Social Influencers of Health and Education Needs Assessment:

A Pathway for School Health and Mental Health Professionals

August 2023

Introduction

Many K-12 school-based staff (school-employed and community partners) understand the connection between the health and well-being of students and their academic success.

They also appreciate that environmental, social, economic, and community factors can impact the experiences students have inside and outside of the classroom. Identifying, understanding, and addressing these social influencers of health and education (SIHE) is critical to help advance educational equity and to secure lifelong health and well-being for all students. Taking the SIHE into account can help advance school-, district-, and state-led activities and initiatives to support student health, mental health, and academic growth.

This guide provides resources that can be used by school-based health centers (SBHCs), comprehensive school mental health systems (CSMHSs), and school health and mental health providers to assess and address SIHE affecting students, their families, and communities so that students are healthy, safe, and ready to learn. This document serves as a "pathway" guide, with tools and practical strategies, for identifying root causes of identified or emerging problems. It also can assist with planning effective interventions to reduce social and environmental barriers to learning or enhance home and community strengths. The guide uses a public health approach to identify collective solutions to address community and population-based health and mental health challenges.

The SIHE Needs Assessment Pathway will lead teams through the following guideposts using the following step-by-step approach:

Guidepost I: Get Ready to Go!
- **Understanding the Path/Definitions**
- **Social Influencers of Health and Education (SIHE) Overview**

Guidepost II: Conduct a Needs Assessment
- **Step 1: Create a Planning Committee/Work Group.** Provides resources for engaging stakeholders, gives examples of potential stakeholders, and shares an example of a Committee Organization Chart.
- **Step 2: Gather Evidence.** Shares information about what data will help teams identify priority SIHE.
- **Step 3: Analyze the Evidence.** Guides teams as they seek to effectively use the evidence they have gathered.
- **Step 4: Brainstorm Contributing Factors.** Guides teams to collaboratively identify contributing factors so that root causes of SIHE can be understood.
- **Step 5: Get to a Root Cause.** Helps teams determine the root cause(s) of a SIHE using the Fishbone Diagram and the Five Whys.

Guidepost III: Take Action
- **Step 6: Integrate the MTSS Framework into Action Planning.** Introduces teams to the Multi-Tiered Systems of Support Framework used widely in schools for intervention planning.
- **Step 7: Communicate Your Stories.** Explains framing social change.

Conclusion
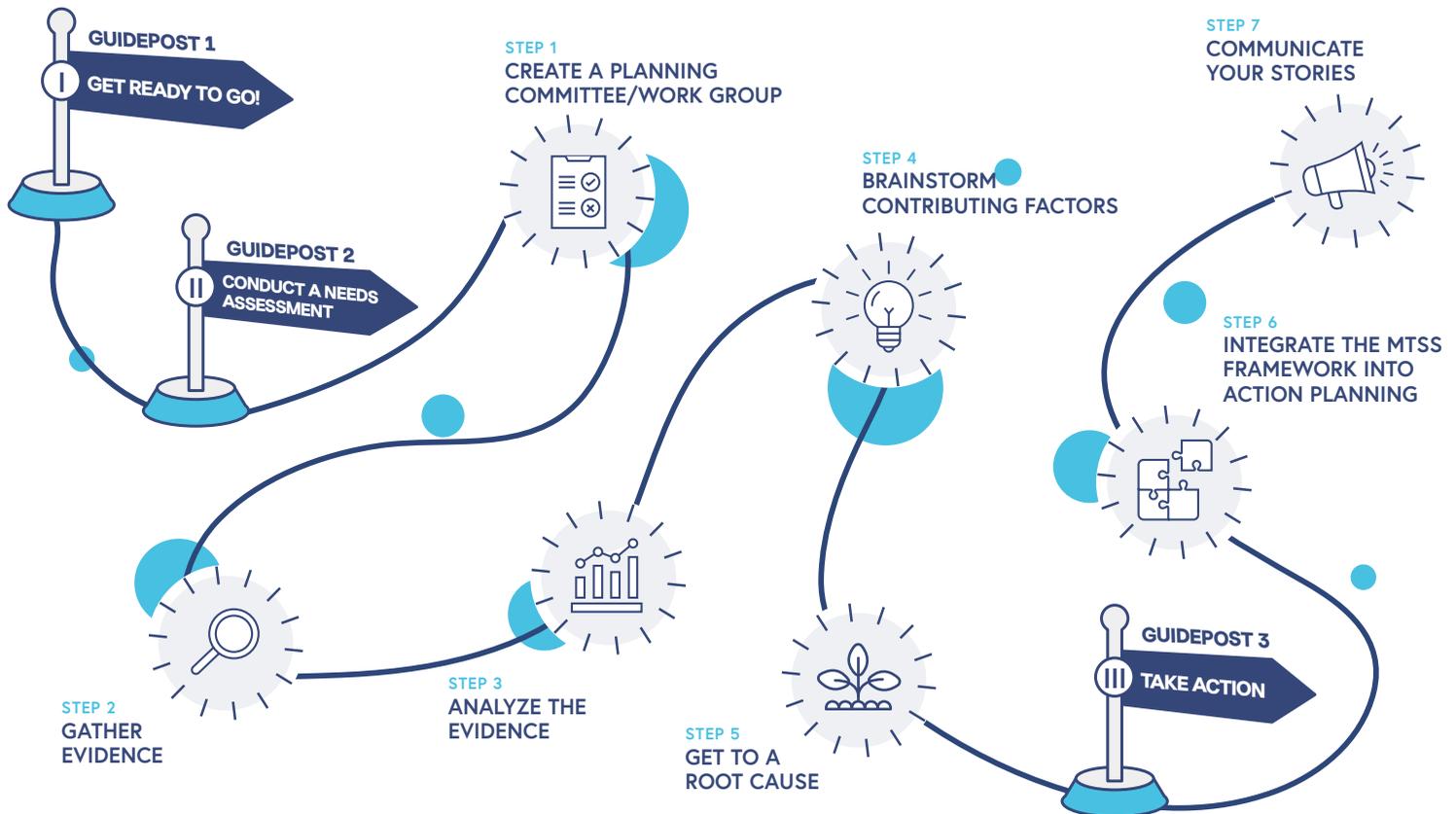
Guidepost I: Get Ready to Go!

Definitions

Community—_A group of people with diverse characteristics who are linked by social ties, share common perspectives, and engage in joint action in geographical locations or settings_ (MacQueen, 2001, p. 1929).

Educational Equity—_Educational equity means that each child receives what they need to develop to their full academic and social potential_ (National Equity Project, n.d.).

Health Equity—_Health equity means that everyone has a fair and just opportunity to be as healthy as possible. This requires removing obstacles to health such as poverty, discrimination, and their consequences, including powerlessness and lack of access to good jobs with fair pay, quality education and housing, safe environments, and health care_ (Braveman, 2017, p. 2).

Multi-Tiered System of Supports (MTSS)—_A three-tiered framework commonly used in schools to deliver evidence-based instructional, or behavioral intervention to students_ (Hoover et al., 2019).

Needs Assessment—_A needs assessment is a method of gathering evidence and analyzing data to help determine the needs of a community in order to be able to develop solutions to complex problems_ (Connecticut State Department of Education, 2023).

Root Cause—_Root cause is defined as the deepest underlying cause or causes of positive or negative outcomes within any process that, if dissolved, would eliminate or substantially reduce the outcome_ (Connecticut State Department of Education, 2023, p. 14).

Root Cause Analysis—_A tool designed to help identify not only what and how an event occurred, but also why it happened._ (Rooney and Vanden Heuvel, 2004, p. 45).
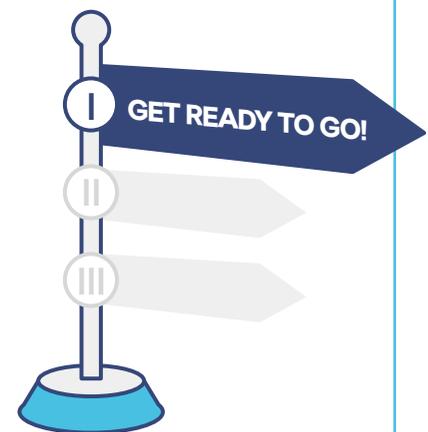
Social Influencers of Health and Education (SIHE)—_The social and environmental factors that affect the growth, development, and well-being of school-aged children, youth, and their families. Examples of SIHE include housing instability and homelessness, community violence, parental unemployment or underemployment, food insecurity, trauma and adverse childhood experiences, poor access to services and support, and unsafe or inadequate physical space_ (Center for Health and Health Care in Schools [CHHCS] et al., 2020, p. 1).

WHAT ARE SOCIAL INFLUENCERS OF HEALTH AND EDUCATION (SIHE)?

SIHE are rooted in the social determinants of health (SDOH), which are "the characteristics in a child's surroundings that affect a wide range of health, functioning, prevalence of risks, and quality of life outcomes" (CHHCS et al., 2020, p. 1).

Examples of SIHE that may influence health and education include housing instability and homelessness, community violence, parental unemployment or under-employment, food insecurity, trauma and adverse childhood experiences, poor access to services and support and unsafe or inadequate physical space. SIHE, however, also highlights the potential for positive change and considers the social and environmental factors that affect the positive growth, development, and well-being of school-aged children, youth, and their families. School and community belonging, social support, strong ethnic identity are examples of SIHE protective factors (CHHCS et al., 2020).

> **More information about the SIHE can be found in the brief, _Understanding Social Influencers of Health and Education: A Role for School-Based Health Centers and Comprehensive School Mental Health Systems_ (CHHCS et al., 2020).**

Research has demonstrated the impact that SIHE can have on academic outcomes for students (American Public Health Association, 2019). Indeed, unaddressed negative SIHE "can increase behavioral or emotional difficulties, which in turn can shape both the short- and long-term path for children and adolescents" (CHHCS et al., 2020, p. 2). Having negative SIHE can also lead to poor health and decreased academic success (CHHCS et al., 2020; National Academies of Sciences, Engineering, and Medicine, 2017). These social influencers are complex and persistent and require a comprehensive set of integrated approaches and interventions.

To advance equity in education and health, it is essential to identify SIHE that may be contributing to preventable disparities. The education sector cannot address SIHE alone. School-based health centers (SBHCs) and comprehensive school mental health systems (CSMHSs) are well-positioned to conduct assessments and interventions that address the SIHE. Key collaborators in this work may include school student support staff (e.g., social workers, mental health specialists, school counselors, school psychologists, school nurses), school administrators, educators, students, families, local and state policymakers, and community partners (local agencies, organizations or programs working in or out of schools) (CHHCS et al., 2021a).

Comprehensive school mental health systems provide an array of supports and services that promote positive school climate, social and emotional learning, and mental health and well-being, while reducing the prevalence and severity of mental illness. These systems are built on a strong foundation of district and school professionals, including administrators, educators and specialized instructional support personnel (e.g., school psychologists, school social workers, school counselors, school nurses and other school health professionals), all in strategic partnership with students and families, as well as community health and mental health partners (Hoover et al., 2019, p. 13).

A **school-based health center (SBHC)** represents a shared commitment between a community's schools and healthcare organizations to support the health, well-being, and academic success of its students. For the schools' part, facilities, and utilities are donated and school and district policies facilitate students' enrollment and utilization. Local health organizations apply school expertise and linkages to an array of services—medical, behavioral health services, oral health care, nutrition services, vision services, and health promotion—that enable children and adolescents to thrive in the classroom and beyond. The ultimate goal of the partnership is to create a culture of health within the school community (School-based Health Alliance, 2022).

Guidepost II: Conducting a Needs Assessment

"If we engage in careful examination of quantitative and qualitative data to determine the most significant challenges to students' success, and we further consider the factors contributing to the challenge and identify root causes, then we can develop action steps to address root causes and implement change that will lead to equitable, improved student outcomes" **(Connecticut State Department of Education, 2023, p.3).**

When schools are not meeting their objectives to reach all students and ensure their learning, concerns arise. The identification of challenges and struggles may come from many different sources, and it is important to gather these pieces of evidence in an organized and comprehensive manner. The needs assessment provides the structure for this analysis.

A needs assessment is an important first step to identify specific and measurable goals to address community needs that may impact health and education, as well as leverage community assets to improve conditions connected to SIHE. Needs assessments identify the strengths and resources available in the community to meet the needs of children, youth, and families; they focus on the capacity and capabilities of the community. Needs assessments provide a framework for developing and identifying services and solutions and guiding communities that support and nurture children and
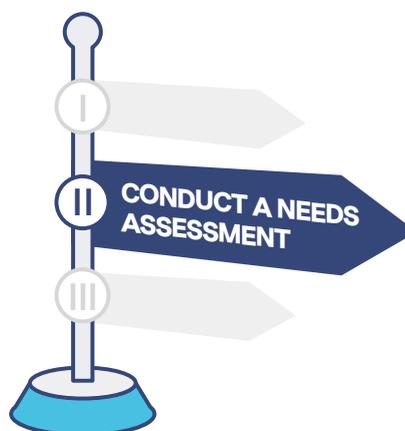
families. Conducting regular needs assessments are part of continuous improvement and planning processes.

Needs Assessment Planning

The following resources provide an overview of the needs assessment process. The Connecticut State Department of Education's (CSDE) resource, *Needs Assessment Toolkit Including Root Cause Analysis*, can help guide the assessment and interventions for addressing SIHE in school communities. The CSDE Cycle for Continuous Improvement outlines a process that aligns well with community health assessments (CSDE, 2023).

The *School Mental Health Quality Guide*, developed by the National Center for School Mental Health (NCSMH) at the University of Maryland School of Medicine, is a detailed resource to support a strong needs assessment and resource mapping process. This document identifies the best practices for assessing student mental health needs and strengths, and provides relevant guidance for all sectors seeking to address SIHE in schools and communities (NCSMH, 2020).

CREATE A PLANNING COMMITTEE/WORK GROUP

Pulling together a planning committee to organize the needs assessment process is a critical first step to address an SIHE that may affect schools and communities. A planning or school improvement team may already exist, or the needs assessment functions may be integrated into another relevant team. It is important to ensure that a broad and representative array of stakeholders are represented in this planning process.

The CDC's *Community Needs Assessment* (CDC, 2013) provides an overview for developing a community needs assessment and contains information applicable to working on assessments within school communities. This guide emphasizes the importance of assembling a team with representation from diverse members of the community. Examples of partners include faith leaders, community health workers, local health practitioners, and school/civic leaders (CDC, 2013).

Example 1 identifies some potential key stakeholders to consider in school community assessment planning.

EXAMPLE 1

Stakeholders

Various stakeholders bring unique value to the needs assessment and planning process, and may include:

Families/parents/caregivers,
are positioned to help interpret community data, provide insight to the challenges and strengths of the community, assess the relevance of proposed solutions, and serve as champions and ambassadors for the solutions with other families. (Resource: CDC Parent Engagement in Schools)

Community partners,
such as sponsors of SBHCs, community mental health providers, and community coalitions, can inform educators and provide needed supports for students and families. (Resource: National Center on Safe Supportive Learning Environments)

Students
are critical partners in any initiative to change the systems that affect their learning experiences and positive well-being. Engagement strategies include opportunities for youth voice and input. (Resource: CASEL Strategies for Elevating Student Voice)

School support personnel (social worker, counselor, school nurse), school leadership and possibly even school board members
are the internal backbone of school support services for all students. (Resource: NASBE How Schools Work & How to Work With Schools)

Adapted from: (CSDE, 2023)

One barrier to effective engagement of and collaboration with diverse stakeholders, including families and caregivers, is implicit bias, which can be defined as *"unconscious bias, involving thoughts and attitudes that we hold toward others that are not intentional. Implicit bias includes stereotypes and attitudes that can affect our perceptions, actions, and decisions. The contributing factors of implicit bias within a school setting may be influenced by how the different actors within a school view particular families or students"* (CHHCS, 2021,

p. 1). See *Addressing Implicit Bias: A Barrier to Family Engagement* for more information about implicit bias and tips for decreasing the negative impact of implicit bias.

Resources for Engaging Stakeholders

- **Community Needs Assessment**
- **Community Engagement Toolkit**
- **Fillable Committee Organization Chart**

"Including stakeholders in the planning process who are directly impacted by the challenges, is more likely to produce a plan that speaks to the needs of all stakeholders in the learning community."

(CSDE, 2023, p. 4)

STEP 2
GATHER EVIDENCE: WHAT DATA WILL HELP US IDENTIFY PRIORITY SIHE?

Next, gather the evidence that will help the planning team identify the priority SIHE and effective strategies to address these indicators. Developing an understanding of the strengths and assets within a school community can provide the team with a positive foundation for addressing SIHE. Sources of evidence available from schools can include descriptive data, which can help teams appreciate or fully understand who is in the school community and the unique strengths and assets of the school community.

More information about assessing SIHE with examples of screening and surveillance tools can be found in the brief, *Assessing Social Influencers of Health and Education* (CHHCS et al., 2021b).

Many schools routinely collect demographic, perception, educational, and process data that could be useful to the needs assessment process. Perception data may come from student and caregiver surveys, mental health surveys, developmental asset surveys, school culture and climate surveys, observations, and focus groups. Educational data may include formative and state assessments and other academic performance data. Process data may come from academic initiatives, equity assessments, culture and climate initiatives, family and community events and communication (CSDE, 2023).

Examples of specific sources of evidence are available in Table 1.

TABLE 1

Sources of Evidence

Data Source	Where to Find
Enrollment data, race/ethnicity, gender, grade level, English language learners, special education, graduation rates	School and district profiles (available by district and USDOE OCR website)
School health data including chronic conditions, hearing and vision screenings, BMI data, communicable disease data, health room visits	School health records, electronic health records
Attendance	School district records (available by school and district and on USDOE OCR website)
Student, family, and staff surveys	School district data coordinator or Department of Education public website
Youth Risk Behavior Surveillance System (YRBSS)	The YRBSS is a set of surveys that track behaviors that can lead to poor health in students grades nine through 12. This survey is conducted periodically in many localities and aggregate data is available from the CDC
SBHC records	Aggregate health records, immunization rates, enrollment, patient experience surveys
Mental health data from service providers	Aggregate and subgroup health data
Community health and wellness data	State and local health departments, community services boards
County health rankings	County Health Rankings website

Adapted from: (CSDE, 2023)

ANALYZE THE EVIDENCE:
HOW DO WE EFFECTIVELY USE DATA TO IDENTIFY PRIORITY SIHE?

The next step in the needs assessment process is to examine the data and determine the strengths and assets, needs, and opportunities for growth. Data should be disaggregated by demographics (e.g., race/ethnicity, socioeconomic status, gender) to ensure equity and representation of all student groups. This process provides an opportunity to look for themes, trends, patterns, and inconsistencies (CSDE, 2023).

CSDE provides a list of questions that can facilitate understanding of data and identify trends and causes. For example:

- *How has the data changed over time?*
- *What clues help explain why a certain population is meeting or missing targets?*
- *What areas in the data stand out as needing further explanation?*
- *What patterns or themes do we see in our observations?*
- *Which of these observations are most relevant and important to our inquiry?*
- *Based on our observations, what do we know now?* (CSDE, 2023, p. 10)

These types of prompts can help ensure that the team has the data needed to answer key questions and whether more data are needed (CSDE, 2023).

EXAMPLE 2

Analyzing the Evidence

A needs assessment planning team at a high school is working with a mental health provider from a mental health department to identify evidence pertaining to student substance use and self-harm behaviors. The team includes parents and students, who provide valuable context about the lived experience of members of the community, as well as a local community leader. Using data from the YRBSS for their high school, they note a 12% increase in the number of students who indicate that they have seriously considered attempting suicide. Additionally, school discipline data show a 50% increase in the number of students with violations of the school's substance use policy. The team is concerned about the increase in both metrics and possible connections between substance use and mental health disorders in their student population. This analysis will be discussed as part of their brainstorming process to identify potential root causes of these problems.

BRAINSTORM CONTRIBUTING FACTORS AND ROOT CAUSES OF SIHE

Understanding the difference between root causes and contributing factors is an important part of root cause analysis. For the purposes of this guide, contributing factors are all of the conditions that affect a situation and the root cause is that central explanation for the condition. See Table 2 for further description of these two terms.

The next step in the process involves brainstorming contributing factors. Individuals bring unique experiences and biases to discussions and it is important to avoid judgment during the brainstorming process. A diverse team can help ensure that many perspectives are considered while assessing the data and defining the problem. Brainstorming can help identify possible factors that may be contributing to a problem (CSDE, 2023).

CSDE offers the following guidance for brainstorming:

1 Defer judgment.

2 Encourage wild ideas.

3 Build on the ideas of others.

4 Stay focused on the topic.

5 One conversation at a time.

6 Be visual.

7 Go for quantity.

Resources for Brainstorming Contributing Factors with a Team

- **Borrowing a Powerful Brainstorm from IDEO**
- **Brainstorm Contributing Factors**
- **The Stepladder Technique: Making Better Group Decisions**

TABLE 2

The Relationship Between Contributing Factors and Root Causes

Contributing Factors	Root Causes
Not root causes but conditions that affect or influence a situation	Central underlying system or process issues that explain a situation
One of several factors that influence a situation	The main reason for the situation
Help to identify root causes	Addressing can help eliminate the problem

(CMS, n.d.)

GET TO A ROOT CAUSE

The fifth step in developing a needs assessment is to get to a root cause. Root causes are "the deepest underlying causes of positive or negative outcomes within any process that, if dissolved, would eliminate or substantially reduce the outcome" (CSDE, 2023, p. 14)

Root cause analysis refers to "a tool designed to help identify not only what and how an event occurred, but also why it happened" (Rooney and Vanden Heuvel, 2004, p. 45). Root causes can be divided into levels of cause:

- **Incident or Procedural Level** (e.g., a student has been found to be abusing substances)
- **Programmatic or Process Level** (e.g., 10 students in this class have been found to be abusing substances)
- **Systemic Level** (e.g., 45% of high school students report using marijuana in the past three months)
- **External Level** (e.g., substance abuse in the community has increased 60% in the past three years) (Pruess, 2013, pp. 9-11)

Root Cause Analysis Tools

Complex social issues often have multiple interrelated causes, so the root cause analysis can help to prioritize one or two of several root causes that are actionable. Teams can use several tools to conduct a root cause analysis, including Fishbone Diagram and The Five Whys, described below.

FIGURE 1

Root Cause Criteria

Would the problem have occurred if the cause had not been present?

- If **no,** then it is a **root cause.**
- If **yes,** then it is a **contributory cause.**

Will the problem reoccur as the result of the same cause if the cause is corrected or dissolved?

- If **no,** then it is a **root cause.**
- If **yes,** then it is a **contributory cause.**

Will the correction or dissolution of the cause lead to similar events?

- If **no,** then it is a **root cause.**
- If **yes,** then it is a contributory **cause.**

(Pruess, 2013, pp. 9-11)

The *Fishbone Diagram* can help identify contributing factors, which can help teams also get to the root cause(s). Some of the factors identified may not be root causes, but rather contributing factors. In determining root causes, planning teams can help to differentiate whether a concern is a contributory or root cause by asking the questions in Figure 1 (Pruess, 2013).

Figure 2 shows a graphic depiction of the process of verifying whether a cause is contributory or root. More root cause analysis resources can be found in Appendix A.

FIGURE 2

Root Cause Strategies: Verifying a Root Cause
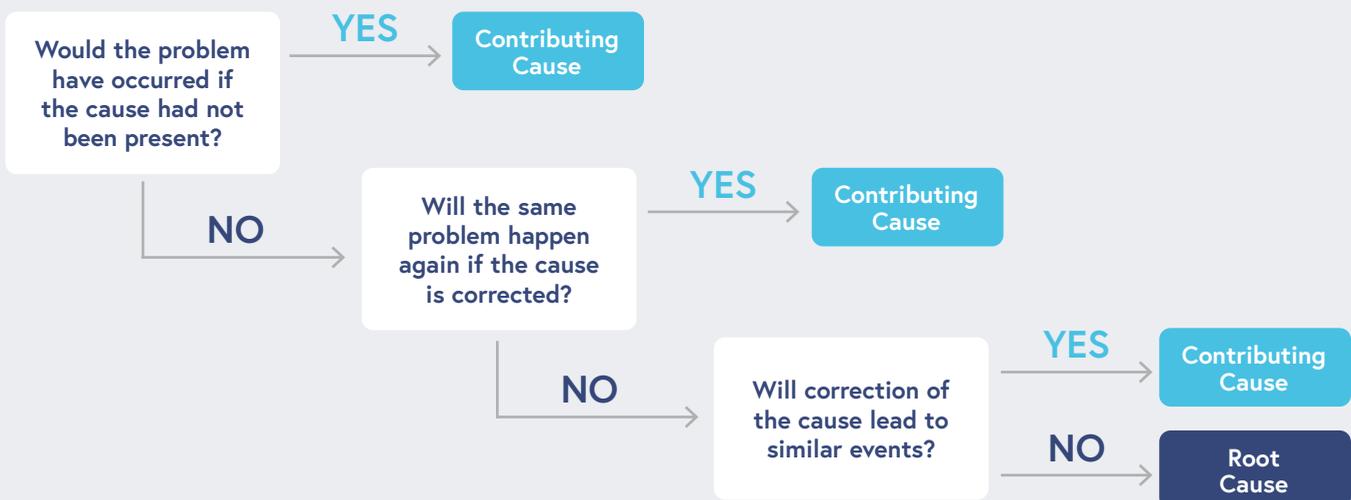
(CSDE, 2023)

Once a team has identified a concern, the Fishbone Diagram, can help to hone in on actionable root causes, following these steps:

1. **Input the effect you would like to influence.** The box at the right of the diagram holds the brief description of the problem/concern.

2. **Input categories of effects.** Teams can choose appropriate categories for their analysis or choose those used in Figure 3.

3. **Input causes under each category.** Teams can identify any contributing factors before analyzing which ones may be root causes.

Teams can then deliberate to determine if each contributory cause is measurable and if there is data to support and prove that the cause can be impacted by actions taken at the building, district or state levels.

A Fishbone Diagram is a tool to outline the initial steps a team would take to conduct a root cause analysis. Teams would then need to discern which of the causes are contributory and which are root using the questions in Figure 1 to guide their discussion.

Figure 3 shows an example of a team's deliberations using a Fishbone Diagram. Here the team was exploring the causes of increased dysregulated behavior and anxiety in young children. The team brainstormed and grouped possible causes for the children's behavior under each category; resources, skills/knowledge, measures, environment, and processes. They then consulted data available to the team and asked themselves questions to determine if each was likely a contributory or root cause.

FIGURE 3

Root Cause Criteria

Template: Cause and Effect Diagram

Team: Sample Team **Project**: Improving Difficult Behaviors in Young Children

1) Input the effect you'd like to influence.
2) Input categories of causes for the effect (or keep the classic five).
3) Input causes within each category.

Resources
- Limited time available to attend to the increased needs of students
- Competing demands of school staff

Skills/Knowledge
- Young students missed basic skill evelopment durinig the Pandemic
- Some young students have difficluty regulating emotions
- Teachers do not know how to manage these behaviors
- Parents lack an understanding of mental health and how to help their children

Increased dysregulated behavior and anxiety in K-2 students causing missed seat time and stress on school resources

Measures
- Increased somatization/visits to the school nurse
- Increased absenteeism
- Increased referrals to School Support Team

Environment
- Increased number of substitute teachers
- High levels of staff stress
- Lack of a conistent schedule for students

Processes
- Inadequate data being collected at the school level
- More referrals are happening for outward behaviors
- Schools are engaging in reactive responses
- School support teams are asking for health

(IHI, 2023)

Figure 4 shows a Fishbone Diagram with the identified concern of "Increased number of students being referred for opioid and other substance abuse this year." Here, the team identified many potential contributing factors and several potential root causes. In this case, the team might decide that although they cannot affect some of the environmental causes of the concern, they do have the capacity to address skills and knowledge or treatment resources. Teams will need to conduct a careful analysis of what is possible given the resources available to them.

FIGURE 4

Root Cause Criteria

Template: Cause and Effect Diagram

Team: Sample Team   Project: Addressing Opioid Substance Abuse in Students

1) Input the effect you'd like to influence.
2) Input categories of causes for the effect (or keep the classic five).
3) Input causes within each category.
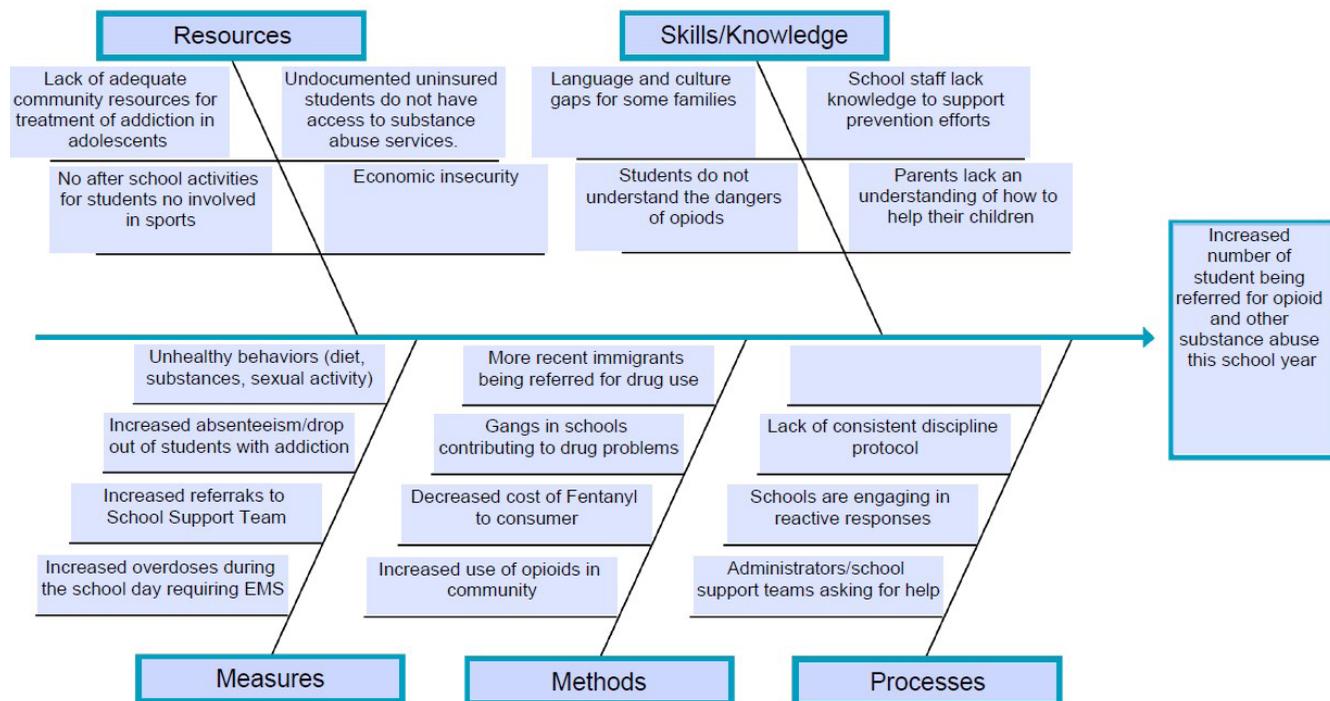
(IHI, 2023)

In the example root cause analysis found in Figure 4, the team asked the following questions about a few of the identified causes on the Fishbone Diagram.

Looking at the identified cause "Economic insecurity," they asked the following questions:
- Would the problem have occurred if the cause had not been present? *Yes "Economic insecurity" is a Contributory Cause*

Looking at the identified cause "Unhealthy behaviors," they asked:
- Would the problem have occurred if the cause had not been present? *No*

- Would the problem recur as the result of the same cause if the cause is corrected or dissolved? *No*

- Will the correction or dissolution of the cause lead to similar events? *No "Unhealthy behaviors" is a Root Cause*

Looking at the identified cause, "Gangs in schools contributing to drug problem," they asked:
- Will the correction or dissolution of the cause lead to similar events? *No "Gangs in schools contributing to drug problem" is a Root Cause*

The Five Whys

The Five Whys is another tool teams can use to identify the root cause(s) of a problem. This tool can be used alone or in conjunction with the *Fishbone Diagram* to better understand factors contributing to the problem.

To use this tool, teams follow these steps after identifying the problem:

1

Put the identified problem at the top of the worksheet.

2

Ask "why" in response to each prompt. It is important to document each reason with supporting data.

3

Continue asking "why" until you reach a fundamental root cause, which the team believes is in their control to address. Each answer builds on the previous "why."

4

Go back to the previous answer if an answer is something that the team can't impact.

5

The final identified root cause cannot be attributed to an individual.

(Vermont Agency of Education, 2020, p. 32)

EXAMPLE 3

Using the Five Whys Tool

A community mental health provider who serves in a busy, urban K-5 school has been receiving more referrals from school staff for young children with very dysregulated behavior. The provider has wondered if perhaps the SIHE of community trauma from the recent isolation of the pandemic has contributed to these behaviors. She wonders if this isolation is a contributing factor or a root cause of the concern. The school social worker has shared that some students with dysregulated behavior are spending much of their school day separated from their educational experience due to disruptive behavior or anxiety. The social worker has been working with one parent who has some unique perspectives on this concern and would like to be a part of improving the emotional health of these children. The mental health provider decides to call a work group together, including this parent, the social worker, and other key stakeholders, to conduct a needs assessment. After discussing the problem, learning more about the context of the lives of families with young children, reviewing data, including the discipline referrals for students in grades K through second grade, the team decides to dig deeper and conduct a root cause analysis.

First, they used the *Fishbone Diagram* and they went deeper using the *Five Whys*, focusing on the skills and knowledge of teachers and parents. The problem was identified as *"More K-2 students are experiencing dysregulated behavior and anxiety in district elementary schools causing loss of educational time and stress on the school staff."* After going through the *Five Whys*, the team identified that the pandemic isolation was a contributing factor to the root cause of *"There is a lack of resources and support for teachers and parents in how to manage dysregulated behavior in young children."* As a result of this needs assessment, the school mental health worker created a community mental health collaborative to develop an education and support program for teachers and parents to give them the knowledge they need to assist children with dysregulated behavior. They additionally suggested ways that the school district could begin collecting more accurate and comprehensive data about dysregulated behavior. The school nurse and counselor also developed an anxiety intervention protocol to help students identify and self-manage anxiety.

Figures 5 and 6 below are examples of using *The Five Whys*. The template in Figure 6 includes both identifying the root cause and corrective actions to take to address the cause.

FIGURE 5.

The Five Whys Worksheet

Problem of Practice: More K-2 students are experiencing dysregulated behavior and anxiety in district elementary schools causing loss of educational time and stress on the school staff.

Why is it happening?

1. Some students lack the skills to regulate their emotions.	**How do you know?** *Supporting Data:* Discipline referrals to school administrators and social workers have increased 150% since 2019.

Why is that?

2. During the Pandemic, young students missed fundamental social skill development.	**How do you know?** *Supporting Data:* Students participated in virtual learning for 120 days during the 2021-2022 school year. Additionally, preschools were shuttered during this time resulting in fewer opportunities for young children to gain social skills at school.

Why is that?

3. Teachers and parents struggle to know how to manage dysregulated behaviors in young children.	**How do you know?** *Supporting Data:* Parent and teacher survey showed that 75% of parents and 79% of teachers struggle to manage behavior in young children.

Why is that?

4. There are more children with more dysregulated behaviors than seen previously.	**How do you know?** *Supporting Data:* Discipline referrals

Why is that?

5. There is a lack of resources and support for teachers and parents in how to manage dysregulated behavior in young children.	**How do you know?** *Supporting Data:* Parent and teacher survey showed that parents and teachers do not know where to turn for help.

Identified Root Cause: There is a lack of resources and support for teachers and parents in how to manage dysregulated behavior in young children.

(Vermont Agency of Education, 2020)

FIGURE 6

5 WHYs TEMPLATE

The Five Whys Template

smartsheet

DEFINE THE PROBLEM	Define problem here

PRIMARY CAUSE

Why is it happening?

1 It is happening because

Why is that?

2 It is happening because

WHY IS THIS A PROBLEM?

Why is that?

3 It is happening because

Why is that?

4 It is happening because

NOTE: If the final "Why" has no controllable solution, return to the previous "Why."

Why is that?   **ROOT CAUSE**

5 It is happening because

CORRECTIVE ACTION TO TAKE

CORRECTIVE ACTION

Describe action here

PARTY RESPONSIBLE

DATE ACTION TO BEGIN

DATE TO COMPLETE

(Smartsheet, n.d.)

Guidepost III: Taking Action

The third guidepost is taking action on priority causes identified through the root cause analysis.

As described above, not all root causes are actionable and teams will need to identify the root cause(s) that they have the capacity to change or improve.

During this step, teams identify evidence-based or best practice strategies to address the root cause(s) and develop specific goals to realize change in the root cause. The CDC has provided examples of evidence-based student health promotion strategies that align with the WSCC framework (Figure 7). This resource includes interventions that are school-based and community-based, as well as examples of advocacy and strategies for local and state governments. It serves as a good reference for teams as they begin planning effective interventions. Figure 8 summarizes some of these strategies (CDC, 2019).

The Centers for Disease Control and Prevention's (CDC) Whole School, Whole Community, Whole Child (WSCC) model (Figure 7) provides a framework for visually depicting the collaboration needed to address the health needs of the student. Collaboration between schools and community resources are key in this framework (CDC, 2019). The components of the WSCC model can provide support to address the cognitive, physical, social, and emotional development of students (CDC, 2023). The social influencers can shape the scope and nature of the interventions by the different contributors within the WSCC model and also help to align SIHE interventions toward a common goal of strengthening the social and educational environment of students.

TAKE ACTION
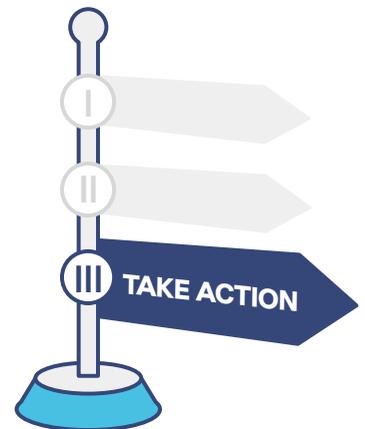
FIGURE 7

Whole School, Whole Community, Whole Child (WSCC) Model

FIGURE 8

CDC Framework Interventions (WSCC)

WSCC Component	School Health Services Strategies
Health Services	• Deliver clinical services to students with acute and chronic health conditions. • Educate students and their caregivers about chronic conditions and coordinate care with external health care providers. • Train appropriate school staff on how to provide resources that support students with chronic health conditions.
Nutrition Environment and Services	• Provide options for children with special dietary needs, per federal regulations. • Help manage the nutritional needs of students with chronic health conditions, including food allergies and diabetes. • Refer students to community-based health care providers and healthy eating services.
Physical Education & Physical Activity	• Encourage all students to participate in physical activity, regardless of ability, unless health conditions prevent it. • Ensure access to free drinking water in the gym and other physical activity areas.
Health Education	• Make sure that students get a comprehensive health education that includes information on common chronic health conditions. • Use CDC's Health Education Curriculum Analysis Tool to help improve the delivery of health education.
Community Involvement	• Involve local hospitals, health care plans, health departments, school-based and community health centers, and other health organizations in school health initiatives. • Connect with out-of-school programs about access to health services and students with chronic health conditions.
Family Engagement	• Give parents opportunities to learn about chronic health conditions and school health services. • Encourage families to participate in school-based programs and activities that promote health behaviors.

(CDC, 2019)

INTEGRATE THE MTSS FRAMEWORK INTO ACTION PLANNING

The Multi-Tiered System of Supports (MTSS) framework provides a structure for schools and community partners working in schools to implement integrated interventions based on the level of student need. This framework aligns with the intervention structure already in place in many schools and school districts.

More information about understanding how to use the MTSS framework to address SIHE interventions can be found in the brief, _Addressing Social Influencers of Health and Education Using a Multi-Tiered System of Supports Framework_ (CHHCS et al., 2021a).

COMMUNICATE YOUR STORIES: FRAMING SOCIAL CHANGE WORK

> _"Framing is about the choices we make in what we say, how we say it, what we emphasize, and what we leave unsaid, and how these choices shape how people think, feel, and act."_
> **(FrameWorks Institute, 2020a)**

Teams need to think about the way they are framing the SIHE, root causes, and potential interventions to facilitate desired changes, such as gaining support for an intervention or acquiring more funding. They should carefully consider how messages may vary by stakeholder and use these varying perspectives to help frame the messages. Stakeholders may include students, parents, school boards, the public, city councils, and state legislatures. How stories are communicated affects how messages are heard and understood by each stakeholder group.

Framing the story of SIHE needs assessments and planned interventions gives teams an opportunity to ensure that the messaging includes solutions, data, and effective visuals, and provides an alternative to "vulnerability" framing that focuses on deficiencies (FrameWorks Institute). A particularly helpful tool for developing this messaging is the FrameWorks Institute's Story Teller's Checklist (FrameWorks Institute, 2020b).

FrameWorks recommends "solutions-oriented framing." This hopeful mindset of framing concerns in terms of systemic solutions is critical to the effectiveness of messaging about the story one needs to tell. They write:

"When we balance urgency ('we can see a problem ahead') with efficacy ('there's a way to steer around it'), we offer people both a reason to engage in collective action and hope that it will work. As part of this balancing, it helps to adopt a "can-do" tone, and to offer concrete examples of the kinds of actions that will make a real difference." (FrameWorks Institute, 2020c)

FrameWorks offers guidance to teams including a series of videos that share specific framing tips to help advance their social change work. This resource is helpful for framing the problem and for telling the story of change that is realized. Included are lessons addressing:

- Leading with solutions
- Talking about data
- Alternatives to "vulnerability" framing
- Using visuals to spark big-picture thinking
- Telling more effective stories about the success of your social change work

> " When we change the story and how we tell it, we can change the world."
>
> (FrameWorks Institute, n.d.)

Conclusion

The SIHE Needs Assessment Pathway provides collaborative school and community teams the tools needed to better understand the role that SIHE play in the health, well-being and education of students.

Example 4 shares the story of how one team integrated the SIHE Needs Assessment Pathway to identify and impact oral health.

EXAMPLE 4

Addressing Oral Health Needs

Addressing SIHE can have a positive impact on the health and wellness of school-aged youth. An example of how a collaborative team that addressed poor access to oral health services in their school community is an example of positive impact:

The school nurse at Jones Elementary School asked the nurse practitioner (NP) in the school's SBHC to conduct a physical examination for a kindergarten student referred by his teacher for a special education evaluation based on suspected ADHD indicated by an inability to sit still. During the examination, the NP found massive unaddressed dental caries. The student had never been to a dentist and his mother reported difficulty providing transportation and taking time off work. The NP referred the student to a pediatric endodontist for remediation and the school social worker arranged transportation. After receiving oral health services, the student no longer experienced distraction, and the teacher withdrew the referral for special education evaluation.

This experience made the NP and school nurse wonder if other students at the school and in the district had significant unmet oral health needs. They assembled a team of school staff (including the school nurse, school social worker, school administrator), additional SBHC staff, community oral health providers, and a parent to plan a needs assessment. The team also engaged the state health department's oral health coordinator in their planning. The school nurse conducted an oral health screening program to gather more data about the oral health of the students at Jones Elementary. The screening identified that 29% of the students screened had unmet oral health needs. About 80% of these students had never received oral health services. A review of the community resources revealed no dentists in town accepted public insurance and the closest sliding-scale dental clinic was 20 miles away. The team also collected information on the percentage of the school population eligible for free and reduced lunch and the number of students who were insured, uninsured, and eligible for Medicaid. This information helped the team identify available and nonexistent resources in the school community. The school team developed a plan to bring oral health services to the school. The local Federally Qualified Health Center (FQHC) that managed the SBHC added oral health care to its services and began providing oral health services in the school twice weekly.

In the first year, 200 students received oral health care they may not have otherwise accessed. During this time, the SBHC oral health care team applied 1,600 sealants and repaired 500 cavities. Special education referrals also dropped 15% during this period. The program became a model for other schools in the district and after three years, all 10 elementary schools had access to school-based oral health services.

The state oral health coordinator brought the program data back to the state health department, which then conducted a survey to identify the availability of oral health services in all school communities in the state. Results from the state health department survey revealed that 10% of the school districts in the state did not have access to oral health services within a 15-mile radius of the school communities. These communities were targeted with a state program to provide financial incentives to oral health providers who relocated to underserved communities. This work, which started with one student, positively impacted the oral health of students across 15 school districts as they saw oral health providers moved into their communities as a result of the incentive program.

The guide provides suggestions for methods to identify, interpret, and prioritize root causes contributing to outcomes. Additionally, this document provides resources for the development and implementation of evidence-based strategies. By working together, schoolbased health centers (SBHCs), comprehensive school mental health systems (CSMHSs), and school health and mental health providers can identify and address SIHE in order to advance health equity and enhance health and education outcomes for all students and their families.

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Appendix A: Root Cause Analysis Resources

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For more information on SBHCs, CSMHSs, and how the education and health sectors can together address SIHE, visit: