# Virginia's Youth Mental Health Crisis

## School-based alternatives to improve identification of crisis-level mental health concerns

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Presented for *Voices for Virginia's Children*

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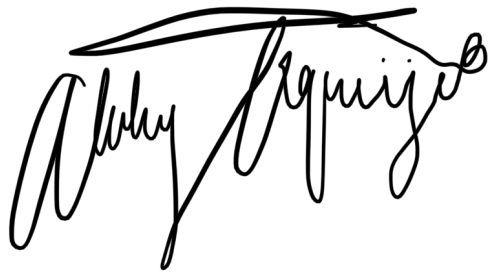


# ACRONYMS

### *State Department and Centers*

| | |
|---|---|
| VDOE | Virginia Department of Education |
| VCSCS | Virginia Center for School and Campus Safety |
| DCJS | Department of Criminal Justice Services |
| VDH | Virginia Department of Health |
| VDBHDS | Virginia Department of Behavioral Health and Human Services |

### *Programs*

| | |
|---|---|
| SS | Sources of Strength |
| MFFA | Mental Health First Aid |
| tMHFA | Teen Mental Health First Aid |
| YMHFA | Youth Mental Health First Aid |
| SOS | Signs of Suicide |

### *Data sources*

| | |
|---|---|
| VSSS | Virginia School Safety Survey |
| YRBS | Youth Risk Behavior Survey |
| VYS | Virginia Youth Survey |

## EXECUTIVE SUMMARY

This report highlights the urgent need to address mental health concerns among our nation's youth, as evidenced by alarmingly high rates of negative mental health behaviors. While Virginia schools have successfully used a threat assessment team approach to identify at-risk students, many cases still go undetected, including high-priority suicide and self-harm cases. *In 2021, 66% of such cases were not identified before their occurrence, leading to devastating consequences and perpetuating cycles of deteriorating mental health.*

Three alternative solutions to tackle this problem are considered, including the **status quo,** which primarily involves training school faculty and staff. In addition, **peer support mental health interventions** and **online monitoring of risk behaviors** are presented as alternatives that would increase the identification of at-risk students without significantly contributing to capacity and burnout concerns among public school educators. After evaluating their effectiveness, cost, feasibility, and equity, we recommend implementing peer support interventions. This alternative empowers students with tools and training to support each other, increasing mental health literacy and reducing stigmas associated with mental health. Peer support interventions may require higher costs than other alternatives, but the benefits outweigh the costs and offer promising equity considerations.

In summary, this report highlights the urgency to address youth mental health concerns and recommends implementing peer support interventions as an effective solution to detect and prevent high-priority suicide and self-harm cases.

## INTRODUCTION

Youth mental health has been a nationwide concern for years. Unfortunately, despite monitoring and interventions, the most recent data on youth mental health and suicidality variables show no improvements in any areas assessed (CDC, 2021). This is true across nearly all demographic characteristics[1], with female and LGBQ+ subgroups having especially concerning rates of poor mental health and suicidal behaviors. *Table 1: National and VA Trends in Mental Health and Suicidality Variable* shows that youth mental health is deteriorating across the board and that there is a pressing need to find new interventions to address these concerns.

### TABLE 1: NATIONAL AND VA TRENDS IN MENTAL HEALTH AND SUICIDALITY VARIABLES

| | | 2011 | 2013 | 2015 | 2017 | 2019 | 2021 | Trend |
|---|---|---|---|---|---|---|---|---|
| Experienced persistent feelings of sadness or hopelessness | % National high schools | 28 | 30 | 30 | 31 | 37 | 42 | Worsening |
| | % Virginia high schools | 26 | 26 | 27 | 30 | 32 | 38 | Worsening |
| Seriously considered attempting suicide | % National high schools | 16 | 17 | 18 | 17 | 19 | 22 | Worsening |
| | % Virginia high schools | 17 | 15 | 14 | 16 | 16 | 21 | Worsening |
| Made a suicide plan | % National high schools | 13 | 14 | 15 | 14 | 16 | 18 | Worsening |
| | % Virginia high schools | 13 | 15 | 12 | 13 | 12 | 16 | No Change |
| Attempted suicide | % National high schools | 8 | 8 | 9 | 7 | 9 | 10 | Worsening |
| | % Virginia high schools | 11 | 10 | 7 | 7 | 7 | 9 | Improving |
| Injured in a suicide attempt that had to be treated by a doctor or nurse | % National high schools | 2 | 3 | 3 | 2 | 3 | 3 | No change |
| | % Virginia high schools | 3.4 | 3.8 | 1.9 | 2 | 1.8 | 2.3 | Improving |

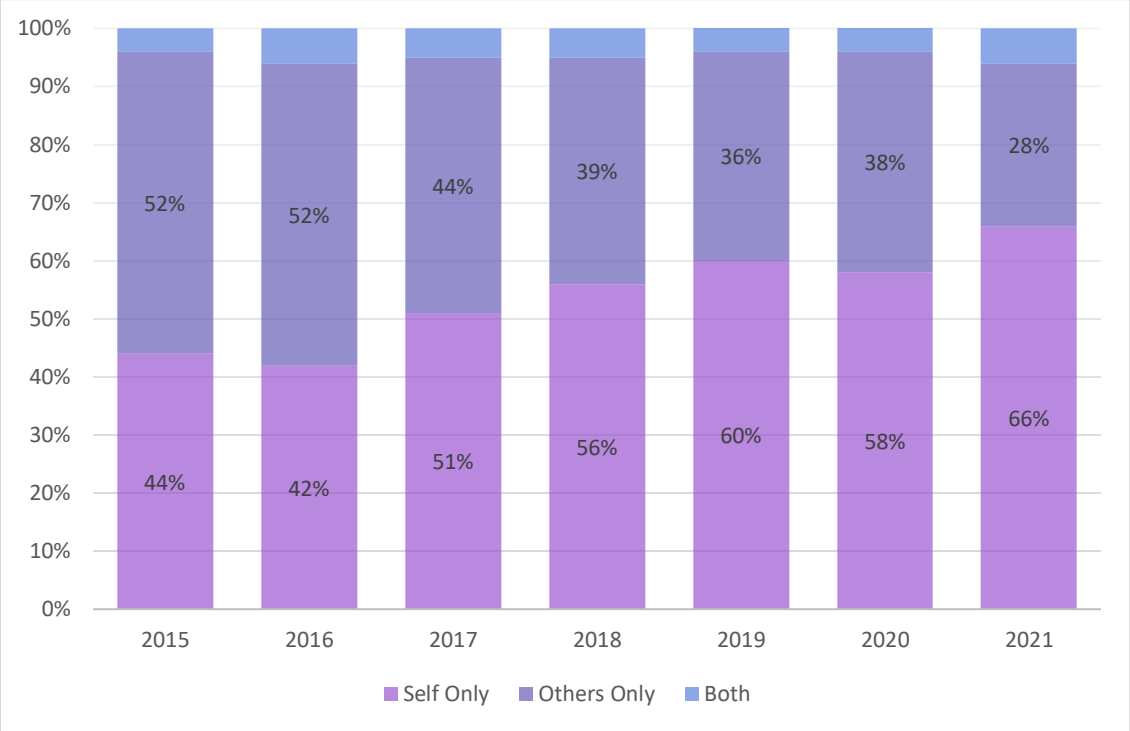
SOURCE: 2021 YOUTH RISK BEHAVIOR SURVEY SUMMARY AND TRENDS REPORT & 2021 VIRGINIA YOUTH SURVEY TREND ANALYSIS REPORT

[1] The only trend moving in "the right direction" for all variables and demographics was with a decreased percentage of attempted suicides among Asian students.

Like many other states in the United States, Virginia has been grappling with mental health concerns among its population. While the state's rates of mental health concerns are slightly lower than the national percentages, they are still alarmingly high and a cause for concern. Both national and state trends in this area have not been moving in the right direction, and the COVID-19 pandemic has only exacerbated the situation. For example, the general trend for attempted suicides in Virginia had been improving but recently began increasing again after the pandemic and is even more concerning now. Self-harm among Virginal youth is also of great concern, with emergency department visits for suicidal ideation, self-harm, and suicide among 9-18-year-olds in Virginia increasing by over 40% from 2019 to 2021 (Virginia Department of Health, 2022).

With these rates of suicide and self-harm behaviors, there is an increased need for schools to address these concerns as a "vital lifeline" for struggling youth (CDC, 2023a). Schools are known to be critical mental health access sites and should be equipped with resources to support the mental health concerns of all students, especially those at a crisis level. The Virginia Center for School and Campus Safety (VCSCS) provides a "one-stop service to K-12 schools" for these recourses, as suicide and self-harm pose a significant threat to students and school communities. As a part of these efforts, Threat Assessment Teams (TAT) have been created to help ensure school safety by identifying, inquiring, assessing, and managing threats. While mass violence (e.g., school shootings, terrorism) may appear to be the greatest threat to public schools, it is becoming much more likely for a school community to be impacted by a "threat to self," which is when a student engages in suicide or self-harm behaviors). From 2015-2021, we can see that the number of threats to "others only" has been steadily decreasing, while the number of threats to "self only" has been rather consistently increasing (see Figure 1: Types of Threats 2015-2021 ) The demand for mental health interventions for students posing a threat to themselves is increasing and schools have been unable to keep up.

FIGURE 1:TYPES OF THREATS




SOURCE: 1VIRGINIA SCHOOL SAFTEY AUDIT

## PROBLEM STATEMENT

A student posing a threat to themselves shows that many levels of mental health intervention have already failed, allowing them to reach a crisis level that can lead to worsened mental health outcomes, hospitalization, and -in the worst case- death. With over 3,000 suicide and self-harm-related school threats assessed in Virginia's latest K-12 school safety survey, schools must be able to identify and address these mental health concerns early to prevent worst-case scenarios (DCJS, 2021). While most of these cases were determined to be low-risk, and school threat assessment teams are generally able to prevent their occurrence, there are still far too many high-priority suicide and self-harm cases going undetected. In 2021, 66% of Priority 1 or 2 cases (representing imminent or high threat), including one student death by suicide, were not identified before their occurrence.[2]

[2] Appendix A provides an overview on how these threats are prioritized and Appendix B shows the number of threats assessed by priority level.

# CLIENT OVERVIEW

*Voices for Virginia's Children (VVC)* is a non-profit organization that champions public policies that improve the lives of Virginia's children. VVC collaborates with other advocates, state agencies, and the state legislature to achieve its goals and is interested in finding equitable alternatives that will gain support from important stakeholders.

Recently, VVC has expressed an increased commitment to expanding its mental health advocacy for Virginia youth as many crisis-level mental health supports, such as the 988 hotlines, are inaccessible to struggling youth (Moore, 2022). In addition, they are committed to directly addressing the growing rate of youth with mental health concerns and ensuring that new mental health initiatives consider the needs and input of children and young people (Mental Health, 2022).

## COLLABORATION WITH VCSCS

VVC has expressed its intention to use the insights from this report to advocate for mental health initiatives. To achieve this goal, VVC must identify key partners who can help facilitate the implementation of these initiatives. The Virginia Center for School and Campus Safety (VCSCS) is a valuable partner in this regard.

While this report uses various surveys and datasets[3], the most accurate overview of how mental health is addressed in schools comes from surveys conducted by the VCSCS. Their surveys include information on incidents that actually occurred and impacted K-12 Virginia public schools[4], which is why we scoped our problem definition based on information collected by their threat assessment teams. Additionally, the VCSCS was created to enhance school safety, giving them the experience and authority to work on initiatives related to mental health in Virginia schools. Specifically, they are mandated to provide training, develop and disseminate resources, and develop partnerships to promote school safety. Therefore, collaborating with VCSCS to implement our alternative would help VVC achieve its advocacy goals and improve Virginia's children's overall mental health and well-being.

[3] Appendix C provides an overview of the data sources references throughout the report.
[4] While VCSCS and their TATs are mandated for Virginia public schools, roughly 30% of VA public schools reported that they typically assessed threats of suicide and self-harm internally meaning showing a limitation to the data provide from this source.

# BACKGROUND ON PROBLEM

## GROWING YOUTH MENTAL HEALTH CRISIS

Youth mental health concerns have reached crisis levels due to a combination of factors, ranging from an individual to a societal level, all of which impact the development of poor mental health in young people. Interpersonal relationships, community safety, societal inequalities, and technology all continue to make mental health either a risk or protective factor (Office of the Surgeon General [OSG], 2021). Prevention and intervention can minimize the risk of youth developing severe mental illness, and there are substantial resources to support their implementation, yet rates remain high (Colizzi et al., 2020). As seen earlier in *Table 1: National and VA Trends in Mental Health and Suicidality Variables,* depression symptoms (sadness and hopelessness) have increased and it is unsurprising that this has evolved into more serious mental health concerns for many students.

The COVID-19 pandemic has only exacerbated these concerns, with social isolation, remote learning, and economic instability contributing to poor mental health outcomes among young people. Looking at high school trends, rates of attempted suicide after the onset of the COVID-19 pandemic rose for the first time in over five years, showing the negative impact of the pandemic on student mental health. The 2021 Virginia School Safety Survey (VSSS) found that 60% of middle schoolers that said their school climate had worsened in the last year attributed the decline to the pandemic (Virginia Department of Criminal Justice Services [DCJS] & Virginia Department of Education [VDOE], 2021).

## LOW MENTAL HEALTH LITERACY

Statistics on poor youth mental health have been showing concerning outcomes for years, and the collection of data on the topic is intended to highlight problems to address. Still, these statistics are survey-based, and there are likely significant underreporting problems when it comes to identifying at-risk students. Many factors contribute to the underreporting of at-risk students. A primary concern is a lack of knowledge among school communities about the warning signs and risk factors associated with mental health problems, making it hard to identify who needs intervention. According to the VDOE, teachers are required to report any direct communication of suicide, and, as of 2020, teachers and other relevant personnel are required to undergo “complete mental health awareness training” at least once (2020). However, mental health literacy remains insufficient. The most recent VCSCS audit found that a quarter of Virginia’s school faculty and staff have not received this training, and 60% of schools reported that their administration/faculty/staff needed more mental health problem awareness and recognition training (2021). Teachers are slowly becoming more equipped to deal with mental health concerns in their students, but there is still more to be done to improve early recognition rates.

## HIGH MENTAL HEALTH STIGMA

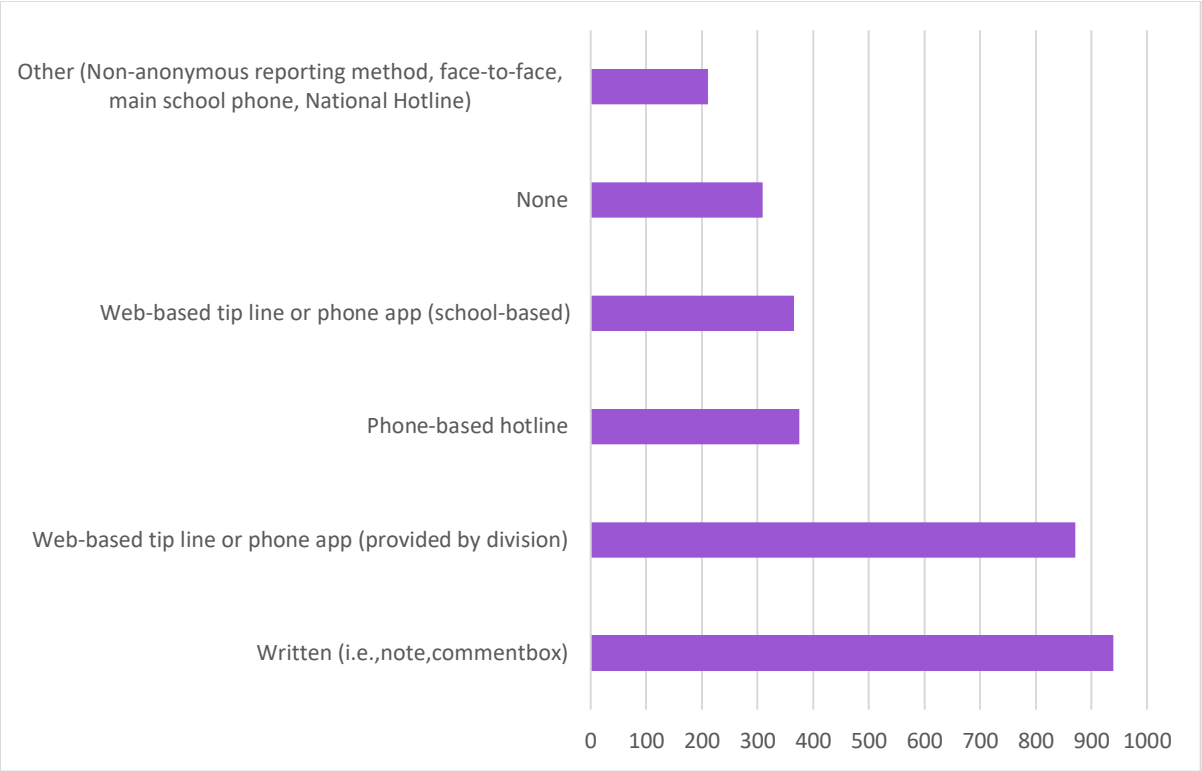
Despite growing awareness of mental health issues, negative attitudes and beliefs continue to surround these topics. They can often lead to shame, fear, and silence among young people struggling with suicidal thoughts or engaging in self-harm behaviors. As a result, these students may hide their struggles, making it hard for teachers, even those with substantial mental health literacy, to identify such students for a threat assessment. In addition, less than half of students with depressive behaviors feel comfortable asking an adult for help in these situations (DCJS & VDOE, 2021).

The stigmatization of mental health creates significant barriers to seeking help. It can lead to feelings of isolation and hopelessness, further increasing the risk of both general and crisis-level mental health concerns (Wyman et al., 2010). These students and their peers may know something is off but do not know how to discuss it or access support resources. This perpetuates a culture of silence and denial, making it challenging to identify and address mental health concerns among students (Wright-Berryman et al., 2022).

## ANONYMOUS REPORTING CONCERNS

To address some of these concerns, the VDOE recommends that schools provide anonymous reporting systems, such as SaySomething and Safe2Tell, for school communities to use as a suicide prevention tactic (VDOE, 2020). However, it is unclear how many schools provide these services. *Figure 2: Anonymous Reporting Methods Available for Reporting School Threats* shows current reporting methods used by Virginia threat assessment teams. Only 63% of schools selected that they provide anonymous reporting methods. This data does not provide information on the actual use of these methods, and it is unclear if schools promote their use for mental health threats.

FIGURE 2: ANONYMOUS REPORTING METHODS AVAILABLE FOR REPORTING SCHOOL THREATS (N=1,967, *SELECT ALL THAT APPLY)*




SOURCE: 2VIRGINIA SCHOOL SAFTEY SURVEY

For those with an anonymous reporting system, students must know that these reporting systems are available and how to use them. Currently, only 40% of high school students know their school's threat assessment approach, and fewer are likely to know its connection to mental health concerns. Likewise, over 100 Virginia schools did not inform students or staff how to recognize and report threatening behaviors. Those that did used a variety of strategies from school assemblies, handbooks, and individual instruction to relay this information, and it is unclear how successful each method is (DCJS, 2021). It is also important to note that these are general awareness strategies for threatening behavior that may not include mental health risks, to begin with. Overall, data on how schools address anonymous reporting for mental health concerns is unclear; however, we can assume most schools have low mental health literacy and high mental health stigmas that create barriers to reporting such concerns. There is significant work to be done in training school communities on identifying mental health concerns, especially when they reach crisis levels.

## SOCIAL MEDIA AND TECHNOLOGY USE

The impact of technology and social media on youth mental health has been a topic of growing concern in recent years. Studies have shown that excessive use of technology and social media can lead to increased feelings of loneliness, depression, anxiety, and decreased self-esteem (Twenge & Campbell, 2019). Additionally, cyberbullying, exposure to inappropriate content, and addiction to social media have been linked to adverse mental health outcomes (Kuss & Griffiths, 2017). Last year, one in five high schoolers reported having been bullied on social media during the school year (VDCJS & VDOE, 2022)

Technology and social media have opened up new avenues for students to experience mental health crises, but monitoring technology in schools for signs of mental health issues is extremely limited. Currently, 45% of Virginia schools do not have any form of general social media monitoring technologies to detect threats and potential safety issues (DCJS, 2021). In addition, as with the reporting statistics mentioned previously, it is unclear how many schools used social media to monitor “threats to self” in particular.

## PROBLEM COST TO SOCIETY

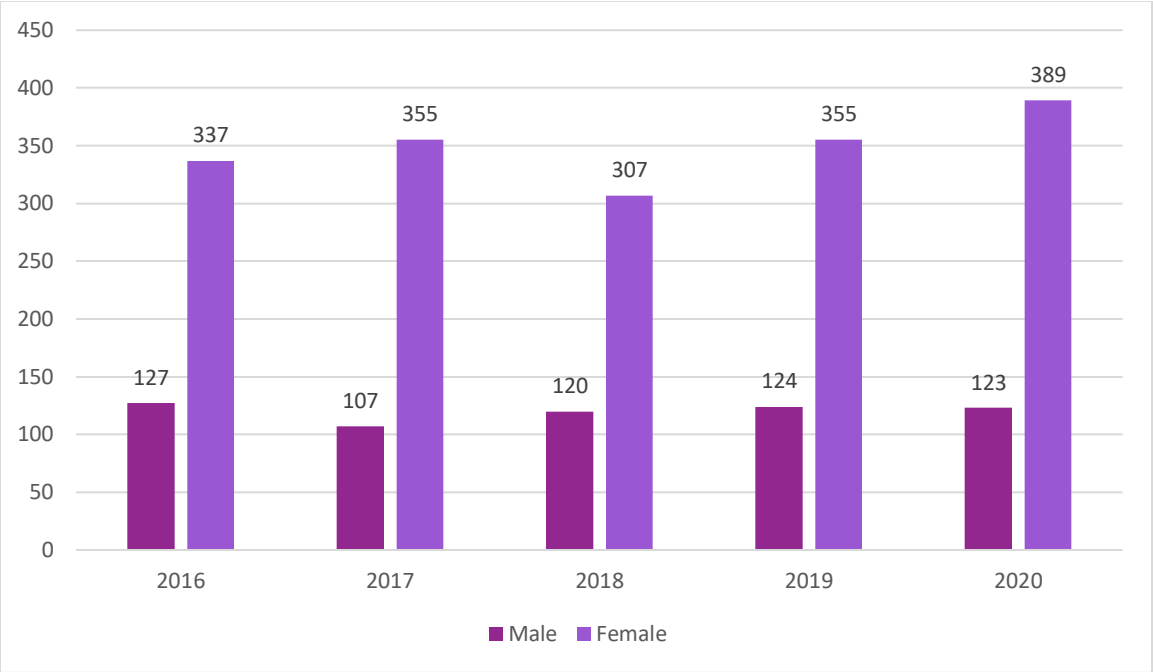
While they may be categorized as "threats to self only," the impact of suicide and self-harm goes far beyond the individual, having profound emotional, social, and economic costs to our society. Throughout this report, we group suicide and self-harm as they both represent crisis-level mental health concerns identified in our problem statement. Though they both are mental health crises that take a significant emotional toll on the individual's community, they are often unrelated and their social and economic costs are very different and must be assessed separately.

Youth suicide has a devastating impact on the communities closest to the individual. It affects the family and friends of young individuals and has a "rippling effect in the school environment" (Poland et al., n.d.). Suicide contagion, when a completed suicide or suicidal behavior increases the suicidal behaviors of others, is of particular concern given its potential impact on already vulnerable school environments. Suicide contagion is of heightened concern within Virginia as Fairfax County had one of the most well-documented cases of it just under a decade ago (Poland et al., n.d.). When considering the social impact of youth suicide, it is also essential to consider that suicides disproportionately affect marginalized groups, like sexual minorities. While data on the number of suicides occurring among LGBQ+ youth is unclear, it has been shown that youth with those sexual identities have higher rates of considering suicide, making a suicide plan, and attempting suicide (CDC, 2023). This all contributes to cycles of deteriorating mental health, further showing how consequential student suicides can be.

Considering this all, it would be impossible to estimate the cost of suicide; still, many have tried to put a price on it. A study on youth suicide estimated the average opportunity cost of youth suicide cost to be $802,939 in the United States; however, commonly used estimates of the *value of a statistical life (VSL)* average $12 million (Doran & Kinchin, 2020; Kniesner & Viscusi, 2019). In 2019, the VDH reported 59 youth suicides (9-18 years old), which, beyond the immediate emotional toll and financial burdens, would come out to over $40 million in foregone lifelong earnings using the conservative estimation, and $708 million using the typical VSL.

Youth self-harm rates have significantly different social and economic impacts, many of which vary based on the type of self-harm one is engaging in. Once again, while it is important to note that while suicide and self-harm correlate, most students engaging in self-harm are non-suicidal. The social impact of self-harm is hard to assess as there are different levels of visibility for self-harm behaviors. One thing to note is that females engage in self-harm at significantly higher rates than males, as seen in *Figure 3: Nonfatal self-harm hospitalizations among Virginia youth aged 9-18 years, 2016-2020,* and recent data from the CDC shows that sadness among teen girls has been getting much worse (CDC, 2023). Females, at a rate of one in three, are also more likely to consider or attempt suicide putting them at greater risk for continued self-harm and suicidal ideation.

FIGURE 3: NONFATAL SELF-HARM HOSPITALIZATIONS AMONG VIRGINIA YOUTH AGED 9-18 YEARS, 2016-2020




SOURCE: VDH

The economic cost of self-harm is also hard to estimate as different types of self-harm can result in various levels of medical treatments, psychiatric follow-up, loss of schooling, emotional burdens, and so on. Looking at medical costs alone, an emergency department (ED) visit for either suicidal ideation, attempts, or intentional-self harm was estimated to be roughly $600 per visit in 2017 (Karaca & Moore, 2020). The VDH reports 14,295 ED visits for youth with these concerns, which amounts to over eight million dollars in medical costs that year. This estimate is only for the initial emergency department visit, from *Figure 3: Nonfatal self-harm hospitalizations among Virginia youth aged 9-18 years, 2016-2020,* factoring in the 512 of these visits resulted in hospitalization follow-up medical treatment, and non-hospitalized self-harm incidents would drive this cost up substantially.

Overall, it is evident that beyond the emotional burden that comes from suicide and self-harm, there are substantial social and economic costs to consider. These all contribute to the worsening state of youth mental health, and we must find ways to address such concerns before they reach these levels. Suicide and self-harm behaviors can be prevented, but that is only so if we know who is at risk and when to intervene.

# EVIDENCE OF POTENTIAL ALTERNATIVES

## STATUS QUO

The *Protecting Youth Mental Health* advisory from the U.S. Surgeon General includes action steps for ten stakeholder groups ranging from young people, caregivers, educators, journalists, funders, and employers (2021). Looking at school-level interventions, it is imperative to equip the former half of these stakeholder groups as they- students, their caregivers, and school staff- are at the center of school communities. In addition, many resources are available to support these groups in their understanding of mental health concerns and readiness to respond to them, all of which are easily accessible online.

Currently, the VCSCS offers various mental health resources on its website and provides Youth Mental Health First Aid (YMHFA) training to school staff at no cost; they simply have to register in advance (VDCJS, n.d.-a). While there may be barriers to accessing these training programs and resources, it is evident that there has been substantial progress in equipping school staff to identify and address mental health concerns already. These efforts are promising as they improve the mental health literacy of key school community members, but they also raise concerns about how effective they will be given high teacher burnout rates and low levels of student trust in adults. Considering this, we focus the research on our other potential alternatives away from staff-level interventions.

## PEER SUPPORT INTERVENTIONS

While only half of the students with depressive behaviors said they would turn to adults for help, 85% of students statewide said they would disclose their peer's mental health struggles to adults (DCJS & VDOE, 2021). This shows that while many students may not seek support themselves, most would do so for a peer. Peers are often the first to notice changes in behavior or mood, making them "the eyes and ears on the ground" for identifying mental health issues, especially when trained to properly do so (Gewertz, 2022). Peer support training can also help reduce mental health stigma, as it normalizes discussions about mental health and shows students how to report their concerns.

Peer support has been used as a mental health and substance abuse intervention for adults, but there are limited studies to support its implementation for K-12 students. *Hope Squad* is a school-based peer-to-peer suicide prevention program that "uses trained students to intentionally facilitate help-seeking with distressed peers," descriptive data found that over one in four who sought adult help for suicidal feelings were referred by *Hope Squad* members (Wright-Berryman et al., 2018). Additional research on the program found that *Hope Squad* schools have lower study-body suicide stigmas than those without, while also mentioning that there is a need for further research, including a randomized control study on its effectiveness (Wright-Berryman et al., 2022). These findings suggest that peer-support interventions could

substantially support Virginia youth and address our problem of undetected suicide and self-harm behaviors.

Without intervention, it is likely that students are already engaging in peer support simply by listening to one another, as it is natural to talk to your friends about problems in your life. Unfortunately, in 2022 less than a quarter of students who had made a suicide plan had received suicide prevention or mental health training (DCJS, 2022). To make peer support an effective intervention, schools must provide students with mental health tools and training to engage in these conversations healthily (Gewertz, 2022). The following are evidence-based interventions that equip students with the necessary skills to recognize and report concerning behaviors in both their peers and themselves:

Sources of Strength (SS): Program aimed at preventing youth suicide and promoting positive behaviors in schools and communities. The program trains students to serve as peer leaders and to spread messages of hope, help, and strength among their peers. Trained peer leaders in large schools were found to be four times more likely to refer a suicidal friend to an adult; this study also concluded that Sources of Strength "enhance[ed] protective factors associated with reducing suicide at the school population level (Wyman et al., 2010).

Signs of Suicide (SOS): Education and screening program that teaches the warning signs of depression and suicidality and how to seek help from a trusted adult. This program is included in the Substance Abuse and Mental Health Services Administration's (SAMSHA) National Registry of Evidence-Based Programs and Practices as a "promising" intervention for reducing suicidal thoughts and behaviors (Virginia Commission on Youth, 2017)

Youth and Teen Mental Health First Aid (YMHFA): Youth Mental Health First Aid (MHFA) is a skill-based training course that teaches individuals how to spot and respond to youth mental health struggles; it is well-known and one of the current training programs used for Virginia school staff. While primarily adults working with youth take the course - including Virginia public school staff mentioned previously- the training is also offered to youth. Various peer-reviewed studies show trainees grow in their knowledge of mental health signs and symptoms, ability to identify professional and self-help resources, and own mental wellness (Mental Health First Aid, 2022). More recently, teen Mental Health First Aid (tMHFA) has become popular as it is specifically designed to train teenagers on common mental health issues in their age group. Unfortunately, research on this program has yet to be made available. However, according to Education Week, a study by Johns Hopkins University in the works has found that over two-thirds of students trained in this program report using the skills to help peers in need (Gewertz, 2022).

Clear evidence of the effectiveness of these programs is hard to assess despite them being widely used and labeled as "evidence-based." Additionally, the evidence in favor is often on improvements to trainees' skills, not on the overall mental health improvements in the

communities they serve (Wong et al., 2015). Given the stigma around this topic and the need for anonymity, tracking the full extent of the program's impact can be challenging, and schools must proceed with caution when selecting training programs for their students.

## ONLINE MONITORING PROGRAMS

Tracking online activity and communications would allow schools to detect behavior patterns indicating mental health issues, such as self-harm and suicidal ideation. Such monitoring can enable schools to intervene early and support students in need (Ding, Gromala, Gao, & O'Leary, 2021). Nationwide, many schools have "recently and rapidly" adopted computerized self-harm monitoring programs that process and collect student information and alter school officials of flagged content (Collins et al., 2021). There are also programs available to monitor social media use for signs of distress. Though these are new and less researched identification methods, school districts are employing these technologies as an additional avenue to monitor mental health concerns. Currently, many monitoring services look a "threats to others," but there are fewer that monitor mental health concerns. The following are potential social media and school technology services that Virginia schools can use to identify students at risk of harming themselves:

GeoListening: Service that monitors and analyzes student social media and reports threats to schools. A California school district drew attention to this program when they hired a firm to monitor social media following a related student suicide nearly a decade ago (Martinez, 2013). A follow-up case study on this intervention found that the school district was alerted to over 20 cases of potential suicide and self-harm in the pilot program's first year. They have since renewed the pilot programs for years after, despite mixed opinions from the public (J.J. McGuire et al., 2017).

Go Guardian: Learning system service that provides classroom management and safety resources to K-12 schools. *Go Guardian Beacon* is a monitoring system installed on school-issued technology to detect and notify staff about online activity that indicates a risk of suicide and self-harm. It was created with the guidance and support of the American Association of Suicidology and the American Foundation for Suicide Prevention to ensure it "fits seamlessly" into schools' suicide prevention policies (Go Guardian, n.d.). There is limited evidence on the number of cases it has identified; however, one article on Baltimore City Public Schools said that in the first few months of its implementation, it identified nine students with severe mental health crises, two of whom had never received mental healthcare previously (Bowie, 2021).

With these programs, schools must know how to balance the need for monitoring with the privacy rights of students and ensure that any monitoring is conducted in accordance with applicable laws and regulations (Tutt, 2020). It is also important to note the potential limitations of monitoring technology in schools, such as privacy concerns and the risk of over-reporting. Additionally, there are concerns that monitoring technology may be unable to keep up with the

creative methods that youth use to avoid getting flagged for risky behavior. For example, Gen Z Tik Tok users have found a loophole for mentioning death, dying, or suicide using “unalive” instead (Skinner, 2021). Though these technology firms claim they have the best technology to assess these nuances and there are robust language processing and deep machine learning techniques to address these concerns, we cannot overlook the ability of youth to circumvent such technologies (Coppersmith et al., 2018).

## EVALUATIVE CRITERIA

We will use effectiveness, cost, feasibility, and equity to evaluate the plausibility of each alternative and asses our final recommendation:

1. **Effectiveness:** This criterion relates to the alternative's ability to directly address our policy problem by improving the number of cases identified before a crisis-level event and targeting stigma concerns that contribute to the problem overall. Each outcome has two impact categories, as such effectiveness is rated out of four.
    a. Encourages earlier identification of suicide and self-harm
        i. Does this alternative improve the ability of school community members to recognize signs of mental health concerns in students? (1 point)
        ii. Does this alternative improve the ability of school community members to act on these concerns? (1 point)
    b. Reduces mental health stigma in school communities
        i. Does this alternative improve general conversations about mental health? (1 point)
        ii. Will it positively engage school community members? If the alternative directly addresses students, what is the uptake likelihood of them engaging with this alternative? (1 point)
2. **Cost:** This criterion will relate to the direct cost of each alternative in dollars and will include the following:
    a. The direct cost of the alternative will be presented using a range of program costs.
    b. Administrative costs related to planning, delivery, and follow-up will be calculated using hourly wage calculations for support staff and time commitment estimates.
    c. Additional costs that are related to student engagement (when applicable).
3. **Feasibility:** This criterion relates to the ability of each alternative to be approved for implementation and is determined by assessing precedent and stakeholder support. Feasibility is rated out of two points.
    a. Precedent
        i. Has this alternative been successfully implemented in other states, and/or does it have federal support? (1 point)
        ii. Has this alternative been successfully implemented in Virginia? (1 point)
    b. Stakeholder support
        i. Will this alternative receive support from state stakeholders, including state departments and representatives? (1 point)
        ii. Are there any other gatekeepers involved? Would they support or hinder this policy? (1 point)
4. **Equity:** This criterion relates to the ability of the alternative to address existing equity concerns without creating any additional ones and will be rated as helpful, harmful, or neutral

a. A score of “helpful” will be given to alternatives that directly address equity concerns (such as sub-group impacts, geographical access issues, etc.) and do not have any aspects that would compromise equity concerns in the future.
b. A score of “harmful” will be given to alternatives that have any elements that could negatively impact vulnerable populations.
c. A “neutral “score will be given to alternatives with mixed equity impacts.

# EVALUATING ALTERNATIVES

## ALTERNATIVE 1: STATUS QUO

Overview: This alternative would leverage existing mental health interventions, primarily the school staff training programs and resources currently provided by the VCSCS. The VCSCS also has a dedicated K-12 Suicide Prevention and Mental Health Coordinator who is actively working on interventions that will address our problem in some capacity.

Implementation: There are also state and federal efforts to improve the general mental health of students, many of which would provide funding for the resources needed to do so. The VDOE and VDH have recently made significant efforts to improve the mental health of Virginia students, such as creating the Virginia School Mental Health and School Safety Commission in 2019, allocating $7.5 million in funding for public school mental health services in 2020, and introducing a Mental Health Awareness Training for School Staff bill in 2021 (VDOE, 2022). It is evident that addressing the youth mental health crisis is a top priority for many state stakeholders, and it could be that rates of suicide and self-harm will decline on their own as a result of general mental health these initiatives.

Potential Challenges: Take-up issues as resources are available already, but individual schools are not engaging in them. There is also the concern that these initiatives are rather general, and do not directly address the policy problem specifically concerned with identifying suicide and self-harm behaviors before they occur.

### *EFFECTIVENESS SCORE: 3*

Improved Identification: 1

Current school-level mental health initiatives are rather general, looking to improve overall student well-being, and do not directly address identification concerns. Interventions may involve teaching school community members how to recognize signs (1 point), but there are still unaddressed reporting barriers (0 points).

Decreased Stigma: 2

Schools are having more mental health conversations and finding ways to engage students, directly addressing stigma concerns. For example, mental health is being incorporated into health curriculums, and the VCSCS suicide prevention coordination is working to create an additional awareness month to promote mental well-being and suicide prevention. These interventions would efficiently improve school-based mental health conversations and are centering student engagement, making this alternative score 2 points for de-stigmatization.

COST: --

This alternative has no additional costs as it leverages current resources.

*FEASIBILITY SCORE: 4*

Precedent: 2

There has been significant precedent at all levels of government to address youth mental health challenges. In Virginia specifically, Governor Younkin announced a three-year "Right Help, Right Now" campaign that addressed Virginia's behavioral health challenges and included $15 million to expand K-12 school-based mental health programs (Office of the Governor, 2022). There have also been smaller pieces of legislation, like SB 1044, which require the 988 Suicide and Crisis Lifeline telephone number to be provided on school identification cards, passed to support youth suicide concerns (The Virginia Public Access Project, 2023). This alternative scores 2 points for precedent as it has significant federal and state support.

Stakeholder Support: 2

There are numerous state departments engaged in providing mental health interventions for Virginia youth, including the VDOE, VDBHS, and VCSCS. Senator Creigh Deeds, a prominent mental health advocate in Virginia's general assembly and Chair of the Behavioral Health Commission, has also stated his support for working on school-based mental health interventions (Office of the Governor, 2022). School-based healthcare, including mental healthcare, has also received widespread support from parents and advocacy groups (Chamberlin, 2009). Overall, there has been significant support to improve student mental health among state and general stakeholders (2 points).

*EQUITY SCORE: HELPFUL*

Given that this alternative includes various mental health initiatives, multiple avenues exist to support equity. We know that specific subgroups are at heightened risk for developing serious mental health concerns, and it is important to address their needs directly. SB1300 aims to do this by including trauma-informed care training for elementary and secondary school training (The Virginia Public Access Project, 2023b). Initiatives like this one seek to support vulnerable students, which promotes equity concerns. Still, at a state level, there are more significant equity concerns to consider when thinking about which districts have access to available mental health resources. For example, the "Right Help, Right Now" funding is targeted toward specific communities that can potentially leave out others in need (Office of the Governor, 2022). Therefore, this alternative score is neutral.

## ALTERNATIVE 2: PEER SUPPORT MENTAL HEALTH INTERVENTIONS

*Overview:* Many conversations around youth mental health surround empowering students to support one another and building positive connections within school communities. Peer support programs effectively improve mental health outcomes by allowing individuals to share their lived experiences with those struggling with similar issues. Providing mental health training to a group of student leaders would help them understand how to identify and responds to mental crisis (in both themselves and their peers), promote early interventions, and reduce stigmas associated with mental health issues. This alternative would improve student attitudes toward mental health and increase access to mental health services for those that need it the most (National Institute of Mental Health, 2017).

*Implementation:* Since there is limited data on the effectiveness of these interventions, this alternative would be a pilot where schools are encouraged to implement mental health training for student-leaders to best engage in peer support. Schools must have the ability to choose a program that works for them based on their student's needs and school budget. For example, *Sources of Strength (SS)* may be better suited for a school impacted by suicide, whereas *teen Mental Health First Aid (tMHFA)* is better for schools with general mental health concerns. Collaborating with VCSCS would be especially helpful for this alternative as they can oversee its implementation (helping schools choose programs, evaluating outcomes, etc.).

*Potential Challenges:* The primary implementation challenge would be finding students to train to offer formal peer support interventions. In addition, while these initiatives provide the initial resources needed to train students, there would have to be follow-up support from staff to ensure that the students use their training throughout the school year.

### *EFFECTIVENESS: 2.5*

Improved Identification: 1.5

One of the primary goals of these mental health interventions is to improve student mental health literacy, which includes recognizing both protective and risk factors in themselves and their peers (Hart et al., 2016). These interventions also prioritize promoting the identification of a trusted adult to report concerns to, which aims to improve the number of cases acted on. Since the ability of students to act on concerns may be limited, we give improved identification a score of 1.5.

Decreased stigma: 1

Peer support programs show promise in decreasing mental health stigmas as they directly engage school communities in related conversations and raise awareness on protecting students (1 point). These programs largely rely on student-leaders to engage in training and spread what they learned around their school communities. Therefore, student take-up is crucial to this

alternative's effectiveness, and estimates are unclear. One peer-support study found that only 34% of students completed training which raises effectiveness concerns about the use of student leaders for such a severe concern (Byrom, 2018). While we would consider incentives and compensation measures in implementing this alternative to prevent low take-up for Virginia students, we should assume low student take-up (0 points).

### *COST: $6,823.22- $13,608.34 PER SCHOOL*

Appendix 1 details the estimated cost for the peer-support programs mentioned for this alternative. It is important to note that we based the supervisor planning and follow-up time commitments on what is described in Calear et al.'s procedure for implementing *SS*, as it provides the most detailed time estimates (2016). These estimates are also based on the lower end of ranges; for example, *SS* recommends 4-6 hours of training and 1-3 supervisors per 50 students. As mentioned, strong and continued student engagement is essential to this alternative's effectiveness, feasibility, and equity, so we recommend using the opportunity cost of students' time to provide incentives and compensation.

### *FEASIBILITY SCORE: 4*

Precedent: 2

A pilot program currently offers *tMHFA* to schools across the nation, reaching over 600 training sites and 82,000 students (Born This Way Foundation, 2019). Two Virginia high schools have been selected to participate in this program, showing precedent for peer-support programs nationwide and within the state (2 points). In addition, there is district-level support of peer support initiatives as Loudoun County Public Schools offers two peer support programs, including *SS* which is one of the trainings we would recommend being offered under this alternative (Loudoun County Public Schools, n.d.).

Stakeholder Support: 2

Peer support programs have gained significant stakeholder support as a valuable intervention to support mental health in high schools. From Lady Gaga's Born This Way Foundation collaborating with the National Council for Mental Wellbeing to pilot tMHFA programs to local school districts showing support for such programs (2 points).

It is important to note that this alternative accounts for previous pushback from Virginia's general assembly on implementing school-based mental health training. Representatives were reluctant to pass these policies due to capacity concerns with school systems given current staffing shortages and widespread burnout within the field (Airington, 2019). One of the benefits of this alternative is that it leverages students (and limited faculty) to support school mental

health. Considering this, it would be reasonable to assume that this alternative would fare better than past legislation should it be proposed to Virginia's general assembly.

*EQUITY SCORE: NEUTRAL*

This alternative seeks to minimize the barrier to accessing care often arising from the lack of knowledge and stigmatization of mental health care. Student-focused interventions have been shown to help students that may not otherwise feel comfortable seeking mental healthcare (Ontario Centre of Excellence for Child and Youth Mental Health, 2016). In its implementation, we also ask that those in charge of identifying peer leaders do so with equity in mind, creating a representative group of trained peer-support students. Looking at this at a state level, it is important to note that districts have different needs and resources and could have unequal access to training programs. For example, LCPS is a very affluent district that was able to implement a costly peer-support program without additional state support, and other districts may have to opt for lesser-quality programs.

## ALTERNATIVE 3: ONLINE MONITORING OF RISK BEHAVIORS

*Overview*: Given the increase in use and reliance on technology at schools and social media, increased online monitoring could provide additional support for early identification of suicide and self-harm behaviors. Monitoring technology in public schools has primarily been used to identify potential threats to the school, cyberbullying, and inappropriate content; however, a recent survey by the Center for Democracy and Technology (CDT) found that nearly 50% of teachers reported them being used to identify mental health concerns (2022). Since this technology is relatively new and still being researched, it isn't easy to assess its success at early identification. Still, the CDT has found significant support for it, with 70% of students and parents being comfortable with activity monitoring to identify at-risk students, showing that this could be a valuable alternative to increase early identification of our problem.

*Implementation:* A 2020 VDOE report found that 85% of Virginia public schools currently use some form of technology to monitor student activity and ensure online safety (2020). It is unclear how many of these include monitoring suicide and self-harm concerns, so this alternative would require all schools to offer monitoring that explicitly includes the detection of threats to self, using programs such as *Geo Listening* and *Go Guardian*. These concerns will be sent to the school's threat assessment teams to determine if they merit intervention using pre-established priority categorizations.

*Potential challenges:* There are several implementation challenges with this alternative, including overreporting, equity challenges, and privacy concerns.

### *EFFECTIVENESS SCORE: 2*

Improved Identification: 2

The direct purpose of this alternative is to improve the identification of at-risk students by monitoring their online behaviors. Further research is needed on the effectiveness of individual monitoring technologies; however, the programs we have looked at use software to recognize risk behaviors and then report it to schools to assess the level of concern, giving this alternative 2 points for improvement identification.

Decreased Stigma: 0

This program primarily focuses on identification and would not directly improve stigma concerns. It would not lead to greater mental health conversations, and there is no student take-up to consider.

### *COST: $1,191.17- 4,941.17 PER SCHOOL*

Estimating the cost of this alternative is difficult for a variety of reasons. To start, technologies are typically implemented at a district level, and obtaining a cost estimate would require requesting a quote and a bidding process. Though it would be important to estimate the opportunity cost of these individuals' time, there is no information on the amount of administrative time this would take, making it hard to provide an accurate estimate. Likewise, we assume that implementation costs may be associated with installing the software that cannot be measured due to a lack of information.

In Appendix 2, we estimate the cost of GoGaurdian and GeoListening in existing school districts per school by dividing district cost by the number of schools. We provide this estimate of the cost per school for ease of comparison to other alternatives; however, it is essential to note that in-reality pricing is based per student (including elementary and middle school students), so we assume there will be significant variation in these costs. In addition, since it is possible for schools to implement both programs or other similar ones, we provide this cost as a range.

### *FEASIBILITY SCORE: 4*

Precedent: 2

As seen in our cost estimate, school districts around the country are using these monitoring technologies. In addition, Virginia is "consistently recognized as a national leader in the use of technology to expand student opportunity" and has many related initiatives that include internet safety policies (Virginia Department of Education, n.d.). These policies primarily surround monitoring school technology. However, there is some district-level precedent for social media monitoring, with Fairfax County Public Schools (FCPS) seeking a social media monitoring program to monitor hate speech (Dorman, 2022). Overall, we can see a significant precedent for this alternative and give it 2 points.

Stakeholder Support: 1

Stakeholder support for this alternative needs to be clarified as this new intervention has strong arguments on both sides, many of which vary based on personal and ideological views. Though many values its importance for safety concerns, others see it as an invasion of privacy. Support also depends on how this alternative is framed, as evidenced by backlash to the FCPS proposal that raised First Amendment concerns among Republicans despite it being a safety measure. Therefore, we give stakeholder support a score of 1, given the uncertainty and potential for pushback.

### *EQUITY SCORE: HARMFUL*

Beyond privacy concerns, there is also a chance for over-reporting that may disproportionately impact vulnerable students. In particular, minority students are often over-disciplined in school and there are concerns that additional monitoring can perpetuate these issues. In addition, algorithms have also been shown to absorb societal bias, which may further impact vulnerable subgroups, making this alternative harmful (Ghili, 2021).

# OUTCOMES MATRIX

| | Alternative 1: Status Quo | Alternative 2: Peer Support Mental Health Interventions | Alternative 3: Improved Online Monitoring of Risk Behaviors |
|---|---|---|---|
| **Effectiveness** | Improved identification: 1<br>Decreases Stigma: 2<br>Total Score: 3 out of 4 | Improved identification: 1.5<br>Decreases Stigma: 1<br>Total Score: 2.5 out of 4 | Improved identification: 2<br>Decreases Stigma: 0<br>Total Score: 2 out of 4 |
| **Cost** | -- | $6,823.22- $13,608.34 | $1,191.17- $4,941.17 |
| **Feasibility** | Precedent: 2<br>Stakeholder Support: 2<br>Total score: 4 out of 4 | Precedent: 2<br>Stakeholder Support: 2<br>Total score: 4 out of 4 | Precedent: 2<br>Stakeholder Support: 1<br>Total score: 3 out of 4 |
| **Equity** | Helpful | Neutral | Harmful |

# RECOMMENDATION

We recommend Alternative 2*: Peer Support Interventions,* as it has high feasibility and promising equity considerations. This is especially so as it would be done in addition to interventions mentioned under the *Status Quo* alternatives, which would provide additional support across all criteria. We recommend this alternative despite it having a more significant cost than *Improving Online Monitoring of Risk Behaviors* as it has slightly higher effectiveness and much higher feasibility.

This alternative also falls in line with our client's values as it centers youth by empowering them to support their own and their peer's mental health needs.

# IMPLEMENTATION

### *Planning Phase: Partnership with VCSCS*

Since a policy problem has been identified at the VCSCS level, Voices will partner it's their K-12 Suicide Prevention and Mental Health Coordinator to develop a list of peer-support programs for schools to use. Then, schools will be identified and recruited to begin piloting the program.

After selecting schools to pilot this alternative throughout the state, we will follow the intervention steps outlined in the Calear et al. study on *SOS*, adding modifications to ensure the highest level of success possible (2016).

### *Intervention Phase One: Preparation of School Administrators and Staff*

The first phase involves preparing the school. This includes presenting school administrators with a background on the program, training one or more staff members to act as adult supervisors, and establishing a "clinical protocol" to respond to crisis-level mental health concerns that this program aims to identify.

Since Virginia already has related suicide prevention (and "postvention") protocols in place, the "clinical protocol" portion of this phase will ensure the school works with its threat assessment team to clarify lines of communication and responsibility. This is important to consider as this alternative aims to improve the number of "threats to self" assessed in schools and requires quick and effective responses. Ideally, one of the staff supervisors identified would also be a threat assessment team member, such as a school psychologist, to ensure a unified approach when these threats are identified by student leaders.

### *Intervention Phase Two: Nomination and Engagement of Student-Leaders by Staff Supervisors*

The second phase revolves around nominating and training peer leaders. It is recommended that 2-10% of the student body be nominated by the trained staff supervisor(s). In doing this, it is important to address both equity and effectiveness concerns mentioned in our evaluation.

To address equity concerns, supervisor(s) should establish guidelines or targets for student nominations to best represent the school across characteristics such as grades, demographic backgrounds, extracurricular involvement, and even academic success. This would also involve many internal stakeholders, such as coaches, teachers, and program directors.

Incorporating incentives and compensation would support take-up concerns by providing students with explicit motivation to engage with the program. Incentives, which can involve money, food, and prizes, are key to improving participation in school programs as they promote both attendance and engagement (Collins et al., 2008). Schools may choose to provide gift cards, food during training, or prizes to compensate student leaders for their time and effort. Supervisor(s) could also find creative ways to engage these students such as partnering with local businesses, parent organizations, or advocacy groups. This would be a good way to further engage the greater school community in their program, which would make it more effective overall and may eventually provide support for its expansion.

### *Intervention Phase Three: Messaging Campaign Led by Trained Students*

The last intervention phase requires a whole-school messaging campaign to support the program. This would be planned and executed by the trained student-leaders (with the support of their supervisor) during the "follow-up" meetings calculated under costs.

This stage is the most public and, thus the most susceptible to pushback. Messaging would involve announcements and posts surrounding positive and protective factors, student well-being, and finding trusted adults. These messages are similar to those of social-emotional learning, which has become a lightning rod for conservative backlash similar to that of critical race theory (Anderson, 2022). As a result, we recommend framing this messaging with an abundance of caution and recognition of the school's ideological atmosphere to minimize the potential for stakeholders to compromise the program's true intention. This has already proven to be an issue in Virginia, with FCPS facing parent pushback at the proposal of monitoring hate speech despite doing so as a safety measure (Anderson, 2022).

### *Final Phase: Recognition by School Administrators and Evaluation by VCSCS*

After the program has concluded, schools should recognize and celebrate the peer leaders and their accomplishments. This recognition would help promote the effectiveness of the intervention and foster continued engagement between school administration and student-leaders.

It is crucial to evaluate the program's effectiveness properly. At the school level, the Threat Assessment Team should evaluate the program by analyzing detailed information on the number of threats identified by the trained student-leaders. Additionally, the VCSCS should assess big-picture improvements related to mental health identification and stigmas for all schools implementing the program. Such an evaluation is necessary as this is a pilot program that will inform whether it should be continued, expanded, or terminated based on its outcomes.

# CONCLUSION

The recommendation for Alternative 2: Peer Support Interventions is crucial for addressing the significant amount of undetected crisis-level mental health risks in Virginia public schools. Students are already engaging in supportive behaviors, and it is vital to provide them with training and support to continue doing so in a way conducive to positive mental health outcomes. Peer support has been successfully used for other populations, and Virginia should join the many school systems that have recently adopted it for mental health concerns.

Moreover, this recommendation can potentially address other policy problems, such as the large rate of lower-priority cases that could benefit from peer support. These students may not be at imminent risk for suicide and self-harm but still, need an increased level of support that could come from trained peers. Additionally, looking long-term, this could start to address issues surrounding Virginia's behavioral healthcare shortage, as trained students may be able to become Certified Peer Specialists in adulthood. Anecdotally, I was trained in one of the programs recommended (*Sources of Strength),* and years later, I continue to engage in mental health work. Hence, it is possible that these programs will have a positive, long-lasting influence that can translate to further work in the mental healthcare field.

With our recommendation, it is important to emphasize that this alternative must be used in collaboration with other mental health resources. The responsibility for providing professional support will always be on adults. This alternative is simply leveraging the impact of peer support to add to existing mental health resources and improve identification rates. We urge Virginia schools to prioritize the implementation of peer support interventions **alongside** other mental health resources to address the alarming rates of undetected crisis-level mental health risks among the youth. By empowering students to support each other, we can create a positive and supportive school environment that encourages help-seeking behaviors and reduces the stigma around mental health.

# APPENDIX

## APPENDIX A: OVERVIEW OF THREAT ASSESSMENT PRIORITIES

| | |
|---|---|
| Priority 1 (Critical/Imminent): | **Subject poses an imminent threat of serious violence or harm to self/others and has or may reasonably have significant impact on others. Requires immediate law enforcement and school administration notification, subject containment, target protection and safety planning, implementation of crisis response and notification protocols, ongoing assessment and management plan, and active monitoring.** |
| Priority 2 (High) | **Subject poses, or is rapidly developing capability for, a threat of serious violence or harm to self or others; or is in urgent need of hospitalization or treatment. Targets/others are impacted. Typically involves environmental/systemic factors and consideration for precipitating events. Requires immediate notification of school administration and law enforcement, subject containment, target protection and safety plan, activation of crisis response protocols as appropriate, ongoing assessment and management plan, and active monitoring. Referrals as appropriate.** |
| Priority 3 (Moderate) | Subject does not pose a threat of serious violence or harm though risk cannot be ruled-out. Subject may be developing capability for harm and is engaging in aberrant or concerning behaviors that indicate need for assistance/intervention. Targets/others likely concerned and impacted. Environmental/systemic or precipitating factors may be present. Consider law enforcement/security notification as appropriate. Requires ongoing assessment and management plan, and active monitoring. Referrals as appropriate. |
| Priority 4 (Low) | Subject does not indicate a threat of violence or harm to self or others; would or may benefit from intervention or assistance with concerns. Target, environmental/systemic, or precipitating events may be present at low levels. May involve some ongoing assessment management with passive monitoring and/or periodic active monitoring, Referrals as appropriate; Close case if no team interventions or monitoring indicated. |
| Priority 5 (Routine) | Subject does not indicate a threat of violence or harm to self or others; or need for assistance or intervention. No impact on others, environmental factors, or precipitants that need team intervention. Close case. |

## APPENDIX B: THREATS BY PRIOIRTY LEVEL AND TYPE OF ASSESSMENT

| | | ***Overview*** | | ***Problem Statement*** | |
|---|---|---|---|---|---|
| | **Number of assessments conducted** | **Number where the act ultimately occurred** | **Threats "Prevented"[5]** | **Conducted post-incident as there was no prior knowledge of threat** | **Had prior knowledge and Suicide/Self-harm Related** |
| ***Priority 1 (Critical/Imminent):*** | 257 | 79 | 178, 53% | 51 | 24 |
| ***Priority 2 (High):*** | 469 | 93 | 376, 67% | 29 | 25 |
| ***Priority 3 (Moderate):*** | 868 | 203 | 665, 65% | | |
| ***Priority 4 (Low):*** | 2126 | 715 | 1411, 50% | | |
| ***Priority 5 (Routine/No Known Concerns):*** | 1344 | 429 | 915, 52% | | |
| ***Totals*** | **5064** | **1519** | **3545, 54%** | **147** | **3344[6]** |

[5] The effectiveness of TAT alone cannot be controlled for. This is simply a visualization of the number/percent of threats that were assessed and did not occur.

[6] This number represents the total number of threats to self-addressed, including the 49 cases of suicide and self-harm that were assessed prior to their occurrence.

## APPENDIX C: OVERVIEW OF DATA SOURCES

| | Description | Target Population/ "Youth" Range | In-text Citation |
|---|---|---|---|
| **Self-Harm and Suicide Among Virginia Youth** | Analysis of mental-healthcare visits for Virginia youth 9-18 years old, including emergency department visits, hospitalizations, and deaths by suicide. | 9-18-year old | (VDH, 2022) |
| **Virginia School Survey of Climate and Working Conditions** | Survey used to maintain and safe and orderly environment conducive to learning. Focused on measuring school perceptions (ex. connectedness, engagement, bullying) and offers insight to student experience. | Alternates between high schools and middle schools each year. 2021 data is on middle schools, 2022 data is on high schools. | (DCJS & VDOE, 2021) Middle school<br><br>(DCJS & VDOE, 2022) High School |
| **Virginia School Safety Survey** | Web-based survey for all public K-12 schools to assess school safety conditions including things like securing the building and practicing fire drills. Includes information on "Threats to Self" conducted by TAT | K-12 school administers fill out survey, is representative of all grade levels | (DCJS, 2021) Survey by Question<br><br>(DCJS VCSCS, 2022) Audit highlights |
| **Virginia Youth Survey** | Similar to YRBSS (and funded by a CDC grant), used to monitor priority health risk behaviors. Administered every odd year in randomly selected VA public schools. | Administered to Middle and High School students. We used high school results to maintain consistency with national YRBS | (VDH, 2021) |
| **Youth Risk Behavior Survey** | The Youth Risk Behavior Surveillance System (YRBSS) is system of surveys conducted by the CDC to determine the prevalence of health behaviors, including mental health risks. | High School | (CDC, 2021) |

## APPENDIX C: ALTERNATIVE 2 COST ESTIMATE

| | Program [7] | Implementation[8] | Cost to Incentivize/Compensate Student-Leaders [9] | Total Cost (*per 50 students*) |
|---|---|---|---|---|
| **Sources of Strength** | $6,000 per school | $1,308.30 total for program planning, delivery, and follow-up<br><br>Supervisor Time Commitment:<br>• 2 hours program planning and introduction<br>• 3 hours supervisor training<br>• 4 hours student-leader training<br>• 6 hours follow-up meetings (2 hours long meetings a month for 3 months)<br>• Total: 15 hours | $6,300 in opportunity cost<br><br>Student Time Commitment:<br>• 4 hours student-leader training<br>• 6 hours follow-up meetings (2 hours long meetings a month for 3 months)<br>• Total: 10 hours | **$13,608.34** |
| **Safe TALK** | No direct cost (offered by VDH) | $523.22 total for program planning, delivery, and follow-up<br><br>Time Commitment:<br>• 2 hours program planning and introduction<br>• 4 hours student workshop<br>• 6 hours follow-up meetings (2 hours long meetings a month for 3 months)<br>• Total: 12 hours | $6,300 in opportunity cost<br><br>Student Time Commitment:<br>• 4 hours of student-leader training<br>• 6 hours follow-up meetings (2 hours-long meetings a month for 3 months)<br>• Total: 10 hours | **$6,823.22** |

[7] *(*based price estimates found on program website)

[8] ***based on average hourly wage of $43.6 for either an Education Coordinator or Psychologist, both of which follow under Band 5 for VA Statewide Pay Areas***

[9] ***(based on $12 minimum wage)***

| | | | | |
|---|---|---|---|---|
| teen Mental Health First Aid | $1,700 for instructor training and material<br><br>$647.5 manuals required to train 50 students | $1,656.83 total for program planning, delivery, and follow-up<br><br>Time Commitment:<br>• 2 hours program planning and introduction<br>• 24 hours supervisor training<br>• 8 hours student-leader training<br>• 6 hours follow-up meetings (2 hours long meetings a month for 3 months)<br>• Total: 38 hours | $8,400 in opportunity cost<br><br>Student Time Commitment:<br>• 8 hours student-leader training<br>• 6 hours follow-up meetings (2 hours long meetings a month for 3 months)<br>• Total: 14 hours | $12, 404.33 |

## APPENDIX D: ALTERNATIVE 3 COST ESTIMATE (FOR AVERAGE VIRGINIA HIGH SCHOOL)

| | District Cost | District Information | Estimated Cost |
|---|---|---|---|
| **GeoListening** | $60,000 for Lompoc Unified School District | 16 schools<br>9,231 students | Per school: $3,750<br>Per student: $6.49 |
| **GoGaurdian** | $40,5000 for Glendale Unified School District | 34 schools<br>24,000 | Per school: $1,191.17<br>Per student: $1.69 |

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