



Screening in
High Schools to
Identify,
Evaluate and
Lower
Depression



What we did



Screening in High Schools to Identify, Evaluate and Lower Depression (SHIELD) is a randomized clinical trial with Pennsylvania public senior high schools. The trial questions if giving all students a brief questionnaire for symptoms of major depressive disorder (MDD) is a better approach to identify at-risk adolescents and connect them to resources.

What we found

Students identified by depression screening had twice the odds of initiating treatment. Specifically, students who completed a brief depression symptom questionnaire had six times higher odds of being identified with depressive symptoms and had two times higher odds of initiating treatment compared to peers who did not receive the screen.

Why this research matters

The prevalence of annual MDD episodes among adolescents in the United States rose by over 50% from **8.3%** in 2008 to **14.4%** in 2018.



Why focus on schools?

Despite the U.S. Preventive Services Task Force statement that all teens should be screened for MDD in primary care, many adolescents are missed, as **more than 60% don't have annual check-ups** and MDD screening remains inconsistent. Schools may provide an avenue to address these disparities. Regardless of race, ethnicity and socioeconomic status, most adolescents attend school. Adolescents' regular contact with schools has previously been used in support of physical health screenings (e.g. vision, hearing).



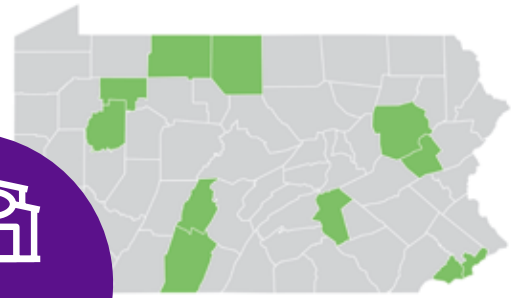
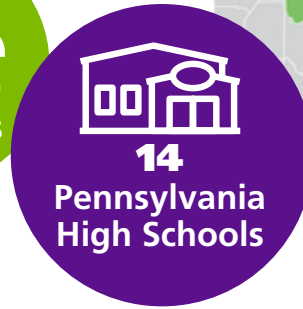
What is a RCT?

A RCT (randomized control trial) is a type of research study in which subjects are randomly assigned to one of two groups: one (the experimental group) receiving the intervention that is being tested, and the other (the comparison group or control) receiving an alternative (current/conventional) treatment.



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Who were the participants?



How were the screenings conducted?

See the full study results here

Sekhar DL, Schaefer EW, Waxmonsky JG, et al. Screening in High Schools to Identify, Evaluate and Lower Depression Among Adolescents: A Randomized Clinical Trial. *JAMA Netw Open*. 2021;4(11):e2131836. doi:10.1001/jamanetworkopen.2021.31836

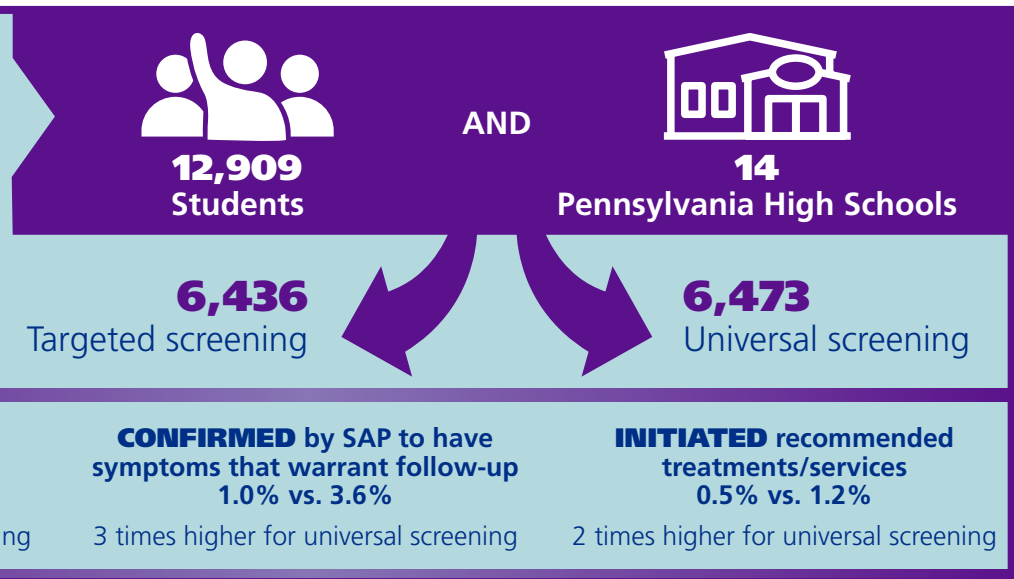
Students were randomized by grade to either the control (targeted screening: current school process of picking up MDD based on concerning behavior or symptoms) or the intervention (universal screening: everyone gets a brief questionnaire for MDD symptoms).

Students in the targeted screening arm went through the school year as usual. If a student exhibited behavior/symptoms concerning for MDD, they could be referred to the Student Assistance Program (SAP). Required in all Pennsylvania schools, SAP programs work to address barriers to student academic success. This encompasses a wide variety of issues (e.g. academic difficulty, substance use, food insecurity) including depression and mental health. SAP teams DO NOT diagnose MDD, but they can determine if the symptoms that prompted a referral require additional follow-up.

Students in the universal screening arm completed the Patient Health Questionnaire-9 (PHQ-9) to identify MDD symptoms from September through the spring of the 2019-2020 academic year. Students with a positive result were referred to SAP and followed the process outlined above. Students in the intervention arm could also be referred to SAP for concerning behavior.

The primary outcome was the proportion of adolescents referred to SAP confirmed in need of follow-up who successfully initiated recommended treatment/services.

What does the data show?



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