CHAPTER

09 Data Collection, Evaluation and Quality Improvement

Data collection and evaluation are important for several reasons. Although initially, you may be able to secure resources and support for your school-based health center simply because people believe it is a good idea, eventually funders, policymakers, and the school community will want some evidence that the clinic is a good use of scarce resources. Second, once your school-based health center is up and running, you will want to know how you are doing, and how you can do even better. Finally, data collection and evaluation is important simply because it is required by many funders and health plans. Health care providers are already well-versed in data collection processes to measure clinic productivity and quality. Health record systems and practice management will feed into these evaluation systems.

WHY START EARLY?

Amidst the challenges of starting and funding a new school-based health center, it is easy to think that evaluation can wait until after you are actually up and running. While it is true that you cannot actually *complete* an evaluation until after you have something to evaluate, you should try to create an evaluation plan as early as possible.

Why? Because there are important data that you can collect BEFORE the health center opens in order to document the CHANGE that the health center made. Think ahead five years. If you want to show that the school-based health center has reduced the number of children sent home due to illness or injury, you need to ask the school to keep a record of these numbers before the health center opens. The same is true for disciplinary referrals, school days lost to illness, immunizations, teacher satisfaction, and a variety of other measures. The more data you can collect before the health center opens, the more you have to compare to data you collect later.

WHO IS YOUR AUDIENCE AND WHAT DO THEY CARE ABOUT?

Different audiences might have different questions and needs for information about the operation and impact of your school-based health center. While one evaluation might not address everyone's needs, it is worth considering many perspectives when planning your evaluation.

THE SCHOOL AND DISTRICT – Regardless of how they are funded or run, school-based health centers rely on collaboration and resources from their partner schools. Because resources are always scarce, the school will eventually want to know that the health center is a good value. Some outcomes that are likely to be important from the school's perspective include:

- Improved academic performance
- Increased attendance
- Lower dropout rates
- Improved student behavior
- Improved school climate
- Increased teacher satisfaction and reduced turnover
- Increased parent participation in school activities
- Increased parent and student satisfaction

CLINIC USERS – Clinic users (patients) will "vote with their feet." If they value the services the health centers provide, they will come; if they do not, they will seek care elsewhere. In this respect, potential clinic users are your most important audience. Patients may not be as interested in the graphs and tables you produce from your evaluation as they are in the changes you make in your services as a result of your evaluation. As you design an evaluation, consider assessing clients' (and potential clients') perspectives on:

- Ease of accessing clinic services
- Types of services provided
- Hours of operation
- Wait time for an appointment
- Friendliness of clinic staff
- Environment of clinic
- Confidentiality
- Stigma (or lack thereof) among peers

HEALTH CARE PROVIDERS – Depending on their field and type of organization, health care providers are required to collect, analyze, and submit data on the quality of care they provide to patients (e.g. UDS measures for CHCs include % of asthmatics who have an asthma action plan on file). Measures like these should also be used for Quality Improvement plans, and outreach to address gaps in care or population health needs (e.g. vaccinations needed).

PAYORS/HEALTH PLANS/FUNDERS – Payors and health plans also collect data on number of their covered patients served and the care type and quality data (e.g. immunizations rates). The health care lead agency will be familiar with what clinical data needs to be collected and reported out. Funders may also want data on number of patients served and types of services. It can also be helpful to collect qualitative data for funder reports (see section on focus groups and interviews).

FAMILY/CAREGIVERS AND COMMUNITY MEMBERS – Although family and community members may not all use the health center, their support can be critical to its long-term sustainability. If community members believe that the school-based health center is making the school or neighborhood safer, helping families, or making the school more successful, they will be more likely to object if clinic funds are threatened. In planning your evaluation, consider the issues that are important to the community at large.

ELECTED OFFICIALS – Legislators, school board members and other elected officials want to use public resources wisely and keep their constituents happy. Many of the outcomes of interest to this group will be the same as those for the school and district. However elected officials will also be interested in health outcomes such as:

- Number of children served, especially uninsured
- Number of uninsured children enrolled in health insurance
- Number of immunizations or physicals given
- Access and utilization of behavioral health services
- Prevention or youth development programs
- The popularity of the school-based health centers among parents and voters
- Support for the school-based health center among businesses, community leaders, and other groups

SBHC ADMINISTRATORS – Those involved in planning and managing the school-based health center may be the ones who make the best use of evaluation data. You will rely on this information to raise funds, demonstrate to local officials that the health center is valuable, make staffing and budgetary projections, improve the quality of your services, and verify client satisfaction. SBHC managers find that good data make their own jobs easier and more effective.

WAYS TO COLLECT DATA

The following is a brief description of several common ways that you can collect your own data. It is not necessary to use all of these sources, however, your evaluation will be strengthened if you use a variety of sources.

ELECTRONIC HEALTH RECORDS

The vast majority of medical providers are now utilizing electronic rather than paper medical records. SBHCs use a variety of electronic health records (EHRs) such as NextGen, Epic, and eClinicalWorks, to name a few. Most EHRs are also connected to an electronic practice management (EPM) system for purposes of billing and scheduling. EHRs and EPMs store information about patient demographics, services delivered and, in most cases, can also help produce important reports about the preventive health care needed by patients and their quality of care (e.g., is their depression improving or their blood sugar level being maintained).

The following set of data elements should be tracked by any EHR:

Patient Demographic Information

- Date of birth
- Gender
- Race
- Ethnicity
- Language spoken at home
- Insurance status at visit
- Identification of primary care provider
- School status (enrolled in this school, another school, or not enrolled)
- Other special populations such as foster care, homeless

Service Delivery Information

- Date of service
- Provider name and provider type
- Diagnosis (ICD-10, DSM-5, and other relevant codes)
- CPT and other procedure codes
- Place of service
- Time spent
- Referrals (internal and external)
- Other subjective notes about the visit such as treatment plan and communication with parent/guardian or PCP

Setting up a clinic data system is a fairly technical process. It is possible to keep data on paper or in an Excel file, but much more useful to use a management information system or practice management software. If the school-based health center's medical provider is a community clinic or county health department, they will likely have a system in place at other sites that can be used in the SBHC. If such a system is not available, you will need outside consultation to select and implement a data system. Many EHRs are based on adult medicine practices and therefore require some customization to include the kind of proactive screenings recommended for SBHCs – e.g. for sexual health, depression, anxiety, and social determinants of health.[13]

[13] Social determinants of health are conditions in the places where people live, learn, work, and play that affect a wide range of health risks and outcomes - see https://www.cdc.gov/socialdeterminants/about.html for more information.

SURVEYS

Surveys or questionnaires can be used for both types of evaluation. You can either use a standardized survey (one that has been created and tested by others) or you can create your own. It is recommended that you create or adapt your own client satisfaction survey, so that you can customize it to your unique program. However, it's best to use a standardized survey for capturing outcomes.

Surveys can be anonymous, which is the preferred way to administer a satisfaction survey, or they can have the clients' names and/or "unique identifier" if you want to be sure that the same students took the pre-test as took the post-test. Matching pre- and post-tests is essential if you want a scientifically rigorous evaluation. A "unique identifier" is used to preserve confidentiality and can be the clients' school identification number or can be constructed using letters of the clients' names and birthdates.

Depending on the content of the survey, if you are using names or unique identifiers, you might need to get **active parental consent** for the students to take these surveys, according to California Education Code section 51513.[14] If your survey is given anonymously but measures student health risks and behaviors, then **passive parental consent** can be obtained.[15]

Surveys can be administered in many settings. They can be mailed (for example, a satisfaction survey can be mailed to parents of students served by your school-based health center), administered by telephone, on the Internet (using technology such as Survey Monkey), or taken in person (for example, in the health center or in a classroom).

Remember to match your method for collecting survey data to the group(s) you are trying to survey. For example, a survey collected in the clinic waiting room will miss students/families who do not use the clinic. This approach may be sufficient if your goal is to learn about the satisfaction of students who have received services. But if you want to know about what additional services to offer, you would also want to reach students who are not currently using the health center. A classroom-based survey will be more effective at reaching all students.

Surveys can gather both qualitative and quantitative data. Qualitative data is typically gathered through "open-ended" questions such as, *"What do you like best about our school-based health center?"* Open-ended questions don't constrain the answer and can be a rich source of information and feedback. The downside to this type of question is that it is more labor intensive to sort through the responses of many surveys. Also, many people won't take the time to give a response on an open-ended question because it takes longer. This will be particularly true for students or family members who are not comfortable with writing.

"Closed-ended" questions are multiple choice and produce data that are easy to quantify (e.g., the number of people who checked "always," "sometimes," or "never"). The advantage of this type of question is that it is easier to analyze quickly when the surveys are returned. The downside is that clients are limited to the choices. This can be partially solved by always having an open-ended category (e.g., "other") or a place following a multiple choice or scale question for clients to elaborate. (See Appendix L for sample surveys.)

[14] California Education Code section 51513. No test, questionnaire, survey, or examination containing any questions about the pupil's personal beliefs or practices in sex, family life, morality, and religion, or any questions about the pupil's parents' or guardians' beliefs and practices in sex, family life, morality, and religion, shall be administered to any pupil in kindergarten or grades 1 to 12, inclusive, unless the parent or guardian of the pupil is notified in writing that this test, questionnaire, survey, or examination is to be administered and the parent or guardian of the pupil gives written permission for the pupil to take this test, questionnaire, survey, or examination.

[15] California Education Code section 51938(c). Anonymous, voluntary, and confidential research and evaluation tools to measure pupils' health behaviors and risks, including tests, questionnaires, and surveys containing age-appropriate questions about the pupil's attitudes concerning or practices relating to sex, may be administered to any pupil in grades 7 to 12, inclusive. Parents or guardians shall be notified in writing that the questionnaire is to be administered, given the opportunity to review the questionnaire if they wish, notified of their right to excuse their child from the questionnaire, and informed that they must state their request to excuse their child in writing to the school district.

FOCUS GROUPS OR PUBLIC FORUMS

Focus groups or public forums are another way to gather data. A focus group is a small gathering of 6-10 people during which a moderator asks questions about a particular topic. It can be a good way to gather feedback relatively quickly and can be an excellent precursor to a survey because it can help develop and refine survey questions and topics. It is also a good way to collect qualitative information about more complex issues such as cultural values and concerns. Be careful, however, about generalizing from a focus group. Six to ten people, especially if they are volunteers who have a particular interest in health, may not represent the entire group.

Focus groups are most successful when there is an objective moderator, so if your budget permits, it may be worthwhile to hire a consultant who specializes in planning and facilitating focus groups. If not, begin by brainstorming a set of open-ended questions on the topic for which you want feedback. Then recruit participants to your focus group. Be sure to reach out to students and families who do not usually volunteer to participate or you may end up with very skewed results. Offering food or a small incentive such as a gift card is very helpful in recruiting.

Groups generally work best when all the participants are similar (e.g., all youth, all teachers, all parents). Consider conducting separate focus groups for different language groups so that the groups can be conducted in a language that is most comfortable for participants. Once the group is assembled and some simple ground rules reviewed, ask the questions and allow everyone attending the opportunity to speak. Be sure to assign someone to take notes or record the meeting.

A public forum is a larger venue for getting feedback from stakeholders of your school-based health center. A public forum is not typically constrained in terms of the number of people who can attend and participate. Usually in a public forum, a presentation about the topic would precede an open dialogue or opportunity for feedback from the attendees. You could conduct a public forum with the school community (administrators, teachers and staff), parents, students or the broader community. Consider having a public forum off-site to reach a wider audience and to get diverse views. For instance, ask local churches if they would be willing to host a forum. Resources on how to design and run a focus group and/or public forum can be found at the end of the chapter.

KEY INFORMANT INTERVIEWS

Conducting individual interviews can be a useful strategy for collecting data and is sometimes easier than focus groups or surveys. Key informants can be any stakeholders in the school, community or even in other arenas, such as health plans or government. Interviews are a useful approach when you think that key informants might be hesitant to attend a focus group or fill out a survey. This might be because they are busy, don't speak English, are not familiar with surveys, or would not be comfortable in a focus group. Often interviews combine both open-ended and closed-ended questions and are usually between 30–60 minutes.

It can also be helpful to collect stories and testimonials from providers and school staff on the value of the SBHC.

OTHER DATA

It can be helpful to track whether, following an appointment in the SBHC, a student was sent back to class, home, to the ER, or elsewhere. These measures demonstrate the impact of the SBHC on attendance and the prevention of lost "seat time" while students access health care.

STUDENT SURVEY DATA

Many schools elect to administer a standardized risk assessment survey to their whole school population or to specific grade levels. These surveys typically are administered on a regular (annual or bi-annual) basis. The most widely used survey in California is the California Healthy Kids Survey (CHKS), which covers a variety of topics. The core module is used by most school districts for students in grades 5-12. There are slightly different core and supplemental modules for grades 5 (and younger).

California Health Kids Survey (CHKS) Modules	
Core Module covers: • School climate and safety • Pupil engagement • Student supports • Bullying • Substance abuse • Student demographics	**Supplemental Modules cover:** • Additional school climate areas • Social emotional health • Tobacco, alcohol, and other drugs • Mental health supports • Community health and safety • Physical health and nutrition • Indicators for after school programs • Gender identity and sexual orientation-based harassment • Resilience and youth development • Sexual behavior

Student survey data can be used for a needs assessment and for an outcome evaluation if you think you will have an impact on the entire school population. For instance, a targeted smoking prevention and cessation program may result in your high school population smoking less over time. However, be careful to match the data you collect to the nature of your program. If your health center provides immunizations to 50 families, do not expect to see a change in physical fitness levels or alcohol use across the entire school. This sounds obvious, but it is easy to fall into the trap of measuring things that you have no hope of changing.

COMMUNICATING YOUR DATA

Now you have arrived at the last but probably most important step. You have collected and analyzed your data, and now need to understand what the results mean, how to use them, and how to communicate the results to your stakeholders

Examples of evaluation results:

- Alameda County 2019-20 School-Based Health Center Brief
  https://achealthyschools.org/wp-content/uploads/2021/03/Alameda-County-2019-20-SHC-Brief-PRINTING.pdf
- Alameda County 2018-19 School-Based Health Center Infographic
  http://achealthyschools.org/wp-content/uploads/2020/10/Alameda-County-18-19_0912201.pdf
- 5 Year Wellness Center Impact Report, The Los Angeles Trust Data xChange, September 11, 2020
  https://static1.squarespace.com/static/610c101c733e257fb271ce0f/t/6116b0440782b920e33
  9f412/1628876869154/LA-Trust-Five-Year-Wellness-Center-Impact-Report-091120.pdf

Receive Expert Guidance to Go From Vision to Reality

Do you have specific questions not answered in this guide, or do you need to talk through how to take action to build and expand school-based health and wellness services in your community?

You can sign up your organization to become a member of the California School-Based Health Alliance and you will receive technical assistance hours where you can receive individual consulting to answer specific questions you may have.

Learn more at https://www.schoolhealthcenters.org/get-connected/membership/.