HEALTH POLICY BRIEF JULY 2017

Addressing Social Determinants of Health Among Adolescents and Young Adults: Strategies from the Field



University of California San Francisco







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BACKGROUND

Social Determinants of Health and the Importance of Context for Adolescents and Young Adults

Overview of the Social Determinants of Health Framework

"The strongest determinants of adolescent health worldwide are structural factors such as national wealth, income inequality, and access to education. Furthermore, safe and supportive families, safe and supportive schools, together with positive and supportive peers are crucial to helping young people develop to their full potential and attain the best health in the transition to adulthood.

Improving adolescent health worldwide requires improving young people's daily life with families and peers and in schools, addressing risk and protective factors in the social environment at a population level, and focusing on factors that are protective across various health outcomes. The most effective interventions are probably structural changes to improve access to education and employment for young people and to reduce the risk of transport-related injury." (The Lancet, 2012)

Disparities in health outcomes are a result of a myriad of socio-ecological factors that are linked to education, employment, income, discrimination based on race/ethnicity, gender, religion, sexual orientation, geographic location, mental health and/or disability. These factors are commonly referred to as social determinants of health (SDOH). The World Health Organization defines SDOH as the conditions in which people are born, grow up, work and live and the structures and systems that shape the daily conditions of life.² There has been a great deal of research focused on SDOH in the past decade that is critical to informing policy and practice necessary to promote health equity. However, it is also important to acknowledge that this concept is not new. Unacceptable health disparities remain despite substantial evidence, over the past century, which shows SDOH are at the root cause of health disparities.³

Addressing equity across the broad social-political factors that shape the communities in which people live is complex and extends beyond the traditional health context. In the health care system, too often, providers are only able to respond to the presenting health issue, rather than working upstream to address the underlying factors necessary to prevent the full negative impact. The purpose of this study was to identify innovative approaches to promote health equity and justice for Adolescents and Young Adults (AYAs) and to learn how the health care delivery system can better work with the broader community to address SDOH, the root causes of health disparities, for young people.

The concept of SDOH has its roots in the early 1900s, with a major focus on public policies beginning in the 1950s and 1960's.³ Specifically, President Lyndon Johnson's "War on Poverty", including its signature Economic Opportunity Act of 1964, which launched programs such as Jobs Corps, Urban/Rural Community Action, VISTA, Head Start and many more designed to help break the cycle of poverty and ensuing negative social, economic and health outcomes.⁴ In particular, the Head Start program was designed to provide low-income children with a publicly funded, comprehensive preschool program to compensate for social and economic inequalities. Through a community-based, culturally responsive approach, the program was to meet the emotional, social, health, nutritional and psychological needs of children.⁵ The less known health component of Head Start included comprehensive medical assessments (e.g., hearing, vision, speech, nutrition, psychological screenings) and appropriate supports, immunizations, and linkages to health services.⁵

Head Start was based on early research showing that socio-ecological factors shape developmental outcomes of young children and attending to these factors could improve child cognitive, social-emotional, and health outcomes.⁶ Among the team of scientists on the planning committee for Head Start, was Dr. Urie Bronfenbrenner, the developmental psychologist who conceptualized the influential socio-ecological model of child development.⁶ According to the model, development is the result of the bidirectional influence of individual characteristics (biological) and contextual factors that occur at multiple levels, including those proximal to the individual, such as family, neighborhood, school, community and larger socio-economic, social and political factors, including, but not limited to, access to education and employment opportunities, income, health and family policy.⁷ These factors are also included within the definition of SDOH.²

It was not until 1985 that the U.S. Department of Health and Human Services (HHS) first documented major disparities in health outcomes.⁸ This HHS report on Black and Minority Health showed that Blacks, Hispanics, Native Americans and those of Asian-Pacific heritage had lower life expectancies and greater mortality rates from cancer, heart disease, diabetes, homicide, infant mortality, homicide, and chemical dependency than whites and that there needed to be a national effort to address these health inequities. The report included a number of recommendations to address these disparities and contributed to the development of HHS' Office of Minority Health in 1986⁹ and the CDC's Office of the Associate Director for Minority Health in 1988.¹⁰ In 2003, the Institute of

Medicine (IOM) published a comprehensive report showing disparities in health care access for racial/ethnic minorities and that the care these populations received was often of poor quality. This growing body of evidence contributed to a number of global and national initiatives that were launched to raise awareness of and address SDOH. Notably, there was recognition of the persistence and severity of health disparities, and that race/ethnicity and poverty are intertwined across the U.S., further confounding negative impacts on health. In addition, institutional racism and its negative impact on health outcomes has been well documented. These factors have contributed to a call for even greater awareness of disparities across the U.S. along with the need to develop health policies and programmatic efforts at the federal and local levels to address disparities.

While this increasing awareness brought additional attention and resources to these issues, the magnitude of fully responding to the underlying social and economic factors is complex and challenging for policymakers, providers, and other stakeholders. In 2012, the Lancet Journal published a special issue dedicated to SDOH and its impact on adolescent health outcomes.¹ Lancet called for increased attention to actors, such as education and employment that influence a number of health outcomes. This renewed attention and focus is especially critical given the slow progress thus far in ameliorating disparities and the fact that significant and persistent racial and ethnic health disparities remain.³, ¹³

Adolescence is a period in which development is particularly sensitive to contextual influences making youth especially vulnerable to social determinants that impact their health

Why did the Lancet draw special attention to SDOH for AYAs? Socio-ecological factors, which are included within the SDOH framework, have a profound impact in the overall development of AYAs. Adolescence is one of the most rapid phases of human development with dramatic changes across physical, cognitive, and social-emotional domains. These dramatic changes make adolescence both a time of considerable opportunity and growth, as well as a period of increased risk and vulnerability. During adolescence, youth seek new challenges, demonstrate new cognitive capacities and skills and generate creative ideas. ^{15,16} Paradoxically, adolescence is also a period in which risk-taking behaviors peak. Morbidity and mortality rates increase 200% from childhood to late adolescence. ¹⁷ Worldwide, the leading causes of adolescent mortality are traffic injuries, lower respiratory infections, suicide, while many others suffer from malnutrition, unintentional injuries, sexual violence, pregnancy, sexually-transmitted diseases, and mental health issues. ¹⁸ In addition, many behaviors that are shaped during adolescence, including diet, exercise, and other health risk behaviors, impact health in adulthood. ¹⁸ Thus, SDOH have a profound impact on AYA health world-wide. ¹

Adolescence is also a sensitive period of learning. Research on brain development emphasizes the importance of the environmental context in which adolescents grow and develop. It is now widely known that the brain continues to develop well into the second decade of life and its development is shaped by biological *and* environmental factors. Specifically, there is considerable neural plasticity in cognitive processing which makes brain development and corresponding behavior particularly sensitive to the environmental context. This sensitive period of development is adaptive in that it enables adolescents to learn and adjust to the transition from childhood to adulthood ^{19,20}; yet, at the same time, it also makes them potentially vulnerable to the negative consequences that can result from a challenging socio-ecological context.

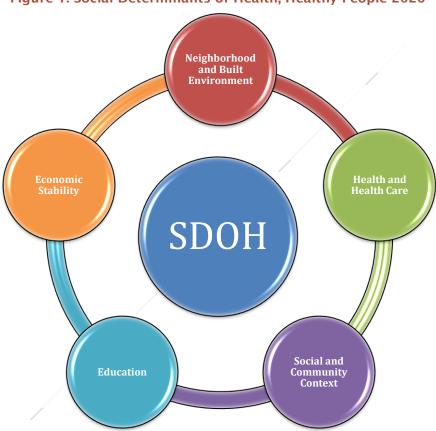


Figure 1: Social Determinants of Health, Healthy People 2020

Figure 1 illustrates how SDOH are a function of economics, education, the social and community context, health and health care and the family, neighborhood and built environment, which includes: supportive environments at home and school, access to healthy foods, quality of housing, the incidence of crime and violence, and other environmental conditions.²¹ Investments in youth and social supports that promote their positive, healthy development can help reduce the risk of poor health and improve developmental outcomes both during and subsequent to the adolescent years.¹

Shifting Attention to Addressing Social Determinants of Health for AYAs

Addressing the broad social-political factors that impact equity in economic, education, housing and health policies that shape the communities in which people live is complex. In response, to this challenge, the National Partnership for Action to End Health Disparities (NPA) and HHS jointly developed the first strategic action plan in 2011 to address racial/ethnic health disparities and improve the health status of vulnerable populations.^{7,22,23} This report includes a number of goals and recommendations with an emphasis on SDOH. In addition, the 2010 Affordable Care Act (ACA)²⁴ include a number of provisions to promote health equity with a number of provisions including, but not limited to, Medicaid Expansion for low income populations who had previously not been eligible to receive health care, healthcare coverage up to age 26, including for youth as they transition from the foster care system and young adults on their parents' health insurance plans, and the provision of preventive healthcare services, incorporated into ten Essential Benefits. The ACA also included funding to expand healthcare workforce capacity through scholarships and grants to address shortages of health care professionals and creating professional training pathways and economic opportunities for people with low-incomes. There are also increased standards for quality of care including cultural and linguistic appropriate services. 13,24 It is important to note that while there have been significant gains in health care coverage and access for many AYAs and their families under the ACA, these gains are in jeopardy as many key provisions are at risk of being repealed or cut.²⁵

Apart from formal policy efforts, health care providers often struggle with what they can do to address social determinants that shape the health outcomes of their patients. While most AYA health morbidity and mortality is largely preventable with roots in health-risk behaviors, providers face challenges in engaging with other systems that influence young people, such as schools, juvenile justice and social service systems, in order to respond to the myriad needs of young people. The purpose of this study was to identify innovative approaches in which the health care delivery system is working with the broader community to promote health equity and address the root causes of health disparities for AYAs.

Major Health Disparities Among Adolescents and Young Adults

While disparities have historically focused on racial/ethnic and income inequalities, more recently there has been increased recognition of health disparities that affect additional populations of AYAs, including lesbian, gay, bisexual, transgender, queer/questioning (LGBTQ) youth, youth in foster care, juvenile justice, homeless youth and youth living in underserved geographical areas, particularly in inner-cities and rural areas. These special populations are at a greater risk for a number of poor health outcomes including: injury, mental health²⁶, substance use²⁷, poor sexual health (young age at sexual debut, teen pregnancy and sexually transmitted infections)^{28,29,30}, obesity³¹, oral health³², and others. There are also disparities in adolescent health service utilization that are affected by SDOH³³ which further contributes to disparities in health outcomes.

Table 1 provides an overview of some of the recommended clinical preventive services for AYA's from the U.S. Preventive Services Task Force and provides examples of research that has documented disparities in a number of areas. This is not designed to be a comprehensive review, but rather highlights data from selected sources where there are disparities by health insurance status race/ethnicity, SES and/or geography. Eliminating barriers to preventive services would constitute a major milestone toward reducing healthcare disparities, but this in itself would not respond explicitly to the multiple issues that underlie the SDOH. Given the wide range of disparities across multiple populations – especially for preventable health morbidities and mortalities, a social disparity and an equity lens needs to underlie the strategies adopted by a wide-array of health and nonhealth providers, programs and institutions that interact directly and indirectly with adolescents, young adults, and their families.

Table 1. AYA Disparities Data for Recommended Clinical Preventive Services

Evidence-based Clinical	•		Sources of Disparities Data and Outcomes	
Preventive Services	Population:		Sources of Disparities Data and Outcomes	
Fleventive Services	Adolescents	Young Adults		
Preventive Well-Visit	√	√	Preventive visits are greater for: White adolescents (55%) than Blacks/African Americans (14%), Hispanics (22%), and Asians (4%); Higher incomes (31%) than low-incomes (18%); YA females (38%) than males (18%). ³⁴	
Time alone with a provider at past year preventive health visit	√	n/a	Adolescents' time alone was greater for: Whites (43%) than Hispanics (24%); and higher income (47%) than low-income (28%). ³⁴	
Substance Use				
Screening, counseling & support services for substance use	√	√	Compared to Whites, Black adolescents with substance use issues reported receiving fewer services from specialists (e.g., inpatient hospital stays) and Blacks and Latinos reported fewer informal care services (e.g., self-help groups). ³⁵	
Nutrition/exercise/obesity				
Hypertension/blood pressure		√	YAs with partial- or full-year uninsured screened less than those with full-year private insurance. ³⁶	
Obesity/BMI	\checkmark	\checkmark		
Cholesterol level		+	Latino and Black YAs were 87% and 63% more likely to receive screening than Whites. ³⁷	
Healthy diet		+	Latino YAs almost 100% more likely to receive diet counseling than white young adults. ³⁷	
Reproductive Health				
HIV screening	√	\checkmark	HIV screening among high school students was greater for: girls than boys (15% vs. 11%) & Blacks (20%) than Hispanics (13%) & Whites (11%).38	
STI screening: screening; Chlamydia; and Gonorrhea	+	+	Among YAs, females 240% more likely to be screened than males. Blacks 100% more likely than Whites; Asian 48% less likely than Whites. ³⁷	
Mental Health			,	
Depression	→	√ √	Among adolescents who did not have a documented diagnosis of depression, screening was rare (0.2%) during general/family medicine or pediatric clinics; it was 80% less likely to occur during visits for Hispanic compared to non-Hispanic white adolescents. ³⁹	
Immunizations				
Human Papilloma Virus (HPV)	√	√	Males were less likely than females (63% vs. 42%, respectively) to receive care. Hispanics > non-Hispanic Whites (46% vs. 40%); Black females > Whites (41% vs. 40%); Geographic disparities (e.g., Utah=25% vs. RI= 68%).40	
Immunizations such as: Td/Tdap; Varicella; Influenza; Meningococcal Quadrivalent	√	√	Td/Tdap: Geographic disparities (e.g., MS=72% vs. Rl=97%. ³² Varicella: Female adolescents greater than males (80% vs. 77.2%); Geographic disparities (e.g., SD=51% vs. CT= 96%). ⁴¹ Influenza: YAs with full-year public insurance > than full-year private insurance or uninsured to receive care. ³⁶ Meningococcal Quadrivalent: Hispanic (38%) higher than Asian (37%) and White adolescents (31%). Geographic disparities (e.g., Rl=97% vs. AK=70%). ⁴⁰	

^{+ =} 'AYAs at risk; $\sqrt{} = AII AYAs$

METHODOLOGY

Innovative programs with the goal of addressing root causes of health disparities were identified through a review of peer reviewed journals and an Internet-based search that included private, non-profit foundations and government funded programs. The goal was to identify approximately 10 innovative programs/interventions. In selecting programs for this study, priority was given to programs serving AYAs either directly or indirectly. We also sought demographic and geographic variability in the sample pool by selecting key stakeholders that represented different regions across the United States, as well as those supported by different funding streams. Additional program candidates were also identified via a snowball sampling approach in which each interviewee was asked to recommend additional models and key informants. From this search, potential participants were invited to participate in individual semi-structured telephone interviews. Participants were e-mailed an invitation to participate and up to 3 attempts were made to follow up with those who did not respond to the invitation letter. Of the 23 invited, 13 completed the interview. Each interview lasted approximately 45 minutes. Reasons for non-participation included not responding after 3 attempts (n=8), and not feeling versed in the topic (n=2). Table 2 provides an overview of each of the programs featured in this report. A more detailed description of each program can be found in the Appendix. These descriptions were based on interviews with the program representatives and supporting materials, such as reports and web-sites, all of which helped to highlight some of the key features of the program that focus on addressing SDOH and health disparities.

After obtaining informed verbal consent, each interview was audio recorded and transcribed. Participants were asked several open-ended questions about their program's efforts to work across the health/community sectors to address SDOH among AYAs and their families. Participants were also asked about their biggest challenges in collaborating across health/community sectors, the funding sources that support their innovative programs/approaches, and sustainability efforts. For example, participants were asked to "describe how you have worked across the health/community sectors" and "how did you identify potential ways to financially support this program?" The interview guide can be found in the Appendix. Each transcript was analyzed to capture the key themes that emerged using preset categories, as well as to identify new themes. Data were further analyzed to identify the range of responses within each theme; the relative importance of different themes; and divergent/convergent responses within each theme. This study received approval from the Institutional Review Board (IRB) at the University of California, San Francisco.

Table 2. Overview of Intervention Approaches by Region in the U.S

Program	Funding	Brief Description	Target Population
The Los Angeles Trust for Children's Health Los Angeles, CA	CA Community Foundation; CA Endowment; CVS Caremark; Kaiser Permanente S. CA	Improve student achievement by increasing access to integrated healthcare & preventive services at 14 Wellness Centers.	Adolescents at SBHCs, younger students and their families
One Degree, San Francisco, CA (expanding into other regions)	Technology entrepreneurs, foundations, and government	A technology-driven organization that links low-income individuals with community resources.	Low-income individuals and families
School-Based Health Center Improvement Project (SHCIP) New Mexico and Colorado	Centers for Medicare and Medicaid	Identifies effective, replicable strategies for enhancing health care quality through 22 SBHCs.	School-age children and adolescents
The Door New York, NY	Public/private, Title X federal funds, City & State Department of Health	Youth development services to AYAs; reproductive health; mental health; legal assistance; educational support for high school equivalency diplomas, English for speakers of other languages & college preparation.	Youth ages 12-24
Housing Rx, Boston, MA	Boston Foundation's Health Starts at Home Initiative	Reduce housing instability among low- income families with young children.	Low-income families with children
Progreso Latino Rhode Island (statewide)	CDC; grant funding; and fee-for-service	Connects Latinos & immigrants to free healthcare; dual-language adult education; & free/low-cost immigration legal services.	Underserved and uninsured Latino and immigrant populations
Mount Sinai Adolescent Health Center (MSAHC) New York, NY	Government grants; foundations; clinic reimbursement; other gifts/donations	Delivers high-quality, comprehensive, confidential and free health care, such as primary care, sexual & reproductive health, optical, dental, behavioral and mental health, social and legal services.	AYA 10-24yrs; low- income, uninsured, teen parents, immigrants, refuges, LGBTQ, transgender, homeless & sex trafficked youth
New York City Teen Center (NYCTC) New York, NY	U.S. Department of Health and Human Services' Office of Adolescent Health; city tax levies	Connects youth with CBOs, schools & clinics to promote evidence-based teen pregnancy prevention programs and access to sexual health care.	15,000 youth ages 15-19 across three geographic communities in New York City
Bronx Health REACH New York Bronx, NY	CDC; National Center on Minority Health and Health Disparities; Johnson and Johnson; Johns Hopkins Community Healthcare Scholars	Reduce racial/ethnic disparities through health education and outreach, policy and system changes through evidence-based and community-informed interventions.	Serves low-income youth and immigrant youth; almost all are Hispanic or African American
Spartanburg County Community Indicators Project South Carolina (SCIP) Spartanburg, SC	CDC, Robert Wood Johnson Foundation, Duke Endowment	Collect data on health indicators, set improvement goals & work with CBOs to coordinate improvements.	Residents of Spartanburg, South Carolina

RESULTS

Multi-Disciplinary Approach

To address the root causes of poverty and social determinants of health (SDOH), all of those interviewed for this study stated that it was critical to form multi-sector community

partnerships to identify and address issues at the local level. All of the interviewees expressed the importance of strong community partnerships, across multiple sectors community (health, education, social services, etc.) to address disparities and improve health outcomes adolescents and young vulnerable adults (AYA). Participants cited a

"In Spartanburg, there seems to be no 'turfism' at all. Ultimately, everyone sees how much work needs to be done and how much help is needed collectively. Because we've had so many successes, it reinforces our efforts. We have the data and the partners to support our work."

-- Dr. Kathleen Brady, SCIP

number of benefits to cross-sector collaboration including: raising awareness of and increasing access to the various types of programs and services in the community; understanding and identifying gaps in services, resources and needs; and building

"From our inception, we were a community coalition that recognized any one program in isolation would be insufficient to address disparities."

-- Charmaine Ruddock, Bronx Health

support and local capacity to meet the needs of AYAs (and their families). Many of the programs established and utilized community-based partnerships at the onset and these partnerships grew and evolved over time. The following are some specific examples of how many of the programs

have utilized their partnerships. These examples highlight a range of different non-traditional partnerships across the health and community sectors. The following is a list of key programs reviewed for this study. A more detailed description of each can be found in Appendix B.

- Bronx Health REACH has partnerships with over 70 community-based organziations (CBOs), heath care providers, faith-based institutions, housing and social service agencies.
- New York City Teen Center (YCTC) brings together youth, community-based organizations, schools, clinics, and citywide agencies to implement evidence-based teen pregnancy prevention programs and increase access to adolescent sexual health care. They have also partnered with over 66 teen-friendly clinics to ensure that every teen in their program has access to high-quality comprehensive health services, specifically reproductive health care.

- <u>Progreso Latino</u> builds relationships with school leaders and partners with other community organizations to ensure that the comprehensive needs of Latino families are being met.
- <u>Housing Rx</u> utilizes community partners in order to access different programs, representing diverse funding streams to maximize the benefits a family may be eligible to receive.
- Mount Sinai Adolescent Health Center (MSAHC) has established partnerships with over 100 community organizations, the Department of Education, Department of Health and other government agencies across the broader community to promote health equity and address the contextual factors that impact the health of AYAs. As part of this effort, they have engaged youth in mapping community health resources and assessing their geographic accessibility. The program has a multidisciplinary staff of Adolescent Medicine specialists, nurse practitioners, physician assistants, psychologists, psychiatrists, social workers, dentists, optometrists, child and adolescent psychiatrists, health educators, lawyers and support staff especially trained to work with teens. They operate school-based clinics and work closely with community-based mental health and health education providers. Their partnership with community groups and city agencies has built programs such as Prescriptions for Good Health and Growing Up Healthy in East Harlem, a community-based study exploring environmental factors affecting the health of children to inform and improve treatment approaches.
- The Door has a long-standing tradition of cross-sector collaboration. At its inception, it was founded by an interdisciplinary group of individuals, from the fields of medicine, psychiatry, law, education, social work and the arts who wanted to identify new solutions to address the complex issues facing urban youth. The Door provides a wide range of services including: reproductive health care and education, mental health counseling and crisis assistance, legal assistance, academic support, job training and placement, supportive housing, recreational and arts activities, and nutritious meals, all for free, completely confidential and in one location.
- The L.A. Trust established partnerships beyond the school system and uses a Collective Impact approach that involves studying the needs of the community and communicating regularly with stakeholders (staff, students, parents, and other partners) to monitor progress collectively on commonly established goals. Furthermore, they use data to inform their best practices or next strategic directions.

• Spartanburg Community Indicators Project (SCIP), involved cross-sector leadership, such as the State Department of Health, Federally Qualified Health Centers (FQHCs), the hospital system, school districts, Community Based Organizations (CBOs), city parks and recreation, local non-profits, the housing authority, and more. For example, the housing authority hosted programs and employed a community health worker model. The City of Spartanburg Parks and Recreation hosted Summer Camps for teens ages 13-16 to replicate evidence based interventions proven to reduce risk taking behaviors and expose youth to various positive youth development (PYD) programs.

Addressing disparities in health care access

Across all of the programs was a conscious effort to address disparities in health care access as a means to reduce disparities in health outcomes. Programs accomplished this goal by promoting access to high quality, comprehensive health care services including those that are confidential for AYA (such as reproductive/sexual health, mental health and substance use screening and counseling services).

In particular, MSAHC's mission is to serve underserved and at-risk AYA (as well as their children) regardless of their ability to pay or their insurance status. A team of compassionate and competent practitioners with expertise in working with young people provide holistic, confidential, comprehensive, integrated medical, sexual and reproductive health, dental, optical care, behavioral and mental health, prevention and support services. MSAHC aims to provide needed support at the appropriate time to ensure better health outcomes for AYAs.

As part of the services offered at the Door, they operate a comprehensive adolescent health center that offers services in an accessible, youth-sensitive and culturally competent manner, and consistent with a sexual and reproductive justice framework. It provides a full range of comprehensive health care services, including: family planning and reproductive health care,

"We provide a comprehensive holistic approach to working with young adults. Youth can access our services without any barriers, including the ability to pay, parental permission, and citizenship status. We also provide youth with a 'warm hand off' to a social worker to start an intervention. Most of our patients are hooked into services and will come back repeatedly to see social workers."

-- Michael Nembhard, MSAHC

primary care, health education, counseling, nutritional services, dermatology, dental, optometry, and counseling to assess which programs may be eligible for in the community. Any youth can access the health center and receive these services for free.

School based health centers are another approach for promoting health care access for adolescents. For example, the L.A. Trust supports a vast network of school based health centers, which are called Wellness Centers, because of the wide range of services they offer including: medical, nutrition, fitness, mental health and trauma awareness, oral

health, asthma prevention and treatment and smoking cessation and reproductive health. The network of Wellness Centers serves students throughout the Los Angeles Unified School District, in areas with the greatest needs. Their reach extends beyond the clinic

setting through strong community partnerships. For example, they have been able to incorporate an extensive dental screening program. They also conduct outreach efforts to students through student health leadership groups who lead health and wellness campaigns that address oral health, asthma, reproductive health,

"The L.A. Trust supports a holistic view of student, family, and community health that integrates services to promote wellness and academic achievement."

-- Maryjane Puffer, L.A. Trust

substance abuse prevention, and mental health awareness. They also work with families throughout the community utilizing promotorasⁱⁱⁱ who engage with families and help them talk with their children about healthy relationships and healthy behaviors.

Progreso Latino found that families in their community faced a number of cross-sector needs. While they initially were established to address health needs, they expanded their service delivery approach to tackle SDOH, including adult literacy programs, job training, substance use prevention, violence prevention, leadership development programs for youth and a comprehensive intervention approach for pregnant and parenting teens to reduce repeat pregnancies.

"Many people, especially immigrant families, were initially coming to us without insurance; they were experiencing difficulties receiving health care due to language barriers. We became the bridge they needed to connect with the health care system. We expanded to meet the other needs of our families." – Mario Bueno, Progreso Latino

Addressing Root Causes of Poverty

A number of the interventions that provide a comprehensive health delivery model also incorporate efforts to address some of the root causes of poverty especially through educational supports, job training and even providing career pathways. For example, while the Door provides comprehensive health services for AYAs and a safe space for homeless and runaway youth, it is embedded in a larger positive youth development program. The Door addresses root causes of disparities through a comprehensive career and education program that supports youth to finish their education and provides them with a number of opportunities to support both job and life skills. For instance, in the Bronx, the Door offers introductory emergency medical technician training and information technology and computer skills. They have also partnered with a local

Promotores are Hispanic/Latina women in the community who are trained to provide health information to other members of their community.

culinary non-profit, who provides both meals to the youth, as well as culinary internship opportunities. These are just a few examples of supports The Door offers youth.

MSAHC provides opportunities to prepare youth with careers in the health field. For example, MSAHC has partnered with STRIVE® whose mission is to help individuals acquire the skills and attitudes they need to overcome challenging circumstances, find sustained employment, and become valuable contributors to their families, employers and communities. STRIVE and MSAHC worked together to develop an internship program at the Center. STRIVE interns spend 8 weeks working in the MSAHC research department learning research skills that are applicable across occupational fields. MSAHC also has a program called, Sinai Peers Encouraging Empowerment through Knowledge (S.P.E.E.K.) which hires and trains adolescents and young adults over the summer months to work in community centers and schools to provide information on various health topics (e.g., substance use, sexuality, etc.). MSAHC, in collaboration with MAPSCorps and the New York State Health Foundation Healthy Neighborhood Grantees, employs youth to survey their zip codes to create comprehensive maps of community assets in New York City for youth-serving professionals to use and help connect young people to services in their area. In doing so, they are able to reach more young people and at the same time are providing health career pathways for AYAs.

The L.A. Trust also offers pathways to careers in health. Specifically, the L.A. Trust's program, the Health Careers Pathway Project, helps students access health career pathways by strengthening employer, community, and state college partnerships within the neighborhoods of Boyle Heights and South Los Angeles.

All interviewees noted that disparities in health outcomes were both a cause and a consequence of poverty. As a result, they emphasized the need to improve access to

health care services, especially for underserved racial/ethnic groups and those living in poverty and in under-resourced communities. NYCTC's work is driven by their understanding that certain social determinants, like poverty, are directly linked to teen pregnancy. To reduce teen pregnancy, they focus on primary prevention efforts to increase adolescents' access to evidence-

"We know for a fact that poverty drives teen pregnancy, so places like the Bronx where there's 40% poverty—it's not surprising they have the highest teen pregnancy rate."

-Estelle Raboni, NYCTC

based sexual health education curricula offered in school, as well as to comprehensive health services. Similarly, there were a number of efforts to foster linkages between health and academic success. The following quote illustrates what many participants expressed, especially those who provide or are linked with school-based health centers. These linkages are important as school-based interventions have been shown to promote school bonding, improve academic outcomes, improve social competencies, reduce health risk behaviors such as substance use and improve other health outcomes.^{42,43}

"There is a strong link between the health of a student and their ability to learn. Students who have poor health tend to miss more school days, perform more poorly in school and have higher drop-out rates. Students learn better and have more academic success when they are healthy." – Maryjane Puffer, L.A. Trust

All programs recognize the challenge their populations face in accessing their services, so they make considerable effort to locate their programs to promote access, for example, on or very near school campuses and near transportation hubs. Others, such as MSAHC and Progreso Latino, offer free transportation to school for low-income students.

Target Population(s)

Focus on the individual AYA vs. Family

The focus of this study was on AYAs; however, in doing our search to identify innovative interventions, it became clear that AYAs were targeted both directly and indirectly by some programs. Many of the SDOH that have a direct effect on AYA health risk behaviors also impact parents/caregivers' ability to care for their children. Several programs featured in this study targeted families (such as One Degree, Progresso Latino, Bronx Health REACH, Housing prescription and in some of the program approaches at the L.A. Trust and SCIP). In addition, MSAHC has a highly integrated and coordinated medical, developmental, and mental health service model that provides services to teen mothers and their children. Moreover, mother/child dyads have access to parenting education and nutrition and wellness services. Research has shown that family--interventions that focused on improving parent-child communication and parenting skills have positive longer-term impacts on substance use and sexual risk behaviors among adolescents.^{44,45}

While several programs focus on the family, others specifically aimed their efforts at

"If you target families, you get the biggest bang for the buck because you are able to reach multiple individuals."

-Rey Faustino, One Degree

AYAs and ensuring that adolescents have access to comprehensive confidential health information and services (such as mental health, substance use and reproductive health services). There was wide recognition that

access to comprehensive, confidential health services promotes screening and treatment of health risk behaviors.⁴⁶

In addition, while a primary focus of a program may be on the family or the AYA, all of the programs highlighted in this report involved intervention efforts in the broader community context. For example, One Degree partnered with health and social service providers to "drive" traffic to their app in order to link families with local services. One such example was having providers screen patients for food insecurities and then through the One degree app, directs families not only to local food resources, but other types of diverse support services. Bronx Health REACH reported a broad community focus, yet it also incorporates specific intervention approaches for AYAs. For example,

they launched an initiative, with funding and partnership from the federal Office of Adolescent Health and the state Department of Education, to ensure that all adolescents were linked to a "teen-friendly" clinic. They worked with their vast networks of over 65 clinics and 25 SBHCs to assess the extent to which the clinic was "teen-friendly" and embarked on a number of efforts to improve clinic capacity to serve teens (including the provision of longer acting, reversible contraceptives (LARCs), ease of appointments, confidentiality, etc.). They also established formal memorandum of understandings (MOUs) with schools to reduce health risks among students in traditional high schools and worked with policy makers to ensure that every young person in New York City had access to sex education and linked directly to a health clinic. To fully address SDOH for AYAs, the attention to family, community and broader social-political contextual factors are needed and are unique features of the programs showcased in this report.

Need to Tailor Service Model for Special Populations

A number of interviewees reported that there needed to be specific targeted efforts to

reach AYAs and noted the importance of having different outreach efforts for adolescents vs. adults; others had special programs/approaches for pregnant and parenting youth, youth in foster care, LGBTQ youth, immigrant populations, homeless youth, etc. For many of these vulnerable

"We create a supportive, nurturing and inclusive environment for all youth. Foster youth, LGBTQ, homeless youth want to be here because it is a fun and safe space for them."

--Julie Shapiro, The Door

populations of AYAs, creating a safe and supportive environment was reported as critical.

Several interviewees commented on long-standing discrimination of racial/ethnic groups as a key social determinant of health. In order to understand and address these historical injustices, it is important for program staff to both understand and reflect the background of the population being served in the program. As one interviewee stated,

"We are the only Latino-led social service organization in the state. We are founded by Latinos and over 90% of our staff is from our Latino community, many of us are first generation immigrants. We have a first-hand understanding of their needs. We provide a one-stop center and provide much needed support, especially for newly arrived immigrants." – Mario Bueno, Progreso Latino

Several programs targeted efforts to reduce teen pregnancies in order to eliminate economic, health and social disparities associated with early childbearing. Many of these

"[MSAHC] operates a transgender program that serves around 300 adolescents and young adults. We are one of the few agencies that provide hormone therapy for youth at age 18."

--Michael Nembhard, MSAHC

provide comprehensive, confidential, sexual and reproductive health care services (such as MSACH, the Door, LA Trust and SHCIP, NYCTC and SCIP). NYCTC, in particular, is focused both on implementing evidence-based teen pregnancy prevention programs along with strategies to promote adolescents' access to comprehensive, confidential, sexual and

reproductive health care services. SCIP also had a teen pregnancy prevention component in addition to tailored services to address the needs of young people with HIV/AIDS, LGBTQ youth, foster care youth, and young people who are abused, neglected, and exploited. MSAHC has partnered with the International Rescue Committee (IRC) to provide core and specialized health services to adolescent and young adult refugees and asylees, aged 10 to 24 years. Again, these intervention efforts, while targeting a particular high-risk population, incorporated broader community-partnerships and initiatives to meet the needs of this population.

Youth Engagement

In tailoring services for adolescents and young adults, most youth-serving organizations recognized the value and input of youth and incorporated a strong youth-engagement or positive youth development approach in their programs. Interviewees reported that youth engagement increases both the utilization of the program/services offered and

ensures that the information and services provided are more relevant for the target population. For example, MSAHC consulted with peer educators to develop their teenfriendly website (teenhealthcare.org). The utilization of youth advisory boards to provide

"We incorporate youth in our work.
For example, peer health educators helped develop our website and make it more youth-friendly."

--Moya Brown, MSAHC

ongoing program guidance was an approach used in a few of the programs. For example, the L.A. Trust Youth Advisory Board informs the organization and board of directors about students' perceptions of the Wellness Centers, identifies health issues affecting their peers, and informs programmatic strategies.

"Youth engagement is at the heart of what we do. Youth are disproportionately affected by the broader society and are without an equitable voice in determining their own futures. Students help keep adult institutions grounded, relevant and effective." - Maryjane Puffer, L.A. Trust

Another approach used in several programs was to engage youth through specific job training/internship programs. As noted previously, the Door, L.A. Trust and MSAHC

have employed AYAs to support their individual programs and at the same time build their employment skills.

One Degree also expressed a need to tailor efforts and outreach to special populations noting that there is a broader movement in the tech world to target different populations. For instance, Facebook is largely geared for the 30 and older populations and Snapchat reaches younger populations. At One Degree, there are plans to develop new landing pages on their Website for new audiences, including youth in foster care and transitional youth. Technology is another approach to engage youth which is discussed in more detail in the next section.

Utilizing Innovations in Technology

Four of the 10 programs: One Degree, SHCIP, The L.A Trust, and MSAHC utilize technology in their approach to addressing disparities. For One Degree, technology was the primary thrust of the intervention framework. One Degree provides a comprehensive resource directory coupled with a searchable web and mobile platform that enables users to identify services that they are in need of across different programs and/or agencies in their local area. The website also offers links to walking directions or public transportation routes. Individual family members can use the tool directly and/or it can also be used by a health care provider, social worker, or other personnel, who in turn, direct families to the tool and helps them navigate resources. One Degree has been implemented in a number of health care delivery settings where a health educator or provider screens a family for food insecurities.

If the family is in need of additional resources, they are shown the One Degree tool on a smart phone or iPad and directed to specific service needs (such as the hours and directions to the local food bank). In doing so, families are also introduced to other resources that they may benefit from. The One Degree platform includes a referral management system to allow professionals to track service referrals and utilization. It also helps families manage resources, and receive reminders directly from social service providers via text message, email, and phone notifications. Users can also manage, save and track the nonprofit services they are using; they can provide reviews and ratings of services, and share resources with friends and family members.

The SHCIP program implemented the electronic Student Health Questionnaire (eSHQ), a tool used to assess risk behaviors and protective factors among adolescents. The questionnaire was administered to youth via an iPad in the waiting room prior to the face-to-face encounter with a provider. Upon completion, the responses were made available to the provider to inform and guide the clinical visit. Approximately 53% of students (N=3,000; 1,861 in New Mexico and 1,076 in Colorado) in the 2013–2014 school year completed the eSHQ³⁹ at the school based health centers (SBHCs). Results show that the clinic improved the early identification of health risk behaviors. Staff also reported that it improved provider-adolescent communication.⁴⁷ Quality demonstration staff

shared aggregate reports with school administrators and other stakeholders to demonstrate the level of need among students and encourage the continued support of SBHCs.

The L.A. Trust is partnering with researchers from the University of California San

Francisco, with funding from the Patient Centered Outcomes Research Institute, to develop and evaluate a mobile health application (app) to reduce disparities in unintended pregnancies among Latina adolescents who utilize the Wellness Centers throughout the Los Angeles Unified School District. The app provides individually tailored

"The Student Health Questionnaire was already happening in New Mexico. The funding from CHIPRA allowed up to make it electronic and generate alert reports. The electronic version (eSHQ) allowed us to better understand patient's needs and drive visit and follow-up care."

-- McKane Sharff, SHCIP

contraceptive decision making support for at-risk adolescents in both English and Spanish.

MSAHC also integrates technology into their clinical practice. The EPIC My Chart module gives MSAHC patients, over the age of 12, access to their patient portal. Patients can download the My Chart app onto their mobile device as well as gain access through a personal computer. With the patient portal, adolescent patients can communicate confidentially and securely with providers of their care, request refills of medications such as birth control, view test results, access letters for their school, for example, verification of a sports physical, or print their immunization record, and can see upcoming appointments. MSAHC medical providers and psychiatrists can also e-prescribe medications through patients' My Chart. Patients can either come in person to pick up their medication or birth control or request a refill via using My Chart. The medical provider can also e-prescribe medication to the patient's preferred pharmacy. MSAHC has seen a significant decrease in their on-site distribution of birth control methods, like the pill and the ring, and a significant increase in e-prescriptions. To meet the needs of young people away from New York City, university students can choose to have their birth control e-prescribed.

MSAHC also recently launched Health Squad, a custom smartphone application intended as an innovative health self-management aid for use by adolescents nation-wide. Health Squad is a mobile solution designed to improve health outcomes for adolescents, increase the Center's digital presence, and engage with adolescents - allowing it to broaden the reach of their services. Later phases of the launch will incorporate a wide range of behavioral health elements designed to promote healthy decision-making among adolescents by allowing users to self-manage their emotional and behavioral health.

Data Driven Approaches

Several programs emphasized the importance of using data to identify needs, monitor progress, inform ongoing improvement efforts and subsequent plans, and report back to stakeholders and garner additional support for their programs. In particular, the Spartanburg Community Indicators Project (SCIP) of South Carolina emphasizes a data driven approach to planning and improving community action and intervention efforts. Specifically, they gather data across seven core indicator areas including: civic health, social environment, public health, natural environment, cultural vitality, economy and education. The work is led by indicator area leaders, who meet regularly to check on progress, set goals, ensure adequate community representation, and provide feedback on and for the Project. SCIP collects county-level population data on health outcomes and trends to collectively decide on focus areas. For each of these core areas, they set improvement goals and then work with CBOs to coordinate improvement efforts and track data to track progress.

"We attribute our success to our data driven approach which is led by a broad-based community coalition." – Polly Padgett, SCIP

"We are very data heavy – it has given us a benchmark to track and assess the successes and areas for improvement in our community." – Dr. Kathleen Brady, SCIP

In addition, both SHCIP in Colorado and New Mexico and the L.A. Trust, use a data informed approach to planning, implementing and evaluating the impact of their approaches to improve the quality of their respective school-based health centers. For example, SHCIP used two data sources for their evaluation plan to assess services provided at participating SBHCs: 1) state-level Medicaid claims; and 2) a customized data warehouse of SBHC encounter data. SHCIP provided resources and assistance to participating SBHCs to improve service data completeness and quality. This included SHCIP QI coaches hosting coding webinars and developing quick-reference coding guide books for participating SBHCs. The L.A. Trust uses a "Dash to Wellness" dashboard that is used to collect and monitor data across all of the Wellness Centers. This data is used to drive program and strategy decisions designed to improve services and the health of youth served. It also allows the L.A. Trust to monitor access to care and inform training and technical assistance efforts to advance quality improvement strategies.

MSAHC also uses data to inform programs, clinic operations, and budget priorities. MSAHC's electronic medical record system, EPIC, has been used by the Health Center's healthcare providers since February 2009. EPIC is widely used by mid to large-sized medical groups, hospitals and integrated healthcare organizations in the United States, with 1 in 4 physicians in the US using it for patient health information. De-identified patient data from EPIC is used by MSAHC to gauge the effectiveness of healthcare delivery, identify and track public health threats, and provide data for professional

articles and published studies. In addition, MSAHC recently concluded a comprehensive 4-year external evaluation to understand the effectiveness and appropriateness of their adolescent-centered health service delivery model. The evaluation design included: (1) a four-year quasi-experimental quantitative outcome study comparing adolescents and young adults enrolled in MSAHC services with similar adolescents in the community; (2) a focus group substudy with MSAHC patients; (3) qualitative interviews of MSAHC patients and providers; and (4) a chart review substudy. Findings from the evaluation substudies will help guide the development of new programs to address emerging health risk, revise existing programs to better meet the needs of young people, and shape policies that help eliminate health disparities and promote health equity among adolescents and young adults.

Need for policy solutions along with program interventions

Interviewees revealed that policy changes are a critical component to promoting social justice and health equity. Efforts of Bronx Health REACH are a particularly noteworthy example. Their community coalition was able to create policies to address SDOH at the local and state level.⁴⁸ For instance, they helped institute a number of school-based initiatives, including the addition of a policy to replace whole milk in all 1,579 NYC public schools and City Council legislation to ensure that all students receive state-mandated physical education.⁴⁹ They also worked with State elected officials on a health equity bill⁵⁰ and more recently launched #Not62 campaign for a healthy Bronx which is a community call to action for elected officials, faith-based leaders, healthcare executives, and community members to create the infrastructure to address social and economic factors to promote health equity and eliminate disparities.

Similarly, New York City Teens Connection (NYCTC) created a sex education mandate policy which requires that all students in NYC have access to a core, evidence-based sex education curriculum and links to health care clinics. In addition, the L.A. Trust spends a substantial amount of effort advocating for health policy change throughout the school district and at all levels of government. Some examples of their policy successes include refining the Blueprint for Wellness policy as part of the Leadership Committee which serves as a guide for the school district to address health risks that students and families are facing and to create school environments that promote students' health and wellbeing and ability to learn. They also advanced the school district's focus on implementing a 100% Kindergarten Mandate for oral health screening, as well as influenced a \$50 million investment in Wellness Phase 2 that will focus on not only on building a new building, but that will also help expand their current site to insure the comprehensive model can be implemented (adding 2000 plus more feet of space for current sites to expand services to the school and community). The Spartanburg Community Indicator Project (SCIP) also worked with Medicaid to change state-level policies related to contraceptive access during delivery and post-partum visits. Following this policy, intrauterine devices (IUDs) could be inserted during post-partum visits which significantly reduced repeat pregnancies among teen moms. In addition to providing

direct services to promote health equity, policy solutions are needed to address SDOH and reduce health disparities.

"We knew statistically teen moms were not coming back for contraceptives at post-partum visits. We worked on changing this policy to include contraceptive access at labor and delivery visits, which included allowing IUDs to be inserted post-partum, at delivery. This initiative had a huge impact on our teen moms – 22% of our girls were repeating a pregnancy in 2015 versus 38% in 2010 (when the policy was changed)." – Polly Padgett, SCIP

Thus, this policy change allowed the placement of IUD at delivery which helped mitigate the problem of pregnancies happening before 6 weeks due to the fact that many new mothers, especially those most at-risk for a repeat pregnancy, were not showing up for the six week post-partum visit.

Challenges

The interviewees also discussed a number of challenges that cut across many of the different service delivery models. These included: lack of steady funding streams to sustain their intervention efforts, targeted funding streams that are "problem" specific and/or are aimed at a specific subpopulation; infrastructure and capacity especially in under-resourced settings/communities; the integration of new technologies and the political will for broader solutions to address root causes of social determinants. Each of these issues is discussed in detail in the following sections.

Funding and Sustainability

Obtaining funding to support the ongoing sustainability of the programs was the most significant challenge experienced by all of the programs. Several interviewees from organization, including the Door, Progresso Latino, the LA Trust, NYCTC, MSAHC and Bronx Health REACH, stated that a diverse funding portfolio increased their ability to sustain changes in any one funding stream. However, diverse funding streams also create challenges of managing multiple programs, with different eligibility criteria, funding timelines, reporting requirements, etc. While programs want to provide a range of services that are seamless from the perspectives of the population(s) they serve, it can be difficult to manage the requirements of multiple funders and communicate such changes across a myriad of program staff.

There are exceptions to programs being supported by specific targeted funding streams, though these examples are rarer. One program, Bronx Health REACH, received funding to adopt a community approach to addressing disparities. The organization received funding from the CDC beginning in 1999 and gave the community coalition the control to examine health disparities that were most significant in their community and then

design a community action plan to address those disparities. They attribute this flexibility in the funding parameters to the success of their initiative.

"The CDC decided that unlike their past efforts where they funded a particular agency, program or academic institution, they were going to directly fund communities. From the beginning, they did not have a prescriptive approach. This allowed us to give sub-awards. It allowed communities to have autonomy and come to the table as an equal partner" – Charmaine Ruddock, Bronx Health REACH

Yet, funding sustainability remains a significant concern for them, especially with changes at the federal government level. REACH grantees across the nation came together to form a national REACH coalition who meets with congressional representatives to educate them about their work and advocate for federal funding.

Reliance on grant funding presents an inherent challenge to sustaining these innovative approaches; however, there is insecurity in the stability of federal funding sources as well. A few participants noted that Medicaid waivers are an important and newly emerging strategy to fund health related support services outside of the hospital setting. The Housing Prescriptions project is one noteworthy example of this approach. The Door has been able to establish partnerships with managed care plans and have expanded their efforts to capture Medicaid reimbursements. However, all of these programs that use these types of funding streams, supported under the ACA, are now in jeopardy with federal efforts underway to repeal the law.

"There is money in Accountable Care Organizations from the ACA, to fund community services like our housing prescription program. This funding is flexible and can be used to address issues like housing and food insecurities. This funding is now in jeopardy if the ACA is blocked." – Megan Sandel, Housing Prescriptions for Health

Targeted funding streams.

There are also challenges with the way in which services are traditionally funded. For instance, funding streams tend to follow specific issues or problems. For example, some grants target substance use or teen pregnancy prevention or healthy eating/active living to address obesity. However, often times, youth and/or their families have multiple needs that cut across multiple categories. Two participants expressed this theme that emerged from several of the interviews.

"We need to put the client at the center of our work. People don't need services from just one sector, their needs cut across a gamut of different services. We found that families utilize services from up to 12 non-profit organizations in order to get by." - Rey Faustino, One Degree

"We bring in a wide range of grant funds and blend and leverage different funding streams from government contracts, grants and private funders that allow us to provide a wide range of support services and programs targeting specific areas such as health, counseling, job training, education, arts and recreation. Funds also are as aimed at serving different populations such as foster youth, juvenile justice, homelessness, runaway, LGBTQ, etc. All of these targeted funding streams have to be administered in a way that it is seamless for any individual young person."

- Julie Shapiro, The Door

In addition, in the traditional health care delivery model, an individual is enrolled in health care. However, social determinants impact multiple members of a given household. It would be more efficient and effective to address household needs (e.g., housing, food insecurity, transportation, etc.) than merely targeting the needs of an individual.

"In health care, we don't enroll the household, we enroll a member. There is a huge disconnect. If we were to enroll households in ACOs, we would make a bigger impact." – Megan Sandel, Housing Prescriptions

Infrastructure/Capacity in Under-resourced settings: Challenges of addressing complex and multiple needs

There are also a number of challenges programs face because they are operating programs in under-resourced settings and it is difficult for many people to access support services for which they are eligible. Most of the participants stated that it is both important, but challenging, to address the multiplicity of complex needs of their clients who have limited literacy, or limited English language, legal needs, unstable housing, special health care needs/disabilities, etc. For instance, South Bronx is one of the poorest urban districts in the US with 39% of residents living below the poverty level and disproportionately high rates of poor health outcomes. Yet, all of the programs featured in this brief serve communities with high needs. Many strive to provide wrap-around services in a "one-stop" center; however, it is difficult to accomplish and sustain this approach.

"We started as a social action organization in 1977 but developed into a social service organization...Our families have limited resources; they would go to the hospital for care and then receive an expensive hospital bill. They would come to us in tears. It is not easy to apply for aid, so we became the natural bridge between the community and the hospital." – Mario Bueno, Progreso Latino

"We also focus our services to high-need individuals. We couple a lot of services, including primary care with mental health and health education, so we are essentially a 'one-stop shop' for youth." – Moya Brown, MSAHC

Integration of Technology:

Interviewees identified several challenges that pertain to the implementation and integration of technology in clinical practice. They stated that organizations that adopt technologies need training and technical assistance. Staff also need to be trained both on the content of the technology and on how to integrate the technology into practice. As there are changes in staff and/or system updates, staff need to be re-trained. Maintaining an ongoing training is difficult due to staffing and resource constraints. In addition, there are a number of issues that arise that need technical assistance including wireless connections, maintaining application updates, communication between devices, electronic health records and/or staff. Integrating information from electronic devices/applications into the medical record is difficult. The integration challenges were explicitly noted in the use of eSHQ at the school based health centers.

"There were a number of challenges integrating the eSHQ into clinical practice. For example, a PDF file needed to be generated and integrated in the EHR which makes it difficult to search and compile data within individual and across groups of patients." –McKane Sharff, SHCIP

Many of the challenges associated with technology and the integration of technology may be especially difficult to overcome in under-resourced settings such as community and other school-based health care organizations that do not have access to technical support resources.

"We need to train social workers and health care providers on how to use One Degree while working with patients. We are examining how to integrate it into a number of clinics through providers, health educators and when patients are discharged from the hospital so that people can find the resources that they need on One Degree." – Rey Faustino, One Degree

Political will is needed to eradicate poverty and create supportive environments for AYAs.

As noted previously, many programs worked hard to change policies to support social justice and health equity. There was a strong sense among a couple of participants that there needs to be a stronger political will to create policies at all levels of government (federal and state, in addition to local) to systemically eradicate poverty and provide greater investments in creating supportive environments for AYAs. A couple of

participants noted that there has been a general lack of social and political will to respond to the need to reduce health disparities, including providing a multi-faceted response to social determinants that place such large proportions of the population at increased risk for poorer health outcomes. These inequities have fueled several social justice movements, such as Black Lives Matter, LGBTQ and transgender rights, and women's reproductive advocacy efforts to name a few. These populations have experienced a variety of social inequalities, including lack of access to culturally-relevant healthcare services and discrimination. Such movements have helped bring issues of inequity and the need for social and health justice to the forefront. This sentiment was captured in the following quote.

"We need political will to eradicate poverty. Until then, creating supportive environments are essential to mitigate the effects on health disparities."

- Estelle Raboni, NYCTC

CONCLUSIONS

The purpose of this study was to identify innovative interventions and programs focused on addressing social determinants of health (SDOH) to reduce health inequities. This report showcases 10 such programs, across the nation that utilize a range of approaches. Some of these programs are a direct result of national initiatives that have called for greater attention in this area, including the CDC's Racial and Ethnic Approaches to Community Health (REACH) program⁵¹, the Healthy People 2020 goals⁵², the National Prevention and Health Promotion Strategy⁵³, and the National Partnership for Action to End Health Disparities. 46,54 The American Academy of Pediatrics now recommends screening for poverty at well care visits in recognition of the need to identify and address a key SDOH. iv In addition, the US Maternal and Child Health Bureau funds the Healthy Tomorrows Partnership for Children Program (HTPCP), a grant program to support service providers address disparities and inequities in vulnerable and underserved populations. There have also been investments from a number of private foundations that have supported this work.⁵⁵ This study provides an opportunity to spotlight some of these innovative approaches and reflect on lessons learned to inform future efforts. Common themes that emerged from this study include:

- Build broad-based multi-sector community coalitions who can collaborate
 effectively to help ensure that all community based organizations and agencies
 work together to address the key areas of SDOH (such as education, economic
 stability, social and community context, health and health care, neighborhood and
 built environment).
- **Use data driven approaches,** including the use of both health needs assessment and health impact assessments, to inform policies and practices.
- Generate locally driven solutions to meet the needs of targeted and special populations. For AYAs, this includes youth engagement and youth-centered delivery models.
- Advocate for policy changes that promote social justice, economic, and health equity within agencies, as well as across local, state and federal government.

whttps://www.aap.org/en-us/about-the-aap/aap-press-room/pages/american-academy-of-pediatrics-recommends-pediatricians-screen-for-poverty-at-check-ups-and-help-eliminate-its-toxic-health.aspx

^v http://www.amchp.org/AboutAMCHP/Newsletters/Pulse/MayJune2017/Pages/Supporting-Diversity-and-Reducing-Health-Disparities-in-Community-Based-MCH-Programs.aspx

- Utilize new and innovative technologies.
- Seek efforts to sustain and leverage each program component beyond funding from any one stream.

Innovative and stable financing strategies are needed to address SDOH, outside of the hospital/clinic setting to promote access to healthy foods, housing, transportation, employment, etc. as the links between these factors and health outcomes are now well established. The Housing Prescriptions project at the Boston Medical Center is one such approach, funded largely through the Boston Foundation's Health Start at Home Initiative to mitigate adverse health outcomes that stem from housing instabilities. Pooling and/or sharing resources across various programs are also important strategies to leverage existing resources that individually would be insufficient to address disparities.

There is also need for additional outcomes data, both short and longer term, to document the impact that attending to the various needs (whether it be an educational need, housing issue, etc.) contributes to improved outcomes. For example, if youth are comprehensively assessed as they enter the program for a need (e.g., tutoring to deal with learning issues---or dealing with foster care parent for housing stability), currently, there is little follow-up data to assess outcomes pertaining to actual elimination/amelioration of disparities. Such data collection and monitoring efforts would inform whether these various innovations are having this type of measureable impact. In addition to outcome data, process data is important to understand program implementation efforts. Many, but not all, programs are capturing some implementation and outcome data. Yet broader, systematic efforts are needed to be able to systematically evaluate the programs and help to ascertain the impacts upon the AYA and their communities, as well as help to disseminate best practices. Such investments could be pooled across the different service sectors to help close the information gap and enable other communities to implement best practices consistently across sites. Longitudinal data are also needed to ascertain long term effects on AYAs who receive a more comprehensive set of SDOH-related services.

This study also revealed that despite the extensive evidence, spanning decades of research, demonstrating the linkages between social determinants and health disparities among AYAs, progress in addressing these issues has been slow. There may be several contributing factors. *First*, health providers historically did not consider it to be within their purview to delve into assessing and addressing health disparities and inequalities among this age group. For many, being able to provide culturally-sensitive health care in an accessible manner was perceived as their most important contribution to the challenges of developing a response to health disparities. *Second*, until more recently, there was limited data that clearly delineated the depth of inequity in health care status among AYAs. *Third*, there were few examples or readily available data on well-tested,

evidence-based interventions that successfully addressed SDOH or inequalities by the health sector for this age group. While there has been data on the effectiveness of intervention programs on specific populations that experienced particular "disease" problems, such as teenage pregnancy, substance use or mental health issues, there has been less data available on programs that integrate comprehensive responses to AYA's social, educational, economic, as well as health needs. For example, in the case of teen pregnancy, even though traditional approaches recognize that social determinants (e.g., living in low-income communities, with limited educational opportunities) placed adolescents at a greater risk for an unintended pregnancy; interventions most often were shaped by different funding streams that led to fragmented approaches. For example, many pregnancy prevention programs focused on educating youth regarding contraceptive methods, with few also focused on achieving educational goals and providing the counseling, role modeling, and other supports that would enhance the motivation to delay early childbearing to achieve career outcomes. In secondary prevention programs, case management approaches have been used to address a variety of socio-economic needs, but these came after the teenager was already pregnant or had given birth.⁵⁶ More often than not, youth were "treated" for a specific problem rather than considering how SDOH impacted not only the focal problem but how, in this case, pregnancy risk intersected with other co-occurring risks, such as substance use, mental health issues and sexual coercion. In other words, intervention efforts often consisted of siloes and fragmented approaches to a particular targeted issue. For example, there are separate programs and funding for foster care youth, pregnant teens, youth involved in the juvenile justice system, runaway and homeless youth, or those who are chemically dependent, etc. Several programs featured in this study blended multiple funding streams to provide a more comprehensive approach to addressing the "whole" child.

To fully address SDOH that contribute to health disparities, it is useful to consider a tiered approach. At one level, interventions need to improve the delivery of care aimed at achieving equity in health care access, as well as the content and quality of care that is provided. In addition, there is a need for a second level that brings the health sector together with other influential stakeholders across other domains (such as family, education, employment, juvenile justice, etc.) to reduce disparities in adolescents' health, as well as other needs. At the same time, a third level that addresses the "upstream" social-ecological factors, such as poverty, unstable housing, food insecurity, and other factors, is critical. Many programs featured in this brief tackled multiple levels, but it can be overwhelming for community agencies and providers to respond to these broader systemic SDOH. Thus, the spotlight on existing efforts across the country provide some guidance and direction for future efforts to develop more comprehensive and well-evaluated approaches to tackle the complex and difficult challenge of ameliorating negative social determinants of health.

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- Julie Shapiro, MPP, Executive Director, The Door
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- Megan Sandel, MD, MPH, Principal Investigator of Housing Prescriptions as Health Care, Boston Medical Center
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REFERENCES

- 1. Viner RM, Ozer EM, Denny S, et al. Adolescence and the social determinants of health. *The Lancet* 2012; 379(9826): 1641-52.
- 2. World Health Organization. Social Determinants of Health. Available at http://www.who.int/social_determinants/en/. Accessed May 17, 2017.
- 3. Thomas S, Quinn S, Butler J, Fryer C, Garza M. Toward a fourth generation of disparities research to achieve health equity. *Annu Rev Public Health*. 2011; 32: 399-416.
- 4. Economic Opportunity Act of 1964, 1981 USC §88-452 (1964).
- 5. U.S. Department of Health, Education, and Welfare. Recommendations for a Head Start Program Washington, DC: Office of Child Development, 1965. Available at: https://eclkc.ohs.acf.hhs.gov/hslc/hs/about/docs/cooke-report.pdf.
- 6. American Psychological Association. Early Intervention Can Improve Low-Income Children's Cognitive Skills and Academic Achievement. Published April 22, 2004. http://www.apa.org/research/action/early.aspx.
- 7. Bronfenbrenner U. *The Ecology Of Human Development: Experiments By Nature And Design*. Cambridge, MA: Harvard University Press; 1981.
- 8. Heckler, M. Report of the Secretary's Task Force on Black and Minority Health. U.S. Department of Health and Human Services. Published October 16, 1985. https://collections.nlm.nih.gov/catalog/nlm:nlmuid-8602912-mvset.
- 9. Office of Minority Health. History of the Office of Minority Health. U.S. Department of Health and Human Services. Accessed May 31, 2017. Available at: https://minorityhealth.hhs.gov/omh/browse.aspx?lvl=2&lvlid=1.
- 10. Center for Disease Control and Prevention. Associate Director, Office of Minority Health and Health Equity (OMHHE). Accessed on May 31, 2017. Available at: https://www.cdc.gov/about/leadership/new-leaders/omhhe.html.
- 11. Institute of Medicine. *Unequal Treatment: Confronting Racial and Ethnic Disparities in Healthcare*. Washington, DC: The National Academies Press; 2003.
- 12. Institute of Medicine. *How Far Have We Come in Reducing Health Disparities?*: *Progress Since* 2000- *Workshop Summary*. Washington, DC: The National Academies Press; 2012.

- 13. U.S. Dept. of Health and Human Services, Office of the Secretary, Office of the Assistant Secretary for Planning and Evaluation and Office of Minority Health. HHS Action Plan to Reduce Racial and Ethnic Health Disparities Implementation Progress Report. Washington, DC: Office of the Assistant Secretary for Planning and Evaluation, 2015.
- 14. Williams DR, Mohammed SA. Discrimination and racial disparities in health: evidence and needed research. J Behave Med; 32:20-47.2009.
- 15. Larson RW. Adolescents' conscious processes of developing regulation: learning to appraise challenges. *New Dir Child Adolesc Dev.* 2011;133: 87-97.
- 16. Sun RC, Hui EK. Cognitive competence as a positive youth development construct: A conceptual review. *ScientificWorldJournal*. 2012: 1-7.
- 17. Tymula A, Belmaker LA, Roy AK, et. al. Adolescents' risk-taking behavior is driven by tolerance to ambiguity. *Proc Natl Acad Sci.* 2012; 109(42): 17135-40.
- 18. World Health Organization. More than 1.2 million adolescents die every year, nearly all preventable. Accessed May 31, 2017. Available at: http://www.who.int/mediacentre/news/releases/2017/yearly-adolescent-deaths/en/
- 19. Crone EA, Dahl RE. Understanding adolescence as a period of social-affective engagement and goal flexibility. *Nat Rev Neurosci.* 2012; 13(9): 636-50.
- 20. McCormick EM, Telzer EH. Adaptive flexibility: Neurodevelopment of decision-making and learning in a risky context. *J Cogn Neurosci.* 2017; 29(3): 413-23.
- 21. Social Determinants of Health. Healthy People 2010. Washington, DC: U.S. Department of Health & Human Services, Office of Disease Prevention and Health Promotion. Available at: https://www.healthypeople.gov/2020/topics-objectives/topic/social-determinants-of-health
- 22. National Partnership for Action to End Health Disparities. National Stakeholder Strategy for Achieving Health Equity. Rockville, MD: U.S. Department of Health & Human Services, Office of Minority Health, April 2011. Available at: https://www.minorityhealth.hhs.gov/npa/templates/content.aspx?lvl=1&lvlid=33&ID=286.
- 23. National Partnership for Action to End Health Disparities. National Stakeholder Strategy for Achieving Health Equity. Rockville, MD: U.S. Department of Health & Human Services, Office of Minority Health, April 2011. Available at: https://minorityhealth.hhs.gov/npa/files/Plans/NSS/NSSExecSum.pdf.

- 24. English A, Park MJ. Access to health care for young adults: The Affordable Care Act of 2010 is making a difference. Chapel Hill, NC: Center for Adolescent Health & the Law; and San Francisco, CA: National Adolescent and Young Adult Health Information Center, 2012.
- 25. Families USA. The American Health Care Act Fails America. Published March 2017. Available at: http://familiesusa.org/product/american-health-care-act-fails-america.
- 26. Dunn EC, Milliren CE, Evans CR, et. al. Disentangling the relative influence of schools and neighborhoods on adolescents' risk for depressive symptoms. *Am J Public Health*. 2015; 105(4): 732-40.
- 27. Hatzenbuehler ML, Jun HJ, Corliss HL, Austin SB. Structural stigma and sexual orientation disparities in adolescent drug use. *Addict Behav.* 2015; 46: 14-18.
- 28. Maness SB, Buhi ER, Daley EM, et. al. Social determinants of health and adolescent pregnancy: An analysis from the national longitudinal study of adolescent to adult health. *J Adolesc Health*. 2016; 6: 636-43.
- 29. Plourde KF, Fischer S, Cunningham J, et. al. Improving the paradigm of approaches to adolescent sexual and reproductive health. *Reprod Health*. 2016; 13: 72.
- 30. Heron J, Low N, Lewis G, et. al. Social factors associated with readiness for sexual activity in adolescents: A population-based cohort study. *Arch Sex Behav*. 2015; 44 (3): 669.
- 31. Li K, Liu D, Haynie D, et. al. Individual, social, and environmental influences on the transitions in physical activity among emerging adults. *BMC Public Health*. 2016; 16: 682.
- 32. Mathur MR, Tsakos G, Parmar P, et. al. Socioeconomic inequalities and determinants of oral hygiene status among Urban Indian adolescents. *Community Dent Oral Epidemiol*. 2016; 44: 248-54.
- 33. Mmari K, Marshal B, Hsu T, et. al. A mixed methods study to examine the influence of the neighborhood social context on adolescent health service utilization. *BMC Health Serv Res.* 2016; 16: 433.
- 34. Medical Expenditures Panel Survey [database online]. Rockville, MD: Agency for Healthcare Research and Quality, 2011-2013. https://meps.ahrq.gov/mepsweb/data_stats/download_data_files.jsp.

- 35. Alegria M, Carson NJ, Goncalves M. Disparities in treatment for substance use disorders and co-occurring disorders for ethnic/racial minority youth. *J Am Acad Child Adolesc Psychiatry*. 2011; 50: 22-31.
- 36. Lau JS, Adams SH, Park MJ, et. al. Improvement in preventive care of young adults after the affordable care act: The affordable care act is helping. *JAMA Pediatr*. 2014; 168: 1101-06.
- 37. Lau JS, Adams SH, Irwin CE, Ozer EM. Receipt of preventive health services in young adults. *J Adolesc Health* 2013; 52(1): 42-9.
- 38. Kann L, Kinchen S, Shanklin SL, et. al. Youth Risk Behavior Surveillance United States, 2013. Centers for Disease Control and Prevention. 2014; 63: 1-168.
- 39. Zenlea IS, Milliren CE, Mednick L, et. al. Depression screening in adolescents in the United States: A National study of ambulatory, office-based practice. *Acad Pediatr*. 2014; 14: 186-91.
- 40. Reagan-Steiner S, Yankey D, Jeyarajah J, et al. National, regional, state, and selected local area vaccination coverage among adolescents aged 13-17 years United States, 2015. *MMWR*. 2016; 65(33); 850-5.
- 41. Elam-Evans LD, Yankey D, Jeyarajah J, et al. National, regional, state, and selected local area vaccination coverage among adolescents aged 13-17 years United States, 2013. *MMWR*. 2014; 63(29): 625-33.
- 42. Murray VM, Berkel C, Brody GH, et al. The strong African American families program: Longitudinal pathways to sexual risk reduction. *J Adolesc Health*. 2007; 41: 333-42.
- 43. Pantin H, Prado G, Lopez B, et al. A randomized controlled trial of familias unidas for Hispanic adolescents with behavior problems. *Psychom Med.* 2009; 71(9): 987-95.
- 44. Catalano RF, Mazza JJ, Harachi TW, et. al. Raising healthy children through enhancing social development in elementary school: Results after 1.5 years. *J Sch Psych.* 2003; 41: 143-64.
- 45. Gonzales NA, Dumka LE, Deardorff J, et. al. Preventing poor mental health and school dropout of Mexican American adolescents following the transition to junior high school. *J Adolesc Res.* 2004; 113-31.
- 46. Tebb K. Forging partnerships with parents while delivering adolescent confidential health services: a clinical paradox. *J Adolesc Health*. 2011; 49:335-6.

- 47. Drisko J, Morrison S. SHCIP Formative Evaluation Summary Report, Colorado and New Mexico: Year 3 of implementation, 2013-2014 school year. 2014. https://www.colorado.gov/pacific/sites/default/files/CMS%20Final%20Report.pdf.
- 48. Devia C, Baker EA, Sanchez-Youngman S, et al. Advancing system and policy changes for social and racial justice: Comparing a rural and urban community-based participatory research partnership in the U.S. *Int J Equity Health*. 2017; 16: 17.
- 49. Golub M, Charlop M, Groisman-Perelstein AE. Got low-fat milk? How a community-based coalition changed school milk policy in New York City. *Fam Community Health* 2010; 34: S44-53.
- 50. Golub M, Calman N, Ruddock C, et al. A community mobilizes to end medical apartheid. *Prog Community Health Parnersh* 2011; 5(3): 317-25.
- 51. Centers for Disease Control and Prevention. Social Determinants of Health: Know What Affects Health. Last updated October 13, 2016. Available at: https://www.cdc.gov/socialdeterminants/cdcprograms/index.htm.
- 52. HealthyPeople 2020. Office of Disease Prevention and Health Promotion. Available at https://www.healthypeople.gov/2020/topics-objectives/topic/social-determinants-of-health.
- 53. U.S. Department of Health & Human Services. Surgeon General: National Prevention Strategy. Available at: https://www.surgeongeneral.gov/priorities/prevention/strategy/.
- 54. National Partnership for Action to End Health Disparities. U.S. Office of Minority Health. Available at: https://minorityhealth.hhs.gov/npa/.
- 55. RWJF Culture of Health Prize. Robert Wood Johnson Foundation. Available at: http://www.rwjf.org/en/library/features/culture-of-health-prize.html.
- 56. Center for Disease Control and Prevention. Social Determinants and Eliminating Disparities in Teen Pregnancy. U.S. Department of Health and Human Services. Accessed on May 31, 2017. Available at: https://www.cdc.gov/teenpregnancy/about/social-determinants-disparities-teen-pregnancy.htm.
- 57. South Bronx At-A-Glance: Health and Related Information. NY: New York City Department of Health and Mental Hygiene; 2013: 6. Available at: https://www.dropbox.com/sh/1tq5k7y9mgch3t4/AACcRJaM_1R57pyUgz8dLs

- hba/Reports%20for%20Library/Bronx/Nonhospital%20Reports/South%20Bronx%20At%20A%20Glane%20%20Health%20and%20Related%20Information%20%20Nov%202013.pdf.
- 58. Johnson A, Meckstroth A. Ancillary Services to Support Welfare to Work. Published June 22, 1988. Available at: https://aspe.hhs.gov/report/ancillary-services-support-welfare-work.
- 59. March E, Ettinger de Cuba S, Cook JT, et al. Behind Closed Doors: The hidden health impact of being behind on rent. Children's Health Watch; Boston, MA: January 2011.
- 60. Mount Sinai Adolescent Health Center. New York State Health Foundation. Available at http://nyshealthfoundation.org/our-grantees/grantee-profile/mount-sinai-adolescent-health-center-apr-2016. Accessed Feb 12, 2016.
- 61. New York City Teens Connection. NYC Health. Available at: https://www1.nyc.gov/site/doh/health/neighborhood-health/new-york-city-teens-connection.page.
- 62. Progreso Latino. Available at: http://www.prógresolatino.org/. Accessed on March 3, 2017.
- 63. Children's Health Insurance Reauthorization Act of 2009. Pub.L. 111-3. Sect. 401.
- 64. Child and Adolescent Health Measurement Initiative, 2012. *Data Resource Center for Child and Adolescent Health website*. http://www.childhealthdata.org/ home. Accessed March 3, 2017.
- 65. School-Based Health Center Improvement Project. Right Place, Right Time: School-Based Health Centers Improve Care for Adolescents, February 2015. Available at: https://www.colorado.gov/pacific/sites/default/files/School-Based%20Health%20Center%20Improvement%20Final%20Report%20February%202015_1.pdf.
- 66. Spartanburg Community Indicators Project. Spartanburg Community Indicators Project: A Brief History. Accessed on February 1, 2017. Available at: http://www.strategicspartanburg.org/about/history.
- 67. Brady K. The Status of Public Health: Spartanburg, County, South Carolina, 2016 Update. Spartanburg Community Indicators Project. Available at: http://strategicspartanburg.galaxydigital.com/files/dl/51ef20e992c9835cc3620e1c1994af5f.

- 68. Spartanburg Community Indicators Project. Birth Outcomes Priority Area. Accessed on February 1, 2017. Available at: http://www.strategicspartanburg.org/public-health/birth-outcomes/.
- 69. CDC Vital Signs. Preventing Teen Pregnancy: A Key Role for Health Care Providers. Atlanta, GA: Centers for Disease Control and Prevention, Office for State, Trival, Local and Territorial Prevention, April 2015. Available at: https://www.cdc.gov/stltpublichealth/townhall/presentations/2015/vs-april.pdf.
- 70. RWJF Culture of Health Prize. Spartanburg, County, SC: 2015 Culture of Health Prize Winner. Robert Wood Johnson Foundation. Published October 15, 2015. Available at: http://www.rwjf.org/en/library/articles-and-news/2015/10/cohprize-spartanburg-sc.html.

APPENDIX A. - INTERVIEW GUIDE

Interview Guide

The University of California, San Francisco, Division of Adolescent Medicine is conducting a study to identify innovative approaches in which the health care delivery system is working with the broader community to promote health equity and address contextual factors that impact the health of adolescents and young adults. You have been especially selected to participate in this study because your approach could serve as an important model.

The following questions are the core of our planned telephone interview. It would be helpful if you took a few minutes to review and familiarize yourself with the questions we will be discussing. Thank you for your participation in this project.

Program Description:

- 1. What are the key features of your program (or approach) especially with regard to the intersection between health and community?
 - a. When did the program begin?
 - b. Is the program still in place?
 - c. How did your approach to addressing some of the root causes of health disparities come about?
- 2. What do you think is most innovative aspects/approach about your program?
- 3. Describe how you have worked across the health/community sectors.
 - a. Which groups are you working with (e.g. juvenile justice, parks and rec, case management, health/clinic providers, transportation, other CBO's etc.)?
 - b. What was the motivation for each sector to come together?
- 4. Who does your program serve?
- 5. Do your program's activities specifically target adolescent and young adults? If yes, please explain and share any specific strategies you've used to tailor your approach to adolescents and/or young adults.
- 6. What is the size of your program?

- a. If your program serves adolescents/young adults, how many do you serve/reach?
- 7. If you don't have adolescent specific strategies, how has working at the "family" level helped to assure that adolescents get services as well (inter-generational efforts)?

Successes & Challenges:

- 8. What are the biggest challenges you have faced?
 - a. What were the barriers you encountered (if any) in bringing these sectors together (previous history of working together)?
- 9. What approaches have you used to address these challenges?

Funding/Program Support:

- 10. What are the sources of funding and other resources that you use to support your program?
- 11. How did you identify potential ways to financially support the program?
- 12. How were you able to access these resources?
- 13. How did this financial support contribute to the overall vision of what you/your agency are attempting to accomplish?
- 14. To what extent are these resources sustainable/how will you sustain and build on these efforts in the future?

Closing Questions:

- 15. Do you have any other comments you would like to add that I have not necessarily asked you about?
- 16. Are there any other people that I should talk to about this issue?

Thank you again for your participation!

APPENDIX B. - PROGRAM DESCRIPTIONS

Appendix B contains a more detailed description of each program featured in this report along with a weblink for additional information. The descriptions were based on information gathered from the interviews and each interviewee had an opportunity to review and revise the descriptions for accuracy.

Bronx Health REACH: Tackling Childhood Obesity through Community-Based Participatory Research

The Bronx Health REACH (Racial and Ethnic Approaches to Community Health)

Coalition was established in 1999 to reduce racial and ethnic health disparities in the Southwest Bronx. Bronx Health REACH is a multi-sectoral, community participatory coalition with over 70 community-based partners. Through health education and outreach, policy and system changes, Bronx Health REACH works within and across community partnerships to develop and

"Pretty early on, without even naming it as such, we took the community-based participatory approach. We realized that to approach this work as a discrete project would not suffice if we were serious about addressing racial and ethnic health disparities."

-Charmaine Ruddock, Project Director

implement evidence-based and community-informed interventions in nutrition and fitness, diabetes management, and other risks factors for chronic disease.

The Southwest Bronx is one of the poorest urban congressional districts in the United States with 39% of residents living below poverty, and 83% of children qualifying for free or reduced school lunches. In addition, the majority of its residents are Hispanic or African American (95%), and over one-third are immigrants (35%). In terms of health outcomes, more than one-third (35%) of elementary and middle school students and one-quarter (25%) of teenagers are overweight or obese. The South Bronx also has one of the highest rates of diabetes compared to the national rate (12% and 8%, respectively).⁵⁷

In an effort to reduce rates of obesity, Bronx Health REACH works with individuals, schools, and churches to promote healthy eating and physical activity. This includes: training elementary school teachers to implement an evidence-based nutrition curriculum on healthy eating created by the Social & Health Research Center; hosting workshops on the importance of nutrition and physical activity for parents; and training 47 health coordinators to implement nutrition and fitness programs at partner churches. Moreover, Bronx Health REACH successfully advocated for policy changes in 2006 by eliminating whole milk and reducing access to sweetened milk in 1,579 elementary schools throughout New York City.

Housed within the Institute of Family Health (IFH), a FQHC network in New York City, Bronx Health REACH was established through a 7-year grant from the Centers for Disease Control and Prevention that funded CBOs across the country to address a wide range of health disparities affecting underserved populations. CDC funding was renewed in 2010 and continues to support the work of Bronx Health REACH. As Charmaine Ruddock states, "CDC was a huge funder, and awarded us a million dollars annually. The CDC REACH funding was not prescriptive and allowed us the flexibility to select the most salient health disparities affecting our population."

In addition to CDC, multiple funding streams support the work of Bronx Health REACH. In 2005, the National Center on Minority Health and Health Disparities funded Bronx Health REACH to evaluate the impact of its faith-based initiative to reduce diabetes and other cardiovascular diseases and develop a model program that can be implemented in other faith-based settings. In 2010, the Johnson and Johnson/Johns Hopkins Community Health Care Scholars Program awarded Bronx Health REACH a grant to expand childhood obesity prevention programs in schools and evaluate the program's effectiveness. For the past 12 years, Bronx Health REACH has also been funded by the New York State Department of Health to help public schools build and sustain effective policies that promote good health in public schools.

In 2007, Bronx Health REACH was designated as a Center of Excellence in the Elimination of Disparities by the CDC, which allowed them to provide seed grants to new community-based efforts focused on eliminating racial and ethnic health disparities. As a result of this effort, Bronx Health REACH has funded 16 projects in New York State, Virginia, and North Carolina since this designation.

For more information, visit http://www.institute.org/bronx-health-reach/about/.

Housing Prescriptions as Health Care: Preventing the Toxicity of Homelessness on Child Health Outcomes

Established in October 2016, the 'Housing Prescriptions as Health Care' is an innovative research project at Boston Medical Center that is focused on reducing housing instability among low-income families with young children to improve child health and other predictors of child health, including food insecurity and maternal mental health status.

Housing instability in this project is defined as experiencing at least one of the following: high housing costs relative to income (i.e., > 50% of a household's gross monthly income); inability to pay rent or mortgage on time at least once in previous year; moving two or more times in a year; and homeless, but not living in a shelter.⁵⁸ Housing instability is frequently associated with families living at or near poverty and is considered an important social determinant of health.⁵⁹ Children in

"We tend to think of homelessness and housing instability on a continuum, but we see that children in families who are behind on rent or who move two or more times a year, functionally look like a homeless child in terms of health outcomes."

-Dr. Megan Sandel, Boston Medical Center

families who experience housing instability are at an increased risk of having poor health outcomes, developmental delays, and below height and length averages which are markers for malnutrition.⁵⁹ Other negative outcomes include a greater number of lifetime hospitalizations and caregiver symptoms including but not limited to maternal depressive symptoms. Regardless of the type of housing instability, the impacts on children are similar to those who experience homelessness.

The housing prescription project targets low-income families that are experiencing severe housing instability (e.g., multiple moves, behind on rent, rent burden, or homeless, but not in shelter), have at least one child under the age of four who received primary care at

"We tend to think of [homelessness and housing instability] as a continuum, but they may all be housing instable and equally impact a child's health."

-Dr. Megan Sandel, Boston Medical Center Boston Medical Center, and have at least one household member that utilizes three or more emergency department visits per year (i.e., high health care utilizer). Once identified, families are randomly assigned to the intervention group ("Housing Prescriptions") or the control group (who

receives a resource list, which is the current standard of care). Families in the intervention group are referred to a Care Coordinator at Project HOPE, a CBO, which provides specialized housing and case management expertise. The Care Coordinator assesses the individual family's housing needs and connects families with partner agencies to other services such as a benefits specialist, financial counseling, legal resources, and the Boston Housing Authority, who has agreed to fast-track eligible families into public housing units. While Housing Prescriptions can include a subsidized housing unit, some families living in affordable housing may need other housing assistance. For instance, a family currently enrolled in this project had two members of the family with disabilities. Even

though the family in lived subsidized housing, the apartment was not wheelchair accessible and needed the Housing Prescription to get relocated to an appropriate unit.

Upon completion of the pilot in 2018, the Housing Prescriptions and Health Care project hopes to scale up this program and spur other communities to replicate their model to serve families experiencing housing instability. According to Dr. Megan Sandel, "housing prescriptions is an incredibly adaptive model. Most communities already have the necessary resources to make this work for them."

For more information, visit: http://childrenshealthwatch.org/housing-prescriptions/

Mount Sinai Adolescent Health Center: Providing Barrier-Free Care to Vulnerable AYAs

Established in 1968, the Mount Sinai Adolescent Health Center (MSAHC) in New York

City, delivers comprehensive, integrated medical and mental health services to a diverse population of youth ages 10 to 24 years. Most patients are low-income (98%), Hispanic or African American (92%), and do not have health insurance (70%). Additionally, the patient population's levels of education and household situations are also diverse and MSAHC provides support services for vulnerable populations including

"Youth can access our services without any barriers, including the ability to pay, parental permission, and citizenship status. We provide care to anyone in the world...they just have to get [to the clinic]. By allowing [youth] to get health care at no cost... we are helping to elevate their overall health and wellbeing.

-Michael Nembhard, MSAHC

youth who are in foster care, homeless, sex-trafficked, and/or refugees. MSAHC is the largest center of its kind in the United States and serves close to 10,000 patients annually.

Vulnerable populations of AYAs face many economic and social barriers to health care and wellness. MSAHC directly addresses these barriers by providing high-quality, comprehensive, confidential and free services to patients. One of the most unique aspects of MSAHC is their focus on providing barrier-free care to patients. They offer services to patients regardless of their ability to pay, parental permission, and citizenship status. This

"We would like to be seen as the gold standard for the way adolescent health should be delivered and conceptualized." -Michael Nembhard, MSAHC allows patients barrier-free access to a wide range of health care services including free primary medical care, sexual and reproductive health, mental and behavioral health, oral health and optical services. MSAHC also offers a series of specialized services to complement their core

service offerings, including: legal advocacy and assistance (e.g., benefit entitlements for food stamps and public assistance, to immigration and housing), violence intervention and prevention services, nutrition and obesity treatment and prevention services, and eating disorder and substance use treatment services. In addition, MSAHC operates a host of programs tailored to meet the needs of youth that are LGBTQ, young parents, young people living with HIV and those dealing with trauma. Their transgender program serves approximately 300 youth annually and is one of few agencies to provide hormone therapy to youth starting at age 18.

MSAHC has established partnerships with the broader community to promote health equity and address the contextual factors that impact the health of adolescents and young adults. For example, MSAHC works with two centers in Harlem to provide safer sex education, and refers young people to them who are in need of job readiness training. In 2014, the MSAHC, in partnership with MAPSCorps and the New York State Health Foundation Healthy Neighborhood Grantees, began employing youth to survey their zip codes to create comprehensive maps of community assets in New York City. These maps

will be made available to the public through an online database. Healthcare providers, social workers, health educators and other youth-serving professionals can use the database to help connect people to services in their area. This interactive database will include essential resources such as health services, fitness opportunities, grocery store, and public service centers—resources that generally go unnoticed and underused in low-income communities. In fact, it has been found that up to 30% of neighborhood assets are not found in popular search engines like Google.⁶⁰

For more information, visit http://www.teenhealthcare.org/.

New York City Teens Connection: Reducing Teen Pregnancy in High-Risk Communities

Funded in 2015 by the U.S. Department of Health and Human Services' Office of Adolescent Health, New York City Teens Connection (NYCTC) (formerly Bronx Teens

Connection) brings together youth, community-based organizations, schools, clinics, and citywide agencies to implement evidence-based teen pregnancy prevention programs and increase access to adolescent sexual health care. NYCTC plans to target 15,000 youth ages 15-19 across three geographic communities (i.e., Bronx, North and Central Brooklyn, and Port Richmond in Staten

"Every young person in NYC should receive high quality sex health education and linkages to health homes."

-Estelle Raboni, NYCTC

Island) with "teen birth rates that are persistently higher than the national average of 26.6 per 1,000 females aged 15-19: the majority of the Bronx (42.8 per 1,000), North and Central Brooklyn (34.2 per 1,000) and Port Richmond, Staten Island (33.3 per 1,000) fit this criteria."

NYCTC implements evidence-based programs in four settings in each target community: 1) high schools, including traditional, transfer, and international; 2) STD and community-based clinics; 3) foster care agencies; and 4) local colleges. For example, NYCTC has partnered with the Department of Education to target over 100 high schools. NYCTC requires school partners to provide evidence-based sexuality health education in the 9th and 10th grade; the current standard is to provide sex education in the 11th and 12th grade. As part of their curriculum, NYCTC has also partnered with over 66 teen-friendly clinics to ensure every teen in their program has access to high-quality comprehensive health services, specifically reproductive health care. In addition, NYCTC works with 20 foster care agencies to implement their curriculum; currently, foster care agencies in New York are not required to offer sexual health curriculum to youth.

NYCTC's work is driven by their understanding that certain social determinants, like

"Teen pregnancy is not on a principal's mind, but they are accountable for graduation rates. If you approach a principal with data like 'a person growing up in poverty is 3x more likely to get pregnant and drop out [of school]'—that's a compelling statement....and makes our program attractive [to them."

-Estelle Raboni, NYCTC

poverty, are directly linked to teen pregnancy. "We know for a fact that poverty drives teen pregnancy, so places like the Bronx where nearly 40% of youth are growing up in poverty—it's not surprising they have the highest teen pregnancy rate in [New York] City." This understanding has led to their focus on disadvantaged New York

boroughs, like the Bronx, and vulnerable AYA populations, like foster care youth. One major barrier NYCTC has faced in partnering with high schools is getting school principals on board with teen pregnancy prevention efforts.

For more information, visit www1.nyc.gov/.

One Degree: Using Technology to Link People with Local Community Resources

Established in 2012, One Degree (1degree.com) is a nonprofit technology-driven organization that strives to "empower people to create a path out of poverty for

themselves and their communities." One Degree links low-income individuals and families with community resources (e.g., housing, healthcare, food banks) so that they have access, "right in the palm of [their] hands" through a web and mobile platform. Locating and accessing social services for which clients may be eligible is a major challenge for low-income families in the U.S. Families spend approximately 20 hours a week researching, finding, and traveling to multiple agencies and utilizing an average of 12 different agencies to meet their basic needs. One Degree provides a comprehensive resource directory coupled with a searchable

"We need to put the client at the center of the work. People don't need services from just one sector, but they have needs across the gamut of services. Different sectors have different incentives. Health care incentives are changing with the ACA. For instance, Blue Cross/Blue Shield is using Medicaid waivers to support services outside the hospital setting. However, many social service incentives have not changed... We need to measure the impact on health, employment, housing, etc. when multiple organizations are utilized all together."

-Rey Faustino, One Degree

web and mobile platform that enables users to identify services that they are in need of across different programs and/or agencies in their local area with links to walking directions or public transportation routes.

Individual family members can use the tool directly and/or a health care provider, social worker or other personnel can direct families to the tool and help them navigate resources. One Degree has been implemented in a number of health care delivery settings where a health educator or provider screens a family for food insecurities. If the family is in need, they are shown the One Degree tool on a smart phone or iPad and directed to specific service needs (such as the hours and directions to the local food bank). In doing so, they are also introduced to other resources that families may benefit from.

One Degree includes a referral management system to allow professionals to track service referrals and utilization. It also helps families manage resources, and receive reminders directly from social service providers via text message, email, and phone notifications. Users can also manage, save and track the nonprofit services they are using; they can provide reviews and ratings of services and share resources with friends and family members.

One Degree serves a broad spectrum of individuals and families to help break the cycle of poverty. At the same time, it recognizes the need to target specific audiences. In particular, it is developing a new landing page on their website specifically aimed at AYAs, tailored to the needs of special populations, such as foster care youth and

transitional age youth. Additional plans are under way to operate a blog that offers relevant information and resources to these vulnerable AYA populations.

The One Degree platform is currently available in English and Spanish throughout the greater San Francisco Bay Area with plans to expand to more languages and regions and is setting the foundation for a national expansion strategy. It is funded primarily through

"If you target families, you get the biggest bang for the buck because you are able to reach multiple individuals. We aim to reach the working poor, the 60-70% that are on the brink of poverty. They have Internet and the agency to look for resources. Intensive case management services are necessary to serve individuals with higher needs such as those who are homeless and/or those with severe mental health issues."

-Rey Faustino, One Degree

philanthropy, approximately 80% with another 20% through earned revenue (i.e., county government contracts). One Degree's platforms have attracted over 140,000 unique users with over 8,000 monthly users. Most users, 90,000, were generated in the past fiscal

year.

For more information, visit http://www.1degree.com/.

Progreso Latino: A One-Stop Shop to Health & Wellness for Underserved Populations

Established in 1977, Progreso Latino is a multi-service, non-profit, CBO in Rhode Island; it is the only Latino-led social service organization in the state. Operated as a "one shop stop," Progreso Latino has become the bridge for underserved and uninsured Latino and immigrant populations in Rhode Island who need to connect to the health care system.⁶²

Progreso Latino offers a variety of programs for all ages including a dual-language adult education program that serves over 500 adults

"We became the bridge [Latinos]

annually; free or reduced immigration services; emergency non-perishable food items for low-income individuals and families; and free transportation to school for low-income students.

needed to connect to the health care system."

-Mario Bueno, Progreso Latino

In addition, Progreso Latino is focused on eliminating disparities in health care access by providing free health services through its Wellness Center. In 2010, Progreso Latino received funding from CDC's Preventive Health and Human Services Block Grant to keep its Wellness Center open at night to provide free preventive services (e.g., vaccinations, HIV screening, blood pressure screening) to underserved and uninsured residents. That same year, the Center served more than 1,500 adults. In addition, Progreso Latino partnered with the Brown University and the Women's & Infant Hospital of Rhode Island to operate a mobile Wellness Van that connects patients to free or low-cost medications and referrals.

For more information, visit http://www.progresolatino.org/.

School-Based Health Center Improvement Project

Funded in 2010, the School-Based Health Center Improvement Project (SHCIP) was a 5-year project funded by the Centers for Medicare and Medicaid Services to "identify effective, replicable strategies for enhancing the quality of health care for children and youth." The program highlighted in this report was led by the Colorado Department of Health Care Policy and Financing, Colorado Department of Public Health and Environment, New Mexico Human Services Department, and the University of New Mexico, Department of Pediatrics- Envision New Mexico. A total of 22 school-based health centers (SBHCs) that served predominantly rural and Latino students in Colorado and New Mexico participated in the project.

SHCIP was specifically focused on increasing access for adolescents, with the lowest rates

of primary care use, to comprehensive high-quality preventive health care services. Approximately 18% of U.S. adolescents had not received preventive health care and an even higher proportion, 36%, had an unmet behavioral health care need with significant disparities among minority youth.⁶⁴ Participating SBHCs were supported in assessing and improving preventive clinical care through promotion of the Early Periodic Screening, Diagnosis, and Treatment (EPSDT)

"There is stigma associated with students accessing some SBHCs. The key is to avoid the clinic being labeled as a 'sex clinic'—which for us meant that we needed to establish strong connections with school and school administration."

-McKane Sharff. SHCIP

exam, Medicaid's comprehensive health exam for children and adolescents, and appropriate follow-up care.⁶⁵

This SHCIP project provided coaching and technical assistance to the 22 SBHCs across Colorado and New Mexico. The program also implemented the electronic Student Health Questionnaire (eSHQ), a tool used to assess for risk behaviors and protective factors

"We utilized youth engagement as a tool to drive traffic to the SBHCs. One strategy included being visible at lunch and tabling around a specific health topic."

-McKane Sharff, SHCIP

among patients. This electronic survey was administered to students prior to their medical appointment via an iPad; results were available for immediate review by providers and were used to guide the visit. Another strategy for improving the receipt of EPSDT exams was educating parents on the importance of the well visit through marketing materials and letters sent to households. Over the

course of this five-year project, participating SBHCs substantially improved the quality of EPSDT exams they delivered to youth, the quality indicator measure increased from 44% to 77% across all 22 sites from baseline to the end of the project from 48% to 77%.65

Following completion of the project in 2015, project partners continue to provide basic quality improvement coaching and guidance to SBHCs, informed by lessons learned from SHCIP, and SBHC eSHQ utilization has been expanded in both states.

For more information visit: https://www.colorado.gov/pacific/hcpf/school-based-health-center-improvement-project-shcip and https://envisionnm.unm.edu/index.php.

Spartanburg County Community Indicators Project (SCIP): Data Driven Health Improvement Efforts

The Spartanburg Community Indicators Project (SCIP) of Spartanburg County, South

Carolina (SC) is a collaboration of seven sponsoring partners including academic institutions, foundations, and community specifically,: the based organizations, Spartanburg County Foundation, United Way Spartanburg County, of the Piedmont, University of South Carolina Upstate, Mary Black Foundation, Spartanburg Regional Foundation, and Spartanburg Area Chamber of Commerce. SCIP reports on data and the progress of key community initiatives. It was initially established in 1987 to measure the

"We noticed that our efforts to improve health outcomes in our county were very siloed and we were not sharing our efforts and lessons learned with each other. As a result, [SCIP] was started to share information, combine resources, and work in synergy."

- Dr. Kathleen Brady, University of South Carolina Upstate

quality of life in the county. Between 1989 and 1997 they published a series of reports with data on a range of health indicators (e.g., birth outcomes, affordable housing), to "inspire dialogue and strategy that lead to community improvements." ⁶⁶

In 2008, SCIP launched The Road to Better Health (RTBH) coalition. The RTBH is a group of more than 40 professional and nonprofit groups working together to improve health

"To prevent social disparities, you have to deal with the root causes. For teen parents, especially those with a repeat teen birth, it is really hard to get out of poverty. With funding from the CDC and OAH were able to tackle this and reduce our teen birth rate."

- Polly Padgett, Mary Black Foundation outcomes in Spartanburg County. Given the size of the collaborative, they work in smaller groups across five priority areas to be reached by 2018. This work is coordinated through a council. The coalition's first priority was to address the county's high teen birth rate, which was higher than the state and national average. RTBH decided to

focus on this effort because they understood that teenage pregnancy is strongly associated with cyclical family poverty and reliance on child welfare systems. Children born to teenage mothers are significantly more likely to experience compromised health and well-being including low education and continued poverty.⁶⁷

A key approach in RTBH's strategy was to partner with CBOs and funders to reinvigorate an underutilized teen health center called The Point. This Center provides confidential health services at free or reduced costs.⁶⁸ RTBH/SCIP also worked to improve contraceptive access beyond the Center by changing policy at the hospital level to increase contraceptive access, such as intrauterine devices (IUDs), to be provided at post-partum visits for teenage mothers at-risk of repeat pregnancies. Through their efforts to support youth-centered care, by 2014, the Center saw a 31% increase in teens receiving family planning services and a 37% increase in the number of teenage patients receiving

a Long-Acting Reversible Contraceptives (LARCs) method (no LARCs were provided prior to this effort).⁶⁹ These collective efforts resulted in a significant decrease in Spartanburg County's teen birth rate from 63% to 33% over a five year period.⁶⁸ By 2015, 22% of teenage mothers were repeating a pregnancy compared to 38% in 2010.

In 2015, SCIP won the 2015 Robert Wood Johnson Culture of Health prize for their data-driven approach to community health.⁷⁰ The RWJ Culture of Health Prize opened up the door to continue discussions and efforts to address health inequities. For example, there is a large project, born 5 years ago, called the North Side Initiative that looks at a downtown neighborhood with 98% poverty rates.

"For the North Side Initiative, we even talked a medical school in town into opening in that neighborhood under a project called 'The Other 45' which allows residents to see doctors for 15 minutes, then the other 45 minutes with a medical student."

- Dr. Kathleen Brady, University of South Carolina Upstate

It has no transportation, no access points, etc. The goal is to work collaboratively with community members to turn NorthSide into a "promise neighborhood".

We attribute our success to a multi-step process that is data driven and lead by a broad-based community coalition:

- 1. <u>Engage in community readiness activities</u> to raise awareness of the issue and prime them to make changes in policy, practice and programs (through community coalitions, community and youth advisory boards).
- 2. <u>Build Capacity among partners</u> (e.g., training FQHCs on contraception, addressing clinic hours, leveraging Title X funding, promoting adolescent friendly health care models, education around confidentiality, etc.)
- 3. <u>Increase health care access</u> (beyond the teen clinic). Identifying where youth can access services, who provides care; what is the referral system like, partnering with other health care providers including community hospital system.
- 4. <u>Promote parent-child communication.</u> After conducting a door-to-door and phone survey, they worked to address perceptions, attitudes and norms around evidence-based teen pregnancy prevention efforts.
 - Polly Padgett, Mary Black Foundation

For more information about SCIP, visit their website at: http://www.strategicspartanburg.org/.

The Door

Since 1972, The Door's mission has been to empower young people to reach their potential by providing comprehensive youth development services in a diverse and caring environment. At The Door, youth can access health care and education, mental health counseling and crisis assistance, legal assistance, college preparation services, career development, housing supports, arts, sports and recreational activities, and nutritious meals – all for free and under one roof.

With this unique co-location model, The Door is highly successful at reaching and engaging some of New York City's most vulnerable youth. Of the nearly 10,000 youth

served last year, 92% were youth of color and 20% were foreign-born. A total of 18% self-identified as LGBTQ, though they estimate that this number is under-reported. These youth face many overlapping risk factors that impact their ability to achieve their goals, including 29% of

"We have to stay competitive from a fiscal perspective. If you don't have a margin, you don't have a mission."

--Renee McConey, The Door

youth that have unstable housing, 11% who have foster care experience, and 17% who have involvement with the justice system. Many of their youth come from low-income families, are disconnected from school and work, and lack supportive adult role models in their lives.

The Door's Adolescent Health Center (AHC) serves as an invaluable resource for young people; it is one of two confidential health centers in New York City solely dedicated to adolescent health services. It is a New York State licensed Article 28 diagnostic and treatment center, located within their comprehensive youth development center. Accordingly, the AHC offers free services in an accessible, youth-sensitive and culturally

"Ease of access is everything for adolescents. At The Door, they can come in for an internship, and then take a dance class and have a reproductive health visit."

-- Julie Shapiro, The Door

competent manner, and consistent with a sexual and reproductive justice framework. Any youth can access the health center and receive a full range of comprehensive health care services, including: family planning and reproductive health care, primary care, health education, counseling, nutritional services,

dermatology, dental, optometry, and counseling about their eligibility for programs. Last year, 4,213 young people visited the AHC; over half of those patients received access to birth control, 75% were tested for Chlamydia/Gonorrhea, and 40% were tested for HIV. Additionally, the AHC provided depression screenings to over 1,400 patients.

The health center (located in the lower level) is embedded in a larger youth development agency so services are provided seamlessly. The 1st floor includes a drop-in center for runaway and homeless youth. Youth are provided with food, laundry, a shower and lounge area, and have access to all other services and opportunities in the building. Legal services are provided to approximately 1,000 youth per year, with the majority from

immigrant populations. The Door also provides dinner for youth every night. The Door

offers a range of activities and programs every afternoon such as support groups, arts, recreation, resume and other education and job training workshops. All services are provided for free, are completely confidential, and all located under one roof. The Door also

"We create a supportive, nurturing and inclusive environment for all youth. Foster youth, LGBTQ, homeless youth want to be here because it is a fun and safe space for them."

--Julie Shapiro, The Door

has an on-site charter high school (with classrooms and activities on floors 2, 4 & 5) that enrolls 330 students annually. Nearly half of these students are in the child welfare system or are homeless but the program serves all youth city-wide, with benefits ranging from small class size and rigorous academics to the linkages to all services that The Door offers.

The Door is funded through a mix of public and private funding streams, with the majority coming from government and private foundation sources. The health center is funded through a number of mechanisms. They are a designated Federally Qualified Health Center (FQHC), and receive Title X federal funding, and funding from the New York City Department of Health and the New York State Department of Health. Funding covers family planning services, screening for sexually transmitted infections and HIV

"Our program has been sustainable in large part because of the diversity of our funding streams. If we take a hit in one area, we grow in another. We blend and leverage all of our funding sources but it is all seamless from the perspective of our youth."

--Julie Shapiro, The Door

testing. They also receive funding that is generated from hospital taxes which is redistributed to health care clinics who serve people who are unable to pay for care. Most recently, they have improved their ability to receive Medicaid reimbursements under the Affordable Care Act. Despite their successful

funding model, they serve a large proportion of youth who have high needs. Many youth receive case management services to help them navigate care. The Door is always seeking out additional resources to provide all youth in need of this more intense service.

The Door is a recognized model for comprehensive, wraparound youth development services to address the root causes of health and economic disparities. They have been visited by other cities, counties and countries looking to replicate their model. The success of their model is best reflected in the education, employment and health outcomes their young people are able to achieve, including youth who obtain a high school equivalency degree, are placed in a job and retained over time, enroll in college, and receive effective contraception and STI screening.

For more information, visit http://www.door.org/.

The Los Angeles Trust for Children's Health (L.A. Trust)

The mission of the Los Angeles Trust for Children's Health (L.A. Trust) is to improve student achievement by promoting wellness and eliminating barriers to learning through access to integrated healthcare and preventive services. The need in the Los Angeles Unified School District (LAUSD) is great. LAUSD is the second largest district in the nation with over 647,000 students, 90% of whom represent communities of color. Approximately 27% of students are uninsured, 52% are enrolled in Medi-Cal (California's Medicaid Program), and 74% participate in the National School Lunch Program. In addition, 1 in 5 youth live in poverty and have no usual source of medical care.

In 1991, the Robert Wood Johnson Foundation invested in the initial LAUSD School-Based Health Clinic and LAUSD created the L.A. Trust to support LAUSD's

implementation of evidence-based health education program models (EBPM). From 1994 – 2002, The L.A. Trust provided substantial financial support to the direct operation of the six original LAUSD school based health clinics, now referred to as

"The Wellness Centers were conceived as a comprehensive, holistic, upstream approach to impact schools and neighborhoods."

-Maryjane Puffer, The LA Trust

Wellness Centers. At the same time, The L.A. Trust worked to facilitate the opening of new Wellness Centers that could be self-sufficient and sustainable without ongoing direct funding. By 2002, dissemination of best practices, sustainable funding models, and expertise in school health were the major focus of The L.A. Trust. In 2014, there were a total of 14 Wellness Centers that served 45,000 patients; outreach and service delivery continued to expand and in 2016, there were a total of 190,000 unique patient encounters across all of the Wellness Centers.

"We were very intentional about addressing issues of equity and disparities in the system and needed a public health framework/population approach and policies to support this approach."

-Maryjane Puffer, The LA Trust

The L.A. Trust supports a holistic view of student, family community health that integrates services to promote wellness and academic achievement. They serve students, families and the surrounding community by providing comprehensive care,

prevention and early intervention and education to promote health and wellness. To do this, they needed to address many of the issues facing youth in their schools and communities including: neighborhood safety, childhood trauma, poverty, no green space, limited access to fresh fruits and vegetables, etc. The L.A. Trust has uses a Collective Impact approach which involves studying the needs of the community. They gather and communicate regularly with stakeholders (staff, students, parents, and other partners) and come to terms with a common agenda, mutual goals, and clarity in roles and responsibilities. They measure their progress collectively and use the data to inform

best practices or next strategic directions. Their strategic plan is focused on key three goals:

- 1. Integrated Wellness
- 2. Advancing Policy
- 3. Strengthening Backbone Support

Each Wellness Center has a youth advisory board who receive support from designated adult "allies", (certificated school district staff members or clinic provider youth organizers) to support youth with their student advisory board meetings, provide a safe and inclusive environment for students, and support them with the student-lead campaigns, such as the anti-tobacco initiative, healthy eating active living, refillable water stations on campus, sexually transmitted infections awareness campaign, with linkages to Wellness Center services, etc.

The L.A. Trust promotes and supports the development of the Wellness Centers, as well as the school campus and feeder schools to have more of a health and wellness focus. They also oversee the operation of a number of EBPMs aimed at addressing the root causes that contribute to health disparities. The following are a few examples:

- The Health Careers Pathway Project offers students access to career pathways in the health field through a strong partnership between employers and state college partnerships within Boyle Heights and South Los Angeles areas.
- The oral health initiative helps schools to address oral health disparities through a 3-tiered program including public health education, universal school-wide oral health screening and fluoride varnishing and linkage to a dental home. Each child screened receives a 1-page report on their oral health status, recommended follow-up care, and a list of local low-cost dental providers who accept publically insured and uninsured patients. Abscesses are consistently identified in 5% of the students screened and an additional 15% are in need of an urgent dental visit. While all care was delivered at no cost, providers submit reimbursement for care provided to publically insured children. Parent volunteers are a key aspect of the program. https://www.google.com/search?rls=com.microsoft:en-US&q=dental+abscess&spell=1&sa=X&ved=0ahUKEwi10cz8q9TRAhUHjpQKHdV7CvoQvwUIGSgA
- The Promotora program engages with families to learn how to talk with their children and adolescents about healthy relationships and healthy behaviors.

For more information about the L.A. Trust, visit their website at: http://thelatrust.org.