## Autism

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### What is AUTISM?

- Autism, or autism spectrum disorder (ASD), refers to a broad range of conditions characterized by challenges with social skills, repetitive behaviors, speech, and nonverbal communication.
- We know that there is not one autism but many subtypes, most influenced by a combination of genetic and environmental factors. Because autism is a spectrum disorder, each person with autism has a distinct set of strengths and challenges. The ways in which people with autism learn, think and problem-solve can range from highly skilled to severely challenged. Some people with ASD may require significant support in their daily lives, while others may need less support and, in some cases, live entirely independently.

#### Autism Prevalence

- In 2020 the CDC determined that approximately 1 in 54 children are diagnosed with an ASD.
- Boys are four times more likely to be diagnosed with autism than girls.
- Autism affects all ethnic and socioeconomic groups.
- Minority groups tend to be diagnosed later and less often.
- Early intervention affords the best opportunity to support healthy development and deliver benefits across the lifespan.
- There is no medical detection for autism.

### What Causes Autism?

- Research indicates that genetics are involved in the vast majority of cases.
- Children born to older parents are at higher risk for having autism.
- Parents who have a child with ASD have a 2 to 18 percent chance of having a second child who is affected.
- Over the last two decades, extensive research has asked whether there is any link between childhood vaccinations and autism. The result of this research are clear: Vaccines do not cause autism.

### Intervention and Supports

- Early intervention can improve learning, communication and social skills, as well as underlying brain development.
- Applied behavior analysis (ABA) and therapies based on its principles are the most researched and commonly used behavioral interventions for autism.
- Many children affected by autism also benefit from other interventions such as speech and occupational therapy.
- Developmental regression, or loss of skills, such as language and social interests, affects around 1 in 5 children who will go on to be diagnosed with autism and typically occurs between ages 1 and 3.

## **Associated Challenges**

- An estimated one-third of people with autism are nonverbal.
- 31% of children with ASD have an intellectual disability with significant challenges in daily function.
- Nearly half of those with autism wander or bolt from safety.
- Nearly 28 percent of 8-year-olds with ASD have self-injurious behaviors. Head banging, arm biting and skin scratching are among the most common.
- Drowning remains a leading cause of death for children with autism and accounts for approximately
   90 percent of deaths associated with wandering or bolting by those age 14 and younger.

# Associated Medical and Mental Health Conditions

- Autism can affect the whole body.
- Attention deficit hyperactivity disorder (ADHD) affects and estimated 30-61% of children with autism.
- More than half of children with autism have one or more chronic sleep problems.
- Anxiety disorders affect an estimated 11 to 40 percent of children and teens on the autism spectrum.
- Depression affects an estimated 7% of children and 26% of adults with autism.
- Children with autism are nearly eight times more likely to suffer from one or more chronic gastrointestinal disorders than are other children.

# Associated Medical and Mental Health Conditions Cont.

- As many as one-third of people with autism have epilepsy (seizure disorder).
- Studies suggest that schizophrenia affects between 4 and 35 percent of adults with autism. By contrast, schizophrenia affects an estimated 1.1 percent of the general population.
- Autism-associated health problems extend across the life span- from young children to senior citizens.
   Nearly a third of 2 to 5 years olds with autism are overweight and 16% are obese.
- Risperidone and aripiprazole are the only FDA-approved medications for autism-associated agitation and irritability.

### Caregivers and Families

- On average, autism costs an estimated \$60,000 a year through childhood, with the bulk of the costs in special services and lost wages related to increased demands on one or both parents. Costs increase with occurrence of intellectual disabilities.
- Mothers of children with ASD, who tend to serve as the child's case manager and advocate, are less
  likely to work outside the home. On average, they work fewer hours per week and earn 56% less than
  mothers of children with no health limitations and 35% less than mothers of children with other
  disabilities or disorders.

### Autism in Adulthood

- Over the next decade, and estimated 707,000 to 1,116,000 teens will enter adulthood and age out of school based autism services.
- Teens with autism receive healthcare transition services half as often as those with other special healthcare needs. Young people whose autism is coupled with associated medical problems are less likely to receive transition support.
- Many young adults with autism do not receive any healthcare for years after they stop seeing their pediatrician.

### Autism in Adulthood Cont.

- More than half of young adults with autism remain unemployed and unenrolled in higher education in the two years after high school. This is a lower rate than that of young adults in other disability categories, including learning disabilities, intellectual disabilities or speech-language impairment.
- Of the nearly 18,000 people with autism who used state-funded vocational rehabilitation programs in 2014, only 60% left the program with a job. Of these, 80% worked part-time at a median weekly rate of \$160, putting them well below the poverty level.
- Nearly half of 25-year-olds with autism have never held a paying job.
- Research demonstrates that job activities that encourage independence, reduce autism symptoms and increase daily living skills.

### **Economic Costs**

- The cost of caring for Americans with autism had reached \$268 billion in 2015 and would rise to \$461 billion by 2025 in the absence of more-effective interventions and support across the life span.
- The majority of autisms costs in the U.S. are for adult services- and estimated \$175 to \$196 billion a year, compared to \$61 to \$66 billion a year for children.
- On average, medical expenditures for children and adolescents with ASD were 4.1 to 6.2 times greater than those without autism.
- Passage of autism insurance legislation in all 50 states is providing access to medical treatment and therapies.