School-Based SBIRT Process Evaluation Final Report

January 2020
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Auburn School District
Bellevue School District
Highline School District
Kent School District
Lake Washington School District
Northshore School District
Seattle School District
Skykomish School District
Snoqualmie Valley School District
Tahoma School District
Tukwila School District
Vashon Island School District

Community-based partners working with participating school districts

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Executive Summary

Introduction

In 2015 King County voters approved the groundbreaking Best Starts for Kids (BSK) levy which funds initiatives to support the health and well-being of King County communities, families, and children. As part of the BSK investment in the health of young people ages 5-24 and with additional funding through a local behavioral health sales tax, Mental Illness and Drug Dependency (MIDD), which supports programs providing equitable opportunities for health, wellness, connection and recovery, King County’s Department of Community and Human Services implemented a school-based SBIRT (SB-SBIRT) model in 42 middle schools starting in September 2018. Screening, Brief Intervention, and Referral (SBIRT) is a public health model for identifying and addressing substance use and related risks. School-based SBIRT is a novel approach which expands on SBIRT to broadly support the health and well-being of middle school students.

Goals & Objectives

Seattle Children’s Research Institute conducted a process evaluation of the SB-SBIRT program during the first year of implementation (September 2018 – December 2019). The evaluation goal was to explore how the program supports care coordination in middle schools and to understand the experiences of participating youth, interventionists, and school staff. The evaluation plan was developed in collaboration with the SB-SBIRT program team and stakeholders from participating school districts. The evaluation addressed three main questions:

1) Was the program implemented as intended?
2) How well did we do and how can the program be improved?
3) Is school-based SBIRT an appropriate model for youth in middle school settings?

Methods

The process evaluation included quantitative and qualitative data collection from all participating schools as well as more in-depth activities with a sub-set of 15 participating middle schools.

Evaluation Question 1: To understand whether the SB-SBIRT program was implemented as intended, we analyzed screening data, SB-SBIRT Interventionist reports, and grantee Narrative Reports to understand the reach of the program, who received services, and to assess implementation processes including any associated drivers or barriers.

Evaluation Question 2: To understand this question we interviewed caregivers of participating students, SB-SBIRT interventionists and school administrative staff to understand their experience and collect feedback on how the program could be improved. In addition, we facilitated conversations to reflect on the data collected during the first year of implementation with the SB-SBIRT program team and participating school districts to provide further context and input on our findings.

Evaluation Question 3: To assess whether SB-SBIRT is the most appropriate model of care for middle school students we collected surveys with students who participated in Brief Intervention to assess satisfaction and key measures following participation in SB-SBIRT. Focus group discussions were conducted with students who participated in screening to help us understand the program from their perspective.
Executive Summary

Evaluation Limitations

The process evaluation was limited by several factors which impact the generalizability of the findings. First, many participating middle schools have multiple initiatives operating at once making it challenging to isolate the impact of SB-SBIRT specifically. Also, the phased roll-out of the program during this initial year negatively impacted the ability of some districts to participate in evaluation activities, particularly reporting on what happened during Brief Intervention. Since assessment of some evaluation measures required linking of separate data sets for screening and brief intervention this limited the sample size for our analysis.

There were several limitations to the methods used with the 15 middle schools who volunteered to participate in additional evaluation activities. First, the number of surveys collected from students was fewer than planned (65) and limited our ability to analyze change in substance use since reported use was very low (6%) among those surveyed. In addition, due to small sample sizes and the voluntary nature of our data collection qualitative results are not generalizable to all youth, caregivers, and schools in King County.

Evaluation Strengths

This process evaluation has several strengths. The evaluation plan and methods were formed in consultation with many different stakeholders from participating school districts and the King County program team. There were frequent opportunities for reflection on the data collected with SB-SBIRT interventionists and district stakeholders.

Data collected for this evaluation included a wide range of voices and experiences. Programmatic data from all 42 participating schools was included in this evaluation. The subset of schools that contributed additional data were demographically and geographically diverse. We analyzed both quantitative and qualitative data which provided additional context and insight into the experience of participating students and schools. The evaluation included data from a diverse set of stakeholders, including SB-SBIRT interventionists, school counselors, school administrators, parents of participating students, and students who participated in screening as well as those who received Brief Intervention. This allowed us to triangulate our findings and to consider the experiences of all groups involved.
Executive Summary

Conclusions & Findings

The following is a summary of our findings by evaluation question.

Evaluation Question 1: Was the program implemented as intended?

During the initial implementation year 141 school staff were trained on the SB-SBIRT program. Across 12 participating school districts, 2,614 middle school students were screened, with 37% receiving brief intervention and 15% receiving a referral to a resource. Bullying (25%) and recent symptoms of trauma (23%) were the most common risk factors identified at screening. The most frequently reported barriers to screening were when parents did not provide permission for their student to participate or when the student required translation of the tool, which is only available in English.

Evaluation Question 2: How well did we do and how can the program be improved?

Training and support provided by the SB-SBIRT program was effective. Among SB-SBIRT interventionists, 77% reported increased proficiency across all program-identified competencies. Interventionist feedback suggests that training methods and content be adaptable to their level of previous experience and availability to join training opportunities.

SB-SBIRT screening helped to identify 326 students with risk factors that were not previously known to school staff. Among youth with identified risk factors, 67% received BI. This year 86% of students who endorsed suicidal ideation received BI within 1 day of screening. Referral connection was high (62%) but varied significantly across school districts and referral types.

Evaluation Question 3: Is school-based SBIRT an appropriate model for youth in middle school settings?

Overall, most students felt that their interactions with the screening process and SB-SBIRT interventionists were very positive. Half of youth survey respondents reported higher connection with adults at school after SB-SBIRT. Students in focus groups indicated that having a personal connection or a relationship with the interventionist is important for them to feel comfortable sharing personal information and for motivating behavior change. Parents and school staff were supportive of the SB-SBIRT program as a means of identifying student needs and providing support.
History

In 2015, King County voters approved a groundbreaking initiative to invest in the health and well-being of children and families. The Best Starts for Kids levy is investing $65 million over the next 3 years to promote stronger communities, resilient families, and happy, healthy, safe, and thriving young people. In 2016, King County extended local funding for behavioral health support through a Mental Illness and Drug Dependency (MIDD) sales tax. Best Starts for Kids and MIDD collaboratively funded the school-based SBIRT (SB-SBIRT) initiative.

Screening, Brief Intervention, and Referral (SBIRT) is a public health approach to identifying and addressing substance use and related risks. The King County School-based SBIRT intervention (also known as SB-SBIRT or school-based SBIRT) has been adapted from the Reclaiming Futures model in collaboration with the model developer and Executive Director, Evan Elkin, and is a novel approach to support the health and well-being of middle schools students. This program is being implemented across 42 middle schools in 12 school districts in King County. Seattle Children’s Research Institute conducted a process evaluation of the SB-SBIRT Program from September 2018 to December 2019. This report describes the evaluation process and presents findings and next steps.

SB-SBIRT Model and Program Structure

SB-SBIRT consists of: Screening for substance use, mental health concerns, and strengths; a Brief Intervention based on Motivational Interviewing that involves semi-structured 15-20 minute sessions with both the youth alone and together with their caregiver; and Referral To assessment and/or other community-based services and supports, including counseling, mentoring, and youth leadership opportunities.

Screening is conducted using a version of the Check Yourself tool adapted for middle school settings through funding from the Conrad N. Hilton Foundation. Check Yourself is a multi-risk electronic screening tool that includes personalized feedback for the student based on their responses developed by Drs. Cari McCarty and Laura Richardson from Seattle Children’s and Tickit Health. Based on their screening results students are prioritized into one of three tiers defined by the risk factors they endorse. SB-SBIRT interventionists at the school conduct Brief Intervention (15-20 minute) sessions with youth using Motivational Interviewing strategies to assess strengths, facilitate goal setting, provide referrals, and follow-up as needed.

If appropriate, SB-SBIRT interventionists will engage with caregivers to participate in Brief Intervention sessions with the youth. Participating schools will also hold informational events for parents and caregivers to introduce the SB-SBIRT program and answer questions about the support provided to students.
SB-SBIRT Support Within a Tiered Framework

The SB-SBIRT program was designed to align with the existing Multi-Tiered Systems of Support (MTSS) framework used by schools to integrate SB-SBIRT into existing systems. The framework uses** universal screening to help identify student challenges early and tiered interventions that can be tailored to student needs.** By design the Check Yourself screening tool in SB-SBIRT incorporates a tiered approach based on risk factors endorsed by students (see Appendix E for details on SB-SBIRT tiers). In addition to the SB-SBIRT interventions described below, the program includes training & technical assistance to support schools with implementation, data collection, and reporting.

Tier 3: Immediate safety concerns endorsed at screening

*SB-SBIRT intervention: Brief Intervention (BI) with student ≤1 day of screening. Caregiver engagement and referral to services/supports as needed.*

Tier 2: Risks to health and well-being endorsed at screening

*SB-SBIRT intervention: BI with student (timing not specified). Caregiver engagement and referral to services/supports as needed.*

Tier 1: No risks endorsed at screening

*SB-SBIRT intervention: School-wide or group activities focusing on prevention and health promotion. All students receive personalized feedback as part of Check Yourself.*

SB-SBIRT Foundation: Community Engagement

*Communication with caregivers, families and community-based organizations to share information about SB-SBIRT.*
Introduction

Participating School Districts

Twelve school districts across King County, WA were awarded Best Starts for Kids and MIDD funding to participate in the SB-SBIRT program. In total, 42 middle schools participated in the program during the 2018-2019 school year.

School districts applied for funding through a Request for Proposals (RFP) process and were required to develop implementation plans specific to their district and school context.

Participating school districts in the initial implementation of SB-SBIRT included:

1. Auburn (4 middle schools)
2. Bellevue (1 middle school)
3. Highline (4 middle schools)
4. Kent (6 middle schools)
5. Lake Washington (8 middle schools)
6. Northshore (5 middle schools)
7. Seattle (7 middle schools)
8. Snoqualmie Valley (2 middle schools)
9. Skykomish (1 middle school)
10. Tahoma (2 middle schools)
11. Tukwila (1 middle school)
12. Vashon Island (1 middle school)

Figure 1. Map showing King County school districts that were selected to participate in the SB-SBIRT program.
Program Evaluation Questions & Methods

Seattle Children’s Research Institute conducted a process evaluation of the SB-SBIRT program during the first year of program implementation, from September 2018 to December 2019, to explore how this program supports care coordination in middle schools and to understand the experience of participating youth and schools. The evaluation plan was developed through a collaborative process incorporating input from the program and evaluation teams as well as key stakeholders from participating school districts. This evaluation addressed three key questions:

1. **Was the program implemented as intended?**
2. **How well did we do and how can the program be improved?**
3. **Is school-based SBIRT an appropriate model for youth in middle school settings?**

Data sources used in this process evaluation are listed below, by data type:

### Qualitative Data
- **3** Focus Groups completed with 29 students
- **10** Interviews with SB-SBIRT Interventionists
- **5** Interviews with Caregivers
- **4** Interviews with School Administrators

### Quantitative Data
- **2614** Students completed school-based Check Yourself tool
- **65** Students who received BI completed a follow-up survey
- **1097** Reports on BI & referrals completed by SB-SBIRT Interventionists
- **194** SB-SBIRT Interventionist surveys completed (administered 3 times throughout the year)
- **82** Narrative Reports by participating middle schools
- **52** Caregivers completed a feedback survey
Evaluation Sample and Key Milestones

This evaluation incorporates programmatic data reported by all participating schools and additional data collection to specifically address the evaluation questions. A subset of 15 schools participating in the program contributed data to inform this evaluation. These schools were selected with input from the SB-SBIRT program team and represent a diverse sample of students.

The results of the evaluation were reviewed with the SB-SBIRT program team and participating schools to validate the results and provide additional context to the findings. The findings have been used to inform continued program implementation, the scale-up of universal screening, and planning for the impact evaluation in the remaining two years of the program.

Program Evaluation data collection activities are noted in bold.

- SB-SBIRT Introduced
- First SBIRT Institute held
- First SB-SBIRT Interventionist Survey administered
- Most participating schools begin screening using CY-SB
- First Narrative Report submitted
- First CY–SB revision
- Second SB-SBIRT Interventionist Survey administered
- Process evaluation results incorporated into impact evaluation planning
- Second Narrative Report submitted
- District Site Visits conducted
- Administrator, school counselor, and caregiver interviews conducted
- Second CY-SB revision
- Process evaluation results shared with King County and participating schools and findings validated with participants and SB-SBIRT program team

Introduction

Continued
Evaluation findings are organized by key SB-SBIRT program areas, process evaluation questions, and the Results-Based Accountability (RBA) Framework\(^1\) used by Best Starts for Kids and MIDD to track performance measurement.

The RBA Framework is a national data-driven model that helps communities and organizations make decisions and problem solve. The findings include measures in each of the following RBA domains:

*How much did we do?*

*How well did we do?*

*Is anyone better off?*

Not all program areas have measures for each RBA domain. We note in the lower left-hand corner of each page which findings are used to answer each of our evaluation questions as described on page 9.

Quantitative and qualitative findings are reported together to provide a comprehensive picture of performance within each program area.

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1. Source: https://clearimpact.com/results-based-accountability/
Findings

Continued

Training and Support

In its initial year, training and support were a key focus of the SB-SBIRT program. All participating schools were invited to kick-off implementation at the SBIRT Institute. During the Institute training, resources were provided on the SB-SBIRT model, Motivational Interviewing skills used to conduct BI, the school-based Check Yourself screening tool, and data collection and reporting requirements. Ongoing technical assistance and support for interventionists was provided through a Learning Collaborative throughout the school year.

How much did we do?

141 school staff members attended the SBIRT Institute, a three-day training and project kick-off meeting held in September 2018.

111 interventionists and school staff attended one-day in-person Learning Collaborative meetings.

50% of school districts participating in SB-SBIRT had a representative join every Learning Collaborative webinar.

How well did we do?

Interventionist feedback on training and support:

Training and support delivery: Interventionists felt that the webinars were useful for ease of access and provided an opportunity for more frequent cross-district sharing, but in-person meetings were preferred and considered more engaging.

Motivational Interviewing (MI): MI training was useful for newer interventionists or those not already familiar, but those experienced in MI requested more targeted training to support student needs, such as training covering specific topics like support for grief or family addiction. Specific guidance on how to improve BI and video resources of MI being used with adolescents were requested.

Assistance with Identifying Community Resources and Referrals: In some schools, referrals posed a challenge due to insufficient availability of outside resources. Interviewees specifically called out the need for more in-school mental health support.

Additional Staff Time: Interventionists recognized the need for an SB-SBIRT coordinator who can help lead implementation logistics and coordination within the school or district. Schools who had an SB-SBIRT coordinator with dedicated time felt most prepared for implementation.

“...we email you and we get a response back within just hours, not days or weeks. In that sense I feel like we are really fortunate to have you guys because it is just easy answers and you guys are approachable.”

[interventionist referring to King County support this year]

Data source: SB-SBIRT Interventionist Interviews (n=10)
SB-SBIRT Interventionist Survey

To understand whether SB-SBIRT interventionists felt adequately prepared to implement the program, quarterly surveys were conducted to assess interventionists’ self-rated change in proficiency in program-related and Motivational Interviewing (MI) competencies. In collaboration with the SB-SBIRT program team we identified 6 program-related competencies and 12 MI competencies. Self-rated proficiency in each competency was assessed using a rating scale, based on the NIH Proficiency scale from 1 (Not Familiar) to 6 (Expert). See Appendix E for more details on the rating scale, survey administration and how each competency was defined.

Is anyone better off?

Overall change in self-reported interventionist proficiency in program-identified competencies was assessed by summing up ratings across all competencies to create an overall score. The score was calculated comparing survey results from the beginning of program implementation in September 2018 to the end of the first school year in June 2019. Of the 36 SB-SBIRT Interventionists who completed the survey at both time points, 77% reported an increase in their overall score. The proportion of respondents with an increase in proficiency in each competency is summarized on the right panel and on the next page.

Change in SB-SBIRT Interventionist Motivational Interviewing Competencies

<table>
<thead>
<tr>
<th>Competency</th>
<th>% Increased</th>
<th>% Same</th>
<th>% Decreased</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elicit-Provide-Elicit Technique</td>
<td>76%</td>
<td>12%</td>
<td>12%</td>
</tr>
<tr>
<td>Summary &amp; Key Question</td>
<td>41%</td>
<td>47%</td>
<td>13%</td>
</tr>
<tr>
<td>Cultural Humility</td>
<td>41%</td>
<td>41%</td>
<td>19%</td>
</tr>
<tr>
<td>Rolling with Resistance</td>
<td>66%</td>
<td>19%</td>
<td>16%</td>
</tr>
<tr>
<td>Recognize Discord</td>
<td>59%</td>
<td>28%</td>
<td>13%</td>
</tr>
<tr>
<td>Change/Sustain Talk</td>
<td>47%</td>
<td>31%</td>
<td>22%</td>
</tr>
<tr>
<td>Change Planning</td>
<td>47%</td>
<td>34%</td>
<td>19%</td>
</tr>
<tr>
<td>Use Readiness Ruler</td>
<td>56%</td>
<td>25%</td>
<td>19%</td>
</tr>
<tr>
<td>Elicit Impact on Goal</td>
<td>35%</td>
<td>42%</td>
<td>23%</td>
</tr>
<tr>
<td>OARS</td>
<td>34%</td>
<td>44%</td>
<td>22%</td>
</tr>
<tr>
<td>Rapport with Parents/Caregivers</td>
<td>45%</td>
<td>36%</td>
<td>18%</td>
</tr>
<tr>
<td>Rapport with Youth</td>
<td>39%</td>
<td>48%</td>
<td>12%</td>
</tr>
</tbody>
</table>

See Appendix I. for a description of the MI competencies and more information about the Interventionist Survey.
Findings
Continued

Screening Process

Most districts began screening using the school-based version of the Check Yourself tool in December 2018 with some schools starting as early as October 2018. This initial implementation period was helpful in identifying areas of refinement for the tool and the technology to support schools in universal screening. The tool was adapted based on interventionist feedback and implemented in January 2019.

Over half (58%) of schools started with an indicated screening approach before implementing universal screening. In total only 14% of students who received Brief Intervention were screened using an indicated screening approach while the majority of students (86%) were screened using universal screening. A sub-analysis of student demographics by screening approach is available in Appendix B.

Indicated Screening

Students identified based on an Early Warning Indicator System (EWIS) or similar using indicators (grades, attendance, teacher feedback, or behavioral referrals), to initiate participation in SB-SBIRT. Most students were referred by a school counselor (48%).

Universal Screening

Schools selected one or more grade levels for screening. Screening was usually conducted in the classroom. Most participating schools screened 7th or 8th graders, with a few focusing on 6th grade.

How much did we do?

2,614 students were screened using Check Yourself (57% of the total planned)

Schools determined their own procedures for parent notification and permission to participate. Some schools chose an opt-in method while others used an opt-out. In the 2018-19 school year 101 parents did not opt-in and 120 parents opted their student out of participation. Students could also decline to participate at any time during the program. In the 2018-2019 school year, 36 students declined to participate in screening and an additional 41 students declined to participate in BI.

% Students Screened by School District (n=2614)

Data source: Check Yourself screening data from September 2018 – June 2019 (n=2614).
Findings

Evaluation Question 1

Demographics of Students Screened

Most students served by the SB-SBIRT program were in 7th (46%) or 8th grade (32%) and identified as male or female only. Students’ self-reported race/ethnicity is described below.

Race/Ethnicity of Students Screened (n=2614)

- White, 46.6%
- LatinX or Hispanic, 14.3%
- Middle Eastern or North African, 1.8%
- Black or African American, 6.5%
- Native Hawaiian/Pacific Islander, 2.6%
- American Indian or Alaska Native, 1.1%
- Asian or Asian Indian, 16.1%
- Multiple Race/Ethnicities Selected, 10.8%

Gender Identity of Students Screened*

<table>
<thead>
<tr>
<th>Gender Option</th>
<th>% Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female (only)</td>
<td>46.9%</td>
</tr>
<tr>
<td>Male (only)</td>
<td>50.0%</td>
</tr>
<tr>
<td>Non-binary (at all)</td>
<td>0.8%</td>
</tr>
<tr>
<td>Questioning (at all)</td>
<td>0.6%</td>
</tr>
<tr>
<td>Transgender (at all)</td>
<td>0.4%</td>
</tr>
<tr>
<td>Something else fits better (at all)</td>
<td>0.5%</td>
</tr>
<tr>
<td>Prefer not to answer (only)</td>
<td>0.8%</td>
</tr>
</tbody>
</table>

*Students were able to select more than one option. We have reported the categories based on whether the student selected only male, only female, or preferred not to answer.

Data source: Check Yourself screening data from September 2018 – June 2019 (n=2614).
Screening Assistance & Barriers

SB-SBIRT Interventionists reported barriers to screening that came up during program implementation. The most common barrier was the need for translation of the screening tool for students whose primary language is not English. Interventionists reported that among the 13 students who required assistance to complete screening:

- 5 students required translation of the tool questions
- 4 required one-on-one assistance
- 4 needed other assistance including reading support and explanation of the screening questions

“Just knowing that we care enough to have the screener and the way the questions are geared towards their developmental level... And we say we care about you, we want to know how we can support you. We need to learn about what your needs are and be responsive to them.”

[SB-SBIRT Interventionist about screening]

Data sources: Check Yourself screening data from September 2018 – June 2019 (n=2614); SB-SBIRT Interventionist reports (n=1097); school Narrative Reports (n=82).

Screening Experience

How well did we do?

95% of students reported that school-based Check Yourself was “easy” or “very easy” to use.

92% of students reported that school-based Check Yourself was "easy" or "very easy" to understand.

Is anyone better off?

Universal screening allowed schools to identify students who endorsed risk factors that were not previously known to staff.

326 students had risk factors that were not previously known to school staff prior to screening.

Were school staff aware of student risk factors prior to screening? (n=1071*)

- Yes: 33.2%
- Somewhat: 31.6%
- Not at all: 34.7%

*This question was added after data collection began.
Distribution of Student Risk Factors Endorsed During Screening

The SB-SBIRT program uses a tiered approach to prioritize follow-up and BI with students categorized as Tier 3 (endorsed a risk factor shown in red below) or Tier 2 (endorsed a risk factor shown in yellow below) during screening. Appendix E shows a more detailed explanation of the risk categorization used by the program. Bullying (25%) and recent symptoms of trauma (23%) were the most endorsed risk factors. Over half (55%) of students reported more than 1 risk factor and those who endorsed bullying also often reported symptoms of anxiety (39%), depression (33%), or a recent symptoms of trauma (43%). Substance use was low in this age group, with older students more frequently endorsing any use. E-cigarette use (vaping) was the most common.

Students Who Endorsed Risk Factors During Screening (n = 2236)

<table>
<thead>
<tr>
<th>Risk Factor</th>
<th>6th Grade</th>
<th>7th Grade</th>
<th>8th Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trauma Symptoms (&lt; 1 month ago)</td>
<td>0.6%</td>
<td>2.1%</td>
<td>7.6%</td>
</tr>
<tr>
<td>Suicidal Ideation</td>
<td>3.1%</td>
<td>2.2%</td>
<td>6.1%</td>
</tr>
<tr>
<td>Self Harm</td>
<td>4.3%</td>
<td>4.3%</td>
<td>8.3%</td>
</tr>
<tr>
<td>Bullying - Safety At Risk</td>
<td>0.8%</td>
<td>0.9%</td>
<td>2.4%</td>
</tr>
<tr>
<td>Speak with Counselor (ASAP)</td>
<td>11%</td>
<td>15%</td>
<td>18%</td>
</tr>
<tr>
<td>Trauma Symptoms (&gt; 1 month ago)</td>
<td>23%</td>
<td>14%</td>
<td>25%</td>
</tr>
<tr>
<td>Frequent Aches &amp; Pains</td>
<td>6%</td>
<td>6%</td>
<td>6%</td>
</tr>
<tr>
<td>Depression Symptoms</td>
<td>10%</td>
<td>14%</td>
<td>15%</td>
</tr>
<tr>
<td>Anxiety Symptoms</td>
<td>11%</td>
<td>18%</td>
<td>23%</td>
</tr>
<tr>
<td>Bullying</td>
<td>2%</td>
<td>2%</td>
<td>2%</td>
</tr>
<tr>
<td>Other Drug Use</td>
<td>1%</td>
<td>1%</td>
<td>1%</td>
</tr>
<tr>
<td>Alcohol Use</td>
<td>4%</td>
<td>4%</td>
<td>4%</td>
</tr>
<tr>
<td>Intention to Use Alcohol</td>
<td>6%</td>
<td>6%</td>
<td>6%</td>
</tr>
<tr>
<td>Marijuana Use</td>
<td>4%</td>
<td>4%</td>
<td>4%</td>
</tr>
<tr>
<td>Intention to Use Marijuana</td>
<td>6%</td>
<td>6%</td>
<td>6%</td>
</tr>
<tr>
<td>Speak with Counselor (Next Few Weeks)</td>
<td>1%</td>
<td>1%</td>
<td>1%</td>
</tr>
<tr>
<td>Tobacco Use</td>
<td>7%</td>
<td>7%</td>
<td>7%</td>
</tr>
<tr>
<td>Intention to Use Tobacco</td>
<td>5%</td>
<td>5%</td>
<td>5%</td>
</tr>
<tr>
<td>E-cigarette Use</td>
<td>6%</td>
<td>6%</td>
<td>6%</td>
</tr>
<tr>
<td>Intention to Use E-cigarettes</td>
<td>23%</td>
<td>14%</td>
<td>25%</td>
</tr>
</tbody>
</table>

Evaluation Question 1

Data source: Check Yourself screening data January 2018 – June 2019 (n=2236).
Student Protective Factors

In addition to risk factors, the Check Yourself tool asks students about several protective factors including goals, who their biggest supports are, and what they do to relax when feeling stressed. Although this data is not used to evaluate the program, it provides valuable contextual information and is used by SB-SBIRT interventionists to enhance relationships with students and build on student strengths when conducting BI. The below chart shows student responses to the question “When things are tough or stressful, what kinds of things get you through the tough times?”

Data source: Check Yourself screening data from September 2018 – June 2019 (n = 2614)
Findings

Continued

**How much did we do?**

Based on SB-SBIRT program guidelines, all students identified as Tier 3 or Tier 2 during screening should receive Brief Intervention (BI). Some schools also chose to conduct BI with students who did not endorse any risk factors and were identified as Tier 1 or based on other needs identified during screening. During the initial implementation year some schools were not able to report data on BI so their information is not included here.

979 youth received Brief Intervention

(37% of all screened)

While the program outlines specific topics to cover during BI with students, it does not dictate the number of meetings interventionists should conduct. This allowed schools some flexibility in balancing how best to meet the needs of students and not exceed the capacity of staff and resources. During this initial implementation year, out of the students who received BI:

- 50% of students had 1 BI meeting.
- 47% of students had 2 or 3 BI meetings.
- 3% had 4 or more BI meetings.

**How well did we do?**

The majority of students who endorsed at least one risk factor at screening (Tier 2 or Tier 3) received Brief Intervention (BI).

**Students who received BI by Tier**

<table>
<thead>
<tr>
<th>Tier 2 (n=513)</th>
<th>Tier 3 (n=720)</th>
</tr>
</thead>
<tbody>
<tr>
<td>36% Received BI: 64%</td>
<td>30% Received BI: 70%</td>
</tr>
</tbody>
</table>

Data source: Linked Check Yourself records and SB-SBIRT Interventionist Reports (n=979)

**SB-SBIRT Integration into Existing School Structures**

A survey of 50 interventionists at the end of the initial program year asked how integrated they felt the SB-SBIRT program was into their school’s processes and how often they attended their school’s Multi-Tiered Systems of Support (MTSS) meetings.

- 78% felt SB-SBIRT is ‘somewhat integrated’
- 6% felt SB-SBIRT is ‘very integrated’
- 70% ‘sometimes’ or ‘always’ attended MTSS meetings

Data source: SB-SBIRT Interventionist reports (n=1097).
Timing of BI and Follow-Up

We assessed timing of Brief Intervention for students identified in Tier 3 or Tier 2, and those who endorsed suicidal ideation. SB-SBIRT program guidance states that Tier 3 students should receive BI within 1 day of screening. Timing of BI with Tier 2 students is not specified.

<table>
<thead>
<tr>
<th>Tier 3*</th>
<th>Tier 2*</th>
</tr>
</thead>
<tbody>
<tr>
<td>81% received BI within 1 day of screening</td>
<td>36% received BI within 1 day of screening</td>
</tr>
<tr>
<td>87% received BI within 2 days of screening</td>
<td>71% received BI within 7 days of screening</td>
</tr>
<tr>
<td>88% received BI within 14 days of screening</td>
<td></td>
</tr>
</tbody>
</table>

*Calculated based on available data. Not all districts were able to report data for every student who received BI.

Some interventionists expressed concerns about whether student comprehension of the trauma questions matched with the intent of the questions. Based upon information obtained during BI, interventionists noted that students who only endorsed trauma symptoms were usually not at high risk and they felt the timing of BI could be impacted by this. We analyzed timing of BI excluding students who only endorsed trauma and did not find a difference.

Interventionist Confidence Following Up with Youth Who Report Suicidal Ideation

In a survey of 50 interventionists, 88% felt very confident or confident following up with a student who endorsed suicidal ideation during screening.

Data Sources: SB-SBIRT Interventionist Survey data from June 2019 (n=50); SB-SBIRT Interventionist Reports (n=1097), Linked Check Yourself and SB-SBIRT Interventionist Reports (n=979)

Timing of BI and Follow-up with Students Who Endorsed Suicidal Ideation

Each school district participating in SB-SBIRT was required to have a suicide response plan in place. SB-SBIRT partnered with Crisis Connections, a local organization that provides resources, support and training to assist school districts in this area.

To understand whether timely and effective follow-up was being conducted with students who endorsed suicidal ideation (SI) during screening we looked at the timing of BI, referrals provided, and referral connection for this subset of students.

<table>
<thead>
<tr>
<th>Suicidal Ideation</th>
</tr>
</thead>
<tbody>
<tr>
<td>86% received BI within 1 day of screening</td>
</tr>
<tr>
<td>93% received BI within 7 days of screening</td>
</tr>
</tbody>
</table>

Among Students Who Endorsed Suicidal Ideation: (n=185)

- **95%** received BI
- **4%** had a caregiver participate in BI
- **55%** of those who received BI also received a referral
  Most were referred to community-based counseling (57%) or their school counselor (35%).
- **71%** who received a referral connected to the resource
Demographics of the Youth Who Provided Feedback After Receiving BI

To better understand student experiences with SB-SBIRT a Youth Post-Brief Intervention Survey was conducted in 3 school districts. Students who participated in SB-SBIRT and received BI were invited to complete the survey. The survey included questions about student experience during BI, connection with adults at school, and a separate sub-set of questions assessing substance use and intention to use for those who endorsed substance use during screening. Most survey respondents were in 7th (68%) or 8th (26%) grade and identified as either female (42%) or male (53%).

<table>
<thead>
<tr>
<th>Gender</th>
<th>Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>42%</td>
</tr>
<tr>
<td>Male</td>
<td>53%</td>
</tr>
<tr>
<td>Non-Binary</td>
<td>2%</td>
</tr>
<tr>
<td>Something else fits better</td>
<td>2%</td>
</tr>
<tr>
<td>Prefer not to answer</td>
<td>2%</td>
</tr>
</tbody>
</table>

Post-BI Feedback from Youth who Endorsed Substance Use

Overall a small portion of students reported substance use (marijuana, alcohol, or other drugs) during screening and reported use varied by grade (see page 19). Only 4 students who completed a Post-BI Survey endorsed substance use during screening therefore our ability to assess any changes in substance use or intention to use following BI was limited. The findings from this small group suggested that students who endorsed substance use discussed their use during BI.

- 4/4 reported substance use (4 reported vaping and 1 also reported alcohol use) and discussed use during BI.
- 4/4 reported that discussion of substance use during BI was “somewhat motivating”.
- 3/4 youth reported that they do not vape after BI.
- 2/4 said that they would “maybe” vape in the next year and that they are “unlikely” to vape in the follow-up survey after BI.
In follow-up surveys, 65 students were asked about their experience meeting with an interventionist for Brief Intervention (BI). Students were asked to rate their experience on a scale from Fair to Excellent. Overall, most students felt that their interactions with interventionists were ‘Excellent’. Follow-up survey questions were adapted from the CARE Measure\(^1\) and modified to fit the SB-SBIRT context with input from the SB-SBIRT program team.

91% of students felt their interactions during BI were “good”, “very good” or “excellent” across all categories.

**Student Ratings of Interactions During Brief Intervention (n=65)**

<table>
<thead>
<tr>
<th>Rating</th>
<th>Explaining why we are meeting</th>
<th>Making you feel comfortable</th>
<th>Letting you tell your “story” and really listening to you</th>
<th>Being interested in you as a whole person and fully understanding your needs</th>
<th>Talking about your goals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fair</td>
<td>18%</td>
<td>3%</td>
<td>2%</td>
<td>2%</td>
<td>5%</td>
</tr>
<tr>
<td>Good</td>
<td>35%</td>
<td>11%</td>
<td>8%</td>
<td>9%</td>
<td>20%</td>
</tr>
<tr>
<td>Very Good</td>
<td>46%</td>
<td></td>
<td>23%</td>
<td>15%</td>
<td>31%</td>
</tr>
<tr>
<td>Excellent</td>
<td>35%</td>
<td></td>
<td>63%</td>
<td>75%</td>
<td>37%</td>
</tr>
</tbody>
</table>

Data Source: Youth Post-BI Survey (n=65)

Findings
Continued

Youth Focus Group Themes

Focus groups were conducted with students who participated in SB-SBIRT in 3 school districts to better understand students’ experiences with the program and to gather feedback on how SB-SBIRT can be improved to better serve students. Three focus groups were held with 29 students. Of the participants, 10 were 6th graders and 19 were 8th graders. The sample was evenly split by gender with 14 females and 15 males participating. About half of the participants self-identified as white while the other half identified as other races/ethnicities, as shown below.

School districts were chosen to ensure geographic diversity and to include students across the participating grades; however due to the timing of program implementation and district readiness we were unable to hold a focus group with 7th graders. In order to protect student privacy, we invited all students who participated in SB-SBIRT to be a part of a focus group, not only students who received BI or referrals. We used fictional scenarios based on the types of situations students may encounter when participating in SB-SBIRT to explore student feedback, rather than asking participants to discuss their own personal experience, as another strategy to protect student privacy. Focus group themes are summarized on the right.

Data Source: Focus Group Discussions with Youth (n=3 groups with 29 students total)

Preferred Screening Setting
Students preferred a group screening setting but valued privacy and wanted a clear explanation of how their information would be used or shared, especially information shared during BI.

Comfort with SB-SBIRT Interventionists
Students felt that for them, having a personal connection and relationship building with school counselors is key to feeling comfortable sharing personal information and motivating behavior change.

Barriers to Accessing Referrals
From the students’ perspective, the most common reasons why youth may be hesitant to access resources outside of school are concerns over sharing of personal information, parents, and fear of stigma. One group discussed gender differences in help seeking behavior and stigma around seeking mental health care.

“I would be really stressed if it was just me and someone else, but if there were more people around I would feel comfortable.”
[referring to preferred setting for screening]

“…they’re sharing a piece of themselves with you, they’re not just asking questions. It gives you more of a personal relationship with them.”
[referring to connecting with counselors during BI]
Youth Connection with Adults at School

Is anyone better off?

One of the protective factors asked about in the Check Yourself screening tool is youth connection with adults at school, a measure of students’ external supports. The school connection scale is composed of four questions, drawn from an existing validated survey of student external supports and internal factors called the Student Resilience Survey.¹ In order to understand whether SB-SBIRT is an appropriate model of support for middle school students’ health and wellbeing, we assessed whether students reported higher connection with adults at school after participating in the program. Student responses on each of the school connection questions improved after participation in BI and half of the participants reported higher connection with adults at school after SB-SBIRT.

52% of youth reported higher school connection after participating in SB-SBIRT. 22% reported the highest possible score for school connection at baseline.

Change in Youth Responses to School Connection Scale Questions (Baseline to Follow-up) (n=65)

At school there is an adult who...

Data Source: Youth Post-BI Survey (n=65)

Findings
Continued

Caregiver Engagement

Caregivers were engaged in the SB-SBIRT program in several ways. Some school districts held events at participating middle schools to provide information about the SB-SBIRT program and answer parent questions. Some caregivers were also invited by interventionists to participate in a BI meeting with the student, when needed and agreed upon with the student.

The number of caregivers who participated in a BI meeting during this initial implementation year was low. In reflecting on this year SB-SBIRT interventionists shared their focus was on initiating and improving the screening and BI process with youth. They felt there will be more of an opportunity to improve parent engagement in the next year.

How Much Did We Do?

38 students had a parent participate in BI
7 of the students endorsed suicidal ideation
9 of the students reported bullying/harassment

Caregiver Barriers to Participation in BI

Interventionists provided information about 11 students whose caregiver was expected to participate in a BI meeting but for several reasons did not. In most of these cases the caregiver could not participate due to logistics (scheduling, transportation, etc.) or they declined to participate.

How Well Did We Do?

Parents who attended informational events in 3 school districts were invited to complete a brief survey, in English or Spanish, about their experience. In total 52 caregivers completed the survey.

All caregivers reported feeling welcomed at the event at the school.

<table>
<thead>
<tr>
<th>Percentage</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>83%</td>
<td>of Caregivers reported &quot;good&quot; or &quot;very good&quot; understanding of the SB-SBIRT program following event</td>
</tr>
<tr>
<td>73%</td>
<td>of Caregivers rated their knowledge of resources offered at school as &quot;very good&quot; or &quot;good&quot;</td>
</tr>
<tr>
<td>94%</td>
<td>of Caregivers had all, almost all, or most of their questions about SB-SBIRT answered during the event</td>
</tr>
</tbody>
</table>

“I like that they have so much information that is thinking about helping the students. They also help parents...”

[Parent feedback about SB-SBIRT events]

Data Source: Parent Feedback Survey (n=52) and Interventionist Reports (n=1097)
Caregiver Interview Themes

Interviews were conducted with 5 parents of students who participated in SB-SBIRT to understand parent engagement in SB-SBIRT and to gather parent feedback on how the program could be improved to better serve students and caregivers. Overall parents were very supportive of the SB-SBIRT program and felt it is a valuable resource. Parent feedback is summarized below:

There is an opportunity to improve caregiver involvement in SB-SBIRT and parent education about the program: Parents were familiar with the screening part of SB-SBIRT but had less knowledge of other program components and support provided to students. They also expressed interest in more opportunities for parent engagement and education around the program and how best to support students.

Parents want more follow-up and ongoing communication with the school: Parents wanted to build stronger relationships with school staff and have more ongoing touch points, rather than a one-time meeting or phone call about a student’s needs.

Most experienced referral needs and barriers to connection: Barriers to connecting with mental health providers (insurance, wait lists, scheduling, knowledge of providers) were the most common. Parents also communicated a need for more social activities for youth outside of school, especially in certain districts, and a need for education and support for parents (classes/informational meetings, support groups, counseling resources).

“I totally support it. I think mental health needs to be a more frequently talked about thing and I don’t think people need to be as scared about it. I was glad when this program had the opportunity.”

[parent referring to King County SB-SBIRT program]
**Findings**

**How Much Did We Do?**

SB-SBIRT Interventionists referred participating students to additional supports/services when needed. The most common referrals were to a school counselor or to community-based counseling either in-school or off campus. A full list of referral resources is included in Appendix D.

563 referrals were provided to 384 students this year (15% of all screened). Among those students who did not receive a referral 15% were already seeing a counselor or therapist according to the SB-SBIRT interventionist.

As seen below the majority of students with BI received one referral. Those who received more than one referral were most often referred to their school counselor and to community-based counseling, prosocial activities, or to study/organizational skills support.

**Evaluation Question 1**

**How Well Did We Do?**

The proportion of students who received referrals as part of SB-SBIRT differed by district and the risk factors endorsed by the student during screening. The rates of referral were lowest (36% among those identified) for students who experienced symptoms of trauma in the past year but not recently. The risk factors with the highest rates of referral are listed below:

- Endorsed self harm in the past school year: 55%
- Endorsed suicidal ideation in the past school year: 55%
- Endorsed marijuana use in the past school year: 56%
- Endorsed use of other drugs (including someone else’s pills) in the past school year: 60%
- Requested to speak with a counselor ASAP: 64%

*Data Source: SB-SBIRT Interventionist reports (n=1097)*
**How Well Did We Do?**

One of the indicators of SB-SBIRT program success is connecting students in need of support with resources and services. Referral connection was reported by SB-SBIRT interventionists who conducted BI with students after screening. Many factors influence the student and the family’s ability to access resources, therefore we recognize that referral connection is not always possible and differed by resource type and location.

Overall **62%** of referrals provided this year resulted in the student connecting to the resource, as reported by the SB-SBIRT interventionists.

- There were significant differences in the rate of connection between referral types and school districts. Connection was significantly higher for some referral types (80% connected with a school counselor) than others (47% connected with community-based counseling). See Appendix C for more information about referral connection.
- 6 students had a need for which a resource was not available.

**SB-SBIRT Interventionists Knowledge of Referral Resources**

SB-SBIRT Interventionists were asked whether they know of referral resources to support students in each tier.

- **82%** reported that they know of referral resources for students in each screening tier (14% are not sure and 2% did not).

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**Data Sources:** SB-SBIRT Interventionist reports (n=1097); SB-SBIRT Interventionist Survey June 2019 (n=50).
Semi-structured interviews were conducted with 10 school counselors who conducted SB-SBIRT and 4 school administrators (2 Principals, 1 Dean of Students and 1 Assistant Principal) to understand the schools’ implementation experience and how support for students has changed since the introduction of SB-SBIRT as well as to gather feedback on the SB-SBIRT model. The interviewees represent 4 school districts and 9 participating middle schools. Key findings from the interviews include the following:

**Referral needs and barriers were communicated by most:** Most interviewees described a lack of community resources and barriers to referral access including cost, health insurance status, resource availability, and capacity of existing resources. Having a mental health provider in the school was identified as a valuable resource and a way to bridge the gaps in community resource availability.

**Having a dedicated SB-SBIRT coordinator has been key to successful implementation:** Schools felt that having a staff role with dedicated time for SB-SBIRT support and coordination was a key to successful program implementation.

**SB-SBIRT has had a positive impact on students’ connection to school:** Interventionists felt that support for students from adults at school improved this year and some students are now more connected to adults at school.

**Universal screening makes SB-SBIRT more equitable:** Although not all districts considered an equity lens when implementing school-based SBIRT, most felt that universal screening makes the program more equitable by including all students.

"One of the issues we have and I’m hearing it’s not just [our] area, but there is just such a lack of resources... It’s been really hard for our families to get counseling in the area. They are on waiting lists for months. The refer-to of SBIRT is a great idea, but it’s really lacking for us.”

[SB-SBIRT interventionist discussing referral barriers]
We identified several limitations to the overall process evaluation, including:

- **Selection of Participating Schools:** Schools implementing SB-SBIRT applied for funding to a Request for Proposals from King County’s Department of Community and Human Services, therefore intervention middle schools may differ from other middle schools in the county. Conclusions drawn for this evaluation may not be applicable to other school districts.

- **Multiple Programs/Investments at Participating Schools:** Many participating schools are implementing multiple programs to improve student health and well-being making it challenging to assess the impact of SB-SBIRT alone. We used qualitative interviews with interventionists and school administrators to understand the role of SB-SBIRT in the context of other school resources.

- **Phased Roll-out and Limited Implementation Time:** Due to the phased-roll out of the SB-SBIRT program during its initial year not all participating schools started implementation at the same time and some schools delayed implementation due to challenges with program start-up. The subset of schools who participated in our data collection sample was often based on school readiness and ongoing SB-SBIRT implementation.

- **Small survey sample sizes:** Due to delayed program implementation we were not able to collect as many student post-BI surveys as planned. Substance use was low among this sample which limited our ability to analyze some measures. Due to high turnover rates, the number of interventionist surveys we were able to collect was limited.

- **Data linkage challenges:** Many evaluation measures rely on linking screening data with interventionist reports on BI and referrals. Due to incomplete reporting in some school districts, we were not able to link records for all students. This may impact the accuracy of our findings since some participating schools are not included in the linked dataset. We noted when linked data was used for analysis.

- **Qualitative data considerations:** Participants could voluntarily opt-in to qualitative data collection therefore our sample may not be fully representative of all perspectives. Findings from our small qualitative sample are not generalizable to all youth and caregivers in King County. SB-SBIRT interventionists were present during youth focus groups because of school regulations. This may have influenced what students were comfortable sharing.
Summary of Findings & Recommendations

Training and Support

Key Findings and Lesson Learned:

- Training and support provided by the program was effective. SB-SBIRT Interventionists reported higher proficiency in key program-related competencies and Motivational Interviewing skills at the end of the first year of program implementation.
- In-person meetings were preferred and better attended than online webinars and participants felt that opportunities for cross-district sharing and learning were a valuable part of the Learning Collaborative structure.
- Schools felt that having a dedicated SB-SBIRT team, including someone whose role is focused on program coordination, was key to successful SB-SBIRT implementation.

Recommendations:

- Prioritizing in-person opportunities for cross-district learning and sharing has been identified by participants as a valuable strategy for facilitating problem solving and effective implementation.
- Contracting with Community-Based Organization (CBO) staff or allocating time for existing school counselors to coordinate SB-SBIRT activities was identified as an effective way to support program implementation.

Screening Process & Brief Intervention

Key Findings and Lessons Learned:

- Students were comfortable with the screening and BI process. Parents and school staff were supportive of the SB-SBIRT program as means of identifying student needs and providing support.
- Some districts experienced delays and challenges during start-up and were not able to meet their initial goals for implementation.
- SB-SBIRT screening helped to identify students with risk factors that were not previously known to school staff.
- Interventionists and students provided valuable feedback based on their use of the screening tool. Schools identified the need for better integration of data collection systems.
- Brief Intervention appears to increase youth connection with adults at school.

Recommendations:

- A slow roll-out of universal screening was a valuable strategy to ensure the program was being implemented as intended and students received support and follow-up in a timely manner.
- To address data collection and reporting challenges, screening and BI data were integrated into one platform through the technical support of Tickit Health.
- The school-based Check Yourself tool was revised based on feedback prior to use in the 2019-2020 school year. Appendix F outlines the specific changes made and the rationale for revisions.
Summary of Findings & Recommendations

Caregiver Engagement

Key Findings and Lessons Learned:
- Caregivers who participated in interviews were most familiar with the screening component of SB-SBIRT, they knew less about what support was provided to students after screening is completed.
- Caregiver participation in BI was low and most communication with parents occurred via individual phone calls or email.
- Attendance at SB-SBIRT parent informational events held at participating schools was low this year.

Recommendations:
- There is an opportunity for additional caregiver involvement and education in SB-SBIRT. It can be challenging to get busy parents to attend an additional in-person event. Schools that combined SB-SBIRT informational events with existing school events (e.g. curriculum nights) were the most successful in reaching parents. Increasing opportunities to partner with parents in helping their student beyond a single notification from school staff will be important to explore as the program matures.
- Data collection systems on caregiver engagement were improved to better assess communication with parents outside of in-person meetings (such as individual phone calls or meetings).

Referral & Connection to Resources

Key Findings and Lessons Learned:
- Over half of all students who were offered a referral to a resource were able to connect with that resource, however, many schools and parents reported significant barriers to accessing resources, especially for mental health services. In some more remote districts resource availability is extremely limited.
- The most common referral types were to community-based mental health services or their school counselor.
- Interventionists and school administrators felt that increasing the availability of in-school mental health services was essential to meeting student needs and addressing barriers to accessing community-based services.

Recommendations:
- Although individual mental health services are appropriate for many students there is an opportunity to cultivate more resources and school capacity for alternative approaches to meet student needs. Developing interventions that can engage students for whom individual therapy is not an option is an important consideration as the program expands.
- Data collection systems on referrals were improved to better assess in-school vs. out-of-school services provided by community-based organizations.
Conclusions

Next Steps

Impact Evaluation

The findings of the process evaluation informed the planning of an impact evaluation looking at the impact of SB-SBIRT on youth outcomes and coordination of support at participating schools. The following evaluation questions were developed in collaboration with the SB-SBIRT program team and participating school districts. The impact evaluation activities will be conducted over Years 2 and 3 of program implementation (2019-2021).

SB-SBIRT Impact Evaluation Questions:

1. What is the impact of SB-SBIRT on intermediate youth outcomes, including preventing or delaying the onset of substance use and improving protective factors?
2. To what extent and in what ways does SB-SBIRT lead to a coordinated and integrated system of emotional/behavioral supports in middle schools?
3. How does SB-SBIRT impact youth academic outcomes?

SB-SBIRT Program Implementation Expands

Most participating school districts are planning to expand universal screening and SB-SBIRT implementation in Years 2 and 3. We anticipate there will be a larger sample of both programmatic and evaluation data for the impact evaluation to better measure indicators of success for the program. Through this work we will continue to collaborate closely with the SB-SBIRT program team and participating school districts, including regular opportunities to share evaluation data and reflect on our findings.

Future Considerations

This evaluation provides valuable information about the implementation of a novel school-based SBIRT model in King County however, more data is needed to assess the feasibility and impact of SB-SBIRT. In this evaluation, program implementation timelines hindered our ability to collect data, which resulted in smaller sample sizes than expected. Data collection on BI across a larger student population would allow us to look more in-depth at district or school-level differences.

To protect student privacy, we did not collect qualitative data about students’ experiences with Brief Intervention and referrals which remains an opportunity for future exploration. For example, students reported an increase in connection with adults at school following BI, however, we cannot pinpoint the specific drivers of this change. In the future it will be important to understand through qualitative data collection whether this increase in connection is a result of having added interaction with a caring adult through the BI process or other factors.

Due to the brief nature of this intervention and the design of this evaluation we were unable to assess whether SB-SBIRT results in any lasting impact on student health and well-being. The impact evaluation has been designed to address some of these gaps.

Participating school districts were able to tailor implementation to their unique local context resulting in a variety of approaches to implementing SB-SBIRT. Additional analysis is needed to understand the most cost-effective way to implement SB-SBIRT in a middle school setting. In addition to cost-effectiveness, more information is needed about what resources school districts would need to sustain school-based SBIRT beyond the duration of this funding.
Appendices

List of Included Appendices:

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38 Appendix B – Abbreviations
39 Appendix C – Indicated vs. Universal Screening Sub-analysis
40 Appendix D – Referral Connection by School District and Referral Type
41 Appendix E – SB-SBIRT Risk Categorization
42 Appendix F – CY-SB Changes Implemented in Year 2
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45 Appendix H – SB-SBIRT Interventionist Competencies: Program-Related
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Appendix A

Evaluation Team Staff & Structure

Cari McCarty, PhD
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### Abbreviations

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>BI</td>
<td>Brief Intervention</td>
</tr>
<tr>
<td>BSK</td>
<td>Best Starts for Kids</td>
</tr>
<tr>
<td>CBO</td>
<td>Community-based Organization</td>
</tr>
<tr>
<td>CY-SB</td>
<td>School-based Check Yourself screening tool</td>
</tr>
<tr>
<td>MI</td>
<td>Motivational Interviewing</td>
</tr>
<tr>
<td>MIDD</td>
<td>Mental Illness and Drug Dependency sales tax</td>
</tr>
<tr>
<td>MTSS</td>
<td>Multi-Tiered Systems of Support</td>
</tr>
<tr>
<td>OARS</td>
<td>Open-ended questions, Affirmations, Reflections, and Summaries</td>
</tr>
<tr>
<td>REDCap</td>
<td>Research Electronic Data Capture software</td>
</tr>
<tr>
<td>RFP</td>
<td>Request for Proposals</td>
</tr>
<tr>
<td>SBIRT</td>
<td>Screening, Brief Intervention, Referral to Treatment/Services</td>
</tr>
<tr>
<td>SB-SBIRT</td>
<td>School-Based SBIRT</td>
</tr>
</tbody>
</table>
Indicated vs. Universal Screening Sub-analysis

In order to assess whether any demographic differences existed between students who participated in universal screening as part of SB-SBIRT and those who were referred to the program based on Early Warning System indicators or other identified needs, we looked at the distribution of student reported gender and race/ethnicity for both groups of students. Gender differences between the two groups were not statistically significant. Race/ethnicity of students who participated in indicated screening was significantly different than that of students who participated in universal screening (p<0.05). Students who participated in indicated screening were more likely to report their race/ethnicity as Hawaiian or Pacific Islander (p<0.05). These students were also more likely to report their race/ethnicity as Asian or Asian Indian (p=0.046), LatinX or Hispanic (p=0.052) or Black of African American (p=0.057), although these differences were not statistically significant.

### Table: Gender Analysis

<table>
<thead>
<tr>
<th>Gender</th>
<th>Indicated</th>
<th>Universal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female (only)</td>
<td>45%</td>
<td>50%</td>
</tr>
<tr>
<td>Male (only)</td>
<td>52%</td>
<td>45%</td>
</tr>
<tr>
<td>Non binary</td>
<td>0%</td>
<td>1%</td>
</tr>
<tr>
<td>Questioning</td>
<td>1%</td>
<td>1%</td>
</tr>
<tr>
<td>Transgender</td>
<td>0%</td>
<td>1%</td>
</tr>
<tr>
<td>Something else fits better</td>
<td>1%</td>
<td>1%</td>
</tr>
<tr>
<td>Prefer not to answer (only)</td>
<td>0%</td>
<td>1%</td>
</tr>
</tbody>
</table>

Note: Percentages may add up to >100% because students were allowed to select multiple options and those who selected non-binary, questioning, transgender, or something else fits better may have selected more than one answer choice.

### Race/Ethnicity Analysis

#### Race/ethnicity reported by students who participated in indicated SB-SBIRT screening (n=103)

- Asian or Asian Indian: 11%
- Black or African American: 7%
- LatinX or Hispanic: 10%
- White: 0%
- American Indian or Alaska Native: 6%
- Middle Eastern or North African: 2%
- Native Hawaiian/Pacific Islander: 0%
- Multiple Race/Ethnicities Selected: 2%

#### Race/ethnicity reported by students who participated in universal SB-SBIRT screening (n=876)

- Asian or Asian Indian: 14%
- Black or African American: 2%
- LatinX or Hispanic: 2%
- White: 52%
- American Indian or Alaska Native: 1%
- Middle Eastern or North African: 13%
- Native Hawaiian/Pacific Islander: 0%
- Multiple Race/Ethnicities Selected: 0%
### Referral Connection by School District and Referral Type

The below table describes the proportion of referrals provided to students who participated in SB-SBIRT for which the interventionist was able to confirm that the student connected to the resource. Referral connection differs both by referral type (for example, between referrals to a school counselor vs. to community-based counseling) as well as by school district. Referrals with the highest connection rates are shown in green and the lowest connection rates are shown in red. Referral types that did not have any referrals provided are marked with “N/A”.

<table>
<thead>
<tr>
<th>Referral Type</th>
<th>All Districts</th>
<th>Auburn</th>
<th>Bellevue</th>
<th>Highline</th>
<th>Kent</th>
<th>LWSD</th>
<th>Seattle</th>
<th>Snoqualmie Valley</th>
<th>Tahoma</th>
<th>Vashon</th>
</tr>
</thead>
<tbody>
<tr>
<td>Summer Job/Recreational Opportunity (n=11)</td>
<td>27%</td>
<td>N/A</td>
<td>N/A</td>
<td>30%</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>0% (1 referral) N/A</td>
</tr>
<tr>
<td>Mentorship Program (n=26)</td>
<td>54%</td>
<td>100%</td>
<td>N/A</td>
<td>20%</td>
<td>0% (1 referral)</td>
<td>0% (1 referral)</td>
<td>N/A</td>
<td>0% (1 referral)</td>
<td>20%</td>
<td>N/A</td>
</tr>
<tr>
<td>Substance Use Disorder Assessment (n=9)</td>
<td>67%</td>
<td>N/A</td>
<td>N/A</td>
<td>100%</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>50%</td>
</tr>
<tr>
<td>Social Services (n=12)</td>
<td>58%</td>
<td>N/A</td>
<td>N/A</td>
<td>75%</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>50%</td>
</tr>
<tr>
<td>School Nurse (n=4)</td>
<td>50%</td>
<td>N/A</td>
<td>N/A</td>
<td>67%</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Psychiatric Evaluation (n=12)</td>
<td>92%</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>100%</td>
<td>50%</td>
<td>100%</td>
</tr>
<tr>
<td>Clothes/Food Resources (n=9)</td>
<td>67%</td>
<td>N/A</td>
<td>N/A</td>
<td>80%</td>
<td>0%</td>
<td>100%</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>0% (1 referral) N/A</td>
</tr>
<tr>
<td>School counselor (n=158)</td>
<td>80%</td>
<td>50%</td>
<td>100%</td>
<td>82%</td>
<td>79%</td>
<td>90%</td>
<td>54%</td>
<td>100%</td>
<td>89%</td>
<td>N/A</td>
</tr>
<tr>
<td>Prosocial activities (including school clubs) (n=38)</td>
<td>45%</td>
<td>83%</td>
<td>N/A</td>
<td>50%</td>
<td>0% (2 referrals)</td>
<td>0% (1 referral)</td>
<td>N/A</td>
<td>50%</td>
<td>25%</td>
<td>N/A</td>
</tr>
<tr>
<td>Study/Organizational Skills (n=57)</td>
<td>58%</td>
<td>71%</td>
<td>N/A</td>
<td>50%</td>
<td>0% (1 referral)</td>
<td>N/A</td>
<td>N/A</td>
<td>75%</td>
<td>38%</td>
<td>N/A</td>
</tr>
<tr>
<td>Other (write-in option) (n=75)</td>
<td>69%</td>
<td>100%</td>
<td>N/A</td>
<td>75%</td>
<td>67%</td>
<td>0% (2 referrals)</td>
<td>100%</td>
<td>67%</td>
<td>70%</td>
<td>25%</td>
</tr>
<tr>
<td>Community-Based Counseling (n=152)</td>
<td>47%</td>
<td>100%</td>
<td>0% (2 referrals)</td>
<td>48%</td>
<td>30%</td>
<td>61%</td>
<td>0% (1 referral)</td>
<td>62%</td>
<td>21%</td>
<td>N/A</td>
</tr>
</tbody>
</table>

**Total** 62% (348/563)

Data source: SB-SBIRT Interventionist reports (n=1097).
SB-SBIRT Risk Categorization

SB-SBIRT uses a tiered follow-up structure that prioritizes students who endorse risk factors. The below algorithm was used to categorize students as Tier 1, Tier 2, or Tier 3 based on the risk factors endorsed. All students received personalized feedback and answered questions about protective factors and relevant context such as goals, home life, and coping strategies.

<table>
<thead>
<tr>
<th>Levels</th>
<th>Tier 1 Personalized Feedback/No Flag</th>
<th>Tier 2 Brief Intervention</th>
<th>Tier 3 Immediate BI + referral</th>
</tr>
</thead>
</table>
| Screening Criteria | • Reports low sleep only  
• Reports e-cig/cig use only  
• Reports intention to use e-cig/cig in the next year | • Reported using substances (other than e-cigs/cigs) in the past school year  
• Reported frequent aches & pains  
• Depression symptoms (PHQ-2 +)  
• Anxiety symptoms (GAD-2 +)  
• Wants to speak with a counselor confidentially in the next few weeks.  
• Reports intention to use marijuana or alcohol in the next year (maybe or likely to use)  
• Feels harassed/threatened in some way in the past year  
• Reports experiencing any symptoms from trauma more than 1 month ago | • Endorses self-harm or suicidal thoughts  
• Reports experiencing any symptoms from trauma over the past month  
• Feels harassed/threatened in some way in the past year and that their safety is currently at risk  
• Wants to speak with a counselor confidentially asap |

All students regardless of behaviors endorsed see feedback on:

• Tips for improved sleep  
• Info that most teens don’t drink or use marijuana and the risks of alcohol and marijuana use  
• Info about the harms of vaping on your health  
• Tips to prevent depression, why checking your mood is important

Relevant Context:

• Biggest supports  
• Best qualities  
• Goals  
• Has trusted adult  
• Coping strategies  
• Sleep hours  
• Home life – food or housing insecurity, safety issues  
• Knowing if the student is already receiving services (mental health)
SB-SBIRT Screening Tool: Check Yourself School-based (CY-SB) changes between Version 1.0 and 2.0

Overview:
During the 2018-19 school year Seattle Children’s Research Institute (SCRI) gathered suggestions regarding how to improve the CY-SB tool screening questions, feedback content, flagging classification, and workflow. Through a series of meetings SCRI presented the suggestions back to the King County SBIRT Workgroup and staff who implemented School-Based SBIRT (SB-SBIRT) in middle schools to get consensus on what recommendations to implement in the next version. The following summary describes the final changes that were determined through this process and implemented in Version 2.0. The text in orange indicates where you can find the full language of new or modified questions in the Screening Tool content and Feedback content documents for CY-SB 2.0 if applicable.

Minor Improvements to Enhance User (Student) Experience:
• Simplified the branching of the race/ethnicity questions to reduce the amount of time it takes students to complete the tool while remaining inclusive of all students. (Question 2.3)
• Modified the question about their biggest supports: Split mother/step-mother and father/step-father into separate options. (Question 2.7)
• Added new response options to the question asking about how students relieve stress: making/listening to music; making art/drawing; reading/writing. (Question 4.9)
• Modified the question asking whether they are currently seeing a counselor or therapist to specify if this was in school. (Question 7.5)

Improvements to Increase the Prevention Aspect of the SB-SBIRT program:
• Broadened the Tier 2 yellow flags to include any reported e-cig or cigarette/tobacco use or the intention to use e-cig or cigarette/tobacco in the next year to enhance early intervention of substance use.
• Added new feedback content giving positive reinforcement to students who did not use substances in the past year. (Feedback 6.0a)
• Added a red flag to the “ever tried to kill themselves” question to ensure this information is clearly noticeable to interventionists prior to meeting with the student. (Question 4.7b)
• Added a yellow flag to further notice students who indicate they are feeling angry, worried, or sad on most days and may need support. (Question 4.2.1)
• Modified responses to the question about frequent pains and aches to understand how often this is happening to better understand the urgency of follow-up. (Question 3.5)
• Replaced a question about school supports outside of school with one asking if they have an adult at school who will help them if they need it, in order to understand school connection through the SB-SBIRT program. (Question 4.12)
SB-SBIRT Screening Tool: Check Yourself School-based (CY-SB) changes between Version 1.0 and 2.0

**Strategic Shift in our Trauma-Informed Care Strategy for SB-SBIRT:**
Due to the limited research available regarding age-appropriate trauma screening in schools, the original trauma questions were removed from CY-SB 2.0. A key resource that helped with this decision was *Guidance for Trauma Screening in Schools* (2016) developed by the National Center for Mental Health and Juvenile Justice, which states, “Such uncertainty, while common in social science research implicates the need for caution when considering universal screening for trauma in schools.”

Clearly, there is a need to screen and respond to trauma as part of how to best serve our youth in schools. Through training and support, interventionists will learn trauma-informed strategies to deliver Brief Intervention and collaborate with the student and family regarding appropriate referrals.

SB-SBIRT Interventionist Survey

Survey Administration

The interventionist survey was administered both electronically via REDCap and in a paper-based format to allow for flexibility in administration. Administration was timed to occur during in-person program meetings and was held in September 2018, January - March 2019, and June 2019. The survey was not anonymous to allow us to match survey responses from all time points. In September 2018, 75 interventionists completed the survey, 69 completed it in March 2019, and 50 in June 2019. Thirty three interventionists completed the survey at all 3 time points.

Survey Analysis

To assess change in competency we looked at the average self-rated competency in each area over time. Interventionists reported an increase in most competencies from the beginning of the program in September 2018 to the end of the first school year of implementation in June 2019, however some areas increased much more than others. For example, many were unfamiliar with the Check Yourself screening tool in September 2018 therefore this is one of the areas showing the highest increase in proficiency. Meanwhile, many interventionists reported familiarity with the principles of Motivations Interviewing at the beginning of the year, therefore reported proficiency did not increase as drastically in these areas. Pages 13 and 14 summarize changes in each competency area. More detail is included in Appendices H and I.

The NIH Proficiency Scale:

The scale was developed and used to measure competencies used in the workplace. We used this scale to assess SB-SBIRT Interventionist proficiency in key program-related and Motivational Interviewing competencies. The scale asks respondents to rate their proficiency as:

- **Fundamental Awareness** (basic knowledge - You have a common knowledge or an understanding of basic techniques and concepts)
- **Novice** (limited experience - You have the level of experience gained in a classroom and/or experimental scenarios or as a trainee on-the-job. You are expected to need help when performing this skill.)
- **Intermediate** (practical application - You are able to successfully complete tasks in this competency as requested. Help from an expert may be required from time to time, but you can usually perform the skill independently.)
- **Advanced** (applied theory - You can perform the actions associated with this skill without assistance. You are certainly recognized within your immediate organization as "a person to ask" when difficult questions arise regarding this skill.)
- **Expert** (recognized authority - You are known as an expert in this area. You can provide guidance, troubleshoot and answer questions related to this area of expertise and the field where the skill is used.)

1. Source: [https://hr.nih.gov/working-nih/competencies/competencies-proficiency-scale](https://hr.nih.gov/working-nih/competencies/competencies-proficiency-scale)
## SB-SBIRT Interventionist Competencies: Program-Related

The below table describes the program-related competencies that SB-SBIRT Interventionists were asked to rate their proficiency in as part of the Interventionist Survey. Proficiency in each competency was rated on a scale from 1 – Not Familiar to 6 – Expert and the table below shows the mean ratings at each survey administration. Interventionist self-rated proficiency increased significantly for utilizing the Check Yourself tool, interpreting student screening tiers, as well as for knowledge of and ability to assist with referrals. These are key program components and therefore are areas in which we expected proficiency to increase significantly throughout the year.

<table>
<thead>
<tr>
<th>COMPETENCY</th>
<th>September 2018</th>
<th>January - March 2019</th>
<th>June 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ability to facilitate a structured presentation about adolescent development including activities for a group of caregivers/parents.</td>
<td>3.9</td>
<td>4.3</td>
<td>4.3</td>
</tr>
<tr>
<td>Knowledge of what services are available within the local and county referral system.</td>
<td>3.7</td>
<td>4.2 (p&lt;0.01)*</td>
<td>4.3</td>
</tr>
<tr>
<td>Knowledge and skill regarding how to assist student to access the referral.</td>
<td>3.8</td>
<td>4.4 (p&lt;0.01)*</td>
<td>4.6</td>
</tr>
<tr>
<td>Interpret student tiers (Tier 1, Tier 2, Tier 3).</td>
<td>2.5</td>
<td>4.3 (p&lt;0.01)*</td>
<td>4.7 (p&lt;0.01)*</td>
</tr>
<tr>
<td>Ability to communicate confidentiality parameters.</td>
<td>4.4</td>
<td>4.5</td>
<td>4.6</td>
</tr>
<tr>
<td>Utilize the Check Yourself screening technology.</td>
<td>1.7</td>
<td>3.8 (p&lt;0.01)*</td>
<td>4.3 (p&lt;0.01)*</td>
</tr>
</tbody>
</table>

*p-values <0.01 are considered statistically significant.

Data source: SB-SBIRT Interventionist surveys for respondents who completed a survey at all 3 timepoints (n=33).
SB-SBIRT Interventionist Competencies: Motivational Interviewing

The below table described the Motivational Interviewing competencies included in the SB-SBIRT Interventionist survey and mean ratings of proficiency at each survey administration.

<table>
<thead>
<tr>
<th>COMPETENCY</th>
<th>September 2018</th>
<th>January - March 2019</th>
<th>June 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ability to build rapport with youth.</td>
<td>5.1</td>
<td>5.2</td>
<td>5.4</td>
</tr>
<tr>
<td>Ability to build rapport with caregivers/trusted adults.</td>
<td>4.9</td>
<td>5.0</td>
<td>5.3</td>
</tr>
<tr>
<td>Ability to use open-ended questions, affirmations, reflections, and summaries (OARS) to motivate students.</td>
<td>4.6</td>
<td>4.8</td>
<td>4.8</td>
</tr>
<tr>
<td>Ability to elicit and reflect students' understanding of the impact of substance use or social-emotional concern on desired goal.</td>
<td>4.4</td>
<td>4.5</td>
<td>4.7</td>
</tr>
<tr>
<td>Ability to use the readiness ruler with students to elicit change talk and understand readiness for change.</td>
<td>3.0</td>
<td>4.2 (p&lt;0.01)*</td>
<td>4.2</td>
</tr>
<tr>
<td>Facilitating change planning with students by eliciting, reflecting, and affirming their ideas, goals, efforts, strengths and values.</td>
<td>4.1</td>
<td>4.5</td>
<td>4.7</td>
</tr>
<tr>
<td>Ability to recognize and respond to change talk and sustain talk.</td>
<td>4.0</td>
<td>4.2</td>
<td>4.4</td>
</tr>
<tr>
<td>Ability to distinguish the difference between discord and sustain talk.</td>
<td>3.6</td>
<td>4.2 (p&lt;0.01)*</td>
<td>4.3</td>
</tr>
<tr>
<td>Knowledge and skill to use key strategies to roll with resistance.</td>
<td>3.7</td>
<td>4.2 (p&lt;0.01)*</td>
<td>4.5</td>
</tr>
<tr>
<td>Ability to engage students and caregivers with cultural humility.</td>
<td>4.5</td>
<td>4.6</td>
<td>4.8</td>
</tr>
<tr>
<td>Ability to complete conversation with a summary and key question to capitalize on momentum.</td>
<td>4.0</td>
<td>4.4</td>
<td>4.5</td>
</tr>
<tr>
<td>Ability to provide information using the Elicit-Provide-Elicit technique.</td>
<td>2.3</td>
<td>3.7 (p&lt;0.01)*</td>
<td>3.8</td>
</tr>
</tbody>
</table>

*p-values <0.01 are considered statistically significant.

Data source: SB-SBIRT Interventionist surveys for respondents who completed a survey at all 3 timepoints (n=33).