

Infant Mortality Collaborative Improvement and Innovation Network

Social Determinants of Health Learning Network

Background on Recommended Strategies

September 2015

Infant Mortality CoIIN SDOH Learning Network

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Background on Recommended Strategies for the Social Determinants of Health Learning Network

(Based on WHO Framework for Tackling SDOH)

Background

Social Determinants of Health Learning Network Aim

The aim of the Social Determinants of Health (SDOH) Learning Network, as part of the Infant Mortality Collaborative Improvement and Innovation Network (CoIIN), is to build state and local capacity, and test innovative strategies to shift the impact of social determinants of health. The primary focus is innovation and to spread evidence-based policies, programs and place-based strategies to improve social determinants of health and equity in birth outcomes.

The SDOH Learning Network has adopted the WHO Framework for Tackling SDOH and developed a consensus set of Infant Mortality CoIIN SDOH recommended strategies for states in the Network.

“The social determinants approach holds promise for reducing persistent health disparities, defined as health differences that are closely linked with social, economic, and environmental disadvantage... [In Healthy People 2020] Addressing the broader social determinants of health held the promise of complementing the traditional efforts of the health care and public health sectors with new cross-cutting efforts involving many diverse sectors of society ... The broader social determinants approach also reinvigorates efforts to tackle complex health disparities in a way that engages people in all sectors and communities to become advocates for change.”

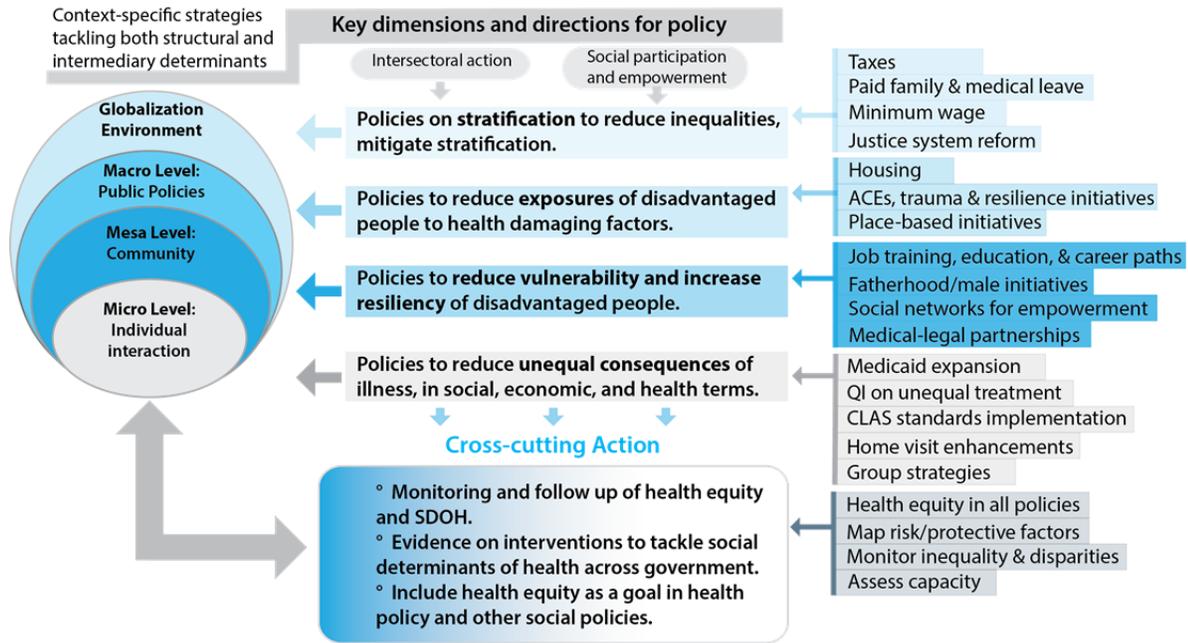
From Koh et al., 2011 based on Braveman et al., 2011; Braveman, Kumanyika, et al., 2010; Koh et al., 2010; Koh 2010; and Kumanyika & Morssink, 2006.

Background resources:

- Link to Koh et al. 2011. Healthy People: A 2020 vision for the social determinants approach <http://www.ncbi.nlm.nih.gov/pubmed/?term=Koh+2011+social+determinants>
- Link to Braveman et al, 2011. The social determinants of health: Coming of age. <http://www.ncbi.nlm.nih.gov/pubmed/21091195>
- Association of State and Territorial Health Officials. (2015). *Health equity*. Retrieved from <http://www.astho.org/programs/health-equity/>
- Association of State and Territorial Health Officials. (2013). *Role of the State and Territorial Health Official in promoting health equity*. Retrieved from <http://www.astho.org/Programs/Health-Equity/Health-Equity-Orientations-for-SHOs/>
- Minnesota Department of Health. (2014). *Advancing health equity in Minnesota: Report to the legislature*. Retrieved from http://www.health.state.mn.us/divs/chs/healthequity/ahe_leg_report_020414.pdf

Framework

WHO Framework for Tackling Social Determinants of Health and Infant Mortality CoIIN SDOH Recommended Strategies



Infant Mortality CoIIN/SDOH Learning Network Recommended Strategies 4/30/15

Strategies, Definitions, and Background

POLICIES AND PROGRAMS ON SOCIAL STRATIFICATION TO REDUCE INEQUALITIES

Taxes: Support the Earned Income Tax Credit, Child Tax Credit, and Similar Federal and State Tax Policies

The Earned Income Tax Credit (EITC), Child Tax Credit (CTC), and similar tax policies provide support directly, as a kind of wage supplement for those with low incomes. They are particularly focused on families in their childbearing years. Together the EITC and CTC have a powerful anti-poverty effect, helping up to 13 million children in 2013. The EITC and CTC reduce poverty in two ways: 1) by encouraging workforce participation, and 2) by supplementing the wages of low-income workers.

The EITC is important for families. In 2013, the EITC lifted more than 6 million people out of poverty, including more than 3 million children. For years, broad bipartisan agreement in Congress has supported the idea that a two-parent family with two children with a full-time, minimum-wage worker should not have to raise its children in poverty. Currently, however, childless adults and noncustodial parents are generally ineligible for the EITC; however, advocates are pressing to expand tax benefits for these groups.

The HHS Secretary's Advisory Committee on Infant Mortality (SACIM) heard a summary of the association between the EITC and improved child health outcomes. Research found that infants born to mothers who could receive the largest EITC increases in the 1990s had the greatest improvements in birth outcomes such as low birthweight and preterm births, and mothers who received the largest EITC increases in the 1990s had greater improvements in their own health indicators (e.g., mental stress), were more likely to enter prenatal care before the third trimester of pregnancy, and less likely to smoke during pregnancy.

Background resources:

- US Government Accountability Office (GAO) report on assistance programs for low-income individuals, including EITC. <http://www.gao.gov/assets/680/671779.pdf>
- The Center on Budget and Policy Priorities (CBPP) website has basic facts and links to studies regarding the EITC. <http://www.cbpp.org/research/federal-tax/policy-basics-the-earned-income-tax-credit>
- For more on the importance of EITC and CTC to children's health, development, and school achievement, see: <http://www.cbpp.org/research/federal-tax/eitc-and-child-tax-credit-promote-work-reduce-poverty-and-support-childrens?fa=view&id=3793>
- For details on the research, see: Hoynes HW et al. The EITC: Linking Income to Real Health Outcomes, University of California Davis Center for Poverty Research, Policy Brief, 2013. <http://poverty.ucdavis.edu/researchpaper/policy-brief-linking-eitc-income-real-health-outcomes>

Family and Medical Leave

Family and medical leave policies allow workers to take time away from work to address a serious health condition, care for a family member with a serious health condition, pregnancy and childbirth, or care for a newborn, newly adopted child, or newly-placed foster child. Under the federal Family and Medical Leave Act (FMLA), unpaid leave is available for up to 12 weeks in a 12 month period but to only about half of workers largely because of the large number of part time workers do not qualify. Only 13% of workers have access to paid family leave through their employers. Paid family and medical leave permits workers to continue to earn a portion of their pay while they take time away from work. Some states (e.g., California, New Jersey, and Rhode Island) have adopted and successfully implemented paid family leave policies. Other states (e.g., Connecticut, Maine, Minnesota, and Vermont) have expanded the amount of leave available or the conditions under which leave may be taken.

In some states, the Temporary Assistance for Needy Families (TANF) program offers the equivalent of paid maternity leave to low-income, single mothers of infants. TANF serves as a de facto paid family leave program for low-income new mothers, providing maternity support for time off of work. Age-of-youngest-child exemptions waive work requirements for TANF recipients following the birth of a child, typically for 3–12 months, depending on the state. Research suggests that TANF is important, alongside state-provided paid maternity leave, as a source of financial support for low-income mothers in the period surrounding birth. The policies should be designed in conjunction with one another. (See Ybarra et al.) State temporary disability policies are another source of support for new mothers.

Paid family and medical leave programs, including TANF exemptions, contribute to improved health for childbearing families. Pregnant women with risks for preterm labor can take time off work. New mothers are better able to continue breastfeeding. New parents can more easily get babies to the doctor for well-child check-ups and immunizations when they have access to paid leave. Parents of infants and children with special needs (e.g., stays in the neonatal intensive care unit, infants with positive newborn screening results or other congenital conditions) can take time to learn about diagnoses or seek interventions.

Background resources:

- The federal Family and Medical Leave Act (FMLA) is summarized on the website of the US Department of Labor. <http://www.dol.gov/whd/fmla/>
- The California Paid Family Leave policy is summarized here: http://www.edd.ca.gov/pdf_pub_ctr/de2511.pdf
- The National Conference of State Legislatures has state-by-state information about family and medical leave laws. <http://www.ncsl.org/research/labor-and-employment/state-family-and-medical-leave-laws.aspx>
- Link to the National Partnership resources describing the positions of advocates for paid family and medical leave. <http://www.nationalpartnership.org/issues/work-family/paid-leave.html?referrer=https://www.google.com/>
- Berger, L., Hill, J., & Waldfogel, J. Maternity Leave, Early Maternal Employment and Child Health and Development in the US. *The Economic Journal*, 2005; 115(501): F44.

- Links to presentations by Ybarra et al.
 - [Panel Paper: TANF Generosity, State-Provided Maternity Leave and the Material Wellbeing of Low-Income Families with Infants:](https://appam.confex.com/appam/2014/webprogram/Paper9701.html)
 - TANF Generosity, State-Provided Maternity Leave and the Material Well-being of Low-Income Families with Infants: <https://sswr.confex.com/sswr/2015/webprogram/Paper23898.html>
 - Stimulating the Effects of Paid Family Leave on Maternity-related Welfare Participants <http://www.ssc.wisc.edu/irpweb/initiatives/trainedu/igrfp/readings08/YbarraGRFjobmarketpaper2.pdf>
- Link to Census Bureau paper on TANF. <http://www.census.gov/content/dam/Census/library/working-papers/2014/demo/SIPP-WP-266.pdf>

Minimum Wage

A wide reaching national, state, and local debate is underway regarding expansion of the minimum wage. The basic argument in favor of increasing the level of the minimum wage is that the current level is one-third below its value at its peak in past years and contributes to income inequality. Currently, half of minimum wage workers are adults over age 30, just over half work full time, nearly 6 in 10 are women, and about one-quarter are parents. People of color are overrepresented among those who work at minimum wage.

An increase in the minimum wage from the current level of \$7.25 to \$10.10 would affect about 28 million workers, lift 1-2 million people out of poverty, and raise average incomes for roughly the bottom earning half of all Americans. Polls suggest a majority of Americans support an increase in the minimum wage.

In absence of federal action and using their authority, 29 states and the District of Columbia have set their minimum wage above the federal level of \$7.25 as of July 2015. In 2014, President Obama signed an Executive Order to raise the minimum wage for individuals working on federal service contracts affecting nearly 200,000 workers by 2019. Some businesses (e.g., Disney, IKEA, Gap, Inc.) have increased their workers minimum wage. Some cities have also adopted increases in the minimum wage.

Background resources:

- Link to the White House website on raising the minimum wage. <https://www.whitehouse.gov/raise-the-wage>
- The U.S. Department of Labor has a website with facts about the minimum wage. <http://www.dol.gov/minwage/> and <http://www.dol.gov/minwage/mythbuster.htm>
- The nonpartisan Congressional Budget Office website has reports, testimony, and fact sheets. <https://www.cbo.gov/publication/44995>
- Link to the National Conference of State Legislatures website on state minimum wages 2015. <http://www.ncsl.org/research/labor-and-employment/state-minimum-wage-chart.aspx>

- The Center on Budget and Policy Priorities (CBPP) has a quick study with 9 things you might not know about minimum wage workers. <http://www.cbpp.org/blog/nine-things-you-might-not-know-about-minimum-wage-workers>
- CBPP also has a policy basics review on this topic. <http://www.cbpp.org/research/economy/policy-basics-the-minimum-wage>
- The Economic Policy Institute also has basics on this as national policy. <http://www.epi.org/publication/raising-the-minimum-wage-to-12-by-2020-would-lift-wages-for-35-million-american-workers/>

Justice System Reform

The issue of criminal justice reform – for adults and juveniles – has risen on the political agenda at the national, state and local levels. President Obama has urged justice system reform. Bi-partisan legislation has been introduced by Senators Cori Booker (D-NJ) and Rand Paul (R-KY), with co-sponsors such as Pat Leahy (D-VT) and Rob Portman (R-OH). A Bipartisan Summit on Criminal Justice Reform in March 2015 brought together these Senators, former House Speaker Newt Gingrich, and former Attorney Eric Holder, among others.

The debate has emphasized three primary issues: 1) too many young people end up in the criminal justice system, 2) mandatory minimum sentences for nonviolent drug crimes have led to high levels of incarceration and overcrowded spending, and 3) policy changes are needed to help people get back on track with work and educational attainment following incarceration. Young men of color are disproportionately affected by justice system and related employment practices, particularly due to racial profiling. This in turn affects their roles as partners and fathers.

An estimate 70 million US adults have prior arrests or convictions in the justice system that make it difficult to find a job. Many of these individuals have non-violent drug-related arrests or convictions. Many are calling for employers to “ban the box” on job applications (the box indicating whether an applicant has had a previous arrest/conviction) to reduce bias and so that former prisoners who have served their time can have an impartial job interview. President Obama issued an executive order to remove the criminal record checkbox from federal agency and contractor job applications. As part of fair hiring policies, Atlanta, GA, Durham, NC, Chicago, IL, Minneapolis, MN, San Francisco, CA and other cities have banned the box and reported shifts in hiring practices and increases in employment for those with arrest or conviction histories following removal of check boxes. Other communities are forging agreements with employers.

Some states have taken action in advance of federal policy changes. For example, Massachusetts implemented Criminal Offender Record Information (CORI) reform in 2012, prohibiting certain questions from employment applications and permitting criminal background checks to help ex-offenders apply for jobs and other opportunities, among other provisions. The state also has adopted sentencing reforms and is looking at the impact of CORI reform implementation.

Background resources:

- Link to Solutions: American Leaders Speak Out on Criminal Justice. <https://www.brennancenter.org/publication/solutions-american-leaders-speak-out-criminal-justice>
- Link to an issue brief by the National Employment Law Project on banning the box. <http://www.nelp.org/content/uploads/2015/03/Seizing-Ban-the-Box-Momentum-Advance-New-Generation-Fair-Chance-Hiring-Reforms.pdf>
- Link to an analysis from the NAACP. <https://www.brennancenter.org/analysis/ban-box>
- Link to Massachusetts CORI reform fact sheet. <http://www.mass.gov/eopss/docs/chsb/implementing-cori-reform.pdf>

POLICIES AND PROGRAMS TO REDUCE EXPOSURES OF DISADVANTAGED PEOPLE TO HEALTH DAMAGING FACTORS

Housing

Housing matters in a discussion of SDOH for several reasons. Rauh and colleagues have written about the role of housing conditions in exposure to environmental toxins which translate social adversities in the form of housing into individual illness and population health disparities. Gross inequities in the distribution of toxic exposures have been described in studies of household and community exposures, resulting in a range of social and health determinants. For pregnant women, infants, and young children such exposures can result in life threatening conditions, as well as infant deaths.

The role of housing conditions in sleep-related infant injury death (SIDS/SUID) also has been studied but is not widely understood. A retrospective review of sleep-related infant injury death cases where an infant was found sleeping on an unsafe sleep surface found that in nearly one quarter of cases, a crib or bassinet was identified in the home. No differences were found between infants with cribs or bassinets and those without them in terms of demographic or other risk characteristics. Qualitative analysis suggested the lack of crib or bassinet use may be related to environmental factors influenced by poverty, specifically crowded living space, room temperature, and vermin infestation.

Unstable housing and homelessness are more common among pregnant women than is generally understood. Housing instability is not widely studied; however, one study in New York City found more than a quarter of pregnant women who gave birth in community hospitals reported housing instability (two or more moves within past year). Adjusting for other known risk factors, housing instability was found to be a significant predictor of low birthweight birth.

In Boston, the Healthy Start in Housing (HSiH) seeks improved birth outcomes and long term health of mothers and infants through improved housing support. The project is a partnership between the Boston Public Health Commission and the Boston Housing Authority designed to reduce stress due to housing

insecurity among low-income, pregnant women. Among eligible women, more than half had medical conditions or mental health conditions and 3 in 10 had multiple risks.

The US Department of Housing and Urban Development (HUD) has multiple projects underway to protect the health and well-being of pregnant women, infants, and their families. For example, Second Chance Homes are adult-supervised, group homes or apartments for teen mothers and their children who cannot live at home because of abuse, neglect or other extenuating circumstances. The Healthy Homes for Healthy Families initiative aims to reach a broader group of families who need information to keep their infants and children safe. HUD also participates in the HHS Secretary's Advisory Committee on Infant Mortality in order to inform national strategies and recommendations.

Program and policy solutions include fair housing policies, housing subsidies, and initiatives focused on reducing homelessness. Particular efforts are needed to ensure safe and healthy homes for infants and young children, that is, homes with safety protections (e.g., stair guards, hot water regulators), without environmental toxins (e.g., lead), without vermin infestation, with adequate heat, and with adequate space for safe sleep and play.

Background resources:

- Link to article by Rauh et al. regarding housing and health. <http://www.ncbi.nlm.nih.gov/pubmed/18579887>
- Link to article by Donovan on *How Housing Matters: Housing as a Platform for Improving Health Outcomes*. <http://www.spotlightonpoverty.org/exclusivecommentary.aspx?id=53e6df1f-e7a8-4453-a390-b438ce410106>
- Link to article by Chu et al. on housing influences and safe sleep. <http://www.ncbi.nlm.nih.gov/pubmed/25724752>
- Link to article by Carrion et al on housing instability and birth weight. <http://www.ncbi.nlm.nih.gov/pubmed/25344356>
- Link to article by Allen regarding Boston pregnancy and housing project. <http://www.ncbi.nlm.nih.gov/pubmed/23820672>
- Links to HUD resources. http://portal.hud.gov/hudportal/HUD?src=/program_offices/public_indian_housing/other/sch/abouut and http://portal.hud.gov/hudportal/HUD?src=/program_offices/healthy_homes/healthyhomes/homesafety

ACE, Trauma, and Resilience

Exposure to abuse, neglect, violence, and other stressors are sometimes called “adverse childhood experiences” or ACE. Building from research conducted through a large, multiyear set of investigations in the ACE study, knowledge has grown regarding the role of early experience on life-long health and well-being. ACEs fall into two general categories: experiences of childhood abuse (e.g., physical, mental, and sexual abuse) and experiences of household dysfunction (e.g., parental substance abuse, mental illness, incarceration, violence and separation or divorce).

For children, ACE can result in toxic stress and disrupted development and health. In addition, adults live with the consequences of ACE, including increased risk for long term adult health problems (e.g., heart disease, depression, smoking, intimate partner violence, risky sexual behavior, and alcohol or drug abuse). Assessing ACE scores can help to identify and address the effects and trauma for children and adults.

Notably, adverse experiences and other trauma in childhood are not, however, determinative and do not dictate the future of the child. For some children, ACE are counterbalanced with protective factors and resilience. Policies and programs can help ensure protective factors in the lives of many children. The evidence-based *Strengthening Families* program is a widely used approach for serving families at risk, and most home visiting programs have reducing ACE as an objective.

Programs and systems serving women, children, and families must have the capacity and skills to provide “trauma-informed care” for those affected. Trauma-informed care is an evidence-based approach to service delivery that is appropriate for trauma survivors (e.g., those with ACE or toxic stress), including avoiding re-traumatization or victimization. A trauma-informed child- and family-service approach is one in which all parties involved recognize and respond to the impact of ACE, trauma, and toxic stress on children, caregivers, and service providers. Health providers, public health agencies, home visitors, and others working to prevent infant mortality should offer trauma-informed care.

Trauma-informed service providers and agencies follow these principles in the delivery of services: 1) screen for trauma exposure and related symptoms; 2) use culturally appropriate, evidence-based assessment and treatment for traumatic stress and associated symptoms; 3) maximize the child and/or parent’s sense of safety; 4) make resources about trauma available to families; 5) engage in efforts to strengthen the resilience and protective factors of children and families affected by and vulnerable to trauma; 6) address parent and caregiver trauma and its impact on the family system; 7) emphasize continuity of care and collaboration across systems; 8) support and promote positive and stable relationships in the life of the child; 9) protect children and youth in custody from further trauma and victimization; and 10) maintain an environment for staff that addresses, minimizes, and treats secondary traumatic stress, and that increases staff resilience.

Promising research related to resiliency pathways is underway. The NIH Community Child Health Network has developed a Preconception Stress and Resiliency Pathways model building local and multi-site community-academic participatory partnerships. The model starts before conception, includes all family members, and engages the community vigorously at multiple levels to promote resiliency, reduce chronic and acute stressors, and expand individualized health care that integrates promotion and prevention strategies. It focuses on improving resilience resources of parents, community-level influences, and maternal allostatic load, among other health influences.

States and communities have undertaken efforts to increase use of: individual assessment with interventions; data collection through surveys (e.g. BRFSS); reports on the status of adverse childhood experiences (ACEs) among children and adults, intergenerational strength-based and resilience initiatives, and trauma-informed systems of care. The Child and Adolescent Health Measurement Initiative (CAHMI) and AcademyHealth have launched an initiative to advance a national research, policy and action agenda on ACE. The federal Healthy Start program has placed new emphasis on promoting resilience for families and communities in order to reduce infant mortality.

Background resources:

- Links to websites on ACE study. <http://www.cdc.gov/violenceprevention/acestudy/> and www.acestudy.org
- Links to other websites about ACE, trauma, and resilience.
 - The Child & Adolescent Health Measurement Initiative: <http://www.cahmi.org/projects/adverse-childhood-experiences-aces/>
 - Robert Wood Johnson Foundation: <http://www.rwjf.org/en/library/collections/aces.html>
 - American Academy of Pediatrics: https://www.aap.org/en-us/Documents/ttb_aces_consequences.pdf
 - The Health Federation of Philadelphia. *The Philadelphia Urban ACE Study*: <http://www.instituteforsafefamilies.org/philadelphia-urban-ace-study>
- Links to websites regarding trauma-informed services: <https://captus.samhsa.gov/access-resources/coping-traumatic-events-resources-children-parents-educators-and-other-professional> and
- Links to information regarding the Strengthening Families approach.
 - Center for the Study of Social Policy: <http://www.cssp.org/reform/strengtheningfamilies>
 - Strengthening Families Program: <http://www.strengtheningfamiliesprogram.org/>
- Links to examples of state surveillance and program initiatives.
 - Iowa: http://www.iowafoodandfitness.org/uploads/PDF_File_74101481.pdf
 - Alaska: <http://dhss.alaska.gov/abada/ace-ak/Pages/default.aspx>
 - Minnesota: http://www.health.state.mn.us/divs/chs/brfss/ACE_ExecutiveSummary.pdf
 - Washington: <http://www.doh.wa.gov/ForPublicHealthandHealthcareProviders/PublicHealthSystemResourcesandServices/LocalHealthResourcesandTools/MaternalandChildHealthResources/AdverseChildhoodExperiences>
 - West Virginia: <http://www.legis.state.wv.us/senate1/majority/poverty/ACEsinWashington2009BRFSSFinalReport%20-%20Crittenton.pdf>
 - Utah: http://health.utah.gov/opho/publications/hsu/11Jul_ACE.pdf

Place-Based Initiatives

Research and experience shows that families do better when they live in strong and supportive communities; however, many families live in communities plagued with high levels of poverty, unemployment, failing schools, neighborhood segregation and housing instability. “Place-based initiatives” are designed to improve outcomes and reduce disparities in high-risk communities by reducing the negative impact of social determinants. Their aim is to create a community environment that promotes and protects health, while also addressing individual needs and choices. Place-based initiatives can transform communities into more vibrant, integrated, and healthy communities.

Examples of place-based initiatives include: Best Babies Zones, Best Start LA, Promise Neighborhoods (U.S. Department of Education), Choice Neighborhoods (US Department of Housing and Urban Development), Responsible Redevelopment, and Harlem Children's Zone. In addition, specifically focused on infant mortality, a select group of federally funded Healthy Start projects are incorporating place-based approaches.

The HHS Secretary's Advisory Committee on Infant Mortality recommends expanded use of place-based initiatives to reduce infant mortality. The Center for the Study of Social Policy has efforts underway to provide technical assistance and resources for communities committed to improving outcomes for families through place-based initiatives. The Annie E. Casey Foundation has conducted a 10-year initiative called Making Connections designed to demonstrate how communities can improve results for vulnerable children and families living in areas of concentrated poverty. The W.K. Kellogg Foundation also has work underway in this area.

Background resources:

- Links to organizations working on place-based initiatives.
 - Center for the Study of Social Policy: <http://www.cssp.org/community/neighborhood-investment/place-based-initiatives>
 - Promise Neighborhoods Institute: <http://www.promiseneighborhoodsinstitute.org/>
 - W.K. Kellogg Foundation: www.wkkf.org
 - Best Babies Zone: www.bestbabieszone.org
 - Edna McConnell Clark evaluation of the Harlem Children's Zone. <http://www.emcf.org/our-grantees/our-grantee-portfolio/harlem-childrens-zone/evidence-base/>
- Links to reports and projects using place-based initiatives as an approach to reduce infant mortality.
 - Secretary's Advisory Committee on Infant Mortality: <http://www.hrsa.gov/advisorycommittees/mchbadvisory/InfantMortality/Correspondence/recommendationsjan2013.pdf>
 - Association of Maternal and Child Health Programs: <http://www.amchp.org/SiteCollectionDocuments/Connecting%20the%20Dots%20Proceedings%20FINAL.pdf>
 - National Healthy Start Association: <http://www.nationalhealthystart.org/>
 - HRSA Maternal and Child Health Healthy Start Program: <http://mchb.hrsa.gov/programs/healthystart/>

POLICIES TO REDUCE VULNERABILITY AND INCREASE RESILIENCY OF DISADVANTAGED PEOPLE

Job training, education, & career paths for economic self-sufficiency

A decade after federal and state welfare reforms swept the country and years into a national recession, many low-income women and men struggle to find jobs and career paths that can advance them to economic self-sufficiency. Many low-income people, particularly women, became poorer as a result. For every 100 families in poverty, just 26 received cash benefits from TANF in 2013, and in some states it was just 10 out of 100. The structure of TANF discourages education and job skills training. Many who have left “welfare” are unemployed, underemployed, or stuck in jobs that will not increase their income over time or offer a real career path.

Even for those who have jobs, the workplace is less “family friendly” for low-wage workers. As said by the National Partnership *“As long as welfare recipients and low-wage workers are disproportionately women and minorities with family responsibilities, any comprehensive strategy to help lift families out of poverty must also help low-income women overcome the discrimination and work-family conflicts they face when searching for work or on the job.”*

Federal laws supporting job training have changed over the years. Enacted in 1982, the Job Training Partnership Act was the largest federal employment training program. In a case-control study of the impact of the JTPA, the Government Accountability Office (GAO) found that five years after expressing an interest in JTPA-sponsored job training, individuals assigned to participate in the program did not have earnings or employment rates significantly higher than individuals not assigned to participate. The Workforce Investment Act of 1998 (WIA) was enacted to supersede JTPA and to reform federal job training programs and creates a new, comprehensive workforce investment system. Through December 2014, the Work Opportunity Tax Credit (WOTC) program offered a Federal tax credit to employers for hiring individuals from certain target groups (e.g., unemployed veterans, cash assistance recipients, Food Stamp recipients, residents of Empowerment Zones, ex-felons, recipients of Supplemental Security Income) who have consistently faced significant barriers to employment. The more recently enacted Workforce Innovation and Opportunity Act (WIOA) focuses on employment outcomes (e.g., measuring employment rates and earnings for the second quarter after a participant completes a training program, and employment rates for the fourth quarter after completion).

Education beyond the high school level is key to employment in many sectors. More than 1,000 community colleges—public and private—across the country provide individuals with needed job and career skills. President Obama has called for the first two years of community college to be free for responsible students, helping students earn the first half of a bachelor’s degree and earn skills needed in the workforce at personal no cost. The Obama Administration aim is to strengthen community colleges and ensure educational opportunities for millions of Americans each year. The proposed policies have not, however, been adopted.

Work opportunities in the health care sector are growing, including technical roles for which training is available at community colleges (e.g. nursing or health or med-tech assistants). Paraprofessional and

human services careers are likewise offer opportunities in today's economy. Some public health and maternal and child health programs have adopted approaches for creating career pathways. For example, federally funded Healthy Start projects across the country have identified program participants who can train and work as community health workers. In early care and education, clients can become staff through combined community college courses and on-the-job training. State health, education, and human services agencies have opportunities to support job training, education, & career paths for economic self-sufficiency among low-income women and men, particularly those with low educational attainment,.

Experts and think tanks recommend that states develop programs that help low-income women and men address work-family life barriers to employment (e.g., increase access to child care and job counseling through TANF). More focused use of TANF and related state funds can make a difference. Using welfare-to-work strategies that have succeeded in placing women into jobs that lead to adequate income is a priority. Focusing on employment outcomes, rather than work participation is one way to shift focus. States also can use their resources to extend the time periods that education and training count for cash assistance/TANF recipients from 12 to 24 months to give families the skills they need to secure good paying jobs and pursue productive career paths. State emphasis on readiness for jobs that can sustain an individual and a family is important. Other strategies in the SDOH Learning Network such as policies to support paid family leave, minimum wage, tax credits, and justice reform also are important to assuring jobs and career paths toward economic self-sufficiency.

Background resources:

- White House website on college affordability.
<https://www.whitehouse.gov/issues/education/higher-education#college-affordability>
- US Government Accountability Office (GAO) report on the Job Training Partnership Act.
<http://www.gao.gov/assets/230/222393.pdf>
- Link to National Partnership report on barriers and detours for women seeking employment.
<http://www.nationalpartnership.org/research-library/more/economic-security/detours-road-employment.pdf>
- Link to Center on Budget and Policy Priorities article about 19th anniversary of TANF.
<http://www.cbpp.org/family-income-support/commentary-at-19-its-past-time-to-improve-tanf>
- Link to book *Working After Welfare*, author Kristin Seefeldt.
<https://books.google.com/books?id=XsjpQEzwfHMC&pg=PA1&lpg=PA1&dq=career+paths+women+welfare&source=bl&ots=ju0xzv203n&sig=uO8P1i3VyoYpFWC4wckVBeoxGCQ&hl=en&sa=X&ved=0CB4Q6AEwATgKahUKEwiNlebAhJ3IAhWBOD4KHSq2CPQ#v=onepage&q=career%20paths%20women%20welfare&f=false>
- Link to book *Women, Work, and Poverty: Women Centered Research for Policy Change*, author Heidi I. Hartman.
<https://books.google.com/books?id=MnO6ngpBujcC&pg=PA51&lpg=PA51&dq=career+paths+women+welfare&source=bl&ots=NOPQJ4Wyuj&sig=eE46jnNhEIVHEtFiQtX74KGNUv4&hl=en&sa=X&ved=0CCQO6AEwAzgUahUKEwih9f6Oh53IAhVGdD4KH4fCyk#v=onepage&q=career%20paths%20women%20welfare&f=false>

Fatherhood/male initiatives

While a large body of research documents the role of paternal involvement in children's health, development, and well-being across the life course, the role of fathers in pregnancy and in improving pregnancy outcomes has not been extensively studied. Pregnancy can be a time to engage fathers in order to encourage their participation (e.g., in prenatal care, birth) and support. The limited professional literature points to the role of male partners/fathers in reducing maternal stress, encouraging use of prenatal care, and decreasing use of tobacco and other substances harmful to the fetus.

In recent years, a "fatherhood" movement has grown and received attention across the country. In 2009, President Obama started a National Conversation on Responsible Fatherhood and Strong Communities and created the Office of Faith-Based and Neighborhood Partnerships which has responsibility for coordinating the federal policy on fatherhood. Subsequently, a National Fatherhood and Mentoring Initiative was launched to encourage responsible fatherhood. With funding from the federal HHS Office of Minority Health, the Joint Center for Political and Economic Studies launched the Commission on Paternal Involvement in Pregnancy Outcomes, which has convened a transdisciplinary working group of scholars from the social sciences and public health community with a goal of informing research, policies, and clinical practice regarding the involvement of fathers in pregnancy outcomes. Other projects are underway at the national, state, and local level.

The federal Healthy Start program has long had an emphasis on male involvement, including the role of fathers in reducing infant mortality. An overarching goal of Healthy Start male involvement components is to ensure the creation of father-friendly environments that respect the diverse needs (cultural, financial, emotional, and otherwise) of the men and fathers in families being served. The National Healthy Start Association developed the Core Adaptive Model[©] to reach fathers in the urban, rural, border, and tribal communities with Healthy Start grants.

As stated by expert Jermane Bond, PhD, director of the Commission on Paternal Involvement in Pregnancy Outcomes and research scientist at the Joint Center for Political Studies: "To date, no one has put together a model identifying best practices to improve paternal involvement in pregnancy outcomes." Likewise, more knowledge is needed regarding the role of fathers in improving pregnancy outcomes and reducing infant mortality. States have an opportunity to advance both practice and research in this area.

Background resources:

- Link to the National Responsible Fatherhood Clearinghouse. <http://www.fatherhood.org/improve-maternal-child-health>
- Link to the National Fatherhood Initiative. <http://www.fatherhood.org/> and <http://www.fatherhood.org/improve-maternal-child-health>
- Link to National Healthy Start Association information on male involvement and fatherhood. http://www.nationalhealthystart.org/what_we_do/male_involvement/nhsa_healthy_start_fathers_real_life_real_dads
- Link to report by M. Jermane Bond regarding paternal involvement to improve pregnancy outcomes. http://jointcenter.org/sites/default/files/Paternal_Involvement_1.pdf

- Link to journal article by M. Jermane Bond on paternal involvement in pregnancy outcomes. http://www.researchgate.net/publication/257198278_Bond_MJ_The_Missing_Link_in_MCH-Paternal_Involvement_in_Pregnancy_Outcomes

Social Networking for Empowerment

Strengthening and broadening the use of social network capacity for empowerment is a key strategy. Whether using online social networking technological tools, face-to-face meetings of a social support, moms groups, community engagement, or other approaches, connecting women as mothers and/or parents to peer support and communication, the salience of social networking is widely understood.

Increasing personal capital and social support during pregnancy may influence subsequent maternal and child health outcomes. A study of the role of personal capital comprised of internal resources (self-esteem and mastery) and social resources (partner, social network, and community support) during pregnancy found that the risks associated with low socioeconomic status, single motherhood, and limited acculturation contribute to low personal capital for many pregnant women, rather than race or ethnicity per se. A social network, including friends, family, neighbors, and media sources, is a key source of contraceptive and pregnancy related information for many women, including adolescents. Social networks also influence decisions and behaviors related to smoking, prenatal care use, breastfeeding, and parenting. Social support is strongly related to levels of stress and depression. Research also shows that families who have experienced pregnancy loss or infant death can be helped by peer and social support groups.

New mother support groups are considered a promising practice. At the macro level, millions of pregnant women and new mothers engage in mother support groups online and in person. Experience in Cincinnati, Ohio and other communities across the country demonstrate the value of “mom’s clubs” or “family support groups” for serving pregnant women and parents of young children in high risk communities. Research from Australia and Norway suggest that such groups may have a high level of continuation and provide measurable support, particularly when initiated by health professionals (e.g., public health nurses).

One of the six goals for the future vision of women’s health research, set out by the Institute of Medicine in 2010, was to develop and implement new communication and social networking technologies to increase understanding and appreciation of women’s health and wellness. To date there is very modest evidence that interventions incorporating online social networks may be effective. A systematic review of text messaging strategies related to maternal and child health found that 48 articles, of which 30 were randomized controlled trials, were available but varied greatly in quality and collectively indicate that text message interventions can effectively promote a wide range of preventative behaviors, including smoking cessation, diabetes control, appointment reminders, medication adherence, weight loss, and vaccine uptake.

Background resources:

- Link to articles related to Internet and phone communications: <http://www.ncbi.nlm.nih.gov/pubmed/25081242>
- Links to articles on the role of social networks and social support in improving maternal and infant health outcomes.
 - Preterm birth and social support during pregnancy: a Systematic review and meta-analysis: <http://www.ncbi.nlm.nih.gov/pubmed/26332279>
 - New mother groups as a social network intervention: consumer and maternal and child health nurse perspectives: <http://www.ncbi.nlm.nih.gov/pubmed/11878547>
 - Are Health Behavior Change Interventions That Use Online Social Networks Effective? A Systematic Review: <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3936265/>
 - Racial and ethnic disparities in personal capital during pregnancy: findings from the 2007 Los Angeles Mommy and Baby (LAMB) study: <http://www.ncbi.nlm.nih.gov/pubmed/23504131>
 - Does social network site use matter for mothers? Implications for bonding and bridging capital: <http://www.sciencedirect.com/science/article/pii/S0747563214001174>
 - The role of the social network in contraceptive decision-making among young, African American and Latina women: <http://www.ncbi.nlm.nih.gov/pubmed/20864007>
 - Pregnancy discovery and acceptance among low-income primiparous women: a multicultural exploration: <http://www.ncbi.nlm.nih.gov/pubmed/11573836>
 - Support for mothers, fathers and families after perinatal death: <http://www.ncbi.nlm.nih.gov/pubmed/23784865>
- Link to articles regarding engagement <http://www.ncbi.nlm.nih.gov/pubmed/24474593>
- Link to Forbes article about online moms groups and social support. <http://www.forbes.com/sites/davidshaywitz/2013/05/22/online-mothers-groups-powerful-unheralded-influencers-of-family-healthcare-decisions/>

Medical-Legal Partnerships

Medical-legal partnerships are designed to ensure families have equal access to justice, advance legal aid, and assist with health-harming legal problems. Their mission is to improve the health and well-being of people and communities by leading health, public health and legal sectors in an integrated, upstream approach to combatting health-harming social conditions. These partnerships have been established in nearly 300 health care institutions (e.g., clinics, hospitals) in 36 states, and may handle legal problems for more than 800,000 low income and vulnerable people in a year. The return on investment from medical-legal partnerships has been demonstrated, recovering health care dollars for clinics and improving patient health.

Many negative social determinants and social conditions are associated with laws that are unfairly applied or under-enforced, often leading to the improper denial of services and benefits that are designed to help vulnerable people. For example, people who are wrongfully denied nutritional supports and health

insurance coverage face barriers to achieving good health, and people who live in housing with mold or rodents in clear violation of sanitary codes are in physical environments that lead to illness or exacerbates existing health conditions such as asthma. These social determinants of health all constitute health-harming legal needs and they cannot be treated effectively without some level of legal care. They also create stress that can have negative effects on pregnant women and families with new babies. There are five main domains where complicated policies and procedures, wrongfully denied benefits and unenforced laws frequently affect health and require legal intervention. These are: health coverage, housing and utilities, employment and education, legal status, and personal and family stability.

Background resources:

- Link to National Center for Medical Legal Partnerships and articles about this topic. <http://medical-legalpartnership.org/>
- Link to the Medical-Legal Partnership Toolkit. <http://medical-legalpartnership.org/mlptoolkit/>
- Links to journal articles on how these partnerships work.
 - Cohen et al. Medical-Legal Partnership: Collaborating with lawyers to identify and address health disparities. <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2847107/>
 - Sandel et al. Medical-Legal Partnerships: Transforming primary care by addressing the legal needs of vulnerable populations. <http://content.healthaffairs.org/content/29/9/1697.full>
 - Zuckerman et al. Medical-legal partnerships: Transforming healthcare. www.ncbi.nlm.nih.gov/pubmed/18994651?dopt=Abstract
- Link to Robert Wood Johnson Foundation article on how medical-legal partnerships reduce barriers to health. http://www.rwjf.org/en/culture-of-health/2015/07/what_s_law_got_todo.html

POLICIES TO REDUCE UNEQUAL CONSEQUENCES IN ILLNESS, IN SOCIAL, ECONOMIC AND HEALTH TERMS

Medicaid for all <138% poverty

Medicaid is a health coverage program operated under a federal-state partnership, with joint funding and varying responsibilities. This year, 2015, is the 50th anniversary of the passage of Medicaid, and the program has made a significant contribution to reducing the number of uninsured, covering prenatal and perinatal care, assuring health, mental health, and dental services for poor children, and serving people with disabilities and low-income individuals over age 65. Financing more than half of US births, Medicaid is a central element of the national infant mortality reduction strategy.

The Affordable Care Act aimed to set a national “floor” for Medicaid eligibility. Effective January 1, 2014, the Affordable Care Act provides states with the option and enhanced federal funding to expand their Medicaid programs to cover adults under 65 with income up to 133% of the federal poverty level. (Because of the way this is calculated, it’s effectively coverage up to 138% of the federal poverty level.)

Children (18 and under) are eligible up to that income level or higher in all states, with no exceptions. This reflects income of \$33,465 for a family of four in 2015.

More than half of states have expanded Medicaid for adults, with most adopting expansions to 138% of the federal poverty level as defined in the Affordable Care Act. As of September 1, 2015, 31 states and the District of Columbia have expanded Medicaid (with 5 of these states are using an alternative to traditional expansion), 1 state has an expansion waiver pending federal approval, and 19 states made a decision not to expand Medicaid.

Maternal and child health leaders have an opportunity to improve the health of men and women of childbearing age through Medicaid expansion. Medicaid expansion offers opportunities to cover those low-income individuals who are childless, uninsured, and in their prime childbearing years. This creates greater opportunities to finance preconception care, family planning services, and other care to reduce health risks that affect birth outcomes. Moreover, Medicaid coverage for low-income adults under age 65 has the potential to provide coverage at lower cost, reduce uncompensated care costs for providers, and improve the health outcomes for many with chronic conditions. Medicaid expansions may increase state Medicaid costs but also generate economic activity (e.g., jobs in the health sector) and save on stand-alone health programs costs (e.g., high-risk pols, substance abuse programs).

Another aspect of Medicaid expansion is to assure that your state covers preventive visits. While children's preventive services are covered under the Medicaid Early and Periodic, Screening, Diagnosis and Treatment (EPSDT) benefit, not all states – with or without Medicaid expansion—now cover adult preventive visits. States have an opportunity to cover under Medicaid the clinical preventive services benefits now required to be covered without cost sharing for most private plans and public exchange plans.

Background resources:

- Link to Kaiser Family Foundation table of state action on the Medicaid expansion decision. <http://kff.org/health-reform/state-indicator/state-activity-around-expanding-medicaid-under-the-affordable-care-act/>
- Link to map of Medicaid expansion decisions. <https://www.statereform.org/Medicaid-Expansion-Decisions-Map?gclid=CMOM1-yv28cCFZKRHwodItsJOW>
- Link to federal website HealthCare.gov site on Medicaid expansion. <https://www.healthcare.gov/medicaid-chip/medicaid-expansion-and-you/>
- Link to the Centers for Medicare and Medicaid website regarding Medicaid eligibility and expansion rules. <http://www.medicaid.gov/AffordableCareAct/Provisions/Eligibility.html>
- Link to federal website HealthCare.gov site on preventive services benefits. <https://www.healthcare.gov/preventive-care-benefits/adults/>
- Link to Kaiser Family Foundation issue brief on the effectiveness and cost effectiveness of Medicaid for low-income adults. <https://kaiserfamilyfoundation.files.wordpress.com/2013/05/8440-what-difference-does-medicaid-make2.pdf>
- Link to Kaiser Family Foundation fact sheet on preventive services. <http://kff.org/health-reform/fact-sheet/preventive-services-covered-by-private-health-plans/>

Quality improvement (QI) projects related to unequal treatment

The Institute of Medicine (IOM) 2002 landmark report on *Unequal Treatment: Confronting Racial and Ethnic Disparities in Health Care* found that a large and consistent body of research documents significant variation in the rates of medical procedures by race and ethnicity, even when insurance status, income, age, and severity of conditions are comparable. This research demonstrates that U.S. racial and ethnic minorities are less likely to receive even routine medical procedures and experience a lower quality of health services and underscores the role of unequal treatment in disparities in health. Among the strategies recommended to reduce unequal treatment, the IOM called for promoting consistency and equity of care through the use of "evidence-based" guidelines to help providers and health plans make decisions about which procedures to order or pay for based on the best available science. Quality improvement projects are an important tool in promoting consistency and quality in health care and, in turn, promoting equitable treatment to reduce disparities.

Lu and Halfon have documented the importance of a longitudinal life course approach in tackling racial and ethnic disparities in birth outcomes. Working to reduce unequal treatment across the continuum of care is one important step. Fiscella and Williams have examined the importance of changing service approaches in urban areas with high concentrations of disadvantage. A large body of literature points to the role of quality in perinatal services and neonatal care in promoting infant survival (e.g., Rogowski et al., 2008; Shah et al., 2014; Henderson et al., 2014; Lake et al., 2015; Mari et al., 2015). A growing body of literature points to the importance of quality improvement for reducing maternal morbidity and mortality (e.g., Lu et al. 2015). Other reports and articles have called for a continued focus on prenatal care quality (e.g., Handler et al, 2014). There also is emerging evidence related to inequality in use of contraceptives, progesterone to prevent preterm birth, C-sections, and other perinatal services.

For eliminating disparities in infant mortality, the focus is especially on reducing unequal treatment in preconception, interconception, pregnancy, and infancy care. The SDOH Learning Network suggested topics include QI projects to reduce unequal treatment in: postpartum visits, prenatal care, well-visits for adolescents and adult women, 17 alpha-hydroxyprogesterone caproate (17P), long-acting reversible contraceptives (LARCs), well-baby visits, and NICU stays and follow-up.

Background resources:

- Link to the IOM report on *Unequal Treatment: Confronting Racial and Ethnic Disparities in Health Care*. <http://iom.nationalacademies.org/Reports/2002/Unequal-Treatment-Confronting-Racial-and-Ethnic-Disparities-in-Health-Care.aspx>
- Link to Congressional briefing document prepared for the Commonwealth Fund. http://www.commonwealthfund.org/usr_doc/steelfisher_unequaltreatment_cong2004_709.pdf
- Link to position paper of the American College of Physicians, 2010. https://www.acponline.org/advocacy/current_policy_papers/assets/racial_disparities.pdf
- Link to Fiscella and Williams article on disparities and unequal treatment. http://journals.lww.com/academicmedicine/Abstract/2004/12000/Health_Disparities_Based_on_Socioeconomic.4.aspx
- Link to Rogowski et al. article on NICU. <http://content.healthaffairs.org/content/23/5/88.short>

Implementation of National CLAS standards

The *National Standards for Culturally and Linguistically Appropriate Services in Health and Health Care (National CLAS Standards)* are designed to increase health equity, improve quality, and reduce health care disparities by providing a blueprint for individuals and health and health care organizations to implement culturally and linguistically appropriate services. Adoption of these Standards will advance health and health care in the United States. First developed in 2000 by the HHS Office of Minority Health, the National CLAS Standards were enhanced between 2010-2013 to reflect new understanding of unequal treatment, professional accreditation policies, and federal health policies including the Affordable Care Act. The 2013 version defines culture in terms of racial, ethnic and linguistic groups, as well as geographical, religious and spiritual, biological and sociological characteristics.

State agencies have embraced the importance of cultural and linguistic competency in the decade since initial development of the National CLAS Standards. A number of states have proposed or passed legislation pertaining to cultural competency training for one or more segments of their state's health professionals. Legislation requiring (WA, CA, CT, NJ, and NM) or strongly recommending (MD) cultural competence training has been signed into law as of January 2015. In other states, legislation has died in committee or been vetoed.

Prominent groups have endorsed the CLAS concept, including public health organizations such as the American Public Health Association and the Society for Public Health Education which promote CLAS and health equity policies through their mission, vision, or values statements. In addition, the National Quality Forum identifies leadership as one of the seven primary domains for measuring and reporting cultural competence. Kaiser Permanente, a nonprofit health plan with 9.3 million members, has adopted the CLAS standards, and Massachusetts has taken a lead in implementing the standards.

A major opportunity exists for states to require use of CLAS standards in the work of all state agencies, state and local public health departments, and/or state contracting and procurement.

Background resources:

- Link to Blueprint for implementing national CLAS standards. <https://www.thinkculturalhealth.hhs.gov/content/clas.asp>
- Link to HHS National CLAS Standards factsheet. <https://www.thinkculturalhealth.hhs.gov/pdfs/NationalCLASStandardsFactSheet.pdf>
- Link to 2014 article by Koh, Gracia and Alvarez in New England Journal of Medicine on CLAS implementation. <http://www.nejm.org/stoken/default+domain/Permissions-HHS/full>
- Link to resource for state public health departments from Massachusetts, *Making CLAS Happen*. <http://www.mass.gov/eohhs/docs/dph/health-equity/clas-intro.pdf>

Home Visiting Enhancements

Home visiting services for pregnant women and families with young children is and should be considered as part of a continuum of services for mothers and babies. Along with direct interventions, education, and support in the home, one of the core functions of home visiting programs is to provide resource and referral information. Success depends, in part, on the array of other services available to families during and after their participation in home visiting programs. For example, referral and linkages to the medical home, nutrition services, or child care may be critical for fostering family and child health and development. Understanding the continuum of services available in the community and how effectively home visiting services link to them is important. In some cases, evidence-based, in-home interventions are available to provide augmented services for depression, domestic violence, substance abuse, infant mental health, and other conditions.

All states have implemented evidence-based home visiting models through the Maternal, Infant, and Early Childhood Home Visiting (MIECHV) program, and most states have additional “home-grown” and/or evidence informed programs. In addition, states might consider adopting enhancements to home visiting which are evidence-based services also designed to be delivered in the home to address risks and conditions common among families targeted for home visiting, (e.g., maternal depression, intimate partner violence, or early childhood mental health).

For example, the *Moving Beyond Depression* program developed by Every Child Succeeds at the Cincinnati Children’s Hospital Medical Center uses an evidence-based in-home cognitive behavioral therapy approach, with mental health clinicians working in tandem with home visitors. The *Domestic Violence Enhanced Home Visitation (DOVE)* program, funded by the National Institute of Nursing Research and led by researchers at the Johns Hopkins University, is designed to offer a nurse home visit intervention for intimate partner violence. Several home visiting models and other programs, for example these include *Child First*, *Incredible Years*, and *Triple P*. Each is designed to decrease the incidence of social-emotional and mental health conditions among young children. *Child First* meets the federal criteria for an evidence-based early childhood home visiting model. While the *Triple P-Positive Parenting Program* does not meet the federal home visiting evidence-based criteria, it has been identified by the federal Substance Abuse and Mental Health Services Administration as an evidence-based program. Triple P approaches such as the child management training or related parent program component might be used to augment an evidence-based home visiting. *Triple P* has been shown to be effective in reducing behavioral and emotional problems and improving parenting skills. It is not specifically a home visiting program but might be used to augment an evidence-based home visiting. Alternative interventions might be used to address substance abuse, trauma, or other risks. Many other research efforts are underway. The *Parents as Teachers* evidence-based home visiting model demonstrated significant impact in one study of a model to promote maternal health literacy.

Background resources:

- Link to HHS evidence-based home visiting program reviews.
<http://homvee.acf.hhs.gov/Default.aspx>
- Links to research on *Moving Beyond Depression*.

- Child Maltreatment History and Response to CBT Treatment in Depressed Mothers Participating in Home Visiting: <http://www.ncbi.nlm.nih.gov/pubmed/25395221>
- A clinical trial of in-home CBT for depressed mothers in home visitation: <http://www.ncbi.nlm.nih.gov/pubmed/23768664>
- Changes in depressive symptoms in first time mothers in home visitation: <http://www.ncbi.nlm.nih.gov/pubmed/19328548>
- An open trial of in-home CBT for depressed mothers in home visitation: <http://www.ncbi.nlm.nih.gov/pubmed/20936338>
- Links to *DOVE* research on serving abused women in home visiting programs.
 - Engaging and retaining abused women in perinatal home visitation programs: <http://www.ncbi.nlm.nih.gov/pubmed/24187115>
 - Current evidence on perinatal home visiting and intimate partner violence: <http://www.ncbi.nlm.nih.gov/pubmed/18754987>
 - Facilitators and barriers for implementing home visit interventions to address intimate partner violence: town and gown partnerships: <http://www.ncbi.nlm.nih.gov/pubmed/18674673>
 - *Domestic Violence Enhanced Home Visitation Program (DOVE)*: <https://clinicaltrials.gov/ct2/show/NCT00465556>
- Links to programs information related to early childhood mental health.
 - Child First: <http://homvee.acf.hhs.gov/Studies/Child-FIRST/42>
 - Incredible Years: www.incredibleyears.com and <http://www.nrepp.samhsa.gov/Viewintervention.aspx?id=311>
 - Triple P: www.triplep.net and <http://www.triplep-parenting.net/glo-en/about-triple-p/the-evidence/>

Centering Pregnancy and Parenthood and Other Group Care Strategies

Group care strategies have been shown to have positive effects on use of prenatal care, improve some perinatal outcomes, and be a cost-effective way to provide perinatal services. It has the potential to reduce unequal treatment and enhance support for women with less social support and personal capital. The design incorporates three components of prenatal care—risk assessment, education, and support—into one series of sessions. Elements unique to group care include peer support and self-management training and activities, as well as use of a team provider approach.

The Centering Pregnancy is a promising method of delivering group prenatal care in a structured approach. A multisite randomized controlled trial (RTC) in university-affiliated hospital prenatal clinics found that women assigned to group care were significantly less likely than those with standard care to have preterm births, with no differences in maternal age, parity, education, or income. (Note that other non-RCT studies have not shown differences for infant outcomes.) These results were stronger for infants born to African American mothers. Intervention group women in this and some additional studies

were significantly more likely to have optimal levels of prenatal care, prenatal knowledge, breastfeeding initiation, and satisfaction with prenatal care. Other studies, including some which focused particularly on African American, Hispanic, or Medicaid beneficiary women, have shown that group prenatal care has positive effects on the psychosocial well-being of women with low social support, greater stress, or lower personal coping resources. Adolescents in Centering Pregnancy studies were more likely to: complete appropriate prenatal and postpartum visits, engage in exclusive breastfeeding, use long-acting reversible contraception, and meet guidelines for weight gain. One study found significant increases in use of postpartum family planning services among women receiving group prenatal care. A Centering Pregnancy Plus study conducted with community health centers demonstrated significant impact on weight trajectories in pregnancy and postpartum periods. Studies of women in the military health system showed no statistically significant differences for those participating in Centering Pregnancy, perhaps as a reflection of more equitable treatment at baseline in that system. Provider training, readiness for change, cultural appropriateness, organizational support, and fidelity to the model have been shown to make a difference in the quality, effectiveness, and outcomes of Centering Pregnancy.

As a model, Centering Pregnancy is one strategy being studied as part of the US HHS Centers for Medicare and Medicaid Services (CMS) Strong Start for Mothers and Newborns initiative. Early results from this research are expected in 2016.

Centering Parenting is a group care model that brings mothers and infants together throughout the first year of life in nine clinical sessions focused on well-baby care, development, and safety. It has been used along and in conjunction with Centering Pregnancy.

In addition to Centering Pregnancy and Centering Parenting group care models, communities across the country are testing the effectiveness of “new mother” groups or “mom’s clubs” as a social network intervention. These are discussed in greater under the SDOH Learning Network social networking strategy.

Background resources:

- Links to articles regarding Centering and group care programs.
 - Group prenatal care and perinatal outcomes: A randomized controlled trial.
<http://www.ncbi.nlm.nih.gov/pubmed/?term=17666608>
 - The comparative effects of group prenatal care on psychosocial outcomes.
<http://www.ncbi.nlm.nih.gov/pubmed/?term=26260037>
 - The effect of Centering Pregnancy versus traditional prenatal care models on improved adolescent health behaviors in the perinatal period.
<http://www.ncbi.nlm.nih.gov/pubmed/?term=26233287>
 - Group Prenatal Care Outcomes in a Military Population: A Retrospective Cohort Study.
<http://www.ncbi.nlm.nih.gov/pubmed/?term=26126255>
 - The impact of group prenatal care on pregnancy and postpartum weight trajectories.
<http://www.ncbi.nlm.nih.gov/pubmed/?term=26164694>
 - Centering Parenting: an innovative dyad model for group mother-infant care.
<http://www.ncbi.nlm.nih.gov/pubmed/?term=24406037>

- The impact of Centering Pregnancy Group Prenatal Care on postpartum family planning. <http://www.ncbi.nlm.nih.gov/pubmed/?term=24018309>
- Introduction of Centering Pregnancy in a public health clinic. <http://www.ncbi.nlm.nih.gov/pubmed/?term=19114236>
- Comparison of centering pregnancy to traditional care in Hispanic mothers. <http://www.ncbi.nlm.nih.gov/pubmed/?term=18465216>
- Centering pregnancy. An interdisciplinary model of empowerment. <http://www.ncbi.nlm.nih.gov/pubmed/?term=9489291>
- Group prenatal care: model fidelity and outcomes.
- In a hard spot: providing group prenatal care in two urban clinics. <http://www.ncbi.nlm.nih.gov/pubmed/?term=22884892>
- Strong Start for Mothers and Newborns: implications for prenatal care delivery. <http://www.ncbi.nlm.nih.gov/pubmed/25379768>

CROSS-CUTTING ACTIONS (FROM WHO FRAMEWORK)

Health equity in all policies

Health in all Policies (HiAP) is an approach and conceptual framework designed to shift how decisions are made and implemented by local, state, and federal government to ensure that policy decisions have neutral or beneficial impacts on the determinants of health. HiAP aims to promote health and equity, support intersectoral collaboration, benefit multiple partners, engage stakeholders, and create structural or process change. Some leaders have pushed farther to pursue **health equity in all policies**.

Many states are active in pursuit of health and health equity in all policies. The California Health in all Policies Task Force has developed a toolkit. The Virginia Department of Health has adopted the principles and an interdisciplinary plan. Washington State has a health equity review planning tool. The Office of Health Equity in Florida is developing a HiAP strategy to engage state and local public agencies, as well as community-based private organizations. Colorado, Kentucky, Massachusetts, North Dakota, Oklahoma and other states also have given HiAP high priority. Leadership, political will, stakeholder engagement, and planning all appear to be factors in advancing this approach.

One state provides an example of how to approach HiAP. The Minnesota Department of Health has been intentionally engaged in decreasing race and ethnicity-based health disparities in the state. Working with the Healthy Minnesota Partnership, the Minnesota Department of Health has aimed to shift the public conversations about health in Minnesota to focus on the factors that actually create health. This effort aims to develop a new narrative about health, focused on “upstream” issues such as education, employment, and home ownership. A statewide health assessment and an improvement framework were developed to accompany an action plan.

Background resources:

- The Public Health Institute link to: Health in All Policies: A guide for state and local governments. <http://www.phi.org/resources/?resource=hiapguide>
- Learn more about the groundbreaking work in Minnesota.
 - Minnesota Health Equity in All Policies: <http://www.astho.org/Health-Equity/MN-Health-Equity-in-All-Policies-Story/>
 - Video: <https://www.youtube.com/watch?v=DkV8TnyX-SU>
- Learn more about the California Health in All Policies Task Force and Strategic Growth Council. http://sgc.ca.gov/s_hiap.php
- Learn more about a tool from the American Public Health Association (APHA), Public Health Institutes, and California Department of Public Health. <https://www.apha.org/~media/files/pdf/factsheets/jcaplanhiapapha2013.ashx>
- Link to the Washington State tool. http://here.doh.wa.gov/materials/equity-review-tool/13_HERtool_E14L.pdf
- Link to the health in all policies work of the National Association of City and County Health Officials (NACCHO). <http://www.naccho.org/topics/environmental/hiap/>
- Link to the Health Equity in Action project in the European Union. <http://www.equityaction-project.eu/tools/health-equity-in-all-policies/>

Assess organization or agency capacity to change policy & programs

Infant Mortality CoIIN leaders from Region V have developed a scorecard to assist state health departments, and other organization in assessing their capacity to address SDOH and advance health equity. The Region V scorecard is a tool that can track progress over time within a dynamic process of learning and continuous improvement. The tool is to be completed by an individual or team with significant knowledge of the organization's structures and functions, and can provide a fair assessment of capabilities to address SDOH and advance health equity. Critical categories of assessment include, but are not limited to: leadership, resource utilization, policy, cross-sector engagement, partnerships, communication, system redesign, and data, continuous quality improvement and performance measurement.

The Region V scorecard has been described on SDOH Learning Network monthly conference calls and was previewed at the CoIIN meeting July 2015. Additional work to pilot the scorecard is underway, and a more refined version will be distributed in coming months. All states in the SDOH Learning Network may choose to use this tool in the future.

Map risk and protective factors to help focus prevention and intervention efforts

Many state and local health departments across the country have undertaken efforts to “map” risk and protective factors in order to better focus prevention and intervention program efforts. In most cases, these efforts involve three critical steps: focusing on issues of concern, identifying risk and protective factors, and mapping.

Risk and protective factors are aspects of an individual’s (group’s) environment and life experiences that confer increased risk making it more likely or offer protection making it less likely that people a given condition will occur or a desired outcome will be achieved. For women of childbearing age and infants, many studies help to identify risk and protective factors. For example, entering pregnancy in good health can be protective and being born preterm can confer risks to survival, health, and development for a child. Resilience is an overarching protective factor.

Many programs for children and families are grounded in terms of risk and protective factors. For example, the *Strengthening Families* program is a research-informed approach to increase family strengths, enhance parenting skills, and reduce the likelihood of child maltreatment. The National Campaign to Prevent Teen and Unwanted Pregnancy has developed a matrix for understanding risk and protective factors related to teenage childbearing.

With technological resources (e.g., GIS mapping, Google mapping), public health agencies are now able to show areas with concentrations of risk factors, protective factors, and program resources. Such maps often identify “hot spots” or areas with concentrations of risks, consequences of risks, deficits of programs, medically underserved areas, and/or community supports to reinforce protective factors.

California has launched the Healthy Communities Data and Indicators project, with the goal of enhancing public health efforts by providing data, a standardized set of measures (21 indicators), and tools that a broad array of sectors can use for planning healthy communities and evaluating the impact of plans, projects, policy, and environmental changes on community health. The initial phase of the project (2012-2014) was a 2-year collaboration of the California Department of Public Health and the University of California, San Francisco with funding by the Strategic Growth Council to create and disseminate indicators linked to the Healthy Communities Framework. This framework was developed by the Strategic Growth Council Health in All Policies Task Force with extensive public discussion and input from community stakeholders and public health organizations. The framework includes issues such as: food affordability, public transit access, household crowding, employment, high school attainment, poverty rates, income inequality, and violent crime.

At the local level, more action is underway. For example, in San Bernardino County, CA technicians, child advocates, and public health leaders built a database for 24 indicators and compiled more than 200 unique maps to illustrate the geographic distribution of and relationships among various risk and protective factors for children and families. More than 18 other California counties have similar data mapping projects. In Richmond, CA the Health Equity Partnership is tracking implementation of a Community Health and Wellness Element and its impact on social, environmental, and health conditions.

This work builds on a city/county commitment to health in all policies, health data in all decisions. Selected health equity indicators and a system for data collection and analysis are being used to build the capacity of agency staff and community members to consider health data and to track progress. A Health Equity Report Card is being used to communicate this tracking effort.

This work is distinct from “problem mapping”, as approach that offers a diagram of precursors and consequences of a problem or issue. (For example, a problem map on teen pregnancy might include sexual activity and afterschool programs as precursors and teen parenthood and child developmental risks as consequences.) Such problem maps assist in understanding multiple causes and risk factors, many levels of influence, large bodies of scientific knowledge, and available local data.

Background resources:

- Link to the Kansas University Community Tool Box information on understanding risk and protective factors. <http://ctb.ku.edu/en/table-of-contents/analyze/choose-and-adapt-community-interventions/risk-and-protective-factors/main>
- Link to the National Campaign to Prevent Teen and Unwanted Pregnancy matrix on risk and protective factors. <https://thenationalcampaign.org/resource/matrix-risk-and-protective-factors>
- Link to journal article on urban health equity indicators and community asset mapping. <http://journals.plos.org/plosmedicine/article?id=10.1371/journal.pmed.1001285>
- Link to San Bernardino, CA mapping project. <http://www.esri.com/news/arcnews/spring05articles/sanbernardino-county.html>
- Link to California MCH mapping project activities. <https://www.cdph.ca.gov/programs/mcah/Documents/MO-MCAH-NeedAssessment-v6-10-15.pdf> and <http://www.cdph.ca.gov/programs/pages/healthycommunityindicators.aspx>
- Link to Richmond CA project. <http://www.ci.richmond.ca.us/2577/Health-Equity-Data-Training-and-Report-C>
- Link to San Joaquin Valley mapping project, which focuses on rural, unincorporated communities. http://www.policylink.org/sites/default/files/CA%20UNINCORPORATED_TECHNICAL.pdf
- Link to Arizona prevention website on risk and protective factors. http://www.azprevention.org/Prevention_In_Practice/What_Works/What_Works_Risk.htm

Monitor unequal treatment and disparities in birth outcomes

Monitoring both unequal treatment and disparities in birth outcomes is one of the core, cross-cutting strategies available to states in the SDOH Learning Network. Every state has data on birth outcomes, particularly on infant deaths, and all states have some health related survey that can offer insights. Yet more needs to be done.

At the same time, monitoring unequal treatment and disparities is not as simple a task as it may initially seem. As described by the Agency on Healthcare Research and Quality (AHRQ): “One of the greatest difficulties in assessing barriers to access, health disparities, and performance of the safety net in a community is obtaining meaningful data to measure these factors.” In some cases, data are not available for the subpopulation of interest (e.g., African American pregnant women), while in other cases useful detailed data on specific services may not be available (e.g., content of prenatal visit, services delivered by a specific provider). Administrative data sets can be useful and routinely available, but also have substantial limitations. Survey data (e.g., Pregnancy Risk Assessment and Monitoring System, Behavioral Risk Factor Surveillance System) can offer additional data. Special data collection may be required to monitor unequal treatment and disparities, including clinical records review, special studies, and data for quality improvement. Health services research has a particularly important role to play in monitoring unequal treatment.

Harper and other analysts offer insights into a framework for monitoring SDOH and disparities. The main question asked often is: Has disparity increased or decreased? However, this question cannot be sufficient given that “disparity” is a complex concept which involves taking into account factors such as population share of the groups being compared and reference points used.

At the federal level, HHS monitors disparities for various conditions. The Affordable Care Act calls for action to promote uniform collection of data on sex, race, ethnicity, primary language, and disability status, and in October 2011, HHS promulgated standards to implement this law. CDC plays a key role by collecting and analyzing data and identifying, monitoring, and reporting differences and trends.

States have opportunities to: work toward implementation of uniform data collection standards, develop their own unique data sets, support analyses of existing administrative and survey data, and conduct special studies to provide more detail regarding subpopulations, geographic areas, or health providers/systems.

Background resources:

- Link to AHRQ information on Using Administrative Data to Monitor Access, Identify Disparities, and Assess Performance of the Safety Net. <http://archive.ahrq.gov/data/safetynet/billings.htm>
- Link to Harper et al An Overview of Methods for Monitoring Social Disparities in Cancer with an Example Using Trends in Lung Cancer Incidence by Area-Socioeconomic Position and Race-Ethnicity, 1992–2004. <http://aje.oxfordjournals.org/content/167/8/889.full>

- Link to CDC health disparities and inequalities report 2013.
<http://www.cdc.gov/mmwr/preview/mmwrhtml/su6203a32.htm>
- Link to the National Library of Medicine, NIH website on health disparities information, including news on recent studies, data, tools, and statistics.
<https://www.nlm.nih.gov/hsrinfo/disparities.html>

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