



SUPPLEMENTAL RESEARCH GUIDE ON SOCIAL DETERMINANTS OF MENTAL HEALTH

Social Determinants of Mental Health Academic Review

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Why Focus on the Social Determinants of Mental Health?

- **A matter of social justice:** According to the World Health Organization's *Commission on Social Determinants of Health*: "Where systematic differences in health are judged to be avoidable by reasonable action they are, quite simply, unfair...Putting right these inequities...is a matter of social justice."¹
- **Persistent and worsening social health inequalities:** "Inequalities in health status in the U.S. are large, persistent, and increasing. Research documents that poverty, income and wealth inequality, poor quality of life, racism, sex discrimination, and low socioeconomic conditions are the major risk factors for ill health and health inequalities."²
- **Long Term Health Effects:** Compromised social determinants of health like financial strain are associated with elevated cortisol levels, a stress hormone. High cortisol levels, in turn, shrink those parts of the brain involved in learning and memory creation. Individuals with high cortisol levels have poorer cognitive performance.³

Defining the Social Determinants of Mental Health

Definitions

- **Social Determinants of Health:** "[L]ife-enhancing resources, such as food supply, housing, economic and social relationships, transportation, education, and healthcare, whose distribution across populations effectively determines length and quality of life."⁴
- **Health Inequities:** According to the World Health Organization's *Commission on Social Determinants of Health*: "Where systematic differences in health are judged to be avoidable by reasonable action they are, quite simply, unfair. It is this that we label health inequity."⁵
- **Social Advantage:** "[O]ne's relative position in a social hierarchy determined by wealth, power, and/or prestige."⁶
- **Health Disparity/Inequality:** "[A] difference in which disadvantaged social groups—such as the poor, racial/ethnic minorities, women, or other groups who have persistently experienced social disadvantage or discrimination—systematically experience worse health or greater health risks than more advantaged social groups."⁷
- **Poverty (U.S. Govt. Definition):** A family of three is in poverty if the household's income is at or below \$1,777/month.⁸
 - **Deep Poverty (Minnesota Definition):** a family of three is in deep poverty if household income falls below \$888/month.⁹

Current Theoretical Approaches to the Social Determinants of Health

- **NOTE:** These theoretical directions are not mutually exclusive.
- **Psychosocial Approaches**
- Psychosocial approaches primarily emphasize *psychosocial factors*.
- They are associated with the idea that "**perception and experience of personal status in unequal societies lead to stress and poor health.**"¹⁰

- Individuals compare their social status and property with that of others, then “experience feelings of shame, worthlessness, and envy that have psychobiological effects on health.”¹¹
- These comparisons motivate individuals to alleviate these negative feelings through “overspending, taking on additional employment that threatens mental health, and adopting health-threatening coping behavior such as overeating and use of alcohol and tobacco.”¹²
- Theorists subscribing to the psychosocial view argue that, at the society-level, income and social status hierarchies weaken social cohesion. The stress that results from this disintegration of the social order then leads to negative mental health outcomes.¹³

Social Production of Disease/Political Economy of Health

- The ***social production of disease/political economy of health*** approaches explicitly identify the economic and political determinants of health and disease.
 - Researchers that take this theoretical approach argue that, while negative psychosocial consequences of income inequality presumably exist, the theoretical framework linking income inequality to mental health **should not just focus on the perception of that inequality: it should start with the structural causes of inequalities.**¹⁴
- “Under this interpretation, the effect of income inequality on health reflects both a lack of resources held by individuals and systematic under-investments across a wide range of community infrastructure.”¹⁵
- Economic processes and political decisions determine:
 - which resources are privately available to the individual; and
 - the “nature of public infrastructure—education, health services, transportation, environmental controls, availability of food, quality of housing, occupational health regulations.”¹⁶
- This approach finds that income inequality is “one manifestation of a cluster of material conditions that affect population health.”¹⁷

Ecosocial Theory and Related Multi-Level Frameworks

- The ***Ecosocial*** approach and other multilevel frameworks integrate (1) social factors, (2) biological factors, and (3) a “dynamic, historical and ecological perspective” to gain a new understanding of the determinants of health and social inequities in health.¹⁸
 - Multilevel frameworks seek to “develop analysis of current and changing population patterns of health, disease and well-being in relation to each level of biological, ecological and social organization’, all the way from the cell to human social groupings at all levels of complexity, through the [whole ecosystem].”^{19 20}
- Dr. Nancy Krueger, the founder of the ***Ecosocial*** approach, uses the notion of ***embodiment*** to describe how “no aspect of our biology can be understood divorced from knowledge of history and individual and societal ways of living.”²¹
- **Comprehensible Summary/TLDR:** when it comes to identifying the social determinants of health, the ***Ecosocial*** approach rejects any separation of human

biology (i.e., the *material* aspects of human behavior studied by the physical sciences) from historical knowledge, individual psychology, and the social world (i.e., the *social/psychological* aspects of human behavior studies by the social sciences).

Mechanisms/Models Through Which Social Determinants Influence Health Social Selection Perspective

- The **social selection** perspective implies that “health determines socioeconomic position, instead of socioeconomic position determining health.”²²
 - Therefore, an individual’s **mental health exerts a strong effect on social position**, be that educational attainment, financial situation, or social network.²³
- From the *social selection* perspective, **social mobility follows mental healthiness**: the social status of mentally healthy people should wax and the social status of mentally unhealthy people should wane.
- **EXISTING RESEARCH**: While overall health status does affect future social mobility,^{24 25} the evidence is opaque and inconsistent.^{26 27 28}
 - While the **social selection** perspective may be valid in some contexts, some researchers hold this theory at arm’s length given its similarity to **Social Darwinism** and that idea’s controversial assumptions.

Social Causation Perspective

- The **social causation** perspective posits that social position determines health status through intermediary factors.²⁹
 - This approach is consistent with longitudinal studies in which socioeconomic status is known before health problems surface. These studies find that individuals of lower socioeconomic status are more likely to develop health problems,³⁰ leading to the conclusion that socioeconomic disparities cause health disparities.
- If the *social causation* perspective is correct, then “Socioeconomic health differences occur when the quality of these intermediary factors are unevenly distributed between the different socioeconomic classes.”³¹
 - “[S]ocioeconomic status determines a person’s behavior, life conditions, etc., and these determinants induce higher or lower prevalence of health problems.”³²
- There are three main categories of intermediary factors: (1) material, (2) psychosocial, and (3) behavioral.

Intermediary 1: Material Factors

- **Material Factors** are linked to economic conditions and those aspects of the physical environment that impact one’s health (mental and physical).³³
 - Economic factors include income, wealth, property, etc.
 - Health-affecting factors in the physical environment include housing, physical working conditions, etc.

- Predictably, individuals with more material resources often also have more social advantages.

Intermediary 2: Psychosocial Factors

- **Psychosocial factors** are the same variables described by **psychosocial approaches**, as explained above.³⁴
 - Psychosocial factors include “stressors (e.g. negative life events), stressful living circumstances, lack of social support, etc.”³⁵
- Proponents of these factors argue “socioeconomic inequalities in morbidity and mortality cannot be entirely explained by well-known behavioral or material risk factors.”

Intermediary 3: Behavioral Factors

- **Behavioral factors**, simply put, are those determinants of health arising out of healthy or unhealthy behaviors.³⁶
 - Behavioral factors include smoking, diet, alcohol consumption, physical exercise, irregular sleep times, etc.
 - Moreover, behavioral factors can vary across socioeconomic groups.
- **CONTROVERSY:** Behavioral patterns vary significantly across countries.
 - “For example, smoking is generally more prevalent among lower socioeconomic groups; however, in Southern Europe, smoking rates are higher among higher income groups, and in particular among women.”³⁷
 - “The contribution of diet, alcohol consumption and physical activities to inequalities in health is less clear and not always consistent.”³⁸

Life Course Perspective

- The **Life Course** perspective “explicitly recognizes the importance of time and timing in understanding causal links between exposures and outcomes within an individual life course, across generations, and in population-level diseases trends.”³⁹
 - Researchers that hold a *life course* perspective keep in mind how social determinants of health operate at every level of development—from the prenatal period to childhood, and from adolescence to old age.

The “Critical Periods” Model

- The **“Critical Periods” Model** considers when exposure to some determinant of health over a specific period has persisting or lifelong effects on one’s physical health.⁴⁰
 - This approach emphasizes *physical health* over *mental health*. In some cases, however, severe mental health conditions that have persistent or permanent effects on physical health can trigger a **critical period**.

The “Accumulation of Risk” Model

- The “**Accumulation of Risk**” model posits that factors which raise disease and/or mental disorder risks or promote good (physical or mental) health accumulate gradually over the course of one’s life.⁴¹
 - This model implies that earlier developmental periods have a greater impact on later periods.

Existing Frameworks

Upstream and Downstream Social Determinants of Mental Health

- **Upstream Social Determinants of Health:** “[F]undamental causes that set in motion causal pathways leading to (often temporally and spatially distant) health effects through downstream factors.”⁴²
- **Downstream Social Determinants of Health:** “[F]actors that are temporally and spatially close to health effects (and hence relatively apparent) but are influenced by upstream factors.”⁴³
- **Metaphor for the Upstream/Downstream Framework:** “[C]onsider people living near a river who become ill from drinking water contaminated by toxic chemicals originating from a factory located upstream. Although drinking the contaminated water is the most proximate or downstream cause of illness, the more fundamental (yet potentially less evident, given its temporal and physical distance from those affected) cause is the upstream dumping of chemicals.”⁴⁴
 - A ‘downstream’ solution to contaminated drinking water may recommend that residents purchase water filters to remove contaminants and make the water drinkable. Because wealthier individuals can afford to buy filters or bottled water, we might expect socioeconomic disparities in illness to result. The upstream solution, however, is to end contamination by addressing the factory’s dumping.
- Figure 2 illustrates the ‘conceptual framework’ from the Robert Wood Johnson Foundation (RWJF) Commission to Build a Healthier America.⁴⁵ Social determinants at the top are upstream, while those near the bottom (health) are downstream.



Figure 2

What influences health? Upstream and downstream determinants.

'Pathways' Frameworks of Social Determinants

- ***Pathways Frameworks*** identify the network of theoretical links or *causal pathways* through which social determinants influence physical and mental health.
- Researchers often illustrate pathway frameworks using boxes and arrows:
 - Exhibit 1 identifies four 'pathways' connecting housing conditions to health outcomes.⁴⁶
 - Figure 1.1, for example, contains a useful chart from the Centers for Disease Control and Prevention illustrating one 'pathways' framework connecting various social determinants to health outcomes.⁴⁷

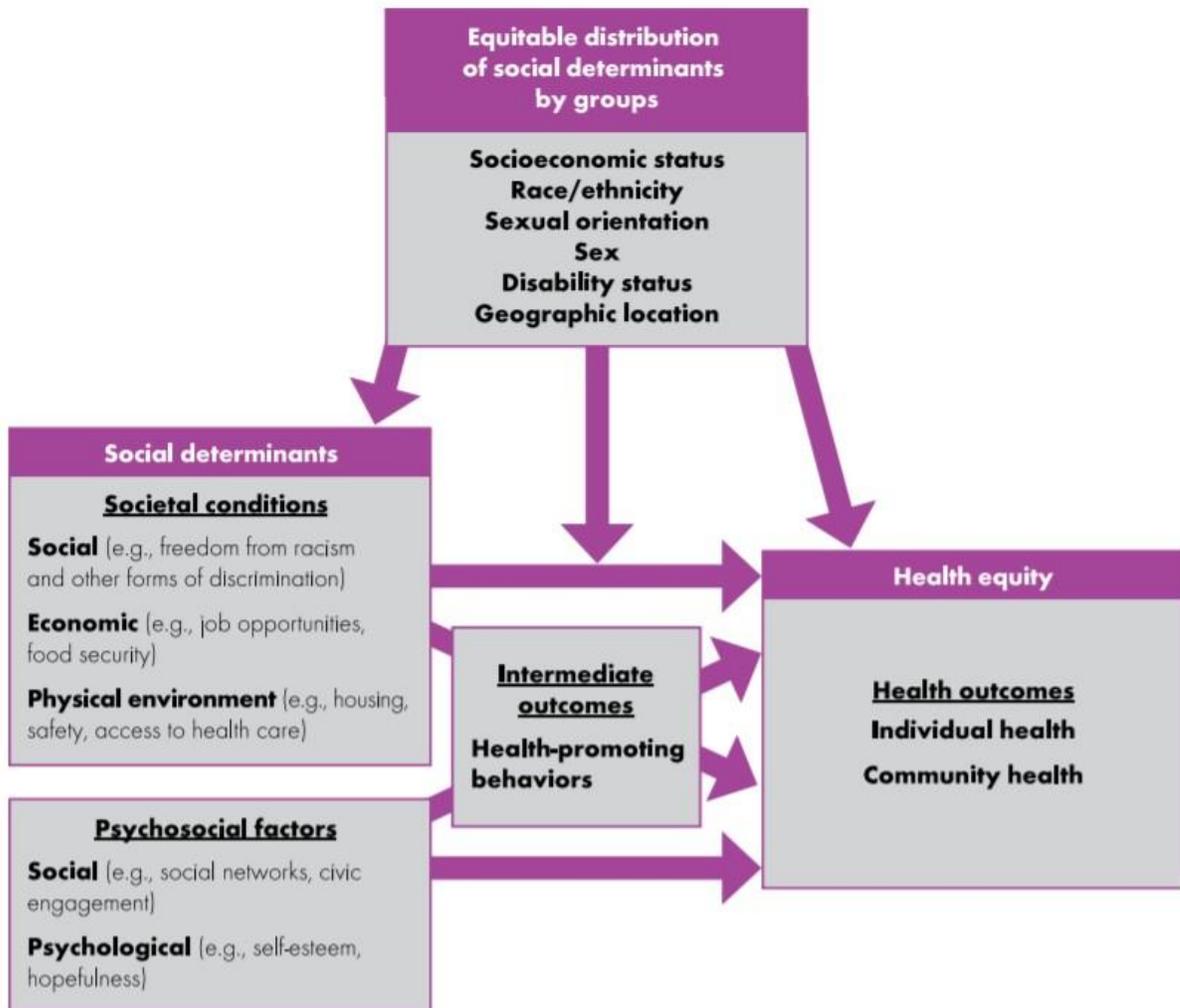
Exhibit 1: Four Pathways Connecting Housing and Health

Exhibit 1: Four Pathways Connecting Housing And Health



Source: Adapted by the author from [Gibson et al. 2011](#), [Sandel et al. 2018](#), [Maqbool et al. 2015](#), and [Braveman et al. 2011](#).

Figure 1.1: Pathways from Social Determinants to Health



Methodology and Measurement Issues

Correlation vs. Causation

- **PROBLEM:** “While the correlations between these lower health outcomes and poverty are strong and convincing, it is difficult to prove causality because **researchers cannot randomize people into poverty.**”⁴⁸
- **SOLUTION:** Natural experiments allow researchers to study how changes in income affect the mental health of low-income individuals and families.
 - For example, Jane et al. (2010) found that when Native American tribes opened casinos and spread their income across tribe members, the prevalence of psychiatric disorders fell.⁴⁹

Endogeneity Between Mental Health and Social Determinants

- **PROBLEM:** It is not obvious if (1) social determinants like poverty and low educational attainment cause poor mental health; (2) poor mental health leads to poverty and low educational attainment; or (3) some confounding third variable produces poor mental health, poverty, *and* low educational attainment.
 - Mental health may influence these social determinants *or* these social determinants may influence mental health. In other words, the relationship is **endogenous**. How do researchers isolate and measure the impact of social determinants on mental health alone?
- **RESEARCH RESULTS:** Existing research that accounts for endogeneity suggests that social determinants causally impact mental health.
 - Hudson (2005) used structural equation modeling to find that socioeconomic status both DIRECTLY and INDIRECTLY impacts rates of mental illness (indirectly through the effects of economic hardship on low- and middle-income groups).⁵⁰
 - Boone-Heinonen et al. (2011) found that neighborhood deprivation (i.e., neighborhoods with low socioeconomic status) influences health by limiting the physical activity of residents.⁵¹ In other words, neighborhood deprivation indirectly affects mental health by reducing the physical activity of residents.

List of Social Determinants

Socioeconomic Determinants of Mental Health

Educational Attainment

- Americans who were least educated are consistently the least healthy. Even groups with intermediate education levels are less healthy than the most educated, suggesting an increasing health gradient from least to most educated.⁵²
- In 2006, U.S. adults without a high school degree were 50% less likely to have visited a doctor in the past year than those Americans with at least a bachelor's degree.⁵³

Occupational/Employment Status

- Low wage jobs do not offer a steady income or financial benefits.
 - Paid family leave is only offered to 21% of U.S. workers (as of March 2020) and only 9% of workers in the lowest 25% of wages.⁵⁴
- Increased job stress is associated with high levels of burnout.
 - Social support from colleagues and supervisors is associated with lower levels of burnout.⁵⁵
- Among **law school students**, social isolation (i.e., small family/peer network size or low social support) is associated with lower life satisfaction and psychological wellbeing.⁵⁶

- Among **teachers**, there is a significant and negative correlation between job satisfaction and dimensions of loneliness at work.⁵⁷

Level of Income

- Families containing a working-age member with a psychiatric disorder experience poverty at a significantly greater rate, depth, and severity.⁵⁸
 - “Families with more severe psychiatric diagnoses, including mood and psychotic disorders, are also found to face more severe poverty.”⁵⁹
- Low wage jobs do not offer a steady income or financial benefits.
 - Paid family leave is only offered to 21% of U.S. workers (as of March 2020) and only 9% of workers in the lowest 25% of wages.⁶⁰
- Poverty may increase the likelihood of the onset of mental illness.⁶¹
- Impoverished women are more vulnerable to binge eating disorder during pregnancy.⁶²
 - College students of low socioeconomic status are at greater risk of social isolation.”⁶³
- Poor adults with mental illness experience higher healthcare costs, decreased productivity, and worse overall health.⁶⁴
- When Native American tribes opened casinos and spread their income across tribe members, the prevalence of psychiatric disorders fell.⁶⁵
- Americans with the lowest income are consistently the least healthy. Even groups with intermediate income levels are less healthy than the wealthiest Americans, suggesting an increasing health gradient from least to most wealthy.⁶⁶
- In 2007, people in families with income below the poverty level were three times more likely to be uninsured relative to those with family incomes more than twice the poverty level.⁶⁷
- Lower income communities are less likely to have access to grocery stores with a wide variety of fruits and vegetables.^{68 69}
- Socioeconomic deprivation is associated with maternal depression (pre- and postnatal).^{70 71}
- Socioeconomic class is a critical factor behind social isolation.⁷²
 - Social isolation in low-income neighborhoods insulates workers from higher paying jobs because they rely upon neighbors and personal contacts to obtain employment.⁷³

Unstable and Poor-Quality Housing Conditions

- In a Health Policy Brief titled “Housing and Health: An Overview of the Literature,” Health Affairs identified four pathways linking housing to health outcomes and healthcare costs: (1) stability, (2) quality and safety, (3) affordability, and (4) neighborhoods.
 - **PATHWAY 1—Stability:** Stable housing had positive impacts on measures of psychological distress and intimate partner violence.⁷⁴ Among chronically homeless people, having stable housing both improves health and decreases healthcare costs.⁷⁵

- Individuals who face housing instability are more likely to experience poor health compared to those with stable housing conditions.⁷⁶
 - Among young people [housing instability is associated with](#) increased risks of teen pregnancy, early drug use, and depression.
 - Chronically homeless individuals are at greater risk of physical and mental health morbidities⁷⁷ as well as increased mortality.⁷⁸
 - **PATHWAY 2—Quality and Safety:** Several environmental factors within homes are associated with poor health outcomes.
 - Lead exposure can [irreversibly damage](#) the brains and nervous system of children.
 - Waters, leakers, poor ventilation, dirty carpets, and pest infestations are associated with [poor health outcomes](#), especially asthma.
 - Exposure to high or low temperatures can [trigger adverse health events](#).
 - [Residential crowding](#) is linked to the spread of infectious disease and psychological distress.
 - **PATHWAY 3—Affordability:** “In 2015, [38.9 million American families](#) spent more than 30 percent of their income on housing, earning them the designation of being “[cost burdened](#)” and inhibiting their ability to invest in health-generating goods.”
 - Low-income families that struggle to pay rent are [less likely](#) to have access to regular medical care.
 - Severely cost burdened renters are [more likely](#) to have difficulty purchasing food.
 - Homeowners who are behind in mortgage payments are [more likely](#) to lack an appropriate supply of food and often go without prescribed medicine.
 - **PATHWAY 4—Neighborhoods:** The availability of nearby resources like public transit⁷⁹, healthy [grocery stores](#), exercise space⁸⁰, and not living near [high-volume roads](#) are correlated with improved physical and mental health outcomes.
- Among children with extensive experiences of homelessness, social isolation was associated with poor emotional health like depression and social anxiety.⁸¹
- Sandel et al. (2018) considered how three forms of housing instability increased one’s risk of adverse health and material hardship.⁸²
 - These three forms of housing instability:
 - Households behind on rent.
 - Families with multiple recent moves.
 - Families with a history of homelessness.
 - Families with these forms of housing instability are more likely to have:
 - Fair and/or poor caregiver health.
 - Maternal depressive symptoms.
 - Child lifetime hospitalization.

- Fair and/or poor child health.
- Household material hardship.

Food Insecurity and Diet Quality

- Lower income and minority communities are less likely to have access to grocery stores with a wide variety of fruits and vegetables.^{83 84}
- The availability of nearby [grocery stores with healthy food options](#) is correlated with improved physical and mental health outcomes.
- Impoverished women are more vulnerable to binge eating disorder during pregnancy.⁸⁵

Recent Resettlement, Immigration, or Emigration

- International college students are at greater risk of social isolation.⁸⁶
- Visible [i.e. identifiable] minority immigrants in Canada are least socially integrated.⁸⁷
 - “Immigrants who reported monthly social interactions with family or friends were more likely to remain in good health.”⁸⁸
- “Family and relative networks, friendship networks, and group and organization networks all have significant effects on the health status of recent family class immigrants.”⁸⁹
 - “The density and ethnic diversity of friendship networks have significant and positive effects on immigrants’ self-rated health status.”⁹⁰

Interpersonal Determinants of Mental Health

Social Network

Family/Peer Network Size

- Effects on Children: Parents who received less social support as a child are at a higher risk of physically abusing their children.⁹¹
 - Socially isolated children have elevated age-related-disease risks in adulthood.⁹²
 - Among adolescents, social isolation increased risks of depressive symptoms, low self-esteem, and suicide.⁹³
- Social isolation (i.e., having a nearly nonexistent social network) is strongly associated with poor health conditions and unfavorable behavior.⁹⁴
- Among pregnant women, social isolation contributes to repetitive negative thinking and loneliness.⁹⁵
- “Young adults reported twice as many days lonely and isolated than late middle-aged adults, despite...having larger networks. For young adults, informal social participation and weekly religious attendance were associated with fewer days isolated.”⁹⁶
- American men have smaller social networks and less stable contact with children and relatives over their lifetimes.⁹⁷

- Contacts with adult children, siblings, friends, and neighbors showed a strong negative relationship with loneliness in unmarried adults.⁹⁸
- Thirty-five percent of men with the lowest levels of social integration (aka the most socially isolated individuals) engage in risky behaviors like heavy drug and alcohol use.
 - Only 10% of men with the highest levels of social integration (least socially isolated) engaged in the same kinds of behavior.⁹⁹
- “Family and relative networks, friendship networks, and group and organization networks all have significant effects on the health status of recent family class immigrants.”¹⁰⁰
 - “The density and ethnic diversity of friendship networks have significant and positive effects on immigrants' self-rated health status.”¹⁰¹

Marital Stability/Satisfaction

- Poor marital satisfaction is associated with maternal depression (pre- and post-natal).¹⁰²
- Singleness and widowhood are associated with social isolation.¹⁰³
 - Loneliness scores are lower in married than single or divorced individuals.¹⁰⁴
- Contacts with adult children, siblings, friends, and neighbors show a stronger negative relationship with loneliness in unmarried than in married adults.¹⁰⁵
 - However, divorced and widowed adults were more likely to profit from contact with adult children, whereas never-married and childless unmarried respondents profited most from contacts with siblings, friends, and neighbors.¹⁰⁶

Familial Support, Satisfaction, and Connectedness

- Among late middle-aged adults, the number of close kin and relationship status were associated with loneliness.¹⁰⁷
 - Older people are at higher risk for isolation because of physical frailty and deaths of family and friends.¹⁰⁸
- Poor family functioning is associated with maternal depression (pre- and postnatal).^{109 110 111}
- Among first-generation Latino/a college students, family social support is negatively associated with stress and depression and is a moderator of stress and depression.¹¹²
- Contacts with adult children, siblings, friends, and neighbors showed a strong negative relationship with loneliness in unmarried adults.¹¹³
- “Family and relative networks, friendship networks, and group and organization networks all have significant effects on the health status of recent family class immigrants.”¹¹⁴
 - “The density and ethnic diversity of friendship networks have significant and positive effects on immigrants' self-rated health status.”¹¹⁵

Peer Support

- Poor social support is associated with maternal depression (pre- and postnatal).^{116 117 118}
- Children: Socially withdrawn children suffer from higher rates of social anxiety than aggressive or nondeviant children.¹¹⁹ They also are at a higher risk of poor adult health compared to non-isolated children.¹²⁰
- Among first-generation Latino/a college students, social support from friends is negatively associated with social isolation.¹²¹
- College students with lower quality social support are more likely to experience mental health problems.¹²²
- Contacts with adult children, siblings, friends, and neighbors showed a strong negative relationship with loneliness in unmarried adults.¹²³
- Older people are at higher risk for isolation because of physical frailty and deaths of family and friends.¹²⁴

Community Belonging

- Compared to older heterosexual adults, older LGBTQ+ adults struggle with depression, social isolation, and acceptance by their families, peers, and communities.¹²⁵
- Social support groups can result in community-level benefits, including increased reciprocity, reduced stigma, and decreased discrimination.¹²⁶

Social Discrimination

- “Racial discrimination and stereotyping of Indian patients, especially by providers in the private sector, is commonplace. Its consequences have left patients without care, with inadequate care, or in some instances, with inappropriate care, such as radical mastectomy for early stage cancers.”¹²⁷
- Compared to older heterosexual adults, older LGBTQ+ adults struggle with depression, social isolation, and acceptance by their families, peers, and communities.¹²⁸
- LGBTQ+ African and Caribbean immigrants and refugees who participated in social support groups experienced greater reciprocity, reduced stigma, and decreased discrimination at the community level.¹²⁹
- Transgender individuals are at a high risk of social exclusion, experiencing discrimination and stigma across many social situations and being at high risk of poor wellbeing.¹³⁰

Drug, Alcohol, and Tobacco Use

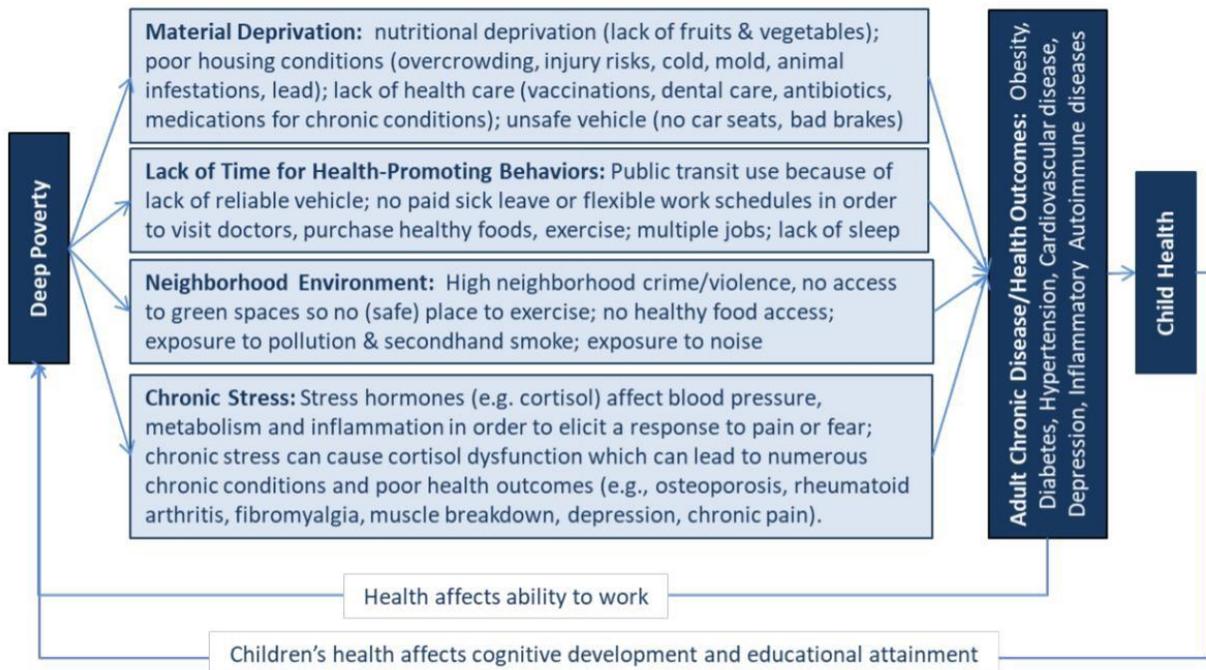
- Among high school students, 23.6% reported in 2020 that they currently use any tobacco products.¹³¹
- Among middle school students, 4.7% reported in 2020 that they used e-cigarettes in the past 30 days. Among high school students, the rate was 19.6%.^{132 133 134}

Intergenerational or Historical Determinants of Mental Health

Parental Income/Poverty

- “Many children living in poverty have inadequate food, unstable housing, and many other stressors associated with being poor. If their parents are unable to insulate them from the chronic stress, these children may experience an additional barrier to learning in the form of their own brain chemistry.”¹³⁵
- Adults who were socioeconomically disadvantaged as children had elevated age-related-disease risks in adulthood.¹³⁶
- Figure 1 (from a Minnesota Department of Human Services report) details how intergenerational poverty affects health and perpetuates the cycle of deep poverty.¹³⁷

Figure 1: How does poverty affect health?



Long-Term Impact of Pregnancy and Parenting on Children

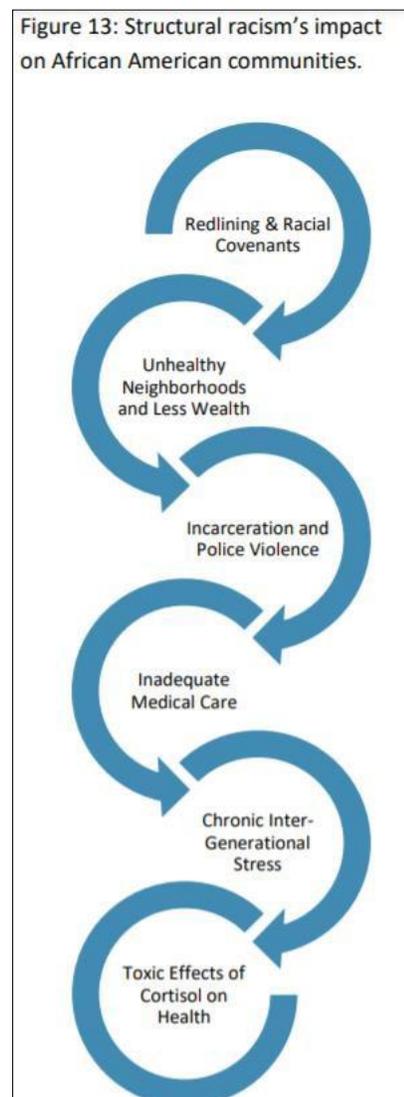
- Parents who received less social support as a child are at a higher risk of physically abusing their children.¹³⁸
- **PREGNANT WOMEN: High cortisol levels** (such as stress from financial strain) during pregnancy causes poor physical outcomes in infants, and anxiety disorders result in higher lifetime stress levels.¹³⁹
 - Poor social determinants of health like poverty or low housing quality can lead to and exacerbate **maternal depression**, of which the long-term

- consequences in children include disruptive social behavior,¹⁴⁰ depression,¹⁴¹ and worse health outcomes.¹⁴²
- The mental disorders that result from poor social determinants **negatively impact the parent-child relationship** and, in turn, **increase children's likelihood of developing mental illness**.
 - Mother-child relationship: **Depressed** mothers are less sensitively attuned¹⁴³ and responsive¹⁴⁴ to their infants, more disengaged from the child,¹⁴⁵ and have compromised maternal-infant social and functional functioning.¹⁴⁶ Similarly, mothers with a **history of trauma** display more behavior characteristic of negative parenting¹⁴⁷ and may respond to infants' attachment cues with disengagement.¹⁴⁸
 - Long-term effects on children: School-aged children of **depressed mothers** have elevated externalizing behavior problems, decreased social competence, reduced frontal brain activation, more depressive symptoms,^{149 150} and increased hyperactivity/attention issues.¹⁵¹ The adolescent children of chronically **depressed mothers** have more behavioral problems and engage in risky behaviors.¹⁵²
 - **Maternal anxiety** has an adverse effect on children's emotional outcomes,¹⁵³ infant temperament, and attentional regulation.¹⁵⁴
 - Infants of **mothers with Post-Traumatic Stress Disorder** have more separation anxiety around bedtime.¹⁵⁵
 - Children of **mothers with bipolar disorder** suffer from more physical assault,^{156 157} psychological abuse,¹⁵⁸ and intellectual disability.¹⁵⁹

Historic/Structural Discrimination (Redlining, Segregation, Incarceration)

- **U.S. racial wealth gap is driven by past redlining and current school re-segregation**: two areas of past and present public policy keep the racial wealth gap from closing:
 - the continuing impact of redlining on American homeownership; and
 - the re-segregation of public education (diverse inner city vs. white suburban schools).
 - RACIAL WEALTH GAP: In 2011 the median White household had \$111,146 in wealth holdings compared to \$7,113 for the median Black household and \$8,348 for the median Latino household.¹⁶⁰
- **Incarceration disproportionately affects Native American communities**: Structural racism contributes to the over-representation of Native Americans in the criminal justice system because Native American youth face disproportionately severe sanctions for minor offenses.^{161 162} Incarceration leads to several disparities that affect native American families and communities (as listed by the Minnesota Department of Health Services report).¹⁶³
 - **Effect 1**: loss of income during incarceration.¹⁶⁴
 - **Effect 2**: reduced employability¹⁶⁵ and eligibility for social programs¹⁶⁶ after release.
 - **Effect 3**: higher rates of mental illness¹⁶⁷ and communicable diseases.¹⁶⁸

- **Effect 4:** increased risk of poor physical¹⁶⁹ and mental¹⁷⁰ health for the children of incarcerated individuals.
- The two figures below from the “We definitely struggle...” Minnesota report¹⁷¹ illustrate the impact of historical and structural racism on Native American (Figure 12) and African American (Figure 13) communities.



Geographic and Neighborhood-Related Determinants of Mental Health

Population Density and Urban/Rural Effects

- Residents of nonmetropolitan areas are more likely to be uninsured or covered by Medicaid and less likely to have private insurance coverage than residents of metropolitan areas.¹⁷²
- Rural residents must travel greater distances than urban residents to reach healthcare delivery sites.¹⁷³
- [From a study of **homeschooled children in Alaska (rural)**]: “The compounding of conditions such as geographic isolation, time spent without access to a peer group, and extremes in seasonal conditions, contribute to a reasonable concern about the susceptibility to feelings of social isolation for homeschoolers in **rural and remote areas of the state**.”¹⁷⁴
- **Rural older adults** are more likely than **urban older adults** to say that they could rely on family and friends. Rural residents report more close friends and relatives than urban residents.¹⁷⁵

Neighborhood Effects

- Food deserts, lack of green spaces, and unsafe environments make it difficult to engage in healthy behaviors.¹⁷⁶
- Among middle-to-old age Americans, low and worsening neighborhood socioeconomic conditions (i.e., impoverished neighborhoods) leads to unhealthy sleep behavior.¹⁷⁷
 - [Healthy sleep is integral to good mental health](#), so neighborhood conditions that disturb sleep may lead to worse mental health conditions.
- Social isolation in low-income neighborhoods insulates workers from higher paying jobs because they rely upon neighbors and personal contacts to obtain employment.¹⁷⁸
- Boone-Heinonen et al. (2011) found that neighborhood deprivation (i.e., neighborhoods with low socioeconomic status) influences health by limiting the physical activity of residents.¹⁷⁹ In other words, neighborhood deprivation indirectly effects mental health by reducing the physical activity of residents.
- On average, public transit systems take twice as long as driving.¹⁸⁰ Neighborhoods that encourage residents to rely heavily on time-intensive methods of transport (like public transit) can reduce the amount of time available for activities that promote mental health like exercise¹⁸¹ and sleep.¹⁸²

Incarceration and High Prison Admission Rates

- Incarceration has several effects on families and, if incarceration occurs at high rates, on communities as well. These include:
 - **Effect 1:** loss of income during incarceration.¹⁸³

- **Effect 2:** reduced employability¹⁸⁴ and eligibility for social programs¹⁸⁵ after release.
- **Effect 3:** higher rates of mental illness¹⁸⁶ and communicable diseases (the latter of which can be brought back to the community after release).¹⁸⁷
- **Effect 4:** increased risk of poor physical¹⁸⁸ and mental¹⁸⁹ health for the children of incarcerated individuals.

Demographic Differences

Ethnicity/Race

Ethnicity/Race—Overall

- “Health in the United States is often, though not invariably, patterned strongly along both socioeconomic and racial/ethnic lines, suggesting links between hierarchies of social advantage and health.”¹⁹⁰
- Minority communities are less likely to have access to grocery stores with a wide variety of fruits and vegetables.^{191 192}
- College students from racial or ethnic minority backgrounds are at greater risk of social isolation.¹⁹³

African Americans

- In 2004, African Americans were around 1.3 times more likely to visit the emergency room at least once in the past year relative to White Americans.¹⁹⁴
- In 2011, the median White household had \$111,146 in wealth holdings compared to \$7,113 for the median Black household.¹⁹⁵
- Among older African Americans, perceived social isolation is negatively associated with mental health.¹⁹⁶

Hispanic Americans

- In 2007, 31% of Hispanic Americans were uninsured compared to 10% of non-Hispanic White Americans.¹⁹⁷
- In 2011, the median White household had \$111,146 in wealth holdings compared to \$8,348 for the median Latino household.¹⁹⁸
- Among older Hispanics, there is a significant negative association between social isolation and mental health.¹⁹⁹

Indigenous Americans

- “Racial discrimination and stereotyping of Indian patients, especially by providers in the private sector, is commonplace. Its consequences have left patients without care, with inadequate care, or in some instances, with inappropriate care, such as radical mastectomy for early-stage cancers.”²⁰⁰
- In Canada, Aboriginal people (i.e., native American populations) had the poorest self-reported physical and mental health.²⁰¹

- In 2004, Native Americans were around 1.3 times more likely to visit the emergency room at least once in the past year relative to Whites Americans.²⁰²
- When Native American tribes opened casinos and spread casino tax income across tribe members, the prevalence of psychiatric disorders fell.²⁰³

LGBTQ+ Individuals

Social Isolation In the LGBTQ+ Community

- Transgender individuals are at a high risk of social exclusion, experiencing discrimination and stigma across many social situations, and being at high risk of poor wellbeing.²⁰⁴
- Internet communities provide emotional, appraisal, and informational support for transgender adolescents, though these adolescents also report harassment and exclusionary behavior online.²⁰⁵
- Compared to older heterosexual adults, older LGBTQ+ adults struggle with depression, social isolation, and acceptance by their families, peers, and communities.²⁰⁶

Differences Across Gender

Women

Women—Overall

- Blood pressure reactions to **acute mental stress** are correlated with loneliness in women but not in men.²⁰⁷

Children and Adolescent Girls

- Poor social determinants of health can trigger or exacerbate existing mental illnesses.
 - Female children of chronically depressed mothers experience more internalized distress and dysphoric moods than their male counterparts.²⁰⁸

Pregnant Women and Mothers

- **SUMMARY:** The mental disorders that result from poor social determinants **negatively impact the mother-child relationship** and, in turn, **increase children's likelihood of developing mental illness.**
- Socioeconomic and educational deprivation,²⁰⁹ ²¹⁰ poor family functioning,²¹¹ ²¹² ²¹³ lower marital satisfaction,²¹⁴ low social support,²¹⁵ ²¹⁶ ²¹⁷ stressful life events,²¹⁸ ²¹⁹ ²²⁰ and chronic strain²²¹ are all associated with pre- and post-natal maternal depression.
- High cortisol levels (from stimuli such as stress from financial difficulties) during pregnancy causes poor physical outcomes in infants, and anxiety disorders result in higher stress levels.²²²
- Mother-child relationship: **Depressed** mothers are less sensitively attuned²²³ and responsive²²⁴ to their infants, disengaged from the child,²²⁵ and have

- compromised maternal-infant social and functional functioning.²²⁶ Similarly, mothers with a **history of trauma** display more behavior characteristic of negative parenting,²²⁷ and may respond to infants' attachment cues with disengagement.²²⁸
- Long-term effects on children: School-aged children of **depressed mothers** have elevated externalizing behavior problems, decreased social competence, reduced frontal brain activation, more depressive symptoms,²²⁹⁻²³⁰ and increased hyperactivity/attention issues.²³¹ The adolescent children of chronically **depressed mothers** have more behavioral problems and engage in risky behaviors.²³²
 - **Maternal anxiety** has an adverse effect on children's emotional outcomes,²³³ negative infant temperament, and attentional regulation.²³⁴
 - Infants of **mothers with Post-Traumatic Stress Disorder** have more separation anxiety around bedtime.²³⁵
 - Children of **mothers with bipolar disorder** suffer from more physical assault,²³⁶⁻²³⁷ psychological abuse,²³⁸ and intellectual disability.²³⁹

Men

- American men are more likely to be socially isolated than women.²⁴⁰
 - Men who are least socially integrated (i.e., most isolated) are at a higher risk of mortality²⁴¹ and, more specifically, suicide²⁴² than men with high social integration.
- American men have smaller social networks and less stable contact with children and relatives over their lifetimes.²⁴³

Policy Research and Recommendations

Robert Wood Johnson Foundation's Commission Recommendations

- The Robert Wood Johnson Foundation (RWJF) Commission to Build a Healthier America was a national, independent, nonpartisan group of leaders that examined how factors outside of medical care influence health.²⁴⁴
- It issues **10 recommendations** to improve health at the local, state, and federal level:
 - **NUTRITION:** (1) Fund and design Women, Infants and Children program and the Supplemental Nutrition Assistance Program to meet the needs of hungry families for nutritious food. (2) Create public-private partnerships to open and sustain full-service grocery stores in communities without access to healthful foods. (3) Feed children only healthy foods in schools.
 - **PHYSICAL ACTIVITY:** (4) Require all K-12 schools to include time for all children to be physically active every day.
 - **TOBACCO:** (5) Become a smoke-free nation - eliminating smoking remains one of the most important contributions to longer, healthier lives.

- **EARLY CHILDHOOD:** (6) Ensure that all children have high-quality early developmental support (child care, education and other services) -this will require committing substantial additional resources to meet the early developmental needs particularly of children in low-income families.
- **HEALTHY PLACES:** (7) Create "healthy community" demonstrations to evaluate the effects of a full complement of health-promoting policies and programs. (8) Develop a "health impact" rating for housing and infrastructure projects that reflects the projected effects on community health and provides incentives for projects that earn the rating. (9) Integrate safety and wellness into every aspect of community life.
- **ACCOUNTABILITY:** (10) Ensure that decision-makers in all sectors have the evidence they need to build health into public and private policies and practices.

Minnesota Department of Human Services (DHS)

Recommendations

- In a report titled, "We definitely struggle...The worry is always there," the Minnesota Department of Health Services offers several recommendations that can be applied generally to federal and state social service programs.

Improvements to Supplemental Nutrition Assistance Program(SNAP)

- **Recommendation:** SNAP benefits have a three-month time limit for work-eligible recipients. Social service agencies should find a reliable way for state and county officials to assess "whether a SNAP applicant is capable of working and thus is appropriately subject to a three-month time limit for SNAP benefits."²⁴⁵

Enrollment Across Programs

- **Recommendation 1:** Social service agencies should create the means for state and local officials to use the data from programs that individuals/families already are eligible for in order to verify eligibility in other social programs.²⁴⁶
 - Workers should be able to use verified SNAP data, for example, to verify eligibility for Medicaid and vice versa.
- **Recommendation 2:** Collaborate with local governments to make it easier for eligible citizens to enroll in healthcare, cash, and food social programs.²⁴⁷

Community Engagement.

- **Recommendation 1:** Coordinate with community leaders to address structural racism within state social service policies and agencies.
 - "These conversations can be even more effective if done while we use tools such as a racial equity toolkit to help us see inequities among the populations we serve, and how state policies can exacerbate these inequities."²⁴⁸

- **Recommendation 2**: Bring community leaders and other state agencies together to determine how to address larger inequities that affect social service recipients.²⁴⁹

Demos: Recommendations to reduce the racial wealth gap.

Eliminate racial disparities in homeownership rates

- **CURRENT HOMEOWNERSHIP RATES**: “While 73 percent of white households owned their own homes in 2011, only 47 percent of Latinos and 45 percent of Blacks were homeowners.”²⁵⁰
- **IF HOMEOWNERSHIP DISPARITIES ARE ELIMINATED**: “**If public policy successfully eliminated racial disparities in homeownership rates**, so that Blacks and Latinos were as likely as white households to own their homes, median Black wealth would grow \$32,113 and the wealth gap between Black and white households would shrink 31 percent. Median Latino wealth would grow \$29,213 and the wealth gap with white households would shrink 28 percent.”²⁵¹

Eliminate racial disparities in college graduation rates and income returns

- **Summary**: Eliminating disparities in college graduation and the return on a college degree would have a **modest direct impact** on the racial wealth gap.
- **If public policy successfully eliminated racial disparities in college graduation rates**, “median Black wealth would grow \$1,313 and the wealth gap between Black and white households would shrink one percent.”²⁵²
 - “Median Latino wealth would grow \$3,528 and the wealth gap with white households would shrink three percent.”²⁵³
- **If public policy successfully equalized the return to college graduation** “median Black wealth would grow \$10,786 and the wealth gap between Black and white households would shrink 10 percent.”²⁵⁴
 - “Median Latino wealth would grow \$5,878 and the wealth gap with white households would shrink six percent.”²⁵⁵

Minnesota Department of Human Services: How does poverty affect health?

- **Affect 1**: Material deprivation makes it difficult to participate in healthy behaviors and environments.
- **Affect 2**: Spending a greater portion of time meeting basic needs makes it harder to engage in health-promoting behaviors.
- **Affect 3**: Food deserts, lack of green spaces, and unsafe environments make it difficult to engage in healthy behaviors.
- **Affect 4**: Chronic financial stress leads to extended exposure to the ‘stress’ hormone cortisol, which compromises functioning in multiple body systems.²⁵⁶

Minnesota Department of Health: Findings on Paid Leave and Health

- **Finding 1:** There is a strong link between health and access to paid leave to care for personal health or the health of family members.²⁵⁷
- **Finding 2:** Lack of access to paid leave can result in significant health implications and costs for workers and the community.²⁵⁸
- **Finding 3:** Access to paid sick and family leave is not distributed equally among working Minnesotans and is often unrelated to employees' health needs or their attachment to the workforce (length of work history or hours worked).²⁵⁹
- **Finding 4:** Gaps in current paid leave laws contribute to the differences in employees' ability to take leave from work for personal or family health concerns, causing a structural inequity that creates unequal opportunity for health.²⁶⁰
- **Finding 5:** Paid sick, family, and parental leave policies impact the economic security of community members and their capacity to care for one another.²⁶¹
- **Finding 6:** Research suggests that flexible and family-friendly policies result in economic benefits to employers.²⁶²

Legislation, Programs, Treatments, and Other Solutions

Socioeconomic Determinants of Health

Pattern/Summary: Almost all state laws focus on physical health as opposed to mental health, though physical health is a significant determinant of mental health outcomes.

Educational Attainment

Existing U.S. Legislation, Policies, and Programs (By State)

Pattern/Summary: Most state education laws involve either (1) special loans/scholarships for underprivileged/minority students, or (2) student loans/scholarships for medical students who promise to work in medically underserved areas.

Federal Programs—Educational Programs

Head Start and Early Head Start

- **DESCRIPTION:** “[A] federal program that promotes the school readiness of children from birth to age five from low-income families by enhancing their cognitive, social, and emotional development.” In addition, Head Start programs “help build relationships with families that support family well-being and many other important areas.”²⁶³
 - Early Head Start serves infants, toddlers, and pregnant women and their families who have incomes below the federal poverty level.
- **COMMENTS:** Improves socioeconomic and intergenerational determinants of health for low-income families and their children.

Higher Education Financial Aid—Federal Perkins Loans

- **DESCRIPTION:** Federal Perkins Loans help financially needy undergraduate and graduate students meet the cost of higher education. It carries a fixed interest rate and repayments begin after a nine-month post-graduate grace period.
- **URL:** <https://www.benefits.gov/benefit/418>
- **COMMENTS:** Improves socioeconomic determinants of mental health by facilitating further educational attainment for students from low-income backgrounds.

Lifetime Learning (Tax) Credit (LLC)

- **DESCRIPTION:** LLC “is for qualified tuition and related expenses paid for eligible students enrolled in an eligible educational institution. This credit can help pay for undergraduate, graduate and professional degree courses — including courses to acquire or improve job skills.”²⁶⁴
- **URL:** <https://www.benefits.gov/benefit/5939>
- **COMMENTS:** Improves socioeconomic determinants by facilitating education attainment.

Federal Work-Study (FWS)

- **DESCRIPTION:** FWS “funds part-time employment for undergraduate and graduate students with financial need, allowing them to earn money to help pay postsecondary education expenses.”²⁶⁵
- **IMPACT:**
- **URL:** <https://studentaid.gov/understand-aid/types/work-study>
- **COMMENTS:** Improves socioeconomic determinants by facilitating education attainment from those with disadvantages backgrounds.

Alabama

Laws and Legislation

- **Ala.Code § 16-47-124**²⁶⁶: Establishes a student loan program for medical students who commit in writing to practice in a medically underserved area in a generalist specialty following graduation.
- **Ala.Code § 16-47-126**²⁶⁷: Establishes a student loan repayment program for medical students who practice in a medically underserved area following graduation.

Arizona

Laws and Legislation

- **Ariz. Rev. Stat. § 15-1721 et. seq**²⁶⁸: Establishes a medical student loan fund for students agreeing to practice in medically underserved areas and/or with medically underserved populations.
- **Ariz. Rev. Stat. § 15-1751**²⁶⁹: Provides that the University of Arizona school of medicine shall give priority consideration to applicants who demonstrate a willingness to practice in medically underserved areas of the state.

- **Ariz. Rev. Stat. § 36-2172²⁷⁰**: Creates the primary care provider loan repayment program in the Department of Health Services to pay off portions of education loans taken out by licensed physicians, dentists, and mid-level providers who contract with the department of health services to practice in a federally designated health professional shortage area.

Arkansas

Laws and Legislation

- **Ark. Code § 6-60-212²⁷¹**: Allows for public colleges and universities to give special consideration to, and carry out recruitment activities of, students interested in nursing or other health related fields from medically underserved areas.

California

Laws and Legislation

- **Cal. Health and Safety Code § 124174 et. seq.²⁷²**- Establishes rules regarding and some funding for public school health centers. This law recognizes the role of student health centers in reducing health disparities.

Florida.

Laws and Legislation.

- **Fla. Stat. § 1009.68²⁷³**- Establishes the Florida Minority Medical Education program to provide scholarships to minority students to encourage the pursuit of medical education at state schools for the purpose of addressing the primary healthcare needs of underserved groups.

Illinois

Laws and Legislation

- **Ill. Ann. Stat. Ch. 110 § 925/2²⁷⁴**- The Illinois Department of Public Health will establish a program to encourage minority students to enroll in and complete dental school in the state.
- **Ill. Ann. Stat. Ch. 110 § 978/5²⁷⁵**- The Illinois Department of Public Health will establish a program providing grants to podiatric medicine residency programs, scholarships to podiatry students, and a loan repayment program for podiatrists who will agree to practice in underserved areas of the state. Minority students shall be given preference for scholarships.

Kansas

Laws and Legislation.

- **Kan. Stat. Ann. § 74-3266²⁷⁶**- Creates a scholarship program for Kansas undergraduate students enrolled in or admitted to an accredited school of osteopathic medicine in a course of instruction leading to the degree of doctor of osteopathy; and who upon graduation agree to practice in a rural area or a medically underserved area.

- **Kan. Stat. Ann. § 74-32,131 et. seq.**²⁷⁷- Establishes the Advanced Registered Nurse Practitioner Service Scholarship Program for students who agree upon completion of an advanced registered nurse practitioner program, to practice in a rural area or medically underserved area.

Louisiana

Laws and Legislation.

- **La. Rev. Stat. Ann. § 17:1817**²⁷⁸- The Board of Supervisors of Southern University and Agricultural and Mechanical College may create and operate an office or offices of minority health. Funding for any such office shall be subject to legislative appropriation.
- **House Resolution 146, 2012**²⁷⁹- Creates a study committee to examine and make recommendations with respect to the structure of the African American family as it relates to education outcomes, socioeconomic factors, and health disparities. Requires the study committee to report to the House Committee on Health and Welfare by March 1, 2013.

Michigan

Laws and Legislation.

- **Mich. Comp. Laws § 333.2707**²⁸⁰- Establishes a grant program for minority students enrolled in medical schools, nursing programs, or physician's assistant programs.

Minnesota

Laws and Legislation.

- **Minn. Stat. § 144.1501**²⁸¹- Establishes a health professional education loan forgiveness program account. Eligible recipients include medical residents agreeing to practice in designated rural areas or underserved urban communities.

Mississippi

Laws and Legislation.

- **Miss. Code Ann. § 37-144-1 et. seq.**²⁸²- Establishes the Mississippi Rural Physicians Scholarship Program designed to recruit, identify, and enroll undergraduate students who demonstrate necessary interest, commitment, aptitude, and academic achievement to pursue careers as family physicians or other generalist physicians in rural or medically underserved areas of Mississippi.

Nebraska

Laws and Legislation

- **Neb. Rev. St. § 85-1,130**²⁸³- Instructs the University of Nebraska Medical Center to develop a plan to increase the number of graduates of the center who specialize in primary care fields, who take residencies in primary care fields, and who establish practices in rural areas and other medically underserved areas of the state.

Nevada

Laws and Legislation

- **Nev. Rev. Stat. § 396.907²⁸⁴**- Establishes the Area Health Education Center Program within the University of Nevada School of Medicine to support education and training programs for students studying to become practitioners, or residents or practitioners who will provide or are providing healthcare services in medically underserved areas in this state, including urban and rural areas.

New Jersey

Laws and Legislation

- **N.J. Rev. Stat. § 18A:71C-32 et. seq.²⁸⁵**- Establishes a Primary Care Practitioner Loan Redemption Program within the Higher Education Student Assistance Authority. The program shall provide for the redemption of a portion of the eligible qualifying loan expenses of program participants for each year of service at an approved site located within a state designated underserved area or a health professional shortage area.

New York

Laws and Legislation

- **N.Y. Public Health Law § 900 et. seq.²⁸⁶**- Authorizes the commissioner of health, in collaboration with the commissioner of education and the president of the higher education services corporation to establish programs for loan repayment, scholarships, and grants to encourage and to increase the number of medical students choosing primary care, and to encourage those students to practice in medically underserved areas. There is also a provision to encourage minority participation in medicine.

Oklahoma

Laws and Legislation

- **Okla. Stat. tit. 70, § 625.1 et. seq.²⁸⁷**- Establishes the Oklahoma Rural Medical Education Loan and Scholarship Fund. The fund is to be administered by the Physician Manpower Training Commission.
- **Okla. Stat. tit. 70, § 697.1 et. seq.²⁸⁸**- Establishes the Physician Manpower Training Commission to establish and administer cost-sharing programs for internship and residency physician training. Not less than fifty percent (50%) of the subsidy for these programs shall be used in the training of primary healthcare and family/general practice physicians for the rural and medically underserved areas of the state.
- **Okla. Stat. tit. 70, § 697.9²⁸⁹**- Establishes the Community Preceptor Physician Training and Work Experience Scholarship Fund. The fund is to be administered by the Physician Manpower Training Commission.

Tennessee

Laws and Legislation

- **Tenn. Code Ann. § 68-1-117²⁹⁰**- Establishes a program at Meharry Medical College School of Medicine to develop resources for recruiting, training and deploying physicians for service in areas of Tennessee with disadvantaged and medically underserved populations.

Texas

Laws and Legislation

- **Tex. Education Code Ann. § 63.301 et. seq.²⁹¹**-Establishes the permanent fund for minority health research and education to provide grants to institutions of higher education, including Centers for Teacher Education, that conduct research or educational programs that address minority health issues or form partnerships with minority organizations, colleges, or universities to conduct research and educational programs that address minority health issues.

Virginia

Laws and Legislation

- **Va. Code § 32.1-122.7²⁹²**- Establishes the Virginia Health Workforce Development Authority to facilitate the development of a statewide health professions pipeline that identifies, educates, recruits, and retains a diverse, appropriately geographically distributed and culturally competent quality workforce.

Occupational Requirements/Employment Status

Existing U.S. Legislation, Policies, and Programs (By State)

Pattern/Summary: Most state laws involve either (1) cultural competency training for healthcare professionals, (2) financial support for healthcare professionals who work in underprivileged communities, or (3) efforts to increase the number of healthcare professionals from underprivileged/minority backgrounds.

California

Laws and Legislation

- **Cal. Bus. and Prof. Code § 2190.1²⁹³**- Requires cultural competency training to be a part of the continuing education requirements for licensure of physicians and surgeons.

Connecticut

Laws and Legislation

- **Conn. Gen. Stat. § 4-124dd²⁹⁴**- Establishes the Connecticut Allied Health Workforce Policy Board to monitor and improve the capacity of the state's current allied health workforce. Among other duties, the board is required to develop

recommendations for promoting diversity in the allied health workforce, including, but not limited to, racial, ethnic, and gender diversity.

Florida

Laws and Legislation

- **Fla. Stat. § 381.0403**²⁹⁵- Establishes a program to provide financial support for primary care specialty interns and residents in order to promote practice in medically underserved areas of the state and encourage racial and ethnic diversity of the state's physician workforce.
- **Fla. Stat. § 641.217**- Requires any entity contracting with the Agency for Healthcare Administration to provide healthcare services to Medicaid recipients or state employees on a prepaid or fixed-sum basis to submit to the Agency for Healthcare Administration the entity's plan for recruitment and retention of healthcare practitioners who are minorities.

Indiana

Laws and Legislation

- **Ind. Code § 12-15-44.2-14**²⁹⁶- Any insurer or health maintenance organization that contracts with the state to provide health insurance coverage under the Indiana Check-Up Plan must incorporate cultural competency standards.

Louisiana

Laws and Legislation

- **La. Rev. Stat. Ann. § 17:2048.51**²⁹⁷- Establishes the Louisiana Health Works Commission within the Department of Education. The commission is to study and make recommendations on programs to recruit and retain healthcare professionals in the Louisiana workforce; models for predicting the supply and demand for healthcare workers in the state; and incentives for healthcare workers to practice in Louisiana's medically underserved areas.
- **La. Rev. Stat. Ann. § 40:1300.132**²⁹⁸- Requires the Department of Health and Hospitals to adopt a series of regulations and payment methodologies intended to fully reimburse federally qualified health centers (FQHC) so that FQHC's may retain primary health professionals and continue providing healthcare services in medically underserved areas.
- **La. Rev. Stat. Ann. § 46:2731**²⁹⁹- Establishes the "Health Trust Fund" within the state treasury. Among the approved purposes for monies from the fund are health workforce development and retention, disease specific treatment programs, and expanding access to healthcare services in medically underserved areas.

Maryland

Laws and Legislation

- **Md. Health-General Code Ann. § 1-216**³⁰⁰- The health occupations boards authorized to issue a license or certificate under this article shall develop

- collaboratively a training process and materials for new board members that include training in cultural competency.
- **Md. Health-General Code Ann. § 20-901 et. seq.**³⁰¹- Encourages the inclusion of courses or seminars that address the identification and elimination of healthcare services disparities of minority populations as part of curriculum courses or seminars offered or required by institutions of higher education; continuing education requirements for healthcare providers; and continuing education programs offered by hospitals for hospital staff and healthcare practitioners.
 - **Md. Health-General Code Ann. § 20-1301 et. seq.**³⁰²- Establishes the Cultural and Linguistic Healthcare Professional Competency Program with the purpose of incorporating cultural and linguistic abilities into therapeutic and medical evaluation and treatment.

Massachusetts

Laws and Legislation

- **Mass. Gen. Laws Ann. ch. 23H § 9**³⁰³- Establishes a health professions worker training grant program for the purpose of responding to the need for workers in various healthcare professions.
- **Mass. Gen. Laws Ann. ch. 111 § 25L**³⁰⁴- Establishes a healthcare workforce center within the Department of Public Health to improve access to healthcare services and to coordinate the department's healthcare workforce activities with other state agencies and public and private entities involved in healthcare workforce training, recruitment and retention.

Minnesota

Laws and Legislation

- **Minn. Stat. § 137.38**³⁰⁵- The Board of Regents of the University of Minnesota, through the University of Minnesota Medical School, is requested to implement initiatives designed to encourage newly graduated primary care physicians to establish practices in areas of rural and urban Minnesota that are medically underserved.
- **Minn. Stat. § 144.1501**³⁰⁶- Establishes a health professional education loan forgiveness program account. Eligible recipients include medical residents agreeing to practice in designated rural areas or underserved urban communities.

Mississippi

Laws and Legislation

- **Miss. Code Ann. § 37-144-1 et. seq.**³⁰⁷- Establishes the Mississippi Rural Physicians Scholarship Program designed to recruit, identify and enroll undergraduate students who demonstrate necessary interest, commitment, aptitude and academic achievement to pursue careers as family physicians or other generalist physicians in rural or medically underserved areas of Mississippi.

- **Miss. Code Ann. § 41-3-61**³⁰⁸- The State Board of Health is required to adopt guidelines applicable to physician practices, nurse practitioner practices and physician assistant practices in Mississippi that incorporate the principles of the patient-centered medical home based upon a number of legislative findings, including that multiple studies have demonstrated that when minorities have a medical home, racial and ethnic disparities in terms of medical access disappear and the costs of healthcare decrease.

New Jersey

Laws and Legislation

- **N.J. Rev. Stat. § 45:9-7.2 et. seq.**³⁰⁹- Requires that the State Board of Medical Examiners include instruction in cultural competency designed to address the problem of race and gender-based disparities in medical treatment decisions as a condition of receiving a diploma from a college of medicine in this State.

New Mexico

Laws and Legislation

- **N.M. Stat. Ann. § 11-18-1 et. seq.**³¹⁰-The "State-Tribal Collaboration Act" requires state agencies to adopt practices to promote cultural competency in providing services to American Indians or Alaska Natives and identifies reducing health disparities as a goal.
- **Senate Memorial 33 - 2012**³¹¹- Encourages state agencies to adopt a policy to address institutional racism, as it results in racial disparities with respect to health, education, criminal justice, employment and housing, by January 1, 2013.

Oklahoma

Laws and Legislation

- **Okla. Stat. tit. 70, § 697.1 et. seq.**³¹²- Establishes the Physician Manpower Training Commission to establish and administer cost-sharing programs for internship and residency physician training. Not less than fifty percent (50%) of the subsidy for these programs shall be used in the training of primary healthcare and family/general practice physicians for the rural and medically underserved areas of the state.

Rhode Island

Laws and Legislation

- **R.I. Gen. Laws § 23-14.1-1 et. seq.**³¹³- Establishes the health professional loan repayment program for physicians, dentists, dental hygienists, nurse practitioners, certified nurse midwives, physician assistants and any other eligible healthcare professional under who desire to serve the healthcare needs of medically underserved individuals in Rhode Island.

Texas

Laws and Legislation

- **Tex. Education Code Ann. § 51.711 et. seq.**³¹⁴- Establishes the medical and healthcare professions recruitment fund for the purpose of recruiting underrepresented ethnic minorities to programs of healthcare professions at institutions of higher education.
- **Tex. Government Code Ann. § 487.251 et. seq.**³¹⁵- Establishes the Texas Health Service Corps Program for Medically Underserved Areas to assist these communities in recruiting and retaining physicians.

Virginia

Laws and Legislation

- **Va. Code § 32.1-122.6:1**³¹⁶- Establishes a physician loan repayment program for recent medical school graduates who agree to perform a period of medical service in the Commonwealth in a medically underserved area or a health professional shortage area.
- **SI 49 (Virginia)**: Social workers; Department of Health Professions to study need for additional, etc., workers.
 - Primary Sponsor(s): Jenn McClellan.
 - Description: “Requests that the Department of Health Professions convene a work group, which shall include certain stakeholders listed in the bill, to...(ii) identify opportunities for the Commonwealth's social work workforce to successfully serve and respond to increasing biopsychosocial needs of individuals, groups, and communities in areas related to aging, child welfare, social services, military and veterans affairs, criminal justice, juvenile justice, corrections, mental health, substance abuse treatment, and **other health and social determinants**; (iii) gather information about current social workers in the Commonwealth related to level of education, school of social work attended, level of licensure, job title and classification, years of experience, gender, employer, and compensation; (iv) analyze the impact of compensation levels on social workers' job satisfaction and performance, as well as its impact on the likelihood of other persons entering the profession and any complications to such compensation levels caused by student debt; and (v) make recommendations for additional sources of funding to adequately compensate social workers and increase the number of social workers in the Commonwealth.”
 - Status: Enacted.

Washington

Laws and Legislation

- **Wash. Rev. Code § 28B.115.010 et. seq.**³¹⁷- Establishes the health professional loan repayment and scholarship program for credentialed health professionals serving in health professional shortage areas.

- **Wash. Rev. Code § 43.80.615³¹⁸**- Requires the state Department of Health to establish a multicultural health awareness and education program to train health professionals to care for diverse populations.

Level of Income

Existing U.S. Legislation, Policies, and Programs (By State)

Pattern/Summary: State laws that address poverty/low-income groups either (1) direct benefits toward underprivileged/low-income communities to reduce health disparities or (2) incentivize physicians to work within underprivileged/low-income communities.

California

Laws and Legislation

- **Cal. Health and Safety Code § 124174.6³¹⁹**- The Department of Public Health will establish a grant program within the Public School Health Center Support Program to provide technical assistance, and funding for the expansion, renovation, and retrofitting of existing school health centers, and the development of new school health centers. The department shall give preference for funding to the following schools: schools in medically underserved areas, schools with a high percentage of low-income and uninsured children and youth, and schools with large numbers of limited English proficient (LEP) children and youth.

Colorado

Laws and Legislation

- **Col. Rev. Stat. § 25-4-2204 et. seq.³²⁰**- Creates the Office of Health Equity within the Department of Public Health and Environment to serve in a coordinating, educating, and capacity-building role for state and local public health programs and community-based organizations. Outlines powers and duties, including promoting health equity in Colorado by implementing strategies to address the varying causes of health disparities, including economic, physical and social environment; and providing public education on health equity, health disparities and the social determinants of health.

Connecticut

Laws and Legislation

- **Conn. Gen. Stat. § 10a-109b³²¹**- Requires the University of Connecticut Health Center to include a health disparities institute to enhance research and the delivery of care to minority and medically underserved populations of the state. The law also requires an institute for clinical and translational science to be located on the campus of The University of Connecticut Health Center.

Florida

Laws and Legislation

- **Fla. Stat. § 381.4018³²²**- The Department of Health shall serve as a coordinating and strategic planning body to actively assess the state's current and future physician workforce needs. The department must also develop strategies that would provide monetary incentives for physicians to relocate to underserved areas of the state.

Hawaii

Laws and Legislation

- **Hawaii Rev. Stat. § 321-1.5³²³**- Establishes within the Department of Health a Primary Healthcare Incentive Program that will investigate and analyze the extent, location, and characteristics of medically underserved areas, and the numbers, location, and characteristics of medically underserved persons in Hawaii, and develop a strategy for meeting the health needs of those populations based upon the findings.

Illinois

Laws and Legislation

- **Ill. Rev. Stat. Ch. 20 § 5/5-565³²⁴**- Requires the State Board of Health to deliver to the Governor, for presentation to the General Assembly, a State Health Improvement Plan which includes priorities and strategies for reducing and eliminating health disparities in areas such as racial and ethnic, gender, age, socio-economic, and geographic disparities, by January 1, 2016 and every five years thereafter.
- **Ill. Rev. Stat. Ch. 20 § 2310/2310-76³²⁵**- Amends the Department of Public Health powers and duties, creating the Chronic Disease Prevention and Health Promotion task force. Particular emphasis is placed on addressing health disparities and targeting high-risk populations, especially in communities where racial, ethnic and socioeconomic factors contribute to higher incidence of chronic disease.

Louisiana

Laws and Legislation

- **La. Rev. Stat. Ann. § 46:978.1 et. seq.³²⁶**- The Department of Health and Hospitals shall develop and implement a medical home system of care for Medicaid recipients and the low-income uninsured citizens of the state with the purpose of providing a coordinated continuum of care, the cost of the current healthcare delivery system shall be reduced, health outcomes shall improve, and the disparities in access to healthcare among the state's populations shall be reduced.
- **La. Rev. Stat. Ann. § 46:2731³²⁷**- Establishes the "Health Trust Fund" within the state treasury. Among the approved purposes for monies from the fund are health workforce development and retention, disease specific treatment

programs, and expanding access to healthcare services in medically underserved areas.

- **House Resolution 146, 2012**³²⁸- Creates a study committee to examine and make recommendations with respect to the structure of the African American family as it relates to education outcomes, socioeconomic factors, and health disparities. Requires the study committee to report to the House Committee on Health and Welfare by March 1, 2013.

Maine

Laws and Legislation

- **Me. Rev. Stat. Ann. tit. 22 § 413**³²⁹- The Maine Center for Disease Control and Prevention, the Statewide Coordinating Council for Public Health, the district coordinating councils for public health and Healthy Maine Partnerships shall undertake a universal wellness initiative to ensure that all people of the State have access to resources and evidence-based interventions in order to know, understand and address health risks and to improve health and prevent disease. A particular focus must be on the uninsured and others facing health disparities.

Massachusetts

Laws and Legislation

- **Mass. Gen. Laws Ann. ch. 40J § 6D**³³⁰- Establishes an institute for healthcare innovation, technology and competitiveness, to be known as the Massachusetts e-Health Institute. Included in the outlined duties, the institute director shall prepare and annually update a statewide electronic health records plan and an annual update thereto. Each plan is to be focused on community-based implementation, particularly for providers such as community health centers that serve underserved populations, including, but not limited to, racial, ethnic and linguistic minorities, uninsured persons, and areas with a high proportion of public payer care.

Minnesota

Laws and Legislation

- **Minn. Stat. § 62J.496**³³¹- Establishes an account to finance the purchase of certified electronic health records or qualified electronic health records, enhance the utilization of electronic health record technology, train personnel in the use of electronic health record technology; and improve the secure electronic exchange of health information. Among the eligible borrowers are entities that serve uninsured, underinsured, and medically underserved individuals, regardless of whether such area is urban or rural.
- **Minn. Stat. § 137.42**³³²- It is a goal of the state to reduce tobacco use among youth and to promote statewide and local tobacco use prevention activities to achieve this goal. Subdivision 6c states that the Commissioner of Health must give funding priority to programs that addresses disparities among populations of color related to tobacco use and other high-risk health-related behaviors.

Subdivision 8a prioritizes smoking cessation activities in low-income, indigenous, and minority communities.

Mississippi

Laws and Legislation

- **Miss. Code Ann. § 41-99-1 et. seq.**³³³- Establishes the Mississippi Qualified Health Center Grant Program for the purpose of making service grants to Mississippi qualified health centers for their use in providing care to uninsured or medically indigent patients in Mississippi. "Mississippi qualified health center" means a public or nonprofit entity that provides comprehensive primary care services that: (iii) Serves a designated medically underserved area or population, as provided in Section 330 of the Public Health Service Act.

New Mexico

Laws and Legislation

- **N.M. Stat. Ann. § 9-7-4.1**³³⁴- Requires the Department of Health, in conjunction with the New Mexico Health Policy Commission and other state agencies, to develop a comprehensive strategic plan for health that emphasizes prevention, personal responsibility, access and quality. The plan should include, but not be limited to addressing the diseases, injuries and risk factors for physical, behavioral and oral health that are the greatest cause of illness, injury or death in the state, with special attention to and recognition of the disparities that currently exist for different population groups.

Ohio

Laws and Legislation

- **Ohio Rev. Code Ann. § 185.01 et. seq.**³³⁵- Establishes the Patient Centered Medical Home Education Pilot Project. As a part of the project, the patient centered medical home education advisory group is directed to work with all medical and nursing schools in this state to develop appropriate curricula designed to prepare primary care physicians and advanced practice nurses to practice within the patient centered medical home model of care. The curricula is to include, but not be limited to, components that reflect, as appropriate, the special needs of patients who are part of a medically underserved population, including Medicaid recipients, individuals without health insurance, individuals with disabilities, individuals with chronic health conditions, and individuals within racial or ethnic minority groups.

Tennessee

Laws and Legislation

- **Tenn. Code Ann. § 68-1-117**³³⁶- Establishes a program at Meharry Medical College School of Medicine to develop resources for recruiting, training and deploying physicians for service in areas of Tennessee with disadvantaged and medically underserved populations.

Texas

Laws and Legislation

- **Tex. Education Code Ann. § 58.001 et. seq.**³³⁷- Provides that each resident physician being educated and trained at an accredited school of medicine shall be compensated by that school. Priority consideration is to be given to applicants who demonstrate a willingness to practice in medically underserved areas of Texas.
- **Tex. Government Code Ann. § 487.201 et. seq.**³³⁸- Creates the Medically Underserved Community-State Matching Incentive Program where medically underserved communities may sponsor a physician by contributing start-up money for the physician and having that contribution matched wholly or partly by state money.
- **Tex. Government Code Ann. § 487.251 et. seq.**³³⁹- Establishes the Texas Health Service Corps Program for Medically Underserved Areas to assist these communities in recruiting and retaining physicians.

Utah

Laws and Legislation

- **Utah Code Ann. § 26-10b-101 et. seq.**³⁴⁰- Subject to appropriations specified by the Legislature for this purpose, the department may make grants to public and nonprofit entities for the cost of operation of providing primary healthcare services to medically underserved populations.

UNNATURAL CAUSES Documentary and Awareness Campaign

- **DESCRIPTION:** A PBS documentary series covering how “the social circumstances in which we are born, live, and work” can disrupt one’s physical and mental health.³⁴¹
- **IMPACT:** [Thousands of organizations around the country](#) use *UNNATURAL CAUSES* to raise awareness of the social determinants of health.

Unstable and Poor-Quality Housing

Existing U.S. Legislation, Policies, and Programs (By State)

Pattern/Summary: Most state laws are designed to assist young people and families experiencing homelessness or housing insecurity.

Federal Programs—Housing/Homelessness Programs

John H. Chafee Foster Care Independence Program (CFCIP)

- **DESCRIPTION:** CFCIP funds state programs that help current and former foster care youths achieve self-sufficiency. State programs include help with education, employment, financial management, housing, emotional support, and assured connections to caring adults for older youth in foster care.³⁴²
- **URL:** <https://www.acf.hhs.gov/cb/grant-funding/john-h-chafee-foster-care-independence-program>

- **COMMENTS:** Improves socioeconomic and intergenerational determinants of mental health.

Transitional Living Program (for homeless youth)

- **DESCRIPTION:** Federal grants to community-based transitional living programs, both public and private. Transitional living programs *offer or refer the following services:* safe/stable living accommodations, life skills building, education opportunities, job attainment services, **mental healthcare**, and physical healthcare.
- **IMPACT:** In Fiscal Year 2018, transitional living programs helped over 2,080 youth suffering from homelessness to *transition to life on their own*.
- **URL:** <https://www.acf.hhs.gov/fysb/programs/runaway-homeless-youth/programs/transitional-living>
- **COMMENTS:** Improves socioeconomic determinants of health for youth experiencing homelessness. Also offers mental healthcare for issues resulting from interpersonal (i.e., family) trauma.

Street Outreach Program

- **DESCRIPTION:** “The program’s primary goal is to provide street-based services to runaway, homeless, and street youth under the age of 21 and who have been subjected to, or are at risk of being subjected to, sexual abuse, prostitution, sexual exploitation, and severe forms of trafficking; and to build relationships between street outreach workers and runaway, homeless, and street youth to move youth into stable housing and prepare them for independence.”
- **IMPACT:** Street outreach programs provide the following services: (1) street-based education and outreach, (2) access to emergency shelter, (3) survival aid, (4) individual assessments, (5) trauma-informed treatment and counseling, (6) prevention and education activities, (7) information and referrals, (8) crisis intervention, and (9) follow-up support.
- **URL:** <https://www.acf.hhs.gov/fysb/fact-sheet/street-outreach-program-fact-sheet>
- **COMMENTS:** Improves socioeconomic determinants for young people who are suffering homelessness and at risk of sexual abuse/exploitation.

Low Income Home Energy Assistance Program (LIHEAP)

- **DESCRIPTION:** LIHEAP provides “federally funded assistance in managing costs associated with home energy bills, energy crises, weatherization and energy-related minor home repairs.”³⁴³
- **IMPACT:** Fiscal Year 2017 data indicates that an estimated **5.4 million households** received assistance with heating costs through LIHEAP.³⁴⁴
- **URL:** <https://www.acf.hhs.gov/ocs/fact-sheet/liheap-fact-sheet>
- **COMMENTS:** Improves socioeconomic determinants by addressing poor housing quality.

U.S. Dept. of Energy Weatherization Assistance Program

- **DESCRIPTION:** This program “reduces energy costs for low-income households by increasing the energy efficiency of their homes, while ensuring their health and safety.”³⁴⁵
- **IMPACT:** “The program supports **8,500 jobs** and provides weatherization services to approximately **35,000 homes every year** using [Department of Energy] funds. Through weatherization improvements and upgrades, these households save on average **\$283 or more every year** according to a national evaluation of the program. Since the program began in 1976, WAP has helped improve the lives of more than **7 million families** through weatherization services.”³⁴⁶
- **URL:** <https://www.energy.gov/eere/wap/weatherization-assistance-program>
- **COMMENTS:** Improves socioeconomic determinants by addressing poor housing quality.

Continuum of Care (CoC) Homeless Assistance Program.

- **DESCRIPTION:** CoC “assists individuals and families experiencing homelessness by helping homeless individuals and families move into transitional and permanent housing.”³⁴⁷
- **URL:** <https://www.hudexchange.info/programs/coc/>
- **COMMENTS:** Improves socioeconomic determinants by moving homeless individuals/families into housing.

Emergency Solutions Grants (ESG) Program.

- **DESCRIPTION:** The ESG program provides grants intended to “assist individuals and families quickly regain stability in permanent housing after experiencing a housing crisis or homelessness.”
- **URL:** <https://www.hudexchange.info/programs/esg/>
- **COMMENTS:** Improves socioeconomic determinants by moving homeless individuals/families into housing.

New Mexico

Laws and Legislation

- **Senate Memorial 33 - 2012**³⁴⁸- Encourages state agencies to adopt a policy to address institutional racism, as it results in racial disparities with respect to health, education, criminal justice, employment and housing, by January 1, 2013.

Food Insecurity and Diet Quality

Existing U.S. Legislation, Policies, and Programs (By State) Federal Programs—Health Programs

Nutrition, Physical Activity, and Obesity Program (NPAO)

- **DESCRIPTION:** NPAO is a cooperative agreement between the Center for Disease Control and Prevention's Division of Nutrition, Physical Activity and Obesity (DNPAO) and 25 state health departments. The program's goal is to prevent and control obesity and other chronic diseases through healthy eating and physical activity.
- **IMPACT:** DNPAO has assisted 25 states implement community health improvements.
- **URL:** <https://www.cdc.gov/obesity/downloads/UrbanDesignPolicies.pdf>
- **COMMENTS:** Improving community health through public infrastructure.

Drug, Alcohol, and Tobacco Use

Existing U.S. Legislation, Policies, and Programs (By State)

Minnesota

Laws and Legislation

- **Minn. Stat. § 137.42**³⁴⁹- It is a goal of the state to reduce tobacco use among youth and to promote statewide and local tobacco use prevention activities to achieve this goal. Subdivision 6c states that the Commissioner of Health must give funding priority to programs that addresses disparities among populations of color related to tobacco use and other high-risk health-related behaviors. Subdivision 8a prioritizes smoking cessation activities in low-income, indigenous, and minority communities.
- **Minn. Stat. § 145.986**³⁵⁰- The commissioner of health shall award competitive grants to community health boards established pursuant to section 145A.09 and tribal governments to convene, coordinate, and implement evidence-based strategies targeted at reducing the percentage of Minnesotans who are obese or overweight and to reduce the use of tobacco.

South Carolina

Laws and Legislation

- **S.C. Code Ann. § 11-11-170**³⁵¹- Establishes the Healthcare Tobacco Settlement Trust Fund and specifies that only interest earnings may be appropriated and used for, but not limited to, disease prevention and elimination of health disparities: diabetes, HIV/AIDS, hypertension, and stroke, particularly in minority populations.

Kognito At-Risk in Primary Care

- **DESCRIPTION:** At-Risk in Primary Care is an online professional development simulation for primary healthcare professionals intended to improve their skill, knowledge, and attitudes in addressing behavioral and mental health with their patients. The simulation is designed to improve users' knowledge and skill when screening and assessing patients for substance use, depression, Post-Traumatic Stress Disorder, and suicidal thoughts. It also enables them to conduct brief interventions using motivational interviewing to build trust and increase adherence and engagement in collaborative treatment planning, as well as to refer patients to treatment services and follow up on referrals.
- **Results First Rating: Highest rated**
- **COMMENTS:** Mental health, Substance use

Recent Resettlement, Immigration, or Emigration

Existing U.S. Legislation, Policies, and Programs (By State)

Pattern/Summary: Most state laws require cultural competency trainings for healthcare professionals, which improves the experience of recent immigrants from non- anglophone countries.

California

Laws and Legislation

- **Cal. Business and Professional Code § 852³⁵²**- Establishes the Task Force on Culturally and Linguistically Competent Physicians and Dentists to develop continuing education programs that include foreign language training for physicians and dentists. The task force will also assess the need for voluntary cultural and linguistic competency certification standards.
- **Cal. Insurance Code § 10133.8³⁵³**- Requires insurance providers to provide appropriate access to translated materials and language assistance. The regulations include an assessment of the needs of the insured group and surveying the language preferences and needs of the insured. The insurer is required to translate vital documents; the number of languages required depends on the size of the population. The insurer is required to inform limited-English-proficient insured of the availability of interpreter services.
- **Cal. Health and Safety Code § 1568.15 et. seq.³⁵⁴**- Alters the composition of the Alzheimer's Disease and Related Disorders Advisory Committee and requires a review of state policies related to the disease. It recognizes the need to serve non-English speakers and ethnically diverse populations.
- **Cal. Code § 1300.67.04³⁵⁵**- Requires health insurance plans to provide language assistance to enrollees. The law requires service plans to provide translations for vital documents. The number of languages documents must be translated into depends on the enrollment size of the plan and linguistic makeup of the enrollees.

Hawaii

Laws and Legislation

- **Hawaii Rev. Stat. § 371-34**³⁵⁶- Requires state-funded entities to provide free language services.
- **HR 143, SCR 143, and SR 79 2012**³⁵⁷- Requests that the Governor direct all state departments to comply with the United States Office of Management and Budget's Statistical Policy Directive No. 15, "Race and Ethnic Standards for Federal Statistics and Administrative Reporting," which separates the "Asian and Pacific Islander" category into two categories entitled "Asians" and "Native Hawaiians and Other Pacific Islanders."

Maryland

Laws and Legislation

- **Md. Health-General Code Ann. § 15-143**³⁵⁸- Requires the Governor to include in the budget bill for Fiscal Year 2008 at least \$3,000,000 in General Fund State support for an immigrant health initiative to provide healthcare services for all legal immigrant children under the age of 18 years and pregnant women who meet program eligibility standards and arrived in the United States on or after August 22, 1996.
- **Md. Health-General Code Ann. § 19-1A-01**³⁵⁹- Requires the Healthcare Commission to establish a Patient Centered Medical Home Program. The commission is charged with ensuring that a participating patient centered medical home provides ongoing culturally and linguistically appropriate care for the purpose of reducing health disparities.
- **Md. Health-General Code Ann. § 20-1301 et. seq.**³⁶⁰- Establishes the Cultural and Linguistic Healthcare Professional Competency Program with the purpose of incorporating cultural and linguistic abilities into therapeutic and medical evaluation and treatment.

Massachusetts

Laws and Legislation

- **Mass. Gen. Laws Ann. ch. 40J § 6D**³⁶¹- Establishes an institute for healthcare innovation, technology and competitiveness, to be known as the Massachusetts e-Health Institute. Included in the outlined duties, the institute director shall prepare and annually update a statewide electronic health records plan and an annual update thereto. Each plan is to be focused on community-based implementation, particularly for providers such as community health centers that serve underserved populations, including, but not limited to, racial, ethnic and linguistic minorities, uninsured persons, and areas with a high proportion of public payer care.

Minnesota

Laws and Legislation

- **Minn. Stat. § 145A.14**³⁶²- The commissioner may make special grants to furnish health services for migrant agricultural workers and their families in areas of the

state where significant numbers of migrant workers are located; and to establish, operate, or subsidize clinic facilities and services to furnish health services for American Indians who reside off reservations. Also provides \$1,500,000 per year available to tribal governments for maternal and child health activities, activities to reduce health disparities, and emergency preparedness.

New Jersey

Laws and Legislation

- **N.J. Rev. Stat. § 45:9-7.2 et. seq.**³⁶³- Requires that the State Board of Medical Examiners include instruction in cultural competency designed to address the problem of race and gender-based disparities in medical treatment decisions as a condition of receiving a diploma from a college of medicine in this State.

Oregon

Laws and Legislation

- **Or. Rev. Stat. § 676.400**³⁶⁴- In order to achieve the goal of universal access to adequate levels of high quality healthcare at an affordable cost for all Oregonians, regardless of ethnic or cultural background, the legislature directs health professional regulatory boards in the state to establish programs to increase the representation of people of color and bilingual people on the boards and in the professions that they regulate.

Texas

Laws and Legislation

- **Tex. Human Resources Code Ann. § 2.001 et. seq.**³⁶⁵- Establishes the Interagency Council for Addressing Disproportionality. One of the stated goals for the council is to assist the Health and Human Services Commission in eliminating health and health access disparities in Texas among racial, multicultural, disadvantaged, ethnic, and regional populations. This chapter expires December 1, 2013.

Utah

Laws and Legislation

- **Utah Code Ann. § 26-7-2**³⁶⁶- Establishes the Center for Multicultural Health within the Utah Department of Health to address multicultural and minority health issues in the state.

Virginia

Laws and Legislation

- **Va. Code § 32.1-122.7**³⁶⁷- Establishes the Virginia Health Workforce Development Authority to facilitate the development of a statewide health professions pipeline that identifies, educates, recruits, and retains a diverse, appropriately geographically distributed and culturally competent quality workforce.

Washington

Laws and Legislation

- **Wash. Rev. Code § 43.80.615**³⁶⁸ - Requires the state Department of Health to establish a multicultural health awareness and education program to train health professionals to care for diverse populations.

Immigrant and Refugee Participation in Social Support Groups

- **DESCRIPTION:** LGBTQ+ African and Caribbean immigrants and refugees experienced immigration stressors, social isolation, mental health issues, and challenges to meet the social determinants of health. Participation in social support groups resulted in benefits at multiple levels, from the intrapersonal to structural levels.³⁶⁹
 - **LEVEL 1—INTRAPERSONAL:** participants in social support groups personally experiences higher self-acceptance and improved mental health.
 - **LEVEL 2—INTERPERSONAL:** participants noticed reduced social isolation and developed new friendships.
 - **LEVEL 3—COMMUNITY:** participants experienced greater reciprocity, reduced stigma, and decreased discrimination.
 - **LEVEL 4—STRUCTURAL:** participants had improvements in housing, employment, immigration opportunities, and healthcare.

Interpersonal Determinants of Health

Social Network—Peer Support

Youth-Nominated Support Team-Version II

- **DESCRIPTION:** A psychoeducational, social support intervention for adolescents hospitalized in a psychiatric unit who have recently reported a suicide attempt or serious thoughts about committing suicide. In this program, adolescents nominate several “caring adults” to serve as support persons. These adults attend a psychoeducational session to learn about the youth’s problem list and treatment plan, suicide warning signs, communicating with adolescents, and how to be helpful in supporting treatment adherence and positive behavioral choices.³⁷⁰
- **URL:** <https://evidencebasedprograms.org/programs/youth-nominated-support-team-version-ii-program-to-prevent-adolescent-suicide/>
- **COMMENTS:** Improves mental health through strengthened interpersonal determinants. In this case, by building an interpersonal relationship between the suicidal adolescent and the caring adult.

Social Discrimination

Existing U.S. Legislation, Policies, and Programs (By State)

Pattern/Summary: Most state-level laws on social discrimination involve either (1) requiring social competency trainings to reduce discrimination in healthcare settings, or (2) combatting racism through emergency measures (such as declaring it a public health emergency) and directing resources toward stopping it.

California

Laws and Legislation

- **Cal. Bus. and Prof. Code § 2190.1**³⁷¹- Requires cultural competency training to be a part of the continuing education requirements for licensure of physicians and surgeons.

Connecticut

Laws and Legislation

- **Conn. Gen. Stat. § 20-10b**³⁷²- Requires that medical professionals applying for licensure renewal after October 1, 2010 must have at least one contact hour of continuing medical education or training in cultural competency.

Hawaii

Laws and Legislation

- **HCR 112-2021 and HR 90-2021 (Hawaii):** Declaring Racism As A Public Health Crisis.
 - *Description:* “The Hawai’i State Commission on the Status of Women supports HCR112, declaring racism as a public health crisis in Hawai’i. Racism is not the result of individual acts, but rather individual acts backed by and taught by systems that harm Native Hawaiian, Black, Asian and immigrant women in Hawai’i. The Legislature is one of the most important actors in the fight against racism because policy is the greatest barrier to a classless, non-hierarchical society.”
 - Comments: Available information seems to indicate that this is a largely symbolic resolution.
 - Primary Sponsor(s): Della Belatti.
 - Status: Enacted.

Illinois

Laws and Legislation

- **Ill. Rev. Stat. Ch. 20 § 2310/2310-210**³⁷³- Creates the Advisory Panel on Minority Health to assist the Department of Public Health in matters relating to minority health.

Maryland

Laws and Legislation

- **Md. Insurance Code Ann. § 27-914**³⁷⁴- Prohibits the use of specified racial or ethnic information to deny or otherwise affect a health insurance policy.

Intergenerational or Historical Determinants of Health
Parental Income/Poverty
Existing U.S. Legislation, Policies, and Programs (By State)

Connecticut

Laws and Legislation

- **Conn. Gen. Stat. § 17b-306**³⁷⁵- The Commissioner of Social Services, in consultation with the Commissioner of Public Health, shall develop a plan for a system of preventive health services for children under the HUSKY Health Plan, Parts A and B. The goal of the system shall be to improve health outcomes for all children enrolled in the HUSKY Plan and to reduce racial and ethnic disparities among children.

Louisiana

Laws and Legislation

- **House Resolution 146, 2012**³⁷⁶- Creates a study committee to examine and make recommendations with respect to the structure of the African American family as it relates to education outcomes, socioeconomic factors, and health disparities. Requires the study committee to report to the House Committee on Health and Welfare by March 1, 2013.

Pregnancy, Parenting, and Child Behavior
Existing U.S. Legislation, Policies, and Programs (By State)
Federal Programs—Child and Family Programs

Child Care and Development Fund (CCDF)

- **DESCRIPTION:** A federal and state partnership program that enables states to provide financial assistance to low-income families to access child care so they can work or attend a job training or educational program.³⁷⁷
- **IMPACT:** CCDF helps fund child care assistance for 1.3 million children under the age of 13 each month.³⁷⁸
- **URL:** <https://www.benefits.gov/benefit/615>
- **COMMENTS:** Improves socioeconomic and intergenerational determinants of mental health among participating families and their children.

Promoting Safe and Stable Families (PSSF)

- **DESCRIPTION:** PSSF provides states with federal funding, training, and technical assistance to meet the needs of families in crisis and at risk of child welfare interventions.³⁷⁹ It is “aimed at preventing child maltreatment, enabling children to remain safely with their families, and ensuring permanency for children in foster care.”³⁸⁰

- **URL:** <https://www.benefits.gov/benefit/828>
- **COMMENTS:** Improves socioeconomic and intergenerational determinants of mental health among participating families and their children

Delaware

Laws and Legislation

- **Del. Code Ann. tit. 16 § 196³⁸¹**- Establishes the Delaware Healthy Mother and Infant Consortium. One of the tasks identified for the Consortium is to coordinate efforts to address health disparities related to the health of women of childbearing age and infants.

Florida

Laws and Legislation

- **Fla. Stat. § 383.2162³⁸²**- Creates the Black Infant Health Practice Initiative. The initiative shall include reviews of infant mortality in select counties in this state in order to identify factors in the health and social services systems contributing to higher mortality rates among African-American infants.

Minnesota

Laws and Legislation

- **Minn. Stat. § 145.928³⁸³**- Sets forth the goal of eliminating health disparities as part of the state's Community Health Services and establishes a program to close the gap in the health status of American Indians and populations of color as compared with whites in the following priority areas: infant mortality, breast and cervical cancer screening, HIV/AIDS and sexually transmitted infections, adult and child immunizations, cardiovascular disease, diabetes, and accidental injuries and violence.
- **Minn. Stat. § 145A.14³⁸⁴**- The commissioner may make special grants to furnish health services for migrant agricultural workers and their families in areas of the state where significant numbers of migrant workers are located; and to establish, operate, or subsidize clinic facilities and services to furnish health services for American Indians who reside off reservations. Also provides \$1,500,000 per year to be available to tribal governments for maternal and child health activities, activities to reduce health disparities, and emergency preparedness.
- **Minn. Stat. § 256.962³⁸⁵**- Establishes a statewide campaign to raise public awareness on the availability of health coverage through medical assistance, general assistance medical care, and MinnesotaCare and to educate the public on the importance of obtaining and maintaining healthcare coverage. As part of the program, the Commissioner of Human Services is directed to award grants to organizations for outreach activities, including, but not limited to, targeting geographic areas with high rates of eligible but unenrolled children, including children who reside in rural areas; or racial and ethnic minorities and health disparity populations.

Missouri

Laws and Legislation

- **Mo. Rev. Stat. § 192.350 et. seq.**³⁸⁶- Establishes the Missouri State Advisory Council on Pain and Symptom Management within the Department of Health and Senior Services. Among the duties of the council is to examine the needs of adults, children, the terminally ill, racial and ethnic minorities, and medically underserved populations that have acute and chronic pain and make recommendations on acute and chronic pain management treatment practices.

Treatment: Child-Parent Psychotherapy (CPP)

- **DESCRIPTION:** CPP is a treatment for trauma-exposed children ages 0-5. Typically, the child is seen with his or her primary caregiver, and the dyad is the unit of treatment. CPP examines how the trauma and the caregivers' relational history affect the caregiver-child relationship and the child's developmental trajectory. A central goal is to support and strengthen the caregiver-child relationship as a vehicle for restoring and protecting the child's mental health. Treatment also focuses on contextual factors that may affect the caregiver-child relationship (e.g., culture and socioeconomic and immigration related stressors). Intended recipients of the intervention include caregivers' and children's maladaptive representations of themselves and each other and interactions and behaviors that interfere with the child's mental health. Over the course of treatment, caregiver and child are guided to create a joint narrative of the psychological traumatic event and identify and address traumatic triggers that generate dysregulated behaviors and affect.
- **URL:** <http://www.cebc4cw.org/program/child-parent-psychotherapy/detailed>
- **RESULTS FIRST RATING:** Highest rated.
- **COMMENTS:** Improves mental health through intergenerational determinants of health, particularly by strengthening the relationship with and parenting of the primary caregiver.
- **NOTES:** Child and family well-being, Crime and delinquency, Mental health.

Treatment: Teaching Family Model

- **DESCRIPTION:** The Teaching-Family Model (TFM) is a comprehensive, mental health treatment model that targets children and youths (ages 6-17) and is conducted in family-style, group care settings. TFM is based in a cognitive-behavioral approach, which is derived from behavioral principles and learning theory. TFM is designed to reduce problem behaviors and increase prosocial behaviors among youths. TFM aims to help youths internalize socially appropriate strategies and attitudes to enhance functioning and development. Overall goals of the program include reduced problem behaviors, increased prosocial behaviors, increased social skills, accomplishment of age-appropriate tasks, and relationship development.

- **URL:**
<https://web.archive.org/https://www.nrepp.samhsa.gov/ProgramProfile.aspx?id=143>
- **COMMENTS:** Improves mental health through interpersonal determinants of health, particularly familial connection and support.
- **NOTES:** Child and family well-being, Crime and delinquency, Mental health

Public Program: Child Care Resource and Referral Services

- **DESCRIPTION:** Government organizations that help parents find quality child care services through referrals to local providers, information on provider quality, available subsidies for low-income families, and other information.³⁸⁷
- **URL:** <https://www.childcareaware.org/resources/ccrr-search-form/>
- **COMMENTS:** Affordable and subsidized childcare can improve several social determinants of mental health:
 - Socioeconomic determinants for low-income families.
 - Interpersonal determinants for children through healthy social interaction.
 - Intergenerational determinants for children of low-income or socially dysfunctional families (through the first two improvements).

Legislation/Policy: Paid Parental Leave

- A. **DESCRIPTION:** Paid family leave (PFL) provides employees with paid time off for circumstances such as a **recent birth** or adoption, a parent or spouse with a serious medical condition, or a sick child.³⁸⁸
- **IMPACT:** Paid parental leave programs reduce infant mortality^{389 390 391} and is associated with reductions in postpartum depression.³⁹²
- **URL:**
<https://www.health.state.mn.us/communities/equity/reports/2015paidleave.pdf>
- **COMMENTS:** By improving socioeconomic determinants of mental health for parents, paid family leave reduces the likelihood that children of impoverished parents will be predisposed to poverty themselves.

Historic/Structural Discrimination (Redlining, Segregation, Incarceration)

Existing U.S. Legislation, Policies, and Programs (By State)

Pattern/Summary: Most state laws involve either (1) assistance for Native American tribes, (2) an emphasis on reducing health disparities in minority populations, or (3) requiring the inclusion of diverse communities in the healthcare decision-making process.

Federal Programs—Native American Programs

Tribal Temporary Assistance for Needy Families

- **DESCRIPTION:** Federal funds for recognized Native American tribes to (1) aid needy families so that children can be cared for in their own homes or in the

homes of relatives; (2) end the dependency of needy parents by promoting job preparation, work and marriage; (3) prevent and reduce the incidence of out-of-wedlock pregnancies; and (4) encourage the formation and maintenance of two-parent families.³⁹³

- **URL:** <https://www.acf.hhs.gov/ofa/programs/tribal/tribal-tanf>
- **COMMENTS:** Improves socioeconomic determinants of health for Native American families and intergenerational determinants for their children.

Indian Child Welfare Act Programs

- **DESCRIPTION:** These programs protect the integrity, stability, and security of Native American tribes and Alaskan Natives by preventing the separation of families and granting federal assistance to tribal child and family service programs.³⁹⁴
- **URL:** <https://www.bia.gov/bia/ois/dhs/icwa>
- **COMMENTS:** Improves familial social determinants of mental health by funding child and family services among Native American tribes.

Indian Family and Child Education (FACE)

- **DESCRIPTION:** "The purpose of the program is to begin educating children at an early age through parental involvement, to increase high school graduation rates among Indian parents, and to encourage life-long learning."³⁹⁵
- **IMPACT:** FACE currently has programs in 49 Bureau of Indian Education funded schools. "Evaluation indicates that FACE programs are succeeding in addressing achievement gaps for American Indian children primarily located on rural reservations, and in better preparing them for school."³⁹⁶
- **URL:** <https://www.bie.edu/topic-page/early-childhood-education>
- **COMMENTS:** Improves socioeconomic determinants by closing the education achievement gap between Native American children and other populations.

Arizona

Laws and Legislation

- **Ariz. Rev. Stat. §15-1643**³⁹⁷ - Establishes the Arizona health education system in the college of medicine at the University of Arizona. One of the purposes of the system is to develop programs to recruit and retain minority students in health professions.

Arkansas

Laws and Legislation

- **Ark. Code § 6-5-801 et. seq.**³⁹⁸ - Establishes the "Healthcare Student Summer Enrichment Program for Underrepresented Student Populations" within the Department of Higher Education. The program is an intensive six-week program aimed at increasing awareness of medical career opportunities for racial and ethnic minority undergraduate students.
- **Ark. Code § 17-80-301 et. seq.**³⁹⁹ - Requires appointing authorities for state health-related agencies, boards, and commissions to consider appointment

- recommendations submitted by minority health-related professional associations in order to ensure that minority health issues and cultural competency are represented in health policy decisions.
- **Ark. Code § 19-12-114:** Instructs the Arkansas Minority Health Commission to establish and administer the Arkansas Minority Health Initiative for screening, monitoring, and treating hypertension, strokes, and other disorders disproportionately critical to minority groups in Arkansas.
 - **Ark. Code § 20-2-101 et. seq:** Establishes the Arkansas Minority Health Commission to address health disparities in the state.
 - **Ark. Code § 20-15-1801 et. seq:** Establishes the Arkansas HIV-AIDS Minority Task Force to study ways to strengthen HIV prevention programs, address the needs of those living with HIV and AIDS, and develop specific strategies for reducing the risk of HIV and AIDS in the state's minority communities.

California

Laws and Legislation

- **Cal. Government Code § 8310.5⁴⁰⁰**- Requires any state agency, board, or commission which directly or by contract collects demographic data as to the ancestry or ethnic origin of Californians to use separate collection categories and tabulations for each major Asian and Pacific Islander group as set forth in this section.
- **Cal. Government Code § 8310.7⁴⁰¹**- Requires the Departments of Industrial Relations and Fair Employment and Housing to collect and publish the demographic data established in § 8310.5 on the web site of the agency on or before July 1, 2012, and annually thereafter.
- **Cal. Health and Safety Code § 128330 et. seq.⁴⁰²**- The Office of Statewide Health and Planning shall establish the Health Professions Education Foundation. The members may include representatives of minority groups that are underrepresented in the health professions and health professionals. One of the goals is to offer scholarship or loans to African-American, Native American, and Hispanic-American students and other students from underrepresented groups accepted to or enrolled in schools of medicine, dentistry, nursing, or other health professions.
- **Cal. ACR 114⁴⁰³**- (Risk Factors and Commission) Establishes a Task Force on Diabetes and Obesity to study factors contributing to the high rates of diabetes and obesity in Latinos, African-Americans, Asian Pacific Islanders, and Native Americans.
- **Cal. Health and Saf. Code § 150 et. seq.⁴⁰⁴**- Establishes the Office of Multicultural Health within the State Department of Public Health. The office will work toward closing health status gaps among racial and ethnic minorities. Responsibilities of the office include developing a strategic minority health plan, providing cultural and linguistic competency training to health professionals, and providing assistance to help other public and private entities locate funding sources for multicultural health initiatives.
- **Cal. Health and Safety Code § 127875 et. seq.⁴⁰⁵**- Creates the Health Professions Career Opportunity Program designed to increase the number of

ethnic minorities in health professional training and increase the number of minority health professionals practicing in medically underserved areas.

Colorado

Laws and Legislation

- **Col. Rev. Stat. § 25-4-2203**⁴⁰⁶- Establishes the Health Disparities Grant Program within the Department of Public Health and Environment to provide financial support for statewide initiatives that address prevention, early detection, and treatment of cancer and cardiovascular/pulmonary diseases in underrepresented populations.

Connecticut

Laws and Legislation

- **Conn. Gen. Stat. § 2-122**⁴⁰⁷- Establishes the Asian Pacific American Affairs Commission. This commission, among other topics, should address any issues dealing with access to healthcare or mental health and addiction services.
- **Conn. Gen. Stat. § 38a-1051**⁴⁰⁸- Establishes a Commission on Health Equity with the mission of eliminating disparities in health status based on race, ethnicity, gender and linguistic ability, and improving the quality of health for all of the state's residents.

Delaware

Laws and Legislation

- **Del. Code Ann. tit. 16 § 9908**⁴⁰⁹- The Board of Directors of the Delaware Institute of Medical Education and Research shall serve as an advisory board to the Healthcare Commission. One of the Board's multiple responsibilities is to develop a recruitment program to encourage medical school applications from minorities and residents of rural counties and underserved areas of Delaware.

Florida

Laws and Legislation

- **Fla. Stat. § 20.43**⁴¹⁰- Establishes the Office of Minority Health within the Department of Health.
- **Fla. Stat. § 381.7351 et. seq.**⁴¹¹- Creates the Reducing Racial and Ethnic Health Disparities: Closing the Gap Act grant program to stimulate the development of community-based and neighborhood-based projects which will improve the health outcomes of racial and ethnic populations.
- **Fla. Stat. § 409.147**⁴¹²- Provides for the designation of "children's zones" where children in disadvantaged areas can be provided with a more positive educational and social environment. Among the goals of these zones is to eliminate health disparities between racial and cultural groups.

Illinois

Laws and Legislation

- **Ill. Rev. Stat. Ch. 20 § 5/5-565⁴¹³**- Requires the State Board of Health to deliver to the Governor, for presentation to the General Assembly, a State Health Improvement Plan which includes priorities and strategies for reducing and eliminating health disparities in areas such as racial and ethnic, gender, age, socio-economic, and geographic disparities, by January 1, 2016 and every five years thereafter.
- **Ill. Ann. Stat. Ch. 110 § 925/2⁴¹⁴**- The Illinois Department of Public Health will establish a program to encourage minority students to enroll in and complete dental school in the state.
- **Ill. Ann. Stat. Ch. 110 § 978/5⁴¹⁵**- The Illinois Department of Public Health will establish a program providing grants to podiatric medicine residency programs, scholarships to podiatry students, and a loan repayment program for podiatrists who will agree to practice in underserved areas of the state. Minority students shall be given preference for scholarships.
- **Ill. Rev. Stat. Ch. 20 §2310/2310-215⁴¹⁶**- Establishes a Center for Minority Health Services to advise the Department of Public Health on matters pertaining to the health needs of minority populations.
- **Ill. Rev. Stat. Ch. 20 § 4075/20⁴¹⁷**- Creates the Commission on Children and Youth Act. Among the factors stated for the Commission to consider in creating a five year plan are disparities in access and outcomes based on racial, ethnic, geographic, gender, sexual orientation, disability, and other variables.
- **Ill. Rev. Stat. Ch. 20 § 2310/2310-216⁴¹⁸**- Establishes the Culturally Competent Healthcare Demonstration Program aimed at improving the quality of healthcare for ethnic and racial minorities.
- **Ill. Rev. Stat. Ch. 20 § 2310/2310-76⁴¹⁹**- Amends the Department of Public Health power and duties, creating the Chronic Disease Prevention and Health Promotion task force. Particular emphasis is placed on addressing health disparities and targeting high-risk populations, especially in communities where racial, ethnic and socioeconomic factors contribute to higher incidence of chronic disease.
- **HB 158 (Illinois)**: Healthcare and Human Services.
 - **Primary Sponsor(s)**: Jacqui Collins, Mattie Hunter, Kimberly Lightford, Patricia Van Pelt, Robert Peters, Camille Lilly, Carol Ammons, Mary Flowers, Chris Welch, LaToya Greenwood.
 - **Impact/Comments**: “*HB 158 would also create a **Health and Human Services Taskforce** and an **Anti-Racism Commission** to make recommendations for tangible solutions to be enacted by hospitals, healthcare organizations and the General Assembly as the conversation and analysis of racial inequities in the healthcare system continue.*”
 - **Status**: Enacted.

Indiana

Laws and Legislation

- **Ind. Code § 16-46-11-1 et. seq.**⁴²⁰- Directs the state department of health to develop and implement a state structure more conducive to addressing the health disparities of the minority populations in Indiana including: monitoring minority health progress; funding minority health programs, research, and other initiatives; staffing a minority health hotline; developing and implementing an awareness program that will increase the knowledge of health and social service providers to the special needs of minorities; and developing and implementing culturally and linguistically appropriate health promotion and disease prevention programs.
- **Ind. Code § 16-46-6-1 et. seq.**⁴²¹- Establishes the Interagency State Council on Black and Minority Health within the state Department of Health.
- **Ind. Code § 16-19-14-1 et. seq.**⁴²²- Establishes the Office of Minority Health within the state Department of Health. This chapter expires July 1, 2014.
- **Ind. Code § 4-12-5-4**⁴²³- Subject to appropriation, monies from the Indiana Healthcare Trust Fund may be distributed to one or more programs, including: healthcare services and preventive measures that address the special healthcare needs of minorities; addressing minority health disparities; and expanding community based minority health infrastructure—among others.

Iowa

Laws and Legislation

- **Iowa Code Ann. § 135.158**⁴²⁴- Establishes the purposes of a “medical home”. Included in the stated purposes is to reduce disparities in healthcare access, delivery, and healthcare outcomes.
- **Iowa Code Ann. § 135.12**⁴²⁵- Establishes the Office of Minority and Multicultural Health within the Department of Public Health.

Kentucky

Laws and Legislation

- **Ky. Rev. Stat. § 205.20**⁴²⁶- Outlines the duties of the Cabinet for Health and Family Services, which includes, but is not limited to: Preparing an annual report for the Legislative Research Commission which contains an overview of the health status of minority elderly Kentuckians and identifies specific diseases and health conditions for which the minority elderly are at greater risk than the general population.
- **Ky. Rev. Stat. § 216.2920 et. seq.**⁴²⁷- Provides guidelines for health data collection. Included are requirements for evaluating the status of women's health including data on ethnicity and reporting in odd-numbered years on the special health needs of the minority population, identifying the diseases that affect this population disproportionately and provide recommendations to address this disparity.

Maryland

Laws and Legislation

- **Md. Health-General Code Ann. § 1-214⁴²⁸**- Requires health occupations boards to collect specified racial and ethnic information. Requires that, to the extent practicable, members of health occupations boards reasonably reflect the geographic, racial, ethnic, and cultural and gender diversity of the state.
- **Md. Health-General Code Ann. § 13-1115⁴²⁹**- Establishes a Baltimore City Community Health Coalition that includes representatives of community-based groups, including minority and medically underserved populations. The purpose of the Coalition is to identify all existing cancer prevention, education, screening, and treatment programs, evaluate those programs, and develop a comprehensive plan for cancer prevention, education, screening, and treatment in Baltimore city.
- **Md. Health-General Code Ann. § 19-134⁴³⁰**- Requires the Maryland Commission on Healthcare to compile data on Minority Health and Health Disparities and publish its findings in the "Healthcare Disparities Policy Report Card" as required under § 20-1004(22).
- **Md. Health-General Code Ann. § 19-2101 et. seq.⁴³¹**- Establishes the Maryland Community Health Commission to increase access to healthcare through community health resources. The commission membership must have geographic balance and promote racial and gender diversity.
- **Md. Health-General Code Ann. § 20-1001 et. seq.⁴³²**- Establishes the Office of Minority Health and Health Disparities. Outlines the duties and responsibilities of the office. Requires the office to work collaboratively with universities, public health and social work programs, and allied health to create courses focusing on cultural competency, sensitivity and health literacy.
- **Md. Health-General Code Ann. § 20-1301 et. seq.⁴³³**- Establishes the Cultural and Linguistic Healthcare Professional Competency Program with the purpose of incorporating cultural and linguistic abilities into therapeutic and medical evaluation and treatment.
- **Md. Health-General Code Ann § 20-1401 et. seq.⁴³⁴**- Creates the Health Improvement and Disparities Reduction Act of 2012. Requires the secretary of mental health and hygiene to designate certain areas as Health Enterprise Zones, and to adopt an evaluation and reporting system for racial and ethnic health disparities.
- **Md. Insurance Code Ann. § 27-914⁴³⁵**- Prohibits the use of specified racial or ethnic information to deny or otherwise affect a health insurance policy.

Massachusetts

Laws and Legislation

- **Mass. Gen. Laws Ann. ch. 6A § 160⁴³⁶**- Establishes a health disparities council within, but not subject to the control of, the executive office of health and human services. The purpose of the council is to make recommendations to reduce and eliminate racial and ethnic disparities in access to quality healthcare and in health outcomes within the commonwealth.

- **Mass. Gen. Laws Ann. ch. 6A § 16K⁴³⁷**- Establishes a healthcare quality and cost council within, but not subject to control of, the executive office of health and human services. The purpose of the council is to promote public transparency of the quality and cost of healthcare in the commonwealth, and to seek to improve healthcare quality, reduce racial and ethnic health disparities and contain healthcare costs.
- **Mass. Gen. Laws Ann. ch. 40J § 6D⁴³⁸**- Establishes an institute for healthcare innovation, technology and competitiveness, to be known as the Massachusetts e-Health Institute. Included in the outlined duties, the institute director shall prepare and annually update a statewide electronic health records plan and an annual update thereto. Each plan is to be focused on community-based implementation, particularly for providers such as community health centers that serve underserved populations, including, but not limited to, racial, ethnic and linguistic minorities, uninsured persons, and areas with a high proportion of public payer care.

Michigan

Laws and Legislation

- **Mich. Comp. Laws § 333.2707⁴³⁹**- Establishes a grant program for minority students enrolled in medical schools, nursing programs, or physician's assistant programs.
- **Mich. Comp. Laws § 333.2227⁴⁴⁰**- Sets forth the powers and duties relating to racial and ethnic health disparities for the Department of Public Health.

Minnesota

Laws and Legislation

- **Minn. Stat. § 137.42⁴⁴¹**- It is a goal of the state to reduce tobacco use among youth and to promote statewide and local tobacco use prevention activities to achieve this goal. Subdivision 6c states that the Commissioner of Health must give funding priority to programs that addresses disparities among populations of color related to tobacco use and other high-risk health-related behaviors. Subdivision 8a prioritizes smoking cessation activities in low-income, indigenous, and minority communities.
- **Minn. Stat. § 145.928⁴⁴²**- Sets forth the goal of eliminating health disparities as part of the state's Community Health Services and establishes a program to close the gap in the health status of American Indians and populations of color as compared with whites in the following priority areas: infant mortality, breast and cervical cancer screening, HIV/AIDS and sexually transmitted infections, adult and child immunizations, cardiovascular disease, diabetes, and accidental injuries and violence.
- **Minn. Stat. § 145A.14⁴⁴³**- The commissioner of health may make special grants to furnish health services for migrant agricultural workers and their families in areas of the state where significant numbers of migrant workers are located; and to establish, operate, or subsidize clinic facilities and services to furnish health services for American Indians who reside off reservations. Also provides \$1,500,000 per year is to be available to tribal governments for maternal and

- child health activities, activities to reduce health disparities, and emergency preparedness.
- **Minn. Stat. § 256.962**⁴⁴⁴- Establishes a statewide campaign to raise public awareness on the availability of health coverage through medical assistance, general assistance medical care, and MinnesotaCare and to educate the public on the importance of obtaining and maintaining healthcare coverage. As part of the program, the Commissioner of Human Services is directed to award grants to organizations for outreach activities, including, but not limited to targeting geographic areas with high rates of eligible but unenrolled children, including children who reside in rural areas; or racial and ethnic minorities and health disparity populations.

Mississippi

Laws and Legislation

- **Miss. Code Ann. § 41-3-61**⁴⁴⁵- The State Board of Health is required to adopt guidelines applicable to physician practices, nurse practitioner practices and physician assistant practices in Mississippi that incorporate the principles of the patient-centered medical home based upon a number of legislative findings, including that: multiple studies have demonstrated that when minorities have a medical home, racial and ethnic disparities in terms of medical access disappear and the costs of healthcare decrease.

Missouri

Laws and Legislation

- **Mo. Rev. Stat. § 192.040**⁴⁴⁶- The Department of Health and Senior Services shall compile and issue reports and summaries of accomplishments and projects within the Department as may be of benefit and advantage to the public, including information concerning vital and mortuary statistics, respecting diseases, and instructing in the subject of hygiene. Such reports shall include information and statistics on Black health and the mortality of minority groups.
- **Mo. Rev. Stat. § 192.083 et. seq.**⁴⁴⁷- Establishes an Office of Minority Health within the Department of Health and Senior Services and outlines powers and duties.
- **Mo. Rev. Stat. § 192.350 et. seq.**⁴⁴⁸- Establishes the Missouri State Advisory Council on Pain and Symptom Management within the Department of Health and Senior Services. Among the duties of the Council is to examine the needs of adults, children, the terminally ill, racial and ethnic minorities, and medically underserved populations that have acute and chronic pain and make recommendations on acute and chronic pain management treatment practices.
- **Mo. Rev. Stat. § 208.533 et. seq.**⁴⁴⁹- Establishes a 20 member Commission on the Special Health, Psychological and Social Needs of Minority Older Individuals under the Division of Aging with the purpose of identifying the special needs of the minority older population in Missouri as compared to the older population at-large and make recommendations for meeting those needs.

Nebraska

Laws and Legislation

- **Neb. Rev. Stat. § 71-701**⁴⁵⁰- Establishes the Women's Health Initiative of Nebraska within the Department of Health and Human Services. Among the powers and duties of the Initiative is to serve as a clearinghouse for information regarding women's health issues, including but not limited to rural and ethnic disparities in health outcomes.
- **Neb. Rev. St. § 71-1628.07**⁴⁵¹- The Department of Health and Human Services shall establish a satellite office of minority health in each congressional district to coordinate and administer state policy relating to minority health.
- **Neb. Rev. Stat. § 71-7605 et seq.**⁴⁵²- Creates the Excellence in Healthcare Trust Fund which will be used for awarding grants for public health services which target federally recognized Native American tribes in Nebraska and organizations that focus on the health of minority groups. It also requires that the Department of Health and Human Services contract with the health clinics of Nebraska's federally recognized Native American tribes, Indian health organizations, or other public health organizations that have a substantial Native American clientele to provide educational and public health services targeted to Native American populations.

Nevada

Laws and Legislation

- **Nev. Rev. Stat. § 232.467 et. seq.**⁴⁵³- Establishes an Office of Minority Health within the Department of Health and Human Services and outlines powers and duties.
- **Nev. Rev. Stat. § 439.362**⁴⁵⁴- Requires that the District Board of Health in counties whose population is 400,000 or more contain two representatives who are physicians licensed to practice medicine in this State, one of whom is selected on the basis of his or her education, training, experience or demonstrated abilities in the provision of healthcare services to members of minority groups and other medically underserved populations.

New Jersey

Laws and Legislation

- **N.J. Rev. Stat. § 26:2-160 et. seq.**⁴⁵⁵- Establishes the New Jersey Office on Minority and Multicultural Health within the State Department of Health and outlines powers and duties.
- **N.J. Rev. Stat. § 26:2-182**⁴⁵⁶- Establishes the Task Force on Cancer Prevention, Early Detection and Treatment in New Jersey within the Department of Health and Senior Services and outlines powers and duties of the task force. The duties of the task force include, but are not limited to, closing the gap in cancer mortality rates between the total population and minorities.
- **N.J. Rev. Stat. § 45:9-7.2 et. seq.**⁴⁵⁷- Requires that the State Board of Medical Examiners include instruction in cultural competency designed to address the

problem of race and gender-based disparities in medical treatment decisions as a condition of receiving a diploma from a college of medicine in this State.

New Mexico

Laws and Legislation

- **N.M. Stat. Ann. § 9-7-11.1**⁴⁵⁸- Requires the Department of Health and the New Mexico Health Policy Commission to consult with governments of Indian nations, tribes and pueblos in order to develop a strategic plan for health. The strategic plan is to be published by July 1, 2004 and July 1 of subsequent even-numbered years and will a focus on prevention, personal responsibility, access, and quality.
- **N.M. Stat. Ann. § 11-18-1 et. seq.**⁴⁵⁹-The "State-Tribal Collaboration Act" requires state agencies to adopt practices to promote cultural competency in providing services to American Indians or Alaska Natives and identifies reducing health disparities as a goal.
- **Senate Memorial 33 - 2012**⁴⁶⁰- Encourages state agencies to adopt a policy to address institutional racism, as it results in racial disparities with respect to health, education, criminal justice, employment and housing, by January 1, 2013.

New York

Laws and Legislation

- **N.Y. Public Health Law § 240 et. seq.**⁴⁶¹- Establishes an Office of Minority Health within the state Department of Health and outlines the powers and duties of the office.
- **N.Y. Public Health Law § 900 et. seq.**⁴⁶²- Authorizes the commissioner of health, in collaboration with the commissioner of education and the president of the higher education services corporation to establish programs for loan repayment, scholarships, and grants to encourage and to increase the number of medical students choosing primary care, and to encourage those students to practice in medically underserved areas. There is also a provision to encourage minority participation in medicine.

North Carolina

Laws and Legislation

- **N.C. Gen. Stat. § 130A 16**⁴⁶³- All medical care providers required to report to the Division of Public Health shall collect and document patient self-reported race and ethnicity data and shall include such data in their reports to the Division.
- **N.C. Gen. Stat. § 130A-33.43 et. seq.**⁴⁶⁴- Establishes the Minority Health Advisory Council in the Department of Health and Human Services and outlines the powers and duties of the council.

Ohio

Laws and Legislation

- **Ohio Rev. Code Ann. § 183.18**⁴⁶⁵- Establishes the public health priorities trust fund in the state treasury. Money credited to the fund shall be used for, but not limited to the following purposes: Minority health programs, on which not less

- than 25 percent of the annual appropriations from the trust fund shall be expended.
- **Ohio Rev. Code Ann. § 185.01 et. seq.**⁴⁶⁶- Establishes the Patient Centered Medical Home Education Pilot Project. As a part of the project, the patient centered medical home education advisory group is directed to work with all medical and nursing schools in this state to develop appropriate curricula designed to prepare primary care physicians and advanced practice nurses to practice within the patient centered medical home model of care. The curricula is to include, but not limited to, components that reflect, as appropriate, the special needs of patients who are part of a medically underserved population, including Medicaid recipients, individuals without health insurance, individuals with disabilities, individuals with chronic health conditions, and individuals within racial or ethnic minority groups.
 - **Ohio Rev. Code Ann. § 3701.78**⁴⁶⁷- Establishes a Commission on Minority Health to promote health and the prevention of disease among members of minority groups.

Oregon

Laws and Legislation

- **Or. Rev. Stat. § 431.375**⁴⁶⁸- Directs the Department of Human Services to contract for provision of maternal and child public health services with the tribal governing council of recognized Indian tribes that request to receive funds under certain federal grant programs.
- **Or. Rev. Stat. § 676.400**⁴⁶⁹- In order to achieve the goal of universal access to adequate levels of high quality healthcare at an affordable cost for all Oregonians, regardless of ethnic or cultural background, the legislature directs health professional regulatory boards in the state to establish programs to increase the representation of people of color and bilingual people on the boards and in the professions that they regulate.

Rhode Island

Laws and Legislation

- **R.I. Gen. Laws § 23-1-43**⁴⁷⁰- Directs the Director of Health to establish a minority population health promotion program to provide health information, education, and risk reduction activities to reduce the risk of premature death from preventable disease in minority populations.

South Carolina

Laws and Legislation

- **S.C. Code Ann. § 11-11-170**⁴⁷¹- Establishes the Healthcare Tobacco Settlement Trust Fund and specifies that only interest earnings may be appropriated and used for, but not limited to, disease prevention and elimination of health disparities: diabetes, HIV/AIDS, hypertension, and stroke, particularly in minority populations.

Tennessee

Laws and Legislation

- **Tenn. Code Ann. § 68-1-2201 et. seq.**⁴⁷²- Establishes the Office of Minority Health within the Department of Public Health and sets for the powers and duties of the office.

Texas.

Laws and Legislation.

- **Tex. Human Resources Code Ann. § 2.001 et. seq.**⁴⁷³- Establishes the Interagency Council for Addressing Disproportionality. One of the stated goals for the Council is to assist the Health and Human Services Commission in eliminating health and health access disparities in Texas among racial, multicultural, disadvantaged, ethnic, and regional populations. This chapter expires December 1, 2013.
- **Tex. Education Code Ann. § 51.711 et. seq.**⁴⁷⁴- Establishes the medical and healthcare professions recruitment fund for the purpose of recruiting underrepresented ethnic minorities to programs of healthcare professions at institutions of higher education.
- **Tex. Education Code Ann. § 63.301 et. seq.**⁴⁷⁵-Establishes the permanent fund for minority health research and education to provide grants to institutions of higher education, including Centers for Teacher Education, that conduct research or educational programs that address minority health issues or form partnerships with minority organizations, colleges, or universities to conduct research and educational programs that address minority health issues.

Utah

Laws and Legislation

- **Utah Code Ann. § 9-9-104.6**⁴⁷⁶- Provides that the American Indian-Alaskan Native Health Liaison may participate in at least three of the joint meetings described in Subsection 9-9- 104.5(2)(a).
- **Utah Code Ann. § 26-7-2 et. seq.**⁴⁷⁷- Establishes the Office of Health Disparities Reduction within the Utah Department of Health to address multicultural and minority health issues in the state. Subject to budget constraints, the executive director shall appoint an individual as the American Indian-Alaskan Native Health Liaison.
- **Utah Code Ann. § 26-7-2**⁴⁷⁸- Establishes the Center for Multicultural Health within the Utah Department of Health to address multicultural and minority health issues in the state.

Virginia

Laws and Legislation

- **Va. Code § 32.1-14**⁴⁷⁹- Requires the State Board of Health to submit an annual report to the Governor and General Assembly which includes, but is not limited to, statistics and analysis regarding the health status and conditions of minority populations in the Commonwealth by age, gender, and locality.

- **Va. Code § 32.1-19**⁴⁸⁰- Requires the State Health Commissioner to designate a senior staff member of the Department, who shall be a licensed physician, to oversee minority health efforts of the Department.
- **Va. Code § 32.1-122.6:1**⁴⁸¹- Establishes a physician loan repayment program for recent medical school graduates who agree to perform a period of medical service in the Commonwealth in a medically underserved area or a health professional shortage area.

Geographic and Neighborhood-Related Determinants of Mental Health

Population Density and Urban/Rural Communities

Existing U.S. Legislation, Policies, and Programs (By State)

Pattern/Summary: Most state laws regarding mental health services in urban or rural communities involve directing healthcare professionals and support to underprivileged urban/rural areas.

Arkansas

Laws and Legislation

- **Ark. Code § 6-64-406**⁴⁸²- The Board of Trustees of the University of Arkansas shall consider applicants to the College of Medicine from rural medically underserved areas to address health disparities.

California

Laws and Legislation

- **Cal. Health and Safety Code § 106000 et. seq.**⁴⁸³- Established the Urban Community Health Institute and Center to Eliminate Health Disparities at the Charles R. Drew University of Medicine and Science to address the problem of disparate healthcare in the Los Angeles County Service Planning Area (SPA 6) and other multicultural communities.

Delaware

Laws and Legislation

- **Del. Code Ann. tit. 16 § 9908**⁴⁸⁴- The Board of Directors of the Delaware Institute of Medical Education and Research shall serve as an advisory board to the Healthcare Commission. One of the Board's multiple responsibilities is to develop a recruitment program to encourage medical school applications from minorities and residents of rural counties and underserved areas of Delaware.

Hawaii

Laws and Legislation

- **SR 22-2021 (Hawaii)**: Requesting the Office of Primary Care and Rural Health to facilitate discussions with key community health and social service organizations within west Hawaii and major healthcare stakeholders in state Senate District 3 to address the health and wellness needs of the most vulnerable by aligning the goals and objectives of key organizations into one shared 2030 Health Vision Plan.
 - Primary Sponsor(s): Dru Kanuha, Gil Keith-Agaran.
 - Impact/Comments: Coordinates with community health and social service organizations to accomplish key health and wellness objectives for the vulnerable.
 - Status: Enacted.

Illinois

Laws and Legislation

- **Ill. Rev. Stat. Ch. 20 § 5/5-565**⁴⁸⁵- Requires the State Board of Health to deliver to the Governor, for presentation to the General Assembly, a State Health Improvement Plan which includes priorities and strategies for reducing and eliminating health disparities in areas such as racial and ethnic, gender, age, socio-economic, and geographic disparities, by January 1, 2016 and every five years thereafter.
- **Ill. Rev. Stat. Ch. 20 § 4075/20**⁴⁸⁶- Creates the Commission on Children and Youth Act. Among the factors stated for the Commission to consider in creating a five year plan are disparities in access and outcomes based on racial, ethnic, geographic, gender, sexual orientation, disability, and other variables.

Kansas

Laws and Legislation

- **Kan. Stat. Ann. § 74-32,131 et. seq.**⁴⁸⁷- Establishes the Advanced Registered Nurse Practitioner Service Scholarship Program for students who agree upon completion of an advanced registered nurse practitioner program, to practice in a rural area or medically underserved area.

Louisiana

Laws and Legislation

- **La. Rev. Stat. Ann. § 40:2195.6**⁴⁸⁸- Requires the Department of Health and Hospitals to establish primary healthcare clinics in each of the rural parishes in the state if and when 100 percent federal funding becomes available for this purpose. The purpose is to expand primary healthcare and medical services to rural areas and develop greater access to healthcare for the underprivileged, working poor, and minorities.

Maryland

Laws and Legislation

- **Md. Health-General Code Ann. § 13-1115⁴⁸⁹**- Establishes a Baltimore City Community Health Coalition that includes representatives of community-based groups, including minority and medically underserved populations. The purpose of the Coalition is to identify all existing cancer prevention, education, screening, and treatment programs, evaluate those programs, and develop a comprehensive plan for cancer prevention, education, screening, and treatment in Baltimore city.
- **Md. Health-General Code Ann. § 19-2101 et. seq.**- Establishes the Maryland Community Health Commission to increase access to healthcare through community health resources. The Commission membership must have geographic balance and promote racial and gender diversity.

Minnesota

Laws and Legislation

- **Minn. Stat. § 62J.496⁴⁹⁰**- Establishes an account to finance the purchase of certified electronic health records or qualified electronic health records; enhance the utilization of electronic health record technology; train personnel in the use of electronic health record technology; and improve the secure electronic exchange of health information. Among the eligible borrowers are entities that serve uninsured, underinsured, and medically underserved individuals, regardless of whether such area is urban or rural.
- **Minn. Stat. § 137.38⁴⁹¹**- The Board of Regents of the University of Minnesota, through the University of Minnesota Medical School, is requested to implement initiatives designed to encourage newly graduated primary care physicians to establish practices in areas of rural and urban Minnesota that are medically underserved.
- **Minn. Stat. § 144.1501⁴⁹²**- Establishes a health professional education loan forgiveness program account. Eligible recipients include medical residents agreeing to practice in designated rural areas or underserved urban communities.
- **Minn. Stat. § 256.962⁴⁹³**- Establishes a statewide campaign to raise public awareness on the availability of health coverage through medical assistance, general assistance medical care, and MinnesotaCare and to educate the public on the importance of obtaining and maintaining healthcare coverage. As part of the program, the Commissioner of Human Services is directed to award grants to organizations for outreach activities, including, but not limited to, targeting geographic areas with high rates of eligible but unenrolled children, including children who reside in rural areas; or racial and ethnic minorities and health disparity populations.

Mississippi

Laws and Legislation

- **Miss. Code Ann. § 37-144-1 et. seq.**⁴⁹⁴- Establishes the Mississippi Rural Physicians Scholarship Program designed to recruit, identify and enroll undergraduate students who demonstrate necessary interest, commitment, aptitude and academic achievement to pursue careers as family physicians or other generalist physicians in rural or medically underserved areas of Mississippi.

Missouri

Laws and Legislation

- **Mo. Rev. Stat. § 191.980**⁴⁹⁵- Establishes the Missouri Area Health Education Centers program to improve the supply, distribution, availability, and quality of healthcare personnel in Missouri communities and promote access to primary care for medically underserved communities and populations.

Montana

Laws and Legislation

- **Mont. Code Ann. § 20-26-1501 et. seq.**⁴⁹⁶- Establishes a Healthcare Provider Incentive Program to pay the educational debts of physicians practicing in rural areas or medically underserved areas or for underserved populations.

Nebraska

Laws and Legislation

- **Neb. Rev. Stat. § 71-701**⁴⁹⁷- Establishes the Women's Health Initiative of Nebraska within the Department of Health and Human Services. Among the powers and duties of the Initiative is to serve as a clearinghouse for information regarding women's health issues including, but not limited to, rural and ethnic disparities in health outcomes.
- **Neb. Rev. St. § 85-1,130**⁴⁹⁸- Instructed the University of Nebraska Medical Center to develop a plan to increase the number of graduates of the center who specialize in primary care fields, who take residencies in primary care fields, and who establish practices in rural areas and other medically underserved areas of the state.

Nevada

Laws and Legislation

- **Nev. Rev. Stat. § 396.907**⁴⁹⁹- Establishes the Area Health Education Center Program within the University of Nevada School of Medicine to support education and training programs for students studying to become practitioners, or residents or practitioners who will provide or are providing healthcare services in medically underserved areas in this state, including urban and rural areas.

New Hampshire

NPAO-Coordinated Trail Improvements

- **DESCRIPTION:** The state health department has provided technical assistance to two local entities on improvements to community trails and the surrounding area.
 - The state health department provided technical assistance to make the needed changes to local trails, including installing a security camera, motion light detectors, benches, and flowers, and painting over graffiti along the trail. In addition, the HEAL Initiative engaged local businesses, community members, and students to create murals on two large buildings visible from the trail.
- **IMPACT:** As a result of these improvements to this portion of the WOW trail (named for the three bodies of water that can be seen from this rail-trail: Lake Winnepesaukee, Opechee Bay, and Lake Winnisquam), several local businesses have promoted the trail as a venue for walking and bicycling as part of their employee wellness programs. Many students also are now using the trail because of its link between a local school to a nearby library.
- **URL:** <https://www.cdc.gov/obesity/downloads/UrbanDesignPolicies.pdf>
- **COMMENTS:** Improves mental health by facilitating exercise.

New Mexico

Laws and Legislation

- **N.M. Stat. Ann. § 21-7-26 et. seq.**⁵⁰⁰- Requires the Board of Regents of the University of New Mexico to establish a primary care physician assistant training program designed to develop and expand physician residencies in family practice, internal medicine, obstetrics, gynecology, and pediatrics in rural or other medically underserved areas.
- **N.M. Stat. Ann. § 24-1D-1 et. seq.**⁵⁰¹- Establishes the New Mexico health service corps in the Department of Health to recruit and place health professionals in rural and other medically underserved areas.
- **N.M. Stat. Ann. § 24-1G-1 et. seq.**⁵⁰²- Creates the New Mexico Telehealth and Health Information Technology Commission to encourage a single, coordinated statewide effort to create a telehealth and health information technology system. The purpose of the Commission includes, but is not limited to, addressing the problems of provider distribution in medically underserved areas of the state.
- **N.M. Stat. Ann. § 24-25-1 et. seq.**⁵⁰³- Authorizes healthcare providers in the State of New Mexico to deliver healthcare services via telehealth technologies in order to provide efficient and effective access to quality health services.

New York

NPAO-Coordinated Building of Multiuse Trails

- **DESCRIPTION:** The state Department of Health partially funded the Healthy Trails, Healthy People initiative, which is a collaboration of municipalities to create or expand trails, especially those that could be used for transportation and recreation. Throughout this process, the Department of Health has provided

- technical assistance and training to the contractors and other local public health partners working to build multiuse trails.
- **IMPACT:** Through this initiative, Parks & Trails New York reached more than 20,000 residents by helping communities develop more active environments through creating multiuse trails.
 - Parks & Trails New York assisted 27 communities in 25 counties with their trail development efforts. Twenty-two of these are expected to complete their projects, which will offer 144 miles of new trails for public use.
 - **URL:** <https://www.cdc.gov/obesity/downloads/UrbanDesignPolicies.pdf>
 - **COMMENTS:** Improved community trails to facilitate exercise, which is a determinant of mental health.

Complete Streets Program in Rural Communities

- **DESCRIPTION:** The New York Department of Health has provided technical assistance and training to the contractors and other local public health partners working on Complete Streets efforts that redesign and develop streets to enable safe access for all users—pedestrians, bicyclists, motorists, and transit riders of all ages and abilities.
- **IMPACT:** Complete Streets have been established in one county and three towns. Once established in a specific region, a committee is formed to collaborate with local and regional officials to develop a transportation improvement plan.
- **URL:** <https://www.cdc.gov/obesity/downloads/UrbanDesignPolicies.pdf>
- **COMMENTS:** Redesigns rural streets to enable safe use.

Oklahoma

Laws and Legislation

- **Okla. Stat. tit. 70, § 625.1 et. seq.**⁵⁰⁴- Establishes the Oklahoma Rural Medical Education Loan and Scholarship Fund. The fund is to be administered by the Physician Manpower Training Commission.
- **Okla. Stat. tit. 70, § 697.1 et. seq.**⁵⁰⁵- Establishes the Physician Manpower Training Commission to establish and administer cost-sharing programs for internship and residency physician training. Not less than fifty percent (50%) of the subsidy for these programs shall be used in the training of primary healthcare and family/general practice physicians for the rural and medically underserved areas of the state.

Oregon

Laws and Legislation

- **Or. Rev. Stat. § 442.550 et. seq.**⁵⁰⁶- Establishes the Primary Care Services Program, to be administered by the Office of Rural Health, pursuant to rules adopted by the Office. The purpose of the program is to provide loan repayments on behalf of naturopathic physicians, physicians, physician assistants, dentists,

- pharmacists and nurse practitioners who agree to practice in a qualifying practice site.
- **Pa. Cons. Stat. tit. 62 § 5001.1301 et. seq.**⁵⁰⁷- Establishes the Primary Healthcare Practitioners Program within the Department of Health to increase the availability of primary healthcare practitioners to rural and inner-city designated medically underserved areas of this Commonwealth.

Rhode Island

Legislation: Transportation Reform Project

- **DESCRIPTION:** In June 2012, the Rhode Island General Assembly passed the Complete Streets law to integrate multiple transit options into the design and construction of the state's transportation system. This provides safe access to all users, regardless of how they travel. Features of Complete Street design in the legislation include sidewalks, paved shoulders suitable for use by bicyclists, lane striping, bicycle lanes, share the road signage, road diets, roundabouts, crosswalks, pedestrian signals, bus pull outs, raised crosswalks, and traffic calming measures.
- **IMPACT:** As of 2015, the Transportation Reform Project has resulted in the following:
 - 50+ Road Safety Audits (RSAs) conducted.
 - 3 RSAs at transit hubs – Interlink, Wickford Junction, and Kennedy Plaza.
 - 10+ road diets implemented with 10+ planned.
 - 5+ miles of new bike lanes.
 - 20+ miles of roadways with shared lane markings.
 - 5+ miles of trails/shared use paths.
 - 30+ Complete Street intersection improvements.
 - 10 roundabouts installed.
 - 33 in planning or design.
- **URL:** https://www.dot.ri.gov/documents/community/safety/Complete_Streets.pdf
- **COMMENTS:** Legislation to improve street safety which has resulted in many infrastructure improvements.

Tennessee

NPAO-Tennessee Metro Training Organization (MPO) Collaboration

- **DESCRIPTION:** The Tennessee Nutrition, Physical Activity, and Obesity program has been closely involved with efforts to support transportation and travel policies and practices. The Nashville Area MPO engaged local governments, businesses, nonprofit organizations, and the general public while conducting the study to better understand bicycle and pedestrian needs within the region. The study results have provided guidance for policies, programs, and investments intended to maximize opportunities for increased walking and bicycling in Davidson, Rutherford, Sumner, Wilson, and Williamson counties, in addition to the cities of Spring Hill and Springfield.
- **IMPACT:** As a result of this study, the Nashville Area MPO made several recommendations in a study report to improve transportation and travel policies in middle Tennessee including the following: expansion of greenways;

development of a regional bicycle network that would provide more than 1,100 miles of on-road bicycle accommodations; creation of sidewalks on all major thoroughfares; and enhancements to public education and law enforcement efforts to improve roadway safety conditions for all users.

- **URL:** <http://www.eatwellplaymoretn.org/>

Texas

Laws and Legislation

- **Tex. Human Resources Code Ann. § 2.001 et. seq.**⁵⁰⁸- Establishes the Interagency Council for Addressing Disproportionality. One of the stated goals for the Council is to assist the Health and Human Services Commission in eliminating health and health access disparities in Texas among racial, multicultural, disadvantaged, ethnic, and regional populations. This chapter expires December 1, 2013.
- **Tex. Government Code Ann. § 487.451 et. seq.**⁵⁰⁹- Creates the Community Healthcare Awareness and Mentoring Program for Students to identify high school students in rural and underserved urban areas who are interested in serving those areas as healthcare professionals and partnering them with healthcare professionals to act as positive role models, mentors, and reference resources.
- **Tex. Government Code Ann. § 487.551 et. seq.**⁵¹⁰- Establishes the Rural Communities Healthcare Investment Program to provide loan reimbursement and stipends for health professionals who serve in those communities.

Washington

Laws and Legislation

- **Wash. Rev. Code § 43.70.590**⁵¹¹- Directs the Department of Health to establish an American Indian healthcare delivery plan in conjunction with the area Indian health services system and an advisory group comprised of Indian and non-Indian healthcare facilities and providers.

Active Community Environments Project

- **DESCRIPTION:** The Washington State Department of Health is working on a project called Active Community Environments that seeks to improve the health and quality of life for Washington citizens by improving and increasing opportunities to be physically active. The vision for Active Community Environments is to create places where people of all ages and abilities can easily enjoy walking, bicycling, and other forms of recreation. The strategies for realizing this vision include improvements to sidewalks, on-street bicycle facilities, multiuse paths, trails, parks, open spaces, low-cost or free recreational facilities, mixed-use development, and connected grid of streets.
- **IMPACT:** As a result of these efforts, the Active Community Environment project has accomplished the following:
 - The Spokane Health Department partnered with the Department of Planning and the Department of Transportation to write and adopt a

citywide pedestrian plan that includes connectivity in low-income neighborhoods.

- The Tacoma Health Department helped write and adopt the Tacoma Master Mobility Plan which addresses all forms of transportation.
- Three Complete Streets trainings were conducted across the state to policy makers and health, transportation, and public works professionals. As a result of these trainings, Tacoma, Sedro-Wooly, and Spokane have passed a Complete Streets resolution or policy.
- **URL:** http://www.doh.wa.gov/cfh/NutritionPA/our_communities/active_community_environments/default.htm

Public Program: ATSDR Brownfields/Land Reuse Action Model

- **DESCRIPTION:** “The ATSDR Action Model creates a framework to assess the impacts of redevelopment on public health...The Action Model framework encourages the Development Community to focus on broad public health topics connected to community health, such as physical and mental health; environment; education and economy; planning; safety and security; and communication and risk communication.”⁵¹²
- **IMPACT:** The Action Model has been used in community health pilots across the nation, including:
 - Milwaukee, WI, 30th Street Corridor
 - East Cleveland, OH, Cuyahoga County
 - Detroit, MI, 48217 Approach
 - Blue Island, IL, Cargo- & Transit-Oriented Development Community Health Monitoring
 - Linnton, OR, Linnton Action Model Project
 - Baraboo, WI, Ringling Riverfront Development
 - St. Paul-Minneapolis, MN, Healthy Communities Count! Healthy Communities and the Central Corridor Light Rail Transit Line
- **URL:** <https://www.atsdr.cdc.gov/sites/brownfields/model.html>
- **COMMENTS:** Improves health (physical and mental), the community (education, economy, safety, security), land and environment (contaminated soil/water/air, parks, waterways), and buildings and infrastructure (dilapidated building, grocery stores, sidewalks).

Neighborhood Effects

Existing U.S. Legislation, Policies, and Programs (By State)

Federal Programs

Centers for Disease Control and Prevention (CDC) Community Health Improvement (CHI) Navigator

- **DESCRIPTION:** “CDC’s CHI Navigator helps hospitals, health systems, public health agencies, and community organizations from a variety of sectors improve community health....CHI Navigator makes the case for prevention, provides evidence-based interventions, and offers a unifying framework that can move partnerships from planning to action.”⁵¹³
- **URL:** <https://www.cdc.gov/chinav/index.html>
- **COMMENTS:** Educational resources and plans for those interested in community health.

Colorado

Laws and Legislation

- **Col. Rev. Stat. § 25-4-2206**⁵¹⁴- Establishes the Health Equity Commission to advise the Department on Public Health and Environment on issues relating to health equity, specifically focusing on alignment, education and capacity building for state and local health programs and community-based organizations. The Commission shall be dedicated to promoting health equity and eliminating health disparities.

NPAO-Coordinated Healthy Community Design

- **DESCRIPTION:** “The Colorado Department of Public Health and Environment (CDPHE) coauthored the newly released Built Environment Policy Blueprint. This document examines how the built environment may be affecting health outcomes throughout Colorado and describes what communities are doing to increase opportunities for active living and healthy eating.”⁵¹⁵
- **IMPACT:** To promote the key recommendations of the Blueprint, CDPHE plans to co-facilitate trainings with community partners in six different locations throughout the state. These subsequent trainings, called Planning for Active Community Environments (PLACE), will further promote sustainable partnerships at the local level and provide resources to address improvements to the built environment.
- **URL:** <https://www.cdc.gov/obesity/downloads/UrbanDesignPolicies.pdf>
- **COMMENTS:** Collaboration and education to promote designing local communities in a healthy way.

Florida

Laws and Legislation

- **Fla. Stat. § 381.7351 et. seq.**⁵¹⁶- Creates the Reducing Racial and Ethnic Health Disparities: Closing the Gap Act grant program to stimulate the development of

community-based and neighborhood-based projects which will improve the health outcomes of racial and ethnic populations.

New Mexico

Laws and Legislation

- **HM 2 (New Mexico):** [Requesting](#) the Secretary of Health to Convene a Public Health Task Force to Recommend Strategies for Improving Public Health Infrastructure in New Mexico.
 - Further Description: BE IT FURTHER RESOLVED that the areas to be considered for study include, but not be limited to, public health infrastructure, the public health workforce, the status of the **social determinants of health** and laws that protect public health...
 - Primary Sponsor(s): Missy Armstrong.
 - Impact/Comments: Unclear.
 - Status: Enacted.

North Carolina

Public Program: Healthy Environments Initiative

- **DESCRIPTION:** The Healthy Environments Initiative is a collaboration of several public agencies that are working toward integrating and influencing interdepartmental efforts to improve the health of North Carolina residents, the environment, and the economy.
- **IMPACT:** Since the establishment of the initiative, it has facilitated the following accomplishments:
 - Developed an inventory of state policies and analyzed over 250 policies.
 - Conducted more than 1,000 telephone survey interviews and 12 focus groups to inform key media messages on the initiative.
 - Selected and funded 11 community teams to provide a local perspective on state-level policies and to identify gaps.
 - Conducted a Health Impact Assessment training for state officials.
- **URL:** <http://www.eatsmartmovemorenc.com/>

Rhode Island

Complete Streets Program

- **DESCRIPTION:** The [Complete Streets Program] initiative began with community action forums and street surveys to assess barriers to walking and bicycling and explore ideas to improve sidewalk and crosswalk accessibility. The street surveys used were developed by the American Association of Retired Persons (AARP) and conducted by volunteers, community leaders, and state representatives.
- **IMPACT:** The results from the street surveys were analyzed and presented to various members of the community at public workshops, city council meetings, and advisory commission hearings. As a result of conducting these assessments and engaging the community in various phases, a Complete Streets initiative was implemented.

- **URL:** <https://www.cdc.gov/obesity/downloads/UrbanDesignPolicies.pdf>

South Carolina

Complete Streets Training Initiative

- **DESCRIPTION:** Local organization worked collaboratively to provide training and technical assistance on Complete Streets policy development at the local level. The purpose of the training was to mobilize these communities to begin the process of creating and proposing a local Complete Streets policy.
- **IMPACT:** One community has since adopted a local Complete Streets policy at both the city and county level; one community has drafted a Complete Streets policy which will be proposed in the upcoming months; and the remaining two communities are currently in the process of developing a local Complete Streets policy.

Virginia

Laws and Legislation

- **HB 1056 (Virginia):** Commission on Wellness and Opportunity.
 - Primary Sponsor(s): Dawn Adams.
 - Description: “Creates the 23-member Commission on Wellness and Opportunity in the legislative branch to study and make recommendations relating to establishing the mission and vision of what health and wellness means for Virginia by examining various dimensions of health and wellness, including but not limited to physical, intellectual, emotional, spiritual, environmental, and social wellness, and **utilizing the comprehensive theoretical framework of "the social determinants of health"**; identifying and defining measurable opportunities and outcomes that build community competence around well-being; and making policy recommendations for improving the quality of life for the people of the Commonwealth.”
 - Status: Enacted.

ENDNOTES

- ¹ Commission on Social Determinants of Health. (2008). *Closing the gap in a generation: health equity through action on the social determinants of health: final report of the commission on social determinants of health*. World Health Organization.
<https://www.who.int/publications/i/item/WHO-IER-CSDH-08.1>
- ² National Association of County and City Health Officials Health and Social Justice Committee. Creating Health Equity Through Social Justice. National Association of County and City Health Officials. Available at <http://archive.naccho.org/documents/healthsocialjusticepaper5.pdf>.
- ³ Österberg, K., Karlson, B., and Hansen, Å. M. (2009). Cognitive performance in patients with burnout, in relation to diurnal salivary cortisol: original research report. *Stress*, 12(1), 70-81.
- ⁴ James, S. (2002). Social determinants of health: implications for intervening on racial and ethnic health disparities. In *Minority Health Conference*.
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