-CKF) is dedicated to developing outreach methods for enrolling and retaining eligible children in the state's CHIP FL-CKP developed a strong data system that allows it to evaluate the effectiveness and success of statewide enrollment and retention efforts Community and school outreach partners enter data each month on all completed CHIP applications via a secure interface, and data are then transmitted to the state The data system is an outreach method for enrolling and retaining coverage; it can also monitor outcomes and provide feedback to community outreach partners Organizations helping uninsured children apply for health insurance may benefit from creating data collection systems to monitor project efficacy and modify outreach and enrollment strategies for greater effectiveness 	Emerging evidence
	Caskey (2019)	Children with chronic diseases	Care coordination using community health workers	Addressing underinsurance (covering needed services and providers; reasonably covered costs)	<ul style="list-style-type: none"> The Coordinated Healthcare for Complex Kids (CHECK) model takes a broad approach to care coordination and health promotion by addressing social determinants of health, caregiver wellness, and mental health needs, in addition to chronic disease management, for children and youth with chronic health conditions 	Emerging evidence

Summary of Evidence-Based/Informed Strategies to Increase Adequate Insurance for Children						
Setting	Study	Target Audience	Intervention Type	Outcome	Description, Key Components, and Findings	Evidence Rating
					<ul style="list-style-type: none"> Community health workers deliver care coordination and assess individual and family needs, as well as patterns of health care utilization, to determine specific services offered to each family The program is focused on lowering health care costs, especially regarding emergency department admissions, of pediatric patients with chronic health conditions Overall Medicaid expenditures and utilization decreased considerably during the first year of the CHECK program for both participants and the usual care group 	
	Chao (2014)	Children and families	Multicomponent	Obtaining coverage and increasing access to the health care system	<ul style="list-style-type: none"> The Healthy Beginnings system of care in Atlanta, GA connects children and their families to health insurance and a medical home model of care to support children’s health and development The main components are care management + education and parent engagement + collaborative partnerships A registered nurse, known as the health navigator, supports parents and helps them learn how to work with health care professionals on behalf of their children; they also connect parents to the Center for Working Families to ensure that they receive public benefits for which they are eligible Healthy Beginnings coordinated care approach has ensured that participating children and families have health insurance (97%) and receive regular immunizations (92%), ongoing health care from a primary care physician and dental health provider, and regular developmental screenings (98%) and follow-up care Healthy Beginnings has dramatically increased children’s access to health care and forms the basis for a cost-effective approach that can be replicated in other communities 	Emerging evidence
	Fuld (2013)	Young children with special health care needs	Multicomponent	Obtaining coverage and increasing access to the health care system	<ul style="list-style-type: none"> In New York, to maximize comprehensive insurance coverage for CYSHCN, a Service Integration Model was formed between the Office of Health Insurance Services and the Early Intervention Program 	Emerging evidence

Summary of Evidence-Based/Informed Strategies to Increase Adequate Insurance for Children						
Setting	Study	Target Audience	Intervention Type	Outcome	Description, Key Components, and Findings	Evidence Rating
					<ul style="list-style-type: none"> The 3 key components include educational messaging (jointly prepared messages about health insurance benefits and enrollment assistance offered by the Office of Health Insurance Services through the Early Intervention Program) + data from program databases (data matching with the Early Intervention Program) + individual counseling using program staff (incorporation of the Office of Health Insurance Services program staff—child benefit advisors—to work directly with parents of children in the Early Intervention Program to facilitate enrollment and renewal) The model overcomes enrollment barriers by using consumer friendly enrollment materials and one-on-one assistance, and shows the benefits of a comprehensive and collaborative approach to assisting families with enrollment into public health insurance 	
	Aller (2014)	Children and families	Outreach using school-based communication tools	Obtaining coverage and increasing access to the health care system	<ul style="list-style-type: none"> In Michigan, a school-based outreach effort was piloted using existing school communication tools to identify children who are currently uninsured and may be eligible for state-subsidized health insurance School districts were provided with two health insurance status collection forms to be included with the free and reduced school lunch application, and as part of the student registration packet and welcome materials for school Completed forms were sent to a state registered application-assisting agency to ensure families can access the coverage and services they need Integrating the collection of health insurance status into routine school communication channels is an effective way to identify children who do not have health insurance and may be eligible for state subsidized benefits 	Emerging evidence
	Jenkins (2018)	Children and families	Outreach using school staff	Obtaining coverage and increasing access to the health care system	<ul style="list-style-type: none"> <i>Healthy and Ready to Learn</i> is a targeted, school-based CHIP and Medicaid outreach initiative for identifying and enrolling eligible and uninsured children entering kindergarten in North Carolina's highest need counties 	Emerging evidence

Summary of Evidence-Based/Informed Strategies to Increase Adequate Insurance for Children						
Setting	Study	Target Audience	Intervention Type	Outcome	Description, Key Components, and Findings	Evidence Rating
					<ul style="list-style-type: none"> School nurses and administrative staff attend regional trainings on how to use a required health assessment form, submitted at school entry, to identify uninsured children who could be eligible but are not enrolled in public insurance Continuous community-based outreach (e.g., attending community events, providing outreach materials in various languages, contacting local organizations and leaders to help inform families about CHIP and Medicaid) is also utilized With increased enrollment rates and well-child exam rates, findings demonstrate the potential benefits of using schools as a point of intervention in enrolling young children in public health insurance and as a source of trusted information for parents from low-income backgrounds 	
Policy	Swartz (2017)	Pregnant women and their infants	Expansion of access to prenatal care	Obtaining coverage and increasing access to the health care system + Addressing underinsurance (covering needed services and providers; reasonably covered costs)	<ul style="list-style-type: none"> Prenatal care is an important component of preventive health care with multigenerational consequences for women and their families For low-income immigrant women, Emergency Medicaid, a federal safety net program for those poor enough to qualify for Medicaid but who cannot meet the citizenship requirements, covers the cost of a birth but not prenatal care or postpartum contraception An “unborn child” option enacted in CHIP and CHIPRA gave states new options to provide prenatal care coverage with federal matching funds for extending coverage to immigrant children and pregnant women, regardless of their legal status or date of entry to the U.S. The study leveraged a natural experiment where unauthorized immigrant women eligible for Emergency Medicaid gained access to prenatal care coverage by the expansion of the Emergency Medicaid Plus program in Oregon Expanding access to prenatal care coverage increased both utilization and quality of prenatal care, and women were more likely to receive adequate care and recommended preventive health services 	Scientifically rigorous

Summary of Evidence-Based/Informed Strategies to Increase Adequate Insurance for Children						
Setting	Study	Target Audience	Intervention Type	Outcome	Description, Key Components, and Findings	Evidence Rating
	Wisk (2018)	Adolescents, young adults, and their families	Dependent coverage expansion	Obtaining coverage and increasing access to the health care system	<ul style="list-style-type: none"> • <i>Dependent coverage expansion (DCE)</i> policies on the state and federal level have been enacted to target the high rates of uninsurance and unique barriers to obtain coverage among adolescents and young adults (AYA) • DCE, a component of the ACA, requires private insurance policies that cover dependents to offer coverage for policyholders' children through age 26 • Several states, including Massachusetts, New Hampshire, and Maine, adopted state DCE policies that extended dependent coverage, with the Massachusetts policy accompanied by other health reforms later incorporated into the ACA, including an individual mandate, a Medicaid expansion, creation of a health insurance exchange with subsidies, and prohibition of pre-existing condition exclusions • State and federal health reforms may modify the effects of a DCE by altering the coverage options and incentives for AYA • Findings suggest that an individual mandate and other reforms may enhance the effect of DCE in preventing loss of coverage among AYA 	Moderate evidence
	DeVoe (2015); Guy (2017)	Parents and children	Parental health insurance expansions	Obtaining coverage and increasing access to the health care system	<ul style="list-style-type: none"> • Numerous states have implemented policies expanding public insurance eligibility or subsidizing private insurance for parents • Under the ACA, states retain significant flexibility in terms of eligibility and program structure • Approaches to state-level expansions to parents include providing public health insurance with or without an enrollee premium and providing subsidies for private health insurance • The Oregon Experiment (Medicaid expansion) gave a subset of uninsured, low-income adults access to Medicaid through a randomized selection process • Children's odds of having Medicaid or CHIP coverage increased when their parents were randomly selected to apply for Medicaid; findings demonstrate a causal link between parents' access to Medicaid coverage and their children's coverage 	Emerging evidence

Summary of Evidence-Based/Informed Strategies to Increase Adequate Insurance for Children						
Setting	Study	Target Audience	Intervention Type	Outcome	Description, Key Components, and Findings	Evidence Rating
					<ul style="list-style-type: none"> Cross-state analyses demonstrate that public expansions without premiums and special subsidized plan expansions had the largest effects on parental coverage and increased the likelihood of jointly insuring the parent and child 	
	Hirschi (2019)	Children with disabilities	Medicaid Buy-In program	Obtaining coverage and increasing access to the health care system + Addressing underinsurance (covering needed services and providers; reasonably covered costs)	<ul style="list-style-type: none"> The Massachusetts Medicaid Buy-In program, called <i>MassHealth CommonHealth</i>, allows families of children with disabilities to buy into the state’s Medicaid program to cover more services and to defray costs that private insurance does not cover Children with disabilities who do not have other insurance can use the program as their sole insurance; Children with disabilities who have other insurance can use the program as a secondary payer to supplement coverage and reduce families’ out-of-pocket costs due to the deductible, co-payments, and coinsurance for the child Adopting a Medicaid Buy-In program may be an effective way for states to create a pathway to Medicaid for children with disabilities whose family income is too high for Medicaid and who have unmet needs and/or whose families incur high out-of-pocket costs for their care 	Emerging evidence
	Smith (2019)	Parents and children	Health reform legislation	Obtaining coverage and increasing access to the health care system	<ul style="list-style-type: none"> In 2006, Massachusetts passed major health reform legislation, including an individual mandate for adults (who were required to purchase insurance or face a penalty); Medicaid expansion (i.e., children’s eligibility for the state’s Medicaid-CHIP increased from 200 to 300% of the FPL and adult eligibility for Medicaid increased to 100% FPL), and minimum essential benefits for private insurance (e.g., coverage of basic specialty services, no co-pay or deductible for preventive care visits) Massachusetts health reform, the model for the ACA, reduced uninsurance and improved access to some types of care for children in the state 	Emerging evidence

Key Findings

Key Findings. Overall, 9 key findings emerged from the analysis:

1. In terms of setting, eight studies (50%) were community-based, six studies (37.5%) were policy focused, and two studies (12.5%) took place in schools.
2. In the community and school-based studies, outreach was the primary strategy used to insure uninsured and underinsured children and improve access to a comprehensive array of needed and affordable services, supports, and providers.
 - a. Peers and professional staff, such as parent mentors, enrollment assistants, community health workers, child benefit advisors, and school nurses and administrative staff, were trained to outreach to parents to help them obtain and renew coverage for their children.
 - b. Technology and tools, such as data systems and communication channels, assisted in the identification of uninsured children who were eligible for public insurance.
 - c. A proactive approach was taken to identify and outreach to uninsured and underinsured children and facilitate their enrollment into public insurance.
 - d. Community-health centers serving low-income populations are well-positioned to support families navigating the complexities of enrolling in public insurance.
 - e. Medicaid/CHIP outreach can be viewed as a continuum of activities from initial contact with a target population, to facilitating enrollment, to addressing access barriers, and, ultimately, ensuring appropriate utilization of care (Phillips, 2010).
3. The policy-focused studies examined the impact of expansion initiatives and health reform legislation on children's insurance coverage and service utilization.
 - a. Parental coverage expansions increased the likelihood of children gaining coverage.
 - b. Dependent coverage expansion for young adults prevented the loss of coverage in young adulthood.
 - c. A Medicaid Buy-In program created a pathway to Medicaid for children with disabilities whose family income is too high for Medicaid.
 - d. The expansion of access to prenatal care for low-income immigrant women (Emergency Medicaid Plus) resulted in increased utilization and improved health outcomes for the women and their infants.
 - e. Adult-oriented health reform legislation, such as an individual mandate, Medicaid expansion, and minimum essential benefits, can reduce uninsurance and positively affect children's access to care.
 - f. The children's health insurance landscape is ever evolving with policy reforms being debated and considered with legislative reauthorizations, changes in administration, national trends, and advocacy efforts.
4. Thirteen studies and policy initiatives (81%) were focused on obtaining coverage, increasing access, and getting children into the health care system. One study (6%) examined underinsurance and measured whether children's insurance covered needed services and providers, and reasonably covered costs. Two studies (13%) were dually focused on both obtaining coverage and addressing underinsurance for children and youth.
5. Attention was given to overcoming enrollment barriers experienced by families and preventing gaps in coverage that result when parents are unable to renew their children's coverage.

6. Thirteen studies (81%) focused on extending insurance coverage to healthy children and adolescents. Three studies (19%) focused on getting coverage or increasing benefits for CYSHCN, children with chronic diseases, and children with disabilities.
7. With states having the flexibility to implement different policies regarding expanding public insurance eligibility and subsidizing options for children and families, there are opportunities for states to learn from one another.
8. Of the 16 studies included in this evidence review:
 - a. The rating of *scientifically rigorous* was given to one study (6%).
 - b. The rating of *moderate evidence* was given to two studies (13%).
 - c. The rating of *emerging evidence* was given to 13 studies (81%).
 - d. The rating of *mixed evidence* was not given to any studies.
 - e. The rating of *evidence against* was not given to any studies.
9. Overall, the evidence base for the included insurance interventions seems to be *emerging*. Most of the articles were published in the last five years and some were pilot studies. Read the discussion section to learn more about effective strategies and promising practices to ensure adequate and continuous health insurance coverage for more children and youth.

Discussion

This section discusses effective strategies to ensure adequate and continuous insurance for children and youth and some important considerations, including coverage and care for mental and behavioral health issues as well as oral health needs.

What Works: Strategies to Increase Coverage and Care

The purpose of this evidence review is to highlight practical strategies that State Title V programs can support and/or implement to increase insurance coverage for children and youth. A review of the literature and evidence from the field provided a strong foundation for this review. Building on this evidence base, the goal is to highlight strategies, programs, and policies, since the enactment of the ACA, that led to more children being adequately and continually insured. Here are major takeaways and a summary of strategies that have been shown to be effective in increasing coverage and care for children, youth, and their families.

Public Insurance. As of June 2021, Medicaid and CHIP provided comprehensive, pediatric-appropriate and affordable health coverage for about half of children in the U.S. (40 million) – the vast majority in Medicaid (Alker & Brooks, 2022). Public health insurance programs provide lifelong benefits for the child’s health and well-being that far outweigh the short-term financial costs to administer them.⁸³ Brown and colleagues (2015) found that by expanding Medicaid to children, the government recoups much of its investment over time in the form of higher future tax payments. More specifically, the government will recoup 56 cents of each dollar spent on childhood Medicaid by the time these children reach age 60. This return on investment does not take into account other benefits that accrue directly to the eligible children, including estimated

⁸³ <https://www.childrendefense.org/policy/resources/soac-2020-child-health/>

decreases in mortality and increases in college attendance (Brown et al., 2015).

Public insurance programs provide more comprehensive benefits than private insurance, along with greater protection against out-of-pocket expenses for beneficiaries.⁸⁴ Since Medicaid and CHIP enrollees have a limited ability to pay out-of-pocket expenses, federal rules prohibit states from charging premiums to Medicaid beneficiaries with incomes below 150% FPL, prohibit or limit cost sharing for some populations and services, and limit out-of-pocket costs (premiums and cost-sharing) to no more than 5% of family income for beneficiaries with incomes >150% FPL (Brooks et al., 2019b; Guth et al., 2021; Rudowitz et al., 2019).^{85, 86, 87}

Together with CHIP, Medicaid covers almost half of all CYSHCN, though the share varies by state:

- These children are likely to be low-income, a member of a racial or minority group, and younger than children covered by private insurance alone.
- Medicaid/CHIP-only CYSHCN are more likely to have greater health care needs compared to those with private insurance only.
- CYSHCN who have both Medicaid/CHIP and private insurance have the greatest health care needs compared to other groups.
- Even though CYSHCN covered by Medicaid/CHIP-only have greater health care needs, they are more likely than those with private insurance alone to report that their benefits are always adequate to meet their needs, reflecting Medicaid's robust benefit package
- While families of Medicaid/CHIP-only CYSHCN are more likely to face financial difficulty, they find their health care more affordable than those with private insurance only due to Medicaid's cost-sharing protections (Williams & Musumeci, 2021).⁸⁸

On the demand side, access to needed medical care is increased when government expands public health insurance plans or when parents are offered financial incentives to take their children to preventive appointments (Leininger & Levy, 2015). On the supply side, access to medical care is expanded when public insurance programs increase the payments that they offer to health care providers, when health care providers are placed directly in schools where children spend their days, or as a result of the ACA's effect on children's access to medical care through increased enrollment (Leininger & Levy, 2015). At least one study (Venkataramani, 2017) shows that children whose parents gained Medicaid coverage under the ACA expansion were more likely to access primary care.⁸⁹

84 <https://www.cbpp.org/research/health/frequently-asked-questions-about-medicaid>

85 <https://www.kff.org/medicaid/issue-brief/10-things-to-know-about-medicaid-setting-the-facts-straight/>

86 <https://www.kff.org/medicaid/issue-brief/understanding-the-impact-of-medicaid-premiums-cost-sharing-updated-evidence-from-the-literature-and-section-1115-waivers/>

87 <https://www.kff.org/report-section/medicaid-and-chip-eligibility-enrollment-and-cost-sharing-policies-as-of-january-2019-findings-from-a-50-state-survey-premiums-and-cost-sharing/>

88 <https://www.kff.org/medicaid/issue-brief/children-with-special-health-care-needs-coverage-affordability-and-hcbs-access/>

89 MCH Evidence Center NPM 15 webinar on May 6, 2020:

<https://www.mchevidence.org/tools/npm/15-adequate-insurance-coverage.php>

“Children are the least expensive beneficiary group in Medicaid, yet they have the most to gain from comprehensive and affordable coverage.”
 -- First Focus Campaign for Children, November 2021⁹⁰

Expansions. Since Medicaid expansion did not happen in all states or at the same time, this allowed for “natural experiments” to occur and increase our understanding of the impact of expansion efforts on access and services. Numerous states have implemented policies expanding public insurance eligibility or subsidizing private insurance for parents. There is a causal link between parents’ access to Medicaid coverage and their children’s coverage (DeVoe, 2015). Research on parental coverage expansions shows “welcome mat” effects where unenrolled, eligible children get enrolled in Medicaid as adults gain coverage for the first time (Burak et al., 2019; Clark, 2020). Further, cross-state analyses demonstrate that public expansions without premiums and special subsidized plan expansions had the greatest effects on parental coverage and increased the likelihood of jointly insuring the parent and child (Guy, 2017).

In sum, Medicaid expansion is effective in increasing insurance coverage for parents and their children:⁹¹

- A child is eight times more likely to have public health insurance if their parent has it (CCF, 2014).
- States that have expanded Medicaid coverage to parents have higher Medicaid participation among children (e.g., Massachusetts’ coverage expansion for parents cut the rate of uninsured children in half (CCF, 2014).
- States that have not expanded Medicaid to parents and other adults under the ACA have seen increases in their rate of uninsured children nearly three times as large as states that have (Clark, 2020).
- Lack of health coverage—as well as inequities in our healthcare system and disparities in social determinants of health—have devastating impacts on our nation’s infants and mothers (Taylor et al., 2019).⁹² Continuing to expand coverage to low-income parents through the ACA’s Medicaid expansion would help decrease the number of uninsured children, as well as ensure that more women have access to essential prenatal care to help reduce both maternal and infant mortality (Clark, 2020; Searing and Ross, 2019; Swartz, 2017).

⁹⁰ https://campaignforchildren.org/wp-content/uploads/sites/2/2021/12/Fact-Sheet_Covering-All-Kids.pdf

⁹¹ <https://www.childrensdefense.org/state-of-americas-children/soac-2021-child-health/>

⁹² <https://www.americanprogress.org/issues/women/reports/2019/05/02/469186/eliminating-racial-disparities-maternal-infant-mortality/>

“Consistent, affordable and high-quality health coverage for parents is essential to ensure that every child has the chance to reach their full potential.”

-- Maggie Clark, 2020⁹³

Continuous-Eligibility Policies. One key federal policy option, 12-month continuous eligibility, allows children to stay enrolled until their annual renewal regardless of most changes in family circumstances, which are often modest or temporary. Disenrollment due to administrative barriers or fluctuations in family income are the primary reasons children lose Medicaid (Alker & Brooks, 2022). In 2019, Brooks and colleagues reported that 24 states provided 12-month continuous eligibility for children in Medicaid, as well as 26 separate CHIP programs. In addition, individual states have different disenrollment policies related to non-payment of premiums within the federal rules designed to minimize gaps in coverage for children. While the minimum grace period before canceling coverage for non-payment of premiums is 60 days in Medicaid and 30 days in CHIP, some states provide at least a 60-day grace period. Children who are disenrolled from Medicaid for non-payment of premiums cannot be locked-out of coverage as a penalty for non-payment, but some separate CHIP programs may establish a lockout period of up to 90 days. As of January 2019, 14 states had lockout periods in CHIP ranging from 1 month to 90 days (Brooks et al., 2019b).

On March 18, 2020, in response to the COVID-19 global pandemic, Congress enacted the FFCRA, which incentivized states to ensure continuous eligibility to current Medicaid enrollees for the duration of the declared public health emergency (Corallo & Moreno, 2022; Corallo & Rudowitz, 2021).⁹⁴ Alker and Brooks (2022) estimate that 37.3 million children are currently protected by the Medicaid continuous coverage requirement.⁹⁵ Studies have demonstrated that continuous-eligibility policies, such as FFCRA, as well as policies that reduce disenrollment increase the continuity of children’s enrollment in Medicaid (Ku et al., 2013; Brooks, et al, 2019b). Adoption of such policies has multiple benefits, including improving child health outcomes, reducing families’ exposure to medical debt, lowering the uninsured rate, and providing a more complete picture of the quality of care children receive in Medicaid and CHIP (Brooks, 2019).

“There is clear evidence that the Medicaid continuous coverage requirement has been an extremely important policy tool to avoid increases in the number of uninsured people during the pandemic.”

-- Joan Alker & Tricia Brooks, February 2022, pg. 2⁹⁶

⁹³ <https://ccf.georgetown.edu/2020/01/15/in-medicaid-expansion-states-fewer-young-children-go-uninsured/>

⁹⁴ <https://www.kff.org/coronavirus-covid-19/issue-brief/analysis-of-recent-national-trends-in-medicaid-and-chip-enrollment/>

⁹⁵ It is very likely that the continuous coverage requirement will be lifted in 2022. Alker & Brooks (2022) project that as many as 6.7 million children will lose Medicaid coverage when the continuous coverage requirement is lifted. These children are at significant risk of experiencing a gap in coverage (Alker & Brooks, 2022).

⁹⁶ <https://ccf.georgetown.edu/2022/02/17/millions-of-children-may-lose-medicaid-what-can-be-done-to-help-prevent-them-from-becoming-uninsured/>

Presumptive Eligibility. Families are often unaware that a child has been disenrolled from their insurance coverage until they show up for a doctor’s appointment or otherwise seek health care (Brooks et al., 2019a). Allowing health care providers to make presumptive eligibility determinations is particularly important for low-income families whose children are eligible but may have lost coverage for administrative reasons (Brooks, 2011; Brooks et al., 2019a). Presumptive eligibility is a policy option that allows states to train and authorize Medicaid providers and other qualified entities to assess eligibility and expedite temporary enrollment while the regular application is being processed (Brooks, 2011). The ACA gives hospitals the option to determine eligibility presumptively, but authorizing federally-qualified health centers and school-based health centers to enroll children presumptively can further minimize gaps in coverage (Brooks, 2014).

Outreach and Enrollment. Under the ACA, all states are required to modernize Medicaid eligibility and enrollment processes.⁹⁷ Medicaid participation is quite high particularly among children in states that have made concerted efforts to simplify and streamline their enrollment processes.⁹⁸ It is critical to reduce barriers to Medicaid enrollment and renewals for children and families. This can be done by removing red tape that can keep eligible children from maintaining consistent Medicaid or CHIP coverage and boosting outreach and enrollment efforts. There is strong policy/practice evidence that consumer assistance/navigators, presumptive eligibility, and 12-month continuous coverage can help reduce these barriers (Brooks, 2020).⁹⁹

As shown in this evidence review, outreach and enrollment efforts can occur via parent mentors (Flores 2016; Flores 2018), enrollment assistants (Harding, 2017), school nurses and administrative staff (Jenkins, 2018), and child benefit advisors. Outreach can also occur with the help of school-based communication tools (Aller, 2014) and data systems (Fuld, 2013; Ray, 2016) to identify uninsured and underinsured children and facilitate their enrollment into public insurance. Small grants to community-based organizations can also bolster outreach initiatives (Phillips, 2010).

Coverage and Benefits Counseling. Benefits counseling can help families who are struggling to understand how their health insurance works and the services it covers.¹⁰⁰ Title V programs and family-led organizations can provide benefits counseling that helps parents learn about the full range of health insurance benefits, in- and out-of-network providers, and additional insurance options available in their state, such as Medicaid Buy-In programs or Medicaid waivers. These options can reduce underinsurance by ensuring that children are able to utilize benefits to the maximum as well as minimizing out-of-pocket costs. Title V programs can hire benefits counselors to work with families directly or it can fund and/or partner with family-led organizations (e.g., Family Voices, Family-to-Family (F2F)) to provide benefits counseling.

97 <https://www.kff.org/medicaid/issue-brief/10-things-to-know-about-medicaid-setting-the-facts-straight/>

98 <https://www.cbpp.org/research/health/frequently-asked-questions-about-medicaid>

99 MCH Evidence Center webinar, May 6, 2020: <https://www.mchevidence.org/tools/npm/15-adequate-insurance-coverage.php>

100 <https://ciswh.org/project/the-catalyst-center/financing-strategy/benefits-counseling/>

Care Coordination. Care coordination is a team- and family-driven process that aims to facilitate access to services by children and adolescents, improve health care outcomes, increase satisfaction for families and health care practitioners, and reduce costs associated with health care fragmentation, which can lead to under- and over-utilization of care (Bachman et al., 2015). Care coordination as a Medicaid add-on benefit supports adequate insurance coverage for children with chronic health conditions by ensuring access to needed health care and social support services and reducing out-of-pocket costs. Medicaid spending on children with chronic health conditions could be decreased through care coordination programs by reducing unnecessary hospital and emergency care (Caskey et al., 2019).

Eligibility for care coordination is an important issue because CYSHCN are not often identified as a target population to receive care coordination as a benefit if it is offered (Bachman et al., 2015). Medicaid-sponsored care coordination activities also vary across states, and access to care coordination financed by Medicaid is limited and variable within and among states.

Title V/CYSHCN programs, Medicaid, and other organizations fund and provide care coordination for CYSHCN in a variety of ways:

- Some Title V programs fund care coordination directly for CYSHCN or contract with other organizations to provide care coordination.
- Several states have expanded the availability of care coordination services for CYSHCN by blending Title V and Medicaid funding.
- Other states use Medicaid funding to provide care coordination through the Early and Periodic Screening, Diagnosis, and Treatment (EPSDT) benefit.¹⁰¹

Broad financing and payment reform are needed to support care coordination as an essential Medicaid benefit to ensure that all CYSHCN who need care coordination get it at the right time, in the right amount, from the right providers, and at the right cost (Bachman et al., 2015).

Mandated Benefits. Policy often focuses only on uninsured children. More research and practices are needed to address underinsurance among children and youth. Mandated benefits address underinsurance by requiring private health insurers to cover specific benefits, such as early intervention, hearing aids, autism services, medical foods, or childhood immunizations.¹⁰² State-specific statutes determine the parameters of a particular mandated benefit, and there is variation in what a plan actually covers from state-to-state. States may vary in terms of the type of health plan affected by the law, who they make eligible for a given benefit, what it covers, or the dollar amount an insurer may be obligated to pay for an enrollee receiving the benefit.¹⁰³

101 <https://ciswh.org/project/the-catalyst-center/financing-strategy/care-coordination/>

102 <https://ciswh.org/project/the-catalyst-center/financing-strategy/mandated-benefits/>

103 <https://ciswh.org/project/the-catalyst-center/financing-strategy/mandated-benefits/>

Health Reforms for Adolescents and Young Adults. In 2018, the American Academy of Pediatrics (AAP) issued a statement on targeted reforms in health care financing to improve the care of adolescents and young adults (Marcell et al., 2018). The statement noted that two pieces of federal legislation, the ACA and the Paul Wellstone and Pete Domenici Mental Health Parity and Addiction Equity Act (MHPAEA) of 2008, helped improve health care coverage for adolescents and young adults but have fallen short in some areas, including persistent inequities in health care plans and state Medicaid programs, insurance cost barriers, such as high-deductible health plans, and the inaccessibility and inadequacy of mental and behavioral health care and sexual reproductive services.¹⁰⁴

According to the National Adolescent and Young Adult Health Information Center (NAHIC), strategies to improve access to health insurance and preventive visits for adolescents and young adults include:

- **Use of community agencies and networks:** States with long-established, community-based partnerships were able to make significant advancements enrolling eligible adolescents and young adults into public health insurance programs.
- **Leveraging opportunities:** Strategies put forth by federal health care agencies to increase adolescent well visits include leveraging clinical encounters to promote health insurance enrollment and access to preventive care. This may include using episodic and acute care to provide enrollment assistance, educating parents on the importance of well visits, and converting sports physicals into well visits. States have utilized innovative strategies to leverage clinical and school-based encounters with adolescents and young adults to improve access to preventive care.
- **Focusing on special populations:** Many state agencies and organizations have conducted extensive outreach to reduce health insurance disparities and improve health outcomes for special populations of adolescents and young adults, including former foster youth, Latino youth, and homeless youth.
- **Engaging youth:** Many state agencies and organizations have utilized youth-adult partnerships to engage youth in outreach and enrollment efforts, while others have raised awareness on the unique health needs of adolescents and young adults (Twietmeyer et al., 2016).

See **Appendix G: Summary of NPM 15 Strategies** for an overview of effective strategies and promising practices to address NPM 15 from the MCHbest Strategy Database, the Catalyst Center, the Association of Maternal and Child Health Program (AMCHP) Innovation Hub, and the Robert Wood Johnson Foundation (RWJF) *What Works for Health*.

¹⁰⁴ <https://www.healthychildren.org/English/news/Pages/Helping-Teens-and-Young-Adults-Overcome-Health-Care-Hurdles.aspx>

Title V-Medicaid Partnership

As the largest federal-state health programs serving children, State Medicaid and State Title V programs share the common goal of improving the health status of the MCH population in their state through affordable health care delivery systems and coverage.¹⁰⁵ Partnerships between these programs allow for the effective leveraging of federal and state resources to help ensure that women and children are provided needed preventive services, health examinations, treatments, and follow-up care.¹⁰⁶ Title V programs complement Medicaid in many ways, including providing gap-filling services to enrollees, assisting in the identification of potentially eligible beneficiaries, and creating an infrastructure in communities to ensure that the capacity exists to support the delivery of quality health care services for women and children.¹⁰⁷

Federal legislation requires that State Title V programs:

- Establish interagency agreements (IAAs) with their state Medicaid programs to ensure coverage and care for more children and youth;
- Help coordinate services within the EPSDT benefit;
- Provide a toll-free number for families seeking Title V or Medicaid providers;
- Provide outreach and facilitate enrollment of Medicaid-eligible children and pregnant women;
- Share data collection responsibilities, particularly those related to infant mortality and Medicaid; and
- In certain instances, provide services for CYSHCN that are not covered by Medicaid, such as rehabilitation services for children under 16 years of age who are both Title XVI and Title XIX eligible (Social Security Act, Section 505 (E and F)).^{108, 109, 110}

Title V agencies can establish, nurture, and leverage partnerships with Medicaid to maximize the proportion of children who are covered by Medicaid, as well as maximize the benefits that are covered, especially in alternative payment models such as managed care.

105 <https://nashp.org/wp-content/uploads/2017/04/Strengthening-the-Title-V-Updated.pdf>

106 <https://mchb.tvisdata.hrsa.gov/Home/IAAMOU>

107 <https://www.mchlibrary.org/IAA/>

108 https://www.ssa.gov/OP_Home/ssact/title05/0505.htm

109 <http://www.amchp.org/programsandtopics/collaborationresources/PublishingImages/Pages/default/Title%20V%20and%20Medicaid%20Case%20Study.pdf>

110 To learn more about the purpose of the MCH Block Grant, as defined in section 501(a)(1) of the Title V legislation, see the 2021 Block Grant Guidance or visit <https://mchb.hrsa.gov/maternal-child-health-initiatives/title-v-maternal-and-child-health-services-block-grant-program> and www.amchp.org/AboutTitleV/Documents/UnderstandingTitleV.pdf

In particular, Title V agencies can partner with Medicaid agencies to:

- Provide subject matter expertise;
- Raise awareness of the link between parental coverage and child development (e.g., two-generation strategies);
- Understand and address gaps in coverage; and
- Report/Improve performance on Child Core Set measures, required for state reporting starting in 2014; NSCH, EPSDT 416, and other data that can help inform policy discussions on strategies.¹¹¹

A Title V-Medicaid partnership is especially important for improving quality and assuring access to public health coverage. This includes expanding and ensuring coverage for CYSHCN. One of Medicaid's critical roles is to provide financial coverage for important preventive and primary care services and specialty services for those eligible; Title V is essential to help translate those funds into a system of care that is accessible. The partnership among Title V and Title XIX agencies is required to be documented with the intended result that the partnership will be complementary, reduce duplication, and increase the effectiveness of both parties.^{112, 113} In sum, a robust IAA can be a key factor in assuring coordination and mutual support between agencies to ensure coverage and care for more children, youth, and their families.¹¹⁴

Health Inequities and Children and Youth with Special Health Care Needs

Race, ethnicity, language spoken at home, household income, number of functional difficulties, and immigration status are among the factors that affect access to health coverage and care for CYSHCN.¹¹⁵ To ensure health care access and coverage equity, states have developed partnerships that pool resources and leverage organizational expertise; ensure staff are representative of the populations served; and maximize outreach and enrollment efforts to reach the most vulnerable CYSHCN.¹¹⁶ For examples of the innovative strategies states are using to improve health inequities for CYSHCN, visit the Catalyst Center webpage on inequities: <https://ciswh.org/project/the-catalyst-center/financing-strategy/inequities/>.

Access to Mental Health Care

This section highlights strategies to improve coverage and care for children's mental, emotional, and behavioral health concerns. See **Appendix D: Mental Health Needs and Coverage** for an overview of children's mental health issues and the need for mental health coverage and services.

111 MCH Evidence Center NPM 15 webinar on May 6, 2020: <https://www.mchevidence.org/tools/npm/15-adequate-insurance-coverage.php>

112 The Title V (MCH) – Title XIX (Medicaid) Interagency Agreement (Title V-XIX IAA) is a tool that assures the legislatively mandated relationship among the State Title V Block Grant Program and the State Medicaid Agency is enacted.

113 Title V and Medicaid are both authorized by the Social Security Act. Coordination between State MCH and Medicaid agencies is required by the following statutes and regulations: (§1902(a)(11)(B) of Social Security Act), (Code of Federal Regulation Title 42 - § 431.620, (§505(a)(F)(iv)). See https://www.ssa.gov/OP_Home/ssact/title05/0500.htm

114 To learn more about IAAs, refer to the MCH Library resource on Title V and Title XIX IAAs at <https://www.mchlibrary.org/IAA/index.php>

115 <https://ciswh.org/project/the-catalyst-center/financing-strategy/inequities/>

116 For state examples, see the Catalyst Center website: <https://ciswh.org/project/the-catalyst-center/financing-strategy/inequities/>

Federal Action. During the COVID-19 pandemic, many children experienced major disruptions that impacted their mental and emotional health. School closures, social isolation, financial hardship, and gaps in health care access contributed to increased rates in anxiety and depression, which were already on the rise in the years leading up to it. According to Lebrun-Harris and colleagues (2022), there were significant increases in anxiety problems (up from 7.1% to 9.2%; 29% increase) and depression (up from 3.1% to 4.0%; 27% increase) between 2016 and 2020.¹¹⁷ During that time period, many children with mental health needs were not receiving care for a variety of reasons, including costs, lack of providers, and limited insurance coverage (if any).¹¹⁸ For many years, health plans provided by private employers and public insurance have failed to offer coverage for mental health services that is “on par” with coverage for medical and surgical care (Kennedy-Hendricks, 2018), despite federal legislation in place to address the imbalance.

Medicaid requires states to provide a full range of services, including mental health care, for children through the EPSDT benefit.¹¹⁹ All marketplace health plans under the ACA must cover screenings for mental health conditions at no cost. Major federal laws regulate insurance coverage for behavioral health equity: The Mental Health Parity Act required parity in aggregated lifetime and annual dollar limits for large group health plans for behavioral health services; the MHPAEA extended such protections to substance use disorders; CHIPRA of 2009 applied parity requirements to CHIP and Medicaid; and the ACA requires health insurance policies to cover mental health services as one of the 10 Essential Health Benefits.¹²⁰

More specifically, the MHPAEA was intended to counteract earlier market failures by requiring that insurance coverage of mental health services be “on par” with general medical care. MHPAEA requires that copayments, deductibles, out-of-pocket maximums, and caps on provider visits or days in a hospital be no more restrictive for mental health treatment than for medical or surgical care. However, the law only applies to insurance plans for public and private sector employers with over 50 employees and health insurance issuers who sell coverage to employers with more than 50 employees. Furthermore, the legislation itself does not include a mechanism to regularly monitor or evaluate the enforcement or implementation of the act,¹²¹ and families of children with mental health needs have often had to fight to obtain benefits provided under the law (Knopf, 2016).

For children with autism spectrum disorder (ASD), MHPAEA implementation was associated with greater use of services paid for through insurance without driving up the out-of-pocket spending paid by families through their insurance policies. However, more stringent parity enforcement and additional policy approaches may be needed to ensure that children with ASD

117 Lebrun-Harris et al. (2022) examined annual data from the NSCH (2016-2020).

118 <https://www.kff.org/coronavirus-covid-19/issue-brief/mental-health-and-substance-use-considerations-among-children-during-the-covid-19-pandemic/>

119 <https://www.ncsl.org/research/health/addressing-children-s-mental-health.aspx>

120 *ibid*

121 https://en.wikipedia.org/wiki/Mental_Health_Parity_Act

are connected to evidence-based services and supports.¹²² To further complicate matters, most but not all states require insurers to provide coverage for the treatment of autism, although mandated coverage may be limited to specific age groups, number of annual visits, or other limitations (Stuart, 2017).

The ACA also mandates that 10 “essential health benefits”—including mental health and substance use disorder services and behavioral health treatment—be offered by health plans in individual or small group markets, whether inside or outside Health Insurance Marketplaces, to ensure Americans have access to quality, affordable health insurance.¹²³ However, treatment, accessibility, adequacy, and affordability vary widely, depending on the mental health diagnosis, the age of the child, the type of health insurance the child/family has access to, and the resources available in any given region. Although children’s mental health providers, including psychologists, psychiatrists, and pediatricians who specialize in mental health, are more prevalent in urban/suburban areas, the larger volume of patients affects their availability. In rural and remote areas, access to mental health care is even more challenging, despite a significant increase in the use of telehealth services.¹²⁴ Nationwide, nearly half of children diagnosed with a behavioral or mental health condition in 2019 had not received treatment or counseling from a mental health professional within the past 12 months.¹²⁵

As of 2021, nearly 39 million children in the U.S. were enrolled in CHIP or Medicaid,¹²⁶ the latter requiring states to correct or ameliorate defects and physical and mental illnesses and conditions discovered as a result of the screening services available under the EPSDT component of the public state and federal program. Preventive, dental, vision, mental health, developmental, and specialty services are included (Langer, 2018). However, states have been given flexibility in designing their own CHIP program, which may or may not include all of the services required under Medicaid.¹²⁷ Some states administer CHIP as a Medicaid expansion, which would include EPSDT screening and treatment, while other states have a separate CHIP program or a combination program that may or may not include comparable mental health coverage.¹²⁸

State Action. State strategies to improve access to children’s mental health care include:

- **Enforcing and strengthening parity laws:** In 2018, at least five states had comprehensive parity laws requiring equal coverage of a wide range of mental health conditions and substance use disorders.
- **Providing additional coverage for mental health through Medicaid waivers:** Legislators and executive branch staff in all states may address coverage and access to mental health services through 1115 Medicaid demonstration waivers. These waivers, upon

122 <https://www.ncsl.org/research/health/autism-and-insurance-coverage-state-laws.aspx>

123 <https://www.cms.gov/CCIIO/Resources/Fact-Sheets-and-FAQs/ehb-2-20-2013>

124 <https://www.kff.org/coronavirus-covid-19/issue-brief/mental-health-and-substance-use-considerations-among-children-during-the-covid-19-pandemic/>

125 <https://mchb.hrsa.gov/sites/default/files/mchb/Data/NSCH-Data-Brief-2019-Mental-BH.pdf>

126 <https://www.medicaid.gov/medicaid/program-information/medicaid-and-chip-enrollment-data/report-highlights/index.html>

127 <https://www.macpac.gov/subtopic/epsdt-in-medicaid/>

128 <https://www.kff.org/other/state-indicator/chip-program-name-and-type/>

federal approval, allow flexibility in what a state’s Medicaid program may cover. For example, in 2018, 16 states used 1915(c) Medicaid waivers to provide children with ASD home- and community-based services.

- **Providing access to mental health services in a variety of settings:** Along with parity and insurance laws, some states are expanding mental health services in schools and other settings. For instance, a state allocated funds for school-linked mental health services and children’s mental health screenings; another expanded the school entry child health examination to include social and emotional screening.¹²⁹

Although rigorous studies on strategies to increase and improve children’s mental health coverage are limited, there is an emerging body of evidence suggesting that location-based policy levers,¹³⁰ such as school-based services and integrated care models, have a significant effect on health care utilization and acceptability (So, 2019). In a systematic review (So, 2019), three studies concluded that children with access to mental health services at their school were more likely to receive care, and their families were more likely to score higher on satisfaction with services. In studies of integrative care models—where children receive both medical and mental health services within an integrated setting where patient care is coordinated by an interdisciplinary team—parents also reported higher satisfaction. Two additional location-based studies that examined acceptability measures found the mental health services delivered in a school or pediatric setting were more acceptable than other locations (So, 2019).

Other research findings support the effectiveness of integrated mental health models, particularly within a pediatric setting (Yonek, 2020). Since more than 70% of youth 18 years and younger see a primary care practitioner each year, the integration of mental health services into the primary care setting can improve access and treatment rates. Parents and adolescents report feeling relatively comfortable disclosing mental health issues in a primary care setting, and this “model” might help reduce the stigma, cost factors, and wait-times given the national shortage of child and adolescent psychiatrists (Corso, 2015; Yonek, 2020).

Studies that focused on health insurance parity and affordability have shown mixed results, with some studies finding only a modest difference in financial burden for families with plans affected by parity laws, particularly among privately-insured families (So, 2019). However, four studies of insurance-based policy levers reported reduced financial burden for families with more coverage for mental health services either via public insurance or mandated parity requirements (So, 2019). The authors note though that even if healthcare coverage reduces or removes cost barriers by making care more affordable, failure to address other barriers, such as accessibility, acceptability, and availability could continue to prevent families from accessing needed services. Gaps in evidence-based policy studies remain, especially on the availability and acceptability of children’s mental health services. In particular, there is a lack of rigorous studies related to identifying effective behavioral health workforce development strategies and studies

¹²⁹ <https://www.ncsl.org/research/health/addressing-children-s-mental-health.aspx>

¹³⁰ A policy lever is defined here as any instrument that could be applied by an organization or government to influence use of psychological services (So, 2019; Raghavan et al. 2008).

that investigate how telehealth policy levers might impact access to or utilization of services for children (So, 2019). Most of the published literature focuses on the adult population, but the nation's future depends on the physical, mental, and emotional well-being of our children and youth.

Barriers to Dental Coverage and Care

The following section highlights the need for children's dental coverage, barriers and inequities, including cost considerations and lack of access, and policy recommendations to extend dental benefits for children. See **Appendix E: Oral Health Needs and Dental Coverage** for background information on the importance of oral health and dental coverage for children and youth.

Cost Issues. Despite the importance of good dental care and the widespread availability of preventive oral health services for children, there are still barriers and disparities in dental care. Children from lower income families often have inadequate dental insurance and less access to dental care. In 2016, the Surgeon General wrote that one-quarter of preschool-aged children living in households below the FPL suffer from untreated tooth decay; in contrast, only one in ten children living above the FPL have untreated tooth decay (Murthy, 2016). Further, the receipt of dental care is closely related to insurance coverage, and an estimated 126 million Americans do not have dental insurance (Murthy, 2016). The enactment of CHIP in 1997 resulted in an increase in access to dental insurance for children living in families with incomes at or below 200% of the FPL (Clemans-Cope et al., 2015). The reauthorization of CHIP (CHIPRA) in 2009 included a provision that required states with separate CHIP plans to provide dental coverage, resulting in coverage for dental services for all children covered by CHIP. Even with CHIP, in 2012 about one in eight children enrolled in the program had unmet dental needs, and many did not get follow-up treatment recommended by a dentist (Clemans-Cope et al., 2015).

The ACA does not have a pediatric dental insurance mandate, but it does require that insurers participating in the Health Insurance Exchange Marketplace offer pediatric dental plans. Parents are not required to purchase dental plans for their children, and government subsidies are not allowed to be used for purchasing dental plans. Premiums, therefore, become an important factor for parents when deciding whether to purchase dental coverage for children (Qiao et al., 2018). Because the ACA does not have a pediatric dental insurance mandate, there has been an increase in the number of stand-alone dental plans (SADPs). There are large variations in the premiums for pediatric SADPs sold through the ACA Marketplaces, ranging from a little over \$8 per month to around \$71 per month (Qiao et al., 2018).

The higher premium SADPs are associated with larger provider networks and greater service coverage, but they are also associated with a larger segment of low-income people with poor dental health. Since children from low-income families are more likely to have poorer dental health, they need better dental coverage and more flexibility in choosing dentists. However, their parents face higher premiums to meet these needs, and may decide not to enroll in any SADPs, resulting in low take-up of Marketplace SADPs (Qiao et al., 2018). One option to

improve children’s access to dental care would be for the government to consider subsidizing Marketplace SADP premiums, thereby encouraging more insurers to participate in the Marketplace and offer more affordable options for low-income families (Qiao et al., 2018).

“The Affordable Care Act recognizes the integral role of oral health services and includes provisions that address important improvements to increase oral health coverage, access, workforce and infrastructure development, surveillance, and public education. One important provision is the inclusion of pediatric dental coverage as part of the essential health benefits, and Medicaid Alternative Benefit Plans.”

-- USDHHS Oral Health Coordinating Committee, 2016, The Framework, pg. 244

Lack of Access. Lack of access to dental care is another significant barrier. One way to increase dental care for underserved and vulnerable populations is to integrate oral health care into primary care practices. Frontline primary health care professionals, such as nurse practitioners and physician assistants, can be trained to incorporate the core competencies of oral health into their existing scope of practice. Since these health care workers are most likely to see vulnerable and underserved populations with limited access to dental care, they can help provide preventive interventions, which can lead to improved oral health, as well as improved overall wellness (USDHHS, 2014).

Integrating oral health care into primary care practices can also be beneficial for CYSHCN. In a study of children with intellectual and developmental disabilities (IDD), Kranz and colleagues (2020) found that despite having a greater risk of developing oral health problems, children with IDD are less likely to receive preventive oral health care than children without IDD. Caregivers of children with IDD report cost as a barrier to receiving oral health care. It can also be difficult for children with IDD to access preventive oral health services (POHS) due to reluctance on the part of dentists who may be unfamiliar with or lack training in treating children with more complex medical needs, including those with autism, cerebral palsy, and other IDD. Integrating POHS into medical offices may make it easier for children with IDD to access preventive dental services, such as the recommended application of fluoride varnish to the teeth of children under the age of six. The authors report that investigators have found that state Medicaid policies that promote the delivery of preventive oral health services in medical settings increase use, reduce dental caries, and improve oral health for young, publicly insured children. Further, *“engaging non-dental providers in the delivery of POHS is an effective strategy to increase access to oral health care and thus improve oral health for this high-needs population”* (Kranz et al., 2020).

Policy Recommendations. The AAPD, in recognizing the essential link between good oral health and overall health and wellness, issued an oral health policy on model dental benefits that advocates for optimal oral health and health care for all infants, children, adolescents, and CYSHCN.¹³¹ The AAPD policy advises that a dental benefit plan should be actuarially sound and

¹³¹ <https://www.aapd.org/research/oral-health-policies--recommendations/model-dental-benefits-for-infants-children-adolescents-and-individuals-with-special-health-care-needs/>

fiscally capable of delivering plan benefits without suppressing utilization rates or the delivery of services (AAPD, 2020b). If dental plans are not actuarially sound and adequately underwritten, there is a risk of not having access to needed and appropriate dental care. Lack of access to good oral health has negative health implications, affects quality of life, and creates enormous societal costs (AAPD, 2020b).

The AAPD policy enumerates the essential components of dental benefit plans, including:

- Preventive services, which include initial and periodic orofacial examinations; education for the patient and patient’s family on measures that promote good oral health; age-appropriate guidance and counseling on non-nutritive habits, injury prevention, and tobacco/substance abuse; application of topical fluoride; prescription of high-concentration fluoridated toothpaste and/or dietary fluoride supplement for patients over six years if needed; application of pit and fissure sealants on primary and permanent teeth based on caries risk factors, not patient age; and other dental prophylactic services based on caries and periodontal risk factors.
- Diagnostic procedures consistent with guidelines developed by organizations with recognized professional expertise, including x-rays.
- Restorative and endodontic services to relieve pain, resolve infection, restore teeth, and maintain dental function and oral health.
- Orthodontic services.
- Dental and oral surgery.
- Periodontal services to manage gingivitis and other periodontal conditions in children.
- Prosthodontic services, including implants with restorations to restore oral function.
- Diagnostic and therapeutic services related to the acute and long-term management of orofacial trauma.
- Drug prescription for preventive services, relief of pain, or treatment of infection or other conditions within the dentist’s scope of practice.
- Medically necessary services for preventive and therapeutic care for CYSHCN.
- Behavior guidance services necessary for the provision of optimal therapeutic and preventive oral care to patients with medical, physical, or behavioral conditions.
- Consultative services provided by a pediatric dentist when requested by a general practitioner or another dental specialist or medical care provider (AAPD, 2020b).

COVID-19 and Insurance

As of this writing, the COVID-19 global pandemic has not only caused the deaths of over 980,000 Americans¹³², it has also led to a massive rise in unemployment. The rate of unemployed Americans grew from 3.6% in January 2020 to a peak of 14.7% in April 2020 (Gautam & Tumin, 2020). Even though the numbers have improved since the height of the pandemic, in early 2022 there are still 3 million fewer people who are employed than before the pandemic.¹³³ Since so many Americans have health insurance through their employers, the loss of employment translates to a corresponding loss of health insurance, with approximately 5.4

132 <https://covid.cdc.gov/covid-data-tracker/#datatracker-home>

133 <https://www.cbpp.org/research/poverty-and-inequality/tracking-the-covid-19-economys-effects-on-food-housing-and>

million workers becoming uninsured between February and May 2020 (Gautam & Tumin, 2020). Many of these now unemployed and uninsured workers have children and families who are dependent on them for health insurance, resulting in more than 6 million children losing their coverage as of May 2020 (Gautam & Tumin, 2020).

With the recent economic downturn and the sudden surge of children without employer-sponsored insurance, Medicaid and CHIP will be tasked with filling a coverage gap to prevent a national crisis of pediatric uninsurance (Strane et al, 2020). Gaps in health insurance can have long-term health consequences for children; the COVID-19 pandemic has created additional barriers to increasing insurance enrollment, such as physical distancing guidelines, shifts to telemedicine, and limited resources for outreach efforts. Some short-term strategies include improving remote screening mechanisms to identify families at risk for gaps in insurance, connecting families with resources in their communities, and helping families learn about and enroll in Medicaid or CHIP (Gautam & Tumin, 2020). A long-term strategy that is already in place allows state and local policymakers to provide opportunities to streamline application and enrollment processes for social services by sharing eligibility determinations across programs.¹³⁴ The ability to apply for multiple benefits at one time helps break down barriers to access, especially during this time of high unemployment and resulting loss of insurance.

According to a data note published in August 2021 by the Kaiser Family Foundation (KFF)¹³⁵, total Medicaid/CHIP enrollment grew to 81.7 million in March 2021, representing a 14.7% increase from enrollment in February 2020 (Corallo & Moreno, 2022; Corallo & Rudowitz, 2021). Increases in enrollment in Medicaid/CHIP reflect changes in the economy and job loss. The Families First Coronavirus Response Act (FFCRA) was enacted in March 2020 to provide paid sick leave, insurance coverage of coronavirus testing, nutrition assistance, and unemployment benefits (Moss et al., 2020).¹³⁶ In addition, the FFCRA has maintenance of eligibility (MOE) requirements that ensure states maintain continuous coverage for those enrolled in Medicaid as of March 18, 2020, and they cannot make eligibility and enrollment more restrictive than policies in place as of January 2020. Between February 2020 and March 2021, all states experienced Medicaid and CHIP enrollment growth ranging from 9.3% to 29.2% (Corallo & Moreno, 2022; Corallo & Rudowitz, 2021).¹³⁷

As the KFF report makes clear, even if unemployment starts to decline, Medicaid enrollment growth may continue. Current enrollees will not be disenrolled due to the MOE requirements that will remain in place during the ongoing public health emergency period. Since the ACA Marketplace provides a single application for Medicaid, CHIP, and Marketplace coverage, many people visiting the Marketplace during open enrollment will qualify for Medicaid or CHIP coverage. In addition, the return to in-person schooling could provide the opportunity for

¹³⁴ <https://www.cbpp.org/research/poverty-and-inequality/opportunities-to-streamline-enrollment-across-public-benefit>

¹³⁵ <https://www.kff.org/coronavirus-covid-19/issue-brief/analysis-of-recent-national-trends-in-medicaid-and-chip-enrollment/>

¹³⁶ <https://www.kff.org/global-health-policy/issue-brief/the-families-first-coronavirus-response-act-summary-of-key-provisions/>

¹³⁷ <https://www.kff.org/coronavirus-covid-19/issue-brief/analysis-of-recent-national-trends-in-medicaid-and-chip-enrollment/>

school-based outreach programs, resulting in an increase in Medicaid/CHIP enrollment (Corallo & Moreno, 2022; Corallo & Rudowitz, 2021).¹³⁸ For the foreseeable future, Medicaid and CHIP will be paramount in providing health coverage for children and adolescents in the U.S. whose parents are facing unemployment (Strane et al., 2020).

There are still many unknowns with COVID-19 and its impact on the health of this country's population and economy. Current policies are helping to ensure the continuity of health care coverage for children, but only future data will reveal the true impact of this national health crisis. As we set the policy agenda for a post-pandemic economic recovery, new, bolder approaches will be needed to prevent erosion of children's coverage gains and also lead us towards achieving universal and affordable coverage and care for all children and youth in the years to come (Strane et al., 2020).

“The magnitude of this current crisis offers a rare opportunity to shine a spotlight on the erosion of pediatric coverage, to offer solutions that would achieve and maintain consistent universal coverage for children and adolescents in the future.”

-- Strane et al., Health Affairs Blog, August 5, 2020¹³⁹

From Evidence to Action

The MCH Evidence Center developed this report as part of a series of scholarly works focused on each NPM to identify and describe evidence-based and informed strategies from peer-reviewed and grey literature. Interventions identified by this process form the cornerstone by which Title V agencies can construct programs and measures that will affect change with their unique populations and advance their NPM topic areas. As such, this is a first step in a long process for meeting National Outcome Measures (NOMs).

If you are looking to strengthen efforts to ensure that children and youth are adequately and continuously insured in your state or jurisdiction, moving “from evidence to action” can seem daunting. The MCH Evidence Center has developed the following framework, tips, and resources to help you through the process. We have developed resources and provide technical assistance for you at every step of this process:

1. Evaluate the evidence to guide your work. Aligning programs and measures with the evidence base helps to ensure programs meet the needs of infants, children, youth, and their families and have the most potential to affect change. We invite you to read through this report to understand the way each intervention identified root causes that were preventing change, produced a new, desired behavior change, and engaged partners and resources that yielded measurable effects.

¹³⁸ ibid

¹³⁹ <https://www.healthaffairs.org/doi/10.1377/hblog20200729.620204/full/>

You can also access additional evidence resources through our NPM 15: Adequate Insurance Toolkit (<https://www.mchevidence.org/tools/npm/15-adequate-insurance-coverage.php>) including:

- A summary of the evidence identified by this report.
- Promising practices as identified by AMCHP’s Innovation Hub.¹⁴⁰
- Current ESMs used by other states and jurisdictions to use as examples.
- Examples of ESMs that include links back to the evidence and show ways to measure effect.

In developing programs based on the available evidence, a critical factor is to ensure that identified interventions are applicable and adaptable to your population needs. The MCH Evidence Center utilizes Harvard University’s Science-Based Intervention Framework to ensure effectiveness by asking the following questions: *What* about the intervention works? *How* does it work? *In what contexts* does it work? And finally, *for whom does it work* and for whom does it *not* work?¹⁴¹ Details about this approach are included in the NPM Toolkit.

As you use resources from the Toolkit, we encourage you to share your thoughts and feedback. This will enable the MCH Evidence Center to track use of the resources in a consistent manner to learn how to better design implementation strategies, monitor uptake and use of interventions, and provide platforms for future research driven by the field.

2. Use a structured approach to integrate evidence into your work to measure process and outcomes. There are many effective approaches for identifying needs and developing programs to address those needs. The MCH Evidence Center uses Results-Based Accountability (RBA) as a suggested method to align program performance (performance-based accountability; e.g., measurement of ESMs) with population goals (population-based accountability; e.g., NPMs and NOMs) and improve measurement of activities.

RBA helps you decide which outcome you would like to address. Begin the process of selecting an intervention by deciding which outcome you would like to address and how you will measure your success in changing that outcome. Choosing the most fitting intervention for your community, setting, population, and context benefits from careful attention to the expected/intended outcomes of the strategy.

- RBA helps to ensure that ESMs align with and advance achievement of NPMs (and eventually NOMs) through a series of 7 performance accountability questions that address:
 - Desired impact change on a targeted group.
 - Mechanisms to deliver services effectively.
 - Ways to engage appropriate partners.
 - How to identify what specifically works to produce measurable outcomes.

¹⁴⁰ <https://www.amchpinnovation.org/>

¹⁴¹ Center on the Developing Child, Harvard University <https://developingchild.harvard.edu/>

- RBA works to strengthen measurement of ESMs through a 4-quadrant system to increase measurement of ESMs by addressing:
 - Quantity of the effort (what did we do? – most basic measure).
 - Quality of the effort (how well did we do it?).
 - Quantity of the effect (is anyone better off?).
 - Quality of the effect (how are they better off? – most advanced measure).

3. Incorporate MCH principles and needs to focus your work. We are mindful of the needs of MCH programs and the need to strategically use and document Title V resources to advance NPMs. This is done by:

- Linking your work back to MCH priorities in that interventions developed are meaningful, measurable, and achievable.
- Ensuring that ESMs always measure the work that is directly related to the appropriate NPM, addresses inequities to advance health equity, and is effective with multiple population groups.
- Leveraging the resources of and coordinating with HRSA MCHB-funded centers.

To accomplish these goals, the MCH Evidence Center suggests using Harvard University’s *Frontiers of Innovation* approach to ask the following questions about evidence-based and evidence-informed interventions as you incorporate them into your work:

- **What about it works?** If we understand the key ingredients, we can replicate them.
- **How does it work?** Being specific about the underlying mechanisms can help us increase the impact.
- **For whom does it work, and for whom does it not work?** When we know who is and isn’t responding, we can make targeted adaptations to improve outcomes.
- **In what contexts does it work?** By evaluating the context in which a program is implemented, we can adapt it for other settings.

With all the time, effort, and resources that go into incorporating evidence-based and evidence-informed interventions into your programming, it is critical to share your successes with Title V state and national programs, legislators, and others who can help support policy change and provide funding for initiatives to ensure adequate and continuous insurance coverage for children and youth. To aid in this task, we encourage you to gather and report information on your use of these interventions to Title V program leaders to shine the spotlight on progress being made at the practice level to support children’s health insurance. These data points could be used to leverage additional funding and/or policy change in the future.

As you work through the process of moving from evidence to action, please reach out to our staff with questions and for technical assistance. We are available to assist you when you need help. Email us at mchevidence@ncemch.org.

Figures and Tables

Figure 1: Flow Chart of the Review Process and Results

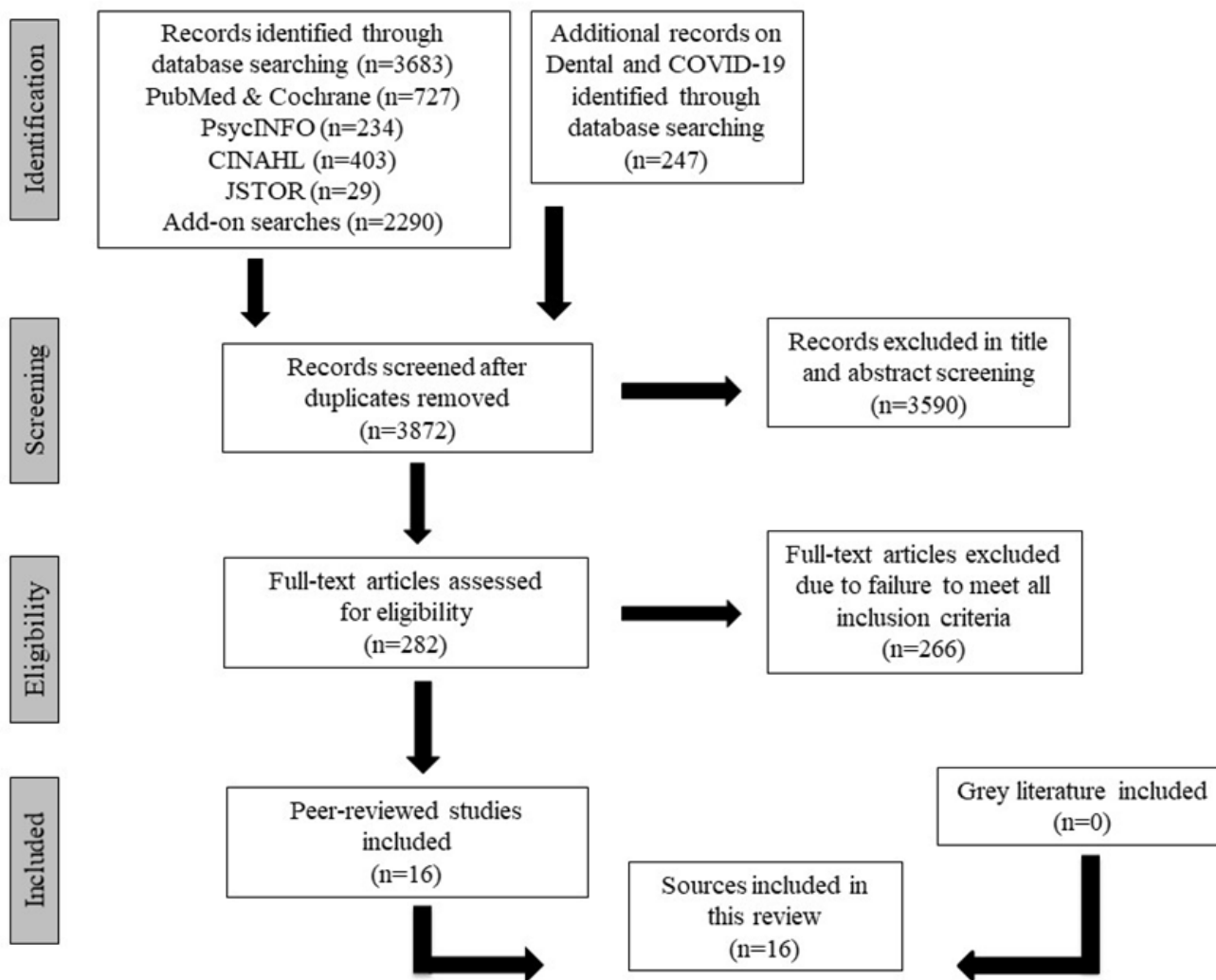
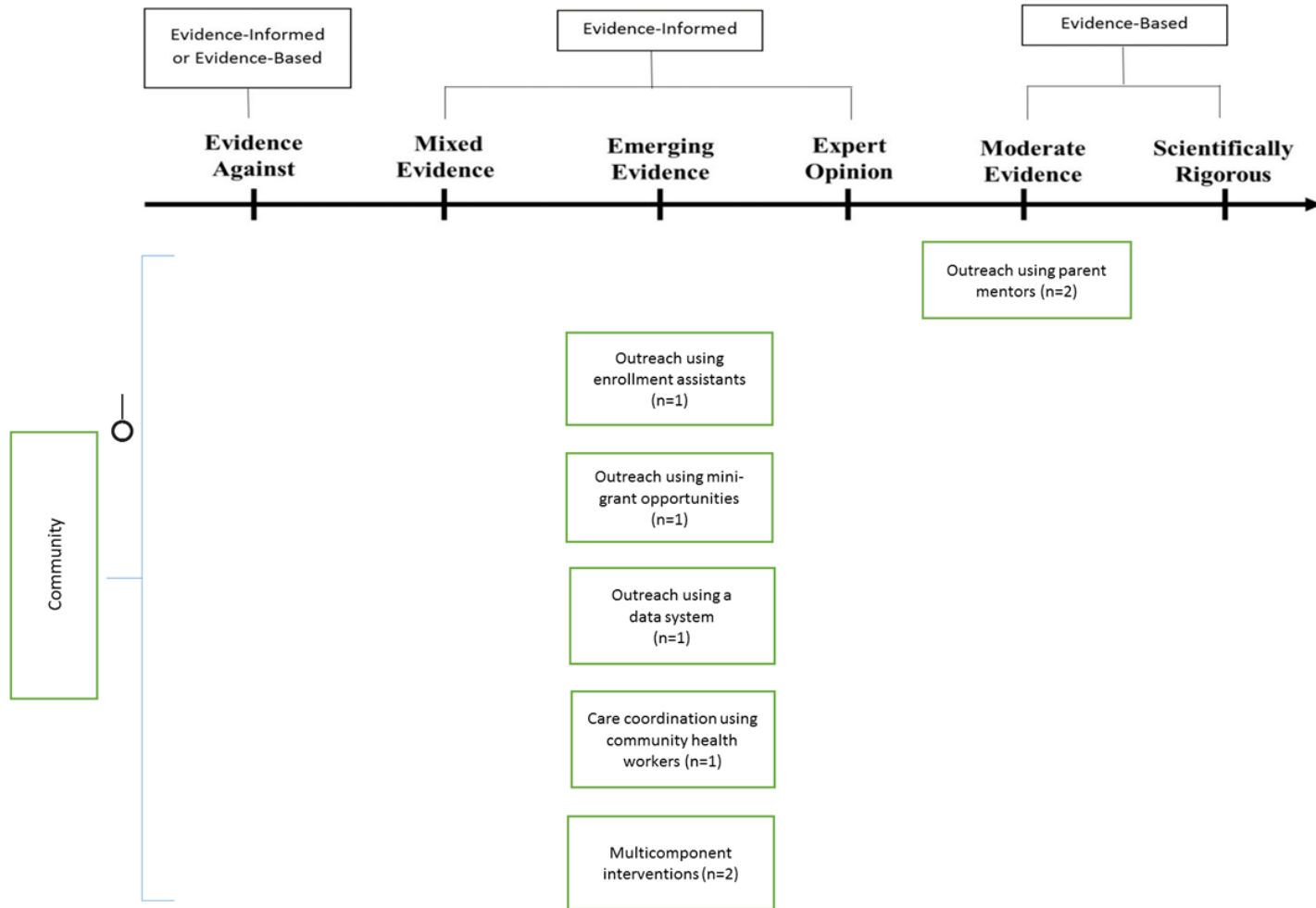


Figure 2: Evidence Continuum for Adequate Insurance



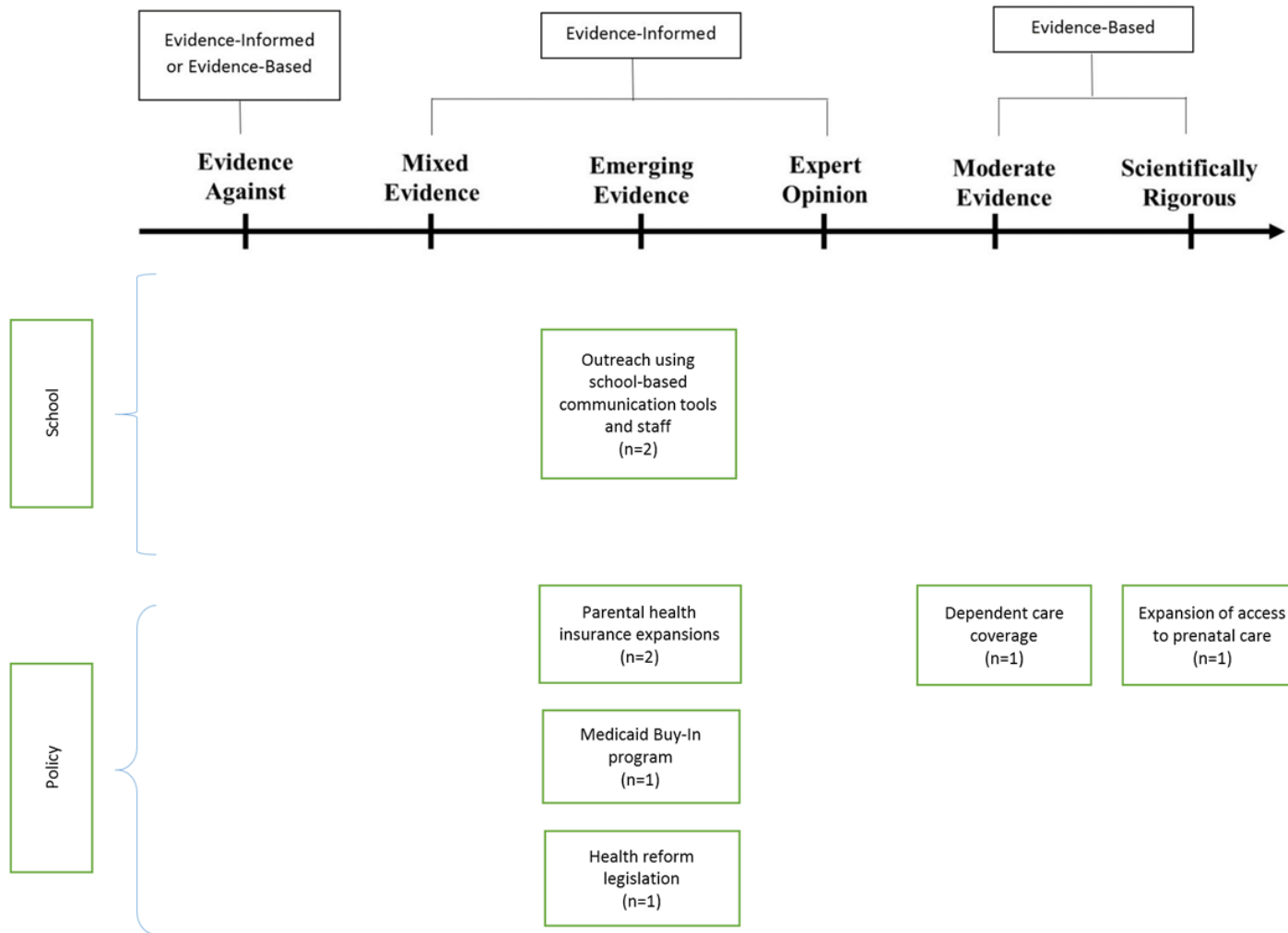


Table 1: Detailed Search Strategies

PubMed Search (limited to the years 2010-2021)

Children’s Health Insurance Program [MeSH] or children’s health insurance [TIAB] (2010-2021)

OR

(health insurance[MeSH] or health insurance[TI] or insurance coverage[MeSH] or underinsur*[-TI] or uninsured[TI]) AND (child[MeSH] or child*[TI]) or children with disabilities[MeSH] [*Limited article type to reviews, systematic reviews, meta-analyses, RCTs, and clinical trials for 2010-15 but no article type limit for 2016-2021*)]

OR

((Health insurance[MeSH] or insurance coverage[MeSH]) AND (child*[TIAB] or children with disabilities[TIAB] or CSHCN or CYSHCN or infant[MeSH] or child, preschool[MeSH] or adolescent[MeSH] or families[TI])) AND (adequate or EPSDT or Medicaid or affordable or “minimal essential coverage” or “essential health benefit*” or value-based purchas* or waiver* or health home* or medical home* or “long-term service* and support*” or LTSS or cost* or continuity or continuous or barrier* or counseling or coordination or “family support” or “foster care” or inequit* or inequalit* or disparit* or healthcare disparities[MeSH] or “managed care” or “mandated benefit*” or “premium assistance” or “relief fund*” or “ACO investment model*” or “ACO financ* model*” or marketplace or exchange or TEFRA or telemedicine or Title V)) [*Limited article type to reviews, systematic reviews, meta-analyses, RCTs, and clinical trials for 2010-15 but no article type limit for 2016-2021*)]

OR

(underinsur*[TI] or out-of-pocket[TI]) AND (health insurance[MeSH] or health insurance[TI] or insurance coverage[MeSH] AND (child[MeSH] or child*[TI]) or children with disabilities[MeSH]) [*Not restricted to article type*]

OR

(churning*[TIAB] or discontinuity[TIAB] or gap*[TIAB] or “minimum essential coverage”[TIAB] or “period* without health insurance”[TIAB]) AND (health insurance[MeSH] or health insurance[TI] or insurance coverage[MeSH] AND (child[MeSH] or child*[TI]) or children with disabilities[MeSH]) [*not limited by article type*]

Dental Care Add-On Search

(dental care for children[MeSH] or ((dental care[MeSH]) or oral health[TI]) and (child[MeSH] or children with disabilities[MeSH]) AND (health insurance[MeSH] or insurance coverage[MeSH] or children’s health insurance program[MeSH]) [*Not restricted by article type*]

COVID-19 Add-On Search

((Children’s Health Insurance Program[MeSH] or children’s health insurance[TIAB]) or (health insurance[MeSH] or health insurance[TI] or insurance coverage[MeSH]) AND (child[MeSH] or child*[TI]) or children with disabilities[MeSH]) AND (Covid-19[MeSH] OR COVID-19[TIAB]) [*Not restricted by article type*]

CINAHL Search

(MM child OR MM child health OR MM child, disabled) AND (MM health insurance OR MM health insurance exchanges OR MM (health insurance portability and accountability act) OR MM community based health insurance) OR (children’s health insurance)).

OR

(MM health insurance OR TI health insurance) AND (infant, newborn, or infant or child, pre-school or child or adolescent)

Exclude Medline records (captured in PubMed search) and limit to English language, United States, and years 2010-2021.

Cochrane Search

- 1 MeSH descriptor: [Children’ Health Insurance Program] explode all trees
- 2 MeSH descriptor [Insurance, Health] this term only
- 3 MeSH descriptor [Child] this term only
- 4 MeSH descriptor [Disabled Children] this term only
- 5 #3 and #4
- 6 #2 and #5
- 7 #1 or #6
- 8 #5
- 9 (health insurance):ti,ab,kw
- 10 #9 and #5
- 11 #7 or #10

PsycInfo Search

- 1 *Health insurance/
- 2 limited 1 to yrs= ‘2010-current’
- 3 “child”.m_titl.
- 4 Explode Child Health/
- exp Pediatrics/
- 6 CSHCN.mp
- 7 CYSHCN.mp
- 8 child*.mp.
- 9 *Special Needs/
- 10 8 and 9
- 11 health insurance.m_titl.
- 12 limit 11 to yr= ‘2010-Current’
- 13 2 or 12
- 14 3 or 4 or 5 or 6 or 7 or 10
- 15 13 or 14

JSTOR Search

“Children’s Health Insurance Program” OR (“health Insurance” and (child* or CSHCH or CY-SCHCN or (child* and (special needs* or disabilit*))), Limited to journal articles and research reports published 2010-2021.

Table 2: Evidence Rating Criteria

Level of Evidence	Evidence Rating	Evidence Criteria: Type	Evidence Criteria: Study Results
Evidence-Based	Scientifically Rigorous	<ul style="list-style-type: none"> Peer-reviewed study results are drawn only from: <ul style="list-style-type: none"> Randomized controlled trials, and/or Quasi-experimental studies with pre-post measures and control groups 	<ul style="list-style-type: none"> Preponderance of studies have statistically significant favorable findings
	Moderate Evidence	<ul style="list-style-type: none"> Peer-reviewed study results are drawn from a mix of: <ul style="list-style-type: none"> Randomized controlled trials Quasi-experimental studies with pre-post measures and control groups Quasi-experimental studies with pre-post measures without control groups Time trend analyses 	<ul style="list-style-type: none"> Preponderance of studies have statistically significant favorable findings
Evidence-Informed	Expert Opinion	<ul style="list-style-type: none"> Grey literature 	<ul style="list-style-type: none"> Experts deem the intervention as favorable based on scientific review
	Emerging Evidence	<ul style="list-style-type: none"> Peer-reviewed study results are drawn from a mix of: <ul style="list-style-type: none"> Randomized controlled trials Quasi-experimental studies with pre-post measures and control groups Quasi-experimental studies with pre-post measures without control groups Time trend analyses Cohort studies 	<ul style="list-style-type: none"> Studies with a close-to-evenly distributed mix of statistically favorable and not significant findings Only cohort studies with preponderance of statistically significant favorable findings
		<ul style="list-style-type: none"> Grey literature 	<ul style="list-style-type: none"> Experts deem the intervention as favorable
Mixed Evidence	Mixed Evidence	<ul style="list-style-type: none"> Peer-reviewed study results are drawn from a mix of: <ul style="list-style-type: none"> Randomized controlled trials Quasi-experimental studies with pre-post measures and control groups Quasi-experimental studies with pre-post measures without control groups Time trend analyses Cohort studies 	<ul style="list-style-type: none"> Studies with a close-to-evenly distributed mix of statistically favorable, unfavorable, and/or not significant findings
		<ul style="list-style-type: none"> Grey literature 	<ul style="list-style-type: none"> Experts deem the intervention as having mixed evidence
Evidence-Based or Evidence-Informed	Evidence Against	<ul style="list-style-type: none"> Peer-reviewed study results are drawn from a mix of: <ul style="list-style-type: none"> Randomized controlled trials Quasi-experimental studies with pre-post measures and control groups Quasi-experimental studies with pre-post measures without control groups Time trend analyses Cohort studies 	<ul style="list-style-type: none"> Preponderance of studies do not have statistically significant findings or have statistically significant unfavorable findings
		<ul style="list-style-type: none"> Grey literature 	<ul style="list-style-type: none"> Experts deem the intervention as being ineffective or unfavorable

Study	Setting	Study Sample			Study Design
		Target Sample	Sample Size	Age Range	
Aller (2014)	School-Based (School districts in Van Buren County, Michigan)	Uninsured children	8,999 children	School-aged children	Cross-sectional pilot study
Caskey (2019)	Community (Coordinated Healthcare for Complex Kids (CHECK) program; Illinois Medicaid)	Children and young adults with chronic disease who receive public insurance	6245 children and young adults (3119 in the control group and 3126 in the intervention group)	Children <1 and youth >18 (the mean age was 11.3 years)	RCT
Chao (2014)	Community (Community-based organizations in Atlanta, Georgia)	Low-income young children and families	279 children	0-10 years	Systems of care framework
DeVoe (2015)	Policy (Oregon Medicaid expansion program)	Children whose parents participated in the Oregon Experiment (Medicaid expansion program)	14,409 children	2-18 years	Randomized natural experiment; generalized estimating equation models
Flores (2018)	Community (Communities in Dallas County, Texas with the highest proportions of uninsured and low-income minority children)	Uninsured children 0-18 years old whose primary caregiver identified them as Latino and uninsured and reported meeting Medicaid/CHIP eligibility criteria for the child	155 subjects (children and parents); 75 in the control group and 80 in the intervention group)	0-18 years	RCT
Flores (2016)	Community (Communities in Dallas County, Texas with the highest proportions of uninsured and low-income minority children)	Primary caregiver had ≥1 child 0 to 18 years old who lacked health insurance but was Medicaid/CHIP eligible, and the primary caregiver self-identified the child as Latino/Hispanic or African-American	237 participants; 114 in the control group and 123 in the intervention group	0-18 years	RCT

Table 3: Study Characteristics

Study	Setting	Study Sample			Study Design
		Target Sample	Sample Size	Age Range	
Fuld (2013)	Community (New York City Department of Health and Mental Hygiene’s Office of Health Insurance Services and the Early Intervention Program)	Uninsured and underinsured young children with special health care needs in New York City participating in the Early Intervention Program	6,500 children in early intervention with a Medicaid number	0-3 years	Program evaluation
Guy (2017)	Policy (States)	Parents ≤ 300% FPL who were eligible for insurance expansions in selected states	19 expansion states (representing 28 expansions) and 22 control states without a parental expansion during the study period	Parents and children; specific ages not stated	Cross-sectional analysis of data
Harding (2017)	Community (Community-health centers in Oregon)	Practice members (e.g., managers, clinician, clinician and non-clinical staff, enrollment assistants) and families using community health centers	4 Community Health Centers (CHC) in Oregon; 26 practice members; 18 adult family members who had at least one pediatric patient	Parents and children; specific ages not stated	Observational cross-case comparative
Hirschi (2019)	Policy (CommonHealth, Massachusetts’s Medicaid Buy-In program)	Parents and caregivers of Massachusetts children with disabilities enrolled in CommonHealth	615 families	0-18 years	Survey
Jenkins (2018)	Schools (Elementary schools in North Carolina)	Uninsured kindergarten-aged children in high economic need counties in North Carolina	300 children; 16 counties were selected as intervention sites that included 278 elementary schools in	4-6 years	Quasi-experimental difference-in-difference and regression discontinuity

Study	Setting	Study Sample			Study Design
		Target Sample	Sample Size	Age Range	
			22 districts; in the second year, expanded to 32 counties		
Phillips (2010)	Community (Community-based organizations)	Children enrolled in Medicaid and PeachCare	6 organizations	Children; specific ages not stated	Participatory approach
Ray (2016)	Community (Community-based organizations and schools in Florida)	Eligible children in Florida’s CHIP		0-17 years	Evaluation assessment
Smith (2019)	Policy (Data from the 2003, 2007, and 2011–2012 waves of the National Survey of Children’s Health (NSCH))	Families with children in Massachusetts	5,760 children in the intervention group (MA), 28,183 children in the comparison group (other New England states)	0-17 years	Quasi experimental difference-in-difference
Swartz (2017)	Policy (Oregon Health Authority)	Pregnant low-income immigrant women and their infants	210,200 mothers and infants	Pregnant women: 12-51 years; Infants: 0-1 years	Quasi experimental difference-in-difference
Wisk (2018)	Policy (Insurance consortium in 3 states: Massachusetts, Maine, and New Hampshire)	Harvard Pilgrim Health Care (HPHC) members who were enrolled continuously as a dependent for at least 1 year between the ages of 16 and 18, from January 2000 to December 2012	131,542 individuals	16-18 years	Retrospective cohort with a pre- to post-comparison

Table 4: Intervention Descriptions

Study	Comparison Group	Description of Intervention	Study Length	Data Collection
Aller (2014)	No comparison group	<p>This is a cross-sectional pilot study designed to employ a school-based outreach effort using existing school communication to identify children who are currently uninsured and may be eligible for state-subsidized health insurance. Additionally, based on the self-identified status of the children not having health insurance, application assistance will be provided to promote enrollment. The pilot program took place in 6 of the 11 school districts in Van Buren County, MI. The school districts were provided with two health insurance status collection forms. Form A was designed to be included with the free and reduced school lunch application; form B was designed to be included as part of the student registration packet and welcome material. The completed Form A and Form B were submitted to the State of Michigan registered application assisting agency for SCHIP application assistance and enrollment. A final step in the process is outreach to eligible respondents by the Michigan Primary Care Association to help ensure that they receive information and access to the healthcare coverage and services they need.</p>	6 months (August-December 2012 data collection period)	Baseline; 6 months
Caskey (2019)	Youth who received usual care (UC) only	<p>In 2014, the University of Illinois Health and Health Sciences System developed a comprehensive care coordination demonstration project designed to provide services for children and young adults with chronic health conditions living in Chicago who are insured by Medicaid. This program, Coordinated Healthcare for Complex Kids (CHECK), took a broad approach to care coordination and health promotion by addressing social determinants of health, caregiver wellness, and mental health needs in addition to chronic disease management. The program targeted children and young adults with diagnoses of asthma, diabetes, sickle cell disease, seizure disorder, or prematurity from birth to age 25 years. All participants were enrolled in the traditional, fee-for-service state Medicaid program or a Medicaid managed care organization (MCO) in Illinois. The CHECK program provided access to multiple services, including care coordination delivered by community health workers (CHWs), mental health services delivered by mental health professionals, and disease-specific health education. Community health workers assessed individual and family needs as well as</p>	May 1, 2014-April 30, 2017; Analyzed in May 2018	12 months prior to randomization; 12 months after randomization

Table 4: Intervention Descriptions				
Study	Comparison Group	Description of Intervention	Study Length	Data Collection
		patterns of health care utilization during the year prior to enrollment to determine specific services offered to each family.		
Chao (2014)	No comparison group	Healthy Beginnings seeks to prevent or reduce health disparities through a community-based, coordinated care approach based in a high quality early learning center. Healthy Beginnings is a system of care that connects children and their families to health insurance and a medical home to support children’s continuing health and development. The system also ensures that children have immunizations, periodic developmental screenings, and follow-up care, with frequent check-ups and assessments where indicated. It also provides families with health education both individually and through monthly workshops for groups of parents. The Healthy Beginnings partners worked together to develop a system of care that supports high-quality preventive health care for all children enrolled at Educare Atlanta. The system is integrated with the work of teachers and other staff at Educare Atlanta, as well as local health care providers, and it ensures that there is an ongoing relationship between parent and physician. The Healthy Beginnings main components are care management, education and parent engagement, and collaborative partnership. Healthy Beginnings employs one registered nurse, known as a health navigator, who supports parents and helps them learn how to work with health care professionals on behalf of their children; the health navigator also coordinates regular visits to pediatricians and other health care providers and resources.	1 year (2013)	Baseline and end-of-year
DeVoe (2015)	Children whose parents were not randomly selected to participate in Oregon experiment (Medicaid expansion project)	Oregon’s Medicaid expansion provided an opportunity to investigate a potential causal relationship between insurance coverage for parents and their children. This expansion, often referred to as the Oregon Experiment, gave a subset of uninsured, low-income adults access to Medicaid through a randomized selection process. In 2008, Oregon’s Medicaid program, the Oregon Health Plan (OHP), sought to enroll 10,000 non-categorically eligible (i.e., not meeting federally mandated Medicaid eligibility criteria) low-income adults into its expansion program (OHP Standard), which had been closed to new enrollment since 2004. During a random selection process, uninsured, low-income adults were encouraged to put their names on a reservation list. From this list, there	8 years (2002-2010 data collection)	Children’s Medicaid or CHIP coverage, assessed monthly and in 6-month intervals relative to their parent’s selection date

Study	Comparison Group	Description of Intervention	Study Length	Data Collection
		were 8 random drawings; individuals selected in these drawings were invited to apply for OHP coverage. The reservation list included more than 90,000 registrants; of these, approximately 30,000 were randomly selected to apply and about 10,000 were ultimately enrolled in OHP. Not everyone selected to apply completed an application, and not all applicants met enrollment eligibility criteria. This study of the Oregon Experiment examined the longitudinal effect of parents randomly selected to apply for Medicaid on their child’s Medicaid or CHIP coverage. The objective was to estimate the effect on a child’s health insurance coverage status when (1) a parent randomly gains access to health insurance and (2) a parent obtains coverage.		
Flores (2018)	Control children and families received standard care (traditional Medicaid or CHIP outreach and enrollment offered by the Texas Health and Human Services Commission including bilingual radio, television, and newspaper ads, messages on public transit, websites with application links, and outreach at day care centers)	The aim of the Kids’ Health Insurance by Educating Lots of Parents (Kids’ HELP) study was to evaluate the effects of parent mentors – Latino parents with children covered by Medicaid or the Children’s Health Insurance Program (CHIP) – on insuring Latino children in a community-based trial of uninsured children from 2011-2015. Parent mentors were trained to assist families in getting insurance coverage, accessing health care, and addressing social determinants of health. The intervention group was assigned parent mentors – trained, fluently bilingual Latino parents who had at least one child insured by Medicaid or CHIP for at least one year. The study team recruited parent mentors from a primary care clinic or a school and via referrals from other mentors. Mentor candidates were screened and interviewed to recruit people characterized by reliability, promptness, organizational skills, persistence, and motivation to help families with uninsured children. The team aimed to match ZIP codes of residence for mentors and participants to promote neighborhood relationships, social support, and economic investment. Mentors were paid \$15/hour. Parent mentors attended a two-day training and received training manuals in English and Spanish with 9 training topics and one on sharing experiences. Parents mentors provided 8 services to intervention children and families (e.g., teaching about types of insurance programs and application processes; helping parents complete and submit children’s insurance applications; acting as family	4 years (2011-2015)	Baseline for all participants; Primary outcome and insurance-related measures monthly; Other outcomes assessed 6 and 12 months after study enrollment, except parental satisfaction evaluated at 12 months after enrollment; Participants who had completed 12-month follow-ups and agreed to long-term follow-up were surveyed

Table 4: Intervention Descriptions				
Study	Comparison Group	Description of Intervention	Study Length	Data Collection
		advocates by liaising between families and Medicaid or CHIP agencies; and helping parents complete and submit applications for coverage renewal).		quarterly for up to 2 additional years
Flores (2016)	Control group received standard-of-care outreach/enrollment by Texas Medicaid/CHIP (2006-2007 outreach/education campaign to raise families' CHIP/Medicaid awareness, emphasize the importance of health insurance, explain how to apply for coverage, etc.)	Six million children are uninsured, despite two-thirds being eligible for Medicaid/CHIP, and minority children are at especially high-risk. The study team conducted a randomized trial of the effects of parent mentors on insuring minority children. Parent mentors were experienced parents with ≥1 Medicaid/CHIP-covered child who received 2 days of training, then assisted families for 1 year with insurance applications, retaining coverage, medical homes, and social needs; controls received traditional Medicaid/CHIP outreach. Parent mentors were recruited from June 2011 to August 2013 at a hospital-based Resident Continuity Clinic, charter school, and via established parent mentor referrals. Interviews were conducted to identify optimal candidates characterized by reliability, timeliness, persistence, and desire to help families with uninsured children. From 31 candidates interviewed, 15 parent mentors were chosen. Parent mentors received monthly stipends for each family mentored. Parents mentors and intervention participants were matched by race/ethnicity and zip code, whenever possible. Latino families were matched with fluently bilingual Latino parent mentors. Session content for the 2-day training was based on training provided to community case managers in the research team's previous successful RCT and addressed 9 topics (e.g., why health insurance is so important; being a successful parent mentor; parent mentor responsibilities; Medicaid and CHIP programs and the application process; the importance of medical homes).	4 years (June 2011 to April 2015)	Primary and other insurance outcomes assessed monthly; Other outcomes evaluated 6 and 12 months post-enrollment, except parental satisfaction assessed at 12 months post-enrollment; For participants agreeing to long-term follow-up, questionnaires were administered every 3 months for up to 2 years
Fuld (2013)	No comparison group	The New York City Department of Health and Mental Hygiene's Office of Health Insurance Services has partnered with the department's Early Intervention Program to implement a Service Integration Model to enroll CSHCN, aged 0 to 3, into public health insurance. This model is based on a combined approach of educational messaging to clients and individual counseling or assistance to facilitate enrollment and renewal of health insurance serving a hard-to-reach and vulnerable population. This model uses data from program databases and staff from children's programs to proactively identify uninsured and	2 years (2008-2010)	Not stated

Table 4: Intervention Descriptions

Study	Comparison Group	Description of Intervention	Study Length	Data Collection
		<p>underinsured children and facilitate their enrollment into public health insurance. The model has 3 key components allowing for comprehensive and continuous coverage for CSHCN: (1) integration of program messages within the Early Intervention Program (e.g., welcome letter to parents, brochure and poster for provider agencies), (2) data matching with child program data (Early Intervention data, Medicaid data, Census data), and (3) incorporation of program staff (Office of Health Insurance Services child benefit advisors) to work directly with parents (e.g., available in multiple languages and at convenient hours and locations). The model overcomes enrollment barriers by using consumer-friendly enrollment materials and one-on-one assistance, and shows the benefits of a comprehensive and collaborative approach to assisting families with enrollment into public health insurance. A key strategy is to prevent gaps in coverage resulting when parents fail to renew their children’s coverage. Staff are strategically co-located at the offices of providers who serve children enrolled in the Early Intervention Program.</p>		
Guy (2017)	22 states that did not offer parental expansion	<p>To assess the impact of parental health insurance expansions from 1999 to 2012 on the likelihood that parents are insured; their children are insured; both the parent and child within a family unit are insured; and the type of insurance. Cross-state and within-state multivariable regression models estimated the effects of health insurance expansions targeting parents using 2-way fixed effect modeling and difference-in-difference modeling. All analyses controlled for household, parent, child, and local area characteristics that could affect insurance status.</p>	Cross-sectional analysis of 2000–2013 data	Cross-sectional analysis of 2000–2013 data
Harding (2017)	No comparison group	<p>Community Health Centers (CHCs) serving low-income populations are well-positioned to support patients navigating the complexities of the public health insurance application process and prevent lapses in patient insurance coverage. Some CHCs have specialized staff called Enrollment Assistants, dedicated to such efforts. All four clinics in the study had Enrollment Assistants dedicated to assisting patients with health insurance application processes. They tailored the type of assistance provided based on family circumstances and needs, and they provided help such as: determining eligibility and/or guiding patients through</p>	July 1, 2013 - September 30, 2013	2-3-day site visits at each location (observations and interviews) between July 1, 2013, and September 30, 2013

Table 4: Intervention Descriptions				
Study	Comparison Group	Description of Intervention	Study Length	Data Collection
		application processes (e.g., assistance with completing the application forms, understanding requirements, and providing appropriate documentation). This study presents qualitative findings on patients’ perceptions and receptivity to insurance application assistance provided by CHC site-based Enrollment Assistants.		
Hirschi (2019)	No comparison group	Medicaid Buy-In programs for children with disabilities have the potential to increase access to benefits while reducing out-of-pocket costs for families whose income exceeds Medicaid eligibility. Children with disabilities enrolled in Medicaid Buy-In programs receive the federally mandated EPSDT benefit provided to all Medicaid recipients younger than 21 and ensures access to all medically necessary services. Medicaid Buy-In programs can also be used to supplement benefits for children whose healthcare needs exceed the amount, scope, and duration of services provided by their private insurance. This study sought to understand how parents and caregivers of children with disabilities perceive access to care under CommonHealth, MA’s Medicaid Buy-In program. Created in 1988, MassHealth CommonHealth allows families of children with disabilities to buy into the state’s Medicaid program to cover more services, including services provided insufficiently (such as therapies) or not covered at all (such as home nursing and personal care attendant services) and to defray many of the costs that private insurance does not cover. Families pay a monthly premium for CommonHealth, which is adjusted based on family size and income in relation to the FPL. Children with disabilities who do not have other insurance can use CommonHealth as their sole insurance; Children with disabilities who have other insurance can use CommonHealth as a secondary payer to supplement other healthcare coverage and reduce families’ out-of-pocket costs due to the deductible, co-payments, and coinsurance for the child.	July – December 2012	Online survey or telephone interview to complete survey
Jenkins (2018)	No comparison group	Healthy and Ready to Learn (HRL), is a school-based outreach initiative designed to help identify and enroll uninsured kindergarten-aged children in areas of high economic need using schools as the key point of intervention. This school-based intervention worked with school nurses and staff by providing regional trainings on how to use a required health assessment form, submitted at school entry, to	3 years: 2007-2008 school year through 2010-2011 school year	Baseline (1 year prior to intervention/ kindergarten); 2 intervention years

Study	Comparison Group	Description of Intervention	Study Length	Data Collection
		identify uninsured children who could be eligible but not enrolled in NC’s public health insurance programs. The main component of the initiative was a series of regional trainings in the HRL school districts for local school-based personnel, primarily school nurses and administrative staff on the Kindergarten Health Assessment form (KHA). The HRL training highlighted the section of the KHA form where parents indicate whether the child has Medicaid, private insurance or HMO, or no insurance. Nurses and staff could then identify uninsured children and refer their families to local partners for potential Medicaid/CHIP enrollment. HRL staff conducted a similar web-based training with non-school-based physicians, nurses, and healthcare providers in HRL counties to encourage them to talk with families about insurance coverage during the well-child visit for the purposes of filling out the KHA form. HRL also involved continuous community-based outreach throughout the study period. This included attending community events, providing outreach materials in various languages, assisting schools in their outreach programs and troubleshooting, and contacting local organizations and community leaders to help inform families about CHIP and Medicaid.		
Phillips (2010)	No comparison group	The Georgia Utilization Minigrant Program provided small grants to community-based organizations. The program was a novel way to leverage modest funding and resources to promote community involvement to improve enrollment and utilization of Medicaid and SCHIP. The program generated community-based outreach efforts as a strategy to encourage the appropriate utilization of primary and preventive care services provider for children enrolled in Medicaid and PeachCare. Rather than the state providing contracts and going from the top-down, the minigrants permitted local solutions to be proposed by community-based organizations best positioned to understand their community’s unique local needs.	11 months	
Ray (2016)	No comparison group	Florida Covering Kids & Families (FL-CKF) is dedicated to developing innovative outreach methods for enrolling and retaining eligible children in CHIP. FL-CKF has developed a data system that allows it to evaluate the effectiveness and success of statewide enrollment and retention efforts. The data system includes a Checkbox survey system which allows data be entered in a uniform format and	2 years	Two waves of data collection; Cycle II – January 2012-February 2013

Study	Comparison Group	Description of Intervention	Study Length	Data Collection
		forces vital data points to be completed. These data are then transmitted to the state to obtain timely application determination information on enrollments. The data system helps FL-CKF to determine which outreach strategies are successful and where changes need to be made to increase effectiveness. The system also provides feedback to community outreach partners in order to enable follow up with families when needed. The system is also easily replicable for use by other organizations enrolling children in health insurance.		
Smith (2019)	Families with children living in New England States (Maine, Vermont, New Hampshire, Rhode Island, and Connecticut)	Massachusetts implemented the ACA mandates before the ACA was enacted and was the model for the ACA. This study compared pre and post ACA adult mandates in MA and compared to post ACA data on insurance and access rates for children in other New England states that were similar in demographics.	Data over 10 - 11 years	Data used was collected from one-time point before health reform occurred in Massachusetts (2003) and two points post-reform (2007 and 2011)
Swartz (2017)	Regular Medicaid pregnancies	Researchers used a difference-in-difference design that leverages the staggered rollout of Emergency Medicaid Plus by county from 2008 to 2013 as a natural experiment to estimate the effect on health service utilization for women and health outcomes for their infants. Regular Medicaid pregnancies were used as an additional control in a triple difference design.	5 years	
Wisk (2018)	Maine and New Hampshire (DCE without other reforms)	To determine the effect of state-level dependent coverage expansion (DCE) with and without other state health reforms on exit from dependent coverage for adolescents and young adults (AYA). Several states, including Massachusetts, New Hampshire, and Maine, adopted state DCE policies in 2007 that extended dependent coverage up to age 26, with the Massachusetts policy accompanied by other health reforms that were later incorporated into the ACA, including an individual mandate, a Medicaid expansion, creation of a health insurance exchange with subsidies, and prohibition of pre-existing condition exclusions. In 2010, the ACA implemented a federal DCE, which extended these policies nationally and mitigated some of the state-specific restrictions. State and federal	Data from January 2000 – December 2012	Pre-reform (January 2000–December 2006); Post-state reform (January 2007–September 2010); and Post-federal reform (October 2010–December 2012)

Table 4: Intervention Descriptions

Study	Comparison Group	Description of Intervention	Study Length	Data Collection
		<p>health reforms may modify the effects of a DCE by altering the coverage options and incentives for coverage for AYA—for instance, Medicaid expansion, creation of health insurance exchanges with subsidies, and prohibition of pre-existing condition exclusions may all facilitate new sources of insurance for AYA who have previously had dependent coverage. An individual mandate, which went into effect nationally in 2014 (nearly 4 years after the federal DCE), may drive AYA to maintain or re-establish dependent coverage to meet the coverage requirement and avoid the associated penalty. Adding a young adult dependent to an existing family plan at no additional cost through a DCE creates a stronger price effect than purchasing individual coverage through an exchange, even with a subsidy. The study team hypothesized that a DCE would have a greater impact on AYA dependent coverage retention in a state with other reforms (specifically an individual mandate) than in states with a DCE only. Using health plan enrollment data for AYA and their families from three states, the team constructed a large, longitudinal cohort to examine the additional impact of other health reforms on the effect of a DCE on exit from dependent coverage among AYA.</p>		

Table 5: Data Sources and Outcomes			
Study	Data Source	Outcome Measures	Results
Aller (2014)	Survey data	Survey data from school districts participating in pilot study; insurance application data available from a 3 rd party administrator (Maximus) contracted by the state of Michigan	As a result of the survey, 156 children were identified as not having health insurance. This represents more than 44% of the 358 children who are eligible for State subsidized health insurance, in the participating school districts, but are uninsured. Enrolling these children will help the State of Michigan to meet targeted enrollment gains and earn CHIPRA performance bonus payments. The additional funds from higher CHIPRA bonus payments could be used to provide the resources to fund the following specific recommendations, per the study team: 1) the Michigan Department of Community Health could work with the Michigan Department of Education to modify the free and reduced lunch application to capture the health-insurance status of students; 2) the Michigan Department of Community Health should lead the effort to incorporate a direct systematic check into the free and reduced lunch program to capture whether or not the student has insurance; and 3) the Michigan Department of Community Health should provide resources from the expected performance bonus to work with schools across the state to implement the change.
Caskey (2019)	Illinois Medicaid paid claims for CHECK participants using the Care Coordination Claims Data (CCCD) provided by the Illinois Department of Healthcare and Family Services	Mean annual Medicaid expenditures, mean annual health care utilization by category (ED and inpatient), and chronic disease type and risk level	In this analysis of the Chicago-based CHECK program (a large care-coordination initiative for low-income children and youth with chronic health conditions), overall Medicaid expenditures and utilization decreased considerably during the first year of the CHECK program for both CHECK participants and the usual care group. Notably, expenditures did not increase among CHECK participants, which has been noted in other care coordination programs. The rate of inpatient and ED utilization decreased for both groups. The mean (SD) inpatient utilization before enrollment in CHECK was 63.0 (344.4) per 1000 PYs for the intervention group and 69.3 (370.9) per 1000 PYs for the usual care group, which decreased to 43.5 (297.2) per 1000 PYs and 47.8 (304.9) per 1000 PYs, respectively, after the intervention.
Chao (2014)	Questionnaire data	Satisfaction, insurance status, immunization status, health screenings	Results suggest that the Healthy Beginnings System of Care has been effectively implemented and has exceeded expectations in terms of achieving the goals of the State of Georgia Governor's Office for Children and Families. Data indicated overwhelmingly positive satisfaction with the system of care: 74% of respondents strongly agreed that they were satisfied. Very few respondents (fewer than 6%) reported that they were neutral, and none strongly disagreed that they were satisfied. In terms of short-term outcomes for participating children, Healthy Beginnings exceeded all of its performance requirements

Table 5: Data Sources and Outcomes			
Study	Data Source	Outcome Measures	Results
			from the Governor's Office for Children and Families in 2013. For example, more than 90% of the children had health insurance and were up-to-date in their immunizations. Nearly all children visited a medical home at least annually, and 98% were current with developmental screenings, according to the Ages and Stages Questionnaires. By building upon the partnerships formed through the foundation's community change effort, Healthy Beginnings has dramatically increased neighborhood children's access to health care and forms the basis for a cost-effective approach that can be replicated in other communities.
DeVoe (2015)	The Oregon Experiment's reservation list data; Oregon Health Plan (OHP) administrative data	Children's Medicaid or CHIP coverage, assessed monthly and in 6-month intervals relative to their parent's selection date.	Children whose parents were randomly selected to apply for Medicaid had 18% higher odds of being covered in the first 6 months after parent's selection compared with children whose parents were not selected. In the immediate period after selection, children whose parents were selected to apply for Medicaid significantly increased from 3830 (61.4%) to 4152 (66.6%) compared with a non-significant change from 5049 (61.8%) to 5044 (61.7%) for children whose parents were not selected to apply. Children whose parents were randomly selected to apply for Medicaid had 18% higher odds of being covered in the first 6 months after parent's selection compared with children whose parents were not selected (adjusted odds ratio [AOR] = 1.18; 95% CI, 1.10–1.27). The effect remained significant during months 7 to 12 (AOR = 1.11; 95% CI, 1.03–1.19); months 13 to 18 showed a positive but not significant effect (AOR = 1.07; 95% CI, 0.99–1.14). Children whose parents were selected <i>and</i> obtained coverage had more than double the odds of having coverage compared with children whose parents were not selected and did not gain coverage.
Flores (2018)	Kids' HELP trial data; questionnaires	Primary outcome – child obtained health insurance; parental satisfaction with process of obtaining insurance; long-term insurance coverage after end of parent mentor intervention; access to health care; unmet	The study found that parent mentors were more effective than traditional methods in insuring children (95% vs. 69%), achieving faster coverage and greater parental satisfaction, reducing unmet health care needs, providing children with primary care providers, and improving the quality of well-child and subspecialty care. Children in the parent-mentor group had higher quality of overall and specialty care, lower out-of-pocket spending, and higher rates of coverage two years after the end of the intervention (100% vs. 70%). Parent mentors are highly effective in insuring uninsured Latino children and eliminating disparities. Parent mentors, as a special category of community health workers, could be an excellent fit with and complement to current state community health worker models. Kids' HELP also would seem to be a promising intervention at the federal level, regardless of the

Table 5: Data Sources and Outcomes

Study	Data Source	Outcome Measures	Results
		health care needs; quality of pediatric care; parental satisfaction with care; mean use of and out-of-pocket spending on health services; parental reported financial burden	outcome of federal debates about Medicaid, CHIP, and future directions and financing of these programs. More covered Latino children, better outcomes, reduced costs, higher care quality, improved parental satisfaction, and job creation would seem to constitute a potent combination of benefits for the nation. This RCT documented that the Kids’ HELP intervention is significantly more efficacious than traditional Medicaid and CHIP methods of insuring Latino children. Kids’ HELP eliminates coverage disparities for Latino children, insures children more quickly and with greater parental satisfaction than among control parents, enhances health care access, reduces unmet needs, improves the quality of well-child and subspecialty care, reduces out-of-pocket spending and family financial burden, empowers parents, and creates jobs. Kids’ HELP could be implemented as part of existing state community health worker models and federal Medicaid and CHIP outreach and enrollment grants.
Flores (2016)	Kids’ HELP trial data; questionnaires; national, state, and regional surveys	Primary outcome – child obtained health insurance; health status and health-related quality of life; access to care and unmet needs; use of health services and out-of-pocket costs; quality of care; parental satisfaction with care; family financial burden and missed school and work days due to child’s illness	In the Kids’ HELP trial, the intervention was more effective than traditional outreach/enrollment in insuring uninsured minority children, resulting in 95% of children obtaining insurance vs. 68% of controls. The intervention also insured children faster, and was more effective in renewing coverage, improving access to medical and dental care, reducing out-of-pocket costs, achieving parental satisfaction and quality of care, and sustaining insurance after intervention cessation. This is the first RCT to evaluate the effectiveness of parent mentors in insuring uninsured children. Kids’ HELP could possibly save \$12.1 to \$14.1 billion. Parent mentors were more effective in improving access to primary, dental, and specialty care; reducing unmet needs, achieving parental satisfaction with care, and sustaining long-term coverage. Parent mentors resulted in lower out-of-pocket costs for doctor and sick visits, higher well-child care quality ratings, and higher levels of parental satisfaction and respect from children’s physicians. Findings suggest that parent mentors and analogous peer mentors for adults might prove to be highly cost-effective interventions for reducing or eliminating insurance disparities and insuring all Americans.
Fuld (2013)	Evaluation data	Number of children enrolled and coverage renewed; churning rate	Since 2008, more than 5,000 children in the Early Intervention Program have been successfully enrolled and coverage renewed in Medicaid through the Service Integration Model. In 2008, the study team found that children in the Early Intervention Program had a

Table 5: Data Sources and Outcomes

Study	Data Source	Outcome Measures	Results
			34% churning rate for Medicaid because of enrollment barriers and misconception of the Early Intervention Program as a replacement for Medicaid. By 2010, the churning rate for clients assisted through Office of Health Insurance Services was reduced from 34% to 8%. The Office of Health Insurance Services will modify the Service Integration Model to respond to New York State’s implementation of the Health Insurance Exchange required by the 2010 ACA. The model is replicable by other government agencies serving the uninsured and underinsured. Partnerships across government programs and agencies offer opportunities to enroll hard-to-reach populations into public health insurance. The model reflects how government programs can work together to improve rates of enrollment and retention in public health insurance. The key elements of integration of program messages, data matching, and staff involvement allow for the model to be tailored to the specific needs of other government programs.
Guy (2017)	2000–2013 March supplements to the Current Population Survey, with data from the Medical Expenditure Panel Survey—Insurance Component and the Area Resource File	Increase in coverage for both parents and children	Expansions increased parental coverage by 2.5 percentage points and increased the likelihood of both parent and child being insured by 2.1 percentage points. Substantial variation was observed by type of expansion. Public expansions without premiums and special subsidized plan expansions had the largest effects on parental coverage and increased the likelihood of jointly insuring both the parent and child. Higher premiums were a substantial deterrent to parents’ insurance. Our findings suggest that premiums and the type of insurance expansion can have a substantial impact on the insurance status of the family. The most effective expansions for parental insurance coverage were those for traditional Medicaid coverage without premiums and for special subsidized plans that subsidized costs for individuals to purchase state-sponsored plans. These findings can help inform states as they continue to make decisions about expanding Medicaid under the Affordable Care Act to cover all family members.
Harding (2017)	Observations and interviews	Keep families insured by assisting with public insurance application processes	CHC Enrollment Assistants were valuable resources for families applying for public health insurance. The assistance these Enrollment Assistants provided helped families understand the process and avoid mistakes and delays while patients valued their advice and their pragmatic, hands-on application assistance.
Hirschi (2019)	Survey data	Child characteristics, healthcare needs,	This study suggests that the MassHealth CommonHealth Buy-In program improves access to care for children with disabilities by providing the benefits that were limited in scope or

Table 5: Data Sources and Outcomes

Study	Data Source	Outcome Measures	Results
		general client satisfaction, availability, accessibility, accommodation, affordability, and acceptability	unavailable through other insurance before enrollment and by making available services more affordable. Parents reported that this increased access resulted in improvements in their child’s health or functioning, reduced stress on the parents and families, and reduced financial strain. Overall, many respondents appreciated the CommonHealth program. Despite these benefits, other families reported that they continued to face barriers in access to care for their children with disabilities. They reported difficulty in finding mental health or dental care, as many of these providers (as well as other specialists) did not accept MassHealth. Even with CommonHealth, families still had high out-of-pocket costs due to services that are not covered or high CommonHealth premiums. Families also struggled with complex paperwork requirements. Policy and administrative changes could improve the program and further increase access to care for children with complex, costly conditions. Adopting a Medicaid Buy-In program may be an effective way for other states to create a pathway to Medicaid for children with disabilities whose family income is too high for Medicaid and who have unmet needs and/or whose families incur high out-of-pocket costs for their care.
Jenkins (2018)	Medicaid and CHIP administrative data, focus groups, key informant interviews	Program participation, health insurance enrollment rate, well-child exam rate	The initiative increased enrollment rates by 12.2% points and increased well-child exam rates by 8.6% points in the regression discontinuity design models, but not differences-in-differences, and did not significantly increase well-child visits. Findings demonstrate the potential benefits of using schools as a point of intervention in enrolling young children in public health insurance and as a source of trusted information for low-income parents.
Phillips (2010)	Questionnaires, telephone interviews, one-on-one counseling, application assistance, home visits	Levels of enrollment, appointment setting and tracking, referrals	Responses suggest that the program improved levels of enrollment, appointment-setting and referrals for social and other services. Common facilitators and barriers to success and ways to address them were also identified. Elaboration on each of the facilitators of success led to the development of several recommendations as guidance for future outreach funding programs such as: staffing, data systems, collaboration and how to address incentives and barriers.
Ray (2016)	Checkbox Survey Solutions data system	Enrollment status, outreach strategy	The highest number of application submissions were through outreach at a child’s school or childcare facility, through a community-based organization, or through targeted outreach events. However, even though those strategies resulted in the largest number of

Table 5: Data Sources and Outcomes

Study	Data Source	Outcome Measures	Results
			<p>application, approval and denial rates show which of these strategies (through a CHIPRA grant partner site or government agency) yielded the highest enrollments. This information can be further stratified by individual project partner to show which strategies are working best in that region. The improved data collection system of Cycle II enables FL-CKF to better monitor the efforts of project partners by tracking monthly progress toward grant deliverable goals.</p>
Smith (2019)	National Survey of Children’s Health (NSCH)	Reduction in uninsured, access to specialty care, access to primary care	<p>No significant differences in demographics among children in the states. Expanding adult-oriented health access policies in MA was associated with a trend toward reduced uninsurance and improved access to specialty care for children overall at 5 years post-reform. For low-income children, health reform was associated with increased access to a personal doctor for children previously Medicaid-eligible and increased access to specialty care for children newly Medicaid-eligible.</p>
Swartz (2017)	Medical claims data from January 1, 2003 through October 1, 2015	Prenatal visits, receipt of adequate prenatal care, number of well-child checks, outpatient and ER visits, vaccinations, low birth weight, preterm birth, infant death	<p>After expansion of access to prenatal care, there was an increase in prenatal visits (7.2 more visits, 95% CI 6.46 to 7.98), receipt of adequate prenatal care (28% increased rate, CI 26 to 31), rates of diabetes screening (61% increased rate, CI 56 to 65) and fetal ultrasounds (74% increased rate, CI 72 to 77). Maternal access to prenatal care was also associated with an increased number of well-child visits (0.24 more visits, CI 0.07 to 0.41), increased rates of recommended screenings and vaccines, and reduced infant mortality (-1.04 per 1000, CI -1.45 to -0.62) and rates of extremely low birth weight (<1000g) (-1.5 per 1000, CI -2.58 to -0.53).</p>
Wisk (2018)	Enrollment and claims data from Harvard Pilgrim Health Care (HPHC), a large not-for-profit health plan with over 1 million members in commercial plans	Reduction in exit from dependent coverage	<p>Implementation of DCE with other reforms was significantly associated with a 23% reduction in exit from dependent coverage among AYA compared to the reduction observed for DCE alone. Additionally, comprehensive reforms were associated with over two additional years of dependent coverage for the average AYA and a 33% increase in the odds of regaining dependent coverage after a prior loss. Findings suggest that an individual mandate and other reforms may enhance the effect of DCE in preventing loss of coverage among AYA. The joint effect of these policy levers is also associated with maintenance of dependent coverage until an older age and increased likelihood of regaining dependent coverage after an initial disenrollment. The study also found greater use of dependent coverage after the federal-dependent coverage expansion than after state-dependent</p>

Table 5: Data Sources and Outcomes

Study	Data Source	Outcome Measures	Results
	<p>concentrated in Massachusetts, New Hampshire, and Maine</p>		<p>coverage expansions in both MA and ME/NH. Further increases in dependent coverage for AYA may have resulted from implementation of the federal individual mandate and other ACA policies after 2014, in addition to dependent coverage expansion.</p> <p>Findings suggest that the impact of this popular policy may be substantially enhanced in conjunction with other reforms, such as an individual mandate, which may induce AYA to take full advantage of the DCE. Without a mandate, some AYA may drop dependent coverage, especially those who are healthy (importantly, the combination of a DCE plus mandate may provide a mechanism for healthy AYA to remain in the risk pool) or those whose families would have lower premium costs without a dependent. However, with a mandate, retention of dependent coverage remains economically attractive for AYA who have access to a family plan (especially a family plan with lower cost-sharing) rather than purchasing coverage on their own.</p> <p>In addition to reductions in the odds of and time to dependent coverage exit, DCE was associated with further coverage gains for AYA in the form of regained dependent coverage. Specifically, AYA were over twice as likely to regain their previously lost dependent coverage after state DCE was enacted, and this policy effect was significantly boosted after federal DCE was enacted. Importantly, the salutary effects of DCE do not extend to uninsured AYA, those who were previously publicly insured, or those whose parents do not have access to commercial insurance with an affordable dependent coverage option. Other ACA policies, such as health insurance exchanges (or marketplaces) and Medicaid expansions, have the potential to provide new coverage options for these AYA who may not have access to dependent coverage through their parents.</p>

Table 6: Limitations	
Study	Limitations
Aller (2014)	<ol style="list-style-type: none"> 1. There are differing levels of understanding of the use and distribution of the two survey addendums. Most participating school districts reported responses on Form A—the addendum to the free and reduced lunch application, whereas on district reported results only using Form B. There were other discrepancies between school districts as well. For example, in most cases, the free and reduced lunch addendum was distributed by the school district; however, the registration material was not universally distributed. 2. Another potential limitation is the fact that many students are direct certified for free and reduced lunch based on participating in other state assistance programs and do not fill out a free and reduced lunch application. Also, both Form A and Form B responses were handwritten and did not include the respondents’ telephone number or email addresses, making it difficult to follow up. 3. In some cases, the Outreach follow-up mailed by the Michigan Primary Care Association was undeliverable, and in other cases, the respondents reported that the student did in fact already have health insurance.
Caskey (2019)	<ol style="list-style-type: none"> 1. First, this was a care delivery program; thus, the services provided to participants were based on participant needs and resources available and were not equal across all participants. This is different from traditional clinical trials, in which uniformity of exposure are a priority. 2. Second, there are limitations to administrative claims data, including the risk of misclassification of diagnoses, miscoding, or duplicate claims. 3. Third, identification of CHECK eligible participants was conducted by the individual Medicaid MCO using the eligibility criteria provided by CHECK; however, some participants did not meet all CHECK eligibility criteria (e.g., no targeted CHECK diagnosis). This could be because of errors in the claims data or errors in how the payers identified eligibility. 4. Fourth, CHWs are a growing but varied workforce, and the effectiveness of care coordination efforts likely varied by CHW as well.
Chao (2014)	None listed.
DeVoe (2015)	<ol style="list-style-type: none"> 1. The OCHIN data allowed identification of parental linkages without requiring that both parent and child be insured by Medicaid at some point. It also allowed the capture of registrants who had OHP ID numbers but did not list them on their registration forms and of patients who did not receive OHP ID numbers because they did not apply for insurance (because they either were not selected or chose not to apply). Although we do not expect the capture of children linked to lottery applicants afforded by the use of OCHIN EHR data to create bias, the linkage source differed between the intervention groups, which means there could be confounding associated with parental OCHIN patient status. We included the data source for parental match as a covariate in our modeling to control for this, but potential bias may still be present. The percentage of racial and ethnic minority participants in our study was lower than national population estimates but similar to Oregon’s. 2. It is possible, but not likely, that parents not selected in the Oregon Experiment sought private coverage for themselves and their children; rates of private coverage have declined for American families in the past decade, and a very small percentage (<7%) of the OCHIN parents and children in our study population ever had private coverage. 3. This study was conducted in 1 state; results may differ in other states with different Medicaid policies.
Flores (2018)	<ol style="list-style-type: none"> 1. This RCT was conducted in urban areas of north Texas. The findings, therefore, might not necessarily be generalizable to other areas of the state or country or to rural settings. 2. The study sample was predominantly Mexican American. Although Mexican Americans are the largest U.S. Latino subgroup, the sample contained proportionately fewer Puerto Rican, Central American, and South

Table 6: Limitations	
Study	Limitations
	American participants, compared to national percentages, and no Cuban Americans. 3. Although this RCT enrolled 155 subjects (75 in the control group and 80 in the intervention group) and resulted in multiple improvements in Latino children’s coverage, access to care, quality of care, and family financial burden, it would be beneficial to have larger, multicenter trials of Kids’ HELP to assess outcomes when scaling up the intervention to larger populations.
Flores (2016)	1. This trial was conducted in urban populations of Latinos and African-Americans in Texas, so findings may not necessarily generalize to non-urban populations or other regions or racial/ethnic groups. 2. Parental-reported service use was not verified via health records, although research documents high correlations between parental reports and health records. 3. Some cost differences were driven by high costs of ICU admissions, so caution in interpretation is warranted. 4. The study protocol may have resulted in control children attaining higher rates of insurance coverage than in the general population in non-research settings, as monthly contacts by research staff to assess outcomes may have regularly prompted parents to seek insurance for their children.
Fuld (2013)	None listed.
Guy (2017)	1. Although the CPS is a standard dataset to measure insurance status, it may be subject to error. Individuals are asked in March about insurance coverage during the preceding year, which may result in respondents erroneously reporting their coverage during the current year. 2. Moreover, participant-reported distinctions between public coverage and non-group private coverage may not be reliable, especially for plans administered for the states by private insurance carriers or networks of providers. 3. We use annual income measures to determine expansion eligibility, but administrative determinations of eligibility consider income at a specific point in time. Our reliance on imputed health insurance premiums may introduce measurement error into our analysis. 4. Lastly, the generalizability of our findings maybe limited given some key differences between our expansions and those under the ACA, namely the presence of the individual mandate and online eligibility systems.
Harding (2017)	1. Did not collect identifying information about interview participants. Thus, we were unable to look at findings across individual demographic groups. 2. Since all four CHC sites were from a single state, assistance models across the sample shared similarities. Patients in different states conforming to state-specific enrollment and redetermination regulations and policies may have different experiences. 3. Spanish language interpreters were provided by the study clinics and data collection was subject to their skill and experience. Use of these interpreters may have affected researchers’ opportunities to follow up on some participant responses. 4. Recruited adult family members from study clinic waiting rooms. Thus, we did not speak to adult family members who do not visit the clinic so there may be other views that did not surface. The on-site interviews were designed to be focused and concise. At the last and smallest clinic, only one adult family member was interviewed.
Hirschi (2019)	1. Limitations to the current study may have an impact on the generalizability of the results. 2. The current study did not collect data on the race, ethnicity, or income of respondents; thus, we were unable to determine whether satisfaction or dissatisfaction with the access to care domains described above differs by race, ethnicity, or income, although all families were assumed to have income in excess of 150% FPL (the eligibility ceiling for MassHealth Standard). 3. Another limitation is that data were obtained from open-ended

Table 6: Limitations

Study	Limitations
	<p>responses, which were included in a larger survey focusing on access to care, employment, and insurance choices. No specific questions were asked about each of the five domains of access to care or client satisfaction. Interviews would have provided more in-depth data than the survey responses provided here. 4. Additionally, there may be some confusion on the part of a limited number of participants about the affiliation of the researchers conducting the surveys. Some responses indicated that a few participants might have assumed that researchers were affiliated with the MassHealth system or the CommonHealth program, which may have influenced participant responses (researchers were not affiliated with MassHealth or CommonHealth, but rather with a private university).</p>
Jenkins (2018)	<ol style="list-style-type: none"> <li data-bbox="380 456 737 483">1. Potential selection biases.
Phillips (2010)	<ol style="list-style-type: none"> <li data-bbox="380 493 2028 589">1. Despite the most common mission among grantees to improve appropriate utilization of health care services, individual grantee objectives and contexts varied in important ways. Data collected by each grantee, while useful within the context of a given grantee’s decision making, reflected these differences and thus limited the ability to make comparisons across awardees.
Ray (2016)	None listed.
Smith 2019	<ol style="list-style-type: none"> <li data-bbox="380 636 2028 699">1. Declining response rates to the NSCH survey over the data period used; 2. Great Recession impact on insurance rates during the study period, outreach grants to increase enrollment in other states occurred after the study period; 3. limited geographic area.
Swartz (2017)	<ol style="list-style-type: none"> <li data-bbox="380 709 2028 805">1. Input errors or omissions could have affected results. 2. The claims database did not include information on socio-economic status, education or other obstetric risk factors that might help better contextualize the results. 3. Women ineligible for Emergency Medicaid Plus may have obtained prenatal care through self-pay or uncompensated care that would not be reflected in the claims database.
Wisk (2018)	<ol style="list-style-type: none"> <li data-bbox="380 818 2028 1161">1. First, our data are from a single private health insurer, so we do not have the ability to determine whether individuals subsequently obtained coverage from another source after they disenrolled from an HPHC plan, or if they had insurance from another source, such as a college health plan. 2. Second, given that MA concurrently enacted several health reforms (e.g., an individual mandate, establishment of an exchange, Medicaid expansion, prohibition of pre-existing condition exclusions) in addition to a dependent coverage expansion, our study cannot estimate the separate/independent contribution of a mandate and other health reform policies on the impact of a DCE. 3. Third, the generalizability of this regional cohort of privately insured beneficiaries may be limited. 4. Fourth, our estimates may be subject to some residual confounding; for example, plan generosity is likely correlated with family income, although we attempt to mitigate this by adjusting for neighborhood income. 5. Finally, although we attempt to control for differences between states with the D-in-D design, it is possible that other time-dependent factors could have differentially affected AYA coverage among the three states studied (e.g., local employment trends, insurance markets, local economy).

Table 7: Individual Evidence Ratings

Study	Individual Evidence Rating
Aller (2014)	Emerging evidence
Caskey (2019)	Emerging evidence
Chao (2014)	Emerging evidence
DeVoe (2015)	Emerging evidence
Flores (2018)	Moderate evidence
Flores (2016)	Emerging evidence
Fuld (2013)	Emerging evidence
Guy (2017)	Emerging evidence
Harding (2017)	Emerging evidence
Hirschi (2019)	Emerging evidence
Jenkins (2018)	Emerging evidence
Phillips (2010)	Emerging evidence
Ray (2016)	Emerging evidence
Smith 2019	Emerging evidence
Swartz (2017)	Scientifically rigorous
Wisk (2018)	Moderate evidence

Appendix A: Key Terms and Acronyms

Definitions came from the Catalyst Center glossary at <https://ciswh.org/projects/the-catalyst-center/glossary/>, healthcare.gov at <https://www.healthcare.gov/glossary/>, and other resources as indicated.

Accountable care organization (ACO): An Accountable Care Organization, often referred to as an ACO, is groups of doctors, hospitals, and/or health care providers, who come together to give coordinated high-quality care to patients enrolled in Medicaid to avoid duplication of services. The ACO receives payment for all care provided to the patient and is accountable for quality and cost of care. To learn more, visit the [CMS.gov](https://www.cms.gov) and [Kaiser Family Foundation](https://www.kff.org) websites.

Advancing Care for Exceptional (ACE) Kids Act: The Advancing Care for Exceptional Kids Act is designed to improve the care for children with medically complex conditions in Medicaid. The new law, signed into law in April 2019 and will take effect on October 1, 2022, will address existing challenges facing children with medically complex conditions by expanding access to patient-centered, pediatric focused, coordinated care models targeted for the child to collaboratively work across multiple providers and services, and by easing access to out-of-state care. [To learn more, see the Children’s Hospital Association’s Summary of the Ace Kids Act.](#)

Benefits counseling/navigation: Providing an individual with information and guidance about what services and/or items are covered under a health insurance plan.

Capitation: A fixed amount a provider receives per member per month (PMPM) from a payer regardless of the type and amount of services used. This is a shift from [fee-for-service](#) provider payments. [See the Kaiser Family Foundation definition for more detail.](#)

Care coordination: Services that promote the effective and efficient organization and utilization of resources among all health providers and services to ensure access to necessary comprehensive services for children with special health care needs and their families. [The Care Coordination Conundrum and Children and Youth with Special Health Care Needs](#) on Catalyst Center website.

See also: [Case Management](#)

Case management: In some service delivery systems the functions of a case manager and a care coordinator are similar. In other systems case managers may function as gatekeepers, with authority to approve or deny access to benefits. [Case Management description on Kaiser Family Foundation website.](#)

See also: [Care Coordination](#)

Children’s Health Insurance Program (CHIP): The Children’s Health Insurance Program (CHIP) is an insurance program that is jointly financed by federal and state dollars, and is administered by

each state. CHIP provides health care coverage to uninsured children up to age 19 whose family income is too high for Medicaid, but less than state-specific income eligibility limits. Within broad federal guidelines, each state determines the design of its program, eligibility groups, benefit packages, reimbursement rates, and administrative and operating procedures. Children began receiving coverage through CHIP in 1997 and the program has helped states expand health care coverage to more than 8 million children. [To learn more, visit the Children’s Health Insurance Program description on Medicaid website.](#)

Children’s Health Insurance Program Reauthorization Act of 2009 (CHIPRA): President Obama signed CHIPRA in February 2009. This federal legislation extended funding for the Children’s Health Insurance Program (CHIP) to September 2013. It also included performance bonuses for states that implemented new ways to identify and enroll all children who were eligible for CHIP and Medicaid. In addition, CHIPRA 2009 gave states the option to provide Medicaid and CHIP to lawfully residing immigrant children and pregnant women who have been in the country less than 5 years. [Children’s Health Insurance Program Reauthorization Act description on Medicaid website.](#)

Coinsurance: The percent of the allowed amount for a covered service that the insured pays. For example, if a health insurance plan’s allowed amount for an office visit is \$100 and your co-insurance is 20%, you would pay 20% of \$100, and the insurance company would pay the remaining costs.

Copayment: A fixed dollar amount that an insured individual must pay out-of-pocket for covered services at the time they are rendered. Also called a copay. [For more detail about Copayment, visit the Healthcare.gov website.](#)

Coverage Counseling: Providing the education and resources necessary for families and individuals to understand which health insurance programs they are eligible for, the pros and cons of different insurance programs and to weigh them, and how to apply for coverage.

Consumer-driven health plan (CDHP): First introduced in the early 2000s in response to rising health care costs, they were created to reduce the amount of money employers paid for health coverage. A consumer-driven health plan is a high-deductible plan where a portion of the health care services are paid for with pre-tax dollars. High deductible plans have higher annual deductibles and out-of-pocket maximums than traditional health plans. The tradeoff: The insured pays lower premiums each month.¹⁴²

Cost-effectiveness analysis (CEA): Cost-effectiveness analysis is a way to examine both the costs and health outcomes of one or more interventions. It compares an intervention to another intervention (or the status quo) by estimating how much it costs to gain a unit of a health outcome, like a life year gained or a death prevented.¹⁴³

¹⁴² <https://www.anthem.com/ca/blog/health-insurance-basics/consumer-driven-health-plans/>

¹⁴³ <https://www.cdc.gov/policy/polaris/economics/cost-effectiveness/index.html>

Cost sharing: The share of costs covered by your insurance that you pay out of your own pocket. This term generally includes deductibles, coinsurance, and copayments, or similar charges, but it doesn't include premiums, balance billing amounts for non-network providers, or the cost of non-covered services. Cost sharing in Medicaid and CHIP also includes premiums.

Deductible: The specified maximum dollar amount a health plan requires an insured individual to pay for covered services before the insurer begins to pay.

Dental coverage: Benefits that help pay for the cost of visits to a dentist for basic or preventive services, like teeth cleaning, X-rays, and fillings. In the Marketplace, dental coverage is available either as part of a comprehensive medical plan, or by itself through a “stand-alone” dental plan. For related content, visit [Dental coverage in the Marketplace](#).

Dependent coverage: Insurance coverage for family members of the policyholder, such as spouses, children, or partners.

Early and Period Screening, Diagnostic, and Treatment Services (EPSDT): EPSDT is a federally mandated Medicaid benefit that every state must provide to Medicaid-enrolled children and youth under 21. EPSDT ensures children receive comprehensive health services and supports that are tailored to their individual needs. [EPSDT description on Medicaid website](#).

Essential health benefits: The ten categories of health services that the Affordable Care Act (ACA) requires all qualified health plans sold in the Marketplaces and new plans sold in the individual and small group market to provide. These include doctors' services, inpatient and outpatient hospital care, prescription drug coverage, pregnancy and childbirth, mental health services, and more. Some plans cover more services. Plans must offer dental coverage to children. Dental coverage for adults are optional. [To learn more, visit the Essential Health Benefits description on Healthcare.gov website](#).

Families First Coronavirus Response Act (FFCRA): The FFCRA was signed into law March 18, 2020, as the second major legislative initiative designed to address COVID 19. It provided expanded nutrition assistance, paid sick leave, enhanced unemployment insurance coverage, free coronavirus testing, and increased federal Medicaid funding. [The Families First Coronavirus Response Act: Summary of Key Provisions | KFF](#).

Family Opportunity Act (FOA): Federal legislation that gives states the option of providing Medicaid coverage to children who meet the disability standard used in the Supplemental Security Income (SSI) program, but whose family income is higher than the income limits for SSI or Medicaid but less than 300% federal poverty level (FPL). States may charge premiums for families who “buy in” to the Medicaid program for a child with a disability. [See Frequently Asked Questions about the Family Opportunity Act's Medicaid Buy-In Option on the Catalyst Center website](#).

Federal poverty level (FPL): The threshold used as a basis for determining eligibility for many public benefits programs, including Medicaid and CHIP. The limits are usually expressed as a percentage of the base federal poverty level. For example, in 2020 for a 4-person household, the base federal poverty guideline is \$26,000, 200% of the FPL is \$52,400. For more information about Federal Poverty Level and examples of how they are used to determine eligibility, visit the description on Healthcare.gov website. See the [2022 FPL guidelines](#).

Fee-for-service (FFS): A payment system in which an insurer pays the provider for each medical service provided, rather than paying a fixed amount for all services (capitation). [See the Kaiser Family Foundation definition for more detail.](#)

Health insurance marketplace® (also called Marketplace or Exchange): Created as part of the Affordable Care Act, the Marketplaces allow people to purchase insurance and be assessed for Medicaid and CHIP eligibility. This online resource allows individuals, families, and small businesses to compare and shop for health insurance. Depending on household income, purchasers may also be eligible for tax credits and other subsidies to make insurance more affordable. Some states operate a state-based Marketplace, while others have a federally supported, state partnership, or federally facilitated Marketplace. [To learn about the Health Insurance Marketplace visit the Healthcare.gov website.](#)

Health maintenance organizations (HMO): A type of health insurance plan where individuals (or employers) pay a fixed or capitated amount for all health services provided by a specific, contracted network of providers.

High-deductible health plan (HDHP): A plan with a higher deductible than a traditional insurance plan. The monthly premium is usually lower, but you pay more health care costs yourself before the insurance company starts to pay its share (your deductible). A high deductible plan (HDHP) can be combined with a health savings account (HSA), allowing you to pay for certain medical expenses with money free from federal taxes.

For 2021, the IRS defines a high deductible health plan as any plan with a deductible of at least \$1,400 for an individual or \$2,800 for a family. An HDHP's total yearly out-of-pocket expenses (including deductibles, copayments, and coinsurance) can't be more than \$7,000 for an individual or \$14,000 for a family. (This limit doesn't apply to out-of-network services.)

For 2022, the IRS defines a high deductible health plan as any plan with a deductible of at least \$1,400 for an individual or \$2,800 for a family. An HDHP's total yearly out-of-pocket expenses (including deductibles, copayments, and coinsurance) can't be more than \$7,050 for an individual or \$14,100 for a family. (This limit doesn't apply to out-of-network services.)

Insurance navigator: An individual or organization that is trained to be able to help consumers look for health coverage options through the Marketplace, including assisting with eligibility and enrollment. The services are free to consumers if accessed through the Marketplace. [To learn more, visit the HealthCare.gov website.](#)

Integrated care models: Integrated care is a general term for any attempt to fully or partially blend behavioral health services with general and/or specialty medical services. This blending can occur within inpatient or ambulatory clinical settings.¹⁴⁴

Long-term services and supports (LTSS): The person-driven services and supports provided by Medicaid to individuals with chronic conditions, disabilities, or mental illness. Services can be provided in community-based or institutional settings. [For more information about Long Term Services and Supports, visit the Medicare website.](#)

Managed care: A health care delivery system that works to coordinate health services, while managing utilization of services, quality, and cost (generally through capitation). Managed care may rely on a primary care provider to provide referrals and document the medical necessity for other services. The capitation may be used to purchase services from a network of providers. [For more detail, see the Managed Care description on the Medicaid.gov website.](#)

Mandated benefit: A benefit, coverage group, or provider type that must be covered by certain types of health plans as a matter of state law. [Self-insured](#) and government health plans are exempt from such mandates. See the state-required benefits (another name for mandates) for each state at [Centers for Medicare and Medicaid Services website](#) (click on the state and scroll down to state-required mandates).

Marketplace: Shorthand for the “Health Insurance Marketplace®,” a shopping and enrollment service for medical insurance created by the Affordable Care Act in 2010.

[In most states, the federal government runs the Marketplace (sometimes known as the “exchange”) for individuals and families. On the web, it is found at HealthCare.gov. Some states run their own Marketplaces at different websites.

Fill out a Marketplace application and you will find out if you qualify for lower monthly premiums or savings on out-of-pocket costs based on your income.

You may find out if you qualify for Medicaid or the Children’s Health Insurance Program (CHIP).

You can shop for and enroll in affordable medical insurance online, by phone, or with in-person help from a trained assister or an agent or broker. Small businesses with between 1 and 50 full-time equivalent employees can offer health and/or dental insurance to their employees through the Small Business Health Options Program (SHOP).]

¹⁴⁴ <https://www.psychiatry.org/psychiatrists/practice/professional-interests/integrated-care>

Medicaid: A public benefits program, jointly funded by state and federal dollars. The federal government oversees the program, but it is administered by the states. Medicaid provides coverage for health care and health-related services to low-income and other specific categories of individuals, such as children and youth with disabilities. [To learn more about Medicaid and enrollment, visit the Medicaid website.](#)

Medical home: An approach to providing primary care that emphasizes proactive identification of special health care needs, comprehensive care coordination, partnership between providers and families (or youth) around health decision-making, and collaboration with other community providers, including schools. The [National Resource Center for Patient/Family-Centered Medical Home](#) provides information about medical homes for families and caregivers, as well as information about state initiatives.

Mental Health Parity (Mental Health Parity and Addiction Equity Act of 2008 (MHPAEA)): Equal health insurance coverage for the treatment of mental health, substance use disorder and medical/surgical health conditions. The Affordable Care Act requires all health plans, including grandfathered and self-funded plans, to provide mental health parity. [For more detail about Mental Health Parity, see the Government Publishing Office publication.](#)

Minimum essential coverage (MEC): Any insurance plan that meets the Affordable Care Act requirement for having health coverage. To avoid the penalty for not having insurance for plans 2018 and earlier, you must be enrolled in a plan that qualifies as minimum essential coverage (sometimes called “qualifying health coverage”). Examples of plans that qualify include: Marketplace plans; job-based plans; Medicare; and Medicaid & CHIP.

National Survey of Children’s Health (NSCH): The NSCH is an annual, cross-sectional, address-based survey that collects information on the health and well-being of children ages 0-17, including health care, family, and community-level factors that can influence health. Data from NSCH reflect information collected from parents/caregivers and are the only source of both national and state-level estimates on key measures of child health.

Among other changes, the 2016 National Survey of Children’s Health started integrating two surveys: the previous NSCH and the [National Survey of Children with Special Health Care Needs \(NS-CYSHCN\)](#).

[For more details, see the National Survey of Children’s Health description on the Data Resource Center for Child and Adolescent Health website.](#)

Out-of-pocket costs: Refers to costs that must be paid by the member because they are not reimbursed by the plan. Out-of-pocket costs are in addition to the insurance premium charged for the health insurance. Out-of-pocket costs include: deductibles (costs that must

be paid entirely by the member before the insurance reimburses anything), “co-insurance” (a percentage of a charge for a specific service that must be paid by the member each time it is consumed), and co-payments (a fixed flat dollar amount for a specific service that must be paid by the member each time it is consumed) (Sepúlveda, 2016).

Patient Protection and Affordable Care Act (ACA): Signed into law by President Obama on March 23, 2010, the Affordable Care Act (ACA) is federal health care reform legislation. The main goals are to create new pathways to affordable insurance and reduce the number of people without insurance, promote primary and preventive care, and decrease the growth of the cost of health care. [To learn more, see the Patient Protection and Affordable Care Act \(ACA\) description on Healthcare.gov website.](#)

Pay-for-performance (P4P): A reimbursement strategy that pays health care providers according to how well they meet certain quality standards.

Preferred provider organization (PPO): A type of health plan that contracts with medical providers, such as hospitals and doctors, to create a network of participating providers. You pay less if you use providers that belong to the plan’s network. You can use doctors, hospitals, and providers outside of the network for an additional cost.

Premium: The amount of money paid to a health plan to provide coverage for an individual or family over a specified time period. Payments are typically made monthly, but may be yearly.

Premium assistance: The payment of all or part of an individual’s or family’s private health insurance premium, usually by a public program such as Title V, Medicaid, or CHIP. [For more information, see the Premium Assistance description on the Department of Labor website.](#)

State Health Insurance Assistance Program (SHIP): A state program that gets funding from the federal government to provide free local health coverage counseling to people with Medicare.

Subsidized coverage: Health coverage available at reduced or no cost for people with incomes below certain levels. Examples of subsidized coverage include Medicaid and the Children’s Health Insurance Program (CHIP). Marketplace insurance plans with premium tax credits are sometimes known as subsidized coverage too.

In states that have expanded Medicaid coverage, your household income must be below 138% of the federal poverty level (FPL) to qualify.

In all states, your household income must be between 100% and 400% FPL to qualify for a premium tax credit that can lower your insurance costs.

Telemedicine (Telehealth): The provision of health care and/or health education using telecommunications technology, rather than in person encounters.

Title IV: Title IV of the Social Security Act provides federal block grants to states for Temporary Assistance for Needy Families (TANF) and for child and family services. [To learn more about Title IV, visit the Social Security website.](#)

Title IV-E: Title IV-E is a subpart of Title IV. This program provides federal reimbursement to states for the costs of children receiving care in foster homes. [To learn more about Title IV-E, visit the Social Security website.](#)

Title V: Title V of the Social Security Act provides federal block grants to states to support Maternal and Child Health (MCH) and Children with Special Health Care Needs (CYSHCN) programs. These programs may provide direct care, but generally focus on provision of wrap-around and population-based services (e.g. immunization) and on assuring capacity for maternal and child health care. The [Maternal and Child Health Bureau \(MCHB\)](#) administers Title V nationally. [Learn more about Title V on the Social Security website.](#)

Title V Block Grant: The Title V Block grant is a fixed amount of federal funds that the 59 states and jurisdictions receive to promote the health of all mothers and children, including CYSHCN. The three Block Grant components are Formula Block Grants, Special Projects of Regional and National Significance (SPRANS), and Community Integrated Service Systems (CISS) Grants. At least 30% of funds must be spent on preventive and primary care for children. Another 30% must be used to ensure CYSHCN and their families have access to family-centered, coordinated, community-based systems of care. Other services include pre- and post-natal care for low-income and at-risk women, and toll-free hotlines families can call for information and referral to other needed services and supports. [Title V Block Grant description on HRSA website.](#)

TRICARE: A health care program for active-duty and retired uniformed services members and their families.

Underinsurance: Describes health insurance that does not cover all the medically necessary services an individual requires, and/or does not provide access to all needed services, and/or the out-of-pocket expenses are not affordable. Underinsurance (also called inadequate insurance) is a cause of family financial hardship and medical debt.

Value-based purchasing (VBP): A model of health care financing that pays providers for quality and value of services, not just the volume of services provided. Sometimes referred to as “pay-for-performance.” [To learn more, see the definition on the HealthCare.gov website.](#)

Appendix B: History

According to Mann and colleagues (2003), public health insurance programs in the United States (U.S.) reflect a deeply rooted commitment to caring for low-income families and children.¹⁴⁵ Although most Americans have access to health insurance through their jobs or the jobs of their family members, not all children have access to employer-based coverage. **Medicaid** and the **State Children’s Health Insurance Program (SCHIP)** are two public programs created to provide free or low-cost health coverage to low-income children who do not have access to private health insurance. Depression-era maternal and child health programs provided the foundation for Medicaid. During the 1980s and 1990s, expansions of the program made Medicaid the single largest insurance provider for children in the country. In 1997, SCHIP added to these efforts by filling the gap between Medicaid and employer-based coverage and spurred efforts to address obstacles to coverage, such as application and enrollment procedures. In tandem, SCHIP and Medicaid are the primary sources of coverage for children in low-income families (Mann et al., 2003).

The **Children’s Health Insurance Program (CHIP)** – formerly known as **SCHIP** – was designed as a federal-state partnership similar to Medicaid with programs run by individual states according to requirements set by the federal Centers for Medicare and Medicaid Services (CMS). States have the flexibility to design their CHIP policies within broad federal guidelines which results in variations in eligibility, benefits, and administration across states.¹⁴⁶ States can design their CHIP programs as an independent program separate from Medicaid (separate child health programs), use CHIP funds to expand their Medicaid program (CHIP Medicaid expansion programs), or combine these approaches (CHIP combination programs). States receive enhanced federal funds to their CHIP programs at a rate above the regular Medicaid match. The Bipartisan Budget Act of 2018 extended CHIP authorization through 2027.

“Medicaid and CHIP serve as lifelines for low- and moderate-income children. Both programs provide expansive, child-focused benefits that ensure that children enrolled in them have access to essential health care services.”

-- Madeline Twomey, 2019¹⁴⁷

The comprehensive health care reform law enacted in March 2010, the **Patient Protection and Affordable Care Act of 2010 (ACA)**, was focused on making affordable health insurance available to more people. It provides consumers with subsidies (premium tax credits) that lower costs for households with incomes between 100% and 400% of the federal poverty level (FPL); expanding the Medicaid program to cover all adults with income below 138% of the FPL; and support innovative medical care delivery methods designed to lower the costs of health care

¹⁴⁵ <https://pubmed.ncbi.nlm.nih.gov/14503453/>

¹⁴⁶ https://en.wikipedia.org/wiki/Children%27s_Health_Insurance_Program

¹⁴⁷ <https://www.americanprogress.org/issues/healthcare/reports/2019/06/12/470996/childrens-health-care-access-improve-universal-coverage-plans/>

generally.¹⁴⁸ The law contains provisions to strengthen coverage for children under CHIP, including requirements to conduct outreach and enrollment of vulnerable populations including children and youth with special health care needs (CYSHCN).¹⁴⁹

According to Strane and colleagues (2019), working families have increasingly enrolled their children in Medicaid or CHIP in recent years. Parents' place of employment affects the availability and cost of family health insurance, making it a determinant of pediatric public insurance enrollment. Increases in the number of working families with public pediatric insurance were driven by employees of large private firms. Maintaining high coverage rates for children will require policies that recognize the changing role of public insurance for working families as the cost of employer-based coverage grows (Strane et al., 2019).¹⁵⁰

Lastly, three major federal laws regulate insurance coverage of behavioral health parity, including the **Mental Health Parity Act (MHPA) of 1996**, the **Mental Health Parity and Addiction Equity Act (MHPAEA) of 2008**, and additional provisions under the **ACA of 2010**. Parity means that insurance companies cannot have more restrictive requirements for behavioral health than for physical health, such as limiting the number of visits covered.¹⁵¹ State strategies to improve access to children's mental health care include enforcing and strengthening parity laws, providing additional coverage for mental health through Medicaid waivers, and providing access to mental health services in a variety of settings. Along with parity and insurance laws, some states are expanding mental health services in schools and other settings.¹⁵²

148 <https://www.healthcare.gov/glossary/affordable-care-act/>

149 <https://ciswh.org/project/the-catalyst-center/financing-strategy/chip/>

150 <https://www.healthaffairs.org/doi/pdf/10.1377/hlthaff.2018.05286>

151 https://www.ncsl.org/Portals/1/Documents/legisbriefs/2018/October/ChildrenMentalHealth_Oct2018_39.pdf

152 https://www.ncsl.org/Portals/1/Documents/legisbriefs/2018/October/ChildrenMentalHealth_Oct2018_39.pdf

Appendix C: Types of Health Insurance

Employer-sponsored insurance remains the most common form of pediatric health insurance coverage in the U.S. (Strane et al., 2019). In 2016, almost half of all children were covered by a parent's employer-sponsored insurance plan (Henry J. Kaiser Family Foundation (KFF), 2019). However, cost changes have been significant in recent years with the average annual worker contribution to premiums for family coverage increasing by 57% to \$5,277 from 2008 to 2016 (KFF, 2016). Simultaneously, deductibles associated with this coverage have become more commonplace and burdensome. These cost increases far outpaced growth in parents' wages during the same time period (Semega et al., 2017; Claxton et al., 2018). Even as the cost of employer-sponsored insurance has grown in recent years, pediatric uninsurance rates have reached historic lows, driven largely by increased enrollment in Medicaid and CHIP.

This increasingly common decision to decline employer-sponsored coverage in favor of public coverage for children likely reflects costlier and lower-quality employer-sponsored plans relative to public insurance (Strane et al., 2019). Several studies have found that children from low-income families covered by Medicaid or CHIP often had no out-of-pocket spending for this care and they had comparable or even greater access to health care services than privately insured children did (Kreider et al., 2016; McMorroff et al., 2014). Other research has demonstrated that workers respond to increases in health insurance cost sharing by switching to a less expensive plan, if offered (Kosteas, 2018). When no alternative employer-based coverage exists, parents many turn to public insurance for their children's coverage (Strane et al., 2019).

There is evidence that access to care for children and families with Medicaid coverage is comparable to private insurance coverage (Murphey, 2017; Wagnerman, 2017).

For instance, a study by Kreider and colleagues (2016) found that Medicaid and CHIP are often better, or on par, with private coverage in terms of meeting the health needs for children:

- Children with Medicaid and CHIP were more likely than children with private insurance to receive a preventative medical visit (88% in Medicaid and CHIP, 83% in private coverage) as well as a preventive dental visit (80% in Medicaid, 77% in CHIP, 73% in private coverage);
- Children with Medicaid and CHIP were more likely to have insurance that always met a child's health care needs (78% in Medicaid and CHIP, 73% in private coverage); and
- Children with Medicaid, CHIP, and private coverage fared equally in terms of having a personal physician or nurse (89% across the board), having a usual source of care (93-94%), having insurance that always allows a child to see needed health care providers (82-84%), receiving effective care coordination when needed (68-72%), and receiving family-centered care (66-67%).

Regardless of coverage type, about 1 in 4 families had difficulty accessing specialists; however, children with CHIP reported the greatest difficulty:

- Children with CHIP more often reported problems seeing a specialist (23% in Medicaid, 28% in CHIP, 22% in private coverage), obtaining a referral (18% in Medicaid, 23% in CHIP, 15% in private coverage), and feeling frustrated obtaining health care services (20% in Medicaid, 26% in CHIP, 23% in private coverage).

Caregivers of privately insured children were far more likely to pay out-of-pocket for health care:

- Children in Medicaid and CHIP are far less likely to report having out-of-pocket costs compared to privately insured children (26% in Medicaid, 38% in CHIP, and 77% in private coverage).

These results were more pronounced for CYSHCN, who reported higher levels of frustration obtaining health care services in private coverage (36%) compared to Medicaid (28%) and CHIP (33%) (Chester, 2015; Kreider, 2016).

This study confirms that children with public and private health coverage are able to access vital preventive care services, however more work needs to be done to ensure children have access to specialty providers and affordable services (Kreider, 2016; Chester, 2015). Ongoing evaluation is needed to ensure that policy decisions are responsive to these differences between insurance coverage options so historical strides made in pediatric health coverage are not lost. Children with health coverage are more likely to grow up to be healthier and more economically successful, and, in doing so, provide a return on investment for government-sponsored programs (Chester, 2015).

“Working families have increasingly enrolled their children in Medicaid or the Children’s Health Insurance Program in recent years. Parents’ place of employment affects the availability and cost of family health insurance, making it a determinant of pediatric public insurance enrollment.”
-- Strane et al., 2019, p. 1132

Uninsured Children. With Medicaid and CHIP, there has been a dramatic decline in the last twenty years in the rate of uninsured children (Alker & Corcoran, 2020). The drop in uninsurance was especially steep between 2008 and 2015. There were four key factors that drove this plunge in children’s uninsurance: 1) expanded Medicaid and CHIP; 2) streamlined enrollment and renewal processes; 3) changes to public insurance eligibility and enrollment due to the ACA, and 4) efforts to cover immigrants and families with mixed status.¹⁵³ However, since 2016, there has been an uptick in the rate of uninsured children that has been significant over time. The public charge rule compelled legal immigrants to stay away from public insurance programs. Narrowing Medicaid eligibility and delays or decreases in funding also contributed to the rise in children’s uninsurance.¹⁵⁴

¹⁵³ <https://healthpayerintelligence.com/news/how-to-improve-childrens-health-insurance-coverage-nationally>

¹⁵⁴ *ibid*

According to Alker and Corcoran (2020), after reaching a historic low of 4.7% in 2016, the child uninsured rate began to increase in 2017, and as of 2019, it jumped back up to 5.7% -- a full percentage point that translates to approximately 726,000 more children without health insurance. States that have not expanded Medicaid to parents and other adults under the ACA have seen increases in their rate of uninsured children three times as large as states that have (Alker & Gardner, 2019). From 2016 to 2019, 29 states experienced an adverse change for children. The only state that significantly reduced its number of uninsured children during this period was New York. These coverage losses in states were widespread across income, age, and race/ethnicity, but were largest among White and especially Latino children (who can be of any race) (Alker & Corcoran, 2020).

Much of the gain in coverage that children made as a consequence of the ACA's major coverage expansions implemented in 2014 has now been eliminated. According to the Georgetown University Center for Children and Families (CCF), the largest increase in the number of uninsured children was observed between 2018 and 2019 when, despite a continued strong economy, the number of children without health insurance rose by 320,000. This increase in the number of uninsured children was the largest annual jump seen in more than a decade. Since this data was collected prior to the COVID-19 pandemic, the number of uninsured children is likely considerably higher in 2020, as families have lost jobs and employer-sponsored insurance (Alker & Corcoran, 2020).

Several factors have contributed to the erosion in children's health coverage:

- Efforts to repeal the ACA and cut Medicaid;
- Cuts to enrollment outreach and advertising;
- Inadequate oversight over state Medicaid programs that have created more red tape barriers; and
- The creation of a climate of fear and confusion for immigrant families that discourages them from enrolling eligible children in Medicaid or CHIP (Alker & Corcoran, 2020).¹⁵⁵

“Reductions in children’s coverage would lead to reduced access to care and other long-term effects for children and increase financial pressure on states and providers.”

-- Samantha Artiga & Petry Ubri, 2017, pg. 1

¹⁵⁵ <https://ccf.georgetown.edu/wp-content/uploads/2020/10/Press-Release-October-9-2020.pdf>

Underinsurance. Tremendous effort has been devoted to reducing the number of uninsured children in the U.S., but considerably less attention has been paid to the problem of underinsurance. Underinsurance, or inadequate insurance, describes health insurance that does not cover all the medically necessary services an individual requires, and/or does not provide access to all needed services, and/or the out-of-pocket expenses are not affordable (Kogan et al., 2009; Pascoe et al., 2021; Voorhees et al., 2008).¹⁵⁶ Underinsurance among children is more common than lack of insurance — in 2018, 26% of U.S. children were underinsured, while 6.6% were uninsured children (America’s Health Rankings, 2021). The ACA did not affect the underinsurance rate (Pascoe, 2021).

Compared with adequately insured children, those who are underinsured have more health disadvantages including delayed or forgone care, lack of a primary care doctor, difficulty obtaining needed specialist care, and difficulty receiving needed referrals, care coordination and family-centered care. In addition, parents who postponed or went without medical care for their children reported significantly increased levels of stress, loss of time at work and other important life activities, and disability that resulted in significant pain and suffering (Kogan et al., 2009; Pascoe et al., 2021).

Underinsurance is a cause of family financial hardship and medical debt. It leaves a family unprotected from the financial risk of illness or disease. A family whose insurance has a high deductible or low coverage might face bankruptcy. *“More than a quarter of poor families with children have total out of pocket expenditures exceeding 10% of family income, a threshold commonly used to capture catastrophic spending or being “underinsured.” By subsidizing many of the costs associated with medical care, public health insurance can play a critical role in improving the financial well-being of low-income families with children”* (Wherry, 2016).

¹⁵⁶ Individuals are said to be underinsured when their health insurance requires excessive out-of-pocket expenditures, when health care services have significant coverage limitations, or when insurance fails to cover health care expenses deemed to be essential by the insured person (Silverman, 2008; Pascoe, 2021).

Appendix D: Mental Health Needs and Coverage

Mental health disorders among children and adolescents remain a common health concern, with approximately 22% of U.S. children, ages 3-17, experiencing a mental health problem in 2018-2021.¹⁵⁷ Among this age group, anxiety (8.5%), depression (3.8%), behavioral problems (6.8%), and Attention Deficit/Hyperactivity Disorder (9%) are particularly prevalent, with two or more conditions often coexisting.^{158, 159} Population-based surveys indicate that one in six children, ages 2-8, have a mental, behavioral, or developmental disorder, and depression and anxiety have continued to increase among children and adolescents, ages 6-17 (Ghandour, 2019; So, 2019). The COVID-19 pandemic exacerbated this trend with 31% of parents reporting in October 2020 that their child's mental or emotional health was worse than before the pandemic.¹⁶⁰

Mental health disorders are not limited to specific genders, races, or socioeconomic levels. Left untreated, they can cause suffering, disability, stigma, exclusion, and poor quality of life.¹⁶¹ Only about 20% of children with mental, emotional, or behavioral disorders receive care from a specialized mental health care provider (Martini et al., 2012).¹⁶² Insurance coverage, cost, lack of providers, distance, and long waiting lists all make it difficult for families to get mental health care for their children.¹⁶³ The chances of optimal recovery are much better with affordable and accessible mental health services.¹⁶⁴ Coverage of mental health care is an important determinant of what type of care and how much care children receive. Mental health care for children and youth can be financed through private insurance, out-of-pocket payment, public insurance, or publicly-financed agencies.¹⁶⁵

Medicaid plays an important role for many children with mental and behavioral health needs by providing comprehensive coverage and making treatment affordable by limiting out-of-pocket costs incurred by the family.¹⁶⁶ All state Medicaid programs provide some mental health services and some offer substance use disorder services as well to beneficiaries. CHIP beneficiaries receive a full service array, including counseling, therapy, medication management, social work services, peer supports, and substance use disorder treatment. Medicaid and CHIP requires that children enrolled in Medicaid receive a wide range of medically necessary services, including mental health services.¹⁶⁷ Mental health services for children and their families are complicated by multiple pathways to treatment and multiple funding streams for services. Strategies to improve care include 1) increased funding for services; 2) comprehensive insurance coverage of mental health services; and 3) coordinated prevention and treatment approaches.¹⁶⁸

157 <https://www.childhealthdata.org/browse/survey/results?q=7981&r=1>

158 <https://mchb.hrsa.gov/sites/default/files/mchb/data-research/nsch-data-brief-2019-mental-bh.pdf>

159 <https://www.cdc.gov/childrensmentalhealth/data.html>

160 <https://www.kff.org/coronavirus-covid-19/issue-brief/mental-health-and-substance-use-considerations-among-children-during-the-covid-19-pandemic/>

161 <https://hpi.georgetown.edu/mentalhealth/>

162 <https://www.cdc.gov/childrensmentalhealth/access.html#ref>

163 <https://www.cdc.gov/childrensmentalhealth/access.html>

164 <https://hpi.georgetown.edu/mentalhealth/>

165 *ibid*

166 <https://www.mentalhealth.gov/get-help/health-insurance>

167 *ibid*

168 <https://hpi.georgetown.edu/mentalhealth/>

Appendix E: Oral Health Needs and Dental Coverage

Total health and wellness are inextricably linked to oral health. Poor oral health has an impact on physical, psychological, social, and economic health, and often results in pain, diminished function, and reduced quality of life (USDHHS Oral Health Coordinating Committee, 2016). In 2000, the Surgeon General issued the first-ever report on oral health of Americans, identifying poor oral health as the “silent epidemic” that burdens children and adults throughout the U.S. (DHHS, 2000). Other federal reports followed in 2003 and 2010, demonstrating a commitment by the U.S. Health and Human Services Department (HHS) and other agencies to promote good oral health. While gains were made in the intervening years, there remained a great deal of work to do to improve access to dental care and to eliminate oral health disparities. To that end, in 2016, the *HHS Oral Health Strategic Framework 2014–2017 (The Framework)* was produced to provide a roadmap for federal agencies to work together to prevent oral disease, increase access to dental services, develop and disseminate oral health information, advance public policy and research and translate policy and research into practice, strengthen the oral health workforce, and eliminate oral health disparities (USDHHS Oral Health Coordinating Committee, 2016).

For children, poor oral health can have negative impacts on speech, growth, and social development. In addition, missing teeth, pain, and infection from oral diseases can limit food choices, worsen nutrition, and may result in missed days at school (USDHHS Oral Health Coordinating Committee, 2016). The American Academy of Pediatric Dentistry (AAPD) (2020a) recognizes dental care as a medical necessity, stating that such care is essential for preventing and eliminating orofacial disease, infection, and pain, restoring form and function of the dentition, and correcting facial disfigurement or dysfunction. Dental caries (cavities) is the most common chronic disease of childhood, affecting 60% of all children by age five. By age 17, 78% of children in the U.S. have experienced dental caries (AAPD, 2020a). If left untreated, caries, as well as other oral diseases, can lead to pain, infection, and loss of function, adversely affecting learning, communication, nutrition, and other activities necessary for normal growth and development.

Professional preventive oral health services can help mitigate caries and other oral diseases in children. The use of sealants on primary molars has been shown to reduce caries and to be safe and cost effective if placed on patients’ teeth during periods of greatest risk. A child who receives sealants is 72% less likely to receive restorative services over the next three years than children who do not receive sealants, and the success rate of sealants may be up to 90% after a decade with proper follow-up care (AAPD, 2020a).

In addition to receiving sealants in professional dental settings, school programs have been shown to be effective. Children who receive sealants during school programs have 60% fewer cavities on their treated teeth (USDHHS Oral Health Coordinating Committee, 2016). Community water fluoridation is another safe and cost-effective measure to reduce the prevalence and severity of tooth decay. *The Framework* (2016) estimated that every \$1 invested in fluoridation

yields about \$38 in savings from fewer cavities treated. Because of preventive services such as early placement of sealants and community water fluoridation, current generations are more likely to maintain their own natural teeth over the course of their lifetimes (USDHHS Oral Health Coordinating Committee, 2016).

Total health and wellness are inextricably linked to oral health—it is impossible to have one without the other. Oral disease has an impact on physical, psychological, social, and economic health and well-being, often resulting in pain, diminished function, and reduced quality of life.

-- USDHHS Oral Health Coordinating Committee, 2016, The Framework, pg. 242

Appendix F: Select Grey Literature

Websites

The Catalyst Center promotes universal, continuous, and affordable health coverage for children and youth with special health care needs (CYSHCN); close benefit and financing gaps; promote payment for additional services; and build sustainable capacity to promote financing of care. <https://ciswh.org/project/the-catalyst-center/>

The Centers for Medicaid and Medicare Services (CMS) within the U.S. Department of Health and Human Services (HHS), provides news updates, resources, and links to data, regulations, and innovative practices related to public (Medicaid/CHIP) and private insurance for both children and adults. <https://www.cms.gov/>

MCH Evidence offers evidence-based tools and resources to help ensure that children receive adequate and continuous health insurance coverage. <https://www.mchevidence.org/>

The NPM 15 webpage -- <https://www.mchevidence.org/tools/npm/15-adequate-insurance-coverage.php> -- includes a list of interventions that provide links to online materials and a training spotlight on access to care: <https://www.mchnavigator.org/trainings/access-to-care.php>

Data and Data Analysis

Children's Defense Fund. *The State of America's Children 2021* provides statistics on children's health insurance coverage, including state-by-state figures on the number of children enrolled in Medicaid and CHIP. 2021. https://www.childrensdefense.org/state-of-americas-children/?gclid=CjwKCAjw95yJBhAgEiwAmRrutJYZkxTVX-il6JgkDMSLUedA4IGqW-j8hwaj-wqDfRdvQehYdgy-2WBoC8YsQAvD_BwE

Kaiser Family Foundation (KFF). *Analysis of recent national trends in Medicaid and CHIP enrollment*. 2021. <https://www.kff.org/coronavirus-covid-19/issue-brief/analysis-of-recent-national-trends-in-medicaid-and-chip-enrollment/>

U.S. Census Bureau. *Health Insurance Coverage in the United States: 2019*, including details on children without coverage. 2021. <https://www.census.gov/library/publications/2022/demo/p60-278.html>

Policy

Centers for Medicare and Medicaid Services (CMS). CMS summarizes the proposed rule to increase Americans' access to health coverage for 2022, addressing access, affordability, and options for states <<https://www.cms.gov/newsroom/press-releases/cms-proposed-rule-increase-americans-access-health-coverage-2022>> and points to the proposed rule in its entirety. 2021. <https://www.federalregister.gov/public-inspection/current>

Government Accountability Office (GAO) *Child Well-Being: Key Considerations for Policymakers, Including the Need for a Federal Cross-Agency Priority Goal* (2017). <https://www.gao.gov/products/gao-18-41sp>

Medicaid and CHIP Payment Access Commission (MACPAC). *Report to Congress on Medicaid and CHIP* (2021) from MACPAC, a non-partisan Legislative branch agency, including recommendations to improve maternal and child health outcomes by expanding coverage during the postpartum period. <https://www.macpac.gov/publication/march-2021-report-to-congress-on-medicaid-and-chip/>

Park, E. and Corlette, S. Center for Children and Families, Georgetown University. *American Rescue Plan Act: Health Coverage Provisions* (March 2021) explains changes in health care provisions under the American Rescue Plan Act. <https://ccf.georgetown.edu/2021/03/11/american-rescue-plan-act-health-coverage-provisions-explained/>

Strategies and Promising Practices

The Commonwealth Fund. *Filling the gap in states that have not expanded Medicaid eligibility*. This issue brief examines three alternative approaches to fill health-insurance gaps in states that have not expanded Medicaid. 2021. <https://www.commonwealthfund.org/publications/issue-briefs/2021/jun/filling-gap-states-not-expanded-medicaid>

National Academy of State Health Policy (NASHP). *State Enrollment Experience: Implementing Health Coverage Eligibility and Enrollment Systems Under the ACA*. 2015. This issue brief includes insights from several states with lessons on establishing marketplaces, improving eligibility verification systems, and having a dedicated federal point person to answer agency questions. 2015. http://www.statecoverage.org/files/NASHP_State_Enrollment_Experience.pdf

Kaiser Family Foundation. *Key Lessons from Medicaid and CHIP for Outreach and Enrollment Under the Affordable Care Act*. 2013. This Issue brief discusses lessons learned on effective Medicaid and CHIP outreach and enrollment strategies. <https://files.kff.org/attachment/key-lessons-from-medicaid-and-chip-for-outreach-and-enrollment-under-the-affordable-care-act-issue-brief>

The Center for Health Care Strategies (CHCS). *Accelerating child health care transformation: Key opportunities for improving pediatric care*. Provides recommendations for providers, payers, and policymakers to consider in adopting culturally respectful approaches to enhance child health care delivery, pointing to evidence-based and promising programs. 2021. <https://www.chcs.org/resource/accelerating-child-health-care-transformation-key-opportunities-for-improving-pediatric-care/>

The National Center for Children in Poverty (NCCP). *Using Medicaid to Help Young Children and Parents Access Mental Health Services* (updated 2017) presents the results of a 50-state survey on the use of Medicaid to help young children and parents access mental health services. http://www.nccp.org/wp-content/uploads/2017/03/text_1164.pdf

The U.S. Government Accountability Office (GAO). *Children's Health Insurance Program: Efforts to Measure and Address Potential Substitution for Private Health Insurance* (2021) summarizes states' efforts to measure and address/prevent "crowd-out-- that is, substituting private health insurance with public insurance as a result of the Children's Health Insurance Program (CHIP). <https://www.gao.gov/products/gao-20-12>

U.S. Department of Health and Human Services (HHS) *Efforts to improve the quality of health care for children and adults enrolled in Medicaid and the Children's Health Insurance Program (CHIP) 2017-2019 Report to Congress* (2021). <https://www.medicaid.gov/medicaid/quality-of-care/downloads/medicaid-chip-rtc-2017-2019.pdf>

Appendix G: Summary of NPM 15 Strategies¹⁶⁹

Strategy	Approach
Initial Strategies in MCHbest Strategy Database¹⁷⁰	
Insurance Enrollment Helpline	Maintain a state-run helpline to assist with insurance enrollment navigation
On-Site Medical Practice Care Coordination Services	Support the development of a care coordination plan by clinics
Expansion of Coverage Eligibility	Promote expansion of Medicaid benefits; reduce barriers to Medicaid enrollments; leverage partnerships with Medicaid
Strategies from the Catalyst Center¹⁷¹	
Behavior Health Programs	Support the development of a state agencies (Administrative Service Organizations) to connect children to appropriate behavioral health programs
Benefits Counseling	Establish a benefits counseling hotline
Care Coordination	Fund care coordination directly for CYSHCN or contract with other organizations to provide care coordination
CHIP	Support the enrollment of children in CHIP across the state
EPSDT	Expand access to EPSDT benefits for children enrolled in Medicaid
Family Supports	Establish a family-run organization to assist families of CYSHCN in navigating health insurance programs
Foster Care	Implement programs within Medicaid agencies to support children in the foster care system in establishing health insurance
Inequities	Support outreach to communities experiencing inequalities in health insurance coverage
Managed Care	Create specialty managed care plan for CYSHCN
Mandated Benefits	Implement mandated benefits to include specific services for children covered by private health insurers.
Medicaid Buy-Ins	Implement Medicaid Buy-In programs to create a pathway to Medicaid for CYSHCN with complex needs whose family income is too high for Medicaid
Medicaid Waivers	Implement protocol to waive federal regulations to ensure health insurance coverage for CYSHCN
Premium Assistance	Support the development of a premium assistance program in the state for low-income working families
Relief Funds	Establish a state relief fund to support families of CYSHCN with financial burdens
TEFRA	Support the implementation of the Tax Equity and Fiscal Responsibility Act

¹⁶⁹ <https://www.mchevidence.org/tools/strategies/index.php> and <https://www.mchevidence.org/tools/npm/15-adequate-insurance-coverage.php>

¹⁷⁰ <https://www.mchevidence.org/tools/strategies/search/refine.php?NPM=15>

¹⁷¹ <https://ciswh.org/projects/the-catalyst-center/financing-strategies/>

Strategy	Approach
Strategies from AMCHP's Innovation Hub¹⁷²	
The Boys' Health Advocacy Program (SD)	Implement boys mentoring program to develop transition to adult health care services
Dare to Dream Youth Leadership Development Initiative (RI)	Develop CYSHCN peer mentoring support program
CMS Kids Network - Medical Foster Care (FL)	Design family-based care model for CYSHCN in the foster system
Pediatric Practice Enhancement Project (RI)	Create peer to peer system navigator program for families of CYSHCN transitioning to adulthood
Oregon Care COOrdination Program (CaCoon) (OR)	Develop community-based care coordination program for CYSHCN
Youth and Young Adult Transition - Children's Medical Service (FL)	Establish transition education and assistance program for YSHCN
Oregon Youth Transition Program (OR)	Develop transition program for high schools to assist YSHCN in transitioning to adult health care
Transition Interagency Group Envisioning Realization of Self (T.I.G.E.R.S.) (CO)	Develop interagency group of community organizations to support youth with special needs as they transition to adult life
Using the Six Core Elements of Health Care Transition in Medicaid Managed Care (DC)	Implement six core elements of health care transition into care management in pediatric and adult settings
Minnesota Care Coordination Systems Assessment and Action Planning (MN)	Implement care coordination quality improvement project centered around systems assessment and action planning to increase connection among care coordinators serving CYSHCN in the state
Family Voices of California Project Leadership (CA)	Develop curriculum and mentoring program for caregivers to develop skills to engage in public policy advocates on behalf of CYSHCN
Care Connection for Children (VA)	Develop care coordination services program for families with CYSHCN
Rhode Island Department of Health Internship Program for Youth with Special Healthcare Needs (RI)	Create a state department of health internship program for youth with special needs
Youth Advisory Council (RI)	Develop leadership development program for YSHCN
Innovative Approaches: Community Systems Building Grants for Children and Youth with Special Health Care Needs (CYSHCN) (NC)	Implement continuous quality improvement initiative to improve service delivery systems for YSHCN
Providers and Teens Community for Health (PATCH) Program: Core PATCH Package (WI)	Implement designated community sites to serve as models in health care transition for young people
Texas Children's Hospital Healthcare Transition Planning Tool (TX)	Develop transition planning tool to be used by pediatric providers within the electronic medical record

¹⁷² <https://www.amchpinnovation.org/>

Strategy	Approach
Washington Statewide Leadership Initiative Coalition (WA)	Develop coalition to connect families of CYSHCN to well-functioning, culturally competent systems of care
Strategies from RWJ's What Works for Health Database¹⁷³	
Health Insurance Enrollment Outreach and Support Health Care Entities	Engage community-based case managers to offer health insurance information and application support
Mental health benefits legislation	Promoting state policy mandating mental health coverage
Public reporting of health care quality performance	Display quality scores alongside insurance plans or options to help consumers choose better plans
Price transparency initiatives for patients	Create a web-based system to inform potential patients of the price of medical procedures
New Hope Project	Fund projects that provide job support services
School-based health centers (SBHCs)	Increase the capacity of SBHCs
Patient Navigators	Promote the use of family navigator programs

¹⁷³ https://www.countyhealthrankings.org/take-action-to-improve-health/what-works-for-health/strategies?keywords=insurance&sort_by=search_api_relevance

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