

Making the Case for Linking SBHCs to Academic Success

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Introduction

- Why is this important?
- What is academic success?
- What does the research show?
- Why is this work so challenging?



Why Is This Important?

- Research shows that health impacts academic success:
 - Vision
 - Asthma
 - Teen pregnancy
 - Aggression and violence
 - Physical activity/Nutrition
 - Inattention and hyperactivity
 - Dental health
 - Substance Use
- Research shows that SBHCs impact health by:
 - Improving access to care
 - Improving health outcomes
 - Providing youth-friendly services that have high client satisfaction ratings
 - Are a cost-effective method of health care delivery

However, can we show that SBHCs directly impact academic success?

What is Academic Success?

- Improved attendance
- More time spent in the classroom
- Increased GPA
- Improved test scores
- Improved student behavior and decreased disciplinary referrals
- Reduced student mobility
- Lower dropout rates
- Improved school learning environment
- Higher graduation rates



What Does the Research Show?

Increased attendance

- ✗ Kisker (1996): Absences because of illness not significantly different between students with and without SBHCs.
- ✓ Gall (2000): Screening for mental health problems and referrals to appropriate services significantly reduced school absences and tardies.
- ✓ Webber et al (2003): Access to SBHCs for students with asthma was associated with reduction in rate of hospitalization and gain of 3 days of school.
- ✓ Walker (2009): SBHC use significantly associated with improved attendance, particularly among students who used medical services. *Effect sizes were largest for high risk youth and were relatively small.*

What Does the Research Show?

More time spent in the classroom

- ✓ Van Cura (2010): Students with access to an SBHC significantly less likely to be sent home during school day than those without access.

Improved grades

- ✓ Walker (2009): SBHC use significantly associated with GPA gains, particularly among mental health counseling users.

What Does the Research Show?

School Dropout/Progression

- ✗ Kisker (1996): Percent of students who progressed through school at expected pace significantly higher among those who went to a school with an SBHC, but the difference was small and the results were not reliable according to the authors.
- ✗ Kerns (2011): No impact on dropout rates for SBHC users and a group of non-users who were statistically controlled for dropout risk.

What Does the Research Show?

School Learning Environment

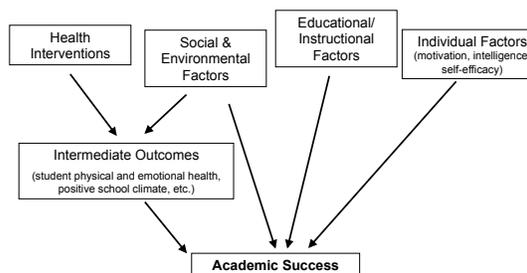
- ✓ Strolin-Goltzman (2011): Students in schools with SBHCs rated academic expectations and school engagement significantly higher than students without SBHCs, although no differences found in ratings of communication or safety and respect.
- ✓ Stone (2013): Wellness Center use positively related to student-reported caring relationships with SBHC staff and school assets. Strongest effects for frequent users.

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Challenges: Linking SBHCs & Academics

- **Study design factors can skew results**
 - Strive for large samples
 - Make surveys anonymous
- **Not all clients receive enough services to make a difference**
 - Include dosage in analysis
 - Focus on clients who receive high levels of service
- **Gaining access to data can be challenging**
 - Must adhere to HIPAA and FERPA
 - Often need data sharing agreements, legal counsel, compliance with various government regulations
- **Positive effects are not always found**
 - Consider focusing only on students at highest risk of academic failure who are provided with multiple, targeted interventions that address their risk factor(s)

Another challenge: Many factors impact academics success



Adapted from: Bruns E & Pullmann M. (2013). Connecting School Mental Health Programs to Academic Success: Using theory and research guide to us. Presentation to Annual Conference on Advancing School Mental Health; Model originally adapted from Geierstanger et al (2004)

Potential Strategies

- Seat Time Logs
- Stakeholder Surveys
- Interviews and Focus groups
- Existing School-Level Data
- Connecting SBHC and Academic Data for Individual Students

Can SBHCS make a difference with classroom instruction and school attendance?

#1: SEAT TIME LOGS



Strategy Overview

- SBHC staff log on an electronic or paper clinic encounter form what happens to students after their visits:
 - Sent back to class (or lunch/recess depending on time of day)
 - Sent home (during school day)
 - Other
 - Not Applicable (client is an adult/community member)
- Analysis
 - Classroom instruction time saved
 - Average Daily Attendance funds saved

Advantages & Disadvantages

Advantages

- Requires limited staff time and resources
- Tells a compelling story of how SBHCs can help keep students in school and save district funds

Disadvantages

- Based on estimates
- Not all students would have necessarily missed a day of school without SBHC
 - However, a visit also can prevent multiple days of absences

Sample Calculation:

Instructional Time Saved

- "John" is seen at 8:15 am after a review of school records reveal his immunizations are not up to date
- With parent consent, the SBHC nurse practitioner updates his immunizations and sends him back to class at 8:45 am, rather than being sent home by the main office
- If school ends at 2:30 pm, the SBHC saved "John" from losing 5.75 hours of classroom instruction time as a result of his visit
- If 1,000 visits are provided annually, with an average of 5 hours per visit of classroom instruction time saved, the SBHC saved approximately 5,000 hours of classroom instruction time in that school year

Where Has This Been Done?

Sierra Vista Children's Health Center in Clovis, California

How do they document impact on academic success?

- When SBHC sees a student whose visit impacts attendance, the providers mark it on a spreadsheet
- At end of each month, SBHC staff then tally number of days saved and multiply by ADA reimbursement rate from California
- They saved 1,032 days of ADA during the 2012-13 school year, or about \$45,000 in savings

How have findings been used?

- SBHC reports amount of ADA saved by SBHC to the district
- District continues to subsidize the SBHC for salaries and services
- Findings support the value of SBHC in grant proposals

How do students, parents and school staff think the SBHC impacts academic success?

#2: STAKEHOLDER SURVEYS



Strategy Overview

- Survey students, school staff and/or parents to assess their self-reported perceptions of SBHCs' impacts on academics
- Items for Consideration
 - Surveys should be anonymous, unless explicit permission is obtained to collect identifying information
 - Obtain feedback from stakeholders and pilot-test before use
 - Adhere to regulations about parental consent or notification
 - Collect both "open" and "closed" ended data
 - Disseminate results in a timely manner

Advantages & Disadvantages

- Advantages
 - Can get large samples of various stakeholders
 - Relatively easy to access staff and student participants
 - Online survey tools can automate data collection, analysis and reporting and significantly reduce costs
- Disadvantages
 - Data based on self-report
 - Costs can be high for paper survey reproduction and/or mailings, as well as data entry in larger schools
 - Obtaining adequate response rates from parents can be challenging

Sample Survey Questions

- Students or SBHC Clients
 - *How many times did you miss class last month due to a health reason?*
 - *Have the services you received at your school's health center helped you miss less school?*
- Parents
 - *How often has your child missed a day of school in the last month to go to a doctor's appointment?*
 - *Has there been improvement in your child's behavior in school in the last year?*
- School Staff
 - *Have you noticed any changes in students' behavior (or attendance) since the SBHC opening?*

Where Has This Been Done?

Berkeley High SBHC in Berkeley, California

How do they document their impact on academic success?

- *Parent Surveys* are administered through a Parent-Teacher Association mailing, with a stamped return envelope
- *School Staff Surveys* were distributed in staff mailboxes and via email with a web-link to the survey. Respondents received a \$5 gift card for their time

How have the findings been used?

- Berkeley SBHC staff presented survey findings to school staff, funders and other stakeholders
- Findings have been shared in reports that are distributed to these audiences to keep them abreast of the SBHCs' accomplishments

What do SBHC clients, students, parents and school staff about the impact of the SBHC on academic success?

#3: INTERVIEWS, FOCUS GROUPS AND STORIES



Strategy Overview

- Gather qualitative data from students, parents, school staff and other stakeholders through interviews, client narratives or focus groups
- Methods
 - SBHC Staff Stories
 - Focus Groups
 - Key Informant Interviews

SBHC Staff Stories

- Ask a staff member to document a detailed account of a client whose receipt of support from the SBHC led to academic impacts
- Items for consideration
 - If appropriate, ask the client and/or her parents to contribute their perspectives as well
 - Change personal or identifying information to protect client confidentiality

Focus Groups

- Small gathering of about 6-10 people during which a moderator asks questions about a particular topic
- Items for consideration
 - Have an objective moderator
 - Recruit participants from broad audiences
 - Start with easy warm up questions to make everyone comfortable
 - Offer refreshments and small incentives

Key Informant Interviews

- One-on-one interview with key individuals to solicit information about a specific topic
- Items for consideration
 - Obtain consent from participants to share their direct quotes
 - Conduct interviews with a broad group of participants to obtain diverse perspectives
 - Offer small incentives

Sample Interview or Focus Group Questions

- SBHC Student Clients
 - *Have the services you received at your school's health center helped you miss less school? If so, how?*
- Parents of SBHC Student Clients
 - *What changes, if any, have you seen in your child's behavior in school in the last year?*
- School Staff
 - *What changes, if any, have you seen in students' behavior (or attendance) since the SBHC opened?*
 - *Do you think the SBHC supports the school environment? If so, how?*

Advantages & Disadvantages

Advantages

- Data are often richer and of greater depth than quantitative data
- Gathering perspectives directly from stakeholders can offer the opportunity to learn not only what they think about a certain issue, but also why they think that way
- Good way to collect information about more complex issues, such as health or social concerns that affect attendance
- Costs can be kept relatively low

Disadvantages

- Analyzing extensive qualitative data can be time consuming
- Data cannot necessarily be generalized to a larger population

Where Has This Been Done?

Connecticut Association of School Based Health Centers

How do they document their impact on academic success?

- Writes stories to explain the benefits of SBHCs on academics from the perspectives of school health staff, students and parents
- Although qualitative, these stories provide rich and compelling evidence of the impact of SBHCs on attendance and overall success in school

How have the findings been used?

- These are posted on their web-site "Sharing Our Stories: Student Stories from SBHCs"

Where Has This Been Done?

"I am a single mother who often works 50-hour weeks, plus travel time, which does not leave much extra time in my schedule.

The SBHC has enabled me to have my daughter seen and treated during school hours. This has reduced the amount of time that I would be required to take off from work in order to bring my daughter to her primary care doctor.

...The SBHC regularly contacted me at work when my daughter was ill. Having the SBHC also significantly lessens the amount of school my daughter would have to miss... my daughter was able to get her physical and immunizations without missing a day of school...

They allow children to stay in school longer, and the parents to stay at work without worrying about their kids." – *School Parent*

Source: Connecticut Association of School Based Health Centers Website: www.ctschoolhealth.org/

Where Has This Been Done?

"Eric was forced to repeat the 7th grade due to a large number of absences... Eric was transferred to our school and referred to the SBHC for counseling.

As the SBHC Social Worker, I met with Eric and his family to create a gradual transition school plan. Once the plan was put into action, Eric's behavior began to improve. Initially, he was able to stay in school for longer days, gradually leading up to full-time attendance. As time has progressed, Eric has reported decreased somatic symptoms, low levels of anxiety and perfect attendance for the past month. He is able to participate both academically and socially in school activities..."

- *SBHC Social Worker*

Source: Connecticut Association of School Based Health Centers Website: www.ctschoolhealth.org/

What changes across the entire school might be due to the SBHC?

#4: EXISTING SCHOOL-LEVEL DATA



Strategy Overview

- Examine school level indicators of student misconduct (expulsion, suspension and truancy), physical fitness tests and dropout/graduation rates or school climate from existing data sources
- Potential Data Sources
 - School district data system (e.g., Power School)
 - California Department of Education's (CDE) Dataquest website (www.cde.ca.gov/dataquest)
 - California School-wide Surveys (www.wested.org/hks)
 - California Healthy Kids Survey (CHKS)
 - California School Climate Survey
 - California School Parent Survey

Sample Indicators

- School District Data
 - Average grades or test scores
 - Excused and unexcused absences
 - Suspensions and expulsions
- CHKS
 - Number of school days missed for health reasons
 - Sense of connection to school and adults
- School Climate Survey
 - Available supports and resources
 - School climate indicators
- School Parent Survey
 - Availability of resources
 - School climate and learning supports
 - Student learning conditions, safety and health

Advantages & Disadvantages

Advantages

- Most data are publicly available on a school or district level, thus no new data collection is needed
- Depending on type of data available, comparisons can be made between SBHC schools and non-SBHCs schools, potentially providing evidence that presence of SBHC has positive association with school environment and students' overall academic behaviors

Disadvantages

- Can't attribute changes solely to SBHC; many other factors could lead to differences in indicators between SBHC and non-SBHC schools, as well as within a school with an SBHC over time

Where Has This Been Done?

Large northeastern city with 1,300 schools, approximately 200 of which had SBHCs

How they document their impact on academic success?

- City Department of Education (DOE) conducts a "Learning Environment Survey" with parents, teachers and students as part of effort to improve student academic success and promote school accountability
- Researchers used data from these surveys to examine whether schools with SBHCs had a more optimal learning environment than schools without SBHCs
- Study findings demonstrated that presence of SBHC associated with greater satisfaction in 3 out of 4 aspects of the learning environment: academic expectations, communication and school engagement

How have the findings been used?

- Findings shared through presentations to DOE demonstrating value and impact of SBHCs
- Findings helped to keep all SBHCs funded and open when they were in jeopardy

Source: Smith-Goodman | The relationship between school-based health centers and the learning environment | *Child Health*, 2010; 80(2):113-118

Who uses the SBHC and how does the SBHC affect their specific health and academic success?

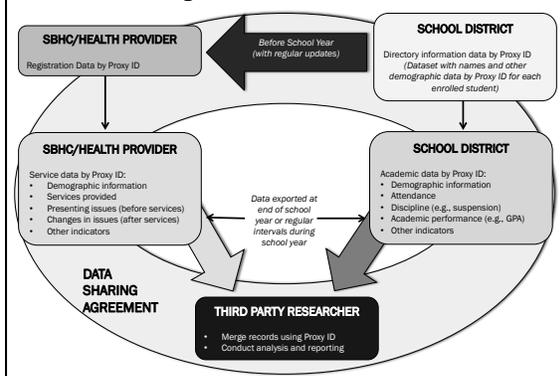
#5: CONNECTING SBHC & ACADEMIC DATA FOR INDIVIDUAL STUDENTS



Strategy Overview

- Researchers establish a data collection system that connects health and academic data by individual student
- Two approaches
 1. Obtain parent consent and student assent to release data from each data source
 2. Use common "proxy IDs" between health and education datasets to link data without names

Linking Health and Academic Data



Strategy Overview (cont.)

- Sample Research Questions:
 - Do SBHC users have greater improvements in grades over time than a similar group of non-SBHC users?
 - Do SBHC mental health service users have improved attendance compared to a similar group of non-SBHC users?
- Items for Consideration
 - Recognize that users and non-users are self-selected groups and therefore fundamentally different from each other
 - Account for variations in the frequency and duration of services received
 - Assure adequate staff time

Advantages

- Research can focus on sub-populations of students, for example SBHC users with asthma, where the impact of the SBHC is potentially most demonstrable
- Researchers can conduct longitudinal data analysis that examines a wide variety of demographic, health and academic indicators
- Comparison groups of non-users can be used, after adjusting for factors that might contribute to baseline differences between users and non-users

Disadvantages

- Obtaining consents can be time and labor intensive and may lead to a biased sample
- Cleaning, matching and analyzing data from two datasets can be time and labor intensive
- Strong knowledge of statistical analysis required
- Despite being strongest methodological approach, still does not offer the "gold standard" of randomized trials to be able to attribute changes solely to the intervention

Where Has This Been Done?

Seattle, Washington: 10 high and 4 middle schools with SBHCs

How do they document their impact on academic success?

- Seattle Public Schools (SPS), City of Seattle Office for Education (OE) and Public Health of Seattle and King County established formal partnership to develop a system for SBHC data with students' academic and demographic data
- Have data sharing agreements outlining each partner's role in accessing data
- SPS provides academic and demographic data to OE stripped of all identifiers and replaced with proxy IDs to link data files
- Linked data can be examined longitudinally to assess impacts of SBHC on students' attendance, disciplinary actions, grades and classes passed

How have the findings been used?

- Used locally and nationally to advocate for continued city tax funding
- Data shared regularly with SBHC providers for continuous performance improvement

Source: Walker S, Karns S, Lyon A, Brunis E, Cosgrove T. Impact of school-based health center use on academic outcomes. *J Adolesc Health*. 2009; 1-7.

Conclusions



Conclusions

- Several strategies can help SBHCs make the case for how their efforts are linked to academic success
- Strategy selection will be based on resources available and target population of interest
- Recognize challenges to each approach and address them before data collection begins
- Disseminate results to broad audiences to get the word out about your work



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