

Adapting Community-Based Wraparound for Use as an Intensive Intervention in Schools

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Abstract

Multi-Tiered System of Supports and Positive Behavioral Interventions and Supports frameworks focus on providing effective Tier 1 (universal), Tier 2 (selected), and Tier 3 (individualized) strategies to meet all students' behavioral and emotional needs. However, there are few Tier 3 models that provide support spanning home, community, and school for students with serious emotional and behavioral challenges (SEBC). This U.S. study used expert and local input to (a) develop practice guidelines and implementation supports for a school-based Wraparound care planning and coordination model and (b) evaluate school feasibility and readiness to implement systems, practices, and data. Using mixed methods followed by a Nominal Group Process to generate recommendations, national experts, school leaders, and school staff reviewed, rated relevance, and revised school and district materials related to school-based Wraparound. Results found existing materials developed for community Wraparound programs required significant adaptation for school context and feasibility. Specific recommendations are being used to design a Wraparound in Schools model for feasibility and efficacy testing in schools. Findings hold promise for aiding schools to implement effective Tier 3 supports for students with SEBC, and for bridging the gap from theory to practice on use of Wraparound as an intensive Tier 3 strategy.

Introduction

Behavioral health problems in children and adolescents are at historic highs,¹ worsened further as a result of stress and isolation associated with the COVID-19 pandemic.^{2,3,4,5} Schools are consistently identified as being on the front lines of responding to this crisis in youth behavioral health, with considerable federal resources directed to potential solutions such as the US\$122 billion Elementary and Secondary School Emergency Relief Fund.⁶

The most common school frameworks to prevent and ameliorate emotional and behavioral needs of students are Multi-Tiered System of Supports

(MTSS), which includes academic and behavior supports^{7,8} and Positive Behavioral Interventions and Supports (PBIS).^{9,10} In both frameworks, district and school teams are convened; identify and implement an array of effective Tier 1 (universal school-wide), Tier 2 (targeted), and Tier 3 (individualized) strategies for students; and track progress at the individual student, building, and district levels.

Research documents an array of effective Tier 1 strategies and interventions such as social-emotional learning programs that confer significant, positive outcomes on school climate, discipline,

student behavioral health, and academic outcomes¹¹ as well as an increasing number of Tier 2 interventions available for students who need additional supports,^{12,13} including the widely implemented Check-In/Check-Out model.¹⁴ At Tier 3, more intensive school- and community-based interventions are available to students who need individualized behavioral supports.

In a national sample of schools implementing Tier 3 PBIS, however, fewer than one in five reported Tier 3 implementation fidelity scores of 70% or higher.¹⁰ As a result, schools struggle to address the needs of students with the most serious emotional and behavioral challenges (SEBC)¹⁵ who may require strategies that span home, school, and community. Without knowledge of effective practices, too many schools use restrictive and punitive discipline approaches, separating students with SEBC from curricula and peers, limiting their access to instructional time, and further compromising their academic success.¹⁶ This contributes to the poor academic and quality of life outcomes for students with SEBC. For example, students with SEBC continue to drop out of school at higher rates than students in any other disability category. In 2019–2020, only 66% graduated with a regular high school diploma.¹⁷

Strategies and Interventions for Students With the Most Complex Needs

While 5% to 10% of the school-aged population experience SEBC,¹⁸ only 0.5% of students nationally are identified as having a special education need under the category “Emotional Disturbance.”¹⁷ This gap underscores the need for an array of general education interventions for students with SEBC. Using functional behavior assessment (FBA) to create behavior intervention plans (BIP) is the most widely implemented Tier 3 strategy for students with SEBC, and research has documented its effectiveness.^{19,20} However, the behaviors that compromise the success of students with SEBC (and often their classmates) are frequently borne of multiple stressors that span home, school, and community settings that are difficult to address with school-based supports alone. Although MTSS and PBIS frameworks reference the need for schools to dedicate resources

and staff (e.g., school social workers)²¹ to addressing the complex needs of students with SEBC via help that extends past the walls of the school, few studies have examined interventions that span school and community.^{19,22}

Developing an Intensive School-Based Wrap-around Intervention

Wraparound is an intensive, team-based, empirically supported care coordination strategy for youth with SEBC primarily used in community settings such as behavioral health and child welfare.^{23,24} Wraparound aims to create a holistic and comprehensive plan of care that integrates professional and natural support strategies and prioritizes the preferences and perspectives of the family and youth.²⁵ Wraparound employs a facilitator or care manager who dedicates considerable effort to each youth (e.g., 2–4 hr per week) to engage families, continually identify priorities, and develop an action plan that spans helpers and systems, tracks progress, and modifies the plan as necessary over time. Wraparound also incorporates a range of “common factors” of research-based care,²⁶ including care coordination,²⁷ engagement and alliance building,^{28,29} and monitoring and feedback of data on progress.^{30,31}

A recent meta-analysis found significant, positive effects of Wraparound on all four outcome domains: residential placements, school success, mental health symptoms, and community adjustment.³² However, none of the 16 controlled studies were in education settings. Furthermore, a national inventory of Wraparound programs³³ found that education served in a lead role in only 12% of Wraparound care coordination initiatives, far less than mental health (94%), child welfare (74%), or juvenile justice (52%).

Peer-reviewed papers that do focus on Wraparound’s application to schools noted the need for greater specification of school-based Wraparound and development of unique, education-specific implementation supports. As stated by Eber and colleagues,²² “Not only is there little evidence of specification with Wraparound implementation in schools, but there is less empirical evidence for intensive Tier 3 supports in general” (p. 61). This situation has not changed since 2011: A recent review found only one

school-based Wraparound program that referenced an implementation manual,³⁴ and this version of Wraparound was specific to transition planning for high school students with SEBC. Proponents for more effective Tier 3 interventions for students often list Wraparound as an option in which schools may wish to invest; however, these authors also emphasize the need for considerable support at the district, school, and community levels.^{35,22}

While few Wraparound initiatives are based in schools,³³ many key elements of Wraparound have characteristics found in school-based intervention frameworks (e.g., being team-based, data-driven, using effective practices). Thus, it makes sense to organize a school-based Wraparound model by the essential PBIS elements of *systems* (e.g., policies, procedures, and processes such as teamwork), *practices* (e.g., classroom practices, student and family interventions and supports), and *data* (e.g., monitoring fidelity and outcomes, using data to inform decision-making).²²

The Current Study

With funding from the U.S. Department of Education, the current study used a structured process and a diverse expert advisory group to review resources used successfully in community-based Wraparound and generate recommendations for adaptation in schools. The *short-term goal* was to review and revise existing school-based individualized support and Wraparound protocols at the practitioner, school building, and system levels in preparation for feasibility testing and controlled efficacy studies of a well-defined and manualized Wraparound in Schools (WIS) model. The ultimate goal was to fill a gap in the continuum of school supports for students with intensive needs such as persistent behavior challenges across the three well-established PBIS implementation domains of *systems*, *practices*, and *data*.¹⁰ We also hoped to inform districts, schools, and provider organizations about key considerations in adapting Wraparound to schools, should they choose to implement it as a Tier 3 strategy.

Specific research questions were investigated as two separate studies (see Figure 1):

1. What are key informants' perspectives on the most critical systems, practices, and data elements to include in the WIS model (Study 1)?
2. Once specified, what is the perceived feasibility and readiness of schools to implement the defined WIS systems, practices, and data elements (Study 2)?

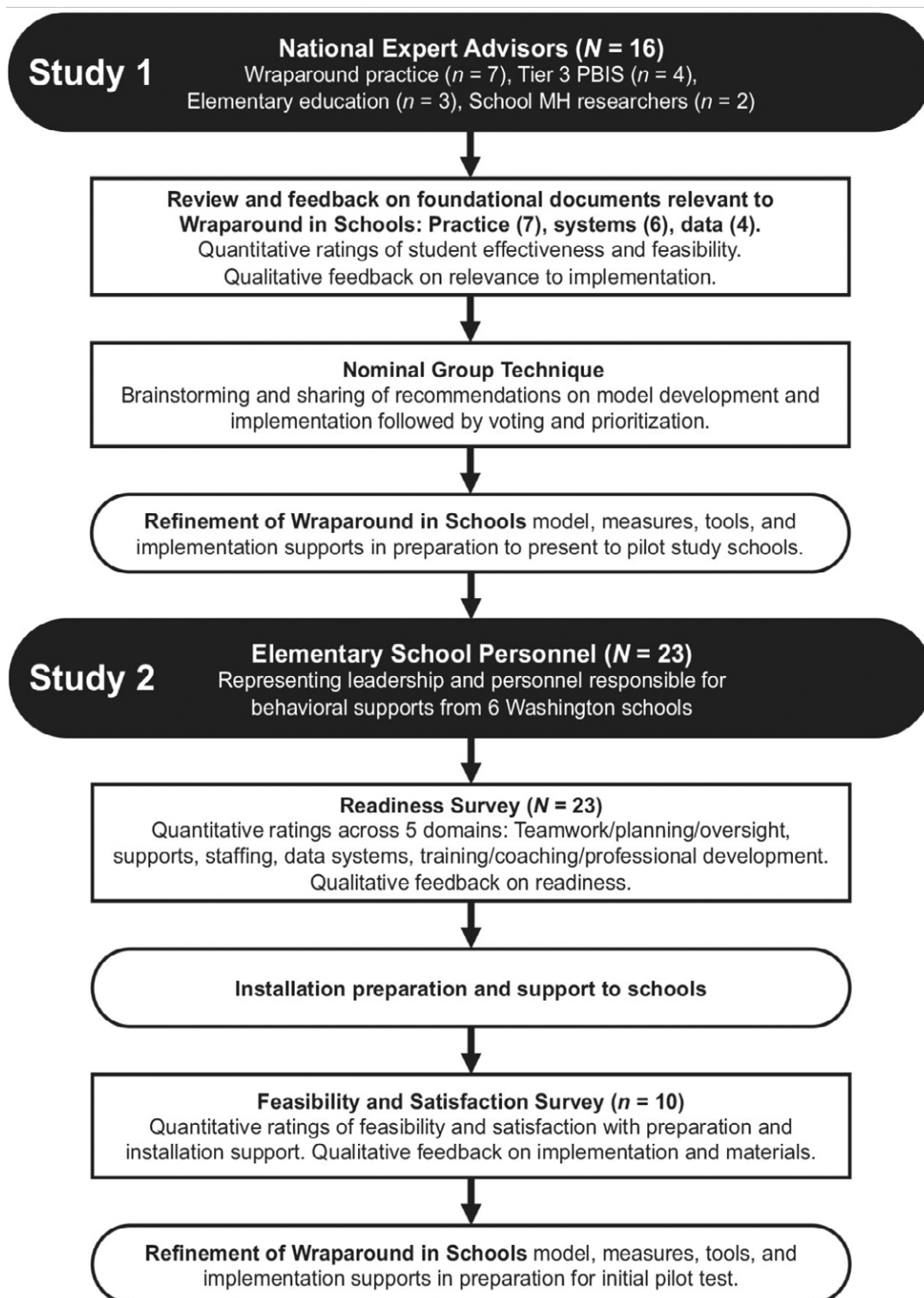
Method

Participants included national experts in Wraparound programming, community-based interventions, and education, as well as school and community staff in Washington State. For Study 1, a survey method based on the Delphi process³⁶ and the Nominal Group Technique³⁷ were used as methods for systematically compiling and prioritizing input and recommendations from national advisors. For Study 2, a readiness survey and qualitative feedback from school leaders and staff were used to evaluate feasibility of the proposed WIS systems, practices, and data elements.

Participants

Study 1. For Study 1, 16 national advisors provided their expert perspectives on the development of a WIS model consistent with core PBIS elements of *systems*, *practices*, and *data*.³⁸ National experts were chosen for their record on developing and implementing Wraparound-based models in schools and/or publishing on the topic of intensive supports for students with SEBC. These experts also were asked to nominate other members. Local advisors were identified via nomination from the Wraparound lead agency and participating school districts, and from the last author's experience serving on the state's legislative subcommittee on school mental health. The advisors represented expertise in Wraparound practice ($n = 7$), Tier 3 PBIS ($n = 4$), elementary education ($n = 3$), and school mental health ($n = 2$). They provided feedback through surveys ($n = 11$) and a nominal group technique ($n = 10$).

Figure 1. Flowchart of Study 1 and 2



Study 2. For Study 2, 23 school staff from six elementary schools in Washington provided feedback on perceived feasibility and effectiveness of the WIS model. These schools were part of a larger development project to design and pilot the model. Staff represented leadership and educators responsible for their school's behavioral supports.

The schools spanned four districts and were situated in a small city (1), a rural region (1), and in towns (4).³⁹ Participating schools had an average enrollment of 391 students ($SD = 134$), with 48% students of color ($SD = 17.5\%$), 17.6% English language learners ($SD = 23.2\%$), 17.9% students with disabilities ($SD = 3.8\%$), 64.4% eligible for or receiving free or reduced-price lunch ($SD = 21.8\%$), and student-to-teacher ratio of 24.1 ($SD = 1.7$). Schools were not selected to be representative of Washington State as a whole; however, student demographics are quite comparable with all elementary schools in the state.

All schools were within districts receiving state and regional support to implement a multi-tiered system of supports that aligned with the PBIS framework, including Tier 3 systems for students with need for individual supports. In the past year, five of the six schools also had completed the Tiered Fidelity Inventory (TFI),⁴⁰ a planning tool used frequently as part of PBIS implementation. Results from these inventories suggested study schools were “partially” implementing required supports at Tiers 1 and 2. At Tier 3, five of the six schools regularly convened a team focused on supporting students needing targeted or individual supports (e.g., “Tier 2/3 Team” or “Student Support Team”), but only two schools completed the TFI for “Tier 3,” reflecting that their PBIS/MTSS implementation process remained focused on Tiers 1 and 2.

Procedures

Data were collected from September 2020 to July 2021 as part of a larger development research study for WIS. As data collection occurred during the COVID-19 pandemic, all procedures were conducted online. The sequence of data collection and analysis was designed to iteratively develop the WIS model. Advisor feedback in Study 1 led to

development of WIS implementation supports (e.g., curricula, readiness checklists, measures) on which school staff provided feasibility and acceptability ratings and feedback in Study 2.

In Study 1, advisors held a kickoff meeting in which authors provided an overview of the study and upcoming research activities. Following the kickoff, the research team (Authors 2, 4, and 5) and five consultants from the advisory group used expert nomination and a review of published and gray literature (including web resources) to identify potential *implementation resources* for school-based Wraparound, including guides, tools, and other documents commonly used in training and technical assistance for school and community-based Wraparound.

Experts were guided in their nomination of resources by two primary criteria. First, nominated materials should reflect the goal stated by Sugai and Horner¹⁰ that evidence-based interventions used within PBIS should include “implementation resources that facilitate adoption, sustainability, and scaling” (p. 120). Second, that implementation resources support installation of school-based Wraparound at one of three levels that align with the PBIS framework: (a) “*systems* needed for the intervention to be used with fidelity” (p. 120); (b) *practices* used in home, school, and community settings to support students with SEBC; and/or (c) *data* that “give priority to answering important student outcome and implementation fidelity questions and enable efficient and timely input and output” (p. 132). After an exchange of documents and consensus among the small group, 16 documents were selected in the categories of system structures ($n = 5$), Wraparound practices ($n = 7$), and data for decision-making ($n = 4$). A description of each of the documents selected for review is in Table 1.

Expert Feedback on Foundational Documents. Documents were sent to advisors for review in three phases (systems, practices, and data) approximately 2 to 3 weeks apart. Advisors reviewed documents, rated documents on effectiveness for achieving positive student outcomes and feasibility for school implementation, and provided feedback on adaptations needed for WIS intervention.

Table 1. Descriptions of Systems, Practices, and Data Documents for Advisor Feedback

Document	Description (reference)
Systems Documents	
NWI Wraparound Implementation and Practice Standards	A summary of research and practice-based standards from the National Wraparound Initiative. Describes conditions to be attended to across five implementation-related areas (staff, leadership, organization, accountability, and system) and two output-related areas (fidelity and outcomes) ⁴¹
Interconnected Systems Framework Implementation Inventory	This resource describes indicators of successful interconnection of PBIS and School Mental Health within a school across Tiers 1, 2, & 3 ⁴²
National Implementation Research Network Hexagon Tool	This tool was designed to guide selection of potential programs and practices for use. It includes six indicators against which to evaluate a program or practice: Need, Evidence, Fit, Usability, Capacity, and Supports ⁴³
Tiered Fidelity Inventory version 2 (Tier 3 only)	The TFI aims to provide a valid, reliable, and efficient measure of the extent to which school personnel are applying the core features of PBIS across Tiers 1, 2, & 3. Note: Expert advisors reviewed only Tier 3 ⁴⁰
Vermont School and District Readiness Checklist for Tier 3 Wraparound	Presents one state's checklist of critical steps to be completed before beginning Tier 3 Wraparound training for school staff and implementation of WIS ⁴⁴
Practice Documents	
Wraparound Theory of Change	A "theory of change" that presents the proposed pathways to positive outcomes for WIS, including needed school, district, and workforce supports and short- and long-term outcomes ⁴⁵
Ten Principles of the Wraparound Process	Definitions of 10 principles of Wraparound ⁴⁶
Phases and Activities of the Wraparound Process	NWI guide providing detailed activities recommended for phases of Wraparound process ⁴⁷
Midwest PBIS Tier III Facilitator role attributes	Midwest PBIS recommendations for characteristics needed for Wraparound facilitators ⁴⁸
Midwest Wrap Student Action Plan	Midwest PBIS comprehensive plan document for students receiving Wraparound ⁴⁹
NWIC Wraparound Plan of Care	Plan of care template for people receiving Wraparound ⁵⁰
Behavior Support Assessment and Planning in Tier 3 Wraparound	Combines content from Vermont PBIS's Wraparound training manual and other sources to provide an overview of Behavior Analysis and Planning (FBA-BIP) and how it interacts with WIS.
Data Documents	
Wraparound in Schools Data Collection Overview	A framework for when and how measures of student progress and Wraparound fidelity might be administered over the course of WIS implementation.
Wraparound Educational Information Tool	The student's teacher provides their perspective on student's classroom behavior and academic functioning. Completed at baseline and at least every 3 months ⁵¹
Wraparound Home, School, Community Tool	The caregiver (at baseline) and then the whole team provide their perspectives about student's strengths and needs. Items are organized into five domains and can be rated separately for home, school, and community settings. Completed at baseline and at least every 3 months ⁵²
Wraparound Integrity Tool	This tool includes 39 indicators of Wraparound integrity organized by the four phases of Wraparound. It is supposed to be completed at least every 3 months ⁵³

Feedback was summarized and presented to the advisors in writing for their review and during a meeting with all advisors. They were given the opportunity to make additional statements, ask questions, and adjust their responses. Following this, they participated in a structured Nominal Group Process (NGP)³⁷ to come to consensus on recommendations and a final synthesis to develop a WIS model for school personnel in Study 2.

Feasibility and Acceptability Ratings From School Personnel. Study 2 began with kickoff meetings for teams responsible for Tier 3 interventions at each of the six schools. Some teams were newly formed for this project. Kickoffs included a project orientation and discussion of school structures, teams, and resources. Team members were sent surveys to provide quantitative and qualitative ratings of readiness, areas for additional support, and perspectives on participation in a pilot of the newly developed WIS materials.

Measures

Advisor Feedback (Study 1). National advisors completed online surveys to provide feedback on the 16 foundational documents. For each document, advisors were asked to what degree they perceived each tool represented systems, practices, or data that (a) would promote positive outcomes for students with SEBC (likely *effectiveness*) and (b) be feasible for schools to implement under real-world conditions (*feasibility*). For each document reviewed, advisors responded using a 5-point Likert-type scale with the choices: 0 = *not at all*, 1 = *not well*, 2 = *somewhat*, 3 = *well*, and 4 = *completely*. Once compiled, scores on the 0 to 4 scale were converted to a percent of total possible on a 0 to 100 scale to aid interpretation by advisors. In addition, advisors provided qualitative feedback about each tool regarding the most important components, items needing revision, practical and useful elements, items necessary to revise for feasibility, and additional concerns.

Readiness Survey (Study 2). Based on information collected from the process with expert advisors, the research team developed a survey to assess school building readiness and perceived feasibility

of implementing a WIS intervention for students. The readiness survey domains and response scales were based on the TFI.⁴⁰ Reflecting the application of Wraparound to PBIS and, more broadly, the education sector, individual items drew from both Tier 3 of the TFI and Wraparound readiness tools such as the Community Supports for Wraparound Inventory (CSWI).⁵⁴ Items asked participants to consider whether they had *Not Started*, were *In Progress*, or had *Achieved* each of the objectives. The readiness survey included five domains, each with three to four items: (a) teamwork, planning, and oversight (three items); (b) comprehensive supports in place at a school level (three items); (c) WIS staffing and practice (four items); (d) data systems for WIS and other intensive supports (three items); and (e) training, coaching, and professional development (three items). Participants also provided qualitative information about strengths, barriers, and additional input for potential implementation.

Satisfaction and Feasibility Survey (Study 2). After review of the readiness survey findings, pilot school representatives completed a survey with questions on satisfaction with and helpfulness of the preparatory steps facilitated by the research team and feasibility for implementing elements of the refined WIS model using a 5-point scale (0 = *not at all*, 1 = *a little*, 2 = *somewhat*, 3 = *moderately*, 4 = *extremely well*).

Data Analysis

Advisor Surveys (Study 1). Descriptive statistics were generated on experts' ratings of document effectiveness and feasibility. Qualitative feedback about the foundational documents was analyzed using a thematic analysis approach.⁵⁵ Specifically, two team members (O.L. and K.S.) independently read all responses to understand the content. Each reviewer then assigned descriptive labels to unique segments of text. The researchers compared initial codes, discussed discrepancies, refined categories, and grouped related codes into broader themes. The last author provided a check on themes by reading all responses, suggesting revisions to ensure they accurately represented the data and were distinct from one another, and addressing discrepancies

in coding identified by the coders. Following these analyses, member checking involved presenting themes and representative quotes to the advisors in writing and during a group summit meeting as a credibility check.⁵⁶ Individual member checking was not conducted. Advisors were asked to pose questions, adjust their feedback, and provide additional feedback before conducting the NGP (see below). For each identified theme, the researchers counted the number of individual statements, and results below present the most frequently reported themes following analyses and member checking.

Nominal Group Process (Study 1). After the initial stages of the NGP (silent generation of ideas, round robin sharing, consolidation, voting on priorities) were completed, the team developed a summary of recommendations from experts, with frequency data compiled on the number of votes each recommendation received from experts, as per Delbecq and VandeVen.³⁷

School Readiness, Feasibility, and Satisfaction Surveys (Study 2). Descriptive statistics were used to evaluate school staff perceptions of readiness (Readiness Survey) and adequacy of support for implementation (Feasibility and Satisfaction Survey). Results were stratified by school for additional context. Qualitative input from open-ended survey items were thematically coded using the same procedure as for the advisors' surveys (see above). Themes from qualitative analyses were reviewed with school staff in small groups at the school building-level using the group member checking procedures as Study 1 as a credibility check and refined based on feedback.

Results

Study 1: Key Informant / Expert Perspectives

Survey Results – Systems Documents. National advisors independently reviewed and rated the relative effectiveness and feasibility of each of the five documents focused on systems features and supports needed to implement the WIS model (see Table 2). Results showed that systems documents

received higher mean ratings for their effectiveness ($M = 79.3$, $SD = 23.7$) than feasibility ($M = 69.5$, $SD = 21.3$). A Tier 3 readiness checklist developed in Vermont⁴⁴ received the second highest mean rating for feasibility and the lowest for effectiveness, the only systems document with a higher feasibility than effectiveness rating. The Hexagon Tool, a method for evaluating feasibility and effectiveness of interventions developed by the National Implementation Research Network (NIRN),⁴² received the highest ratings for effectiveness and feasibility.

Thematic analysis of qualitative feedback on the systems documents found that advisors consistently noted the importance of how WIS is connected to *broader systems*. This included clarifying WIS's connection to school leadership, school teams, district teams, and cultural and community values. Advisors also noted the importance of *ensuring training and support structures* for facilitators leading WIS and *evaluating the needs of students*.

Advisors also shared feedback on elements of the systems documents that should change to better fit WIS. The most common concern raised for all documents was *lack of feasibility* of using these system processes and/or measures. Advisors questioned how and when schools would find the capacity to use these systems planning tools effectively. Some advisors pointed out that even the NIRN Hexagon Tool, which received the highest ratings for feasibility, would require training, coaching, and significant time to complete. A consistent recommendation was to simplify the tools and align closely to WIS. Other themes provided more specific feedback. One was the need for *language to be more specific to school context*, such as Wraparound practice model documents developed by the National Wraparound Initiative (NWI). Similarly, some shared a desire for more consideration of *community involvement* (e.g., families, natural supports) needed to make WIS successful. Another theme identified by advisors was inclusion of *mental health needs beyond behavior problems*. Finally, some advisors noted that school-focused measures needed more consideration of *culture, equity, and inclusion*.

Table 2. Descriptive Statistics for Advisor Feedback on Systems, Practices, and Data Documents

Document	Effective for Students			Feasible for Schools		
	<i>M</i>	<i>SD</i>	Range	<i>M</i>	<i>SD</i>	Range
Systems Documents						
NWI Implementation & Practice Standards	77.8	23.2	50–100	58.3	25.0	25–100
ISF Implementation Inventory	81.3	22.2	50–100	62.5	13.4	50–75
NIRN Hexagon Tool	90.6	12.9	75–100	84.4	12.9	75–100
Tiered Fidelity Index (Tier 3 only)	78.1	16.0	50–100	68.8	17.7	50–100
Vermont Tier 3 Readiness Checklist	68.8	37.2	0–100	75.0	26.7	25–100
Practice Documents						
Wraparound Theory of Change	72.2	23.2	25–100	55.6	20.8	25–100
Ten Principles	83.3	17.7	50–100	58.3	17.7	25–75
Phases & Activities	80.6	16.7	50–100	50.0	28.0	0–100
Midwest Facilitator Role	72.2	19.5	50–100	61.1	22.0	25–100
Midwest Student Action Plan	66.7	28.0	0–100	61.1	28.3	0–100
NWIC Wraparound Plan of Care	55.6	16.7	25–75	58.3	25.0	25–100
Vermont Tier 3 Wraparound Plan	61.1	28.3	25–100	61.1	35.6	0–100
Data Documents						
Data Overview	71.9	20.9	25–100	75.0	18.9	50–100
Midwest Educational Information Tool	62.5	13.4	50–75	68.8	25.9	25–100
Midwest Home, School, Community Tool	59.4	12.9	50–75	56.3	17.7	25–75
Midwest Wraparound Integrity Tool	77.8	15.0	50–100	66.7	17.7	50–100

Note. NWI = National Wraparound Initiative; ISF = Interconnected Systems Framework; NIRN = National Implementation Research Network; NWIC = National Wraparound Implementation Center

Ratings were 0 = *not at all*, 25 = *not well*, 50 = *somewhat*, 75 = *well*, 100 = *completely*.

Survey Results – Practice Documents. Like the systems documents, mean ratings of effectiveness for practice documents ($M = 70.2$, $SD = 22.8$) were higher than ratings of feasibility under real-world conditions ($M = 57.9$, $SD = 24.9$; see Table 2). The Ten Principles and Phases and Activities documents were rated most effective for students among the practice documents, but substantially less feasible to implement. Advisors rated the three examples of student plans of care as the least effective for students among the practice documents. As a group, the mean effectiveness and feasibility ratings were lower for most of the practice-related tools compared with the systems planning tools.

Qualitative analysis revealed several themes. First, WIS practice should be *integrated within school and PBIS systems*. Second, the importance of *student and family leadership and engagement* are unique and critical aspects of Wraparound. And third, *cultural competence and a focus on equity* are strengths of Wraparound practice.

With respect to recommendations for improvement, advisors again shared concerns about how school personnel would be able to use the practice information and tools *feasibly in real-world settings*. Experts emphasized the need to *focus on school personnel and context* (e.g., teacher involvement in Wraparound teams, school and district oversight). Across practice tools, advisors recommended more *attention to the facilitator or care coordinator role* responsible for leading WIS for students. This included wanting more information about scope of facilitator responsibilities (e.g., assessment, delivering interventions, team management); trainings and supports needed; relationships with student, family, and other team members; and qualifications and commitment. Several advisors recommended more attention to *inclusion of evidence-based and trauma-informed interventions* as part of WIS. Regarding the action plan templates reviewed, advisors provided a mix of recommendations: provide *more explicit instructions*, make them *more flexible and open-ended*, and make them *more family-friendly* (e.g., plain language) and *easier to complete* (e.g., accessible digital versions).

Expert Surveys – Data Documents. Unlike systems and practice documents, the data-focused documents received similar mean ratings for effectiveness ($M = 68.2$, $SD = 16.9$) and feasibility ($M = 66.7$, $SD = 20.4$). A fidelity measure (Wraparound Integrity Tool) and a one-page overview of data tools at different stages of Wraparound implementation were rated as most effective for students, with the data overview also rated as most feasible. The Home, School, Community tool received the lowest ratings for perceived effectiveness and feasibility.

Themes from qualitative feedback on the data-related documents revealed that *assessing individualized student needs and strengths* was considered critical for the model. Gathering data from *multiple perspectives* (e.g., students, caregivers, teachers) was highlighted as important for WIS. Advisors appreciated the attention to collecting and using data across *multiple contexts* (Home, School, Community Tool). There was also strong support for *fidelity measurement*.

Like the systems and practice documents, advisors recommended several changes needed for WIS. While the Data Overview was rated as one of the most feasible documents overall, advisors requested more *specific guidance on data collection procedures*. Many shared that more detail is needed on how and when data tools are administered and how data will be used to support decisions. Increasing *youth and family perspectives* was recommended across all data tools. The need for *flexibility and individualization* was a common recommendation across data tools as well. Advisors shared concerns that the focus on behavior that characterizes some of the tools may not match the needs of all students, and that some terms may be outdated or culturally insensitive. Several advisors recommended WIS should *allow teams to select other measures* to inform the WIS process, such as the Child and Adolescent Needs and Strengths.⁵⁷

Nominal Group Process. After quantitative and qualitative ratings for systems, practice, and data documents were presented, the full advisory group ($N = 16$) was prompted to brainstorm and share recommendations for (a) approaches to building *system-level readiness*, (b) additions or

changes to the *practice model*, and (c) *data collection and use* for students receiving WIS. After silent idea generation, sharing, and consolidation, advisors generated 39 unique recommendations focused on systems (12), practice (16), and data (11). Advisors had three votes for each domain to select top recommendations, and this resulted in 13 top recommendations (see Table 3). The highest voted WIS *systems* recommendation was for school staff to receive training and support across all tiers, followed by ensuring commitment from leadership, protected time for WIS coordination, building connections to effective services, and assuring there is a school-level team overseeing WIS. The most highly endorsed *practice* recommendation was to integrate FBA-BIP practices within WIS while focusing on the broader needs of the student. Other top practice recommendations were clarifying the scope of WIS, connecting phases of WIS implementation to the school calendar, prioritizing high impact outcomes, and creating a well-designed WIS plan of care template. Finally, the top *data* recommendations were to limit outcome measurement to each student's identified needs, create data dashboards to monitor progress, and integrate data collection with existing systems.

Study 2: School Staff Ratings of Readiness and Feasibility

Readiness Survey Data. A summary of readiness survey responses ($N = 23$) for leaders and staff in the six participating schools are presented in Table 4. Mean overall readiness was 1.6 ($SD = 0.3$), falling between not started (1) and in progress (2) on the 3-point Likert-type scale (far short of 3 = Achieved). Across readiness domains, school personnel gave higher readiness ratings for data systems ($M = 2.2$, $SD = 0.5$) and school teamwork, planning, and oversight ($M = 1.9$, $SD = 0.5$). School personnel rated their schools lower on readiness for training and professional development ($M = 1.2$, $SD = 0.2$), staffing for WIS ($M = 1.3$, $SD = 0.3$), and availability of comprehensive services and supports ($M = 1.6$, $SD = 0.5$).

Thematic coding was conducted for 21 qualitative responses received from school staff in the areas

of strengths and needs for additional support for WIS implementation. Personnel from all schools noted their staff (quantity, dedication, qualification, skills) as strengths in the implementation of a Tier 3 intervention. The next highest nominated strength was their school's existing MTSS structure ($n = 3$) and readiness/commitment to implement a Tier 3 intervention ($n = 3$). Personnel at all six schools voiced concerns about *time and capacity to support a Tier 3 level intervention*, while personnel from half the schools shared *concerns about training/experience, concerns about relying on helpers from outside the school, and staffing*.

Feasibility and Satisfaction Survey. Mean ratings from school personnel ($n = 10$) on the feasibility and helpfulness of proposed WIS procedures were all 3 or higher on the 0 to 4 scale. The highest rated domain was belief that WIS would benefit students ($M = 3.5$, $SD = 0.7$). The remaining three domains were rated similarly: acceptability of WIS orientation and preparation ($M = 3.1$, $SD = 1.0$), feasibility for school and staff ($M = 3.1$, $SD = 0.9$), and helpfulness of readiness assessments ($M = 3.0$, $SD = 1.2$). A primary finding from qualitative input was that many voiced specific *concerns about capacity to implement WIS, with concerns including staffing, burn-out, and too many meetings*.

Discussion

This study leveraged national expertise and local educational practice knowledge to support the development of a school-based Wraparound model. Results also promise to guide states, districts, and schools in their own local adaptation of Wraparound to schools for students with SEBC, and their assessment of readiness to install Wraparound as a Tier 3 strategy.

The most consistent feedback from expert advisors and local educators was the importance of creating a WIS model with *comprehensive supports* – including systems, practices, and data elements – that can be *feasibly implemented by schools*. Beyond these two major themes, there was a wide breadth of input and recommendations for developing WIS, which was not surprising given the diversity of experts. Nonetheless, key themes emerged

Table 3. Top Recommendations from Advisors Nominal Group Process ($N = 16$)

Recommendation	Votes
System	
Assure there is training, coaching, and implementation planning across all tiers	4
Assure there are agreements and commitment from school & district leadership	3
Provide protected time for WIS care coordinators	3
School and community must have linkage to effective services and treatments	3
Assure each school has a single Tier 3 team that develops supports for the school and each identified student	3
Practice	
Incorporate evidence-based FBA-BIP processes but with focus on underlying needs of student (e.g. trauma, MH)	5
Define the reach of WIS—will it strive to meet all student/family needs across life domains	4
Map the phases of WIS effort onto the school calendar, for all students and individual students served	3
Shift the practice model to prioritize high impact outcomes for students and families	3
Have an instructional designer develop the plan of care template so form follows function	3
Data	
Focus outcome measurement on small number of big needs individualized to the student	5
Data collection should focus on providing individualized dashboards for students with progress monitoring	4
Data collection should extend from existing school/district data systems wherever possible	3

Note. FBA-BIP = Functional Behavior Analysis–Behavior Intervention Planning.

that provide guidance to our development of WIS and that contribute to the literature on implementation of intensive supports in schools.

Adapt Wraparound Resources to Work in Schools

The national experts rated the systems, practices, and data resources relatively modestly on their effectiveness for students and even lower on their feasibility for schools' use. This is notable because the documents were selected as the most widely

used resources for training and technical assistance for school and community-based Wraparound. Low feasibility ratings for implementation strategies have been found in other studies,^{58,59} reflecting the implementation gap between research and practice in schools.⁶⁰ While prior research on school-based implementation strategies found many that were both effective and feasible, only three documents in our study (19%) were rated high on both dimensions, and all three were focused on measurement.

Table 4. Descriptive Statistics for WIS Readiness Domains ($N = 23$)

Readiness Domain	<i>M</i>	<i>SD</i>	Range
Teamwork, planning, and oversight	1.9	0.5	1.3–3.0
Comprehensive supports at school	1.6	0.5	1.0–2.7
WIS staffing and practice	1.3	0.3	1.0–2.0
Data systems for WIS and other intensive supports	2.2	0.5	1.0–3.0
Training, coaching, and professional development	1.2	0.2	1.0–2.0
Overall Readiness	1.6	0.3	1.1–2.2

Note. Ratings were 1 = *Not Started*, 2 = *In Progress*, or 3 = *Achieved*.

Examining the remaining 13 Wraparound-focused documents, six were rated low on both effectiveness and feasibility, three as low on effectiveness and high feasibility, and four as high on effectiveness but low on feasibility. The only Wraparound documents that received mean effectiveness ratings above 80 were the Ten Principles⁴⁶ and Phases and Activities,⁴⁷ two of the most widely promulgated practice-based resources by the National Wraparound Initiative. Yet, both received lower than average feasibility ratings for school implementation. In essence, expert advisors judged existing foundational resources for Wraparound as “gold standards” that are nonetheless neither feasible nor acceptable for schools.

Trends in advisor ratings point to changes needed to develop WIS resources. First, the system documents received higher ratings of effectiveness for students than practice and data documents, reinforcing years of emphasis on school frameworks such as PBIS and MTSS.^{9,10} Advisor ratings indicate using well-vetted systems tools designed for multiple contexts (Hexagon Tool) and/or tools specific to schools (TFI) may be more effective and feasible for schools than using resources designed for community-based Wraparound.

Second, the documents designed to support Wraparound practice received lower feasibility ratings than the systems and data documents, and five of the seven practice documents were rated low on both dimensions. This feedback indicates development of a Wraparound model for schools will require the greatest attention to the practice model. Local districts and schools seeking to use a version of Wraparound for youth with SEBC may wish to also examine elements of the practice model and ask how they can most feasibly achieve fidelity to core Wraparound components, such as use of individual student teams, developing and following through on plans of care, and continually assessing student progress.

Measure at Multiple Levels to Stay on Track

Some expert and local feedback received suggest districts and communities seeking to use Wraparound-based programming at Tier 3 for students with SEBC should prioritize measurement across multiple levels. At the systems level, the NIRN Hexagon Tool⁴² and TFI⁴⁰ were among the only documents to receive relatively high effectiveness and feasibility ratings. Local school staff also reported the Tier 3 Wraparound readiness inventory was very helpful as an implementation

support. These findings indicate their potential for understanding adequacy of supports at the building and district levels. Similarly, the high ratings for the Wraparound Integrity Tool, a fidelity measure,⁵³ support its use for measurement at the student or team level. Such tools can be administered by external experts as part of coaching or self-administered to examine areas of needed development and track improvements in these areas.

Although measures of practice fidelity were reviewed favorably, advisors indicated the Wraparound measures designed to standardize educational data and functioning across home, school, and community contexts may be too lengthy and rigid to be feasible and effective in schools. Advisors recommended having more flexibility for schools to use data tools individualized for students and a better fit with existing data collection in schools.

Integrate Wraparound in Schools Within School Systems

With feasibility as a primary concern raised by both expert advisors and local school personnel, it is not surprising a strong theme emerged for thorough integration of WIS within school systems. Top recommendations from the NGP included incorporating FBA within WIS, aligning the roll out of WIS team planning with the school calendar, and ensuring the same school-level team oversees all Tier 3 supports, including WIS. These recommendations align with literature promoting Wraparound as a Tier 3 intervention within schools implementing PBIS^{61,22} and should be viewed as high priorities for schools and districts seeking to implement a variant of Wraparound for students with SEBC.

However, given the low rate of Wraparound use in schools³³ and concerns about feasibility (by advisors in Study 1 and school personnel in Study 2), integrating Wraparound within schools is not straightforward. In addition to specific strategies, experts recommended careful consideration of the scope of WIS systems, practices, and data compared with community-based Wraparound. For example, some questioned whether a school-based Wraparound model can feasibly address home and community functioning, even though family and

community stressors can influence classroom behavior and academic success.

This tension between effective, model adherent Wraparound and feasibility for schools is likely a primary reason schools rarely lead Wraparound efforts and that there currently are no published, rigorous studies of Wraparound in schools. Notably, other evidence-based, ecologically focused models that aim to address family stressors on student behavior and achievement tend to require less intensive follow-up than Wraparound. The Family Check-Up (FCU), for example, requires an interview, assessment, and feedback session. However, unlike Wraparound, which expects regular meetings and monitoring until measurable progress is achieved, the FCU only expects annual follow-up.⁶²

Support Care Coordinators Responsible for Facilitating Wraparound in Schools

The role of the facilitator – and the training and support these individuals receive – represented another major theme. Experts and schools alike expressed concerns about who would be able to provide this type and intensity of support to students and their families. To address, participants emphasized the importance of allowing schools to customize how they staffed and supported these positions. This fits with findings that training and consultation supports for personnel were rated among the most promising school implementation strategies^{58,59} as well as a major focus of existing school-based Wraparound initiatives, such the Midwest and Vermont PBIS networks that contributed resources reviewed in Study 1.

Focus on Students, Families and Culture

While participants noted the need for flexibility in implementing Wraparound in schools, several consistent care principles were noted. National and local experts emphasized focusing on needs and perspectives of students and families. Specific recommendations included identifying a small number of priority needs for each student and individualization of progress monitoring. Similarly, a theme emerging across all three domains in the expert advisor results was a need for consideration of

the student and family's culture. Specific feedback included reinforcing Wraparound focus on cultural competence, adapting measures to use culturally inclusive language, and considering mental health needs beyond behavior problems.

Coordinate Support Across Home, School and Community

Despite the many concerns raised about the feasibility of schools implementing a comprehensive model like WIS, feedback across studies underscored the importance of this work. In Study 1, advisors rated nearly half of the resources as potentially effective for achieving positive outcomes for students with SEBC. In Study 2, the highest rated domain from the assessment of feasibility and satisfaction with local schools was the belief that WIS would benefit students, despite feasibility concerns. As described by Yu et al.,⁶³ "schools in the USA have historically been disconnected from community-based programs and services" (p. 155). Indeed, even when community-based Wraparound initiatives are available to students, they are often challenged to include members of local school district teams in cross-agency planning, engage school staff in planning for specific students, or include strategies that address youths' education needs.³³ Much of this disconnect stems from the challenge of aligning eligibility criteria, legal requirements, funding, and staffing across school and community. If WIS can be developed in a way that is feasible for schools, it holds potential to fill an important gap in a school or district's continuum of tiered supports.²²

Limitations

This effort to guide development of a set of materials for a pilot test of school-based Wraparound yielded rich and actionable results for the team's purposes of developing materials for subsequent testing. However, limitations may constrain its generalizability as a research study. For example, while the research team worked with advisors to identify salient documents for review and to stimulate recommendations, procedures necessarily had to be selective to keep the scope of review manageable for experts. Certainly, additional resources from across community services and education could have been

included in the review. In addition, the number of expert advisors, schools, and school personnel was modest. Schools were self-selected and from a single region of one state and thus not likely to be broadly generalizable. Nonetheless, demographics of these schools were comparable with elementary schools in Washington and their level of PBIS implementation readiness as assessed by the TFI was typical as per published studies.⁶⁴ Finally, while qualitative analyses included some credibility checks, we did not calculate intercoder agreement or conduct individual member checking.

Conclusion

Many students with SEBC require comprehensive and coordinated supports across home, school, and community to succeed in school and in life. Wraparound has been promoted for decades as a family-focused, team-based, and culturally competent model for meeting this need. Its implementation has spread widely across the United States but has seen the least uptake and research in schools. This initial effort to gain structured feedback and shape tools and resources aims to be the first step to addressing this longstanding gap in the evidence base. Even more critically, we aim to close the gap between the widely promoted idea of Wraparound as a Tier 3 intervention⁶⁵ and the reality of what is feasible for and contextually fit to schools. The project will be followed by rigorous evaluation of implementation and outcomes to provide a true test of the feasibility and effectiveness of a fully explicated WIS model.

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