



YOUTH EMPOWERMENT SERVICES

CLASS SIZE ESTIMATE

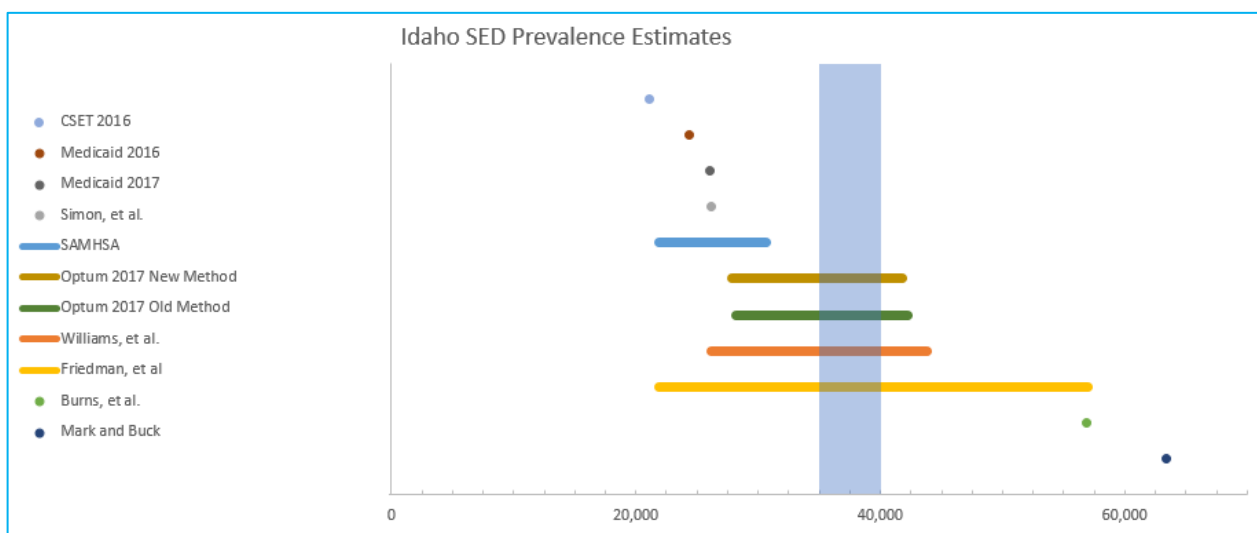
As one of the required annual deliverables to the plaintiffs in the Jeff D. lawsuit, the YES Data and Reports committee is tasked with providing an estimate of how many children in the state of Idaho have serious emotional disturbance (SED) and would be class members in the YES Project (Youth Empowerment Services). The 2017 Class Size Estimation Team (CSET), consisting of data and quality assurance team members from the Divisions of Behavioral Health and Medicaid, expanded upon the 2016 estimate and revised their methods for the 2017 edition.

Boise State University was commissioned to write a report evaluating the methodology of the first estimate of SED prevalence in Idaho (*Evaluation of a Methodology to Estimate the Prevalence of Serious Emotional Disturbance in Idaho*, Williams 2017). This report found that, though it was quite primitive and based almost solely on claims data – a flawed method for studies like these – it was acceptable considering the lack of data available to the team. The report went on to recommend for future estimates a more in-depth review of existing literature in creating the estimate. This year’s team aimed to conduct a more thorough, research-centered approach to the estimation process.

Six studies and five claims-based estimates were used to inform the estimate for 2017. These studies and estimates were weighted on seven factors, including study size, reliance on claims, demographic similarity to Idaho, etc. Studies that were conducted with greater fidelity were weighted more than those that were based on claims data, those not performed by established researchers, and other limiting factors.

After combining these studies and estimates with their weighting, the CSET concluded that there are potentially 35,000-40,000 children in the state of Idaho with SED. As per other research, this is not the number of children expected to seek services through the YES Project, but the absolute number who may meet SED criteria.

Below is a forest plot of the estimate ranges of the studies and estimates consulted, with the potential number of SED children in the state of Idaho highlighted in blue.



Limitations and Interpretive Cautions

The data utilized in this report are to be taken with several assumptions and interpretive cautions. First, this is not the number of children expected to seek services through the YES Project, but the absolute number who may meet SED criteria. Second, in the state of Idaho, there is no current field in claims or electronic health record data to indicate if a child has SED. The number of children we currently assume may have SED is based on diagnostic information and claims intensity. Third, none of the studies considered involve Idaho-specific data: Two are meta-analyses of previous studies, two are nationally-representative, and one is from a region of North Carolina with a demographic similar to Idaho. As such, until we have sufficient data from several years of Child and Adolescent Needs and Strengths (CANS) assessments, Idaho's SED prevalence and service engagement rates will remain as estimates based on universal data.

Fourth, the studies consulted in this report find that in most engaged scenarios, only about half of children with serious mental health conditions will receive any mental health services, suggesting the potential maximum number of Idaho children who have SED *and receive treatment* – from any system of care – will be between 12,000 and 22,000. The levels of service engagement found in those studies included 34% (Zachrisson et al., 2006), 35% (Offer et al., 1991), 40.3% (Burns et al., 1995), 43.9% (Olfson, et al., 2015), 52.8% (Merikangas et al., 2010), 53.4% (Simon et al., 2015), and 56% (Bourdon et al., 2005) – no study yet identified has had a service engagement rate higher than 56%. The low end of this range (12,000) is calculated using the lowest engagement rate supported by research (~34%) with the lower end of the estimate (35,000), while the high end (22,000) is calculated using the highest engagement rate observed in the literature (~56%) with the higher end of the estimate (40,000). Although this is significantly lower than the statewide estimate, it is assumed to be a ceiling of service engagement amongst those with SED.

Fifth, we cannot determine how many children of the overall statewide estimate are currently receiving services for SED through private insurance as we do not have access to private insurer data. These children are also eligible for YES services – though not through Medicaid – but they may either remain in their current treatment arrangements or engage in YES services.

Last, the Simons (2014) report outlines three levels of program maturity based on Centers for Medicaid & Medicare Services (CMS) guidance: Emerging, Evolving, and Established. That report states that engagement rates increase significantly with program maturity. As the YES Project is in its infancy, it is expected that initial engagement rates will be much lower than the 12,000 – 22,000 range estimated above, but will instead mature into that range, readjusting for overall population growth and demographic shifting.

These limitations should be taken into consideration when assessing current service levels, future service engagement, and unmet need. Again, only until more Idaho- and SED-specific data are collected, longitudinally, over a period of years, will we have a much more accurate picture of the prevalence and treatment of SED.

In conclusion, this team estimates that there may be 35,000-40,000 children in the state of Idaho with SED. Of those, we estimate that 12,000-22,000 may receive mental health services at some point in the future, either through the YES Program or through the private insurance sector. Moving forward, the CSET intends to continue collecting available data, studies, and research to further inform and improve their estimates as one part of the Quality Management, Improvement, and Accountability (QMIA) Plan. Research regarding SED and treatment engagement is limited, and thanks to Boise State's assistance and guidance in their methodological validity report, the team feels more confident in the fidelity of the 2017 estimate.

For 2018, with one year's worth of CANS records, we hope to gain insights into items such as: Medicaid prevalence, Level of Care Guideline results, percentages of CANS clients that fail to qualify as class members, the demographics of the class, what our actual engagement levels will be, and drop-out rates. With this data, we'll be better prepared to estimate class size and engagement from an Idaho-specific point of view.

Sources Cited

- Burns BJ, Costello EJ, Angold A, et al. (1995). Children's mental health service use across service sectors. *Health Affairs*, 14, 147-159.
- Burns BJ, Costello EJ, Erkanli A, et al. (1997). Insurance coverage and mental health service use by adolescents with serious emotional disturbance. *Journal of Child and Family Studies*, 6, 89-111.
- Friedman RM, Katz-Leavy JW, Manderscheid RW, & Sondheimer DL. (1996). Prevalence of serious emotional disturbance in children and adolescents. In RW Manderscheid & MA Sonnenschein (Eds.), *Mental health, United States, 1996* (pp. 71-89). Rockville, MD: Substance Abuse and Mental Health Services Administration, Center for Mental Health Services.
- Mark TL, Buck JA. (2006). Characteristics of U.S. youths with serious emotional disturbance: Data from the National Health Interview Survey. *Psychiatric Services*, 57, 1573-1578.
- Merikangas KR, He J, Burstein M, et al. (2011). Service utilization for lifetime mental disorders in U.S. adolescents: Results of the National Comorbidity Survey-Adolescent Supplement (NCS-A). *Journal of the American Academy of Child and Adolescent Psychiatry*, 50, 32-45.
- Offer D, Howard KI, Schonert KA, Ostrov E. (1991). To whom do adolescents turn for help? Differences between disturbed and nondisturbed adolescents. *Journal of the American Academy of Child and Adolescent Psychiatry*, 30, 623-630.
- Olfson M, Druss BG, Marcus SC. (2015). Trends in mental health care among children and adolescents. *New England Journal of Medicine*, 372, 2029-2038.
- Simon AE, Pastor PN, Reuben CA, et al. (2015). Use of mental health services by children ages six to 11 with emotional or behavioral difficulties. *Psychiatric Services*, 66, 930-937.
- Simons D, Pires SA, Hendricks T, et al. (2014). Intensive care coordination using high-quality wraparound for children with serious behavioral health needs: state and community profiles. Center for Health Care Services. Available at <http://www.chcs.org/media/ICC-Wraparound-State-and-Community-Profiles1.pdf>
- Substance Abuse and Mental Health Services Administration, Drug and Alcohol Services Information System. (2016). Uniform Reporting System (URS) Table 1: Number of Children with Serious Emotional Disturbances, age 9 to 17, by State, 2016. Available at https://www.dasis.samhsa.gov/dasis2/urs/adult_smi_child_sed_prev_2016.pdf
- Williams NJ (2017). Evaluation of a Methodology to Estimate the Prevalence of Serious Emotional Disturbance in Idaho. Boise State University. Available at <http://youthempowermentservices.idaho.gov/Portals/105/Documents/BSUEvaluationofDeterminingSEDinIdahoReport1.pdf>
- Williams NJ, Scott L, Aarons GA. (2017). Prevalence of serious emotional disturbance among US children: A meta-analysis. *Psychiatric Services*. Available online ahead of print at: <https://doi.org/10.1176/appi.ps.201700145>
- Zachrisson HD, Rödje K, Mykletun A. (2006). Utilization of health services in relation to mental health problems in adolescents: A population based survey. *BMC Public Health*, 6, 34.



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