



ADVANCING INTEGRATED HEALTHCARE

Pediatric Immunization: A Quality Improvement Initiative in Response to COVID-19

Funded by Blue Cross & Blue Shield of Rhode Island and the Coronavirus Relief Fund



**Blue Cross
Blue Shield**
of Rhode Island



Report By:

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EXECUTIVE SUMMARY

In May 2020, the effects the COVID-19 pandemic on accessing well-child care as evidenced by declining pediatric immunization rates was brought to light at various committee meetings. Blue Cross & Blue Shield of Rhode Island (BCBSRI) requested that the Care Transformation Collaborative of Rhode Island / PCMH Kids (CTC-RI/PCMH Kids) develop a proposal to address this emerging issue. CTC-RI/PCMH Kids' Immunization Quality Improvement proposal submitted to BCBSRI addressed this need through a four-pronged approach:

1. **Leadership:** provided through the formation of a cross-sectional Core Immunization Planning Team to oversee planning and implementation.
2. **Information Management:** provided through regular dissemination of KIDSNET Immunization Performance Reports to pediatric practices.
3. **Practice Facilitation/Performance Improvement:** to assist practices with implementing Performance Improvement Plans.
4. **Financial Assistance:** provided through health plan pmpm incentive payments and later augmented through Pediatric Relief Funds/Medicaid Pediatric Primary Care Rate Supplement Program.

In June 2020, BCBSRI approved the funding request (\$71,750). CTC-RI/PCMH Kids began implementing the Immunization Performance Improvement Initiative. Over a six-month time period, CTC-RI/PCMH Kids provided 76 practices with bi-monthly practice specific immunization reports, customized practice facilitation support, formed a "best practice sharing" learning community and created a Pediatric Resource Guide.

By December 31, 2020, practice performance in Measles Mumps and Rubella (MMR), and vaccination for kindergarteners and seventh graders exceeded pre-COVID-19 rates.

Parallel and complimentary to this proposal RI American Academy of Pediatrics, through the Governor's Task Force, was working with EOHHS and OHIC to address the financial viability of pediatric practices in Rhode Island given the devastating impact COVID-19 was having on the healthcare system. These efforts resulted in pediatric primary care practices successfully applying for additional funds (Pediatric Relief Funds, Medicaid Pediatric Care Rate Supplement Program) to further expand and support improvement in well-child outcomes. BCBSRI funding was used to provide practice facilitation technical assistance to 76 PCMH Kids / Pediatric Relief Fund practices, which added 25 new pediatric practices to the PCMH Kids learning community.

In addition, CTC-RI successfully applied for Coronavirus Relief Fund (CARES Act) funding, which was used in conjunction with BCBSRI funding, to deepen our use of pediatrician content experts, expand our efforts to develop family engagement strategies and provided financial assistance for families who needed support to return to well-child care.

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PROBLEM STATEMENT/INTRODUCTION

The problem of declining child and adolescent immunization rates was identified in a May 15, 2020 [Centers for Disease Control and Prevention report](#) that contained data on vaccine ordering through the Vaccines for Children (VFC) program. The data showed that from mid-March to mid-April, doctors in the VFC program ordered about 2.5 million fewer doses of all routine non-influenza vaccines and 250,000 fewer doses of measles-containing vaccines compared to the same period in 2019. The number of doses of measles-containing vaccine administered at Vaccine Safety Datalink sites also dropped in mid-March, especially among older children. Administration of these vaccines started to pick up again among children 2 years and under, but remained lower than before the emergency declaration. Consistent with national data, Rhode Island data from KIDSNET showed a corresponding decline in immunization rates and lead screening rates:

Number of Childhood Vaccines Administered, Rhode Island, 2019-2020									
Vaccine Group	March			April			Total		
	2019	2020	% change	2019	2020	% change	2019	2020	% change
Hepatitis B	3907	3441	-11.9%	3717	3122	-16.0%	7624	6563	-13.9%
DTaP/DT/Tdap/Td	5801	4225	-27.2%	5753	3332	-42.1%	11554	7557	-34.6%
HPV	1959	1140	-41.8%	2249	396	-82.4%	4208	1536	-63.5%
Hepatitis A	2553	1532	-40.0%	2651	1308	-50.7%	5204	2840	-45.4%
Hib	2781	2240	-19.5%	2663	2109	-20.8%	5444	4349	-20.1%
Influenza	4317	4529	4.9%	2150	1200	-44.2%	6467	5729	-11.4%
MMR	2053	1247	-39.3%	2433	972	-60.0%	4486	2219	-50.5%
MenACWY	1760	1011	-42.6%	1903	329	-82.7%	3663	1340	-63.4%
MenB	896	650	-27.5%	926	235	-74.6%	1822	885	-51.4%
Other	57	60	5.3%	57	5	*	114	65	-43.0%
Pneumo	3674	3117	-15.2%	3536	2846	-19.5%	7210	5963	-17.3%
Polio	3960	3063	-22.7%	3792	2518	-33.6%	7752	5581	-28.0%
Rotavirus	1750	1513	-13.5%	1617	1432	-11.4%	3367	2945	-12.5%
Varicella	2185	1287	-41.1%	2382	980	-58.9%	4567	2267	-50.4%
TOTAL	37653	29055	-22.8%	35829	20784	-42.0%	73482	49839	-32.2%

Source: RIDOH, Center for Health Data and Analysis, KIDSNET last updated 5/15/2020

* % may be an unstable estimate due to small numbers

Number of Lead Screening Tests, Rhode Island, 2019-2020									
	March			April			Total		
	2019	2020	% change	2019	2020	% change	2019	2020	% change
# Children Tested	1787	959	-46.3%	1898	388	-79.6%	3685	1347	-63.4%
# Tests	1796	970	-46.0%	1905	395	-79.3%	3701	1365	-63.1%

Source: RIDOH, Center for Health Data and Analysis, KIDSNET last updated 5/15/2020

IMMUNIZATION QUALITY IMPROVEMENT PROPOSAL

Based on this public health emergency concern, Blue Cross & Blue Shield of RI approached CTC-RI/PCMH Kids and requested that we develop a proposal to address this emerging issue. CTC-RI/PCMH Kids developed an Immunization Quality Improvement Proposal to:

- a. Collaborate with RI Department of Health Immunization Quality Improvement (IQIP) and KIDSNET staff and other key stakeholders to form a Core Planning Committee to develop and implement a state-wide immunization quality improvement work plan to improve access, customer experience and clinical quality outcomes;
- b. Provide practices with immunization performance reports using KIDSNET data;
- c. Provide practices with quality improvement practice facilitators who would assist practices with identifying school-aged children who are in need of MMR vaccination and develop and implement performance improvement plans to improve access, patient experience and clinical outcomes;
- d. Provide practices with a “best practice sharing” learning forum and pediatric resource guide; and
- e. Submit a proposal to the CTC Contract Committee that will recommend 1) offering PCMH Kids Cohort 3 a Year 2 Performance Contract that incorporates immunization performance as a measure for incentive payment; and 2) re-allocating the CAHPS survey line item (\$32,000) to this Immunization QI project so that CTC-RI could provide state-wide practice facilitation services to pediatric practices that need technical assistance based on immunization performance.

CTC-RI convened a Contract Meeting with the payers (6/2/20) and obtained a one-time contract approval for 2020-21 Performance Standard and Incentive payments:

- a. PCMH KIDS Cohort 3 practices are eligible for performance improvement incentive payment based on demonstrating immunization performance levels for measles, mumps and rubella at 90% of pre-COVID-19 levels (using December 31, 2019 as the baseline compared with December 31, 2020 MMR performance);
- b. Incentive payment (\$0.50 pmpm) will start Summer of 2020 (75% of pmpm payment) with final incentive payment (25% of pmpm payment) based on achieving performance goal.

In June 2021, BCBSRI approved the Immunization Quality Improvement Proposal and provided \$71,750 in funding for CTC-RI to address this state-wide need.

IMMUNIZATION QUALITY IMPROVEMENT INTERVENTIONS

Starting in June 2020 and over a six-month time frame, CTC was successful in implementing a work plan that included the following key components of: 1) leadership; 2) data management; 3) performance improvement/practice facilitation; and 4) financial assistance as outlined below:

Leadership:

Planning to meet the objectives for this Immunization Quality Improvement Initiative started in June 2020 when CTC formed a Core Immunization Planning Committee consisting of key stakeholders (PCMH Kids Co-Chairs, KIDSNET staff, RI Department of Health Quality Improvement staff, Health Plans, CTC-RI Practice Facilitators, RIPIN and System of Care (SOC) leadership).

Information Management:

KIDSNET project management staff developed a bi-monthly immunization/lead screening report card that provided updated information on key performance indicators: MMR, Kindergarten immunizations, 7th grade immunizations and Lead Screening. CTC shared practice immunization performance results with practices bi-monthly and developed a PCMH Kids Cohort 3 Score Card comparing MMR baseline performance to current performance.

Practice Facilitation/Practice Performance Improvement:

Practices developed Performance Improvement Plans (P-D-S-A) including AIM statements and strategies to improve access to Well Child Visits/immunizations/lead screening. PCMH Kids Cohort 3 practices additionally surveyed parents to identify concerns/barriers around returning to care and were asked to use this information to help inform their performance improvement plans. Practice Facilitators were assigned to practices who agreed to participate in the Immunization Performance Improvement Initiative and provided them with customized technical assistance to assist them with improving access to care and immunization/lead screening rates.

Financial Support:

As noted above, the CTC Contract Committee approved providing PCMH Kids Cohort 3 practices with \$0.50 pmpm payment (with 75% paid in Summer and 25% based on meeting 90% of pre-COVID-19 performance rates (baseline December 31, 2019)).

ALIGNMENT WITH GOVERNOR'S TASK FORCE AND EOHHS ACCESS TO CARE FUNDING OPPORTUNITIES

The BCBSRI initiative and funding positioned CTC-RI to align with the Governor's Task Force Execution Action Plan, which identified immunizations as an important aspect of Rhode Island's COVID-19 response. The Governor's Office formed a Pediatric Advisory Council, which included the PCMH Kids Co-Chairs, and identified lead screening and incoming kindergarteners and seventh graders as priority populations for targeted interventions. Medicaid and the Office of the Health Insurance Commissioner jointly offered a Pediatric Primary Care Relief Program, which provided additional financial relief payments to pediatric primary care providers, contingent on practices developing and implementing a performance improvement plan.

The Pediatric Primary Care Relief Program provided \$4M to the 57 pediatric/family practices who agreed to take targeted actions to ensure that patients are caught up on immunizations. Practices were allowed to use funds toward eligible expenses for the period of March 1, 2020 to December 30, 2020 for payroll expenses and new costs related to COVID-19.

CTC-RI was able to use the BCBSRI funds to provide all the Pediatric Relief Fund practices with practice facilitation technical assistance.

The Executive Office of Health and Human Services (EOHHS) provided pediatric/family practices with a second funding opportunity through the Medicaid Pediatric Primary Care Rate Supplement Program. Supplemental funding (\$3M) was awarded to 42 practices/systems of care that demonstrated monthly patient access measure benchmarks for children under 18 and covered by Medicaid insurance.

With BCBSRI funding, CTC-RI was able to extend practice facilitation technical assistance for practices that successfully applied for the Medicaid Primary Care Rate Supplement Program to support their efforts in meeting access to care performance requirements.

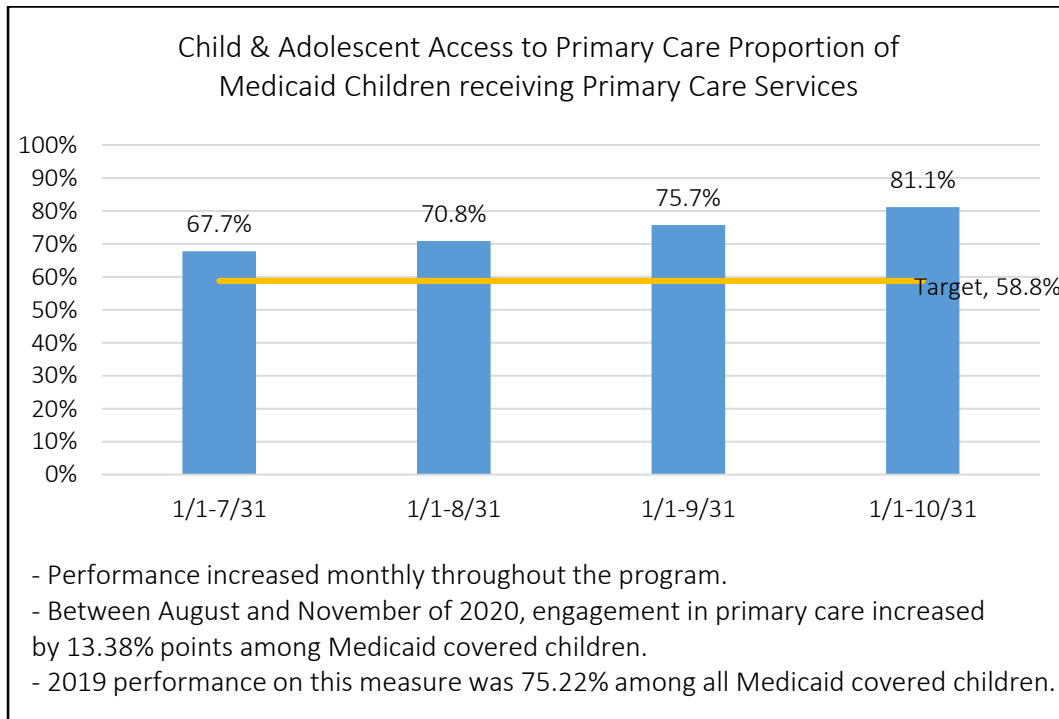
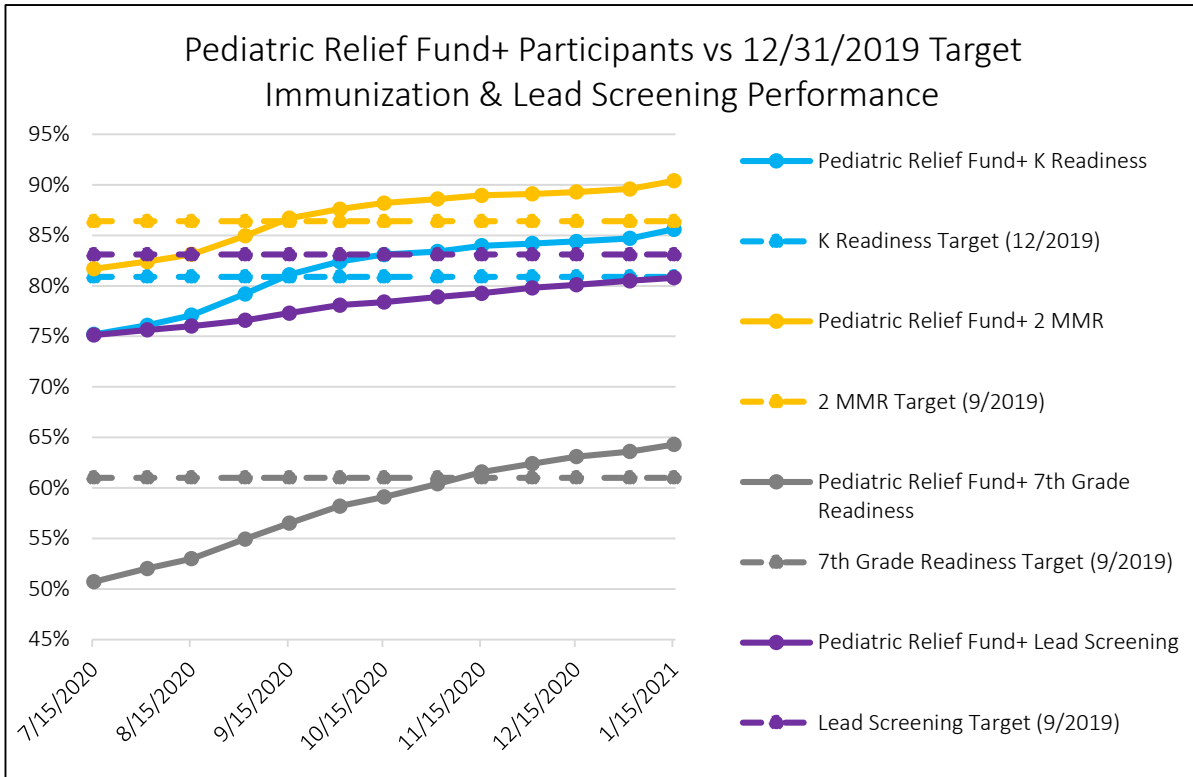
CARES ACT FUNDING: EXPANDING EFFORTS TO SUPPORT PARENT ENGAGEMENT STRATEGIES AND PROVIDE RESOURCE FUNDS FOR FAMILIES IN NEED OF ASSISTANCE

CTC-RI was ready and able to successfully apply for CARES Act funding based on work that was initiated under the BCBSRI funding proposal and received \$126,045 that was used to implement the following strategies:

- a. Engage Pediatric Content Experts to review pediatric practice immunization performance improvement plans and develop a change packet/learning opportunities to improve performance.
- b. Partner with the RI Chapter of the American Academy of Pediatrics to develop family engagement strategies to assist partners with returning to care within their patient centered medical homes. With this funding, RI AAP launched a new “Tips to Keep Your Family Healthy During COVID” public awareness campaign, designed to empower parents and teens with information and resources to stay healthy mentally and physically through the ongoing COVID-19 pandemic. Tips and resources on mental health, wellness, learning during COVID-19, parenting during COVID-19, and being a teen during COVID-19 are available at FamilyHealthDuringCovidRI.org. In addition to this web site, the campaign includes Facebook and Instagram content targeted to Rhode Island parents and teens, and focused interviews with pediatricians and content experts to raise awareness.
- c. Partner with five Family Home Visiting Programs to engage families with high-risk scores that were behind in immunizations and provide resources to enable families to obtain well-child care within pediatric practices.

OUTCOMES: IMMUNIZATION RATES EXCEED PRE-COVID LEVELS

1. Improved clinical outcomes: immunization, lead screening and access to care:



2. Enhanced ability to deepen and spread pediatric primary care efforts.

BCBSRI leadership and funding were important catalysts for initiating targeted action directed toward improving childhood immunizations rates. The BCBSRI funding supported initial efforts and aligned with Governor's Task Force, EOHHS and OHIC efforts to expand and support improvement in well child outcomes. BCBSRI funding was used to provide practice facilitation technical assistance to a total of 76 practices, which added 25 new pediatric practices to the PCMH Kids learning community.

The BCBSRI Immunization Initiative positioned CTC-RI to deepen our use of pediatrician content experts, expanded efforts to develop family engagement strategies and provided financial assistance for families who needed support to return to well-child care.

Total Funding deployed to primary care practices to improve immunizations, lead screening, access to care = \$7,229,795.79.

- Blue Cross & Blue Shield of Rhode Island funding: \$71,750
- Re-allocated CAHP Survey applied to immunization efforts: \$32,000
- Pediatric Relief Fund Payments: \$4M
- EOHHS Medicaid Pediatric Primary Care Rate Supplement Program: \$3M
- CARES Act Well Child Care-Technical Assistance and PI: \$126,045

AREAS THAT NEED CONTINUED FOCUS

CTC/PCMH Kids would welcome the opportunity to partner with BCBSRI to address other identified areas of concern:

Lead Screening:

Pediatric lead screening performance increased from 73.3% (7/20) to 78.7% (1/15/21) and reached the goal of 90% of pre-COVID-19 rates but did not reach the pre-COVID levels of 81% (12/31/19)

Addressing disparities in immunization rates:

Practices participating in the Immunization Quality Improvement Initiative surpassed pre-COVID immunization performance rates. KIDSNET state-wide immunization performance rates, which include practices that declined to participate in Immunization Performance Improvement Initiative, demonstrate race and ethnicity disparity (data from KIDSNET - August 2020).

Disparities in post-COVID Immunization and Lead Screening declines

Age

- The decline in vaccine doses administered is *greater for older children* (11% decline for age < 2, 36% decline age 2-6, 43% decline age > 7)
- The decline in lead screening is greater for children over age 2 (39% decline in age <2, 45% decline for ages 2-7)

Insurance

- The decline in vaccine doses administered is *greater for publically insured children* (25% decline for public insurance, 15% decline for private)
- The decline in lead screening is greater for publically insured children (43% decline for public insurance, 38% decline for private)

Ethnicity

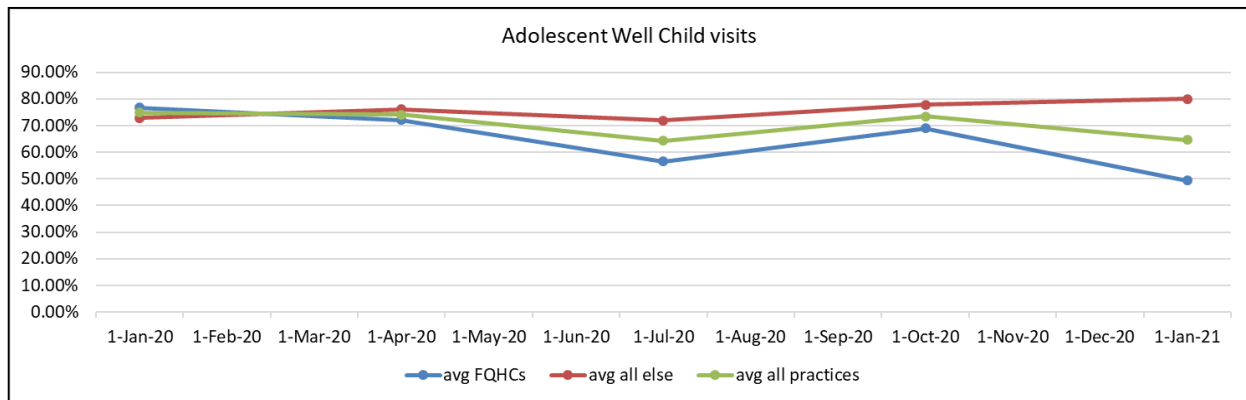
- The decline in vaccine doses administered is *greater for Hispanic children* (29% decline for Hispanic, 18% decline for non-Hispanic)

Race

- The decline in vaccine doses administered is *greatest for Black children* (26% decline for Black, 20% decline for White, 21% decline for Asian, 22% decline for other races)

Improving access to Adolescent Well Child Care:

Recent PCMH Kids Cohort 3 performance improvement data shows a decline in access to Adolescent Well Child Care, predominantly practices with high Medicaid population (>50%). Preliminary information from practice indicates that some pediatric practices needed to prioritize children in need of immunizations over children in need of adolescent well child visits. Efforts need to be made to improve adolescent well child care.



Obesity:

Pediatricians are alarmed by the increase in obesity that they are seeing in their practices based on lack of activity (reduction in school sports/activity with friends) and an increase in unhealthy eating habits. Efforts are needed to address this rising concern.

CTC/PCMH Kids would welcome the opportunity to partner with BCBSRI to address other identified areas of concern.

APPENDIX

Core Immunization Quality Improvement Team Members

<p><u>CTC-RI/PCMH Kids</u> Susanne Campbell Pat Flanagan Beth Lange Carolyn Karner Pano Yeracaris</p>	<p><u>Health Plans</u> Stacey Aguiar, UHC Jay Buechner, NHP Stephanie De Abreu, UHC Nancy Hermiz, NHP Chris Ottiano, NHP Mary Ricci, THP Jessica Rubinstein, THP Rena Sheehan, BCBSRI Brenda Whittle, NHP</p>	<p><u>RIDOH</u> Ellen Amore, KIDSNET Lori Clark Michelle Kollett, Epidemiologist Janet Limoges, KIDSNET Kathy Marceau, School & Adolescent Services Coordinator Anne Primeau Faubert Cindy Singleton Tricia Washburn, Immunization & Vaccines</p>
<p><u>Practice Facilitators</u> Vicki Crowningshield Sue Dettling Suzanne Herzberg</p>	<p><u>Family Visiting</u> Emily Corbett Marie Palumbo-Hayes Lauren Piluso, WIC Sara Remington</p>	<p><u>Systems of Care</u> Marilyn Boichat, Coastal Elizabeth Caruso, Prospect IPA Elizabeth Dennigan, Lifespan Der Kue, RIHCA Bernadette Parrillo, RIPCPC Kelsey Ryan, Coastal</p>
	<p><u>RI EOHHS</u> Jennifer Kaufman</p>	<p><u>Other Key Stakeholders</u> Paul Hynes, MTM Linda Mendonca, Natl Assoc. of School Nurses Jessica Signore Nancy Silva, RIPIN</p>

APPENDIX

Governor's Task Force and Core Team Responsible for Pediatric Relief Fund

- Libby Bunzli, Senior Medicaid Policy Advisor, Executive Office of Health and Human Services
- Benjamin Shaffer, Medicaid Director, Executive Office of Health and Human Services
- Cory King, Director of Policy, Office of the Health Insurance Commissioner
- Marie Ganim, PhD, Health Insurance Commissioner
- Gina M. Raimondo, Governor
- Dacia Read, Deputy Chief of Staff, Office of the Governor
- Nicole Alexander-Scott, MD, MPH, Director of Department of Health

Pediatric Advisory Task Force

- RIDOH Medical Director, Ailis Clyne, MD, MPH, FAAP
- RIAAP President, Gregory Fox, MD, FAAP
- RIAAP Treasurer, Peter Pogacar, MD, FAAP
- Elizabeth Lange, MD, FAAP
- Patricia Flanagan, MD, FAAP
- Elizabeth Lowenhaupt, MD, FAAP
- Phyllis Dennery, MD, FAAP
- David Bourassa, MD

Pediatric Resource Guide ([link](#))