

AUTISM SPEAKS[™]

It's time to listen.

Living Life: Health, School, Workforce, and Independent Living

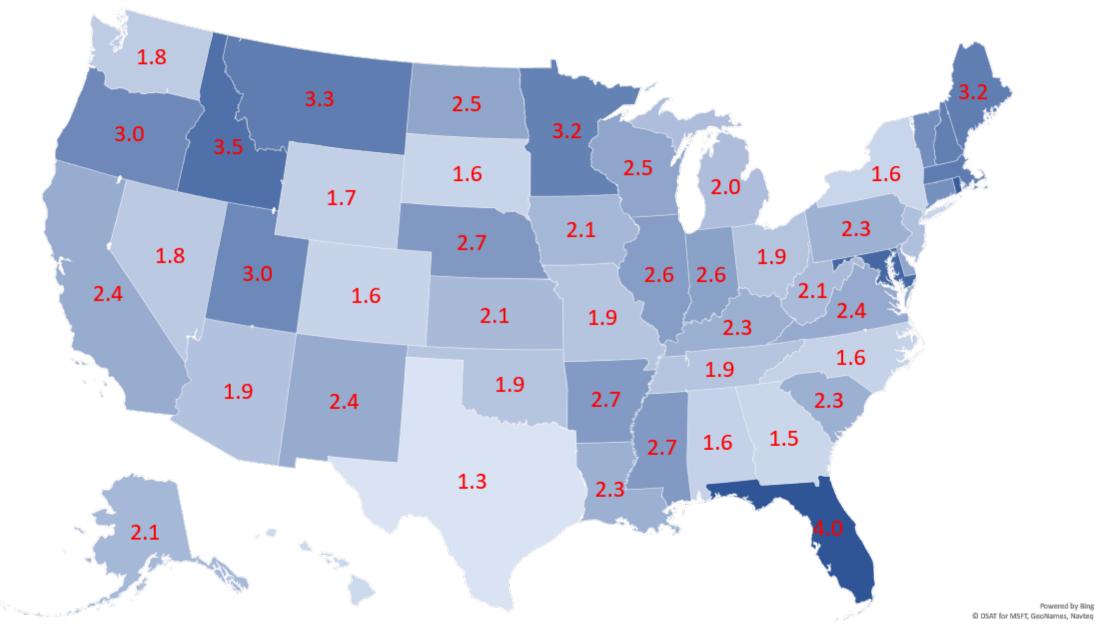
Arun Karpur, MD, MPH April 2, 2019

World Autism Awareness Day Interagency Roundtable 5600 Fishers Lane, Rockville, MD 20857



Background

- One in 59 children has ASD diagnosis in U.S.
- ASD is under-identified or identified late in low-income and minority population.
- Access to early intervention services, appropriate psychoeducational or Applied Behavior Analysis (ABA) services continue to be difficult for children with ASD.
- Transition-age youth with ASD continue to experience poorer outcomes in health, employment, education, and overall wellbeing.



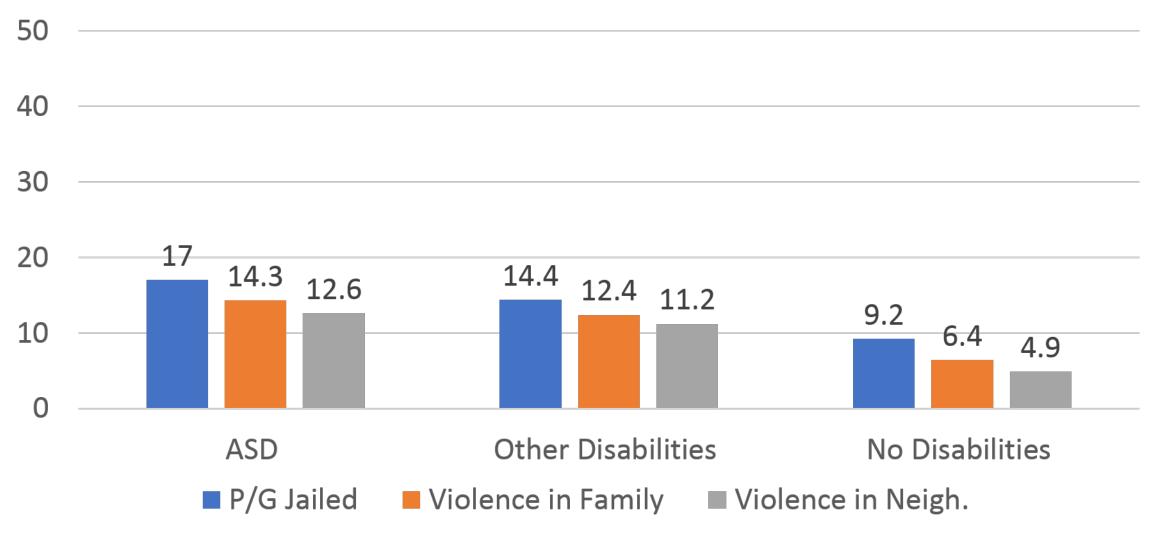
Individual Characteristics

- Children with ASD are:
 - 4 times more likely to be males;
 - 1.2 times more likely to be Non-Hispanic Whites;
 - 1.5 times more likely to be poor (i.e., < 100% FPL); and
 - 2 times more likely to be obese, compared to children without disabilities.
- 72 % of children with ASD had four or more co-occurring medical conditions; compared to 30% children with other disabilities.

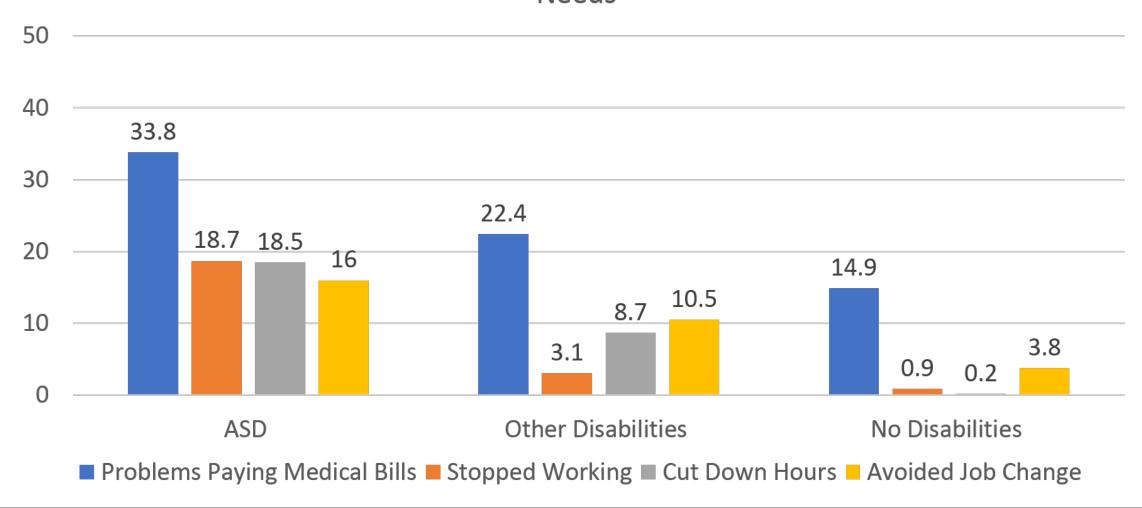
Family Characteristics

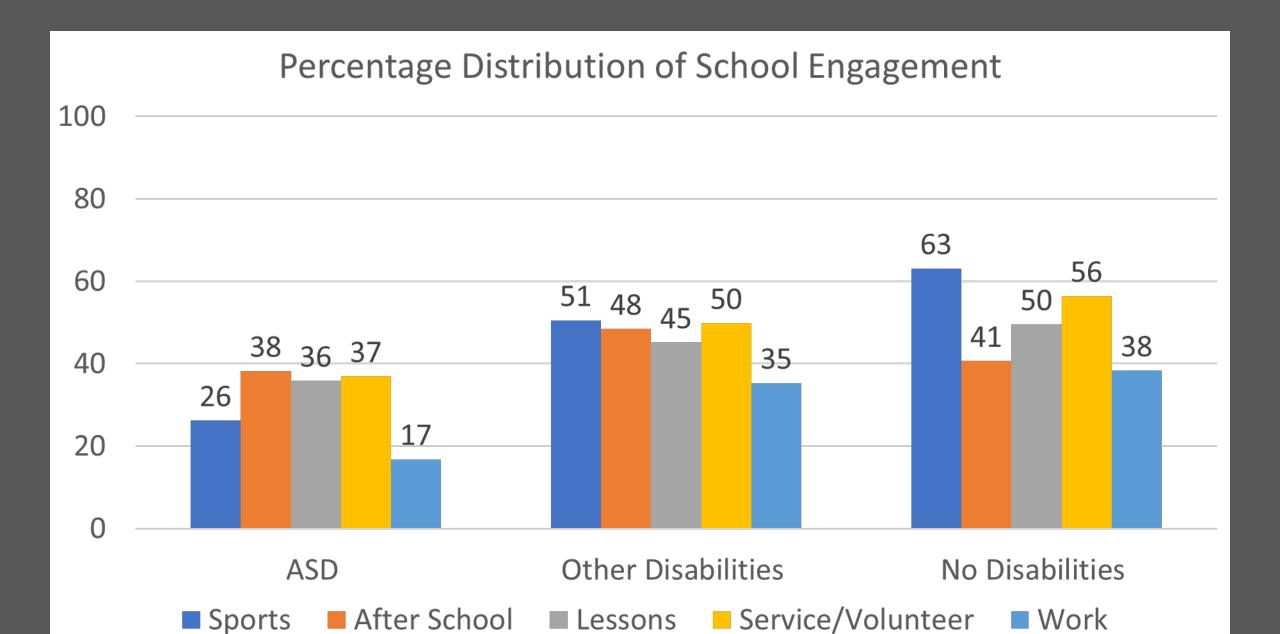
- One quarter of children with ASD belong to single-parent families compared to only 16% of children without disabilities.
- 35% of parents of children with ASD received welfare benefits compared to 19% of parents of children without disabilities.
- Parents/caregivers are 3 times more likely to experience hardships, 2.5 times more likely to have poor health, and 15 times more likely to be unemployed/stopped working compared to parents/caregivers of children without disabilities.
- 15% of children with ASD experience three or more adverse family events compared to 5% of children without disabilities.





Percentage Distribution of Challenges in Managing Child's Healthcare Needs





Access to Healthcare

- Though children with ASD are 3 times more likely to have health insurance, they are 2 times as likely to indicate poorer quality of coverage.
- About half of children with ASD indicated lack of availability of suitable services nearby their home, nearly 70% indicated problem with getting appointment to seek clinical services, and 34% indicated problems with transportation.
- Children with ASD are 4 times more likely to report unmet healthcare needs compared to their peers without disabilities.*
- Social determinants predict unmet healthcare needs more than functional limitations or the co-occurring conditions. (Karpur, Lello, Frazier, Dixon, & Shih, 2018).

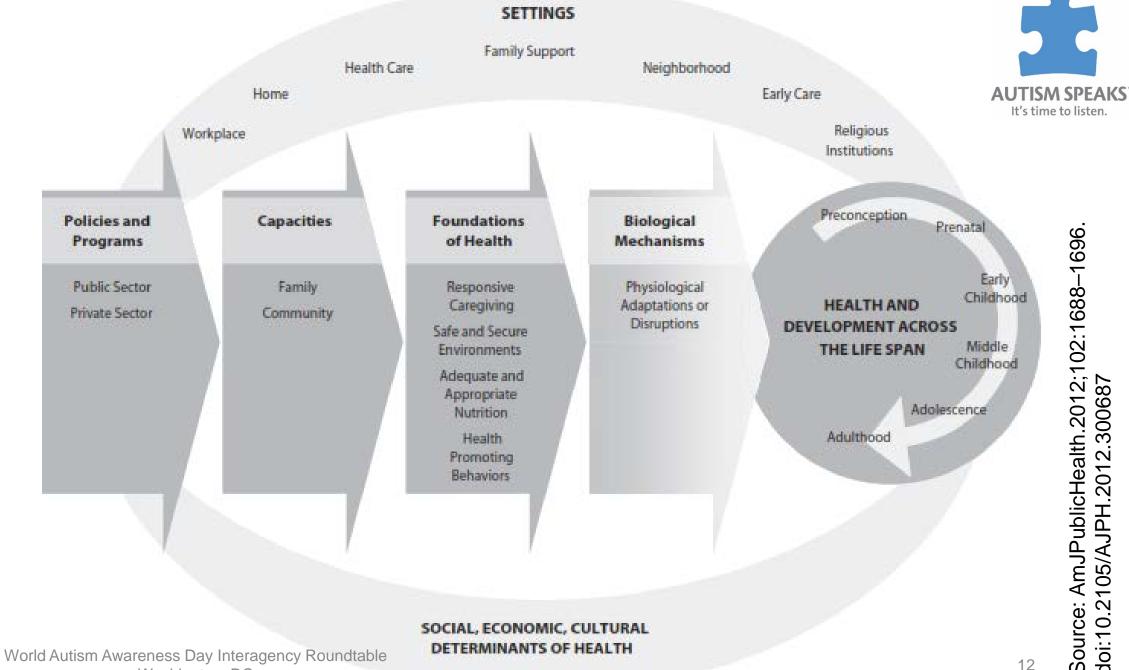
Access to Healthcare (continued)

- Children with ASD continue to have lower quality of life more often predicted by support needs and cooccurring conditions (Arias et al., 2018).
- Children with ASD, especially from Black and Hispanic families, continue to experience persistent lower quality of services.
- Transition to adulthood continues to pose challenges where many lose access to public health insurance (Shea et al., 2019).
- As Individuals with ASD grow older, they loose access to needed services that address core functional limitations a "service cliff" (Turcotte, Mathew, Shea, Brusilovskiy, & Nonnemacher, 2016; Shattuck et al., 2012).

Life-long Learning and Work

- Among individuals with disabilities, young people with ASD are least likely to be engaged in work or community-based opportunities to learn and/or attend post-secondary education (Chen, Sung, & Pi, 2015).
- Individuals belonging to lower socio-economic status and minorities were least like to be engaged in work and community-based activities.
- Less than one in five youth with ASD receive services from Vocational Rehabilitation to support their life-long learning needs (Rast, Roux, & Shattuck, 2019).

Response Framework for



Source: AmJPublicHealth.2012;102:1688-1696.

doi:10.2105/AJPH.2012.300687

Opportunities

- Strengthening access to healthcare through reforms, expanding Medicaid, and access to private insurance.
- Strengthening independent living center programs.
- WIOA provides an unparallel opportunity to improve access to services to prepare young adults with ASD for careers after high-school.
- HCBS Waiver programs offer opportunities for states to structure services for individuals with ASD to improve access to transportation, housing, and other community-based services to address the "service cliff."
- Financial and benefits management programs have ability to support families as they support their child with ASD.



Reference

- Chen, J. L., Sung, C., & Pi, S. (2015). Vocational Rehabilitation Service Patterns and Outcomes for Individuals with Autism of Different Ages. *J Autism Dev Disord*, 45(9), 3015-3029. doi:10.1007/s10803-015-2465-y
- Arias, V. B., Gomez, L. E., Moran, M. L., Alcedo, M. A., Monsalve, A., & Fontanil, Y. (2018). Does Quality of Life Differ for Children With Autism Spectrum Disorder and Intellectual Disability Compared to Peers Without Autism? *J Autism Dev Disord*, 48(1), 123-136. doi:10.1007/s10803-017-3289-8
- Karpur, A., Lello, A., Frazier, T., Dixon, P. J., & Shih, A. J. (2018). Health Disparities among Children with Autism Spectrum Disorders: Analysis of the National Survey of Children's Health 2016. *J Autism Dev Disord*. doi:10.1007/s10803-018-3862-9
- Rast, J. E., Roux, A. M., & Shattuck, P. T. (2019). Use of Vocational Rehabilitation Supports for Postsecondary Education Among Transition-Age Youth on the Autism Spectrum. *J Autism Dev Disord*. doi:10.1007/s10803-019-03972-8
- Shattuck, P. T., Narendorf, S. C., Cooper, B., Sterzing, P. R., Wagner, M., & Taylor, J. L. (2012). Postsecondary education and employment among youth with an autism spectrum disorder. *Pediatrics*, 129(6), 1042-1049. doi:10.1542/peds.2011-2864
- Shea, L. L., Field, R., Xie, M., Marcus, S., Newschaffer, C., & Mandell, D. (2019). Transition-Age Medicaid Coverage for Adolescents With Autism and Adolescents With Intellectual Disability. *Am J Intellect Dev Disabil*, 124(2), 174-185. doi:10.1352/1944-7558-124.2.174
- Shea, L. L., Xie, M., Turcotte, P., Marcus, S., Field, R., Newschaffer, C., & Mandell, D. (2018). Brief Report: Service Use and Associated Expenditures Among Adolescents with Autism Spectrum Disorder Transitioning to Adulthood. *J Autism Dev Disord*. doi:10.1007/s10803-018-3563-4
- Turcotte, P., Mathew, M., Shea, L. L., Brusilovskiy, E., & Nonnemacher, S. L. (2016). Service Needs Across the Lifespan for Individuals with Autism. J. Autism Dev Disord, 46(7), 2480-2489. doi:10.1007/s10803-016-2787-4
- Mistry, K. B., Minkovitz, C. S., Riley, A. W., Johnson, S. B., Grason, H. A., Dubay, L. C., & Guyer, B. (2012). A New Framework for Childhood Health Promotion: The Role of Policies and Programs in Building Capacity and Foundations of Early Childhood Health. *American Journal of Public Health*, 102(9), 1688 1696. doi:10.2105/AJPH.2012





Arun Karpur, MD, MPH

Director, Data Science and Evaluation Research

Autism Speaks

Princeton, NJ

arun.karpur@autismspeaks.org