

25 by 25 Metrics: The Case for Including . . .

- **Poverty, Children 0-5:** “Growing up in poverty is one of the greatest threats to healthy child development. Poverty and financial stress can impede children’s cognitive development and their ability to learn. It can contribute to behavioral, social and emotional problems and poor health,” according to the Annie E. Casey Foundation.

The effects of poverty are felt in a number of ways, both individually and societally. One of the most common effects is poor nutrition. Families living in poverty rarely have access to highly nutritious foods. Even when available, the costs associated with the healthiest foods are too high for their income. In many cases, they are forced to live in unhealthy living environments (poor sanitation) and many have no insurance coverage to access preventive or acute care. There is also a strong correlation between those living in poverty and the lack of education, which leads to higher levels of unemployment for this segment of society. Those unemployment occurrences often lead to homeless, and the fastest growth segment of that condition is parent(s) with children.

For children, growing up in poverty hinders brain development and leads to poorer performance in schools. In fact, recent research has linked poverty to smaller brain surface areas. They found that children who grew up in families below the federal poverty level had grey matter volume 8-10% below normal development. Sadly, the research showed that gaps in brain development between children in poverty and those not impoverished was still present at age 22. An NCES report recently revealed that 51% of students in public schools were from low-income families and that those children are exposed to more environmental stressors, such as lack of access to healthy food, unsafe neighborhoods, and stressed parents. Finally, a recent editorial in the Oklahoman pointed out that “the poverty rate for adults who complete college is about 5%. It climbs to 15% for those who obtain only a high school diploma, and approached 30% for adults who don’t finish high school.”

- **Uninsured, (< 19 years old):** The lack of health coverage takes an enormous toll on the uninsured – in thousands of avoidable deaths each year, poorly managed chronic conditions, undetected or untreated cancer, and untried life-saving medical procedures. According to emerging research, being uninsured has multiple economic consequences as well. The costs associated with being uninsured are borne across the board: by those uninsured, by employers, by the health system, and by the taxpayers.

According to Families USA, the impacts on those uninsured include: they are less likely to have a source of care outside the emergency room; they often go without screenings and preventive care, they often delay or forego needed medical care; they are sicker and die earlier than those with insurance coverage; and they pay more for medical care.

- **Single Parent:** Research shows that children who grow up in single parent households have elevated risks of experiencing cognitive, social, and emotional problems. They also tend to be economically disadvantaged, where their parents can't afford books, home computers, cell phones, clothes and other resources that make it easier for their child to succeed academically and/or give their children status among their peers. They also tend to live in neighborhoods with a high crime rates, low quality education, and little to no community services.

The quality of parenting is also much lower in comparison to continuously married parents. According to a journal article published by The Future of Children, single parents are less emotionally supportive, have fewer rules, dispense harsher and more inconsistent discipline, provide less supervision, and engage in more conflict with their children. Children living with single parents are also exposed to more stressful experiences, which is also a strong predictor of their behavioral and emotional problems as adolescents and young adults.

- **Females, 18-64, Associates Degree or Higher:** The importance of having a post-secondary degree on family income has grown exponentially over the past two decades. In today's global economy, graduating from high school to post-secondary education is critical for students to have the greatest professional options and opportunities. College is one of many pathways (post-secondary certificates is another) that teach students the skills they need to pursue a specific career such as nursing, mechanics, or computer technology. Research findings are also quite clear: the correlation between rising educational attainment and -- higher wages AND lower rates of unemployment -- is quite strong.

Finally, educational attainment is an important cultural value that yields large economic returns. The Bureau of Labor Statistics reports that, in 2014, the median weekly earnings of a person with less than a high school diploma was only \$488. Earnings jump with higher levels of educational attainment: Associated degree (\$792), Bachelor's degree (\$1,101), and Doctoral degree (\$1,591). For those individuals that move up the educational ladder and receive a Bachelor's degree, 36% came from intact married families; only 8% came from single parent families.

- **Teen Births/Teen Parents:** The research is clear and compelling about the damaging short- and long-term effects of teen pregnancy and too-early parenting, an issue that impacts three generations at once. Teenage pregnancy is linked to an array of costs and negative health, education, and economic consequences that impact the baby and teen parent, often for a lifetime. Data indicates that three in 10 girls will become pregnant before reaching age 20. Teens are more likely to experience complications during pregnancy than women who are older, and their babies are more likely to be born prematurely, have a low birth weight or experience other health problems.

Pregnancy and parenting teens often find that caring for a child makes it difficult for them to continue their education, and research shows that pregnancy is the leading factor limiting a teen mother's educational attainment. More than half of teen mothers never graduate from high school, and fewer than 2 percent graduate from college. Research suggests that teen fathers struggle to complete their education, also. With limited education, teen parents are often less able to find and keep employment that can support a family and have a lower earning potential. According to the National Campaign to Prevent Teen & Unplanned Pregnancy, 75 percent of unmarried teen moms go on welfare within five years of having their first child.

Depression is common among pregnant teens, along with continual stress and anxiety. Studies show that children of teen parents are at higher risk for abuse and neglect, as the teens are unprepared for the emotional, physical and economic demands of parenting. The following statistics reveal the importance of tracking this metric: 30% of teen girls who have dropped out of high school cite pregnancy or parenthood as the reason; less than a quarter of teen mothers receive any child support payments; children born to mothers younger than 18 years old score significantly worse on measures of school readiness, including math and reading tests; daughters born to teen mothers are three times more likely to also become teen mothers, and sons of teen moms are twice as likely to go to prison, compared to children born to mothers who were over 20. (Source for most info: National Campaign to Prevent Teen & Unplanned Pregnancy)

- **Preterm Birth Rate:** Preterm birth is when a baby is born before 37 weeks of gestation. In 2015, preterm birth affected about 1 of every 10 infants born in the United States. Preterm birth rates decreased from 2007 to 2014, and CDC research shows that this decline is due, in part, to declines in births to teens and young mothers. But, more recent data indicate a slight increase in the national preterm birth rate from 2014 to

2015. In 2015, the rate of preterm birth among African-American women (13%) was about 50% higher than the rate of preterm birth among white women (9%).

A developing baby goes through important growth throughout pregnancy – including in the final weeks and months of pregnancy to fully develop. There is a higher risk to the baby of serious disability or death when the baby is born early. In 2013, about one-third (36%) of infant deaths were due to preterm-related causes. Babies who survive may have breathing problems, feeding difficulties, cerebral palsy, developmental delay, vision problems, or hearing impairment. Preterm births may also take an emotional toll and be a financial burden on families (CDC, March of Dimes).

- **Infant Mortality Rate:** According to the Center for Disease Control (CDC), over 23,000 infants died in the United States in 2014. The death of a baby before his or her first birthday is called infant mortality. More than one third of all child deaths occur within the first month of life. According to the World Health Organization (WHO), up to two thirds of newborn deaths can be prevented if known, effective health measures are provided at birth and during the first week of life. Most of these babies die as a result of birth defects due to drug use during pregnancy, preterm birth, maternal complications such as hypertension and weight gain, Sudden Infant Death Syndrome, and injuries such as suffocation. WHO also stated that almost 3 million of all the babies who die each year can be saved with low-tech, low-cost care.

In 2016, the CDC stated that one way this can be reduced is to have higher quality health care access and implement policies that focus on preconception health. They also state that the best chance for expecting mothers is to become healthy before a pregnancy. Providing folic acid to women who are pregnant or wanting to become pregnant, for example, would reduce the risk of certain birth defects. Providing affordable screenings and nurse home visits, especially for women with known risk factors and lower socioeconomic status, can also reduce/resolve complications before becoming a serious problem.

- **Vaccination Coverage (through age 3):** Vaccines are given early in life because many of the diseases they prevent are more common, and more deadly, among infants and small children. Vaccination is one of the most cost-effective and successful public health interventions. Each year, UNICEF estimates that vaccines save an estimated 6-9 million lives worldwide, including the lives of 3 million children. In the US, vaccinations have decreased most vaccine-preventable childhood diseases by more than 95%.

Although all states have vaccination mandated for schoolchildren, in recent years they have granted a growing number of nonmedical exemptions. As a result, the risk of

infectious disease outbreaks – especially among children – has increased. Clusters of exemptions have cropped up in certain communities' herd immunity and leading to outbreaks of vaccine-preventable diseases.

- **Reading Scores (4th Grade, NAEP):** An Annie E Casey Foundation report, *Early Warning! Why Reading by the 3rd Grade Matters* summarized the research basis for focusing on grade-level reading proficiency as an essential step for increasing the number of children who succeed academically, graduate from high school on time, and do well in life and the workforce. There is a nationwide effort – The Campaign – that is focusing on an important predictor of school success and high school graduation – grade-level reading by the end of third grade.

Additionally, research has shown that reading is important for a whole host of reasons: to better function in today's society; for finding and retaining a good job; develops the imagination/creativity; develops a good self-image, and because words, both spoken and written, are the building blocks of life. Programs like Reach Out and Read (ROAR), which are evidence based, is a proven early literacy intervention. Parents are up to four times more likely to read aloud to their children and children in the program score three to six months ahead of their peers NOT participating in ROAR in vocabulary tests. In Oklahoma, the program is in 81 communities, serving over 47,300 children annually, with over 75,400 books distributed each year.

- **Children Not in Nursery School, Preschool (≥ 3 years):** Preschool refers to an early-childhood educational class for 3- and 4- year olds that can either offer part time and/or full time care throughout the school year. Kathleen McCartney, the dean of Harvard Graduate School of Education, states that preschool can greatly improve a child's chance of succeeding in preschool and beyond by exposing them to numbers, letters, and shapes. They also learn to socialize with other children and learn to separate from their parents to make the Kindergarten transition much easier.

The National Institute for Early Education Research (NIEER) director, Steven Barnett, says that children who attend a high quality preschool enter kindergarten with richer vocabularies and stronger basic math and reading skills. In 2015, the U.S. Department of Education mentioned that overall, children who go through a high quality pre-school program before kindergarten have been shown to have better health, socio-emotional, and cognitive outcomes than those who don't. Not only does this help in preschool, but it has also been shown to boost the child's education attainment and earnings later on in life.

- **Children in Food Insecure Households (< 18 years):** According to Feeding America and No Kid Hungry, 1 in every 5 children don't get the food they need because their family suffers from food insecurity. In 2014, more than 15 million children lived in a food-insecure household. According to the U.S. Department of Agriculture (USDA), food insecurity is defined as having "dependable access to enough food for active, healthy living." Out of these 15 million children, about 20% are not eligible for government assistance and rely solely on organizations like Feed America in order to survive.

A report from the National Center for Children in Poverty states that without enough food, kids can suffer from poor cognitive development, socio-emotional development, and health problems. Kindergarteners especially show a decline in learning. Children in food insecure households are more likely to repeat a grade in elementary school, experience developmental impairments with their language and motor skills and have more social and behavioral problems. One of the largest contributors to whether a house experiences food insecurity is the lack of income. Other factors that contribute include access to credit, asset wealth, health insurance coverage, low levels of education, and single parenting.

- **Child Abuse and Neglect:** There is more to this issue than bruises and broken bones; other types of abuse, such as emotional abuse, abandonment and neglect, also leave deep, lasting scars. While physical abuse makes the headlines, neglect and emotional abuse can be just as damaging and since they are more subtle, others are less likely to intervene. Not all abusers are intentionally harming their children. Many have been victims of abuse themselves and don't know any other way to parent. Others may be struggling with mental health issues or a substance abuse problem, both conditions quite prevalent in Oklahoma. Finally, while abuse by strangers does happen, most abusers are family members or others close to the family.

Children who are maltreated often are at risk of experiencing cognitive delays and emotional difficulties. Childhood trauma also negatively affects nervous system and immune system development, putting children who have been maltreated at a higher risk of health problems as adults. Additional effects include lack of trust, developing strong relationships, core feelings of feeling worthless or damaged, and trouble regulating emotions. As adults that is often presented as anxiety, depression, or anger.