Early Childhood Mental Health in Utah

Early childhood mental health services address an important need in Utah. More data and collaboration in this area can help maximize health, opportunity, and public investment outcomes.

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Analysis in Brief

This study provides an overview of the risk, reach, and potential return on investment (ROI) associated with Utah's early childhood mental health system for children ages 0–8. It provides a foundation for ongoing discussions about how to improve access to early childhood mental health services given varying risk factors and program distribution among different populations and regions throughout the state.

Key points include the following:

• **There is a need for early childhood mental health services in Utah.** National research shows Utah is among a group of states with the highest prevalence of child and adolescent mental health disorders, and the highest prevalence of youth with untreated mental health needs.ii

• **Early investment improves children’s current and future health, as well as reduces future use of services and programs.** Research shows a link between unmet mental health needs in a child’s earliest years and their lifetime outcomes. National cost estimates of mental, emotional, and behavioral disorders among youth amount to $247 billion per year in mental health and health services, lost productivity, and crime.iii

• **Data indicate certain areas in Utah may have a higher need for early childhood mental health services based on various risk factors.** Additionally, children from racial and ethnic minority populations frequently face a disproportionate likelihood of experiencing these risks. Strategies developed to address Utah’s early childhood mental health needs should consider effective means to reach these areas and populations.

• **An array of programs in Utah support early childhood mental health.** Research shows young children’s behavioral and emotional concerns are best met through a variety of services. This report reviews ten categories of programs: Baby Watch Early Intervention, Nurse-Family Partnership, Family Support Centers & Crisis Nurseries, Health Centers, Head Start, Integrated Pediatric Mental Health Practices, Local Mental Health Authorities, Parents as Teachers, Special Education Preschool, and other child and family focused practices.

• **Availability of mental health programs vary across the state.** Urban areas tend to have far fewer programs per 1,000 children ages 0–8, with populous Davis and Utah counties in the lowest range. Salt Lake County falls into a mid-range despite having almost six times as many programs as any other county. In contrast, rural counties have higher density due to a low number of children, but some children’s needs may not be met by the few available programs, especially children needing intensive mental health services and licensed mental health providers comfortable treating younger children (e.g., ages 0–4).

• **Education is key.** Stakeholders reported one of the biggest challenges is helping parents, physicians, schools, and the general population understand the importance of early childhood mental health, the critical brain development taking place during this phase of life, and how to identify a need for mental health services.

• **Data is needed.** Needs include: consistent use and reporting of screening tools; better estimates of the number of children 0–8 needing services; reasons for disparities in accessing services; studies specifically focused on the return on investment for early childhood mental health programs and evidence-based practices; and continued development of school-based mental health data.

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ii. Eisenberg, D., and Neighbors, K. (2007). Economics of Preventing Mental Disorders and Substance Abuse Among Young People. Paper commissioned by the Committee on Prevention of Mental Disorders and Substance Abuse Among Children, Youth, and Young Adults: Research Advances and Promising Interventions, Board on Children, Youth, and Families, National Research Council and Institute of Medicine, Washington, DC.
Introduction

Based on estimates from national studies, 10–20% of Utah’s 458,000 children between the ages of 0–8 could experience mental, emotional, developmental, or behavioral challenges.1, 2, 3 Research shows a measurable link between unmet mental health needs in a child’s earliest years and lifetime outcomes, including lower rates of high school graduation, college attendance, and employment, and higher rates of poverty, homelessness, and involvement in the criminal justice system. Growing knowledge of brain architecture and development underscores the critical need for understanding the mental health of Utah’s youngest children.

This report provides an overview of the risk, reach, and the potential return on investment (ROI) associated with early childhood mental health services in Utah.4 It builds on a study the Kem C. Gardner Policy Institute completed in 2019 on Utah’s Mental Health System, which provided information on the system as a whole, but primarily focused on services provided to adults and adolescents. This report specifically focuses on the mental health needs and services for Utah children ages 0–8 and should be viewed as a starting point for discussions regarding how to increase access to early childhood mental health services, and how to enhance targeted interventions among programs and providers to improve treatment efficacy.

“"The science of early childhood development tells us that the foundation for sound mental health is built early in life, as early experiences shape the architecture of the developing brain."”

“… regardless of the origin of mental health concerns, new research clearly indicates that early intervention can have a positive impact on the trajectory of common emotional or behavioral problems as well as outcomes for children with serious disorders.”

—Center on the Developing Child, Harvard University

In this report, risk, or the potential need for early childhood mental health care, is highlighted through a review of risk measures known to be associated with a greater risk for needing early childhood mental health services. Program reach is shown geographically, by mapping the locations of 10 categories of programs that support early childhood mental health. Finally, the report includes information on the potential ROI, or cost savings, associated with addressing early childhood mental health. The report concludes with a discussion of key themes, ideas for future research, and next steps.

Early Childhood Mental Health

In the 2017–2018 National Survey of Children’s Health, parents reported 10.2% of children ages 3–5 and 26.9% of children ages 6–11 had mental, emotional, developmental, or behavioral concerns.6, 7 Other research estimates “the prevalence of emotional/behavioral disturbance in children 0–5 years of age is in the range of 9.5% to 14.2%”8 and that 17.4% of children ages 2–8 had at least one mental, behavioral, or developmental disorder.9 A 2006 research review notes, “Despite the relative lack of research on preschool psychopathology compared with studies of the epidemiology of psychiatric disorders in older children, current evidence now shows quite convincingly that the rates of the common child psychiatric disorders and the patterns of comorbidity among them in preschoolers are similar to those seen in later childhood.”10 The review shows a higher incidence of psychiatric disorders in preschoolers ages 2–5 (15%) than suggested by the 2017–2018 National Survey of Children’s Health findings. In both cases, there is no comparable data for the 6–8 age range also included in this study, but both sources suggest the percent for this age group would be higher.

The literature points to at least three reasons why younger children’s mental and behavioral health is particularly important, but also more complex, to address. First, early childhood is a time of rapid physical (including neural) and mental growth, when cognitive, social, and emotional capacities are still developing. Second, young children are reliant on parents and relationships to promote mental health and buffer adverse experiences. Third, it is difficult to distinguish between transient and enduring differences in behavior during early childhood development.11

These same factors can also contribute to why some have concerns about the classification of psychiatric disorders in preschoolers—rapid development and normal developmental differences may make it difficult to identify and measure psychiatric symptoms, behavior-related concerns can be related to the child’s relationship with parents and caregivers, and diagnoses could adversely shape the child or caregivers’
perception of the child. Keeping these considerations in mind, research suggests “the emotional and behavioral needs of vulnerable infants, toddlers, and preschoolers are best met through coordinated services that focus on their full environment of relationships, including parents, extended family members, home visitors, providers of early care and education, and/or mental health professionals.”12

“Indeed, sometimes the best intervention strategy for young children with serious behavioral or emotional problems is to focus directly on the primary needs of those who care for them.”

—Center on the Developing Child, Harvard University

This report reviews programs that provide early childhood mental health services in Utah with these developmental complexities in mind. Some of the programs highlighted provide clinical mental health services. Others are home-visiting, educational, or family support programs that focus on promoting healthy family relationships and school readiness preparation for very young children—and in doing so improve the child’s mental health. Some programs represent a hybrid of these approaches.

Each type of program provides an important mental health resource for families during a critical period of child development, sometimes reflecting an opportunity to provide support before a family recognizes a need for mental health services.

Methodology

This report combines quantitative and qualitative research methodologies to provide a detailed look at the need for, and availability of, early childhood mental health services for children ages 0–8 in Utah. The quantitative analysis uses publicly available data to assess the risk, or need, for early childhood mental health services across the state. Data selected for review were determined by (1) availability, (2) recommendations from experts in Utah’s early childhood mental health system, and (3) the data framework established by a similar study produced by the Colorado Health Institute.14

Qualitative findings were derived from interviews with early childhood mental health service and support providers and stakeholders,15 as well as open-ended questions from a survey sent to early childhood mental and behavioral health programs statewide.16 Insights from the interviews and survey helped to provide program context, identify and understand the different types of mental health services available across the state, and provide insight into the strengths and challenges associated with Utah’s early childhood mental health system.
A number of factors contribute to a child’s need for early childhood mental health services. Some of this need may be the result of individual and family genetics, while other times it is driven by family structure, life circumstance, and the environmental factors impacting a child’s development. Although experiencing some stress is an important aspect of healthy brain development, children with prolonged exposure to adversity and stress-inducing events can experience toxic stress, which “may impair school readiness, academic achievement, and both physical and mental health throughout the lifespan.” Although young children may differ from adults in the way they respond to these experiences, they may exhibit characteristics of disorders related to anxiety, attention-deficit/hyperactivity, or post-traumatic stress.

To better understand the potential risk and need for early childhood mental health services in Utah, the Gardner Institute reviewed a number of data points and measures that reflect a risk for needing early childhood mental health services based on family structure, family background, socioeconomic status, or a child’s situation or environment.

Where available, data were collected at either a local, county, or state level to better understand how the need for early childhood mental health services in Utah compares nationally, and to understand which areas within the state and populations may have higher relative risks for needing early childhood mental health services.

**Risk Measures**

**Adverse Childhood Experiences (ACEs)**

The impacts of ongoing stressors in the lives of children can be immediate and long lasting. Research on adverse childhood experiences (ACEs) shows a relationship between the number of ACEs or stressors a child experiences and diminished health and well-being outcomes both immediately, and later as adults. ACEs include emotional, physical, and sexual abuse, emotional and physical neglect, a mother treated violently, a household substance use disorder or mental illness, parental separation or divorce, an incarcerated household member, and other adverse experiences.

**Prevalence of ACEs in Children**

Data from the National Survey of Children’s Health show that more than one in six children in Utah (17.6%) ages 0–17 have experienced two or more of the following ACEs: economic hardship; parental divorce or separation; living with someone who had a substance use disorder; being a victim or witness to neighborhood violence; living with someone who had a mental illness, had serious thoughts of suicide, or was severely depressed; being a witness to domestic violence; having a parent serve jail time; being treated or judged unfairly due to race/ethnicity; or experiencing the death of a parent within the last two years. Nationally the rate is 20.5%. Experiences with ACEs are also not evenly distributed among all children; the percent of Black children experiencing multiple adversities is more than twice as high (15%) as it is for white children (7%), and “children of color are more likely to experience most types of adversities.”

It is important to note that experiencing the ACEs outlined above does not necessarily translate into a need for mental health services as a child or adult. Research notes that ACEs may become toxic for a child when “a child experiences strong,
frequent, or prolonged adversity, such as physical or emotional abuse, chronic neglect, caregiver substance [use disorder] or mental illness, exposure to violence, or the accumulated burdens of family economic hardship, in the absence of adequate adult support." Nationally, between 75–130 of every 1,000 children under five live in homes where they experience at least one of three potential sources of toxic stress (maltreatment, parental substance use disorder, and postpartum depression).

Individuals who experience multiple ACEs are more likely to experience learning and behavioral challenges as children and have a greater likelihood of developing life-threatening conditions such as obesity, heart disease, alcoholism, drug use, smoking, binge drinking, and depression as adults. Having an ACE score of four or more has been shown to be related to mental health concerns later in life, to the extent that preventing adverse childhood experiences for a person with four or more ACEs would have reduced the occurrence of depression by 44.1%.

An ACE study from California shows adults have a greater likelihood of asthma, arthritis, depression, COPD, and cardiovascular disease if they encountered ACEs as a child. The study estimates the total cost to California in 2013 was $112.5 billion, including $102 billion in 434,000 disability-adjusted life years (DALYs are an estimate of disease burden expressed as the total years lost to mortality and non-fatal health problems due to a disease) and $10.5 billion in excess personal health spending by California adults. In 2013, “…the estimated health burden per exposed adult included $589 in personal health care expenses and 0.0224 DALYs valued at $5,769.”

Figure 3: Share of Adults with Four or More Adverse Childhood Experiences (ACE Score) by Race/Ethnicity, 2013–2018 Average

Note: Age-adjusted. *Use caution in interpreting; the estimate has a coefficient of variation > 30%.
Source: Utah Behavioral Risk Factor Surveillance System, Office of Public Health Assessment, Utah Department of Health

Figure 3: Share of Adults with Four or More Adverse Childhood Experiences (ACE Score) by Utah Small Area, 2013–2018 Average

Note: Age-adjusted. *Use caution in interpreting; the estimate has a coefficient of variation > 30%.
Source: Utah Behavioral Risk Factor Surveillance System, Office of Public Health Assessment, Utah Department of Health
**Prevalence of ACEs in Adults**

ACE score data for children ages 0–8 is not available; however, the Utah Department of Health (UDOH) provides data on the prevalence of ACEs among adults, which can serve as a proxy for measuring ACEs among children and the potential need for early childhood mental health services. In Utah, 15.3% of adults ages 18 and older have experienced four or more ACEs in their lives (age-adjusted, 2013–2018 average). This is close to the national average of 15.6%. On a county basis, Beaver and Tooele counties have the highest share of adults with four or more ACEs (see Figure 1). Looking at the data by race and ethnicity, some populations have higher rates of ACEs: 30.9% of American Indian or Alaska Native adults experience four or more ACEs, followed by adults who identify as two or more races (24.4%) and Black or African American adults (22.2%) (see Figure 2).

**Beyond County Lines**

As noted above, this analysis examines risk for early childhood mental health services using county-level data. However, for some counties, these data may not adequately highlight areas of high risk. For example, data from UDOH show areas in Tooele (40.9%), South Salt Lake (30.9%), and west Sandy (28.8%) have the highest shares of adults with four or more ACEs in the state (see Figure 3). These rates are substantially higher than the state and national averages of roughly 15%.

**Maternal Education**

Research shows that children of mothers with low education levels tend to experience more mental health concerns than children with mothers with higher education levels. This trend is more acute in younger children. Initial findings from one study found that a mother’s education was a better indicator than income or maternal depression for predicting a child’s social competence at age 4.

In 2017, about 7% of all live Utah births were to mothers age 25 and older with less than a high school diploma. Nationally, the rate was 10%. Utah counties with the highest shares of live births to mothers age 25 and older with less than a high school diploma include Millard and Sanpete (see Figure 4). Of the total number of mothers age 25 and older with less than a high school diploma, 59.3% identified as Hispanic, with 39.0% identifying as non-Hispanic (the remaining 1.7% is unknown).

The disparity of high school graduation rates among racial and ethnic groups in Utah is an additional point of consideration. Although overall graduation rates increased in 2019, all racial categories other than Asian students (91.4%) graduated at rates lower than white students (89.7%). Lower graduation rates among Hispanic/Latino (79.5%), American Indian (79.3%), and African American/Black (74.8%) suggest maternal education may be a particular concern for these groups.

**Maternal Mental Health**

As noted in the ACEs section, living with someone who has a mental illness increases the risk of a child needing mental health services. Individuals in Utah are statistically more likely to have lived with someone who has a “mental illness, has serious thoughts of suicide, or is severely depressed as a child than individuals nationally, 12% vs. 8%. More specifically, maternal depression “is considered a risk factor for the socio-emotional and cognitive development of children.”

One measure of maternal mental health is postpartum depression. Severe or untreated cases of postpartum depression may have a more immediate impact on early childhood mental health, particularly the health of infants and toddlers, who may show signs of passivity, withdrawal, self-regulatory behavior, dysregulated attention, and noncompliance, among other signs of concern.
In 2018, close to 15% of Utah’s new mothers experienced postpartum depression symptoms. This is higher than the national average, which is estimated to be about 13%. In Utah, this share increases to 22% for mothers with incomes below the poverty level, 21% for mothers with less than a high school diploma, and 19% for mothers who identify as a race other than white. One study shows there are also racial/ethnic disparities in the likelihood of initiating treatment for postpartum depression and the likelihood of follow up. The odds of Black and Latina women initiating follow-up for treatment were significantly lower than for whites.

Table 1 shows the share of women experiencing postpartum depressive symptoms by local health district. The recently completed Utah Maternal and Child Health and Children with Special Healthcare Needs, Statewide Needs Assessment collected input from over 3,300 parents, workers, and community leaders and found a top concern was mental health, including perinatal depression, anxiety, and suicide.

**Poverty**

Economic stability is a key factor in health and well-being, including a person’s mental health. In terms of early childhood mental health, poverty is a major barrier to child development that increases the risk of children falling behind in school, and experiencing social, emotional, and behavioral challenges and health concerns. One study specifically found that children in low-income families start off with higher levels of antisocial behavior than children from more advantaged households. This behavior becomes worse over time compared with children living in households that never experience poverty or later move out of poverty.
Percent of Children Living in Poverty

The share of children living in poverty in Utah is fairly low compared with the national average (9.7% vs. 18.0%). For children under age five, the rate of children living in poverty is closer to 11% (compared with 19.5% at the national level).43

However, not all areas in Utah experience low rates of child poverty. Figure 5 shows the share of Utah children ages 0–17 living in poverty by county. The five counties with the highest percent of children ages 0–17 living in households with incomes below the federal poverty threshold are Piute (30.8%), San Juan (26.8%), Garfield (19.1%), Wayne (17.2%), and Carbon (17.0%). Three of these four counties have child poverty rates above the national average (18.0%).

Like other indicators, poverty is also not evenly distributed among different population groups. In 2018, Utah's overall poverty rate (9%) was lower than the U.S. poverty rate (13%), but the poverty rate for American Indians/Alaska Natives (28%) was higher than the national average (24%) for this group, and Utah’s poverty rates for other racial subgroups were all higher than for whites (see Figure 6). These same trends exist for children under age 18 in poverty.

Intergenerational Poverty

Since 2012, the state of Utah has been focused on reducing intergenerational poverty, which is defined as “two or more successive generations of a family continue in the cycle of poverty and government dependence.”44 In 2018, the Utah
At a state level, 6.3% of children under age six do not have health insurance, compared with 7.9% of children ages 6–18. However, Figure 8 shows these percentages vary widely across the state: Wayne, Grand, and Juab counties have early childhood uninsured rates (ages 0–5) above 13%, which is not only more than twice the state average, but also more than three times the national average (4.2%). Uninsured rates vary substantially across race and ethnic groups as well, with 29% of nonelderly American Indians/Alaskan Natives and 24% of nonelderly Hispanic adults being uninsured (see Figure 9).

Some uninsured children may qualify for public health insurance but are not enrolled; others may live in low-income households with incomes between 100% and 200% FPL, or live in households with incomes slightly above 200% FPL, which equates to $52,400 in annual income for a family of four (see Figure 10). Without health insurance, many families may not be able to access necessary mental health services due to cost, which can be a barrier to accessing mental health care for families with commercial health insurance as well.

Figure 8: Share of Children Ages 0–5 Uninsured by County, 2014–2018 Average

![Map showing the percentage of children by county in Utah from 2014-2018.]

State Average: 6.3%

Note: The national average is 4.2%.

Source: U.S. Census Bureau, 2014-18 American Community Survey 5-Year Estimate

Figure 9: Utah’s Nonelderly Population Uninsured Rates, 2018

![Bar graph showing the percentage of uninsured nonelderly population by race/ethnicity and income level in Utah.]

Source: Kaiser Family Foundation estimates based on the 2018 American Community Survey, 1-Year Estimates

Figure 10: Share of Children Ages 0–6 by Income Level, 2018

![Pie chart showing the percentage of children by income level in Utah.]

Source: National Center for Children in Poverty (NCCP) analysis of American Community Survey data

Department of Workforce Services (DWS) estimated that there were 53,861 children ages 0–17 experiencing intergenerational poverty in Utah. Children ages 0–8 account for over 68% of these children.

Beyond County Lines

Data from UDOH show that Utah’s small areas with the highest share of children living in poverty are areas of San Juan County (49.6%), Rose Park (37.6%), Glendale (37.3%), and South Salt Lake (31.8%) (see Figure 7). Three of these four small areas have percentages that are close to or more than double the state average: Wayne, Grand, and Juab counties have early childhood uninsured rates (ages 0–5) above 13%, which is not only more than twice the state average, but also more than three times the national average (4.2%). Uninsured rates vary substantially across race and ethnic groups as well, with 29% of nonelderly American Indians/Alaskan Natives and 24% of nonelderly Hispanic adults being uninsured (see Figure 9).

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Maternal Age

Research shows that babies born to adolescent mothers are at higher risk of receiving lower levels of emotional support and cognitive stimulation, having fewer skills and being less prepared for kindergarten, and needing behavioral health supports (particularly babies born to young adolescent mothers). One study shows a child’s risk of developmental vulnerabilities decreases as a mother’s age increases (up to age 35). Data from UDOH show that Utah’s adolescent birth rate (13.1) was below the national average (17.4) in 2018 and has been falling over the past five years, from 19.6 live births per 1,000 girls ages 15–19 in 2014. On a county basis, Beaver has the highest rate of adolescent births (36.6), followed by Duchesne (35.3) and San Juan (32.0) (see Figure 11). Looking at the data by race and ethnicity show that rates of adolescent births were highest for Blacks (24.6) and American Indians/Alaska Natives (22.8) in 2018.

Beyond County Lines

Data from UDOH show some areas in West Valley (45.6 live births per 1,000 girls ages 15–19), San Juan (39.3), and Glendale (37.8) have the highest rates of adolescent births in the state. Examining these data at a community level or small area is helpful in better understanding which areas within county lines may experience high risk for early childhood mental health services.

Chronic Absence

A student is considered to be chronically absent if they were absent for more than 10% of the days they are enrolled in a school year (about 18 days for a student enrolled in the whole school year). Illness and injury play a primary role in chronic absence, but a 2014 report by Voices for Utah Children highlighted other factors such as “poverty, teenage parenting, single parenting, low maternal education levels, unemployment, maternal health issues, and household food insecurity.” The report also notes that chronic absence may be a sign that families are dealing with serious concerns such as homelessness, mental illness, child or domestic abuse, or incarceration of a parent, among other factors.

In Utah, 20.0% of kindergarteners were chronically absent, 17.3% of first graders, 15.3% of second graders, and 14.6% of third graders in school year (SY) 2019. The average for grades K–3 was 16.8%. Figure 12 shows the share of chronically absent children in grades K–3 by county. The rates range from a low of 5.7% in Morgan County to a high of 38.5% in Carbon County. In SY2016, the chronic absence rate for grades K–12 was 11.9% in Utah, compared with about 16% at the national level. A student’s chronic absence in grades K–3 is a concern because it can lead to a higher probability of chronic absence in higher grades. The Utah Education Policy Center published a research brief in 2012 that showed “being chronically absent in one grade increased the odds of being chronically absent in the next grade by nearly 13 times. For each year that a student was chronically absent, his or her odds of dropping out nearly doubled.” Dropping out of high school perpetuates cycles of poverty and being at risk for experiencing mental health concerns.

The 2012 study also showed how membership in any of the Utah State Office of Education (USOE) racial categories changed the odds of a student’s chronic absenteeism.

Child Abuse and Neglect

Child abuse and neglect include physical abuse, sexual abuse, neglect (educational neglect, medical neglect, etc.), and emotional maltreatment. Untreated abuse and neglect can have long-lasting impacts on a child’s mental health, which...
may include an inability to form attachments and adapt to new situations.\textsuperscript{61} As illustrated in Figure 13, younger children are more susceptible to abuse and neglect than older children, as the rate of child maltreatment in the U.S. for children ages 0–3 is three times the rate for children ages 16–17.\textsuperscript{62} In state fiscal year (SFY) 2019, there were 7,570 confirmed Child Protective Services reports of abuse and neglect in Utah.\textsuperscript{63} This resulted in 10,828 confirmed child victims.

**Foster Care**

Research shows that children in foster care have more mental and physical health needs compared with their peers, including children in economically disadvantaged families.\textsuperscript{64} One study found that children placed in foster care were three times as likely to have ADD/ADHD, five times as likely to experience anxiety, six times as likely to have behavioral concerns, and seven times as likely to experience depression compared with children not placed in foster care.\textsuperscript{65} About 2,000 total children were placed in Utah’s foster care system in SFY2019, which was a decrease from SFY2017.\textsuperscript{66}

One of the reasons a child may enter the foster care system is due to a need for mental health treatment (other reasons include, but are not limited to, domestic violence, physical abuse, sexual abuse, neglect, emotional maltreatment, and abandonment). Data from the University of Utah Social Research Institute show that, among all of the reasons children enter the foster care system, those who enter because they are in need of mental health treatment are most likely to remain in the foster care system for longer periods of time, which increases the potential for long-term adverse mental health effects.\textsuperscript{67} \textsuperscript{68} For some families, foster care may be the only option for care due to the high cost of residential mental health treatment options.

The Utah Division of Child and Family Services (DCFS) focuses on whole-family engagement to strengthen families so that parents can safely care for their children without the disruption of out-of-home care. DCFS was one of the first states in the nation to implement the Family First Prevention Services Act (2018) and, in accordance with the Family First Transition Act (2020), is in the early stages of improving systems that connect children and families who would have otherwise utilized the foster care system with evidence-based mental health services, substance use disorder prevention and treatment, and in-home parent skills-based programs. The Department of Human Services (DHS) has initiated provider training and certification to build in-state service capacity from a nationally approved list of services, including: Functional Family Therapy, Parent-Child Interaction Therapy, Trauma-Focused Cognitive Behavioral Therapy, and the Parents as Teachers program. The focus on increased use of kinship care, limiting use of congregate residential settings, and increasing the quality of care when higher level residential treatment placements are needed are all efforts focused on minimizing the trauma of foster care utilization.
COVID-19 Concerns

It is important to note this report was written at a time when mental health service and support providers are learning how best to care for clients in the midst of COVID-19. The effects of COVID-19 range from a greater use of telehealth, to reduced mental health visits, to increased need for mental health care both now and in the future due to social distancing, the economic recession, and increased risk for child abuse and neglect. One study found “reduced access to resources, increased stress due to job loss or strained finances, and disconnection from support systems” were some of the social factors that increased risk for violence. These effects have implications for both parents and children. A 2020 Mental Health America survey found that Utah has the third highest share of adults with mental health conditions (23.5%) and one of the highest shares of adults reporting thoughts of suicide in the nation, an important consideration for the mental health of young children who depend on adults for their well-being.

Moreover, many families with young children are facing additional stresses and complexities due to a decrease in child care options (both a reduction in already insufficient child care options due to the economic realities of child care provision during COVID-19, and the removal of grandparents as an option to fill in for child care due to their age-related increased risk for serious COVID-19 complications). Demands on parents are further amplified due to remote schoolwork and school schedule changes related to COVID-19. Supporting parents in confronting these additional stresses will be particularly important in the coming months.

Finally, the effects of COVID-19 have been felt more acutely by some populations than others. Hispanic and nonwhite workers are disproportionately represented in frontline occupations, increasing disease incidence among racial and ethnic minority groups. In the industry sectors where workplace outbreaks occurred, Latinos and other minority groups account for 73% of infected workers even though they represent only 24% of total employees in the industry sectors.

Reach of Early Childhood Mental Health Services

This report includes 10 categories of early childhood mental health service and support providers in Utah and discusses other stabilization, referral, or support programs providing crisis intervention, service referral, and case management that have strong mental health support components. Each type of program provides an important mental health resource for families during a critical period of child development, sometimes reflecting an opportunity to provide support before a family recognizes the need for mental health services. Programs were identified for inclusion based on suggestions from experts in Utah’s early childhood mental health system and programs identified by a similar study produced by the Colorado Health Institute.

Some of the program categories represent a single program with multiple locations, while others group together similar, but independent, early childhood mental health service providers. The programs differ significantly from each other in terms of their geographic location and coverage, capacity, age of children served, and the types of services they provide. Each provides families with a potential access point to a mental health screening, referral, or service for young children. The locations of these programs are mapped by county in Figures 14 and 15. Figure 14 includes all program locations, and Figure 15 includes program locations that indicated having a licensed mental health provider.

Early Childhood Mental Health Service and Support Providers

Baby Watch Early Intervention Program (BWEIP) (IDEA Part C – Early Intervention Program for Infants and Toddlers with Disabilities)

BWEIP serves children ages 0–3 and describes its purpose as “to enhance early growth and development in infants and toddlers, who have developmental delays or disabilities, by providing individualized support and services to the child and their family….. Early Intervention (EI) services are provided through a family coaching model that focuses on helping children meet goals in all areas of development. All services take place in the child’s natural environment (home, child care, etc.) and are tailored to meet the individual needs of the child and family.” “Social-emotional” is one of the developmental areas addressed by BWEIP, and may lead to providing a family with information for mental health resources and referrals. BWEIP offers services statewide from 17 locations.

Family Support Centers/Crisis Nurseries

Eighteen Family Support Centers and Crisis Nurseries are located across the state and offer an array of services to protect children and strengthen families. These services may include crisis and respite nurseries, case management, family life education, family therapy, camps and classes, and some mental health services such as counseling (10 locations have licensed mental health providers onsite for young children).
Health Centers
Utah’s Health Centers are community-based organizations that serve populations with limited access to care and special populations such as the homeless or migrant workers. They provide primary and preventative health care for individuals regardless of their ability to pay, including integrated physical and mental health services. Utah’s Health Centers comprise 13 federal Health Center grantee organizations (federally qualified health centers, or FQHCs) that operate 58 clinics in rural and urban communities dispersed throughout the state. This report includes 35 locations that have licensed mental health providers onsite for young children.

Head Start
There are 150 Early Head Start and Head Start early childhood centers across the state served by 12 regional programs (including migrant- and tribal-focused centers). Head Start offers home-based services along with center-based services. Head Start programs support early learning, health, and family well-being for children ages 0–5 by offering educational, nutritional, social and emotional, behavioral, and family engagement services. With parental consent, children receive a social and emotional screening (along with other screenings) during enrollment to identify needs for additional support. If a child is identified as having a mental health need, they are either provided services by licensed mental health professionals on staff or referred to licensed mental health consultants contracted in the community. This report identifies 142 unique Utah Head Start program locations, 85 locations of which have a licensed mental health provider onsite.

Integrated Pediatric Mental Health Practices
A number of pediatric health care practices in Utah offer an integrated approach to physical and mental health. Some practices employ a team-based approach to care if the physician identifies a mental health need. Members of the care team may include the physician, a mental health professional, the patient, family members, and a care manager or health advocate. Other practices have mental health professionals located in adjacent offices that are available for referral if the physician identifies a mental health need. This report includes 28 locations that offer integrated pediatric mental health.

Local Mental Health Authorities
Utah’s county authorities—or Local Mental Health Authorities (LMHAs)—oversee the provision of mental health services to all county residents, including Medicaid enrollees, uninsured individuals, and other underinsured populations. They also serve those with Medicare and commercial health insurance (and other third-party payers). They primarily serve adults and children with serious mental illness and serious emotional disturbances. There are currently 13 LMHAs in Utah serving all 29 counties. Utah state statute requires LMHAs to provide 10 mandated mental health and substance use disorder services to adult and children residents in their county: (1) inpatient mental health services; (2) outpatient mental health services; (3) residential care; (4) 24-hour crisis care and services; (5) psychotropic medication management; (6) psychosocial rehabilitation, including vocational training and skills development; (7) case management; (8) community supports, including in-home services, housing, family support services, and respite services; (9) consultation and education services, including case consultation, collaboration with other county service agencies, public education, and public information; and (10) services to persons incarcerated in a county jail or other county correctional facility. Medicaid enrollees obtain most mental health services from their county’s LMHA or LMHA-contracted providers. In some cases, the LMHA aligns to a single county, but for others it may include up to five counties.

LMHAs also provide mental health education and awareness, promote prevention and early intervention, and partner with local schools in the counties they serve to provide mental health services. The number of physical locations providing LMHA services varies by county. Because most LMHAs serve multiple counties, two counties do not have a physical LMHA provider location. Salt Lake County, however, has 69 provider locations because it contracts with other providers to provide mental health services. This report includes 102 LMHA locations.

Nurse-Family Partnership
Nurse-Family Partnership is an evidence-based home-visiting program where specially trained nurses visit first-time moms from early pregnancy through the child’s second birthday. Eligible participants must be prenatal first-time mothers less than 28 weeks pregnant, with incomes at or below 185% of the federal poverty level, and not be enrolled in another home-visiting program. Nurses undergo training on how to establish therapeutic relationships with clients, engage in motivational interviewing skills, and address mental health needs. The Nurse-Family Partnership program serves families in Salt Lake County and referrals to community mental health services through nursing assessments.

Parents as Teachers Program
The Parents as Teachers (PAT) program is an evidence-based home-visiting model aimed at strengthening families with pregnant women or children ages birth through kindergarten. PAT supports goals that promote early childhood mental health, including increasing parent knowledge of early childhood
On the early detection of developmental delays and health concerns, and preventing child abuse and neglect. By using the Ages and Stages Questionnaire (ASQ) and the Ages and Stages Questionnaire: Social-Emotional (ASQ:SE) screenings, parent educators can identify a need for additional services, such as a mental health or developmental assessment for the child. All home visitors are certified parent educators, and some are also nurses. This report identifies 20 PAT locations in the 16 counties from which the home-visiting programs operate.

Special Education Preschool (IDEA Part B Section 619)
Federal Special Education Preschool funds from IDEA Part B help each state provide special education and related services to children ages 3–5 free of charge through the public school system. With regard to mental health services, IDEA eligibility includes children experiencing developmental delays in social/emotional development. Although mental health–related services do not account for a large portion of Special Education services, the universal availability of this program for Utah children makes it an important resource for families with preschool-aged children with mental health needs.

Other Child and Family Therapy Practices
These practices include licensed behavioral health providers offering an array of therapy and counseling frameworks, including individual and family counseling, day treatment programs, respite care, in-home therapy, and therapy provided in a local school setting. This report includes the locations of 43 child and family therapy practices that provide mental health services to young children (providers contracting with LMHAs to provide mental health services are represented in the LMHA category). These practices were identified as serving the mental health needs of young children in their community, but likely do not represent a complete count of child and family therapy practices available to children.

Child-Focused Mental Health Programs

Only a few mental health programs in Utah focus exclusively on children. Most of these are day treatment programs that provide care to children ages five or older. Examples of these programs are below.

The Kidstar program at the University of Utah is a four- to six-day weekly treatment program for children ages 5–12 with emotional and behavioral challenges. The program is 40 hours a week and includes meals, a group check in, art or recreation, social skills and emotional intelligence work, and therapy. The program is also linked to a parenting group and individual and family therapy, and works towards transitioning children back to school.

Northern Utah Counseling offers a day program that offers time-limited and therapeutically intensive clinical services for children ages 5–12 with acute behavioral therapy needs. The program is offered Monday through Friday during the school year and generally lasts between 30 and 45 days.

The Wasatch Stride program is a 13-week program that meets Monday through Friday. This afterschool day treatment program serves children ages 5–12 and is run by Wasatch Behavioral Health, Utah County’s Local Mental Health Authority. The program includes social skills lessons, time for homework and activities, group therapy, monthly parent education groups, and home and school behavior tracking to engage parental (or guardian) involvement.

Intermountain Primary Children’s Wasatch Canyons Behavioral Health Campus is a pediatric behavioral health campus for children and adolescents who struggle with mood/emotion regulation and related behaviors. The campus offers three points of service: (1) an inpatient acute psychiatric unit providing 24-hour care for children and adolescents ages 5–18; (2) Intensive Outpatient Programming and Day Treatment Programs, including schooling for both children and adolescents; and (3) an outpatient program offering individual, family, and group psychotherapy/counseling, medication management, and psychological testing.

One organization, The Children’s Center, focuses exclusively on infants, toddlers, preschoolers, and their families. The Children’s Center is the largest mental and behavioral health care facility for young children in Utah and provides evidence-based treatments through both outpatient therapy and a therapeutic preschool program. Clinical services include family therapy, group therapy, psychological evaluations, and psychiatric services. The therapeutic preschool program offers intensive day treatment for children three hours a day, five days a week, and is paired with concurrent family therapy. Findings from the qualitative research suggest The Children’s Center is an important, and one of the only, resources for serving the mental health needs of young children in Salt Lake County and across the state.
Other Stabilization, Referral, or Support Programs

In addition to the programs listed above, there are programs that support early childhood mental health through stabilization, referral, and support services, such as crisis intervention, service referral, and case management. Examples of these programs are provided below.

System of Care

System of Care is a Utah DHS program which assists families and youth (ages 2–21) across the state find appropriate services and resources using “High Fidelity Wraparound” (HFW) care. HFW is a “team-based, collaborative planning process for developing and implementing individualized care plans for children with behavioral health challenges and their families” and is aimed at increasing families’ self-sufficiency and confidence and offering support.84 System of Care provides help navigating human service delivery systems related to child welfare and juvenile justice.

Stabilization and Mobile Response

Stabilization and Mobile Response (SMR) services are another resource available to families experiencing behavioral, mental, and developmental challenges. DHS (in collaboration with LMHAs, the Division of Substance Abuse and Mental Health [DSAMH], the Division of Juvenile Justice Services, DCFS, as well as some health systems) provides SMR services to children, parents, caregivers, and families in their homes. These services ease behavioral health crises, offer family preservation strategies, and provide support for making environmental modifications. SMR provides immediate, short-term counseling and mental health referral. These short-term services are provided for six to eight weeks along with a six to eight weeks of follow up care. SMR services help keep children and youth in their homes, schools, and communities when possible.

Infant and Early Childhood Mental Health Consultation

In recognition that most people who care for young children, including teachers, child care workers, and family members, do not have mental health care training, DSAMH is working on securing funding to implement “a prevention-based service that pairs a mental health consultant with families and adults who work with infants and young children.”85 The Infant and Early Childhood Mental Health Consultation (IECMHC) system is aimed at building adults’ capacity to “strengthen and support the healthy social and emotional development of children—early and before intervention is needed.”86

Office of Child Care, Department of Workforce Services Trainings

The Office of Child Care (OCC) partners with The Children’s Center to offer a variety of services to child care providers, early care and education programs, and families. Services include onsite training for teachers and caregivers that emphasizes social-emotional development, positive guidance techniques, and developmentally appropriate practice. The OCC offers onsite consultation and coaching for caregivers, teachers, children, and families to observe and support specific children or teachers. Additionally, the OCC partners with the six Care About Childcare agencies across the state to offer Utah’s early childhood workforce training on early childhood mental health. The OCC has approved numerous third party, online courses on early childhood mental health that meet the Utah Early Childhood Career Ladder requirements.

Applied Behavior Analysis Providers

The state also has a number of autism-focused programs that serve young children and are important providers of mental health services. These programs are not included in this discussion because of their specialized treatment focus and often require an Autism Spectrum Disorder diagnosis. A UDOH list of Applied Behavior Analysis (ABA) providers is available at https://health.utah.gov/cshcn/pdf/Autism/ABA Therapy.pdf/.

Geographic Reach

Reach

The visual depiction of mental health program locations for children in this report should be considered as a broad view of the availability of early childhood mental health services. The 10 program categories are striking in their variety, including mental health service providers, programs that provide home-visiting or family support, programs focused on different age ranges, and programs with varying capacities and different approaches to meet the mental health needs of the children they serve. Some of the programs focus more broadly on early childhood development and provide only limited mental health-related services, but all provide important access points for families with young children with mental health needs.

Additionally, the reach of different program categories differs based on the organizations’ purpose. Three of the 10 program categories provide resources to children across the entire state based on their legal mandate. The Baby Watch Early Intervention Program and the Special Education Preschool program are both part of the federal Individuals with Disabilities Education Act (IDEA), which provides “free and appropriate public education to eligible children with disabilities throughout the nation and ensures special education and related services to those children.”87 Utah’s LMHAs are county-based entities that oversee the provision of mental health services to residents in all Utah counties. Utah’s Health Centers are also located in nearly every area of the state and serve all individuals regardless of their ability to pay.

Other program categories have multiple locations across the state, but do not serve all areas. There are 150 Head Start programs in Utah, but they do not serve, and do not have sufficient funding to serve, every eligible child in Utah. Both Family Support Centers and Parents as Teacher programs also
have a well-dispersed set of programs, but do not have the resources or legal mandate to programmatically serve the entirety of the state. Other groups, such as the Nurse-Family Partnership program, serve more limited geographic areas, such as a single county, or people who can travel to their location.

Table 3 shows the approximate number of programs and children ages 0–8 in each county. Each location is a physical location, which may have multiple providers or trained staff that provide mental health services and supports. There is a wide variety of program distribution among counties, suggesting differing levels of access depending upon a child’s need and proximity to location. By far the greatest number of programs (about 245) were identified in Salt Lake County, with the next highest count being Davis County, with 43 locations. In 18 counties, fewer than 10 programs were identified. Maps included in the Appendix illustrate how total programs are distributed throughout the state and the variety of programs in each area.

Figure 14 shows the information included in Table 3 geographically, with a measure of programs per 1,000 children ages 0–8 for each county. Five ranges of program density are indicated in Figure 14, with white colored counties having the lowest number of programs per 1,000 children and dark red counties having the highest number of programs per 1,000 children. The uneven distribution affects county areas differently, with Salt Lake County falling into a mid-range of program density despite having almost six times as many programs as other counties. Less populated counties, like Piute County, have the greatest number of programs per 1,000 children due to their

Table 3: Approximate Number of Program Locations Per County, 2020 and Estimated Total Population of Children Ages 0–8, 2018

<table>
<thead>
<tr>
<th>County</th>
<th>Approximate Number of Program Locations</th>
<th>Estimated Population of Children Ages 0-8, 2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beaver</td>
<td>4</td>
<td>1,064</td>
</tr>
<tr>
<td>Box Elder</td>
<td>10</td>
<td>8,483</td>
</tr>
<tr>
<td>Cache</td>
<td>25</td>
<td>20,539</td>
</tr>
<tr>
<td>Carbon</td>
<td>10</td>
<td>2,694</td>
</tr>
<tr>
<td>Daggett*</td>
<td>0</td>
<td>91</td>
</tr>
<tr>
<td>Davis</td>
<td>41</td>
<td>53,618</td>
</tr>
<tr>
<td>Duchesne</td>
<td>7</td>
<td>3,794</td>
</tr>
<tr>
<td>Emery</td>
<td>4</td>
<td>652</td>
</tr>
<tr>
<td>Garfield</td>
<td>2</td>
<td>578</td>
</tr>
<tr>
<td>Grand</td>
<td>5</td>
<td>1,127</td>
</tr>
<tr>
<td>Iron</td>
<td>14</td>
<td>7,673</td>
</tr>
<tr>
<td>Juab</td>
<td>5</td>
<td>1,935</td>
</tr>
<tr>
<td>Kane</td>
<td>1</td>
<td>789</td>
</tr>
<tr>
<td>Millard</td>
<td>9</td>
<td>1,930</td>
</tr>
<tr>
<td>Morgan*</td>
<td>0</td>
<td>1,600</td>
</tr>
<tr>
<td>Platte</td>
<td>4</td>
<td>147</td>
</tr>
<tr>
<td>Rich</td>
<td>3</td>
<td>337</td>
</tr>
<tr>
<td>Salt Lake</td>
<td>245</td>
<td>156,728</td>
</tr>
<tr>
<td>San Juan</td>
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<tr>
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</tr>
<tr>
<td>Sevier</td>
<td>13</td>
<td>3,017</td>
</tr>
<tr>
<td>Summit</td>
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<td>4,051</td>
</tr>
<tr>
<td>Tooele</td>
<td>15</td>
<td>9,468</td>
</tr>
<tr>
<td>Uintah</td>
<td>9</td>
<td>6,182</td>
</tr>
<tr>
<td>Utah</td>
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</tr>
<tr>
<td>Wasatch</td>
<td>5</td>
<td>4,336</td>
</tr>
<tr>
<td>Washington</td>
<td>18</td>
<td>19,159</td>
</tr>
<tr>
<td>Wayne</td>
<td>4</td>
<td>302</td>
</tr>
<tr>
<td>Weber</td>
<td>28</td>
<td>35,173</td>
</tr>
</tbody>
</table>

* While no program category locations were identified in Morgan and Daggett counties through this analysis, residents have access to school-based mental health services (provided in partnership with the LMHA) and mental health services available in adjacent counties.

Note: The number of program locations likely do not represent a complete count of all available programs. School-based mental health services are not included in the program location counts, but school-based mental health services or supports are available in most, if not all, counties. The “stabilization, referral, and support programs” noted above are also not included in the program count.

small population size. Counties like Utah and Davis Counties, are in the lowest category for program locations per 1,000 children even though they have more programs than many of their rural counterparts, given their larger populations.

While this map is a helpful depiction of the distribution of programs across the state as they relate to population size, caution is warranted in interpreting the results. First, this is a measure of program density and not a measure of access. It does not differentiate among the variety of program types, children's needs, account for program capacity, or account for ability or distance required to access necessary services. Second, the county-level designation used in this map is a way to organize the locations, and should not be interpreted as a restriction on available services. Many families drive across county lines in order to receive care, a particularly important consideration in interpreting Salt Lake County's ratio which only reflects the county's population. Third, school-based mental health services are not included in the program location counts, but school-based mental health services or supports are available in most, if not all, counties. The programs listed in the "Other Stabilization, Referral, or Support Programs" section above are also not included in the program count.

Figure 15 shows the location of programs that have a licensed mental health provider for children onsite. Program locations for Baby Watch Early Intervention Program, Parents as Teachers, Nurse-Family Partnership, and Special Education Preschool are not included in this map because they provide mental health assessments or support services to families with very young children, but do not provide mental health services from a licensed mental health provider. This map also includes only Family Support Center and Head Start programs that offer mental health services onsite. In the case of Head Start, this prevents a double-count of the licensed mental health providers who contract with the other Head Start program locations. The total number of programs represented in the licensed mental health provider map decreases from 541 to 302. Salt Lake County again has a much greater number of program locations than any other county (142) with the next closest county being Utah (27). Overall, Figure 15 looks similar to Figure 14, but shows a lower relative program density in counties like Duchesne and Uintah and a higher relative program density in counties such as Wasatch and Sanpete. These results should be viewed with the same caution as Figure 14 and suggest the difficulty of characterizing access in any given area without knowing more about a child's specific needs or circumstance.

That said, the maps are useful in suggesting the sizable distances that residents who are not near the Wasatch Front may have to travel to receive early childhood mental health services. While it may be impractical to attract full-time mental health providers or practices to all areas of the state, understanding where the gaps exist can assist in evaluating

![Figure 15: Approximate Number of Program Locations with a Licensed Mental Health Provider per 1,000 Children Ages 0–8, 2020](image)

Since the programs omitted from Figure 15 support mental health through family support, mental health assessments, and referrals, the low number of available programs in some areas of the state highlights the areas of Utah where families with children in need of more intensive mental health care have fewer options.
whether increasing the use of options such as part-time practices, mobile services, and telehealth are needed. Evidence-based caregiver support programs may also be helpful in expanding services into identified areas of need.

**School Counseling and Therapeutic Services**

There is one important program category missing from Figures 14 and 15: elementary and other schools providing access to school counselors and mental health professionals (either hired or contracted by a local education agency for K–3 students). Although Special Education Preschool locations are listed in Figure 14, the public school system also provides widespread access to mental health assessments, social, and emotional learning, referrals, and some clinical services for Utah children ages 5–8. In recent years, the Utah legislature emphasized increasing mental health supports in Utah’s schools by creating the Elementary School Counselor Program in 2018 and the Student Health and Counseling Support Program in 2019.

Local education agencies that receive Elementary School Counselor Program grants may direct the funds to elementary schools in a variety of ways, prioritizing funds for elementary schools with a high percentage of students exhibiting risk factors for childhood trauma and intergenerational poverty.

Funds must be used for licensed counselors or social workers who collaborate with educators and students’ families to identify academic and mental health needs and remove “barriers to learning and developing skills and behaviors critical for a student’s academic achievement.”

Survey responses also confirmed location matters when it comes to an ability to access early childhood mental health care. When asked if they thought certain areas of Utah were doing well at meeting the mental health needs of children 0–8, respondents were split: 40% answering yes, 33% answering no, and 27% answering don’t know; but when asked if there were areas of the state that were not doing well at meeting the mental health needs of children 0–8, a notable 95% of respondents said yes.

**Key Findings Regarding Early Childhood Mental Health in Utah**

Integrating themes gleaned from the qualitative research with the relative risk and reach of early childhood mental health services shown in the previous sections provides for a more comprehensive understanding of early childhood mental health services in Utah. This section provides an overview of key themes from the qualitative research, and builds on recent research focused on Utah’s mental health system and children’s service areas, including the *Utah Maternal and Child Health and Children with Special Healthcare Needs 2020* report; the *2019–2020 Preschool Development Grant B–S Needs Assessment, Empowering Utah Families Through a Coordinated Early Childhood B–S System; Utah’s Mental Health System* by the Kem C. Gardner Policy Institute; *Utah’s Eighth Annual Report on Intergenerational Poverty, Welfare Dependency and the Use of Public Assistance 2019*; and other studies that provide context for understanding the data collected. When considering all of these sources, a number of themes emerge.

**Limited Supply of Mental Health Providers**

The 2019 Gardner Institute mental health report highlights research from the Utah Medical Education Council that indicates Utah has a shortage of mental health care providers that could worsen over time. “Utah experiences mental health professional shortages in all of its counties and has fewer providers per 100,000 people than the national average.”

It also highlights data from the American Academy of Child & Adolescent Psychiatry that shows “the ratio of child psychiatrists per 100,000 children in Utah is particularly low. Most counties have no access to a practicing child and adolescent psychiatrist unless they travel to a different county for services.”

Findings from the qualitative research confirmed this scarcity, particularly for mental health providers trained and comfortable with young children. While providers reported offering a range of services (many combining play, individual, and family therapy, and a few offering day programs), most of these services were targeted to children ages five or older.

**Uneven Distribution of Early Childhood Mental Health Services**

Survey responses also confirmed location matters when it comes to an ability to access early childhood mental health care. When asked if they thought certain areas of Utah were doing well at meeting the mental health needs of children 0–8, respondents were split: 40% answering yes, 33% answering no, and 27% answering don’t know; but when asked if there were areas of the state that were not doing well at meeting the mental health needs of children 0–8, a notable 95% of respondents said yes.
Rural Areas Are a Particular Concern

As shown in Table 3, rural areas have access to far fewer programs than urban areas, and families are likely to have to drive greater distances to receive mental health services for their child. Additionally, several stakeholders noted rural areas particularly struggle with resources and have a difficult time attracting necessary personnel. The Utah Maternal and Child Health and Children with Special Healthcare Needs 2020 report also identified access to care due to limited availability as a top concern, specifically highlighting the difficulties of accessing mental health care in rural areas.

Services in urban counties, and counties bordering urban counties, were generally perceived as doing a better job of meeting early childhood mental health needs than rural counties, and several stakeholders specifically noted meeting the needs of younger children (ages 0–4) in rural areas was an even bigger challenge. In some rural areas, a child in need of more intensive mental health care may not be able to access services due to cost (even if the family has insurance) or having to travel hours to receive treatment. A long drive can be an even greater deterrent if the caregiver does not understand the importance of seeking mental health services for their child.

Lack of Comfort with Treating Young Children

Stakeholders noted being aware of only a few mental health care support providers for young children, and several local experts observed therapists may not feel as comfortable treating young children as they feel treating older children, both in rural and non-rural areas. A lack of training, experience, and knowledge of need were cited as factors for this discomfort. One stakeholder noted some mental health professionals have never considered mental health to be an infant or young child need.

Lack of Program Collaboration and Transition Support

The 2019–2020 Preschool Development Grant B-5 Needs Assessment provides important information and data on a variety of early childhood services. One section addresses an area of particular concern for programs supporting young children’s mental health: transition support between early childhood programs and elementary schools. The assessment notes that coordination and information sharing can be difficult, particularly for vulnerable and underserved children with developmental delays or other special needs.

“It is difficult for Utah’s early childhood service leaders to address social and emotional needs as children transition to kindergarten, and between early intervention and preschool special education programs. This is particularly true for children who have experienced trauma and disruption, such as those in foster care. With only one therapeutic preschool in the state of Utah, many early care providers are tasked with meeting the needs of children who have emotional disruption without the specialized training necessary to do so. Early childhood service providers need additional skills to effectively screen and respond to the needs of children appropriately while distinguishing normal behavior from trauma responses. It is essential that Utah’s early childhood system better acknowledge and account for the socio-emotional development of young children relative to their overall well-being.”

—2019 Utah Preschool Development Grant B-5 Needs Assessment: Empowering Utah Families Through a Coordinated Early Childhood B-5 System

“…specialty medical care is extremely limited, especially in rural areas, and developmental screening is not comprehensive. Mental health and behavioral health services were described as very limited and as a system that is not nearly robust enough to meet the needs.”

Stakeholders echoed these concerns, noting that once a child transitions from one program to another, including between school districts, it is difficult to know whether the child is still receiving mental health services. Others felt the lack of system integration severely limited the overall quality of care and allowed children and families to fall through cracks in the system.

That said, qualitative research findings also revealed there are a few areas of the state with successful collaborations between different programs and funding sources. One example is the non-profit Root for Kids program in St. George, which includes an Early Head Start Home Visiting program, BWEIP, a Parents as Teachers Program, access to a clinical therapist on staff funded through a separate fundraising effort, participation in the Utah Alliance for Determinants of Health demonstration project, and an early Head Start Childcare Partnership in addition to a child care center.

Other positive examples were noted, including more professional development resources being directed towards mental health services, and a significant increase in awareness and knowledge of the importance of mental health in young children. Some described positive working partnerships between the different systems in their areas, allowing them to meet children's and families' needs in a timely and effective manner.

**Need to Promote Greater Understanding of Early Childhood Mental Health**

As discussed above, parents and caregivers are a critical part of children's mental health. That said, stakeholders noted parents may not always understand the importance of the mental health services recommended for their children and the critical brain development taking place during this phase of their child's life. This can be particularly true of parents of children with the greatest need for mental health services.

For the youngest children—infants, toddlers, and preschoolers—parents may hope the child will grow out of any concerning behavior. For parents of all ages, not seeking treatment and services can be the result of a myriad of issues, including balancing the competing demands of work, family, and personal issues; not being able to access services due to cost; the difficulty finding affordable and reliable transportation; and stigma.

Qualitative research findings showed stakeholders feel one of the biggest challenges to providing mental health services is helping parents, physicians, school leaders, and the general population understand the importance of early childhood mental health and how to identify a need for mental health services. Stakeholders suggested more needs to be done to provide education and resources to parents about childhood development, as well as to support parents who struggle to meet the needs of their children with mental or behavioral health challenges. In addition to educational efforts, evidence-based programs to improve and support parenting could foster a greater awareness of mental health care needs and resources.

For example, one stakeholder noted that other states offer a hotline for children who are close to being removed from daycares due to behavioral concerns.

**Greater Need for Trauma-Informed Approaches**

Research from the Utah Intergenerational Welfare Reform Commission consistently highlights a link between intergenerational poverty, childhood trauma, and toxic stress. In response, the Commission created the Resilient Utah Subcommittee which in turn conducted a statewide survey of behavioral health practitioners between 2018 and 2019. Survey results suggest “there is a need for assistance with training, resource, and implementation strategies for trauma-informed practices.” The Subcommittee proposes designating a center to “establish consistent foundational principles for integrating a trauma-informed approach into operational functions of agencies, organizations, and citizens.”

Qualitative research findings from this report confirm the need to better understand the impact of trauma on children, with some stakeholders noting that more training is needed for providers to have the necessary skills and confidence to work effectively with extremely high-risk children. That said, many stakeholders also feel progress has been made in terms of available education, information, programs, training, and resources detailing the need for early childhood mental health and trauma-informed approaches. Some of this may be the result of health systems providing training and consultation to providers on trauma-informed and evidence-based practices. For example, Intermountain Healthcare is providing training to Children's Justice Centers and rural providers, including behavioral health providers, on Trauma-Focused Cognitive Behavioral Therapy, as well as a clinical process model for treating trauma symptoms in children. University of Utah Pediatric Psychiatry and Behavioral Health Faculty have developed and piloted a Child and Adolescent Mental Health certificate program for primary care physicians, nurse practitioners, and physician assistants. Once operational, providers will have access to University of Utah faculty clinicians and empirically based best practice content related to assessment, diagnoses, and treatment of pediatric psychiatric disorders in primary care settings.

**Waiting Lists**

Several stakeholders suggested that waiting lists can delay or prevent young children from receiving mental health services, and that long wait lists are a particular concern in Salt Lake City and surrounding areas. As noted above, Salt Lake County has by far the largest number of programs, but is only in the mid-range for programs per 1,000 children ages 0–8. Many of the programs in Salt Lake County also serve families that drive across county lines to access programs or providers that are unavailable in their area, which may result in the waiting lists and more limited access to the programs.
Bilingual and Multicultural Mental Health Professionals

Even in areas where programs are accessible, language and multicultural understanding can be a barrier to families accessing appropriate mental health services for their children. One stakeholder reported it is difficult to find someone who is both bilingual and trained specifically to work with children ages 0–5. Some home-visiting programs also lack necessary staff to provide culturally knowledgeable home visiting for refugees and other populations.

Cost and Transportation

Stakeholders frequently shared concerns about the prohibitive costs of mental health services for families, and the barrier transportation can pose to accessing ongoing care. They mentioned accessibility and an inability to afford care as the biggest challenges, including for families with commercial health insurance.

The majority of Utahns receive health care coverage through their employers (60%–65%) and Utah has the highest rate of employer-sponsored insurance in the country (see Figure 16). However, not all employer-sponsored health insurance plans in Utah are required to cover mental health services—and even if they do, there are still applicable copays, deductibles, and out-of-pocket costs. For example, the cost for counseling or therapy can range from $50 to $240 for a one-hour session. Commercial health insurance typically covers only 70%–80% of the cost of these sessions if they are provided by a network provider and are for a diagnosed psychiatric disorder. High-deductible health plans (HDHPs) are also a concern because they can deter some individuals from seeking appropriate medical care due to the higher upfront, out-of-pocket costs. HDHPs currently make up about 30% of Utah’s commercial health insurance market.

Potential Return on Investment (ROI)

Effective early childhood mental health programs employ evidence-based practices to address the mental health of young children. By doing so, they maximize the potential positive impact a mental health intervention has on the children they serve, including long-term positive impacts that can endure throughout a child’s life.

As with other human service programs, the ROI for early childhood mental health programs can be thought of as “the cost savings and/or taxpayer gains realized by a program’s intervention” divided by the cost of the intervention. For example, effective early childhood programs, specifically mental health programs, not only improve a child’s mental health, but can lower physical health care costs over the child’s lifetime as well. The potential reduction in costs is notable since national cost estimates of mental, emotional, and behavioral disorders among youth reach $247 billion per year in mental health and health services, lost productivity, and crime. An estimate specific to child maltreatment from the Centers for Disease Control and Prevention shows total lifetime financial costs associated with one year of child maltreatment (physical abuse, sexual abuse, psychological abuse and neglect) is $124 billion (lifetime costs of childhood maltreatment are estimated at $210,012 per case).

A review of the literature reveals only a limited number of cost-benefit studies focus specifically on early childhood mental health—and most of these studies examine the costs associated with ACEs (see “Adverse Childhood Experiences” section above) or are programs that support early childhood mental health through center-based care or home visitation.

For example, a recent study suggests Head Start generates at least $1.84 in future after-tax earnings for every $1.00 invested if program substitution is included in the analysis. A Washington State Institute for Public Policy study found the Parents as Teachers program had a net benefit of $800 per child. A two-year classroom management strategy for first and second graders, shows a benefit to cost ratio of $62.80.
A number of other studies support the positive ROI associated with the Nurse-Family Partnership, and also note that the long-term positive impacts related to improved mental health and development for children include:

- 67% reduction in behavioral and intellectual concerns at age 6
- 48% reduction in instances of abuse and neglect
- 28% reduction in depression at age 12
- 50% reduction in language delays

The Nurse-Family Partnership also improves the general health and well-being of children (56% fewer emergency room visits for accidents and poisoning, and children are three times more likely to graduate from high school with honors).

Additionally, the program supports the health and well-being of parents who are likely to experience 20% fewer preterm births, 20% less time on welfare, two times more likely to be employed by the child's second birthday, and three times less likely to die from all causes of death. This is a significant amount of research that supports a positive ROI associated with high-quality early childhood care and interventions. However, given what is known about the lifetime personal and public costs of mental, emotional, and behavioral disorders, and the disproportionate impact evidence-based interventions have at an early age, more ROI studies specific to early childhood mental health care should be conducted.

Programs supporting early childhood mental health have positive impacts throughout a person's life. The potential reduction in costs is notable since national estimates of mental, emotional, and behavioral disorders among youth cost $247 billion per year in both mental health and health services, lost productivity, and crime.109

Ideas for Future Research and Next Steps

Initial ideas for future research and possible next steps are suggested by the findings in this report:

- Provide resources to establish ongoing collaboration and transition support between early childhood mental health entities in order to support children, create efficiencies, and better understand long-term outcomes. Encourage network development to increase access to areas and populations facing gaps in services.110
- Create a catalogue detailing the types of early childhood mental health services offered in different areas of the state to provide a more nuanced understanding of the mental health resources that exist for Utah children regionally and for high-risk areas and groups. Enlist early childhood mental health experts to identify when different types and intensities of services are needed in order to help people access appropriate care.
- Encourage use of evidence-based treatment. Stakeholders mentioned a number of approaches to treatment used in Utah, including psychological evaluations, family therapy, play therapy, group therapy, case management, telehealth, medication management, and evidence-based treatments.

- Increase awareness of early childhood human development and the influence of ACEs. Support early childhood mental health through increased parent and provider education and services.
- Identify program capacity and explore coordination opportunities to best reach Utah children in need.
- Ensure family voices, representative of all populations, cultures, and languages across urban and rural areas, are included in an effort to identify areas of need and opportunities for improvement in service provision.
- Research barriers to ubiquitous and seamless data collection and contribution to Utah’s Early Childhood Integrated Data System (ECIDS), the Utah Data Research Center (UDRC), school system, or other data collection efforts, bolstering knowledge of the current need for, and provision of, early childhood mental health screening and services.
Future studies could also benefit from more data, information, and research on this early childhood age group, including:

Screening Tools
Increasing use of the parent-completed Ages and Stages Questionnaire: Social-Emotional (ASQ:SE) screening tool could be helpful in understanding the degree of need for early childhood mental health care. ASQ:SE is used to identify social-emotional developmental delays and can be used to determine whether a child would benefit from early intervention services. Programs such as BWEIP, home visitation, and Head Start use or may choose to use ASQ:SE or a similar screening tool to help identify developmental delays and provide parents and service providers with information needed to seek additional services or diagnoses for young children. More consistent and widespread use of ASQ:SE or a similar screening tool could increase understanding of the need for early childhood mental health services in Utah.

Utah already has a strong foundation for the unified collection of data on early childhood mental health and other services in Utah’s ECIDS system, including information on ASQ:SE assessments. However, since data contribution is voluntary, it is difficult to ascertain the representativeness of the data and to view the data longitudinally in order to learn about trends in early childhood mental health service and coverage. Enhancing this data system to be able to provide information such as unduplicated headcounts of children served by early childhood programs, complete summaries of the ASQ:SE screeners used by early childhood service providers in Utah, or longitudinal trends would be helpful in assessing Utah’s need for early childhood mental health services.

Targeted Data on Early Childhood Mental Health Needs and Services
More targeted data is needed to better understand disparities in access to early childhood mental health services, the extent of early childhood mental health care provision, longitudinal outcomes for children’s well-being, and areas of high risk and need for early childhood mental health services. However, aggregating data on early childhood mental health needs and services is difficult. Part of the difficulty comes from different definitions used in data collection, such as counting the number of individual children or families served, depending on the program purpose. Some of the difficulty is associated with an inability to determine unduplicated headcounts of children, meaning that a single child may be served by multiple programs and counted each time. Another key part of the difficulty is related to privacy rules and regulations associated with mental health provision. Finally, there are a number of different entities involved in supporting early childhood mental health, including federal and state government, education and health programs, and for-profit and nonprofit entities.

One possible solution is to utilize the UDRC, which was created by the Utah legislature in 2017 to connect data from a variety of government sources including the State Board of Education and UDOH early childhood data. UDRC has the ability to provide unduplicated headcounts, but has not incorporated early childhood data into its data warehouse. Additionally, since early childhood programs use different identification numbers for children, it is difficult to evaluate outcomes based on program participation.

Another possible idea is to issue a Child Health Survey with a focus on early childhood mental health. In 2000, UDOH issued a Child Health Survey that included a few questions on mental health, including whether the child needed mental health treatment or counseling, how many days in the past 30 days a child’s mental health was “not good,” and problems with accessing mental health care. Given this survey was issued over 20 years ago, it would be helpful to have updated data to accurately analyze the mental health needs of young children and their parents’ ability to access services. The state of Colorado issues this survey on an annual basis and collects data on whether children experience emotional or behavioral difficulties and whether parents have said there was a time in the past 12 months when their child needed mental health care or counseling.

Data on Resources Spent on Early Childhood Mental Health
Originally, this report was envisioned to include a discussion of the resources being spent on early childhood mental health services. Although funding information is available for some public programs, in many cases it is difficult to separate the portion of funding directed to early childhood mental health from the entirety of the program. Future discussions and research in this area should consider which mental health
supports, services, and treatments should be included in an estimate of early childhood mental health resources, what aspects of public and private funding should be included and accounted for, and how best to measure whether the amount of current resources are sufficient in meeting the state's early childhood mental health needs.

**ROI Studies on Early Childhood Mental Health Programs and Evidence-Based Practices**

This report cites a variety of studies establishing a strong ROI for early childhood programs. Many of the programs included in these studies have similar characteristics to those of evidence-based early childhood mental health programs, or are programs that support early childhood mental health through home visitation. However, studies focused specifically on early childhood mental health tend to examine the costs associated with ACEs rather than conducting an ROI or cost-benefit analysis of a specific program. Given what is known about the lifetime personal and public costs of mental, emotional, and behavioral disorders and ACEs, and the positive impact evidence-based interventions have at an early age, it is critical to conduct more ROI studies specific to early childhood mental health care, particularly of programs that use evidence-based practices.

**School-Based Mental Health Data**

As noted earlier, schools provide an important mental health resource for families throughout Utah. The Special Education Preschool Program, school counselors, and licensed mental health professionals (both hired and contracted by local education agencies) support the mental health of children through the services they provide. However, breaking out data for the age group focused on in this report is difficult since the age range does not correspond with school ages, and access to mental health varies depending on the school district and school.

That said, national data from 2015–2016 show that schools do not provide students with the recommended ratio of school counselors, school psychologists, or social workers, and that Utah has far lower ratios than national levels:

- The recommended ratio of school counselors to students is 250:1, the national ratio is 444:1, and Utah’s ratio is 663:1.
- The recommended ratio of school psychologists is 700:1, the national ratio is 1,526:1, and Utah’s ratio is 2,720:1.
- The recommended ratio of licensed social workers to students is 250:1, the national ratio is 2,106:1, and Utah’s ratio is 8,198:1.116

Elementary schools are even less likely to have the recommended ratios of students to mental health professionals. In 2019, there was a ratio of 1,314:1 K–6 students per school counselor.117 As noted earlier, the 2018 Elementary School Counselor Program grants for school-based counselors and social workers are aimed at increasing mental health support in Utah's elementary schools.

School counselors, psychologists, social workers, and nurses all have different training and educational backgrounds and are likely to play different roles in terms of mental health service at an elementary school. Some may be involved with mental health service provision or social and emotional learning, and others may focus more on mental health screening (regardless of their ability to provide mental health services). As noted before, schools may share a local education agency hired mental health professional or contract with an external mental health provider.

Collecting and summarizing data regarding the different types of mental health professionals providing services at elementary schools would allow for a greater understanding of localized mental health resources available to families through the public school system.
Conclusion

This report is a starting point for understanding the complexities of Utah’s early childhood mental health system for children ages 0–8. Future research should build on the work that is currently being done in this space and continue to identify additional programs, tools, and approaches to better understand and serve the mental health needs of Utah’s youngest children. Being the youngest state in the nation, with the highest percent of children under age 18, Utah has an important opportunity to address Utah’s early childhood mental health needs, improve outcomes, and produce significant “cost savings and/or taxpayer gains” in public services by moving upstream and preventing more serious and costly outcomes later in children’s lives.

As a first step, the baseline information provided in this report suggests that there are a range of goals to consider when thinking about increasing access to early childhood mental health, including aligning program accessibility with level of risk or need, aligning program accessibility with the number of children in need, and ensuring that children in need have reasonable access to care in all areas of the state. One of the limitations to achieving these goals is program distribution, with children in different areas of the state experiencing this problem differently. Highly populated counties like Utah county have relatively small number of programs for a large number of children, while families in rural areas may be hours away from appropriate care, especially for intensive services. These differing goals are important to consider when addressing access and may suggest a need for greater use of options such as part-time practices, mobile services, and telehealth.

Second, it is important to consider that different groups of children experience varying degrees of risk and access. For instance, some mental health professionals do not feel comfortable providing services to young children (e.g., 0–4 year olds), and there is only one program that exclusively focuses on infants, toddlers, preschoolers and their families, suggesting an overall shortage of mental health services for this age group across Utah, and particularly in rural areas. Additionally, children from racial and ethnic minority populations frequently face a disproportionate likelihood of experiencing risks related to a greater need for early childhood mental health services. Strategies to address early childhood mental health needs should consider effective means to reach these populations and address broader access issues including cost, transportation, and a lack of bilingual and multicultural professionals.

Third, more education is needed to help parents, physicians, school leaders, and the general population understand the importance of early childhood development and mental health, and the long-term benefits, both personal and societal, of investing in programs that support early childhood mental health. Enhanced focus should be given to the importance of trauma-informed care as well as the disproportionate impact many risk factors have on certain racial and ethnic groups.

Finally, early childhood mental health is an area in need of more and better data. With so many different entities involved in care provision and so many different focuses regarding treatment and service specialty, child age, geographic location, and program capacity, an effort should be made to collect data that thoroughly reflects the mental health needs, services, and progress of Utah’s youngest children.

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Appendix

Figure 17: Approximate Number of Program Locations by County, 2020

Note: Mapped program locations likely do not represent a complete count of available early childhood mental health programs and providers. The county-level designation used in this map is a way to organize the locations, and should not be interpreted as a restriction on available services. Families travel to different counties for care. Each count represents a single location, which may have multiple providers or trained staff that provide mental health services and supports. County color depicts the range of the number of programs located in each county. Pie charts indicate the proportion of total programs in a county by program category. School-based mental health services are not included in the map, but school-based mental health services or supports are available in most, if not all, counties. See "School Counseling and Therapeutic Services" for more information.

*While no program category locations were identified in Morgan and Daggett counties through this analysis, residents have access to school-based mental health services (provided in partnership with the LMHA) and mental health services available in adjacent counties.

Source: Kem C. Gardner Policy Institute analysis.
Endnotes


6. This measure was derived based on 10 conditions (Tourette Syndrome (3-17 years), anxiety (3-17 years), depression (3-17 years), behavioral and conduct concerns (3-17 years), developmental delay (3-17 years), intellectual disability (3-17 years), speech or other language disorder (3-17 years), learning disability (also known as mental retardation) (3-17 years), Autism or Autism Spectrum Disorder (ASD) (3-17 years), Attention Deficit or Attention-Deficit/Hyperactivity Disorder (ADD or ADHD) (3-17 years)) and the CSHCN Screener questions on mental, emotional, and behavioral concerns. To qualify as having a mental, emotional, developmental or behavioral concern, the child must have any of 10 conditions currently and/or qualify on the CSHCN Screener screening emotional, developmental or behavioral conditions criteria. Please note that in the NSCH, all information about children's health conditions is based on parent recollection and is not independently verified.


15. Forty-eight Interviews were conducted between March and June 2020. Conversations lasted about thirty minutes and provided insight into specific programs as well as an opportunity to learn about other important early childhood mental health care resources in the stakeholders' communities.

16. Surveys were sent to 104 early childhood mental health care programs between July 13, 2020 and July 31, 2020. The survey response rate was 47% including some partially completed surveys. Respondents represented programs in 19 of Utah's 29 counties. Survey findings should be considered directional in nature given the response rate and the likelihood that some early childhood mental health programs did not receive a survey because they were not identified through the interview and review process.


22. This report draws from several studies to better understand how risk factors impact different racial and ethnic groups. Population categories highlighted in the report vary because they are used as defined by the differing study classifications and definitions.


38. Utah Pregnancy Risk Assessment Monitoring System (PRAMS), Utah Department of Health.


83. Every school district has the responsibility to serve children ages 3–5 with disabilities. The services, and where they are provided, is determined annually based on the needs outlined in the student's Individualized Education Program (IEP) and the IEP team - including the parents and the student. Some students receive preschool education services in preschool classrooms. In this case, they are placed with consideration to proximity to their home and the student needs outlined in the student’s IEP.


100. Baum, H. M., Gluck, A. H., Smoot, B. S., & Wubbenhorst, W. H. (2010). Substance Abuse Among Children, Youth, and Young Adults: Research Commissioned by the Committee on Prevention of Mental Disorders and Substance Abuse Among Young People. Paper commissioned by the Committee on Prevention of Mental Disorders and Substance Abuse Among Children, Youth, and Young Adults: Research Advances and Promising Interventions, Board on Children, Youth, and Families, National Research Council and Institute of Medicine, Washington, DC.

101. Baum, H. M., Gluck, A. H., Smoot, B. S., & Wubbenhorst, W. H. (2010). Substance Abuse Among Children, Youth, and Young Adults: Research Commissioned by the Committee on Prevention of Mental Disorders and Substance Abuse Among Children, Youth, and Young Adults: Research Advances and Promising Interventions, Board on Children, Youth, and Families, National Research Council and Institute of Medicine, Washington, DC.

102. Baum, H. M., Gluck, A. H., Smoot, B. S., & Wubbenhorst, W. H. (2010). Substance Abuse Among Children, Youth, and Young Adults: Research Commissioned by the Committee on Prevention of Mental Disorders and Substance Abuse Among Children, Youth, and Young Adults: Research Advances and Promising Interventions, Board on Children, Youth, and Families, National Research Council and Institute of Medicine, Washington, DC.

103. Baum, H. M., Gluck, A. H., Smoot, B. S., & Wubbenhorst, W. H. (2010). Substance Abuse Among Children, Youth, and Young Adults: Research Commissioned by the Committee on Prevention of Mental Disorders and Substance Abuse Among Children, Youth, and Young Adults: Research Advances and Promising Interventions, Board on Children, Youth, and Families, National Research Council and Institute of Medicine, Washington, DC.

104. Evaluations of the benefit of the Head Start have varied through the years since its inception in 1965, but a recent policy brief by the Institute for Research on Labor and Development suggests that the benefits of the program were underestimated in a randomized experimental evaluation of the program reported in a 2010 study because, although children randomly assigned to Head Start were compared to those who were not assigned to Head Start, many of those children attended similar programs which were also publicly subsidized. This alternative expense was not accounted for in the 2010 analysis. Montialoux, C. (2016, September). Revisiting the impact of Head Start. Institute for Research on Labor and Employment. Policy Brief. Retrieved from https://www.irle.berkeley.edu/files/2016/IRLE-Revisiting-the-impact-of-Head-Start.pdf


109. Eisenberg, D., Neighbors, K. (2007). Economics of Preventing Mental Disorders and Substance Abuse Among Young People. Paper commissioned by the Committee on Prevention of Mental Disorders and Substance Abuse Among Children, Youth, and Young Adults: Research Advances and Promising Interventions, Board on Children, Youth, and Families, National Research Council and Institute of Medicine, Washington, DC.

110. The social and emotional health for young children subcommittee of the Early Childhood Utah Commission Advisory Council was mentioned as a possible resource in facilitating focused actions.

111. The ECIDS’ mission is to “to better coordinate policy, programming, and funding among all participating programs in Utah through data-driven decision-making.” For more information: https://earlychildhoodutah.utah.gov/ecids.php


114. The National Survey of Children’s Health does provide some information on the need for and availability of mental health services, but most questions focus on children ages 3–17 years, with some data only available for children ages 6–17 years. Accessing micro-level data may allow researchers to pull out state and age-specific data, but having appropriate sample size could be an issue.


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