



# **Diagnostic Predictive Scales White Paper**

## **Using DPS to Increase Effectiveness of School Counselors**

By Todd Archbold, LSW, MBA

PrairieCare has teamed with nationally recognized experts to deliver an effective mental health screening tool to Minnesota School Districts. In Minnesota there are over 340 public and private school districts providing educational services to over 1.3 million students.<sup>1</sup> School staff are in a powerful position to help identify students suffering from mental illness and help them receive treatment – and can be even more powerful when armed with the appropriate tools.

The DPS has been able to help thousands of students by increasing the effectiveness of school counselors, social workers and psychologists (“counselors” hereafter) in Minnesota schools since 2007. PrairieCare has a dedicated team of professionals who have been offering clinical and technical training for use of the DPS across the Twin Cities metro area – and beyond. The DPS is currently being used in over 13 Minnesota school districts reaching a population of more than 260,000 students.



A report created by the Minnesota Department of Education identified the need to develop strategies for community collaboration to promote appropriate mental health screening and pre-referral practices.<sup>2</sup> The Committee attached high importance to public health practices that seek to identify risk factors for mental health problems and to intervene early to prevent more severe problems. PrairieCare's dedication to help train school counselors in the use of the DPS is helping fulfill this mission.

PrairieCare is a Twin Cities based psychiatric health care organization providing specialized outpatient and intensive psychiatric services to all populations. PrairieCare was founded in 2009 by Child & Adolescent Psychiatrists, Stephen Setterberg, MD and Emmet Kenney, MD and currently hosts programs in Edina, MN and Woodbury, MN. The beginnings of the organization can be traced back to 2005 when the programs were established as a local offshoot of the Fargo, ND based Prairie St. John's. Since that time PrairieCare has redefined the quality and delivery of much needed psychiatric services throughout the region.

*PrairieCare offers specialized psychiatric care including outpatient clinic services and Partial Hospitalization.*

The prevalence of undiagnosed or untreated mental illness in the United States is startling. The World Health Organization approximated that 450 million people worldwide suffer from a psychiatric disorder.<sup>3</sup> A separate Harvard study found that nearly 25% of the world's population will develop a mental or behavioral disorder sometime in their life.<sup>4</sup> Shockingly, studies have show that only 25%-35% of children and adolescents suffering from a psychiatric disorder will receive treatment.<sup>5</sup> Other studies have found that more like one in five will receive treatment.

*Only about 1 in 4 kids will receive treatment for mental illness.*

Researchers at the National Institute of Mental Health have found that half of all lifetime cases of mental illness are onset before the age of 14. Past epidemiological research suggests that early identification of the onset of mental illness is crucial in preventing unnecessary worsening symptoms that could ultimately result in suicide.

Jim Bierma, President of the American School Counselors Association, says that *Minnesota currently has a ratio of one school counselor to every 800 students.*

This ranks Minnesota second to last out of the 50 states (2007). The national average in 2007 was one counselor to every 488 students, according to Bierma.

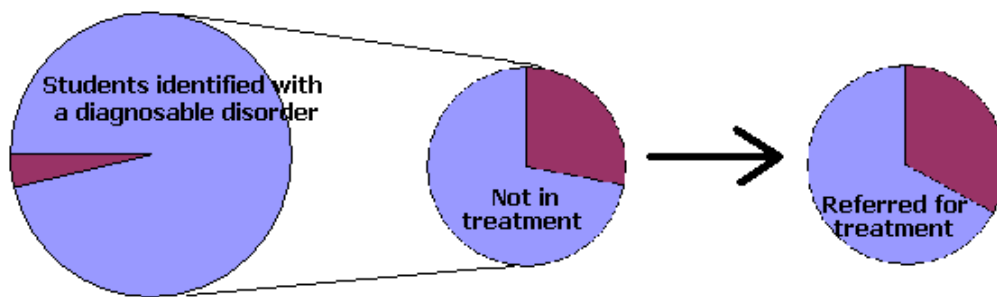
**Diagnostic Predictive Scales (DPS)** is a mental health screening tool that is a derivative of the Diagnostic Interview Schedule for Children (DISC). The DISC was pioneered at Columbia University in 1983 and endorsed by the National Institute for Mental Health. The DISC was largely considered the gold standard among academics as the tool used for conducting many lengthy, large-scale epidemiological surveys. The DPS uses the most sensitive items from the DISC to create a user friendly, valid and reliable, non-intrusive instrument that counselors can use to quickly screen for a variety of psychiatric disorders.

*The DPS uses the most sensitive items from the DISC to produce quick and accurate output.*

The DPS is a customizable, audio administered, computerized interview that allows counselors to quickly screen for a variety of disorders to help identify children in need who may otherwise go unidentified. The DPS produces an instant, easy-to-interpret report that flags critical responses and identifies potential disorders. The use of the DPS in schools enhances the counselor's ability to work with more students and increase accuracy in identifying disorders.

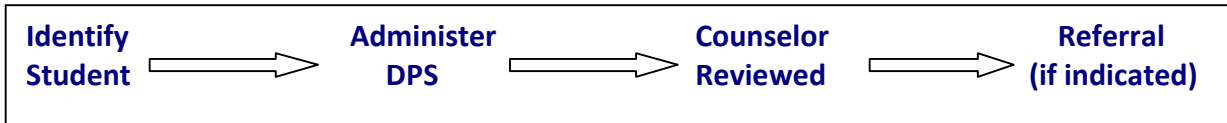
**PrairieCare conducted a pilot project** during school year 2007/08 to determine the feasibility of school counselors using the DPS to help identify students with possible mental illness and connect them with the necessary treatment resources. The results of the data analysis were consistent with nation-wide epidemiological studies among youth. Researchers at PrairieCare gathered and analyzed anonymous data from participating school districts and were able to make the following conclusions:<sup>6</sup>

1. **The DPS is effective in helping identify students with a diagnosable disorder.**
2. **The DPS is effective in helping students get referred for treatment.**



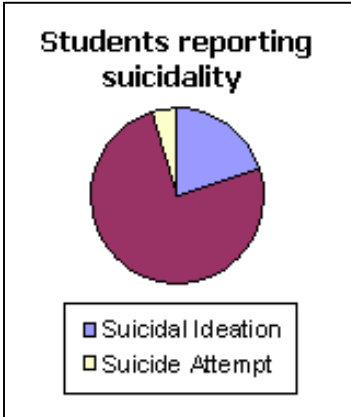
Throughout the pilot project, school counselors used naturalistic case identifiers to determine which students to screen using the DPS. Nearly 96% of the students screened met criteria for a diagnosable disorder – while only 30% of those students were receiving treatment. School counselors recommended further psychological evaluation for 68% of those meeting criteria for a diagnosable disorder.

**General Administration Protocol**



The results of the pilot project proved that the DPS could increase effectiveness of school counselors and help identify students with mental illness so that they could be referred for treatment. More so, the use of the DPS allowed counselors to learn more about their student population.

The DPS is effective in flagging critical responses that counselors are not always able to get through intentional interviewing, such as suicidal ideation and any history of past suicide attempts. The data from the pilot project showed that 50% of the students meeting diagnosable criteria for Depression reported suicidality, and 40% of those meeting diagnosable criteria for Anxiety reported suicidality. Throughout the project, the DPS identified that 25% of the students meeting diagnosable criteria also reported suicidality. The report flags these critical responses, which prompts the counselor to review the raw data for accuracy and meet with the student individually.



*School Psychologists and Social Workers can use the DPS for special education evaluations.*

School counselors have successfully used the DPS with all populations within public education. The primary purpose is for counselors to help identify onset of mental illness. The DPS has also been used regularly for special education evaluations to determine emotional and behavioral functioning. Generally, school psychologists have administered the DPS for this purpose and are able to use the results to create Individual Education Plans (IEP's) or other similar treatment plans.

*The versatility of the DPS makes it an appealing tool for counselors and school districts to have at their disposal.*

The DPS has also proven useful in many alternative programs such as suspension/expulsion programs where students receive educational services at an alternative setting to their regular school. Under the Pupil Fair Dismissal Act (MN statute section 121A.40), every student must be offered a free mental health screen if they are being considered for a long-term suspension or expulsion. The aforementioned examples illustrate the versatility and reliability of the DPS. This makes the DPS an appealing tool for counselors and for districts to have at their disposal.

“According to the Institute of Medicine of the National Academy of Science, it takes 18 years on average for medical innovations to reach patients.”<sup>7</sup> PrairieCare has been able to help get the DPS into the hands of school staff as soon as three years into its inception. The appeal of the tool has led to a remarkable natural dissemination and general widespread interest. The combination of the momentum between PrairieCare’s enthusiasm about helping school districts, and school staff’s interest in the tool has helped many students in Minnesota lead healthier lives.

Although the results of the Twin Cities DPS pilot project illustrate a significant number of students with mental illness “flying under the radar”, other similar studies have shown more concerning trends. For instance, Shaffer and colleagues reported on a three stage screening procedure that was completed on approximately 2,000 high school students. The results from this program demonstrated that 69% of teens who met criteria for major depression, 74% of teens who were having suicidal thoughts, and 50% of teens who had made a suicide attempt were not known by school personnel to have significant problems and were not receiving any type of treatment for their emotional problems.<sup>8</sup>

*The DPS can help bridge the gap between mental health resources and the unmet needs of students who are at-risk for mental health problems in the community.*

“Thus, the screening procedure was extremely important in identifying youth who were likely to benefit from professional mental health services. However, given the costs required for salaried screening staff, this type of program may not be feasible for long-term implementation in most school settings.”<sup>9</sup> This research reinforces the need for a tool such as the *DPS which can provide valid results – in a timely manner*, and which does not require significant costs or training.



**The DPS possesses the following valued qualities as an effective screening tool:**

1. Proven validity from extensive DISC studies
2. User-friendly (leading to natural dissemination/popularity)
3. Averages 10-15
4. Customizable modules
5. Instant report flagging critical responses
6. Meets needs of Minnesota Department of Education's strategy
7. Easy to access and receive support through PrairieCare

PrairieCare continues to provide community outreach to school districts and other professionals who are on the "front lines," such as primary care professionals, Native American community officials, and Parish Nurses. This type of outreach helps bridge the gap between mental health resources and the unmet needs of students who are at-risk for mental health problems in the community.

PrairieCare has been a leading advocate in the Twin Cities for the solution to the shortage of mental health resources and acute care facilities. When identified, psychiatric disorders such as depression and anxiety are treatable and those suffering can find and lead happy and healthy lives. When gone unidentified, those same disorders can lead to significant emotional decline and can have fatal results. Research has shown that a psychiatric disorder is present in approximately 90% of cases of suicide worldwide. Eileen Salinsky has conducted extensive research on the constraints of psychiatric services and states, "tragedies that result from a failure to intervene effectively in an individual's mental health crisis are particularly appalling, as they are often preventable."<sup>10</sup>

If you are interested in more information about the DPS, please visit <http://www.prairie-care.com/dps.html>. If you are interested in using the DPS in your school or community place of practice, please contact Todd Archbold at 651-259-9735, or Jen Holper at 952-230-9103.

## References

- 
- <sup>1</sup> Census 2000 SF30001 (P001). Statistical data compiled by the National Center for Education Statistics from 2000 Census.
- <sup>2</sup> Minnesota Department of Education (2005). The WIT Project Strategic Plan. Retrieved on December 13, 2009 from:  
<http://education.state.mn.us/content/077389.pdf>
- <sup>3</sup> World Health Organization. The world health report 2001: mental health: new understanding, new hope. Geneva, Switzerland: World Health Organization; 2001.
- <sup>4</sup> Murray CL, Lopez AD, eds. The global burden of disease and injury series. Vol 1: a comprehensive assessment of mortality and disability from diseases injuries and risk factors in 1990 and projected to 2020. Cambridge, MA: Harvard University Press; 1996.
- <sup>5</sup> Burns, B., Costello, E., Angold, A., et al. (1995). Children's mental health service use across service sectors. *Health Aff.* 14(3): 147-159.
- <sup>6</sup> Jensen, P, Setterberg, S, & Archbold, T (2008). Diagnostic Predictive Scales (DPS) Twin Cities Pilot Project Diagnostic (2008). Retrieved from <http://www.prairie-stjohns.com/research/diagnostic.predictive.scales.pdf> on September 10, 2009.
- <sup>7</sup> The REACH Institute Website (2009). *About Us*. Retrieved on December 12, 2009 from: [www.thereachinstitute.org](http://www.thereachinstitute.org)
- <sup>8</sup> Shaffer D, Wilcox H, Lucas C, et al. (1996). *The development of a screening instrument for teens at risk for suicide*. Poster presented at: Annual meeting of the American Academy of Child and Adolescent Psychiatry, 1996; New York, NY.
- <sup>9</sup> Levitt, et al. (2007). Establishing Ongoing, Early Identification Programs for Mental Health Problems in Our Schools: A Feasibility Study. Retrieved on 12/11/09 from: [www.prairie-stjohns.com/research](http://www.prairie-stjohns.com/research)
- <sup>10</sup> Salinsky, E. & Loftis, C. (2007). *Shrinking Inpatient Psychiatric Capacity: Cause for Celebration or Concern?* Issue Brief – No. 82, August 1, 2007. National Health Policy Forum, George Washington University, Washington DC