

Healthy Tomorrows Partnership for Children Program (HTPC): FINAL REPORT

Project Title: SRCH Healthy Tomorrows Partnership for Children
Project Number: H17MC28291
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1. PURPOSE OF PROJECT AND RELATIONSHIP TO SSA TITLE V MATERNAL AND CHILD HEALTH (MCH) PROGRAMS:

This project was funded under HRSA’s MCH Healthy Tomorrows Partnership for Children Program. It directly addresses the goals and objectives of the Bright Futures for Infants, Children and Adolescents initiative. In *“Promoting Mental Health,” Bright Futures: Guidelines for Health Supervision of Infants, Children and Adolescents* emphasizes the importance of the primary care provider in assessing and diagnosing potential mental and behavioral health issues, including issues related to adverse childhood experiences. Our program follows recommendations for diagnosis and treatment outlined in *Bright Futures in Practice: Mental Health*, which expertly and extensively addresses child and family mental health. We use and promote Bright Futures materials extensively at Roseland Pediatrics.

This project also aligns with the American Academy of Pediatrics policy recommendations on trauma-informed care. In 2012, the American Academy of Pediatrics issued a landmark warning that

toxic stress can harm children for life and encouraged pediatricians to address adverse childhood experiences and toxic stress in early childhood¹. Their report advised pediatricians to advocate for “new, evidence-based interventions that reduce sources of toxic stress and/or mitigate their adverse effects on young children.” The report also recommended that providers incorporate into professional development the knowledge of how childhood toxic stress affects “disruptions of the developing nervous, cardiovascular, immune, and metabolic systems, and the evidence that these disruptions can lead to lifelong impairments in learning, behavior, and both physical and mental health.”

This project has regional/national significance and was extremely timely given the AAP’s 2012 policy statements on trauma-informed care and their more recent release of the Trauma Tool Box for Primary Care. Implementing this project in a center of pediatric excellence focused on a very high need, culturally diverse community has proven to be an ideal setting for practical testing and discussion of AAP’s methods for addressing trauma care.

A Disadvantaged MCAH Population:

At the time of application, according to the *Title V MCAH Needs Assessment*, the maternal and child population in California was expected to keep growing in number and diversity over the next 10 years². The population of children 0-17 years of age was 10.0 million in 2010 and is projected to reach 10.9 million by 2026. In 2010, the population of children who are Hispanic was 50%, compared to 30% white, 10% Asian, and 6% Black. By 2020, the proportion of Hispanic children would continue to increase while the proportion of white children will decrease. As of 2018, 52.1% of children in California were Hispanic, 26.6% were white, 10.8% were Asian, 5.2% were black, 4.5% were multi-racial, 0.4% were American Indian/Alaska Native, and 0.3% were Native Hawaiian/Pacific Islander.³

1 The American Academy of Pediatrics. [Technical Report: The Lifelong Effects of Early Childhood Adversity and Toxic Stress](#)

2 California 2011-2015 Title V MCAH Needs Assessment, completed by the MCAH Program of the Center for Family Health within the California Department of Public Health.

3 KidsData.org: Child Population by Race Ethnicity – California 2018.

Supporting the physical, socio-emotional, and cognitive development of children was identified as a top state priority in the California 2011-2015 Title V MCAH Needs Assessment⁴. Mental health among women, children, and adolescents was also identified as a priority need. In Sonoma County, data from California's most recent *Maternal and Infant Health Assessment (MIHA)*⁵ demonstrates that our maternal and child population is at serious risk:

- 56.1% of mothers have family incomes below 200% of the federal poverty level
- 42.9% qualify for Medi-Cal⁶ during pregnancy
- 34.1 % were born outside the U.S.
- 29.3% speak a language other than English at home
- 24.9% were uninsured before they became pregnant
- 25.4% reported their current pregnancy was “mistimed or unwanted”
- 24.2% will be uninsured postpartum, compared to 17.4% statewide
- 18.6 % experienced “food insecurity” during pregnancy
- 16.7% of mothers or their partners lost jobs or had hours/pay cut during the pregnancy
- 13.9% had not completed high school or a GED
- 7.2% experienced intimate partner violence during pregnancy

Our Local Service Area and the Need:

Santa Rosa Community Health serves low-income individuals and families living in greater Santa Rosa. At the time this grant was submitted, our 2013 federal UDS report⁷, showed that SRCHC had served 41,041 patients in 2013⁸, an increase of more than 10% from 2011. SRCH's target population struggles with numerous socio-economic and cultural barriers to health care, including transportation, language,

4 California 2011-2015 Title V MCAH Needs Assessment, completed by the MCAH Program of the Center for Family Health within the California Department of Public Health.

5 MIHA Snapshot, Sonoma County 2011

6 The California Medicaid Program is called “Medi-Cal.”

7 All FQHCs file an annual “Uniform Data System” (UDS) report on demographics, quality, and finances.

8 SRCHC 2013 UDS Final Report

addiction, and homelessness. *A Portrait of Sonoma County 2014* found the most extreme disparities in basic health, education, and earnings outcomes are found within Roseland Creek, the geographic area where two of our largest health centers are located. Of Sonoma County's 99 census tracts, Roseland Creek ranked at the bottom, with a Human Development Index (HDI) value of 2.79 (compared to top-ranking East Bennett Valley, with an index value of 8.47.) The well-being outcomes of people in Roseland Creek scored well below those of Mississippi, the lowest ranked state on the American HDI⁹.

Large Undocumented Population: At the time this grant was submitted, California had the largest number and proportion of undocumented immigrants of any state¹⁰. In Sonoma County, the Public Policy Institute of California estimated that undocumented immigrants make up 8.8% of the population¹¹. Immigration status is related to poverty among children, which in turn is a strong predictor of childhood health outcomes. Overall, 48% of California's children had immigrant parents: 34% had at least one legal immigrant parent, and an estimated 14% had at least one undocumented immigrant parent. Among these children, 24% of children with legal immigrant parents were poor and 38% of children with undocumented immigrant parents were poor¹².

High Rates of Poverty: In 2015 when this grant proposal was developed, there were large areas of significant poverty in Santa Rosa. 35% of people in our service areas had incomes below 200% of the federal poverty level¹³. In 2013, 97% of our patients had incomes at or below 200% of the federal poverty level and 82% had income at or below 100% of the federal poverty level¹⁴. Latinos were exponentially more likely to be living in poverty.

Low Rates of Educational Attainment: As of the time this grant was submitted, the 2012 U.S.

9 *A Portrait of Sonoma County 2014*, commissioned by the County of Sonoma Department of Health Services

10 California 2011-2015 Title V MCAH Needs Assessment, completed by the MCAH Program of the Center for Family Health within the California Department of Public Health.

11 Public Policy Institute of California, *Unauthorized Immigrants in California: Estimates for Counties*, July 2011

12 California 2011-2015 Title V MCAH Needs Assessment, completed by the MCAH Program of the Center for Family Health within the California Department of Public Health.

13 American Community Survey 2012 (U.S. Census Bureau)

14 2013 UDS report, Santa Rosa Community Health Centers; three-year UDS trend is over 98% at below 200% of poverty

Census reported for Santa Rosa that 14.3% of people age 25 and over did not graduate from high school, and 36.5% had a high school degree or less¹⁵. Fewer than 33% of people in the area had attained a bachelor's degree or higher. Levels of attainment varied significantly by ethnicity. Just over 6% of whites in the county did not have a high school diploma, compared with 45.9% of the Hispanic population¹⁶. Among current students, 93.6% of white 9th graders graduated from high school four years later, as compared with only 64.4% of Latino students.

Addressing Childhood Trauma Identified as a Priority Need: With higher rates of poverty, lower rates of educational achievement and a large disadvantaged immigrant population, our service area proved to be home to many children who were likely to experience violence, trauma, family instability or other events that can negatively impact health. Because of the strong connection between ACEs and health outcomes, the *2013 Sonoma County Community Health Needs Assessment*¹⁷ agreed that addressing childhood trauma is a priority for our community in 2013-2016. ACEs was identified as a significant health concern that met priority selection criteria because of its links to chronic disease, potential for health improvement based on local intervention, and opportunities for prevention approaches.

The *2013 Sonoma County Community Health Needs Assessment* identified expanded trauma screening and services as a top priority for the county: "The prevalence of ACEs underscores the need for additional efforts to reduce and prevent child maltreatment and associated family dysfunction and the need for further development and dissemination of trauma-focused services to treat stress-related health outcomes¹⁸."

Other local data confirmed the need for expanded mental and behavioral screening and

15 Source: U.S. Census Bureau, 2019 Population Estimate

16 U.S. Census Bureau, 2006-2010 ACS 5-Year Estimates, Table S1501 Educational Attainment; Table C15002H Sex by Educational Attainment for the Population 25 Years and Over (White Alone, Not Hispanic or Latino); Table C15002I Sex by Educational Attainment for the Population 25 Years and Over (Hispanic or Latino)

17 [Sonoma County Community Health Needs Assessment, Sonoma County 2013–2016](#)

18 [Sonoma County Community Health Needs Assessment, Sonoma County 2013–2016](#)

treatment for children in the county, including services related to ACEs. In spring 2013, Social Advocates for Youth and the Child Parent Institute evaluated 171 at-risk students in seven Santa Rosa elementary, middle and high schools. The study found that anxiety, depression, trauma and behavior problems were common among all the schools and ages of students. Thirty percent of the 53 high school students evaluated had an eating disorder, 60% showed clinical levels of depression, and 75% were failing at least one class. *A Portrait of Sonoma County 2014* reports that 5.8% of 11th graders in the county have been intentionally physically hurt by a boyfriend or girlfriend in the past year¹⁵.

Gaps in Trauma Treatment Options in Local Service Area: In 2015, for children and families affected by trauma, treatment options in our service area were limited. Sonoma County suffers from a shortage of qualified, culturally competent mental health providers available to serve low-income and uninsured families. The *2013 Sonoma County Community Health Needs Assessment*¹⁹ noted that insufficient private insurance coverage for mental health services and insufficient availability of publicly funded treatment services are significant barriers for local families seeking mental health services. Alarming, the 2011-2012 California Health Interview Survey found that of people who sought help for self-reported mental/emotional and/or alcohol-drug issues in the past 12 months, 42.5% reported they did not receive treatment²⁰.

There are no other Federally Qualified Health Centers in our Santa Rosa service area, and outpatient mental health programs in the area continue to be limited. While SRCH has made significant progress in addressing this gap for our patients, over the past several years, there has been a significant decline in mental health services provided by the Sonoma County Department of Mental Health, with a corresponding increase in the demand for services. This is a particular pain point as regards bilingual mental health services, let alone bicultural mental health care.

¹⁹ [Sonoma County Community Health Needs Assessment, Sonoma County 2013–2016](#)

²⁰ 2011 - 2012 California Health Interview Survey

2. GOALS AND OBEJCTIVES/PURPOSE: Below is a summary of the goals and objectives of this project.

Goal 1: To ensure all staff at Roseland Pediatrics understand the toxic effects of trauma/violence and the principles of trauma-informed care

Objectives:

- Train all staff at Roseland Pediatrics in the relationship between traumatic childhood experiences and health outcomes by April 2016
- All staff will indicate an understanding of ACEs and the principles of trauma-informed care, as measured by a self-assessment conducted by 9 months into the project.

Goal 2: To introduce evidence-based trauma/violence screening at Roseland Pediatrics Health Center to a large population of disadvantaged, low-income children age 0-19 to better identify youth and families affected by trauma

Objectives:

- Train staff to use the Adverse Childhood Experiences (ACE) Score Calculator by March 2016
- Modify workflows to use ACE screening tool in 90% of all new patient visits starting March 2016
- Establish a clear triage system for patient scoring & referral by March 2016
- 80% of Roseland patients will have a documented annual ACEs screening in their electronic health record in years 2-5 of the project

Goal 3: To augment immediately available counseling services available on-site at Roseland Pediatrics for children and families who have experienced trauma and improve the emotional health and well-being of children

Objectives:

- Ensure all members of the patient’s health care team will have access to a patient’s trauma screening results to inform future treatment and care plans starting April 2016
- Hire and train a 1.0 FTE pediatric psychologist starting March 2016
- Hire and train a .5 FTE Care Coordinator starting May 2016
- 50% of children and families affected by trauma will receive treatment by March 2018
- Set screening goals for outlying years after review of baseline data

Goal 4: To make appropriate treatment options available to all children and families who have experienced trauma/violence

Objectives:

- Collaborate with community partners and Advisory Board to map available community treatment options for low-income children and families by September 2016
- Develop and implement a clear system of shared referral procedures to connect patients to community treatment programs by December 2016
- Develop and implement a shared process for care coordination and management with referral partners by March 2017

Goal 5: To support healthy family behaviors and build community understanding of the negative impact trauma has on children to sustain the program beyond HTPCP funding

Objectives:

- Recruit a patient representative to join the Sonoma County ACEs Connection workgroup by March 2015, which will serve as the Advisory Group for this grant (MCH Goal 7)

- Develop a comprehensive toolkit of research-based support materials for patients, families and staff by March 2016. Of particular concern, we will emphasize and test materials for cultural and linguistic competence (MCH Goal 10).
- Modify our electronic health records to allow collection of data needed to report on project activities by October 2015
- Monitor costs and build a sustainable model for screening and treatment of ACEs in an FQHC setting by December 2017 (MCH Goal 33)
- Present toolkit and ACEs screening methodology for implementation by at least one other health center annually in years 2017, 2018, 2019, and 2020
- Present at findings at regional meetings at least three times by 2021

Goal 6: Reduce the prevalence of community, family, and domestic violence

Objectives:

- Document prevention-informed trauma discussion with families as part of 80% of all patient visits in years 2-5 of the project
- Parents/caregivers identified as being at high risk for maltreatment behaviors will be asked to fill out an evidence-based ACEs and Resilience Questionnaire in years 2-5 of the project

3. METHODOLOGY: The goals of the project were developed to identify and address emotional and developmental problems in traumatized children that can lead to unhealthy behaviors and poor physical outcomes and prevent children from living healthy and productive lives. By expanding screening and availability of therapy services, we aimed to improve access to interventions designed to address the adverse childhood events and traumas that result in PTSD, mood disorders, and behavioral problems in children aged 0 - 19. Our project included a screening and treatment component directed at parents and

caregivers as a means of preventing future trauma and toxic childhood stress.

Our Roseland Pediatrics Health Center (now known as the SRCH Pediatric Campus) proved to be the perfect test ground for this project. The team was highly motivated to support the systems changes necessary to address the impact of childhood trauma and the campus serves primarily high-risk children. Located in the center of the Hispanic Roseland district in Santa Rosa, Roseland Pediatrics treats patients from birth through age 19 and served 28,420 patients over the five-year period of the grant²¹.

Piloting a new program at a single health center proved to be the best way to roll out this new service. Starting Roseland Pediatrics Health Center allowed us to fully develop processes and workflows, work through unforeseen challenges, and develop a useful set of lessons learned that will help us spread the model successfully to our other campuses. Roseland Pediatrics has a highly skilled staff made up of Pediatricians, Pediatric Nurse Practitioners, a behavioral health specialist, and a team of competent bilingual clinical support staff. These individuals are now available for training and support as we roll out the ACEs screening to our other campuses.

A 3-Tiered Approach:

To accomplish this project, we employed a three-tiered approach to identify youth in our service area affected by ACEs and intervene effectively: 1) implement evidence-based universal ACEs screening at our Roseland Pediatrics Health Center, in the lowest-ranked SES census tract of Sonoma County, 2) develop a menu of immediate on-site intervention options for children and their families who screen positive for ACEs, and 3) through close collaboration with community partners, create a tightly integrated system of guaranteed referral options in the community to further expand evidence-based treatment options for children and families.

Part 1: Introduce evidence-based trauma/violence screening for children and families at

21 SRCH ACE Screening Counts Provider_3-2015 to 2-2020

Roseland Pediatrics with the Adverse Childhood Experiences (ACE) Score Calculator. The American Academy of Pediatrics strongly supports the Bright Futures tools for improving health maintenance visits for children, but the AAP Periodic Survey of fellows found that Pediatricians still report that completing questions on Family Stress is one of their lowest areas of focus²². Given the overwhelming evidence of the negative impact early exposure to traumatic events has on children, we set out to support pediatricians to take leadership on trauma-informed care. In years 2-5 of this project, screening for children and families affected by violence/trauma occurred an average of 53% of every new patient visit at Roseland Pediatrics Health Center, using the evidence-based Adverse Childhood Experiences (ACE) Score Calculator. Since ACE scores can change over time, we also implemented processes for 80% of all patients at Roseland Pediatrics to have annual ACEs screening documented in our electronic health record in years 2-5 of the project. Internal data reports of screening responses revealed that more than 82% of our pediatric patients screened positive for one or more adverse events.

Parents/caregivers identified as being at high risk were also asked to fill out a culturally appropriate version of the validated *CASA ACEs and Resilience Questionnaire* in the waiting room. Results of screening show that common experiences for our patients included physical abuse, sexual abuse, rape, parents who are addicted or incarcerated, domestic violence, traumatic immigration experiences, highly unstable living situations, and homelessness. Many of our patients cope by resorting to self-destructive behaviors like self-cutting and drug use. However, these children generally don't speak about their experiences because they either normalize what has happened, are scared, or don't have the resources to get help. In counseling sessions, our staff consistently uncover through focused questioning, traumas that youth did not discuss in initial medical appointments.

Part 2: Increase access to on-site treatment and intervention options at Roseland Pediatrics for

22 <http://www.aap.org/en-us/professional-resources/Research/research-findings/Pages/What-Do-Pediatricians-Discuss-During-Health-Supervision-Visits-National-Surveys-Comparing-2003-to-2012.aspx>

children and families affected by trauma. Under the direct leadership of Roseland staff pediatricians Dr. Meredith Kieschnick (retired in 2018) and Dr. Deidre Bernard-Pearl, this project added a 1.0 FTE on-site bilingual pediatric psychologist in years 2-5 of the project period. This intention of this FTE was to provide immediate warm hand-offs and treatment options for children and families who screen positive for ACEs. The project also included the development of a trauma-informed care toolkit of evidence-based take-home materials for parents to help families address the effects of ACEs at home. Limited resources created challenges with full implementation of the tool kit that will need to be addressed in the next phase of the project. To maximize workflow efficiencies, we also hired a .5 FTE Care Coordinator to help screen and triage children and their families, provide care coordination services, and facilitate patient connections to our network of community partners.

The first year of the project period was dedicated to developing and implementing training for all levels of staff on trauma-informed care: strategies for recognizing children and families affected by ACEs, information on the impact of trauma and ACEs across the lifecycle, and methods for compassionate and empathetic communication with families affected by adversity. This training was critical for our front-line staff of receptionists and medical assistants. Most of our support staff have socio-economic backgrounds that are very similar to our patients and many staff have themselves been affected by trauma. This has made them well positioned to be positive vectors for community healing. The goal of the training was successful in establishing a trauma-informed culture at Roseland Pediatrics. A culture that incorporates knowledge about trauma in all aspects of service delivery and practice; is hospitable and engaging for survivors; minimizes re-victimization; facilitates healing, recovery, empowerment; and emphasizes collaboration throughout the system.

Part 3: Promote community partnerships to provide a range of evidence-based treatment and referral options and transform health care for the low-income Latino community served by SRCH. A significant component of this project involved strengthening our partnerships with the diverse network

of public and private sector stakeholders already working to implement evidence-based trauma-informed care at the community level. Since the *2013 Sonoma County Community Health Needs Assessment* identified ACEs as a priority, the health care community is very mindful of the need for trauma screening and treatment, and there are several local advocacy groups already in place. We were able to leverage relationships with many local organizations to create community partnerships. This included the Sonoma County ACEs Connection a workgroup of the Child Parent Institute (CPI) and the Perinatal-Adverse Childhood Experience (ACEs) collaborative run by First 5 of Sonoma County as key examples.

The project at Roseland Pediatrics has filled a critical gap in our community. During the first year of the project, we began work with the complete constellation of organizations in our community already engaged in prevention and treatment related to ACEs, including the Child Parent Institute (CPI), First 5 Sonoma County, the Roseland School District, the Santa Rosa City School District, the Sonoma County Department of Maternal and Child Health, Community Action Partnership, the Sonoma County Department of Mental Health, and the Community Child Care Council. The goal has been to develop a tightly woven safety net of trauma-informed community programs linked by a clear shared system for triage and referral. When Roseland providers identify children and families in need of intervention, we want to ensure there are programs available to fit every level of need across the continuum, and a defined system for linking children and families into treatment.

We also partnered with the California Title V Maternal and Child Health Program and the California American Academy of Pediatrics to develop and implement our ACEs screening and treatment program. Our project supports several of California's Title V Maternal and Child Health Program goals, including the goal to "Reduce the prevalence of community, family, and domestic violence"²³. We were

23 <http://www.cdph.ca.gov/services/funding/mcah/Documents/MO-MCH-Background04.pdf>

lucky to have Addie Aguirre, Acting Chief of the California Department of Public Health (CDPH), Maternal Child and Adolescent Health (MCAH) be involved in the initial proposal planning process and as a member of our Advisory Board. We worked closely with the California Title V agency to link our ACEs screening and intervention project with other health initiatives at the local, state, and national levels to the fullest extent possible. We regularly partner with Title V to serve as a resource to families for preventive health services, screening, care coordination, Medi-Cal eligibility, and the transition from pediatric to adult services for children with special health needs.

4. EVALUATION: The following outlines the evaluation methods used to assess the effectiveness of the project and attain goals and objectives.

An Integrated Medical & Behavioral Electronic Health Record for Reporting: SRCH utilizes an electronic health record called eClinical Works (eCW) to monitor and report on all clinical measures and health outcomes. Our electronic health record is common to all of our health center sites and providers, including pediatric clinicians, and captures a broad array of data for clinical tracking and quality outcomes management for individual patient health, population health management, and community health. Mental and behavioral health information, as well as medical chart notes and care plans, are accessible to all appropriate members of the care team. These practices ensure continuity among providers and coordination across services. As part of this project, we modified our eCW templates to enable accurate tracking of ACEs screening results, documentation of trauma prevention discussions and all other data necessary for accurate reporting on project outcomes.

For children and families referred from Roseland Pediatrics to external providers for complex/specialty behavioral and mental health care or other services as a result of this project, we employ a dedicated staff of referral specialist that has an established system for following up on referrals. The system indicates whether a referral was completed, includes processes for providing

feedback on referral status to providers and patients and captures referral information in our electronic health record.

Tracking Progress of ACEs Screening & Intervention Program: We have a robust Quality Improvement (QI) Program overseen by the Chief Medical Officer and the Director of Quality, in partnership with site Medical Directors and the Director of Integrated Mental and Behavioral Health. This project also contributed to our ability to meet our Quality Improvement Plan which included an objective to integrate behavioral health into primary care. We have closely tracked the progress of our ACEs screening project at Roseland using a variety of systems that were already in place and some which we developed to capture specific ACEs data points. The workflow for documenting ACEs screening results was built into our electronic health record system. Templates were designed to capture results that can be retrieved patient-by-patient, and also pulled in aggregate by our data analyst. We used the existing Roseland Pediatrics quality team to review goals and progress and added this to our Quality Management plan. Key staff presented results of the project on a quarterly basis to the project Advisory Board. Key staff presented results of the project annually to our consumer-led Board. We conducted qualitative focus groups and quantitative surveys to incorporate the patient's expertise in developing the ACEs screening program. This met our MCH-funded program goal of consumer involvement. We utilized already strong financial systems in place to monitor grant expenditures and matching requirements.

MCH Performance Measures: We were able to positively report against the MCH performance measures for MCHB-funded programs, using the tools in the HRSA Electronic Handbook (EHB). First, by expanding consumer participation in the project Advisory Group and via focus groups regarding programming. Using feedback and our experience in delivering linguistically and culturally responsive primary care, we adapted the ACE screening tool, scripts, and training to meet the needs of patients. By attaining additional grant funding, streamlining and normalizing the screening process into primary care,

and, most recently, participating in the California state ACEs Aware initiative that will provide a small reimbursement for ACE screenings, we have also made considerable progress towards the goal to develop a sustainable and spreadable approach to improving pediatric care in an FQHC setting. All of this allows for a positive report against MCH performance measure 07 - the degree to which MCHB-funded programs ensure family, youth, and consumer participation in program and policy activities; performance measure 10 - the degree to which MCHB-funded programs have incorporated cultural and linguistic competence elements into their policies, guidelines, contracts and training; and performance measure 33 - the degree to which MCHB-funded initiatives work to promote sustainability of their programs or initiatives beyond the life of MCHB funding.

5. RESULTS/OUTCOMES: Below is a summary of our accomplishments which includes systems changes, lessons learned, and outcomes.

Overarching Outcomes:

Establishing a Culture of Trauma Informed Care: As of the end of this project, we have successfully standardized ACE screening as a regular part of the culture at our Roseland Pediatrics. We have also leveraged the learning in this project to access additional grant funding that expanded screenings to our teen-serving Elsie Allen Campus. The framework and practice of ACE screenings has also expanded across our agency as we train staff and implement screening at our other campuses. In addition to the deep commitment within SRCH, awareness, expertise, and interest in the impact of trauma on health and trauma-informed care practices are noticeably expanding across Sonoma County. We are happy to report that we have established additional funding to continue to build on the success of this project, including potential Medi-Cal reimbursements through the new California ACEs Aware program, and for continued collaboration with community partners.

Trauma-Informed Community Disaster Response: During the course of the grant, our

community was struck by two separate wildfires. The first wildfire in October of 2017, destroyed one of our main campuses. In addition to the wildfires, Sonoma County has also had to adapt to smoke which created dangerous air quality for several weeks and more recently the Coronavirus pandemic. The scope of these disasters has created trauma as children and adults living in Sonoma County cope with so many disasters in such a short period of time. The wildfires and loss of our largest campus have created financial and operational strains on SRCH. This resulted in less staff to do the pre-visit planning that supports the ACEs screening process and created barriers to meeting our proposed 90% screening rate. Despite these challenges, and in some cases because of them, we remain committed to the full implementation of ACEs screening for all patients served by Santa Rosa Community Health. As was mentioned in previous reports, the silver lining in these tragedies is an expanding understanding and acceptance of the impact that trauma can have on health. Because of the impacts of these disasters on our community, Santa Rosa Community Health has become deeply committed to providing an environment of trauma informed care.

Screening for ACE's and Referrals for Treatment or Resources: From March 1st, 2015 through February 29, 2020, we screened 14,926 patients for ACEs at our Roseland Pediatrics Campus. The screening rate as of the end of the project was 61% of all new patients and well child exams. Over the course of the five years, 11,125 of the patients who had a positive screening were referred to one of our behavioral health providers. 3,225 of the patients who were screened positive requested to have a community resource referral meaning food, housing, childcare, school, etc. We continue to find that not only are many of our pediatric patients screening positive, but many of the parents are screening positive for ACEs in their own histories as well. Throughout the implementation of this project, many parents expressed appreciation during visits that we are asking the questions in the screening.

Screening Expansion: We successfully implemented the SmartForm into our electronic health record. This allows us the opportunity to expand screening across Santa Rosa Community Health.

As part of this project, we provided training to many of our staff in understanding the impacts of trauma on health and creating a culture of trauma informed care. We also at our Elsie Allen and Dutton campuses. We have developed a plan for expansion and secured additional funding to continue to implement screening within our other campuses.

Results by Project Goals and Objectives:

Goal 1: Ensure all staff at Roseland Pediatrics understand the toxic effects of trauma/violence and the principles of trauma-informed care

Objective: Train all staff at Roseland Pediatrics in the relationship between traumatic childhood experiences and health outcomes by April 2016

This objective was accomplished in year one. In March 2015, all existing staff at our Roseland Pediatric Campus were trained in the connection between adverse childhood experiences and poor health outcomes. In December 2016, we re-trained all existing Pediatric Campus staff (some of whom were new since the last training) in resiliency and trauma and included additional cultural competence training. Since that time, new staff/temporary staff have been retrained as needed. We contracted with Wellness Consultant-Lance McGee who conducted training on trauma and wellness. In addition, Dr. Deirdre Bernard-Pearl continues to complete internal trainings across SRCH to reinforce the principles of trauma-informed care and teach new skills in mindful, empathetic practice.

Objective: All staff will indicate an understanding of ACEs and the principles of trauma-informed care, as measured by a self-assessment conducted by 9 months into the project.

As part of this project, all staff at Roseland Pediatrics completed a self-assessment within 9 months of the start of the project. This tool was used to develop training and as a way to determine baseline competency of staff's understanding of the principles of trauma-informed care. This tool has also been used to assess staff understanding as we begin to expand screening to our other campuses.

Goal 2: Introduce evidence-based trauma/violence screening at Roseland Pediatrics Health Center to a large population of disadvantaged, low-income children age 0-19 to better identify youth and families affected by trauma

Objective: Train staff to use the Adverse Childhood Experiences (ACE) Score Calculator by March 2016

This objective was accomplished in Year one and retraining on the calculator was included in our 2018 training update. We implemented two versions of the customized questionnaire: one for teens age 12 and up, and one for kids age 0-11 that includes questions directed at the child and the parent. We continue to find that many of the parents are screening positive for ACEs in their own histories, which has been a big lesson for us.

Objective: Modify workflows to use ACE screening in 90% of all new patient visits starting March 2016

Over the period of the grant, we have completed 14,926 screenings, and as of 2019, our screening rate was 62% of new and well-child visits. Given the impact of the recent disasters (two wildfires and the Coronavirus pandemic) we were unable to meet the optimistic 90% screening rate by the end of the grant. That is offset, however, by the expansion to the other sites which means more children can be screened overall at Santa Rosa Community Health. At the time of this report, the California ACEs Aware initiative is acting as a key driver to help us act on our commitment to spreading ACEs screening to our large campuses. We will continue to work towards the 90% screening rate at the Roseland Campus.

Objective: Establish a clear triage system for patient scoring & referral by March 2016

We have established a clear system for reviewing and responding to positive ACE screening questionnaires and for referring patients who need support to internal and external resources. Instead of a triage system, every single patient or family member with a positive screen is asked about their needs and referred appropriately.

Objective: 80% of Roseland patients will have a documented annual ACEs screening in their electronic health record in years 2-5 of the project

As was mentioned above, Roseland Pediatrics screened 14,926 screenings, and as of 2019, our screening rate was 62% of new and well-child visits. As patients return we will continue to update the screenings so that the information stays current.

Goal 3: Augment immediately available counseling services available on-site at Roseland Pediatrics for children and families who have experienced trauma and improve the emotional health and well-being of children

Objective: Ensure all members of the patient's health care team will have access to a patient's trauma screening results to inform future treatment and care plans starting April 2016

We met this objective in Year one. We completed development of a template in our electronic health record system (eClinicalWorks, or ECW) that contains structured fields for universal screening and referral information for children and parents. This information is available across all of our health center sites to every member of a patient's treatment care team (within HIPAA guidelines) and is being used to inform treatment recommendations and care plans. We have also expanded use of this functionality when we opened our new health center, the Dutton Campus in February 2018. We delivered training in the impact of ACEs to all staff and providers and have begun to implement ACEs screenings into their workflows.

Objective: Hire and train a 1.0 FTE pediatric psychologist starting March 2016

We met this objective in year one. Marianne Rickards, LSCW was hired in April 2015. She is a bilingual trauma-informed care specialist. Julie Ann Steinberger, ASW also joined our team in December 2016.

Together they make up the 1.0 FTE goal.

Objective: Hire and train a .5 FTE Care Coordinator starting May 2016

We met this objective in year one. We have not been able to maintain this position at this point in time in the absence of grant funding and combined with the financial challenges presented by the wildfires mentioned above.

Objective: 50% of children and families affected by trauma will receive treatment by March 2018

Over the course of the grant, we successfully referred 11,125 children and families to mental health counseling and 3225 families to external community resources as a result of positive ACE screening. This is an exponential increase over the 37 children and families we referred to mental health counseling and 21 families we referred to external community resources the year prior to this grant award. We have discovered that not all of our patients who screen positive need or want counseling and measuring patient access rather than utilization respects our patients' right to choose. We continue to follow this model of patient-centered choice in terms of making and following up on referrals. With additional counselor availability at Roseland Pediatrics, we are increasingly able to handle same-day requests and immediate warm hand offs from our medical providers. JulieAnn Steinberger offers trauma-informed care training called the *Circle of Security* in English and Spanish for parents of children ages 0 to 3 at the Pediatric Campus. This is by referral and self-referral. The *Circle of Security* has proven effective for traumatized populations, because it is completely based on trauma theory and trauma triggers. The curriculum focuses on breaking the cycle of trauma, addressing parent trauma and promoting a better connection between parents and children. In our population, 90% of parents have at least one ACE. Helping them in this supportive structure is a good investment in the health of their children, themselves, and our whole community.

Objective: Set screening goals for outlying years after review of baseline data

In spite of the disruptive wildfires, we have made very strong progress towards our initial stretch goal of 90% screening rate for all new patients. In 2018, we implemented an agency wide data analytics

platform called “Relevant”, which is transforming our ability to access and use data, as well as how teams prepare for visits. We are evaluating if we can create a ‘care gap’ in Relevant and eCW that would streamline the identification of patients who need a screening. We have gained buy-in from our CMO to do one lifetime screen for adults.

Goal 4: Make appropriate treatment options available to all children and families who have experienced trauma/violence

Objective: Collaborate with community partners and Advisory Board to map available community treatment options for low-income children and families by September 2016

We continue to have a positive and active relationship with Sonoma County ACEs Connection who also serves as our advisory group. Several professionals who are responsible for Sonoma County ACEs Connection participated in the Sonoma Community Resilience Collaborative training and saw a strong alignment of the work. Over the past two years, our relationship at Elsie Allen High School has expanded to include training teachers on the impacts of trauma and how to refer students to our health center co-located at the high school. We were also able to conduct an assessment for the school staff on the types of resources the staff and student would like to see/need to support their well-being. This proved helpful in developing patient supports at the high school health center.

Objective: Develop and implement a clear system of shared referral procedures to connect patients to community treatment programs by December 2016

We have a strong referral program in place. A new opportunity that began in 2018 is a collaborative with Sonoma County Parks and Recreation. They are becoming very proactive as partners in our community’s health. They made a presentation to our Roseland Pediatric Campus on ways our patients can access county parks and related programs. This has allowed us to expand a program to provide free parks passes to patients as a kind of “prescription for nature.”

Objective: Develop and implement a shared process for care coordination and management with referral partners by March 2017

We have many strong partnerships in our local community. This includes membership with the Redwood Community Health Coalition (RCHC), a regional consortium of 16 community health center organizations (including free clinics, FQHCs, Rural Health Centers, and look-alikes). Together, this group serves more than 180,000 low-income and uninsured people in Sonoma, Napa, Marin, and Yolo counties. SRCH has partnered with other providers in this group to develop a referral system called Norcal Resources. This system will eliminate barriers to follow up services and allow us to see whether individuals referred to others had follow up and track any future support needs.

Goal 5: Support healthy family behaviors and build community understanding of the negative impact trauma has on children to sustain the program beyond HTPCP funding

Objective: Recruit a patient representative to join the Sonoma County ACEs Connection workgroup by March 2015, which will serve as the Advisory Group for this grant (MCH Goal 7)

This objective was met in Year one. Initially, we successfully recruited a very engaged parent to be our patient representative on the Sonoma County ACEs Connection workgroup to make sure the patient's voice is captured at every meeting. When that person was no longer able to fulfill the role, it became a challenge to identify a new representative.

Objective: Develop a comprehensive toolkit of research-based support materials for patients, families and staff by March 2016. Of particular concern, we will emphasize and test materials for cultural and linguistic competence (MCH Goal 10).

We have compiled a broad set of materials relevant to childhood trauma in our community and have tailored them to be more appropriate and effective for the cultural, linguistic and socio-economic backgrounds of our patients. Dr. Meredith Kieschnick was taking the lead on this project and fully retired

in 2018. The competing demands of disaster recovery have kept us from being able to actively pursue toolkit development. AB-340 will require ACE screening during well-child exams and there is a statewide committee developing policies and procedures to roll it out across the state. This effort will drive and define what materials are needed. We will continue to focus our efforts on the development of this critical toolkit.

***Objective:** Modify SRCH's electronic health records to allow collection of data needed to report on project activities by October 2015*

This objective was successfully completed in year one and is being replicated at other SRCH campuses.

***Objective:** Monitor costs and build a sustainable model for screening and treatment of ACEs in an FQHC setting by December 2017 (MCH Goal 33)*

We continually work to monitor costs and build a sustainable model for our ACEs screening project. As part of HRSA's ROI initiative, *ROI Technical Assistance for Healthy Tomorrows*, we sought technical support to help us determine how best to evaluate our project's economic impact as well as determine strategies for sustainability post federal funding. Roseland Pediatrics Medical Director Dr. Deirdre Bernard-Pearl has been developed economic analyses for evaluation and sustainability, including cost effectiveness analysis, cost benefit analysis and return on investment. We have established funding through Medi-Cal visit reimbursement and other grant sources to continue to build on the efforts of this project and expand ACEs screening to all campuses.

***Objective:** Present toolkit and ACES screening methodology for implementation by at least one other health center annually in years 2017, 2018, 2019, and 2020*

The community continues to have interest in the screening work being done at Roseland Pediatrics. Program staff have presented to staff annually at SRCH Vista, Dutton, and Lombardi Campuses and externally to mental health providers, educators, nonprofits, city officials and other practitioners.

***Objective:** Present at findings at regional meetings at least three times by 2021*

We met this goal and will continue to seek opportunities to provide opportunities to share the impacts of this project. Below is a summary of the presentations at regional meetings. Three project staff attended the second bi-annual *Center for Youth Wellness National Conference on ACEs and Resiliency* October 20-21. The Roseland Pediatrics team presented at a poster symposium on our Roseland work. Dr. Meredith Kieschnick also participated on a discussion panel at the same conference for pediatric providers on ACEs screening. On December 4, 2016, Dr. Kieschnick and Dr. Deirdre Bernard-Pearl presented our poster at the Chapter 1 AAP Annual CME event in San Francisco. On April 8, 2016, Dr. Deirdre Bernard-Pearl presented a 3-hour workshop at the National Meeting of the Association of Maternal Child Health Programs in Washington D.C. entitled: "Implementing universal ACE Screening at a Community Health Center" with Santa Rosa Community Health Centers colleagues Maryellen Curran PhD (Director of Integrated Behavioral Health) and Molly Reed, MFT. It should also be noted that in 2018, Dr. Pearl was hired as a consultant/coach by the Center for Care Innovations' Resilient Beginnings Collaborative. This was a program to spread trauma-informed care at seven Northern California FQHCs during the year 2018.

Objective: Convene an ACEs forum that includes all local and regional partners and stakeholders, including the state MCH and AAP representatives, to get feedback, share best practices, and continue to refine our network for referrals and support.

The Early Childhood Mental Health Summit and Right Start Town Hall, both held in 2018, were the first of their kind and served as a gathering place for professionals and community respectively. The former was organized by SRCH mental health provider JulieAnne Steinberger, who also participated as a panelist in the Right Start Town Hall.

Goal 6: Reduce the prevalence of community, family, and domestic violence

Objective: Document prevention-informed trauma discussion with families as part of 80% of all patient

visits in years 2-5 of the project

We began screening parents at Roseland Pediatrics in Year one and that work is ongoing today.

***Objective:** Parents/caregivers identified as being at high risk for maltreatment behaviors will be asked to fill out the ACES and Resilience Questionnaire²⁴ in years 2-5 of the project*

We began screening parents at Pediatric Campus in Year one of our project and that work is ongoing today. We provide flyers in English and Spanish to all parents every time we screen. Documenting the discussion as a standalone deliverable continues to be a challenge.

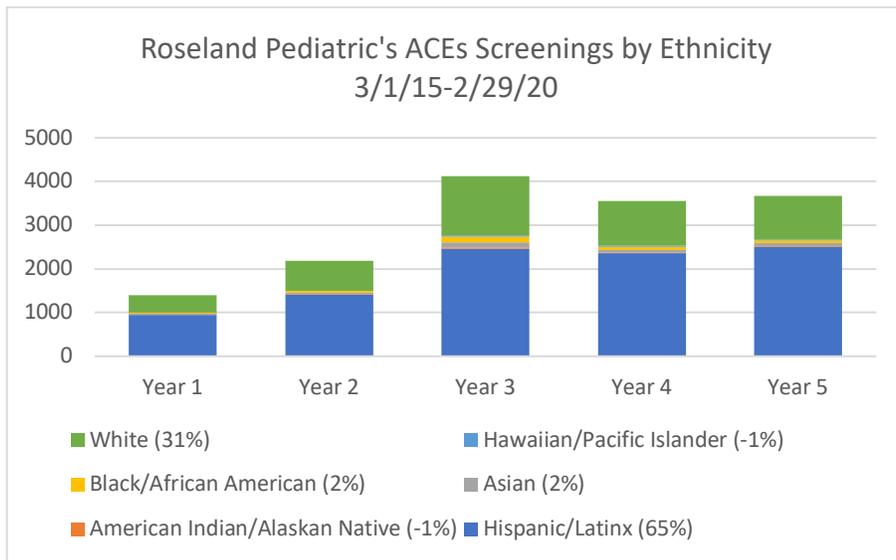
***Objective:** Advisory Board uses project information to build community awareness of this issue and gets input from patients on what resources are needed in the community to improve health outcomes*

Our HTPC project Advisory Board continues to be the Sonoma County ACEs Connection workgroup. The workgroup has a broad membership of providers, local government, non-profits and advocacy organizations, and has continued to be very successful at building community awareness of the importance of identifying and addressing childhood trauma. Since the *2013 Sonoma County Community Health Needs Assessment* identified ACEs as a priority, many public and private sector stakeholders have been working to implement evidence-based trauma-informed care at the community level, and the workgroup has been a wonderful vehicle for sharing information and best practices on these various projects. We've had a patient representative on the workgroup since March 2015. Our HTPC project Advisory Board continues to be the Sonoma County ACEs Connection workgroup.

Results by Race and Ethnicity:

Over the course of the five-year grant, 65% of patients screened for ACEs at Roseland Pediatrics were Hispanic or Latinx while 2% were Asian, 2% were Black or African American, less than 1% were American Indian/Alaskan Natives and Hawaiian/Pacific Islanders, and the remaining 31% were white. The below

chart shows the ethnicity of the patients screened by year. The chart demonstrates the year over year growth in screening capacity. The peak in year three followed by a decrease in year four is a reflection of the extreme systemic disruption caused by the 2017 wildfires and the loss of SRCH’s largest health center. An increase is visible in year five, which reflects the beginning of a return to normal in 2019. While the net result still shows an increase, they were hampered again by wildfire in November 2019 that caused the largest evacuation in Sonoma County history.



6. PUBLICATIONS/PRODUCTS: In addition to training materials, the following products and publications were created:

- 2016: *Integrating mental and physical health services using a socio-emotional trauma lens*, Dr. Bernard Pearl, Current Problems in Pediatric and Adolescent Health Care
- 2016: *Center for Youth Wellness National Conference on ACEs and Resiliency*, poster presentation and panelist, Drs. Bernard Pearl and Keischnick
- 2016: Chapter 1 AAP Annual CME, poster presentation, Drs. Bernard Pearl and Keischnick

- 2017: Implementing universal ACE Screening at a Community Health Center, presentation, Dr. Bernard Pearl and Dr. Maryellen Curran, National Meeting of MCH Programs
- 2017: ACEs Toolkit for Medical Providers Fact Sheet by Dr. Bernard Pearl
- 2017: Addressing Positive ACE Screenings Fact Sheet, Dr. Bernard Pearl

7. DISSEMINATION/UTILIZATION OF RESULTS: SRCH is a data-driven organization which has proven useful in the dissemination of information and outcomes related to this project. We utilized our Board of Directors and project Advisory Board to improve community understanding of the extent and impact of early trauma and exposure to adverse events on children. We have a rich network of partnerships that were interested in hearing information about this project. This includes membership with the Redwood Community Health Coalition (RCHC). We have strong relationships with neighboring community health centers, and we regularly disseminate project results and share best practices. SRCH and nine other RCHC health centers also share a common electronic health record. Over the past three years, we have collaborated with RCHC and its member health centers on multiple projects, including the Patient-Centered Medical Home Learning Collaborative and the Partnership Health Plan Managed Medi-Cal Quality improvement program. These partnerships have been valuable resources for dissemination of results from our ACEs screening and treatment program at Roseland Pediatrics.

Our many community-based partnerships include the Child Parent Institute (CPI), First 5 of Sonoma County, the Sonoma County Department of Maternal and Child Health, Community Action Partnership, and the Sonoma County Department of Mental Health, all of whom have also been important vehicles for spreading our program to other FQHCs and community clinics. First 5 Sonoma County, who provided the matching funding for this grant, was a key advocate and partner in sharing results with the community at large.

In their role as our project Advisory Board, Sonoma County ACEs Connection in particular has

proven effective in getting the word out about our program and potential for replication. Our strong connection with national ACEs expert Jane Stevens also creates excellent potential for national dissemination via her well-known ACEs newsletter and website. The Roseland Pediatrics Medical Director and Site Administrator are active with the California School Based Health Center association and have presented at their statewide conference.

8. FUTURE PLANS/SUSTAINABILITY: We have made significant progress towards sustainable ACEs screening as part of our primary care experience for children. It does take extra visit and staff time but is fully embedded in the Roseland Pediatric Campus workflow. Recruiting and developing provider who are billable under the PPS system are one component of sustainability. Roseland Pediatrics Medical Director Dr. Deirdre Bernard-Pearl has developed economic analyses for evaluation and sustainability, including cost effectiveness analysis, cost benefit analysis and return on investment. These tools will be used to continue to evaluate the project as it moves into the next phase.

In 2020, California introduced the ACEs Aware initiative that creates a Medi-Cal visit reimbursement for ACEs screenings, which will help offset the financial impact somewhat, as would reimbursement for same-day medical and mental health appointments, should that legislation pass. ACEs Aware and the associated reimbursement potential are serving as a catalyst to help us expand ACEs screening and treatment to SRCH's other large campuses. We have also secured grant funding from ACEs Aware for the necessary training, as well as a small grant to participate in a Center for Care Innovations learning collaborative to support the expansion to other campuses. We will continue to seek additional funding and billable service models to ensure we can operationalize our commitment to maintain and expand ACEs screening and treatment for SRCH patients and our community.

ANNOTATION:

The primary goal of our project was to develop and implement an evidence-based ACEs screening program at our Pediatric Campus and to expand the therapeutic treatment and referral options available for affected children and families. The latter included developing internal mental health support and a warm hand-off and referral system, as well as referrals to external resources. Santa Rosa Community Health's Pediatric Campus is the only pediatric health center serving Medi-Cal and low-income families in our Sonoma County service area and cares for over 5,000 children every year at this site alone.

KEY WORDS:

ACE, adverse childhood experience, trauma screening, trauma informed care, mental health, pediatric mental health