A GUIDEBOOK FOR EVALUATING SCHOOL-BASED HEALTH CENTERS

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- ☑ **Six Steps in SBHC Evaluation**
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WHY EVALUATE SCHOOL-BASED HEALTH CENTERS?

To establish or revise program design and priorities by identifying:

- unmet student health needs
- perceptions of students' health needs
- existing services and gaps in services

To gain and/or maintain financial support by:

- providing data to document need for existing services
- providing data to demonstrate a response to documented unmet student health needs
- providing records of mainstream health care clients served by SBHCs
- demonstrating how SBHCs complement mainstream health care services
- meeting requirements of funding agencies
- linking with other local and state government funders
- documenting data to back up claims

To build community support by:

- demonstrating how SBHCs serve students' needs
- documenting how SBHCs improve students' health

To assess need for, implementation of, and effectiveness of SBHC services by:

- conducting needs assessments
- conducting process evaluations
- conducting outcome and impact evaluations

This guidebook has been designed to help you identify service needs and report the preliminary, short-term, and net results of SBHC service provision.

WHAT HAS SCHOOL-BASED HEALTH CENTER EVALUATION SHOWN?

SBHCs are becoming increasingly important in health care delivery to medically-underserved children and adolescents across the United States. In 1990 there were only 150 SBHCs and by 1997 over 900 clinics were operating across the U.S. The majority of SBHCs are located in schools serving high school students, although the number of SBHCs serving younger students is increasing.

The following is a summary of the research regarding SBHCs, much of which has been summarized on the George Washington University's Making the Grade Website, http://www.gwu.edu/~mtg/.

Who uses SBHCs?

- SBHC registered students were similar to all students enrolled in the school, according to gender, ethnicity, and age (McCord, Klein, Foy, Fothergill, 1993).
- Average SBHC users (those going to SBHC three times/year) were representative of the entire student population based on age, race, gender, and grade point average. Frequent users (students completing 15 or more visits per year) were more likely to be female and have a lower grade point average (Wolk, Kaplan, 1993).
- Students with less access to health care (uninsured and those with greater self-reported health needs) were more likely to visit the SBHC than other students (Kisker, Brown, 1996).
- At least two-thirds of the student population enroll in clinics, and of those enrolled, about 69-75% use the clinic during the school year (McKinney, Peak, 1995; The Lewin Group and the Institute for Health Policy Studies, 1997).
- SBHC use is generally appropriate, with more needy or high-risk students making a greater number of visits (Balassone, Bell, Peterfreund, 1991; Joost, Grossman,

McCarter, Verhulst, Winsted-Hall, Mehl, 1993; Wolk, Kaplan, 1993; The Lewin Group and the Institute for Health Policy Studies, 1997).

- Anemia and emotional problems were documented more frequently among students attending schools with a SBHC (Santelli, Kouzis, Newcomer, 1996).

Can SBHCs be successfully implemented?

- Evaluations have shown most SBHC services can be successfully implemented (Kirby, 1992; Kisker, Marks, Morrill, Brown, 1994; Dryfoos, Brindis, Kaplan, 1996; The Lewin Group and the Institute for Health Policy Studies, 1997).

What is the impact of SBHCs on health care access?

- Access decreases adolescents' barriers to physical and mental health care services (Kisker et. al., 1994; Brindis, Kapphahn, McCarter, Wolfe, 1995; Kaplan, Calonge, Guernsey, Hanrahan 1998).
- Access increases use of mental health services (Kaplan et. al. 1998a).
- Access increases use of preventive health services, i.e., comprehensive physicals (Kaplan et. al., 1998a).
- Access increases rate of screening for risk behaviors (Kaplan et. al., 1998a).
- Compared to youths nationally, seniors attending a SBHC school were more likely to have made a visit to any health care provider (Kisker, Brown, 1996).
- Access is related to more frequent use of health providers, when compared to use of health providers by adolescents in the general population (Anglin, Naylor, Kaplan, 1996).
- Students in schools with SBHCs were more likely to report seeing social workers and counselors (Santelli, Kouzis, Newcomer, 1996).
- Elementary school students made an average of 4 visits to an SBHC (Kaplan, Brindis, Naylor, Phibbs, Ahlstrand, Melinkovich, 1998).
- Elementary SBHC access is related to less difficulty accessing physical health care, and a greater likelihood of actually obtaining that care (Kaplan, Brindis, Phibbs, Melinkovich, Naylor, Ahlstrand, *In Press*).

What is the impact of SBHCs on hospital emergency room (ER) use?

- No impact on ER use (Kisker, Brown, 1996).
- SBHC access is associated with decreased emergency room use (Santelli, Kouzis, Newcomer, 1996; The Lewin Group and the Institute for Health Policy Studies, 1997; Kaplan et. al., 1998a).
- SBHC access at the elementary school level is related to decreased emergency room use (Kaplan et. al., *In Press*).

What is the impact of SBHCs on "medical homes"?

- Compared to a national sample of urban youths, those with SBHC access were more likely to report having a medical home (Kisker, Brown, 1996).

What is the impact of SBHCs on health knowledge?

- Greater knowledge of health issues was gained among students attending SBHC schools, compared to urban youths nationally, but increased knowledge did not necessarily lead to better health behaviors (Kisker, Brown, 1996).
- There were significant gains in reproductive and sexual knowledge by teens who attend a school-linked program (Zabin, Hirsch, Smith, Streett, Hardy, 1986).

What is the impact of SBHCs on student health status?

- Compared to students not receiving SBHC services, those who received services showed significant declines in depression (Weist, Paskewitz, Warner, Flaherty, 1996).
- There was no impact on self-reported physical health status of SBHC youth, as compared to national urban youth (Kisker, Brown, 1996).
- Fewer students attending SBHC schools reported considering suicide, as compared to urban youths nationally, but there was no impact on suicide attempts (Kisker, Brown, 1996).

What is the impact of SBHCs on sexual activity/pregnancy?

- Students with SBHC access had a lower rate of ever-having had sexual intercourse, as well as a delay in sexual intercourse initiation, compared to urban youths nationally (Kisker, Brown, 1996).
- Seniors with SBHC access, compared to those without access were no less likely to have had recent sexual intercourse, and there was no impact on birth or pregnancy rates of students of SBHC students, as compared to urban youths nationally (Kisker, Brown, 1996).
- Females in school-linked clinic programs and school-based sex education programs postponed the onset of intercourse, with a seven month median delay, and there was a decline in pregnancy rates (Zabin et. al., 1986).
- There was no significant impact on the rate of pregnancy among students being served by six SBHCs (Kirby, Waszak, Ziegler, 1991).

What is the impact of SBHCs on school-related measures?

- No impact on absences due to illnesses, compared to urban youths nationally (Kisker, Brown, 1996).
- SBHC users were less likely to be absent than SBHC registered non-users and non-registrants (McCord et. al., 1993).
- Progress through school was slightly greater for students with SBHC access, compared to urban youths nationally (Kisker, Brown, 1996).
- Registered SBHC students were more likely to graduate or be promoted than those not registered for services, and African-American male students were three times more likely to stay in school if they had registered for the clinic (McCord et. al., 1993).
- Expectations that SBHC access is unilaterally related to broad outcomes, such as attendance and school performance may not be realistic, although specific SBHC interventions may influence outcomes, such as reducing risk behavior (The Lewin Group and Institute for Health Policy Studies, 1997).

TEN QUESTIONS A SCHOOL-BASED HEALTH CENTER EVALUATION CAN ANSWER

① **How many students are using the SBHC?**

② **Whose needs are being addressed by the SBHC?**

③ **What other health and social services are students using?**

④ **How has the SBHC changed the pattern of mental health use in the community?**

⑤ **What other needs could the SBHC address?**

⑥ **How effective has mental health counseling been?**

⑦ **Does the SBHC increase the use of preventive health services?**

⑧ **Does the SBHC decrease sexual risk-taking behaviors?**

⑨ **Does the SBHC improve school attendance?**

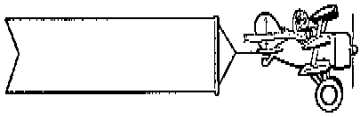
⑩ **Is the SBHC cost-effective?**

SIX STEPS IN SCHOOL-BASED HEALTH CENTER EVALUATION

1. Prepare for the Evaluation

2. Create a Timeline

3. Select Evaluation Methods



4. Pilot and Implement Methods

5. Compile and Analyze Data

6. Act on Findings

INTRODUCTION TO FOUR MAIN TYPES OF SCHOOL-BASED HEALTH CENTER EVALUATION

Program evaluation is a process for describing and assessing the activities undertaken by the SBHC for a variety of purposes including: improving SBHC services, improving efforts to integrate SBHCs within a network of community health services, presenting evidence of how SBHCs respond to student needs, and/or documenting the social and economic value of continued or increasing investment and financial support for SBHCs.

The scope of an evaluation will vary considerably according to the goals of the evaluation, as well as the resources you have available to devote to it. A small-scale evaluation may attempt to answer a fairly straight-forward question; "What services are utilized by students?" or "Has the clinic responded to initially identified needs of the population?" A large-scale evaluation will seek to answer more complex questions, i.e., has the SBHC improved specific health status indicators of students, or is the SBHC cost-effective?

Resources required for different types of evaluations vary **greatly.** It cannot be stressed strongly enough that seemingly small questions may indeed be complex to answer. A small question may require a multitude of resources, including expertise, time, and money. By following this manual, you should be able to determine what type of evaluation is appropriate to your resources and be able to formulate and implement your evaluation strategy.

We describe, in order of complexity, four types of evaluations applicable to SBHC research:

- Needs Assessments
- Process Evaluations
- Outcome Evaluations
- Impact Evaluations.

The less complex evaluations (needs assessments and process evaluations) may be prerequisites to the more complex evaluations, although needs assessments and process evaluations may fulfill your evaluation task. An overview of each type of evaluation is given next, followed by Table 1.1, summarizing some essential elements of each evaluation type. After finishing this chapter, you should be able to establish the evaluation level appropriate for your program.

 **Needs Assessments** are evaluations done as part of the pre-planning phase of SBHC service implementation or as part of planning for service revision. Needs assessments are conducted to learn from the community what types of services are most needed. Depending on your SBHC's stage of development, you may ask: What additional services do students think are most needed by the population served? What additional services do parents think are needed for the SBHC? What services would an ideal SBHC offer to students at this school? What are the major student problems that might be addressed by a SBHC?

Attempts to implement SBHC services should not be done without this essential assessment. In at least one instance SBHC services were implemented without community input, resulting in unused services and eventual termination of the SBHC at that location. A needs assessment can help determine which, if any, SBHC services are needed by a specific community. Needs assessments can also be done after SBHCs have been implemented, for the purpose of updating knowledge of student needs, with a view to improve service provisions. Thus, needs assessments can serve as feedback to assure that your clinic continues to be as responsive as possible to the needs of the population being served. Needs assessment evaluations can serve as the end of your evaluation process or may be the beginning of a more in-depth evaluation.

To increase the utility of the needs assessment process, school and parent community representatives, health professionals, and other service providers in the community should be involved throughout the process. Perhaps the most important data to document through the assessment process is community assets and resources, as well as whether or not individual students and parents perceive service gaps and a need for SBHC services.

Process Evaluations are designed to determine how well SBHC programs have conformed to their design, or if the programs are producing all the services for which they were designed, i.e., if your goal is to be sure that at least half the students register for SBHC services, a process evaluation could help determine if you have met that goal. Other process questions you may ask include: Have the full range of offered services been utilized (especially services implemented to meet identified student needs)? Is the SBHC being utilized by the high-risk students the SBHC intended to serve? Process evaluations can be used by SBHC staff to learn if their operations are running smoothly and effectively, and how to refine their programs to improve the services they currently provide. These evaluations may also be used to examine barriers which may prevent the achievement of outcome or impact objectives, as well as help identify methods for overcoming such barriers.

Outcome Evaluations are designed to determine the degree of SBHC effectiveness, and require collection of data that measures both short-term and long-term objectives through which the clinic's overall goals are realized. Such evaluations require more scientific rigor than process evaluations. Outcome evaluations require:

1. applying all measures to all study participants,
2. keeping track of individual students' use of services, and
3. most importantly, establishing an appropriate comparison population (Peterson, Card, Elsen, Sherman-Williams, 1994).

Emphasis is placed on the more relatively short-term results of program efforts such as: Are students with SBHC access more likely to be up-to-date with their immunization status as compared to those without such access? How satisfactory are SBHC services compared to other available health services? Are there measurable improvements in SBHC students' health status not documented in a comparison population? These evaluations are likely to require more extensive funds and a greater amount of professional research staff time and expertise for choosing and implementing an appropriate evaluation design. Outcome evaluations usually require a minimum of one year to complete.

Impact Evaluations determine if the program ultimately had the desired effect. Measures can be short-term or long-term and are more closely related to achievement of the overall SBHC goals than are outcome evaluations. Impact evaluations often require more than two measurements, i.e., baseline and two or three outcome measurements to document evidence of a program's impact. Examples of questions relevant to impact evaluations are: Have SBHCs saved state Medicaid funds? Have mental health provisions at the elementary school level reduced the incidence of teenage suicide attempts in middle schools? Does the provision of contraception reduce the incidence of teenage pregnancy and sexually-transmitted diseases and/or infections?

While impact evaluations have the same scientifically rigorous requirements as outcome evaluations, the best impact evaluations will require even more extensive resources. Like outcome evaluations, impact evaluations require:

1. applying all measures (e.g., surveys, interviews, assessments) to all study participants,
2. keeping track of individual students' use of services, and
3. most important, establishing an appropriate comparison population (Peterson et. al., 1994).

Impact evaluations are the most challenging to conduct as sufficient numbers of participants and comparison group members must be followed over a longer period of time, to assure that the results you are collecting are unbiased. Impact evaluations usually take from one to three years and should be conducted in collaboration with expert research staff.

SBHC Evaluation Cycle

These four types of evaluations are often conducted as part of a SBHC evaluation cycle, as shown in the diagram below. Needs assessments help to shape the types of clinic services offered; while process evaluations can then help determine if the designed services have indeed been implemented. Outcome or impact evaluations should be considered the most rigorous of SBHC evaluations, testing both the short and long-term effects of the intervention.

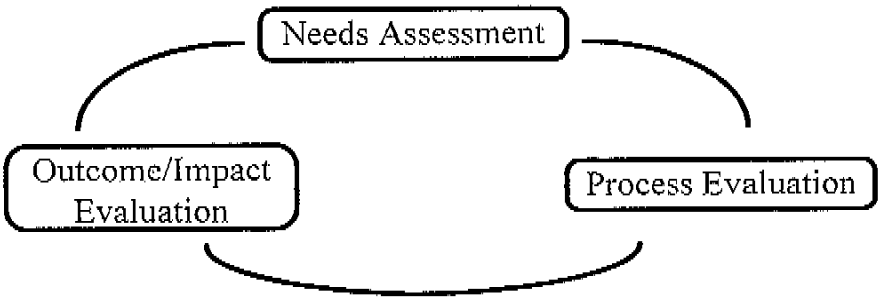


Table 1.1 reviews some of the specifics of each type of evaluation. Worksheet 1.1 at the end of this chapter is provided to help you start thinking about the requirements for SBHC evaluation. Although Worksheet 1.1 need not be completed before proceeding to Chapter 2, you may find it useful for organizing some preliminary evaluation thoughts.

Table 1.1: SUMMARY OF SBHC EVALUATIONS

	Needs Assessment	*Process Evaluation*	*Outcome Evaluation*	*Impact Evaluation*
Purpose	To determine the services needed by students, or to formulate program revision	To determine if service delivery goals have been met, why and/or why not?	To assess whether specific SBHC services have achieved specific short-term outcomes	To assess whether specific SBHC services have achieved specific long-term outcomes
Variables Measured	Needs of students, school, community	Clinic utilization, compliance, satisfaction	Access to care, change in short-term health knowledge, health behaviors, and risk-taking behaviors	Access to care, change in long-term health knowledge, health behaviors, and risk-taking behaviors
Population Studied	Students, parents, community organizations	Clinic users	All students in intervention school and a comparison population/group	
Resources Required				
Time; Money; Expertise	This varies depending on available resources and extent of evaluation; might be conducted with minimal funds and expertise, although some consultation could be useful		1 year for implementation, 1-12 months developing and refining evaluation methods and tools; substantial funds and expertise required	1-4 years, depending on outcomes measured and available evaluation tools; substantial funds and high level expertise required
Source(s) of Data	Survey/interview and/or focus groups with students, community members, or parents	Clinic records, surveys of students and parents, school data, data from other health agencies, i.e., managed care organizations, public health facilities		

WORKSHEET 1.1: Preliminary Questions

Please answer the following questions to help you begin thinking about the evaluation appropriate for your program.

What evaluation questions do you want to answer?

What types of resources do you have available to conduct your evaluation?

Who can help you in the evaluation process?

What type or level of evaluation makes sense for your site?

What is your deadline?

Can you acquire a comparison group? (e.g., a comparable school without an existing SBHC onsite)

CHAPTER 1 SUMMARY

In this chapter we: 1) provided several reasons why SBHC evaluation may be useful for you, 2) reviewed some literature regarding SBHC evaluation, 3) suggested questions a SBHC evaluation might answer, 4) listed the major steps in SBHC evaluation, and 5) provided an overview of the four types of SBHC evaluation covered in this manual.

With this introduction, you should be prepared for Chapter 2 in which we suggest how to form measurable goals using a logic model. We provide comments throughout the chapter to help you confirm the type of evaluation appropriate for your program.

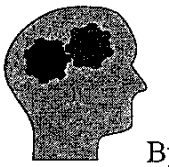
CHAPTER 2:

PREPARING A SCHOOL-BASED HEALTH CENTER EVALUATION

This Chapter Will Help You:

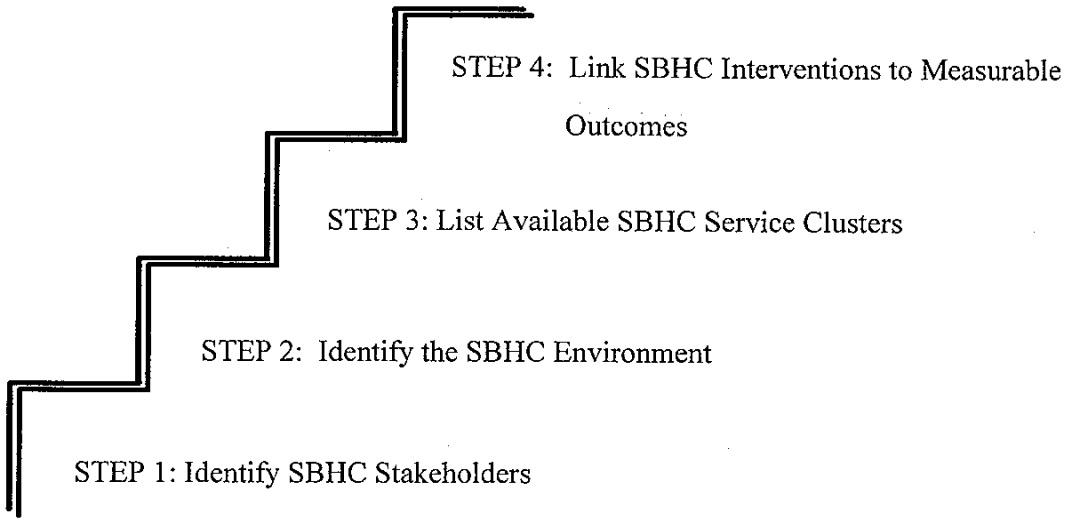
- ☑ **Complete a 4-Step Logic Model to Form Measurable Goals, including:**
  1. **Identifying SBHC Stakeholders**
  2. **Identifying the SBHC Environment**
  3. **Listing Available SBHC Service Clusters**
  4. **Linking SBHC Interventions to Measurable Outcomes**
- ☑ **Write Preliminary Evaluation Goals and Objectives**
- ☑ **List Factors that Might Effect Goal Selection**
- ☑ **Write Final Evaluation Goals and Objectives**

INTRODUCTION — USING A LOGIC MODEL TO FORM MEASURABLE GOALS



By the end of this chapter you will have decided on the type of evaluation which is appropriate for you, and will have written the final evaluation goals and objectives. The sequential steps for forming measurable evaluation goals provided in this chapter can benefit even the most experienced researchers, including those who already have a strong sense of appropriate evaluation goals. This chapter will help give you a greater understanding of your goals, and more important, help keep you from pursuing unattainable research goals. The step-by-step method of developing useful research goals presented in this chapter originates from a logic model developed by Rachel Feldman with The Lewin Group, in Fairfax Virginia, to help researchers explain their research rationale to various groups, including grant funding organizations.

The logic model is divided into four steps:



In general:

- If your SBHC services are in the design phase, or if you want to add additional services to your SBHC, you will need to conduct a needs assessment. It is likely you will only be able to complete Steps 1 and 2 of the logic model.
- If SBHC services have been recently implemented, or if you want to learn how services are being used, then a process evaluation is for you. Complete Steps 1-3 of the logic model.
- If you are working in a SBHC where process evaluation(s) have already been completed, you are likely ready for an outcome or impact evaluation. Complete all 4 steps of the logic model before implementing an outcome/impact evaluation.

Even if you cannot complete all steps of the logic model, we suggest reading through each of the steps to help give you a context for less complex evaluations.

On the next two pages we supply an example of a completed logic model. This model shows responses to each of the four logic model steps. Your model will be developed using a series of worksheets which will look different from the example, but which will contain the same information. After reviewing the example, you can start with Step 1 of the logic model.

While working through the four logic model Steps, you may find you are unable to complete a step with existing information from your SBHC. If this is the case, find the notes that are boxed-off, like this paragraph, which will give you modified directions. These notes will suggest the type of evaluation appropriate for your program's development, or at least where your evaluation process might begin.

Logic Model Example

Step 1: Identify SBHC Stakeholders

- Funded and managed by the local health department.
- Funded in part by the federal and state government.
- Research funded by private grant.
- SBHC implementation will be influenced by the school administration and staff.
- Community primary care and/or mental health centers.
- Parent/Teacher Association and other community representatives.

Step 2: Identify the SBHC Environment

- Highly medically-underserved low-income population.
- High rate of uninsured students, i.e., 60% uninsured.
- High incidence of violence in the schools, i.e., 15% of population carries guns, 20% of students have gotten into physical fights at school.
- Little community cohesiveness.
- School administrators are responsive to implementation of a clinic.

Step 3: List Available SBHC Service Clusters

- Preventive mental health services, e.g., peer counseling program; individual therapy for depression, behavioral problems, alcohol, and other substance abuse prevention.
- Preventive physical health services, e.g., comprehensive physicals, gynecological exams, immunizations, TB tests, eyesight exams, anticipatory guidance, prenatal care.
- Health education, e.g., violence prevention, nutrition, SBHC services availability.
- Acute medical care, e.g., ear, nose, and throat infections; injuries; STDs.
- Referrals for dental problems and more complex physical and mental health needs.

Logic Model Example (continued)

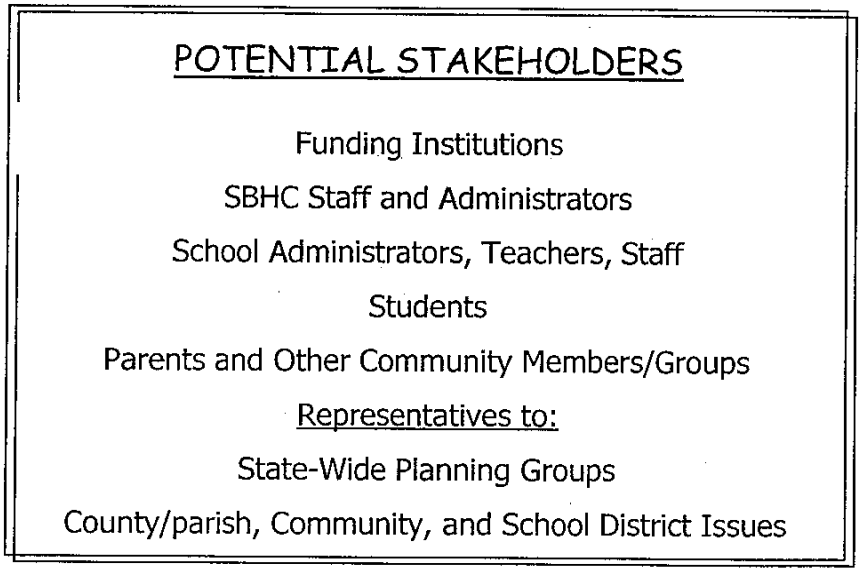
Step 4: Link SBHC Interventions to Measurable Outcomes			
OUTPUT OF SBHC INTERVENTION	TARGET POPULATION	EXPECTED CHANGE	EVIDENCE OF CHANGE
• 1,200 visits given to entire school population (500 students)	⇒ Entire school population	⇒ Improved service accessibility	⇒ Compared to students without SBHC services, those with access have higher rates of health service use
• 220 comprehensive physicals given to school population	⇒ Entire school population	⇒ Screening for physical/mental health problems, and appropriate referral	⇒ Compared to students without SBHC services, those with access have higher rates of screening
• 400 respiratory problem visits	⇒ Recipients of respiratory care	⇒ Prevention of acute episodes of respiratory problems (AERP)	⇒ Compared to students without SBHC access, those with access have fewer AERP.
• 100 referrals for dental care	⇒ Entire school population	⇒ Improved rate of students using dental services	⇒ Compared to students without SBHC access, those with access have improved self-report rates of dental service use
• 50 visits for substance abuse	⇒ Recipients of substance abuse treatments	⇒ Decreased substance use	⇒ Compared to students without SBHC access, those with access have less self-reported substance use
• 100 visits for depression	⇒ Recipients of depression counseling	⇒ Decreased depression symptoms	⇒ Compared to students without SBHC access, those with access have fewer self-reported depressive symptoms
• Violence prevention and intervention visits to 200 students	⇒ Recipients of intervention, e.g., suspended students and "Saturday school" attendees	⇒ Increased knowledge of mechanisms for coping with violence, and decrease incidence of violent acts	⇒ Compared to students without SBHC access, those with access show greater decreases in violence-related suspensions, expulsions, fights, and teacher-reported behavior problems

Step 1: Identify SBHC Stakeholders

People and organizations that influence the SBHC and SBHC evaluation are called **stakeholders**.

Stakeholders are generally decision-makers such as school principals, PTA members, and health officials who are interested in school health service consumers (and their families) who might benefit from the SBHC program. Stakeholders might need information, for instance, to make funding decisions. Stakeholders might also be gatekeepers, controlling access to students for the evaluation, or they might keep data needed for your evaluation.

Regardless of the type of evaluation you plan to conduct, you will need to gather your stakeholders to start evaluation planning. On Worksheet 2-1, which corresponds to Step 1 of the logic model, list your current stakeholders, as well as potential stakeholders. On the following page we explain why each category of stakeholders may be important for the SBHC implementation and evaluation process.



Funding Institutions - Any organization or individual funding SBHC efforts will be a stakeholder who will be interested in knowing how much of which services are being utilized, by whom, and the cost. Government officials may want to know who is receiving the services, insured or uninsured students. Managed care contractors may need to know the proportion of students covered by HMOs who also receive SBHC services.

SBHC Staff and Administrators - Whether or not this group is conducting the evaluation, they must be involved in most of the initial planning stages of the evaluation, as well as helping to interpret the findings. They are the central locus of control, controlling researchers' access to students and parents, as well as the implementation of actions related to evaluation findings.

School Administrators, Teachers, and Staff - This group will know a lot about students' needs. This group also includes school nurses, social workers, and counselors. They will influence your ability to obtain school-held data, administer surveys, and have access to students and/or parents.

Parents and Other Community Members/Groups - Members of this group know many of the needs of students, and how SBHC services have affected students' health care. Parents will be required to give consent for you to survey students, especially if you ask sensitive questions on topics such as drug or alcohol use, sexual activity, or mental health (check with local policies). Community members can help encourage parents to cooperate in completing surveys and/or consent forms.

Students - Young people should be given the opportunity to provide their input in shaping the services that they feel they need. Students will be able to give you insights into the types of outcomes you might expect from SBHCs, although you will likely need parental and student consent in order to gather information from them.

State-Wide Planning Groups - These stakeholders might provide their perspective on the role and contribution SBHCs might make to the overall health care delivery system available to children and adolescents in the community. It is important to know before you start the evaluation how and what results may fit into the "bigger community picture of health."

County/Parish, Community, and School District Factors - SBHC evaluation needs to consider how school district political pressures may influence teachers' and administrators' willingness to support program evaluation. This may include political factors, e.g., a governor that advocates accessible health services for children, or other pressing priorities of the school.

Although there are many potential stakeholders for your evaluation, it may not be necessary to identify a stakeholder in each category described. For instance, if you wanted to know the characteristics of students using specific SBHC services, and/or how much of the SBHC services students use (both process evaluation questions), then it may or may not be important that you contact stakeholders who represent state-wide planning groups. Stakeholders should ideally be part of the planning phase of SBHC implementation, although necessary stakeholders are often invited to the evaluation process as SBHC services expand or you learn of more stakeholders. Involving stakeholders from the beginning provides them the opportunity to be part of goal formation, interpretation of results, and dissemination of findings.

TIPS ABOUT STAKEHOLDERS:

- Your evaluation team should contain as many stakeholders as possible.
- If possible, stakeholders should be involved from the very beginning of the evaluation in an advisory capacity.
- They should help you form evaluation goals, objectives, and methods.
- They can provide resources throughout the evaluation process, e.g., money, credibility, access to a study population.

- They should be involved in helping interpret the results of your evaluation, disseminating findings, and in making program modifications, as necessary.

With this understanding of stakeholders, please complete Worksheet 2.1, that is found on the next page.

WORKSHEET 2.1: Logic Model Step 1: Identify SBHC Stakeholders

Please list current and/or potential stakeholders.

Type of Stakeholder	Name, Organization	Address	Fax, Phone Numbers, E-mail	Interest, Expertise, Potential Resources	Contact Date
Funding Institutions					
SBHC Staff and Administrators					
School Administrators, Teachers, and Staff					

WORKSHEET 2.1 (Continued) — Logic Model Step 1: Identify SBHC Stakeholders

Type of Stakeholder	Name, Organization	Address	Fax, Phone Numbers, E-mail	Interest, Expertise, Potential Resources	Contact Date
Students or student organizations, i.e., Associated Student Body					
Parents and other community members/groups					
People representing state wide planning groups					
County/parish, community, and school district groups					

Step 2: Identify the SBHC Environment

If you were telling an out-of-town friend about the SBHC and the community you plan to evaluate, what would you say? You might tell them about the largest health concerns in the community; the social, cultural, and political climate; demographic characteristics of the population you serve; and/or specific problems and assets of the SBHC school community. These characteristics help profile the SBHC environment. Worksheet 2.2 should be completed next to help you describe your SBHC environment.

If SBHC services have not yet been implemented:

You are probably in the Needs Assessment Evaluation Phase of program development. You are congratulated for thinking about the evaluation process this early in your program development. You are encouraged to work through the following steps using your best judgment to approximate the services you might deliver, the population you intend to serve, and the related outcomes you might expect. Doing so will help you brainstorm potential goals or outcomes of your service delivery, which will help you in conducting later process, outcome, or impact evaluations.

If you don't work through the remainder of the logic model, we suggest you scan the remainder of this logic model section, then complete the subsequent sections in this Chapter, starting with the section, "Writing preliminary SBHC evaluation goals and objectives", (p.51). Then use Chapter 3 to choose needs assessment evaluation methods.

WORKSHEET 2.2: Logic Model Step 2: Identify the SBHC Environment

Please list components of the SBHC environment, i.e., incidence of disease and sicknesses, age group served, as well as the cultural, political, moral, and social climate.

What are the largest health challenges faced by the SBHC population?

What are the largest social challenges faced by the SBHC population?

What is the incidence of common physical and emotional health problems, i.e., depression, otitis media, substance use, STDs?

What are the local or national statistics about the health issues of your or a similar school population?

What do parents, schools, and local governments think about child and adolescent health problems? Are SBHCs seen as a supportive or controversial resource? Are there relevant ballot issues or campaign issues that effects the SBHC?

What are the major school and community assets which will help you successfully implement and operate your SBHC?

Step 3: List Available SBHC Service Clusters

The SBHC is likely to deliver numerous services to the student population it serves. We suggest several categories of services offered at many SBHCs, as well as examples of specific services that might be offered under each category. Detail the services offered at your SBHC on Worksheet 2.3.

If SBHC services have not yet been implemented:

You are probably in the Needs Assessment Evaluation Phase of program development. Congratulations for thinking about the evaluation process this early in your program development. We strongly recommend you work through the remainder of the logic model Steps using your best estimates of services you plan or hope to be able to provide.

If you don't work through the remainder of the logic model, we suggest you SCAN the remainder of this logic model section, then complete the subsequent sections in this Chapter, starting with the section, "Writing preliminary SBHC evaluation goals and objectives", (p.51). Then use Chapter 3 to choose needs assessment evaluation methods.

WORKSHEET 2.3: Logic Model Step 3: List Available Service Clusters

✎ *Please check the services below that are provided at your SBHC.*
The source for the services listed below is from Quality standards for comprehensive school-based health centers in North Carolina (Division of Women's and Children's Health, 1997).

Comprehensive health assessment:

- ☐ medical history
- ☐ psycho-social screening for health risks
- ☐ comprehensive physical exams
- ☐ screenings: vision/hearing/dental/developmental/nutritional
- ☐ one-on-one education about identified health problems/risks
- ☐ mental health screening
- ☐ other _____

Diagnosis of presenting physical health problems:

- ☐ acute illness
- ☐ chronic illness
- ☐ acute dental
- ☐ minor injuries
- ☐ pregnancy
- ☐ other _____

Treatment/Management of identified or presenting physical health problems:

- ☐ acute illnesses and injury
- ☐ chronic illness
- ☐ acute dental
- ☐ prenatal care
- ☐ prescriptions
- ☐ other _____

Preventive Health Services and Risk Management:

- ☐ immunizations

- ☐ Health Check (EPSDT) screening
- ☐ anticipatory guidance/counseling (including abstinence, self-breast and testicular exam, nutrition, physical fitness, safety, injury, violence prevention, stress management, etc.)
- ☐ nutrition counseling and weight management
- ☐ sexual abstinence counseling
- ☐ dental care
- ☐ other _____

Mental health assessment and treatment for the following:

- ☐ immediate response to emergency/crisis situations
- ☐ physical/sexual abuse prevention/counseling
- ☐ alcohol/substance abuse prevention/counseling
- ☐ depression/suicide prevention/counseling
- ☐ family/peer relationship problems
- ☐ linkage with school and community counseling
- ☐ school performance/behavior problems
- ☐ short-term counseling
- ☐ case management
- ☐ group and family counseling
- ☐ psychiatric evaluation and treatment
- ☐ long-term counseling
- ☐ other _____

Laboratory testing:

- ☐ Clinical Laboratory Investigation Agency (CLIA) I tests:
- ☐ Hematocrit/hemoglobin
- ☐ urinalysis-dipstix
- ☐ wet-prep
- ☐ pregnancy testing
- ☐ tuberculin skin testing
- ☐ HIV/STD testing

☐ other tests according to the Guidelines for Adolescent Preventive Services (GAPS) and CLIA II & III guidelines

☐ other _____

Health education/promotion:

☐ one-on-one health education

☐ group/targeted education

☐ family and community health education

☐ health education for health center and school staff

☐ other _____

Support for comprehensive health education in the classroom in such areas as:

☐ substance use prevention/cessation

☐ intentional and unintentional injury prevention

☐ nutrition

☐ social skills development

☐ death and dying issues

☐ physical and emotional development

☐ conflict resolution

☐ child abuse prevention

☐ violence prevention

☐ STD/HIV/AIDS prevention

☐ pregnancy prevention

☐ chronic conditions (i.e. asthma)

☐ general parenting skills

☐ chronic disease prevention (smoking cessation/prevention, heart disease, osteoporosis)

☐ other _____

Social Services:

Assessment and referral to social service agencies to provide the following:

☐ assistance attaining basic needs (food, shelter, clothing)

☐ legal services

- ☐ referral to public assistance
- ☐ assistance with Medicaid and other health insurance enrollment
- ☐ employment services
- ☐ daycare services
- ☐ transportation
- ☐ child protective services
- ☐ other _____

Nutrition services:

- ☐ comprehensive nutritional assessment
- ☐ weight management counseling
- ☐ therapeutic diet counseling for chronic disease prevention and treatment
- ☐ nutrition education and counseling
- ☐ disordered eating screening and referral
- ☐ consultation to child nutrition/school food service staff on diet modifications for children with special needs
- ☐ consultation to coaching staff on sports nutrition
- ☐ nutrition counseling for faculty and staff
- ☐ WIC program certification and nutrition education for pregnant and parenting teens
- ☐ other _____

Other services:

- ☐ dental care
- ☐ well-child care of students' children
- ☐ physical fitness
- ☐ reproductive health care
- ☐ age-appropriate reproductive health counseling
- ☐ pregnancy options counseling
- ☐ case management
- ☐ prescriptions_____
- ☐ other _____

Step 4: Link SBHC Interventions to Measurable Outcomes

Probably the most important preliminary step for developing outcome and impact evaluation goals is completing Step 4 of the logic model. In this step, you clarify the logical connection between the services used by students and the change you expect to see from this service delivery.

Step 4 contains four parts:

- 1) identifying services actually delivered to students,
- 2) describing the population using the specific intervention,
- 3) describing the related change that might be expected in the population served if the proposed (or current) services are made available, and
- 4) predicting the change which might occur and the means of documenting that change.

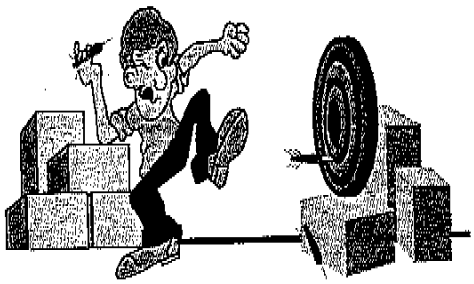
> If you are unable to complete all parts of Step 4, a process evaluation is probably appropriate for you. If a process evaluation is appropriate for you, please complete this step with your best estimates, which you can confirm with later process evaluation results.

To complete the first part of Step 4 you will need to know how much of each SBHC service is actually delivered to the student population. You may have this information from previous years or you may have this information in a current database in your SBHC management information system. Please complete the first column of Worksheet 2.5 (p.49), "Output of SBHC Interventions", then return to these instructions.

 For the second part of Step 4, you should try to describe the population that has used the specific services or the population you expect will use these services. This should give you insight into the population where change might be evidenced, and will also give you a sense of potential sample size. Please complete the second column of Worksheet 2.5 (p.49), "Target Population/Population Served", then return to these instructions.

 For the third part of Step 4 of the Logical Model, you should consider what change might result from the services the SBHC offers to specific students. To help you consider different changes you might expect, we present expected change targets on the next several pages. After reading through these possibilities, please complete the third column of Worksheet 2.5 (p.49), "Expected Change", and then return to the instructions for the final part of Step 4. Remember, that for some of the following changes, you could either compare pre- and post- data for one clinic, compare results over time, and/or compare a SBHC school to another school where a SBHC is not available.

TARGETS FOR SBHC RESEARCH



Possible Expected Change from SBHC Interventions

Access to Health Care

- Increased access to mental health/substance abuse care
- Reduction of Emergency Room /After Hours care use
- Increased access to treatment for acute medical problems
- Reduced difficulty obtaining needed care
- Decreased likelihood of not receiving care when needed
- Increased access to primary care providers
- Increased availability to culturally sensitive care
- Increased access to dentists
- Increased satisfaction with the source of care that is most utilized

Health Outcomes

Health Maintenance/Screening

- Up-to-date immunization status
- Completion of timely comprehensive medical exams, i.e., following recommended guidelines, e.g., Guidelines for Adolescent Preventive Services (GAPS)
- Timely dental exams
- Increased number of students screened for vision, hearing, scoliosis, TB, Sickle Cell

Acute Illnesses

- Early treatment
- Increased compliance with recommended medical regimen
- Decreased number of missed school days
- Reduction in the amount of parental work missed
- Increased follow-up

Health Status

- Improved ability by parents to identify previously unrecognized health problems
- Increased identification of new or previously unrecognized health problems
- Reduced incidence of new dental caries

Chronic Disease

- Reductions in:
  - anemia
  - asthma excerbations
  - seizures
  - eczema
  - recurrent otitis
  - enuresis/encopresis

Reproductive Health

- Increased early adoption of contraception - decrease in time between initiation of intercourse and contraception
- Increased use of condoms
- Adoption of more effective contraception
- Improved contraceptive compliance
- Reduction in teenage pregnancy, abortions, and births
- Early entrance into prenatal care
- Reduction in repeat teen pregnancy

Education

- Improved or increased attendance
- Improved academic performance
- Reduction in drop-out rates
- Improved academic aspirations
- Improved perception of academic performance

Mental Health

- Identification of depression, substance abuse, anxiety, suicide attempts
- Improved access to treatment of specific mental health problems
- Reduction in mental health problems

Health Education

- Effects of health education curriculum, e.g., increased level of knowledge and behavioral intent related to specific topics (e.g., smoking, alcohol use, condom use, etc.)
- Increased knowledge among students, family, and staff about SBHC services

Parental Involvement/Functioning

- Increase participation in child's health
- Increased proportion of consent forms signed
- Improvement in number of students receiving after-school supervision
- Reduction in abuse/neglect
- Improved parental attitudes toward school
- Increased parental visits/involvement with school

Risk Behavior

- Reduction in frequency of alcohol consumption in life
- Reduction in number of drinks alcohol consumed at one time
- Reduction in frequency of alcohol consumption in last month
- Reduction in frequency of chewing tobacco
- Reduction in ever chewed tobacco
- Reduction in frequency of smoking cigarettes and cigars
- Reduction in ever smoked cigarettes and cigars
- Reduction in frequency of smoking marijuana
- Reduction in ever smoked marijuana
- Reduction in ever used illegal drugs

Financial

- Increased number of eligible students enrolled in Medicaid, State Child Health Insurance Programs, or other plans as appropriate
- Establishment of competitive or reasonable cost per visit
- Increased number of uninsured students served
- Increased proportion of reimbursement obtained

Utilization of Services

- Increase proportion of students enrolled in SBHC
- Document appropriateness of visits, e.g., Is SBHC used unnecessarily?
- Establish referral sources
- Increase compliance
- Improve system coordination at the intra and inter-organizational level

Change might also be expected in areas of particular interest to managed care organizations (MCOs). If you are working with or trying to work with MCOs it may be in your best interest to "speak" the same language managed care speaks when it evaluates service quality. MCOs and others use a set of measures, called HEDIS 3.0, which stands for Health Plan Employer Data and Information Set 3.0. HEDIS is a standardized set of performance measures developed by the National Committee for Quality Assurance. These indicators will help users and purchasers of health plans compare health services. Therefore, SBHCs measuring their performance by these indicators may have a bargaining tool for development of future MCO contracts. SBHCs contracting with health plans, i.e., MCOs, will need to collect this data to prove they are delivering quality services to two different populations: 1) those enrolled under commercial contracts, and 2) those enrolled under Medicaid contracts.

Possible SBHC Outcomes Important for HEDIS

(Taken from Making the Grade Website: http://www.gwu.edu/~mtg/)

Effectiveness of Care

- Childhood immunization status
- Adolescent immunization status
- Advising smokers to quit
- Prenatal care in first trimester
- Check-ups after delivery
- Treating students' ear infections
- Follow-up after hospitalization for selected mental illnesses

Access/Availability of Care

- Students' access to primary care providers
- Availability of primary care providers
- Availability of mental health/chemical dependency providers
- Availability of obstetrical and prenatal care providers
- Initiation of prenatal care
- Annual dental visits
- Availability of dentists
- Availability of language interpretation services

Satisfaction with the Experience of Care

- Satisfaction survey

Health Plan Stability

- Provider turnover

Use of Services

- Frequency of ongoing prenatal care
- Well-child visits in the first fifteen months of life
- Well-child visits in the 3rd , 4th, 5th, and 6th years of life
- Adolescent well visits
- Chlamydia screening for females
- Counseling for alcohol use
- Ambulatory care
- Mental health utilization - percentage of members receiving inpatient, day/night care and ambulatory services

Cost of Care

(for example, cost per service or cost per user per year)

Informed Health Care Choices

(for example, new member orientation/education and language translation services)

Health Plan Descriptive Information

- Board certification/residency completion
- Provider compensation
- Case management
- Utilization management
- Recredentialing
- Preventive care and health promotion
- Arrangements with public health, educational, and social service organizations
- Pediatric mental health services
- Chemical dependency services

The final part of Step 4 of the logic model requires you to plan how the change you expect to achieve will be documented. After completing this final part, you should be able to consider the data sources you will use to measure change in an outcome. This final part is critical and should not be overlooked, especially if you intend to complete an outcome or impact evaluation. Completing Step 4 will force you to determine whether or not the expected change is or is not measurable.

To help determine if your expected change is measurable, we suggest you ask yourself four questions:

1) What does change look like?
2) What would count as evidence of change?
3) What other factors may influence the extent of change (we will discuss this issue and confounding factors in more detail later)?
4) Who/Which students will be affected?

These four questions should help you start thinking about what is and what is not measurable, e.g., it is unlikely SBHC services will change the general health of an entire school population for the better, thus a potential measurable SBHC outcome is not a change in general health status. An example of measurable change may be results of conflict resolution training. If students with previous violent behaviors are targeted for such training,

a measurable change may be detected in a survey completed by these students. Alternatively, you may offer one-on-one counseling sessions to learn why specific students are violent (e.g., abuse, neglect, hyperactivity, boredom), and then provide related counseling services. Ultimately, your measurable outcome would be a decrease in students' violent behaviors, as measured by student self-reports, teacher surveys, and/or school records regarding expulsions, suspensions, or other similar indicators. By the time you have answered the four evaluation questions above, the complexity of SBHC outcome/impact evaluations should become more obvious.

Example - Educating Teachers' and Students' About Available SBHC Services

A SBHC has set a goal of trying to increase student and teacher understanding of available SBHC services. By answering the four questions suggested earlier, it should be clear whether the effect of this intervention can be measured. If we cannot visualize what change looks like, or if we imagine the change, but we can't see how we would separate SBHC influence from other influences, then this may not be an appropriate outcome to measure.

Look at the following responses to the four questions:

1) <u>What does change look like?</u> Change would mean a larger number of students and teachers would know about services available at the SBHC. As a result, the SBHC may experience a greater number of visits and an increase in the range of offered services being utilized. There may be an increase in the number of teacher referrals, as well as follow-ups with teachers as appropriate. For example, a joint coordinated intervention may be developed by both teachers and SBHC staff if a problem is deemed to be prevalent across many students.

2) What would count as evidence of change? A 20% increase in the number of student visits. A 10% increase in the number of student self-referrals. A 10% increase in the number of teacher referrals.
3) What other factors might influence the extent of change? Word-of-mouth might be responsible for more students knowing about the clinic. SBHC publicity may be heightened by a high-profile incident related to SBHC, e.g., SBHC staff interviewed in school newspaper, or a difficult situation is handled well by clinic staff, thus increasing the level of trust among students. Normal fluctuations in SBHC visit rates, e.g., seasonal variation, may exist with greater number of visits during the winter season. SBHC use increases as the center becomes established. Maturity of the clinic could also be responsible for measurable change in service use/ knowledge of services.
4) Who/Which students will be effected? Will a large enough population be effected so that the change will be measurable? Will the children effected still be in the school when the effects of the intervention can be measured? Who needs to be included in the study? Who can be excluded from the study?

Please complete Worksheet 2.4 now. After completing Worksheet 2.4, complete the final column of Worksheet 2.5 (p.49), labeled, "Evidence of Change."

WORKSHEET 2.4: Logic Model Step 4: Is the Expected Change Measurable?

Write the answers to the following questions.

1) What does change look like?

2) What would count as evidence of change?

3) What other factors may influence the extent of change

4) Who/Which students will be affected?

WORKSHEET 2.5: Logic Model Step 4: Link SBHC Interventions to Measurable Outcomes

Write in SBHC services delivered, target population, expected change, and evidence of change.

OUTPUT OF SBHC INTERVENTION	TARGET POPULATION (POPULATION SERVED)	EXPECTED CHANGE	EVIDENCE OF CHANGE
•	⇒	⇒	⇒
•	⇒	⇒	⇒
•	⇒	⇒	⇒
•	⇒	⇒	⇒
•	⇒	⇒	⇒
•	⇒	⇒	⇒
•	⇒	⇒	⇒
•	⇒	⇒	⇒

In summary, Step 4 of the logic model is divided into four parts which are intended to help you make the logical connection between SBHC interventions and outcomes you can measure. In the first part of Step 4 you listed the SBHC service outputs, giving you a concrete understanding of the quantity of intervention you plan to deliver. In the second part of Step 4, you describe the population that will receive the intervention, and thus the population that might exhibit change. In the third part of Step 4, you listed outcomes that might be related to your intervention. In the fourth and final part of Step 4, you pared down the list of outcomes you brainstormed and chose the most measurable of those outcomes.

Having completed this final Step of the logic model, you should be ready to set goals to measure the outcome or impact of an intervention. Alternatively, if you have not been able to complete this step, see below for a suggestion of where you might start the evaluation process.

- If you have not been able to complete Step 4, you know that your SBHC program is best suited for a needs assessment or process evaluation.
- If you are not certain what services to offer students, or you need a better understanding of the SBHC environment, you should work towards completing a needs assessment.
- If you have implemented services, but are unsure how much of which services have been used or by whom, you should conduct a process evaluation.
- If you have completed the logic model using information from your own clinic, you are ready to conduct a process evaluation, and possibly an impact or outcome evaluation, but only if you have identified a clear baseline comparison group.

In the next section of the manual you will be introduced to the process of writing your evaluation goals and objectives. This next step is important no matter what level of evaluation you select.

WRITING PRELIMINARY EVALUATION GOALS AND OBJECTIVES

Having followed the four steps of the logic model, you should have a good idea of the type of evaluation appropriate for you and you should be well prepared to form your preliminary evaluation goals and objectives. On the following pages we provide definitions, examples, and directions for forming your relevant, measurable evaluation goals and objectives.

Goals

Goals for any type of evaluation are global, broad, and diffuse. An evaluation may have only one or two primary goals. Goals include the scope of evaluation and a definition of the population to be studied.

Objectives

Objectives are specific indicators of your goals; they define the necessary steps for reaching the goal.

Objectives must be measurable and contain the following four elements:

1) a strong verb,
2) a single purpose or aim,
3) a single result or end product, and
4) the time frame for the expected achievement.

Examples of Needs Assessment Goals and Objectives

Goal: "To evaluate the health needs of the school for which a SBHC is intended."

- **Objective 1:** Identify twenty health resources for this community, within the next two weeks.
- **Objective 2:** Identify the five most frequent health problems experienced by the student population, during the Fall season.
- **Objective 3:** Describe the health status of Kindergarten students using immunization status, medical records, and prevalence of school days missed for sickness, in the first month of school.
- **Objective 4:** Identify at least two unrecognized needs of high-risk students that could be addressed by the SBHC, within one school year.

Goal: "To determine if the community perceives a need for a SBHC."

- **Objective 1:** Identify ten community leaders, their opinions about the need for health services, and the appropriateness of a SBHC for meeting those needs, within the next two weeks.
- **Objective 2:** Identify the frequency and type of health services used by students during the previous academic year, using private and public medical facility records.
- **Objective 3:** Identify at least five common barriers to health care access experienced by the community's student population, within two months.
- **Objective 4:** Determine if students and/or parents perceive a need for SBHC implementation, within five months.

Examples of Process Goals and Objectives

Goal: "To increase the number of high-risk students at one high school who use SBHC services."

- **Objective 1:** Make ten presentations to classrooms containing high-risk students emphasizing available, relevant services, by the third month of school.
- **Objective 2:** Increase use of contraceptive services by 20% among the sexually active school population, within one school year.
- **Objective 3:** Increase the proportion of identified depressed students who have utilized mental health services to 40%, in one academic year.
- **Objective 4:** Increase teachers' referrals of at-risk students by 25%, by the third month of school.

Goal: "To increase the percentage of eligible students who obtain preventive health services at the SBHC."

- **Objective 1:** Increase the percentage of school sport physicals that are obtained at the SBHC by 5%, within this school year.
- **Objective 2:** Increase by 10% the number of physicals given to students who receive free or reduced meals and who are not participating in school athletics, within this school year.
- **Objective 3:** Increase the percentage of preventive health service referrals from teachers by 30%, during this school year.
- **Objective 4:** Increase the percentage of students who receive substance abuse preventive interventions by 20%, during this school year.

Examples of Outcome Evaluation Goals and Objectives

Goal: "To assess if SBHC services increase access to primary, preventive health services by Medicaid-insured elementary school students."

- **Objective 1:** Increase SBHC preventive health service use by Medicaid-insured students, within one academic year.
- **Objective 2:** Document Medicaid-insured students' use of preventive mental health services, during one academic year.
- **Objective 3:** Contrast the use of preventive dental health services among Medicaid-insured students with and without SBHC access, over one academic year.
- **Objective 4:** Document Medicaid-insured students' knowledge of preventive health service at a SBHC and comparison school, during one academic year.

Goal: "To assess if a targeted nutrition intervention increases the consumption of fruits and vegetables in the target population more than in the comparison group."

- **Objective 1:** Establish nutrition profile of comparable intervention and comparison school students using baseline characteristics collected, during the first month of school.
- **Objective 2:** Survey students to determine the change in fruit and vegetable consumption, between the fifth week of school and two weeks post-nutrition intervention.
- **Objective 3:** Conduct lunchroom observations at baseline and follow-up to validate reported fruit and vegetable consumption by students.
- **Objective 4:** Document whether results have been maintained, at six months post-nutrition intervention.

Examples of SBHC Impact Evaluation Goals and Objectives

Goal: "To determine if SBHC pregnancy prevention efforts (contraceptives, mental health counseling, health education interventions) in five schools help prevent teenage pregnancies more than a standard sexual education school curriculum."

Objective 1: Compare knowledge of contraceptives and STDs among students attending a SBHC and comparison school, at baseline, three, six, and ninth months after implementation of a SBHC and standard educational intervention.

Objective 2: Compare changes in STD rates in the SBHC and comparison school, at three, six, and nine months post-intervention.

Objective 3: Increase by 25% students' reports of talking with partners and/or parents about sexuality, within one academic year in schools with SBHCs.

Objective 3: Decrease by 50% the rate of teenage pregnancy among five schools with SBHCs, within two academic years.

Goal: "To determine the cost-benefit of delivering preventive dental health services to elementary-aged students."

Objective 1: Determine the costs associated with the provision of dental services during eighteen months.

Objective 2: Determine the benefit of providing dental health services during eighteen months.

Objective 3: Calculate the ratio of costs to benefits for the provision of preventive dental care services for 18 months in school settings, as compared to non-school settings.

Now that you have reviewed the key elements of goals and objectives, you are ready to write your preliminary goals and objectives in Worksheet 2.6 found on the next page.

WORKSHEET 2.6: Writing Preliminary Evaluation Goals and Objectives

Please follow the instructions for writing your goals and objectives.

Your goal statement should contain the answers to these questions:

1) What is the population you are studying - students, staff, services, teachers?
2) How large is the evaluation?
3) What do you hope to accomplish?

Write your proposed goal(s) statement here:

When writing objectives for your evaluation goal, you might ask yourself the following: How might you know when/if this goal has been accomplished? What are some of the overall objectives/process objectives that would need to be accomplished for the evaluation goal to be assessed?

Objectives contain:

1) a strong verb,
2) a single purpose or aim,
3) a single result or end product, and
4) the time frame for the expected achievement.

Write your evaluation objectives here:

Objective 1:

Objective 2:

Objective 3:

Objective 4:

FACTORS INFLUENCING EVALUATION GOALS AND OBJECTIVES

By this point, you have a good idea of the type of evaluation you wish to pursue, and you have created preliminary goals and objectives. The goals and objectives you have written are preliminary because you have not yet looked systematically at factors that may influence your evaluation goals and choice of objectives. For instance, you may have an evaluation that is unattainable due to resource constraints. In this section, we ask you to consider the match between your desired level of evaluation and the resources you have available. This is so you can revise, if needed, your preliminary goals to ensure your evaluation plan is both practical and feasible.

Level of the Evaluation

In whatever type of evaluation you choose to conduct, it is important to be aware of the level of your evaluation, whether you have taken a micro- or macro-level view of your research question. It is possible to approach one research question from anywhere along a continuum of these two perspectives. Table 2.1 provides examples of different levels of evaluation for each evaluation type.

From a micro-level perspective: This would include looking at the SBHC services within the school walls, e.g., how are services in one school being used. This level might be of interest to a SBHC staff person.

From the macro-level perspective: This would include looking at how SBHC service use fits into a network of community health services utilized by students, e.g., how do SBHC services

supplement, complement, or replace existing community resources. This evaluation level may be of interest to a public health professional or a city-wide health service coordinator.

Table 2.1: Micro and Macro-level perspectives for three evaluation types

Evaluation Type	Micro-level Perspective	Macro-level Perspective
Needs Assessment	What additional SBHC services do SBHC users say they need?	Considering the various health resources in the community, what service gaps exist?
Process Evaluation	To what extent are SBHC services being used?	How has SBHC service use affected the use of other health resources in the community?
Outcome/Impact Evaluation	Has SBHC access improved access to health services among SBHC users?	Compared to a community-wide sample of youth, has SBHC access in 12 schools improved students' access to health services?

Identifying the level of your evaluation makes clear the data you need to collect. From a micro-level perspective, you would need to collect data from SBHC users or students who have SBHC access in a specific school. If you look at an evaluation from a macro-level, you are committed to more extensive data collection.

The level of your evaluation is also related to the strengths and limitations of your study, including the conclusions that can be drawn. For example, if you take a micro-level perspective, you will not be able to conclude that SBHC services improve overall access to mental or preventive health care. Such conclusions could only be made if you had asked about use of services inside and outside of the school, to evaluate whether SBHC services had simply replaced the use of other services outside the school. Even if you ask about services in

and outside the school your results would be strengthened if you were able to verify self-reports with other community health provider data.

	Micro-level Perspective	Macro-level Perspective
Focus:	Narrow----------	Broad
Time needed:	Minimal----------	Extensive
Attention given to:	SBHC----------	SBHC, school, community
Services considered:	SBHC services----------	SBHC, school, community health services
Population studied:	SBHC users----------	SBHC users, non-users, comparison population

Most evaluations will likely be conducted somewhere on the continuum between micro- and macro-levels. Use Worksheet 2.7: Scope of Your Evaluation, to write the perspective from which you will do your evaluation. The essential purpose of this diagram is to help you be aware of your approach. Describing the level of your planned evaluation will help you recognize the strengths and limitations of the evaluation results you obtain.

WORKSHEET 2.7: Scope of Your Evaluation

Please put an "x" along the continuum to describe the focus of your evaluation.

	Micro-Level	Macro-Level
Focus:	Narrow----------	Broad
Time needed:	Minimal----------	Extensive
Attention given to:	SBHC----------	SBHC, school, community
Services considered:	SBHC services----------	SBHC, school, community health services
Population studied:	SBHC users----------	SBHC users, non-users, and comparison populations' use of school and other community health services

How extensive will your data collection efforts need to be?

_____

How does your evaluation level influence the conclusions that can be drawn from your study?

_____

_____

Who will use your evaluation results?

_____

_____

Resources for the Evaluation

In this section we describe budgetary resources needed for your evaluation, as well as expertise, support, and informed consent procedures required for some evaluations.

YOUR BUDGET

As a rule of thumb, needs assessment and process program evaluation should cost about 10% of a program budget, i.e., if the program budget is $300,000, your evaluation will likely cost an additional $30,000. This does not include outcome or impact evaluations, which can cost much more due primarily to the need to track students at both SBHC schools and non-SBHC schools over time. When estimating your budgetary needs you should consider costs for staff time, tools and materials, as well as operational costs such as computers for data entry and analysis.

MONEY, STAFF, AND TIME

Most SBHC staff will have little time or expertise for additional evaluation activities. Yet needs assessments and process evaluation tasks might be partially absorbed by current staff enthusiastic about evaluation. **Caution** - you should be aware that SBHC evaluation by SBHC providers may bias your results. To minimize such potential bias, SBHC staff should be as systematic as possible in collecting client data and lab data to substantiate results. Outcome and impact evaluations will likely require additional staff for identifying comparison data, administering surveys, tracking students, entering and analyzing data, and reporting the results.

If your current budgetary constraints restrict your evaluation options, you can expand your options by:

- gaining evaluation expertise from a parent agency, community health care organizations, or the like,
- using volunteer staff,
- offering graduate students internships, or allowing them to do some of the leg-work of your evaluation. With a high level of commitment, supervision, and monitoring by faculty, graduate students might be able to do the data analysis work and report-writing, and/or
- raising additional funds or matching funds through grant, foundation, and/or private sector support.

TOOLS AND MATERIALS

Depending on the extent of your evaluation, you will need various resources.

All evaluations will require some operating costs, including:

- word processor and printer, or typewriter.
- paper, pens, envelopes, flip charts, copier, audio-visual equipment etc.
- access to meeting, planning, or office space.

Needs assessments may require:

- incentives for participants, including teachers, sometimes schools, and students. These can be relatively low cost, e.g., students receive extra school credit for returning a completed consent form and survey.
- a needs assessment survey, i.e., an existing instrument or a new survey created by modifying existing surveys.
- survey mass mailing, extensive interviews, and/or access to people for focus groups.
- recording equipment or an assistant to record focus groups (optional).
- computer software for analyses.
- staff to collect and analyze data.

Process evaluations may require:

- process evaluation instruments, such as surveys, clinic data, parent consent form data.
- access to SBHC records.
- mass mailing to parents and/or other stakeholders and/or access to people for focus groups.
- computer software for analyses.
- staff to collect and analyze data.

Outcome and impact evaluations may require:

- survey instrument(s).
- access to populations that will be studied for piloting and surveying in schools without a SBHC.
- incentives for participation (teachers, principals, students, SBHC staff, etc.).
- a system for tracking participants over time.
- statistical software, e.g., SPSS or SAS.
- data on each student from schools, e.g., grade level, classroom, gender, ethnicity, birth date, subsidized school lunch enrollment, etc.
- staff to collect and analyze data.
- outside evaluation expertise.

Worksheet 2.8 is designed to help you plan your evaluation budget. Thinking of the costs mentioned in the previous two pages, please complete Worksheet 2.8 now.

WORKSHEET 2.8: Budget Proposal

Please list the projected costs for each of the following categories.

BUDGET ITEM	ESTIMATED EXPENSES	VOLUNTEER IN-KIND	TOTAL
PERSONNEL			
Project Manager(s)			
Research Assistant(s)			
Data Collectors, e.g., incentives for teachers			
Data Entry			
Report Writer			
Other			
TRAVEL			
OPERATING COSTS			
Computer(s)			
Software			
Survey Instruments			
Room Rental			
Other Materials & Supplies			
Printing & Copying			
Telephone & Fax			
Distribution			
Other			
TOTAL COST			

In addition to budgetary constraints on your evaluation, you should also consider whether you have or can obtain sufficient expertise, support, and Institutional Review Board approval to complete the evaluation.

EXPERTISE

- Research experience, including capacity to develop overall evaluation goals and objectives, evaluation questionnaires, analysis, etc.
- Experience working with the community.
- Experience working with school administrators, teachers, parents, and students.

SUPPORT

- School administrators
- Teachers
- Community members outside of the school who are interested in evaluation efforts
- SBHC staff

PROTECTION OF CHILDREN PARTICIPATING IN SCHOOL RESEARCH

The federal regulations for the protection of human subjects The Code of Federal Regulations 45 Subpart 46) require a review of all federally supported research, unless the research is specifically exempted from review (Department of Health and Human Services, 1991). Most universities, many school systems, and most large health care organizations also require a review of non-federally funded research. Research projects are reviewed by local Institutional Review Boards (IRBs) which are federally chartered ("assured" in the language of the regulations) to review research. This assurance process is directed by the Office for Protection from Research Risk (OPRR), which is part of the federal Department of Health and Human Services (DHHS).

An IRB can review and approve, require modifications in a research study, or disapprove a study entirely. This review is designed to minimize risks to research subjects and to maximize the benefits of the research. The IRB scrutinizes consent forms to assure the information

given to research subjects is comprehensible and complete enough to allow a person to make an informed decision. The IRB also conducts continuing reviews of research projects, usually on an annual basis.

School systems normally have their own administrative mechanisms for approving school-based research. School system approval is especially important if research includes activities outside of the clinic itself. While educational research, such as research on standardized tests of knowledge and aptitude, is often exempt from IRB review, research on health behaviors is generally not considered educational research and is not exempt. We suggest three basic references for this subject, Grodin, Glanz 1994; Guidelines for Adolescent Health Research, 1995; and Santelli, Rosenfeld, DuRant, Dubler, Morreale, English, Rogers, 1995.

Students may be the best source of information for some data, e.g., students' substance use, sexual activity, number of times skipped school without permission, mental health, etc. Such data are often collected using in-classroom questionnaires. Both parental permission and child or adolescent assent (consent) are generally required for children (minors) who are participating in research, including research using questionnaires about health behaviors. The term "assent" recognizes that children even as young as six years show significant capacity to make decisions, but often need adult guidance. Research on decision-making capacity suggest that adolescents are as skilled as adults in deciding about research participation and make decisions similar to adults. Minors should be fully informed, should be able to ask questions, and can refuse to be involved in a research project. Assent forms with adolescents should generally contain all the same information as the parents' permission form.

Parental permission for student participation in research can be obtained in one of two ways: through "active" or "passive" consent. Active consent (permission) means a parent must sign and return a permission form in order for the child to participate. Passive consent (permission) means parents read a permission letter and contact the school or health center only if they want their child to be excluded from participation. Using passive consent often improves the

response rate of questionnaires and is a procedure which is familiar to school personnel. Both active and passive consent should include procedures for parents to speak with the researchers, in person or via telephone, to ensure they understand the written form and are making an informed choice. Surveys such as the Center for Disease Control and Prevention 'Youth Risk Behavior Survey' are often conducted with "waiver of documentation of parental permission", i.e., passive consent procedures.

A good consent form should be easily readable and should contain the essential elements of informed consent as described in the federal regulations. Many adults in the U.S. do not read above an eighth grade level. Keep the language simple!

The essential elements of informed consent (from section 46.116 of the federal regulations, Department of Health and Human Services, 1991) include:

1) a statement that the study involves research, an explanation of the purposes of the research and the expected duration of the subject's participation, a description of the procedures to be followed, and identification of any procedures which are experimental;
2) a description of any reasonably foreseeable risks or discomforts to the subject;
3) a description of any benefits to the subject or to others which may reasonably be expected from the research (the beneficiaries of survey research are generally other people);
4) a disclosure of appropriate alternative procedures or courses of treatment, if any, that might be advantageous to the subject (this element is generally not applicable to survey research);
5) a statement describing the extent, if any, to which confidentiality of records identifying the subject will be maintained;
6) an explanation as to whether any compensation or medical treatments are available if injury occurs and, if so, what they consist of or where further information may be obtained (for research involving more than minimal risk - this element is generally not applicable to survey research);
7) an explanation of whom to contact for answers about the research and research subjects' rights, and whom to contact in the event of a research-related injury to the subject; and

8) a statement that participation is voluntary, refusal to participate will involve no penalty or loss of benefits to which the subject is otherwise entitled, and the subject may discontinue participation at any time without penalty or loss of benefits to which the subject is otherwise entitled.

Informed consent is only one way to protect people involved in research. For example, completing a questionnaire or survey for a SBHC evaluation will pose little or no physical or emotional risk to students if confidentiality is adequately protected. Researchers must have procedures to protect sensitive data from disclosure to those not involved in the research. Collecting data anonymously (without names or any specific identifying information) or using confidential study numbers instead of names are two ways to protect confidentiality.

Confidentiality means the respondent's identity is known by the individual conducting the evaluation project, but the link between the identity of the student and the data provided is protected and guarded, e.g., codes or ID numbers are used instead of names. Anonymity means responses cannot be linked to any particular individual in any way.

SAMPLE PARENTAL PERMISSION FORM
(Active Consent version)

Our school is taking part in the 2000 Student Health Survey. This research project is sponsored by the _____. The survey will ask about the health behaviors of 9th through 12th grade students. The survey will ask about nutrition, physical activity, injuries, tobacco, alcohol, and other drug use. It also will ask about sexual behaviors that cause AIDS, other sexually transmitted diseases, and pregnancy.

Doing this paper and pencil survey will cause little or no risk to your child. The survey has been designed to protect your child's privacy. Students will not put their names on the survey. Also, no school or student will ever be mentioned by name in a report of the results. Your child will get no benefit right away from taking part in the survey, but the results of this survey will help your child and other children in the future. We would like all selected students to take part in the survey. The survey is voluntary. No action will be taken against the school, you, or your child, if your child does not take part.

State and local school officials and a review board at _____ have approved the survey. Please call Dr. _____ of the _____ at (XXX) XXX-XXXX, if you have any questions about the review process.

Please read the section below and check one box. Return the form to the school in three days. Please see the other side of this form for more facts about the survey. If your child's teacher or principal cannot answer your questions about the survey, call Dr. _____ of the _____ at (YYY) YYY-YYYY. Thank you.

_____

Child's name:_____ Grade: _____

I have read this form and know what the survey is about.

[ ] My child may take part in this survey.

[ ] My child may not take part in this survey.

Parent's signature:_____
Date:_____

Phone number: _____

SURVEY FACT SHEET

Q. Why is the survey being done?
A. The _____ will use the survey results to help measure how many youth practice health-risk and health-positive behaviors. The survey results will also be used to create school health programs to help young people make positive health decisions.

Q. Are sensitive questions asked?
A. Yes. Some questions are sensitive. To help solve health problems among our youth, we must first understand them. AIDS is a major health problem. Sexual intercourse and injecting drug use are behaviors that increase the risk of getting AIDS. The only way to learn if youth are at risk of getting AIDS is to ask questions about these behaviors. Attempted suicide, tobacco use, alcohol and other drug use, and weapon carrying are also sensitive issues. Therefore, survey questions are written in a direct, but sensitive way.

Q. Will students' names be used or linked to the survey?
A. No. The survey has been designed to protect your child's privacy. The survey is given by trained staff. Teachers are not involved directly. Students do not put their name on the survey. When students finish the survey, they place the survey in an envelope and seal it shut. The envelopes are then placed in a big box.

Q. Do students take the survey more than once to see how their behaviors change?
A. No. Each year a new sample of states, schools, and students is picked. Students who take part one year cannot be tracked because their names are not on the survey.

Q. How was my child picked to be in the survey?
A. About X,XXX students from X schools in (state) were picked to take part in this survey. One or two classes (about 25 to 50 students) in each grade 9 through 12 were picked randomly to take part in each school.

Q. How long does it take to fill out the survey? Does the survey include a physical test?
A. One class period is needed to fill out the written survey which has 90 questions. The survey does not include a physical test or exam.

Q. Does the survey have national support?
A. Yes. The survey is supported by many local health and educational organizations interested in the health of youth. The following organizations have given letters of support. _____

SAMPLE PARENTAL PERMISSION FORM
(Passive Consent version)

Our school is taking part in the 2000 Student Health Survey. This research project is sponsored by the _____. The survey will ask about the health behaviors of 9th through 12th grade students. The survey will ask about nutrition, physical activity, injuries, tobacco, alcohol, and other drug use. It will also ask about sexual behaviors that cause AIDS, other sexually transmitted diseases, and pregnancy.

Doing this paper and pencil survey will cause little or no risk to your child. The survey has been designed to protect your child's privacy. Students will not put their names on the survey. Also, no school or student will ever be mentioned by name in a report of the results. Your child will get no benefit right away from taking part in the survey, but the results of this survey will help your child and other children in the future. We would like all selected students to take part in the survey. The survey is voluntary. No action will be taken against the school, you, or your child, if your child does not take part.

State and local school officials and a review board at _____ have approved the survey. Please call Dr. _____ of the _____ at (XXX) XXX-XXXX, if you have any questions about the review process.

Please read this section. If you do **not** want your child to take part in the survey, check the box and return the form to the school in **three** days. Please see the other side of this form for more facts about the survey. If your child's teacher or principal cannot answer your questions about the survey, call Dr. _____ of the _____ at (YYY) YYY-YYYY. Thank you.

Child's name:_____ Grade: _____

I have read this form and know what the survey is about.

[ ] My child may **not** take part in this survey.

Parent's signature:_____
Date:_____

Phone number: _____

Obtaining parental consent for student participation is a time-consuming and expensive endeavor, especially if your school district requires active parental consent. Active consent has been estimated to cost approximately several thousands of dollars in staff time, materials, and incentives, depending upon your sample size and setting.

Please complete Worksheet 2.9 on the following page to help you inventory your evaluation resources.

WORKSHEET 2.9: Resource Inventory

Please 1) check the type of evaluation you plan to pursue, 2) check the appropriate box to indicate if you have the needed resources and 3) make any notes to yourself you might need in thinking through each of these components.

Check the Type of Evaluation You Plan to Pursue:

☐ Needs Assessment ☐ Process Evaluation

☐ Outcome Evaluation ☐ Impact Evaluation

Resource	Do you have the needed resources?	Next steps
Money, Staff, Time	☐ Yes ☐ No	
Tools, Materials	☐ Yes ☐ No	
Expertise	☐ Yes ☐ No	
Support	☐ Yes ☐ No	
IRB Approval and Knowledge of Informed Consent	☐ Yes ☐ No	

SUMMARY OF EVALUATION RESOURCES

Now you have considered your budget, expertise, and support constraints, including the need for informed consent. In worksheet 2.9 you were asked to indicate whether or not you had the needed resources to conduct your planned evaluation. Space was also provided in that worksheet for you to write your own notes and consider the next steps needed to gather the different types of resources you need for each type of evaluation you want to conduct.

Remember, it is better do a small evaluation well
than to do a large-scale evaluation poor.

WRITING FINAL EVALUATION GOALS AND OBJECTIVES

Now that you have worked through the logic model connecting your SBHC services to relevant and measurable outcomes, and you have considered all factors that might effect your SBHC evaluation, you are now ready to write your final SBHC evaluation goals. We would remind you of the importance of involving your stakeholders for this crucial step. If your stakeholders have been involved with forming the goals for the evaluation, you are on the righ path for a successful SBHC evaluation. Please proceed to worksheet 2.10 now.

WORKSHEET 2.10: Writing Final Evaluation Goals and Objectives

Follow the directions to write your final evaluation goals and objectives.

Your final goal statement should contain the answers to these questions:

1) What is the population you are studying - students, staff, services, teachers?
2) How large is the evaluation?
3) Considering all the external influencing factors, what do you hope to accomplish?

Write your final goal(s) statement:

When writing objectives for your goal, remember to ask yourself the following: How might you know when/if this goal has been accomplished? What are some of the overall objectives/process objectives that would need to be accomplished for SBHC services to be linked to the proposed outcome?

Objectives contain:

1) a strong verb,
2) a single purpose or aim,
3) a single result or end product, and
4) the time frame for the expected achievement.

Write your final evaluation objectives here:

Objective 1:

_____

_____

_____

Objective 2:

_____

_____

_____

Objective 3:

_____

_____

_____

Objective 4:

_____

_____

_____

CHAPTER 2 SUMMARY

By completing Chapter 2 you have laid a solid foundation for future evaluation efforts. By completing the four steps of the logic model and considering the potential external influences on your evaluation, you are very likely to have created appropriate, attainable evaluation priorities. Now that you know what your evaluation entails, as well as the type o evaluation that is appropriate for your site, you can now proceed to the chapter that details **methods** for your evaluation type.

Chapter 3 provides methods for conducting a needs assessment, Chapter 4 details how to complete a process evaluation, and Chapter 5 describes the methods appropriate for conducting outcome and impact evaluations.

Once you have completed Chapter 3, 4, and/or 5, you can use the relevant sections of Chapter 6 to compile and analyze your data, and finally act on your findings using some of the techniques described in Chapter 7.

Good Luck!!

CHAPTER 3:

CONDUCTING A NEEDS ASSESSMENT

This Chapter Will Help You:

- ☑ **Review Your Goals and Identify Key Questions**
- ☑ **Establish a Time-Line**
- ☑ **Select Evaluation Method(s)**
- ☑ **Pilot and Implement Your Evaluation**

INTRODUCTION TO NEEDS ASSESSMENTS

Congratulations for choosing to conduct a needs assessment! You are probably at a very exciting developmental point in SBHC service delivery, ready and enthusiastic to identify and address the ever-changing, and increasingly complex, health care needs of students attending your school(s). Needs assessment is a crucial process for identifying the needs of the community, as well as the methods for best addressing those needs. We also recognize that in conducting such an assessment it is as important for you to identify both service and community assets, as well as service gaps that may exist in your community's health care delivery system.

The steps for conducting a needs assessment are similar to those in any SBHC evaluation. You need to:

1) review your goals and objectives and pose specific, relevant questions,
2) create a timeline,
3) find out what has already been done,
4) choose your methods for gathering additional information,
5) pilot your methods,
6) collect information,
7) analyze the data, and
8) report the findings.

This seems like a lot, but to get started here are some basic tips to keep in mind when conducting a needs assessment:

- Keep your stakeholders involved throughout the process.
- Continue to collect data until you have obtained an in-depth profile of the school (or community).

- Review the information you gather with stakeholders to interpret the data.
- Involve as many sections of the community as possible.
- Involve the community members themselves in collecting the data, if appropriate.

To help you plan your assessment, you should start by reviewing the goal(s) and objectives of your needs assessment from Worksheet 2.10. Then consider specific questions you want to have answered. Below we list several questions that might be pertinent to your needs assessment.

Needs and Assets Assessment Questions

What is the nature of the problem? Which are the groups in greatest need in the community (or school)?

- What are the biggest health problems and/or concerns for the students?
- What are the specific health problems the community faces?
- What portions of the community experience these problems?
- What kinds of services are needed?

What existing services address the problem?

- What community and school health resources already exist?
- Which health facilities are most used and why?
- Are there services to match each of the problems the community faces?
- How are services coordinated?
- What segments of the population find it most difficult to get services?
- What are the barriers to care for students and families?
- What service gaps exist?
- Is the community satisfied with the current set of services?

How have previously implemented programs worked?

- What interventions and/or techniques have worked before? Why?
- What interventions have not worked very well? Why?
- What other program models exist around the country that could be adapted to meet your community's needs?

What program factors need to be considered for implementing the program?

- Would the SBHC or another service model be best suited to meet student needs?
- What resources are available to meet these needs?
- Will you need additional funding to meet the needs?
- What resources, other than financial, will you need to fill service gaps?
- Who are the key persons that need to be involved in program planning and implementation?

WORKSHEET 3.1: Needs assessment purpose and specific questions

Please use Worksheet 2.10 and the questions listed on the previous page to answer the following questions.

Think about the goal(s) of your needs assessment. Overall, what do you hope to learn from this assessment, or what is the PURPOSE of this needs assessment? You can copy your goal from Worksheet 2.10 here.

Looking at your objectives from Worksheet 2.10, what are the KEY NEEDS AND ASSESSTS ASSESSMENT QUESTIONS you need to establish your baseline and answer in order to achieve your objectives?

Objective 1:

Specific Questions—

Objective 2:

Specific Questions—

Objective 3:

Specific Questions—

Objective 4:

Specific Questions—

CREATING A TIMELINE

Now you probably have a feel for the complexity of your needs assessment process. It is helpful to establish a reasonable timeline for conducting your needs assessment. You may not know how long an assessment will take, so the following is a feasible timeline for one full-time person to conduct an average needs assessment, i.e., 1 FTE = 2000 hours/year. We encourage you to involve stakeholders from the beginning of the assessment, as they may be able to assist you.

Sample Needs Assessment Timeline

1999			**2000**		
October	**November**	**December**	**January**	**February**	**March**
Review Existing Data-					
Administrative Consent- (if needed)					
-- Select Methods--					
	Develop Instrument(s)				
		-Parental Consents - (if needed)			
		--Pilot--			
			--Data Collection--		
				Data Entry and Analysis	
					Write-up and Dissemination

Creating a timeline and delegating tasks will help you conduct your assessment. This should help keep you focused and help distribute the work into manageable pieces in order to keep your project moving along so you can report your results to the stakeholders.

WORKSHEET 3.2: Developing Your Timeline

In the space provided below designate when you anticipate the listed tasks to be accomplished, and who will assume primary responsibility for completion of that task.

TASK	TARGET DATE	PERSON(S) RESPONSIBLE
Gather existing data & information on resources	_____	_____
Select methods & data sources	_____	_____
Select/create instruments	_____	_____
Select samples & obtain consent(s)	_____	_____
Pilot methods	_____	_____
Collect data	_____	_____
Compile, analyze & interpret results	_____	_____
Report & disseminate findings	_____	_____

NEEDS ASSESSMENT METHODS

After constructing the questions you want to answer in your needs assessment and establishing a timeline, you are ready to select methods for achieving your needs assessment objectives. To begin answering your questions and to avoid duplicating efforts of other organizations, review existing sources of data. There are numerous sources of data in your community which may be able to answer some of your needs assessment questions, e.g., what is the ethnic breakdown of my school's population?

Once you have gathered all the existing data sources, then you are ready to choose from methods for obtaining new needs assessment data, surveys, focus groups, nominal group process, key informant interviews, and resource mapping. Each of these five methods are summarized and discussed in detail in the latter parts of this chapter.

Gathering Existing Data

Data for your needs assessment may come from a variety of community sources. Whether or not existing information sources detail the specific health needs in any particular school, existing sources may help provide a useful context for your needs assessment. The scope of different data sources may range from limited (e.g., mental health needs of adolescents in your community) to comprehensive (e.g., previous community-wide child health needs assessments). You should be able to combine existing sources to give you an increasingly clearer picture of student health. Because it would be a waste of resources and time to answer questions that have recently been answered by others, we suggest several sources of existing data you should explore before gathering new data. However, be aware that existing resources may have some limitations if they haven't included data on children similar to your population, or your school specifically.

Compiling existing data sources is an appropriate method for starting a needs assessment. Often communities will have a great deal of information that simply needs to be gathered to help answer your questions. If existing data only answers part of your questions, then you could supplement this method with other needs assessment methods described later.

What information is already available? The following is a list of sources that might provide you with necessary information:

Census Data - you may obtain census data by looking in the "General Social and Economic Characteristics" volume for your state in the Census of Population. You may also want to check the relevant web page, http://www.census.gov/.

Vital Statistics - including county birth and death certificates, can be used to document the reasons for mortality, morbidity, and the birth rate for a specific population. These statistics can be obtained from the National Center for Health Statistics (NCHS) or from your state health department. NCHS can be reached at http://www.cdc.gov/nchswww/index.htm.

School District Offices - might be able to provide information on rates of dropout, truancy, suspensions, probation, and grades repeated, as well as school nurse records, which often include immunization status. They may also be able to supply you with names of Head Start directors familiar with your community, who can help you identify community contacts, resources, and needs.

The Chamber of Commerce - may have useful demographic data from your community, including new population and economic shifts. Your group can also request and/or pay to have additional questions added to the community surveys conducted by the Chamber on a periodic basis.

Legislative Resources - may help you understand the most prominent health needs of students. You may look on your state's legislative web page to learn who sits on committees of child and adolescent health. The institution you work with, or the

professional organization you belong to, may have one person who is responsible for digesting and summarizing legislative issues relevant to your field. You can also ask to be introduced to specific legislative staff who might be able to share information with you regarding the community in which you want to establish a SBHC.

Local Journals and Newspapers - may offer in-depth descriptions of your community's health problems, potential solutions, or at least the names of relevant people that can be contacted for additional information.

Student Survey Data - may be available at several different levels. For instance, the Center for Disease Control and Health Prevention's Youth Risk Behavior Survey (YRBS) provides national data regarding adolescent risk behaviors. The survey may be conducted in your vicinity, thus offering local statistics as well. Other agencies in your area may conduct other surveys regarding drug use, mental health, or another specific issue. School principals will likely be a good source for determining what data already exists.

Other Important Data Resources - include:

Educational Resources

- School principals, teachers, and staff.
- Local, county, state, and federal departments of education.
- Libraries.
- Local colleges and universities.

Health Resources

- Local physical and mental health clinics and health programs.
- National and state SBHC groups, including, The National Assembly with the affiliate state organizations (which can be contacted by phone at 1-888-286-8727), Making the Grade (a SBHC organization which can be found at http://www.gwu.edu/~mtg/); and Advocates for Youth (another knowledgeable SBHC organization which can be found at http://www.advocatesforyouth.org, or at 202-347-5700).

- Medical and other professional societies, e.g., American Academy of Pediatrics (AAP), American School Health Association (ASHA).

Community Resources

- Community action agencies (health and welfare councils, youth advocacy groups).
- Community organizations (Parent-Teacher Associations, League of Women Voters, community development boards, etc.).
- Major employers.
- Non-profits and umbrella organizations, e.g., United Way, La Raza, League of United Latin American Citizens, Junior League, Rotary clubs.
- Youth-serving agencies, e.g., Boys and Girls Clubs, Boy/Girl Scouts, Campfire girls, YMCAs, YWCAs, community centers, after-school daycare agencies.
- Religious organizations including Catholic Social Services, Salvation Army, Lutheran Social Services, Council of Jewish Woman, Council of Churches, as well as local parishes, synagogues, or mosques.

Governmental Resources

- Local, county, state, and federal departments of health, probation, and social services, e.g., Temporary Aid for Needy Families (TANF), foster care, departments of social services or public welfare, the Human Resources Administration, and the Children's Bureau. Many of these sources can be accessed through websites.
- City and regional planning agencies.

Use Worksheet 3.3 on the next page to help compile existing data resources for your needs assessment.

WORKSHEET 3.3: Utilizing Data Resources

Please list the person or organization that will provide you with relevant data, the exact name of your contact, and the specific information that might be obtained.

PERSON/ORGANIZATION	CONTACT	RECENT DATA/SURVEYS
Educational Resources		
Health Resources		
Community Resources		
Governmental Resources		
Other Resources		

Once you have identified sources of existing data, work hard to obtain them, either from a web-page, library, or from specific people or organizations. Summarize the information so that it is useful for you. Once you have exhausted existing data sources to answer all the specific questions you listed in Worksheet 3.1, you can then consider one or more of the following needs assessment methods to help answer any remaining questions.

Surveys, focus groups, nominal group process, key informant interviews, and resource mapping are all different methods for gathering information. We encourage you to use a minimum of two data collection approaches summarized below in order to compensate for limitations inherent in any one method. We also recommend that you engage a number of community members in collecting the needs assessment information to further ownership of the problem or issue you are trying to address.

Collecting New Data

SUMMARY OF NEEDS ASSESSMENT METHODS

Surveys can be either a standardized survey or a local survey that you might develop yourself. If you cannot find an instrument which has already been developed to suit your community, we suggest you modify an existing tool, or as a last resort, construct your own survey. A survey you construct on your own may not have as good reliability and validity as a standardized instrument, but may better suit your needs. A number of school surveys have been developed in the field of SBHCs. We suggest a number of surveys you may use in Table 3.1 (p. 97), and provide examples of surveys you can use or adapt in Appendices C and D. You may also call the Office of School Health at the University of Colorado Health Sciences Center, 1-800-669-9954, which acts as a clearinghouse for such materials.

Focus Groups are similar to a group discussion or group interview. With this method you gather 6-10 community members who share a similar background, and ask them to discuss certain topics. For example, focus groups may be conducted with parents of students, male

students, female students, and school staff. This method will provide a lot of interesting data, which may give you clues about the context of the issues you are trying to resolve, and give you an idea of the degree to which there is consensus or disagreement regarding topics you raise as part of the discussion.

Nominal Group Process involves gathering 6-10 people and asking them an open-ended question, e.g., how do you think we might be able to increase the rate of immunizations in this community? Rather than brainstorming, which may be intimidating for some people, the nominal group process involves each person writing down their ideas, then sharing each of these ideas briefly in round-robin fashion, while the facilitator lists the ideas on a flip-chart. Then all the ideas are discussed, clarified, and combined as appropriate. Finally, each person ranks the ideas and the rankings for each idea are tallied. Top ideas are further discussed and ranked again, if necessary. Implementation phases can be planned once the priorities are established.

Key Informant Interviews are interviews that utilize key formal and informal leaders in the community, and are a method of quickly gathering an overview of available community resources and problems. Interviewing these people may be a good way to introduce SBHC services into the community because these key informants can subsequently encourage others in the community to trust and support the development of school services.

Resource Mapping is a graphic way of identifying organizations and groups in your community who are serving students. It is often called a strength or assets assessment and helps to delineate potential resources you may have available to meet the gaps you identify. The mapping process also helps to visualize what service gaps exist in your community, for example, few specific adolescent mental health services.

We go into much greater detail in the next several pages to explain the methods summarized above. After choosing which method(s) you plan to pursue, you can look for the appropriate method within the next sections to help you implement that strategy.

SURVEYS

Surveys are an excellent way to allow people to anonymously or confidentially provide their opinions regarding the needs of their community. This may be particularly important if you are asking students and/or parents about risk behaviors that are a problem for themselves or the community. On the next few pages we provide information on:

- existing surveys,
- considerations when constructing or revising a survey,
- writing good questions,
- survey formatting,
- piloting your survey, and
- selecting a sample.

Existing Surveys

Examples of surveys useful for needs assessment and other evaluations are included in Appendices C and D of this manual. You can use these instruments or adapt them to better meet your needs. Other resources for needs assessment surveys that you might want to consider are provided in the following Table 3.1.

Table 3.1: Resources and Needs Assessment Surveys

Name of Instrument and Contact Information	Length and Focus	Target Population	Comments
Adolescent Health Survey National Teen Pregnancy Research Center University of Minnesota 420 Delaware St. SE, Box 97 Minneapolis, MN 55455 Phone: (612) 625-1674	A 16 page comprehensive health behaviors and attitudes survey	7-12 grade student survey. Three versions: 1) statewide; 2) urban: and 3) Native American/ American Indian. 16 pages.	Technical consultation available: survey is free.
American Drug and Alcohol Survey Rocky Mountain Behavioral Science Institute, Inc. 419 Canyon Ave., Suite 316 Fort Collins, CO 80521 Phone: (970) 221-0602	This 4 page, 54 question survey is used to measure substance use and students attitudes about alcohol and other drugs. The survey has three insert questionnaires: 1) Tobacco Survey, 2) The Prevention Planing Survey, and 3) Program Evaluation Survey.	2 student survey versions: 4-6th grade; 6th-12th grade.	Anonymous survey; instrument is copyrighted; receive survey free. Surveys must be returned to RMBSI. Cost depends on number of surveys RMBSI will scan and the reports produced.
Michigan Alcohol and Other Drug Survey Department of Sociology Western Michigan University Kalamazoo, MI 49008 Phone: (616) 387-5296	An 8 page (48 question) survey about behaviors and attitudes related to alcohol and drug use, safety, and violence.	High school student survey.	Results can be compared to national data collected yearly by Loyd Johnston for a NIDA-funded study, Monitoring the Future. Cost involved to cover instrument purchase data entry, analysis, and report production.
Healthy Schools, Healthy Communities Student Survey Bureau of Primary Health Care US Dept. of Health & Human Services 9th Floor- Room 9-3A2 4350 East-West Highway Bethesda, MD 20814 Phone: (301) 594-4475	Surveys of various lengths, similar to those found in the Appendices of this manual. Student health behaviors (dental, physical, mental, nutritional, high risk)	Three student survey versions- elementary, middle, and high school; parent survey for elementary parents.	Please call for information.
Search Institute Profiles of Student Life: Attitudes and Behaviors Search Institute Thresher Square West 700 S. Third St., Suite 210 Minneapolis, MN 55415 Phone: 800-888-7828	This 8 page, 150 question survey measures student behaviors, values and needs. Focuses on student assets, deficits, pro-social and at-risk behaviors.	6-12th grade students	Purchase of the survey includes survey administration support, data entry/analysis, an 85-page report with graphics and explanatory text, and resources to mobilize community efforts.
AML Scale Emory L. Cowen Center for Community Studies 575 Mt. Hope Ave. 14620 Rochester, NY 14620 Phone: (716) 273-5957	11-item scale that measures elementary-aged students' adjustment using 3 sub-scales: (A) Acting out, (M) Moodiness, and (L) Learning Difficulty.	Administered to teachers.	As a reference, see Dorr, Stephens, Pozner, Klodt, 1980.
Pediatric Symptom Checklist Michael J. Murphy Massachusetts General Hospital 15 Parkman St., WACC725 Boston, MA, 02114 Phone: (617) 724-3163	A 35-item survey. The only brief mental health questionnaire that has been validated for use in general pediatric office screening, as well as in a variety of school and minority settings.	Parent completes instrument for children aged 2-18 years.	Not copyrighted. Can be copied from relevant papers (Murphy, Reede, Jellinek, Bishop, 1992). Has been used in SBHC research (can contact G. Gall (617) 889-8449 or M. Murphy (617) 724-3163).

Name of Instrument and Contact Information	Length and Focus	Target Population	Comments
Child Behavior Checklist Child Behavior Checklist The University of Vermont 1 South Prospect Street Burlington, VT 05401-3456 Phone: (802) 656-8313; E-mail: Checklist@uvm.edu web-page: http://www.uvm.edu/~cbcl/	There are numerous surveys available, most related to emotional and social problems as well as academic functioning. Each surveys is about 112 questions.	Three versions- parent, teacher, and student. Parent survey is for children ages 4-18. Teacher's Report Form is for children 5-18, Youth Self Report is for youth 11-18.	Widely used in national surveys. Surveys must be bought. Data entry, analysis, and report production services **not** available, except in the form of software that will enter data and score profiles. Call or e-mail to request an order form.
Children's Global Assessment Scale Dr. Shaffer Department of Child Psychiatry College of Physicians and Surgeons Columbia University 722 W. 168th St. New York, NY 10032 Phone: 212-543-5947; E-mail: shafferd@child.cpmc.columbia.edu	This instrument takes one minute to use by experienced users and is used to assess the overall social and psychiatric functioning of a child.	For assessment of children 4-16 by clinicians.	There is no cost for the survey. See Shaffer, Gould, Brasic, Ambrosini, Fisher, Bird, Aluwahlia, 1983, for reliability and validity measurements.
Child Health and Illness Profile-Adolescent Edition Barbara Starfield 624 N Broadway, Room 452 Baltimore, MD 21205 Phone: (410) 955-3737 E-mail: bstarfie@jhsph.edu	An epidemiological survey to distinguish between populations and to measure impact of changes in health services and policies. Has domains, including Health, Achievement (of age-appropriate social roles), Risks, and Resilience.	For assessment of children aged 11-17.	Costs for software, manual, and postage. Copyrighted.
Risk Factor Screening Survey for Urban Minority Junior High Students. R. Vaughan 60 Haven Ave., Level 2B New York, NY 10032 Phone: (212)304-5211 E-mail: rdv2@columbia.edu.	This 36-item behavioral risk survey focuses on school failure, running away, alcohol and drug use, violence, and suicide.	For use with 6th-8th grade minority students. Used to help focus limited SBHC resources on needy children.	E-mail Dr. Vaughn to request permission to use the survey- no cost. See Vaughan, McCarthy, Walter, Renicow, Waterman, Armstrong, Tiezzi, 1996.
Youth Risk Behavior Survey Division of Adolescent and School Health National Center for Chronic Disease Prevention and Health Promotion Center for Disease Control and Prevention 4770 Buford Highway, NE Atlanta, GA 30341-3717 Phone: 770-488-3257 E-mail ccdinfo@cdc.gov.	This 88-item survey focuses on the six key health risk behaviors of adolescents, including safety and violence, suicide, substance use, education, sexual behaviors, weight, and physical activity.	Designed for use with the adolescent population, 8-12th grades.	This CDC survey has been administered yearly since 1990. It has good reliability for grades 8-12. Contact CDC to get information on availability

Source: Adapted from Davis and Harmacek, 1997

If the above resources do not meet your survey needs, you can obtain other examples of needs assessment surveys by contacting the University of Colorado School Health Sciences Center at 1-800-669-9954.

If an existing survey does not meet your needs entirely, we encourage you to adapt an existing survey, or create your own needs assessment survey. The next few pages explain some of the considerations for constructing or revising a questionnaire or interview. Because a poorly adapted survey or a poorly designed new survey might render your results useless, you may also want to get help from someone experienced in survey development, at least as a consultant in the development process. After reading through these considerations and drafting your survey, use Worksheet 3.4 to check the quality of your instrument.

CONSIDERATIONS WHEN CONSTRUCTING OR REVISING A SURVEY

If you are revising a questionnaire, adding some questions, or writing a survey from scratch, this section is for you. In this section we explain several considerations you must be aware of when constructing your own or revising another tool. Each question you ask in a survey needs to have a purpose. For instance, a series of questions might be asked to provide a demographic profile of your population. Questions for outcome/impact evaluations may try to solicit information that could be used to control for confounding variables. A confounding variable is a variable that is more likely to be present in one group than another and is also related to the outcome you are studying. The concept of confounding is also covered later in this manual in Chapter 6.

Space is provided in Worksheet 3.4 for you to:

- Identify your information needs - information related to your study question and information that can be used to control for confounding variables.
- Identify the purpose of those information needs, e.g., process measure, main outcome, demographic profile, confounding variable, other.
- Describe sources from where you can get similar questions, e.g., the instrument and whether or not the instrument is standardized. (Note: Don't assume that a questionnaire is good just because it has been used - if possible, look for a questionnaire with measured **validity** and **reliability**, a standardized questionnaire.)

WORKSHEET 3.4: Creating or Revising a Questionnaire or Interview

Please fill in the information you need to collect, the purpose of collecting that information, and possible sources from which you can take relevant questions, e.g., Youth Risk Behavior Survey.

Information You Need	**Purpose of Information**	**Source of Question(s)**
Example: Demographics (age, gender, race/ethnicity, income)	Baseline data to describe the population. Also needed to control for confounding.	Survey in Appendix of this manual - not standardized.

Once you have identified the information you want to collect, you can start to construct the specific questions that will provide the needed information.

WRITING GOOD QUESTIONS

- FACE VALIDITY — Does the question, as written, make sense to the audience in the way you intended? Questions from other surveys need to be tested on your population to guarantee face validity.
- RESPONSE OPTIONS — There are two types of response options that correspond to the type of question asked, a closed-ended question or an open-ended question. In closed-ended questions, respondents choose from among a list of provided response options. If respondents are instructed to choose only one response, response options should be exhaustive and mutually exclusive. Response options may comply with a "Likert"-type scale, e.g., four or five response options that range from good to bad, difficult to easy, i.e., very difficult, fairly difficult, neither difficult nor easy, fairly easy, very easy. When using only four response options, the neutral response should be eliminated, forcing respondents into a positive or negative response. Open-ended questions allow a respondent to answer the question in their own words; this type of information is one type of qualitative data. Plenty of space should be provided for adequate response. These responses (qualitative data) are much harder to use in data analyses, but provide a rich source of data not possible in closed-ended responses. Open-ended response options may be used initially in pilot studies to develop closed-ended response options which can be readily analyzed.
- APPROPRIATE USE OF LANGUAGE — You must consider the reading level of the population being surveyed. Also, you may involve community members in survey development so they can provide you with appropriate colloquial terms. If the survey is translated into another language, verify the accuracy of the translation by back-translation (back to the original language of the survey), and/or piloting.
- CLARITY — Questions should be phrased simply and without double negatives.

- DOUBLE-BARRELED QUESTIONS — Do not ask two questions in one, e.g., " Do you like the SBHC services and staff?" or "Do you have any serious illnesses that limit your sports activity and ability at school?"
- MISLEADING — Be careful not to provide misleading information in a survey, e.g., True or False? "HIV is carried in breast milk." You would need to add "of HIV-infected women" so that respondents don't assume you mean all women.
- BIAS — Questions should not be phrased in a way that suggests an answer. For instance. asking "How good is your health?" has the value-laden term "good" which should be eliminated. Instead, the question can read "How is your health?" with responses very bad, bad, fair, good, or very good.
- CHANGING THE WORDING OF A QUESTION DURING THE SURVEY — Don't do it!! All your revisions should be made prior to the final "pilot" administration. A slight change in wording can change your results dramatically.
- THREATENING QUESTIONS — Asking students and/or parents about drug use or immigration status, unless respondents are confident of their anonymity, would be threatening, leading some of the population to refuse to complete the survey or to be dishonest in their responses.
- ASSURANCES OF CONFIDENTIALITY OR ANONYMITY — Permission to skip questions should be clearly stated close to the placement of sensitive questions.

After having written good questions, next you have to arrange the questions in the most appropriate format. Below we describe the numerous considerations you must make when formatting a survey.

SURVEY FORMAT

- *INTRODUCTION* — Introductions (often within the informal consent form) to questionnaires should clearly state: 1) who is conducting the research, 2) the purpose of the survey and how results will be used, and 3) a statement about confidentiality or anonymity.

- *INSTRUCTIONS* — Clear instructions and examples of how to complete questions should be given, e.g.,

> Please help us find out more about your health. You will need about 30 minutes to finish this survey. This is not a test. Please answer every question and do the best that you can. There are no right or wrong answers. **Draw a circle around your answers.**
>
> Example: **Do you belong to any clubs or sport teams?** (circle one):
>
> (1) YES (2) NO

- *SEQUENCING OF QUESTIONS* — Questions should be ordered so that the first questions should be easy, interesting, and non-threatening. The most sensitive questions should be asked towards the end of the survey. However, you should be sure that participants have enough time to get through the survey so that even your most sensitive questions can be answered.
- *LENGTH OF SURVEY* — A questionnaire or interview should be as short as possible. The maximum length of surveys will vary with the respondent population, i.e., surveys should be shorter for younger children. Optimally, questionnaires should take no more than 45 minutes to complete. Interviews can last up to one hour, and twenty minutes can be spent on telephone interviews. Exceeding these maximum limits may lower your response rate or the quality of your responses, unless the respondents are very interested in the subject matter (which may be the case when asking parents about their children's health).
- *MAKING QUESTIONNAIRES READABLE* — use white or light colored paper which is easy to read; write in lower case and try to avoid capital letters; use spacing techniques; underline or bold for emphasis.
- *USE OF ILLUSTRATIONS* — You can use illustrations or "clip art" to make your survey more interesting. Some considerations when using illustrations:
  * An illustration should not **bias** a person's response to questions. For instance, a picture of a person showing a specific emotion, e.g., happy/sad, should not

accompany questions asking about a person's level of happiness, as the picture could influence a response.

  * If using illustrations of people, be sure to include people of different ethnic/racial backgrounds, different genders, etc.
  * Limit your use of illustrations so that respondents, especially young students, will not be distracted from completing the survey.

- *CODING* — You want to be certain to label each response option with the coding you want entered into a database. In the example below, if the respondent checks "Mother", the person entering the data will enter a "1" in the database for question number 1.

1. Are you this child's? (check one box):

1 ☐	Mother	5 ☐	Foster Parent
2 ☐	Father	6 ☐	Grandparent
3 ☐	Adoptive Parent	7 ☐	Other, please describe_____
4 ☐	Step-Parent		

Missing responses (questions left blank) can either be coded "9" or "99". If you have nine or more response options, then you will have to use "99" for the missing value, since '9' will correspond to a response. Missing values throughout the questionnaire should have consistent values, i.e., 9 or 99 should be used throughout.

If you have nine or more response options, each response should be labeled from "01" to "09", not "1" to "9", because you will need to enter a missing value of "99", which has two digits. This is important because the position of the digits in a string of numbers in an ASCII file is critical when the data file is later "read into" an appropriate program for data analysis, e.g., SPSS, SAS.

You now have all the information you need to revise an existing survey or create a new questionnaire/interview. Next, create a draft of your instrument (which you should plan

adequate time to create). Once you have an initial draft of the instrument, ask someone else familiar with your project to rate the survey according to the criteria given in Worksheet 3.5.

WORKSHEET 3.5: Criteria for Reviewing Instruments

Assign a rating to your instrument for each of the criteria below. Use the comments column to indicate particular weaknesses you want to correct.

CRITERIA	RATING (High, Medium, Low, Not Applicable)	COMMENTS
Introduction and Directions. The purpose of the interview/survey should be clearly stated, and confidentiality or anonymity assured. Directions should be clear and specific. Give an example of how to complete a question. State the estimated time to complete the evaluation.		
Length and Format. An interview should last no more than one hour and should maintain the interest of the interviewee; questionnaires should be easily completed in 45 minutes.		
Objectivity. Do your question(s) contain biases in wording, pictures, or elements?		
Clarity. Is the wording of the questions clear? Questions should not have multiple interpretations.		
Relevance. Questions should be relevant to the needs assessment, and not contain extra questions.		
Cultural and Age Sensitivity. All questions should be understood by respondents in the age, language, and cultural group being surveyed.		
Background information. Request appropriate background information, e.g., education, race/ethnicity, place of residence, informants' title, official organization affiliation, length of time at current position, length of time in community, other positions held in community.		
Overall comments: **Overall rating:**		

Source: Adapted from Davis and Harmacek, 1997

After using the criteria in Worksheet 3.5, you should realize whether your instrument is ready to be piloted or is in need of additional revisions. Once your instrument achieves a "high" rating for each of the criteria listed in the worksheet, you are ready to pilot your survey.

PILOTING YOUR SURVEY

Piloting your survey is just another way to say test your survey. To do this, gather approximately ten people similar to the population for which your survey is intended. Ask these people to complete the survey and answer questions. Explain to them that they are taking this to help you make the survey better. If there are any strange questions or things that don't make obvious sense, it may be a mistake, and the administrator should be asked. When your pilot population has completed the survey you should be able to see if your survey is helping you gather the information you need. Do the people seem to mind providing the information? Are your questions being understood in the manner you had hoped? Did survey or interview completion take too much or not enough time for most respondents? Are the tools you are using responsive to the goals of your assessment?

SELECTING A SAMPLE

Now that you have developed and piloted a tool for your evaluation, you need to decide which segment of your population you want to complete the survey. Do you want everyone to complete the survey (cross-sectional sampling) or can you save some resources by selecting a smaller portion of the sample (random sampling)? You are now ready to choose a sampling technique. The following is a brief discussion of random sampling methods you might want to use to select your sample. We do not include non-random methods of sampling here because we assume you want your results to be generalizable to your population.

With these sampling methods your objective is to be sure that every person in your population has an equal chance of providing their input, thus you can be sure your results are

applicable to your community. All random sampling techniques require that you have a complete sampling frame, which is a list of all the people in your population, e.g., all the students, all the teachers, or all the parents that might be represented. There are a few different types of random sampling methods you may want to consider:

Simple random sampling — to create a simple random sample you can either: 1) put all names in a hat and literally pick names out of a hat until you have a sufficient number of potential respondents (at least 150 in your sample), 2) you can put all the names into a statistical database and program the computer to select a random sample of respondents, or 3) you can use a random number table to select your sample (see Dawson-Saunders, Trapp, 1994).

Stratified random sampling — using stratified random sampling will help assure that certain subgroups within your population are sufficiently represented in your study. To create stratified random sampling, you divide your sampling frame into each of the categories you want represented, and then randomly select a sample for each. This is commonly used when you want to report results by sub-groups, e.g., health needs of Kindergarten through 6th grade students.

Cluster random sampling — This is very commonly used when surveying students in school because it is relatively easy. Instead of pulling random students from class, you randomly select classrooms and survey the entire randomly selected class.

Interval random sampling — Instead of using a random number table, picking names from a hat, or having a computer select a random sample, you select every nth person from your sampling frame arranged in alphabetical order. For instance, if your sample is 1500 and you want to include 150 people in your sample, you would select every 10th person from your sampling frame to be included in your sample.

NEXT STEPS

After piloting and revising your survey, as well as selecting a sampling technique, begin to collect the bulk of your data from your sample. After collecting your data, go to Chapter 6 which explains how to compile and analyze your data.

CONGRATULATIONS!! YOU'RE ON YOUR WAY!

FOCUS GROUPS

Focus groups are small discussion groups consisting of 6-10 people who are encouraged to share their opinions as part of a discussion facilitated by a group leader. These groups can be used to gain insights into the community's perceptions of their needs and/or how a specific need should be addressed, e.g., What are some of the barriers that prevent students from getting needed health care? Do you think that a large part of the student population would use "x" service if it were made available to them? Why or why not? Focus groups can also be convened to help you develop an instrument for a specific community, e.g., Is the survey culturally sensitive? Will people complete the survey? Is it easy to understand?

The focus group is conducted by a moderator/facilitator, and a second person acts as a recorder who keeps notes regarding interactions and comments as they occur within the group. The moderator helps the group remain focused on the pertinent questions, while making everyone feel comfortable and essential to the discussion. The moderator may introduce himself/herself and the recorder, then explain why the focus group has been organized, and finally, why the session will be audio and/or video recorded (if it is being recorded). The moderator then asks participants to sign a consent form.

On the next few pages we provide information on:

1) selecting focus group participants,
2) a sample outline for a focus group(s),
3) a focus group checklist to help plan for the focus group(s),
4) guidelines for the recorder,
5) a sample consent form, and
6) guidelines for note-based analysis of a focus group(s).

SELECTING FOCUS GROUP PARTICIPANTS

Selecting participants for a focus group can be difficult. You have to balance the need to make participants similar enough that they feel comfortable sharing their ideas, but you also need to be sure that most of the different opinions within the larger population are heard. To meet these two needs, we suggest two sampling techniques, although you may want to adapt other techniques (all of which are explained in Chapter 5 in the sampling methods section).

Stratified random sampling — using stratified random sampling will help assure that certain subgroups within your population are sufficiently represented in your study. To create stratified random sampling, you divide your sampling frame (a list of each person in your population) into each of the categories you want represented, and then randomly select a sample from each. This is commonly used when you want to report results by sub-groups, e.g., health needs of Kindergarten through 6th grade students. You could then conduct a separate focus group with each of these randomly selected subgroups. For focus groups, you may also want to separate groups by gender and race/ethnicity to encourage openness that may not be expressed in mixed groups.

Snowball sampling — this sampling technique is not as good as stratified random sampling, but it may be easier and more appropriate for some situations. This method requires you to carefully select certain members of the community representing certain interests. For example, you could select one person from each community organization and ask them to recommend 5-6 other participants. Sometimes people are only invited if they have been recommended by more than one source.

After selecting your sample, you should create a focus group outline, as shown on the next page, pilot your focus group, and collect the final focus group data. After conducting your focus groups, there are guidelines in this section that will assist your data analyses. These analyses should take place shortly after conducting the focus groups, especially if the focus groups were not recorded.

SAMPLE FOCUS GROUP OUTLINE

The following is a focus group outline which would be appropriate to use with a group of parents concerned about their children's health.

I. Welcome participants as they arrive (8:45-9:05)

- The facilitator and recorder welcome participants and encourage them to have a snack, sit, talk, and relax. If there are children, efforts should be made to provide free, onsite child care. Children staying with their parents are often disruptive, so i is important to plan ahead.

II. Introduction (9:05-9:15)

- Introduce the facilitator and recorder. Explain that the role of the facilitator is to ensure that each person's ideas are heard and to move the group through each topic of discussion. The recorder is here to listen to all the ideas and write them down in order to keep track of the ideas that come from this group.
- Explain that the purpose of the group is to inform and improve health services that are available to children in the school setting.
- Distribute, explain, and collect consent forms.
- Have participants introduce themselves and indicate something about themselves that does not indicate any socio-economic characteristic, e.g., ask parents the number of children they have at a specific school, ask students to name their favorite food.
- Explain that the group has been convened because we believe they are the "experts" in trying to access health care for their children, and you are interested in understanding what additional services they believe should be offered, and how those services would be best made accessible.
- Explain the general outline for the discussion, for example:

  ⇒ What services are currently used for children?

  ⇒ Why are these services easily accessible or difficult to access?

⇒ What health service is missing? How should it be offered?

III. Content of the Discussion (9:15-10:15)

IV. Summary of the focus group discussion by the recorder (tape record this summary if possible) (10:15-10:20)

V. Clarification of recorder's questions and open discussion for questions from participants (10:20-10:30)

VI. Thank participants for their participation and hand out acknowledgments or gift certificates (10:30)

FOCUS GROUP CHECKLIST

Advance Notice:

____ Send each participant a letter of invitation one week prior to the focus group.

____ Give the participants a reminder phone call the evening before the focus group.

____ Help arrange transportation if necessary.

____ Get a commitment from 2-4 extra participants in case some participants do not show.

Advance Arrangements:

____ Contact participants to explain the focus group, incentives, and ask for a commitment.

____ Select good times and locations for focus groups (during the school day or after school).

____ Decide how to best address focus group participants, e.g., first names? last names?

____ Create a note-taking form for the recorder.

Arrangements:

____ Obtain flip chart and audio/video tape recorder.

____ Create invitations.

____ Arrange for recorders.

Checklist for Day of Focus Group:

____ Napkins, food, drinks/coffee pot, cups, silverware, plates for parents and children.

____ Name tags.

____ Gift certificates from nearby grocery store or acknowledgments for participants.

____ Flip chart and markers.

____ Overhead projector and transparencies (if necessary).

____ Set-up tables/chairs, food, welcome table, and other resources as necessary.

____ Notebook for field notes.

____ Introductory statement on flip chart or chalkboard, or discuss orally.

Questions and Prompts:

____ Consider probe or follow-up questions.

____ Limit the use of "why" questions.

____ Use "think back" questions as needed, for insta
tried to get health care for your child..."

____ Conclude the focus group by providing a summ
presented by the recorder) and invite comments
group participants.

Logistics:

____ Arrange for child car

____ Plan topics for small talk conversation

____ The moderator should arrive early to make necessary arrangements.

____ Bring sufficient copies if you are planning to give out materials.

Moderator Skills:

____ Practice the introduction without referring to notes.

____ Ask questions with minimal reference to notes.

____ Be careful to avoid head nodding or comments that signal approval, such as "Excellent", "Great", "Wonderful".

____ Avoid giving personal opinions.

Immediately After the Session:

____ Clean-up.

____ Thank appropriate staff—provide child care staff with small gift.

____ Prepare a brief written summary of key points.

____ Arrange a meeting time to discuss more specific focus group information with stakeholders.

GUIDELINES FOR THE RECORDER

1) Help welcome participants as they arrive.

2) Sit in designated location. Sit outside the circle, opposite the moderator, near the door. If someone arrives after the session begins, meet the person at the door, take him/her outside the room, and give him/her a short briefing as to what has happened and the current topic of discussion. Then bring the late participant into the room and show him/her where to sit. However, if the participant is late more than fifteen minutes, it would be disruptive to the group. In this case, you may have to provide an incentive to the person, even though they are not participating. Perhaps a follow-up phone interview can be established.

3) For a number of reasons you may not be able to record the focus groups, e.g., confidentiality issues (especially with students) and/or lack of equipment. If, however, you record the focus group, turn on the recorder **after** people have introduced themselves by first name, to assure that confidentiality is maintained

4) Take notes throughout the discussion.

   - Make a sketch of the seating arrangement and assign numbers to participants when taking notes (1, 2, ...).
   - Write down participant comments on a form with participant numbers on it.
   - Place quotation marks around well-stated quotes and indicate the number of the speaker. Capture word for word as much of the statement as possible. Listen for sentences or phrases that are particularly enlightening or eloquently expressive of a particular point of view.
   - Listen for inconsistent or vague comments (not addressed by the facilitator) and probe for understanding at the end of the focus group.
   - Note the nonverbal activity. Watch for head nods, physical excitement, eye contact between participants, or other clues that would indicate level of agreement, support, or interest.

- Place your opinions, thoughts, or ideas in parentheses to keep them separate from participant comments.
- If a question occurs to you that you would like to ask at the end of the discussion, write it down in a circle or box.

5) Do not participate in the discussion! Only talk if invited by the moderator. Control your nonverbal actions no matter how strongly you feel about an issue.

6) At the end of discussion, the facilitator will ask you to:
   - Ask questions for amplification or clarification.
   - Give a brief (around five minutes) oral summary of responses to the important questions (tape record this if possible).

7) Hand out the gift certificates or acknowledgments and thank the participants.

8) Debrief the session with the research staff (try to tape record this discussion).

9) Prepare a brief, written note-based analysis of key points:
   - Identify noteworthy quotes.
   - Identify important themes or ideas expressed.
   - Compare and contrast this focus group with other focus group or with what you had expected

10) Re-read and provide feedback on the written analysis.

SAMPLE CONSENT FORM FOR FOCUS GROUPS

Discussion about Student Health Service Needs

You are being asked to take part in a focus group (a focus group is sometimes called a group discussion). This focus group is being conducted by the _____ and is intended to improve health services for elementary-aged students attending Zena Elementary School. You are being asked to take part in this study because your child/grandchild attends Zena Elementary and we want to learn more about your experiences in getting health care for him/her.

Your participation in this focus group will be confidential. This means that we will not link your ideas or comments to your name in any written documents or in discussions with anyone at Zena Elementary or elsewhere. The focus group is intended to improve the health services offered to students.

If you do not want to participate in this audio-taped focus group you do not have to. If at any time you want or need to leave the focus group and no longer wish to participate, you may choose to do so. There will be no negative consequences if you do not want to participate in the focus group, or if you want or need to leave at any time during the focus group.

I have read this paper about the study. I choose to be in this study. I know that I can stop being in the study when I want, and there will be no consequences for leaving the study at any time.

_____

Signature **Date**

PILOTING YOUR FOCUS GROUPS

You should conduct a focus group on one to two groups to test questions and to try out your recruitment strategies and protocols. For example, go through the process of recruiting people and find out what percentage of people show up to the event. Try out your questions and see if people understand the questions you are asking, and whether they elicit the type of in-depth information you need. Test your moderator skills and see if you are achieving the level of interaction you need to sustain the focus group. Does your recording equipment work? Does the focus group question guide provide enough information or do you want to ask more or fewer questions? Did some questions seem to elicit similar information? Did people feel comfortable?

GUIDELINES FOR NOTE-BASED ANALYSIS OF FOCUS GROUPS

1) Review field notes by the questions/categories.
2) Listen to the tape of the post-focus group meeting and transcribe this discussion (if possible).
3) Talk about notable quotes (refer to participants by number).
4) Listen to the oral debriefing.
5) Identify the major points. The major points will usually relate to the most evident points or questions that were summarized in the oral debriefing. Major points might include "big ideas" or "moderator insights" that are supported by the data (the comments of the participants). For example:
    - Types of health problems experienced by students.
    - Barriers and facilitators to health care access.
    - Source of payments.
    - Qualities parents value in health services.

6) Write the first draft of your report, which will include:

   - Major points (one or two pages typed).
   - Notable quotes (one or more pages typed).

7) Share the first draft with the needs assessment planning group for feedback and comments.

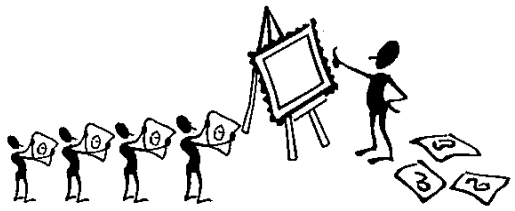
8) Analyze data across different focus groups to ascertain whether 1) there are common themes, and 2) if you have reached a data saturation point, i.e., no additional themes are being raised by group participants.

9) Prepare a final report for sharing with your planning group and other stakeholders.

NEXT STEPS

If you have completed items 1-9 above for your focus group, you do not need to read Chapter 6, Compiling and Analyzing Your Data, unless you want to do a more extensive analysis of your data. From here, you may want to read further in Chapter 3 to consider use of additional data collection techniques. Otherwise, you can go to Chapter 7: Acting on Findings, to learn ways your results can be used.

NOMINAL GROUP PROCESS



In the nominal group process, your intent is to create some type of consensus regarding the priorities for a SBHC planning group. This step includes each of the 5-10 participants in the group equally, and may be most useful after you have gathered some preliminary needs assessment data. This method is ideal for helping form a coalition, because this process creates ownership with each person's ideas being equally considered, and then moves the group together towards agreement on the issues. This process could be used to identify the most difficult problem facing the target youth, or perhaps how to best solve a problem that has already been identified through other needs assessment data.

On the next pages we provide information on:

1) selecting participants, and
2) six steps in nominal group process.

SELECTING PARTICIPANTS FOR THE NOMINAL GROUP PROCESS

If you are using this method for coalition building, you will likely have identified several key members of the community. To be sure that you have most of the community interests represented we suggest that you use the "snowball sampling" method. Your stakeholders can help identify key community representatives. You should ask each of these representatives to recommend 5-6 people you should contact. You might only contact a person if more than one representative mentions that person's name.

SIX STEPS IN NOMINAL GROUP PROCESS

Once you have selected your participants, arrange a meeting time for the group. Confirm the appointments and make a reminder phone call the day before the meeting. The following six steps take you through the nominal group process (Brindis, 1991).

1) Statement of the problem.
2) Silent individual listing of ideas in writing.
3) Round-robin recording of ideas.
4) Serial discussion of ideas for clarification.
5) Ranking alternative solutions.
6) Action stage.

After reviewing these steps, be sure to pilot this process before conducting the nominal group process with your main participants.

STEP 1: STATEMENT OF THE PROBLEM. The problem should be clearly stated so that group members can quickly grasp the issue and contribute their ideas.

Facilitator Role: Explain the exercise and assure participants that each person's contribution is essential and weighted equally.

STEP 2: SILENT INDIVIDUAL LISTING OF IDEAS IN WRITING. Each group member should individually list their strategies for reaching the identified goal.

Facilitator Role: Encourage participants to use short phrases and to work independently during this step. Allocate approximately fifteen minutes for this step.

STEP 3: ROUND-ROBIN RECORDING OF IDEAS. Members contribute in round-robin fashion the ideas they have listed, i.e., in turn, each person briefly states their first idea; after all first ideas are exhausted, each person briefly describes their second idea, and so on until all ideas are exhausted.

Facilitator Role: List and serially number the ideas that are presented on a flip-chart. At this point avoid evaluation of the ideas. New ideas that occur to members during the process can be added, in turn, to the list.

STEP 4: SERIAL DISCUSSION OF IDEAS FOR CLARIFICATION. Respondents discuss each item listed on the flip chart, in turn. This is the time for respondents to question, seek clarification, state agreement and disagreement, and state how they see a specific item tying to another item.

Facilitator Role: The focus should be kept on clarifying the idea, and limiting judgment. Help participants to group and subsume ideas in appropriate categories.

STEP 5: RANKING SOLUTIONS. This step allows each individual to rank the proposed solutions, so that the group gets a picture of the top solutions or options. If there are twenty solutions listed, each person should select and rank the top four solutions they support. Individually:

- Each person selects the top four solutions from the proposed ideas. Then each of these ideas are written on a separate index card, with the corresponding number from the flip-chart list written on the top left hand corner,
- Then each person ranks their four cards from 1-4, with "4" being the most-liked solution, and "1" the least-liked of the top four selected solutions. The ranking of each solution is placed on the bottom right-hand of the index card and underlined.

Facilitator Role: Explain the process to everyone, making sure people understand that "4" is the highest, not the lowest rank. Consider providing a sample index card on a chalkboard, using ideas not corresponding to the listed ideas to avoid bias. Gather the cards and tally the scores. The response with the highest total score will be the one best liked by the group.

For instance, you may have listed ideas 1-10. With ten people in your group, ranking up to four items, your tally sheet may look as follows:

Ideas from Round Robin	Scores from Group	Totals
1	1,2,1,1,4	9
2	2,1,3,3	9
3	3,2,4,2	11
4	4,4,2,2	12
5	2,3,1,3	9
6	1,3,4,1	9
7	3,4,1,4	12
8	4,1,2	7
9	4,2,3	9
10	3,1,2,3,4	13

The process of ranking can be repeated, or discussed until the group members agree on major strategies and their priorities. In this example, idea number ten sums to 13, and is the idea most liked by the group (remember the highest number is the most-liked response). This process should help get rid of ideas that are not germane, as well as those that are impractical.

STEP 6: ACTION STAGE. Now is the time to ask group members to assess the potential barriers and resources for implementation of the priority solution. This step is designed to help start the implementation of the group's solution. Among the questions that need to be resolved are:

1) Who else should be involved in working on this project?
2) Where should we begin?
3) How do we begin?
4) Who will do what to get the group started?
5) When do we start?

Facilitator Role: Keep participants focused and committed to working toward the proposed group solution. If you are doing this process with stakeholders or

persons who might be involved with implementing the solution, now would be a good time to try and get tentative commitments for continued participation.

PILOTING THE NONIMINAL GROUP PROCESS

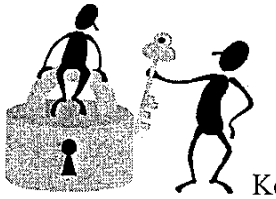
You should try your process on at least one group to test questions, as well as your recruitment strategies and protocols. For example, go through the process of recruiting people and finding out what percentage of people show up to the event. Try out your questions and see if people understand the questions you are asking, and if they elicit the type of in-depth information you need. Test your moderator skills and see if you are achieving the level of interaction you need to achieve. Does your recording equipment work? Does such an interaction provide enough information? Do you want to ask more or fewer questions? Did some questions seem to elicit similar information? Did people feel comfortable? Did the process help foster a sense of purpose or enthusiasm for a specific solution?

NEXT STEPS

Once you create a nominal group process method that is successful, use the technique with community leaders or other target population(s). Once you have completed the nominal group process with the target population, you will have formed a group with a priority it hopes to achieve. Work next with the group to implement that priority. If you choose to explore an additional method of data collection for your needs assessment to make it more comprehensive, go to the relevant section in this Chapter. Otherwise, you have completed this part of your needs assessment evaluation and can proceed to Chapter 7, which describes how to use your findings.

Congratulations!

KEY INFORMANT INTERVIEWS



Key informants, for example, the director of a health department, managed care organization, or a school district, are likely to be very busy individuals in the community. Therefore, it may be difficult to get several key informants in one room to conduct a focus group or a group using the nominal group process. Due to busy schedules, or a need to maintain confidentiality, you may need to conduct separate interviews with each of the key informants you have identified in the community.

On the next few pages we provide information on:

1) questions for interviews, and
2) selecting informants.

QUESTIONS FOR AN INTERVIEW

There are several types of questions you may want to ask a key informant:

- The nature of the problem.
- Existing resources.
- Successful programs previously implemented.
- Unsuccessful programs previously implemented.
- Insights into future directions and potential directions.

When you are constructing a key informant interview you want to follow the same guidelines for creating a survey discussed in the survey section presented earlier in this chapter. Some questions that might be particularly helpful for these type of interviews include the following (Brindis, 1991):

- What do you believe are the most critical problems or the greatest unmet needs facing youth in the community? What do you believe are the underlying causes? At

the local level, what do you view as the biggest obstacle to solving each of these problems?

- What do you think should be done to resolve these barriers, and how are you involved in the solution of these problems? Is the model of SBHCs known to you? Is such a model appropriate for the school to respond to the needs of students?
- How concerned do you think the residents of the area are about each of these problems? Who are the most knowledgeable people in each of these problems areas?
- What local health programs serving children and adolescents have been successful in your community? Why do you think they were successful? What are your conclusions based on? Are there SBHCs in the community already? How are they perceived?
- Has there been any controversy surrounding health service provision for students? What are these issues?
- What do you think needs to be done in the community to better address the problem of limited student health care access? What would you do first?
- What role does/might an agency like yours play in solving the problem you have described?
- What service gaps exist, and which factors create the greatest barriers to services?
- What networks, alliances or relevant associations (formal and informal) already exist to target child/adolescent health issues in this community?
- Are there any other groups of key individuals who have not been identified and who could play an important role in reaching the target population?
- What groups or individuals might oppose these efforts? Why? How might your organization work with these programs in negotiating a consensus process?
- What intervention models are currently in place in the community which are aimed at your own target group or other at-need populations? How successful have they been in reaching at-risk populations?

- What previous efforts have been most successful? Least successful?
- Do you know of any other models outside this community that might be successfully implemented for this target population?
- What models from other fields might be applied to a strategy to address the problem topic?

You can use these or other questions you develop as a basis for your key informant interview. We recommend you write out your questions under the appropriate headings provided in Worksheet 3.6. Once you write these questions, you should rate your questions using the criteria found on Worksheet 3.5 (p. 106).

WORKSHEET 3.6: Key Informant Interview Development

List the questions you would like to ask your key informants, being sure to create questions that reflect each of the following major categories listed below. After creating your questions, refer to the questionnaire criteria used in Worksheet 3.5 (p. 106), and ask someone else to rate the quality of your questions.

Questions about the nature of the problem?

_____

_____

_____

Questions about existing resources?

_____

_____

_____

Questions about successful programs previously implemented?

_____

_____

_____

Questions about barriers experienced by other similar implemented programs?

_____

_____

_____

Other types of questions?

_____

_____

_____

SELECTING KEY INFORMANTS

To be sure that you have identified informants that represent most of the community interests, we suggest that you use the "snowball sampling" method (p. 111). Your stakeholders will be useful in identifying key community representatives. Ask each of these people to recommend 5-6 people you should contact. You may choose to interview a person only if more than one community representative mentions that person's name.

PILOTING YOUR KEY INFORMANT INTERVIEW

Using your draft tool, pilot test it with approximately five people who resemble your key informants. This should help you assess whether or not you are gathering the information you desire. Do the people seem to mind providing the information? Are your questions being understood in the manner you had hoped? Did survey or interview completion take too much or not enough time for most respondents? Are the tools you are using responsive to the goals of your needs assessment?

NEXT STEPS

After collecting pilot data and noting and correcting the short-comings in the interview, you are ready to collect the main data for your needs assessment. After collecting your data from your true key informants, go to Chapter 6: Compiling and Analyzing Your Data, which explains how to work with your qualitative data.

RESOURCE MAPPING

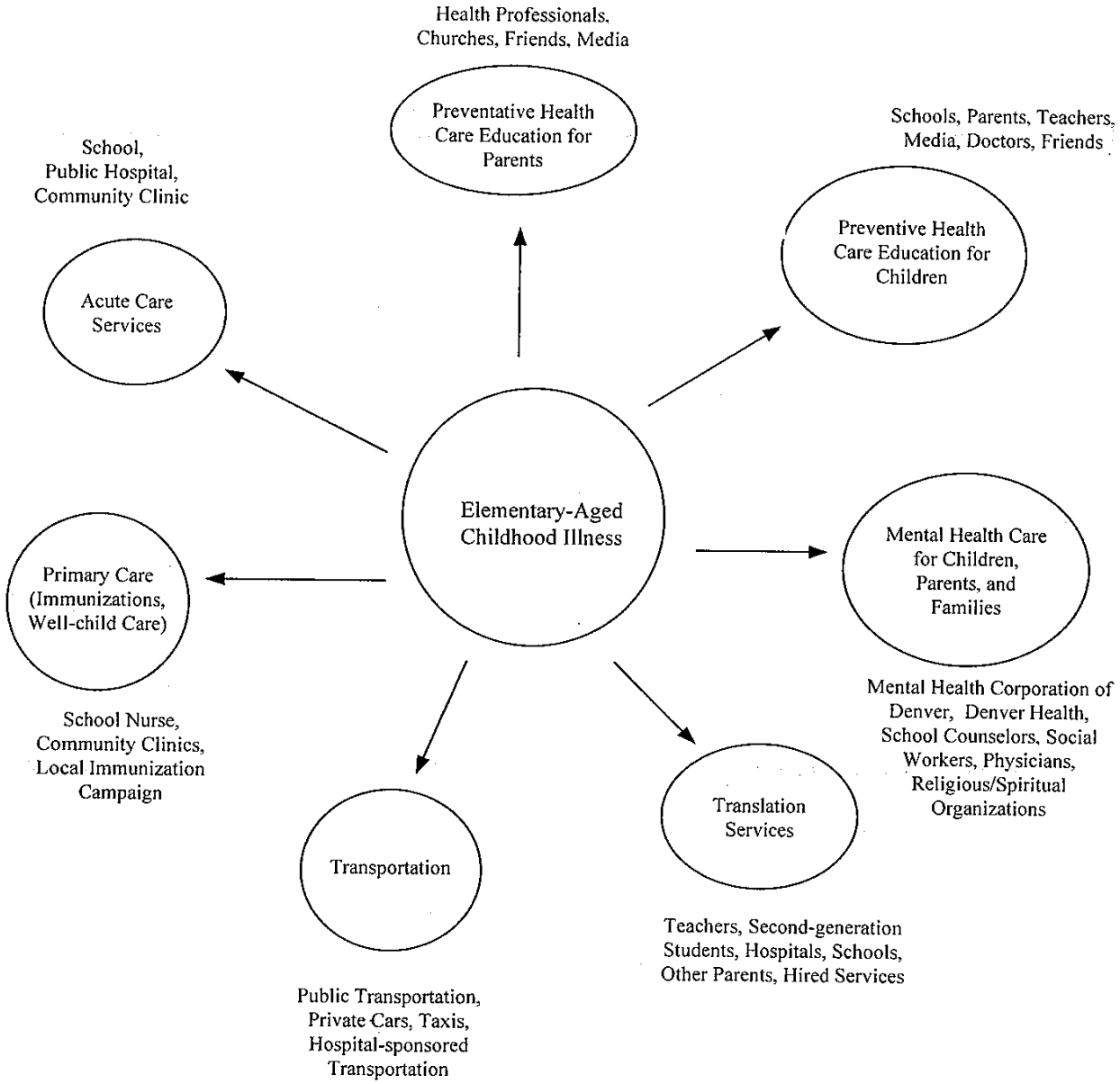
Resource mapping is a tool for gathering existing data in order to visualize the strengths and gaps in community resources, e.g., information and/or community services. Resource mapping may take place with key informants, stakeholders, focus groups, or in more informal interviews/conversations. Refer to those sections for sampling techniques.

THREE STEPS FOR RESOURCE MAPPING:

1) Label the target population or problem in the middle of the diagram (see example on the next page).
2) In the surrounding circles, write in the services/resources you would like to see available to address the target population or specific problem.
3) Next to each of the satellite circles label the community services available, leave blank if nothing is available.

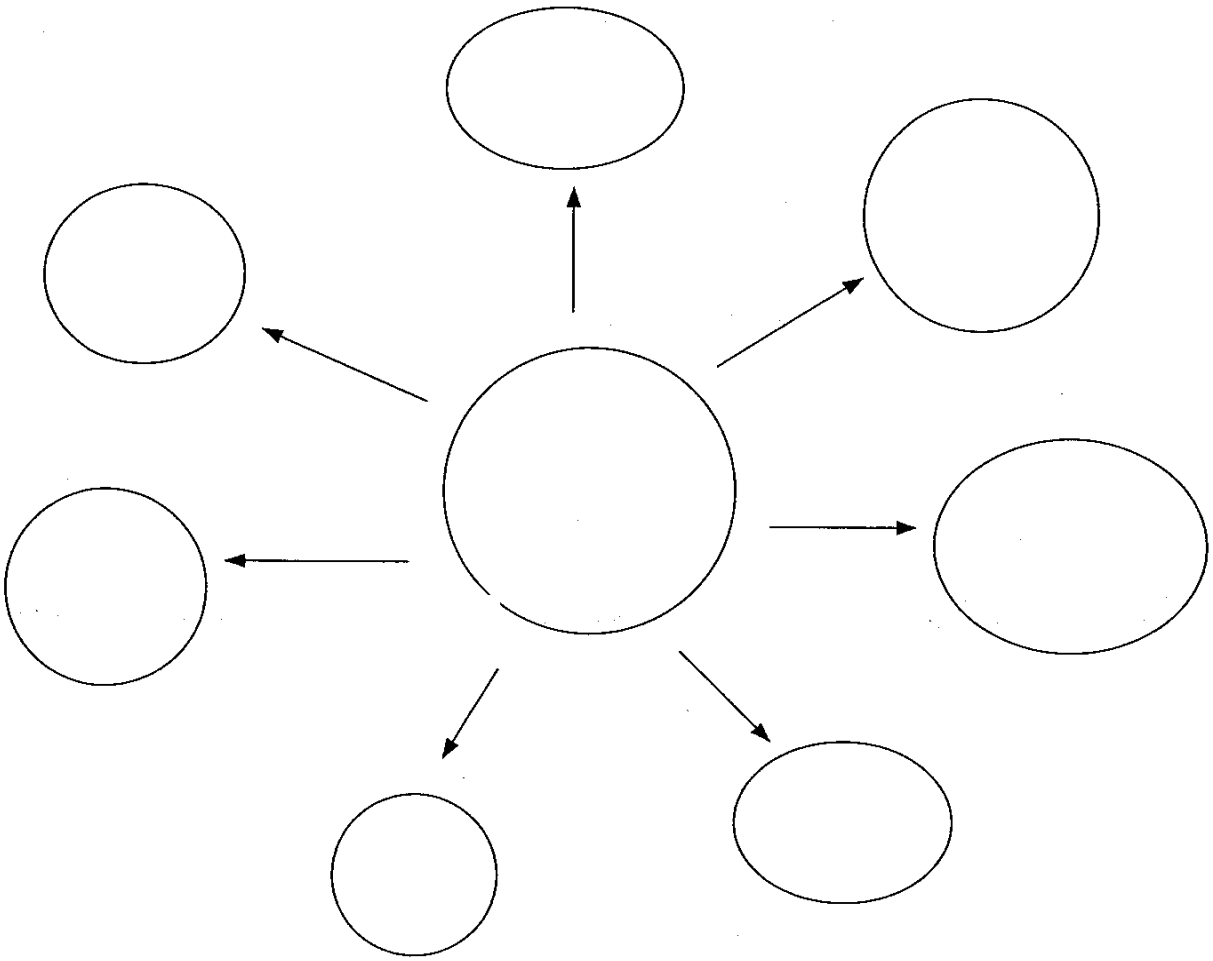
In our illustration of resource mapping on the next page we focus on a hypothetical example of services needed for one community of elementary-aged students. The resources are generic in this example, but would be more specific in your actual resource map, e.g., instead of "public transportation" you might specify the exact names of the public transportation services available.

Resource Mapping Example



WORKSHEET 3.7: Resource Mapping

Complete the resource map using three steps. 1) In the center circle, label the target population or problem; 2) In each of the satellite circles, write in the services you would like to see available to address the center problem; and 3) Next to each of the satellite circles, write in the relevant, available services.



Source: Adapted from Davis and Harmacek, 1997

PILOTING RESOURCE MAPPING

Pilot your mapping process by taking one small section of your community to see if you are able to adequately capture information on all the available resources in the community. Review both written, as well as interview formats, to assure that you are gathering an in-depth profile. Review available community reference books, for example, a United Way directory to fill in any omitted information.

NEXT STEPS

Resource mapping is a visual approach for displaying the information you have been able to collect using a variety of data resources. It helps illuminate existing service gaps, as well as identifying strengths and assets available to assist you in initiating a program and its evaluation. Now you are ready for Chapter 6: Compiling and Analyzing Your Data.

CHAPTER 3 SUMMARY

Chapters 1, 2, and 3 were intended to provide the necessary information for carrying out a needs assessment evaluation. After providing an introduction to needs assessments, help was given to create a timeline and collect potential sources of existing data. Five methods for conducting needs assessment evaluation were outlined: surveys, focus groups, nominal group process, key informant interviews, and resource mapping. These five evaluation methods were later described in more detail, complete with necessary worksheets. Again, we suggest that you use at least two of the above methods to help verify your information when conducting a needs assessment. Each needs assessment method ends with a "Next Steps" section which will describe where you need to go next to put your needs assessment results into action.

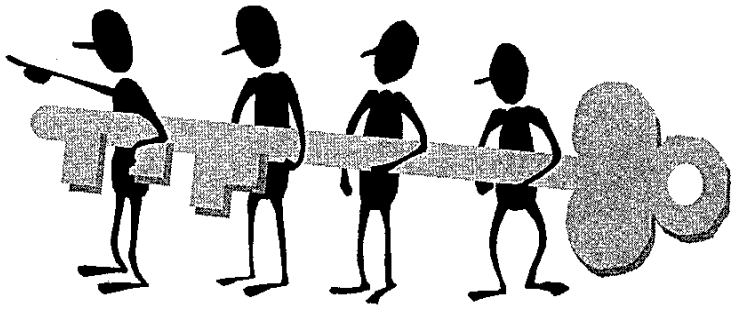
While this guide is not oriented to helping you plan a program, be sure to use the needs and assets assessment data to help prioritize the type of model and services needed for your community. Contact The Robert Wood Johnson Foundation, Advocates for Youth, or the National Assembly on School-Based Health Care (NASBHC) for further assistance in program planning, all of which are listed in Appendix C. We especially recommend you use the NASBHC web page.

Congratulations on Your Progress!!

CHAPTER 4:

CONDUCTING A

PROCESS EVALUATION



This Chapter Will Help You:

- ☑ **Establish a Process Evaluation Timeline**
- ☑ **Detail Your Service Delivery Goals**
- ☑ **Detail Your Actual Service Delivery**
- ☑ **Collect Quantitative Data**
- ☑ **Collect Qualitative Data**

INTRODUCTION TO PROCESS EVALUATIONS

A process evaluation will help you provide clear documentation of SBHC services provision. Such documentation can be shared with school and clinic staff, parents, and other community members, funders, legislators, and/or stakeholders. This type of evaluation will also be useful in identifying which service goals have or have not been achieved and why. When conducting a process evaluation you need to:

1) Review your goals and objectives, and posit specific, relevant questions.
2) Create a timeline.
3) Detail your quantitative service goals.
4) Collect existing data.
5) Choose methods to answer quantitative and qualitative questions.

This seems like a lot, but to get started, here are some basic tips to keep in mind when conducting a process evaluation:

- Involve as many sections of the community as possible.
- Keep your stakeholders involved throughout the process.
- Review the information you gather with stakeholders to interpret the data.
- Involve the community members in collecting the data, if appropriate.

On the next page we offer several specific questions your process evaluation might answer.

Process Evaluation Questions

Who are the SBHC users/non-users?

- How do users and non-users compare in terms of ethnicity? Gender? Grade level? Insurance status?
- Are the SBHC users representative of the school population?
- Are SBHC users at increased or decreased risk for violence? Drop out? Other?
- Who is not accessing services?

What services are being utilized, and why?

- What are the most and least utilized services?
- Might some services be eliminated from the SBHC?
- Does current service utilization suggest a need for an area of preventive care?
- Does current service utilization suggest a need for more staff expertise in a certain area?

Regarding service delivery, what works? What doesn't?

- Are students comfortable with the care they receive?
- Are students able to access care appropriate for their needs?
- How is the SBHC interfacing with the school administration? Teachers? Staff?

Are services being delivered in a manner that will eventually help accomplish SBHC program goals?

- What SBHC program goals will or will not likely be accomplished?
- Does the number of students being served or the strength of the intervention suggest an adequate sample size can be obtained for an outcome or impact evaluation?

- Should program goals be altered to match the reality of service delivery? Shoul service delivery be altered to better address SBHC program goals?

To help you implement your process evaluation, start by reviewing the goal(s) and objectives that you planned for in Worksheet 2.10. Then on Worksheet 4.1 write specific questions (like those on the previous page) which you want to answer with your evaluation.

WORKSHEET 4.1: Process Evaluation Purpose and Specific Questions

Please use Worksheet 2.10 and the questions listed under "Process Evaluation Questions" to complete this worksheet.

Think about the goal of your process evaluation. Overall, what do you hope to learn from this evaluation, or what is the PURPOSE of this evaluation? You can copy your goal from Worksheet 2.10 here.

Looking at your objectives from Worksheet 2.10, what are the SPECIFIC QUESTIONS you need to answer in order to achieve your objectives?

Objective 1:

Specific Questions—

Objective 2:

Specific Questions—

Objective 3:

Specific Questions—

Objective 4:

Specific Questions-

CREATING A TIMELINE

Once you have chosen specific questions you want answered, decide how many of the corresponding objectives you can realistically accomplish. Then, by creating a timeline and delegating tasks you can implement your process evaluation. A timeline will help keep you on task and help divide the work into manageable pieces to keep your project moving along. Because you may not have chosen specific evaluation methods yet, and you may not know how long a process evaluation will take, we provide the following sample timeline for one full-time person to conduct a process evaluation on one school site. Using the sample below, create for yourself an evaluation timeline using Worksheet 4.2.

Sample Process Evaluation Timeline

1999			**2000**
October	**November**	**December**	**January**
- Select Methods -			
- Collect Quantitative Data -			
- Develop Qualitative Instrument - (if needed)			
- Obtain Consents - (if applicable)			
		- Pilot -(if applicable)	
		- Collect Qualitative Data -	
			-Write-up and Disseminate-

WORKSHEET 4.2: Developing Your Timeline

In the space provided below, designate when you anticipate the listed tasks to be accomplished and who will assume primary responsibility for completion of that task.

TASK	TARGET DATE	PERSON(S) RESPONSIBLE
Gather quantitative SBHC data	_____	_____
Select qualitative methods & data sources	_____	_____
Select/create instruments	_____	_____
Select samples and obtain consents	_____	_____
Pilot methods	_____	_____
Collect qualitative data	_____	_____
Compile, analyze and interpret results	_____	_____
Report and disseminate findings	_____	_____
Utilize evaluation findings to improve your program	_____	_____

PROCESS EVALUATION METHODS

Process evaluations are often used to help determine if service goals are being reached. This presupposes that your SBHC has some concrete service delivery goals. Did you intend to deliver a certain amount of services, or did you intend to serve a specific portion of your student population, e.g., at-risk, or uninsured students? For instance, you may have decided at the start of the school year that you would provide comprehensive physicals to 10% of the male and female high school students you serve. A process evaluation will help answer the question of whether or not you accomplished the service provision goals you established.

In Worksheet 4.3 there is space for you to record your service delivery goals. We encourage you to include your staff and other relevant stakeholders in creating your clinic's service goals. We also encourage you to consider your goals in relation to your clinic's resources.

WORKSHEET 4.3: Listing Your Service Delivery Goals

Please list your service delivery goals, i.e., the services you plan, the quantity you hope to deliver, to whom you intend to deliver services, and by when.

Service Planned	Quantity Planned	To Whom	By When

Worksheet 4.3 helps you record service delivery goals that are quantitative in nature, i.e., the number of services delivered. This is often how process evaluations start - by collecting **quantitative** information that attests to the degree of service delivery goal accomplishment. The most useful process evaluations, however, also ask why service implementation was or was not successful. This type of information is gained by gathering **qualitative** information, e.g., why do (or don't) students use the SBHC? What would make the SBHC more attractive? What would help the SBHC better achieve its goals for service provision?

Thus, the most effective process evaluations combine quantitative and qualitative methods to collect information and describe results. The quantitative portion will be used to learn what numerical service goals have or have not been met, and the qualitative portion will solicit information to explain or provide the context for those findings, as well as information to help you better realize your quantitative goals.

In this section we first describe the different types of quantitative data methods you might use for your process evaluation (clinical data, surveys), and later in this section we describe the qualitative methods relevant to process evaluations (interviews, focus groups, observations).

Quantitative Data Collection Methods

SBHC/CLINICAL DATA

Often a large component of quantitative data collection is the number of visits the clinic has provided, to whom, and what types of services or diagnosis were made (steps 3 and 4 of the logic model detailed in Chapter 2). This data can likely be abstracted from an existing data source, such as a SBHC management information system. It is important that SBHC evaluation efforts are consistent so that information across sites can be compared. Thus, every clinic should have a similar definition of what constitutes a student "visit." In the box on the next page, we suggest how to define a SBHC visit.

What constitutes a visit? If a student passes in the hall and tells the counselor that he/she is feeling better, does that constitute a visit? What about a young student coming to the clinic complaining of a stomach ache? An appropriate rule of thumb is that if the encounter requires something to be written in the student's health record, then the encounter should be counted as a visit (Kirby 1992). Researchers and SBHC clinicians have reported that minor student encounters constitute up to one-half the interactions with the clinic, but are traditionally not recorded by the clinic because of the excessive time involved in collecting the data.

To gain your quantitative clinic data you may be able to use the SBHC management information system (MIS) used by the clinic. If no such database is available, you will need to do chart audits to get the needed data. If you have a MIS, specifically School HealthCare ONLINE!!! (SHO!!!), there are several easy ways to generate process evaluation data. If your clinic does not use SHO!!!, you should be able to extract similar information from your clinic's MIS.

SHO!!! commands for process evaluations

Some of the most useful data for a process evaluation will come from your record of SBHC registrants and visits. One difficulty with analyzing data in SHO!!! is that, because of attrition and new students coming into the school, it is difficult to determine an accurate denominator for your percentages, e.g., an accurate number of registered students, or an accurate list of students in the school. If SHO!!! data is extracted and matched to data from the school district with up-to-date class lists that are verified with teachers, you should be able to determine fairly accurate percentages for a cross-section of the population.

SHO!!! can be used to provide some basic frequencies, e.g., number of enrolled students, the number of SBHC users, the number of diagnoses given, etc. (provided registration data and encounter data are entered into the system).

You may also be able to combine the user and visit file capabilities, i.e., report the number of users who received a certain diagnosis. This can be accomplished in SHO!!!, as well as in other management information systems. The instructions for combining the user and visit files in *SHO!!!* is found in Appendix E at the end of this guidebook.

There are numerous other SHO!!! capabilities that are not detailed here, but technical assistance is available by contacting Angela McCauley at (303)764-8400.

After gathering quantitative data for your process evaluation, you can use the following worksheet to list the services actually provided (not just offered).

WORKSHEET 4.4: Services Delivered

List the SBHC services that were utilized, the quantity of each service provided, to whom it was provided (e.g., by gender and/or ethnicity), and when it was provided (any peaks in this service provision?).

Service Provided	Quantity Provided	To Whom	When

Comparing Worksheets 4.3 and 4.4, you should be able to note the differences between your service delivery goals and actual service delivery. For instance, you may have planned to provide 10% of male students with comprehensive physicals, but have provided physicals to 20% of the male student population. Please note these differences, positive and negative, on Worksheet 4.5.

WORKSHEET 4.5: Differences Between Planned and Actual Service Delivery

In the space below, note the differences between your service provision goals (Worksheet 4.3) and the services you actually provided (Worksheet 4.4).

Service Planned	**Service Delivered**	**Notes (what <u>was</u>/<u>was not</u> accomplished)**

Although SBHC clinical data is necessary to conduct your process evaluation, you may also want to expand the information you gather by collecting surveys from students and/or parents. If you combine clinical data and student/parent survey data, you might be able to answer the following types of questions:

- What is the level of satisfaction with SBHC services, or what is the level of satisfaction among parents for different services being used by students?
- Of all the people who reported experiencing a specific problem, what portion has been seen in the SBHC for that problem? For example, if 25% of elementary school parents report their child had ear infections within the first three months of the school year, clinic data should document what portion of those students were actually treated at the clinic during that time frame.
- What is the level of consistency between SBHC registration data completed by parents and parent surveys on items such as insurance status, health status, last well-child check, etc.?

SURVEY DATA

Using surveys to collect additional quantitative data can be very useful, but is also requires additional financial resources. Developing surveys can be an arduous task, and every effort should be made to use and/or adapt existing instruments. Surveys can be used to gather profile information on students, including their health concerns, risk-taking behaviors, and health care utilization. In process evaluations, surveys can also help determine levels of health care service satisfaction. The amount of required resources will depend on the extent of your survey procedures. Review case studies #1 and #2 to see the range of resources that might be needed, depending on the scope of your evaluation.

Process Evaluation of Service Satisfaction #1

You may ask students (and parents if they accompany the student) to complete a service satisfaction form after they finish their appointment. Survey participants are encouraged to drop their surveys in a locked box, to help assure anonymity.

Process Evaluation of Service Satisfaction #2

Given more resources, you may want to anonymously survey all students or parents of students at a particular school, asking them first, where they go for health care and how much they like that service, e.g., would they recommend it to friends? What do they like most/least about the clinic? You could also ask if students have any suggestions for improving the SBHC. If you were measuring satisfaction alone, the survey may only be ten items and take students a few minutes to complete. Such a survey may not require that you obtain parental consent, but this should be cleared with the school principal, the SBHC director, and other stakeholders. In addition, if you are contemplating collecting satisfaction data, you may also collect information on risk behavior and health care utilization. Such additional information could be used to compare characteristics of SBHC users and non-users.

Tips for using surveys:

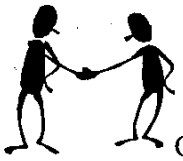
- Try to use surveys that have already been developed and fit your school's profile, making adaptations as necessary (See Appendices C and D, as well as the Survey section in Chapter 3 for tools that you might use).
- Consider your audience when selecting a survey. For instance HEDIS (Health Employer Data and Information Set) standards have recently been developed to help employers compare available Health Maintenance Organizations and other health care systems. Therefore, using HEDIS instruments would help make your SBHC evaluation results comparable to those of other health systems. (Please call the

National Committee for Quality Assurance at 1-800-839-6487 for ordering information).

- Know the benefits and drawbacks of the sampling techniques you choose (hiring a few hours of consultant time can help here).
- If using a previously developed survey, call the program or authors who developed the instrument and ask them about their experiences in using it. Most groups will be pleased that you want to use their instruments, but some will put restrictions on such use.
- Always pilot the instruments with your population. Piloting your instrument will help make sure the questions make sense to your population, and that your population responds to the survey

If you plan to conduct a survey as part of your data collection methods, you should now go to the survey sub-section in Chapter 3. Once you have collected the necessary quantitative data, you may choose to augment this with qualitative data, described next.

Qualitative Data Collection



Once you obtain some quantitative data, you will likely have a number of questions, such as: Why or why weren't service goals accomplished? How might more services be better delivered to a difficult-to-reach population? Which services do students like the most and why? You might then choose to collect qualitative information from students, teachers, and/or others, to answer your questions.

To answer these qualitative questions, you will need to gather students, teachers, parents, and/or others to learn the information you want to gather. This information can be gathered in the form of focus groups or open-ended interviews.

Focus groups are small discussion groups consisting of 6-10 people who are encouraged to share their opinions as part of a discussion facilitated by a group leader. These groups can be used to gain insights into why goals were or were not met. You should reference the focus group section in Chapter 3: Conducting a Needs Assessment

CHAPTER 4 SUMMARY

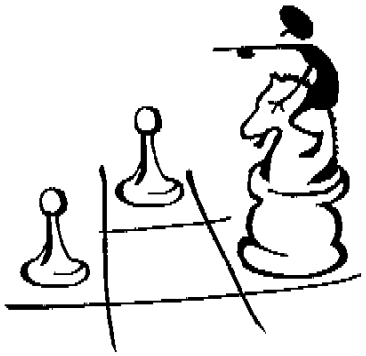
Chapters 1, 2 and 4 are intended to provide the necessary information for carrying out a process evaluation. After providing an introduction to process evaluations and offering several questions a process evaluation might answer, suggestions for creating a timeline were made. Both quantitative and qualitative process evaluation methods were described, and many methods suggested referencing back to methods described in Chapter 3.

NEXT STEPS

Regardless of the type of data collection methods selected, be sure to pilot your methods as described in the relevant section. After doing this, you can implement your main data collection procedures according to your timeline, and then turn to Chapter 6 to learn about compiling and analyzing both qualitative and quantitative data.

CHAPTER 5:

CONDUCTING AN OUTCOME OR IMPACT EVALUATION



This Chapter Will Help You:

- ☑ **Choose A Study Design**
- ☑ **Select Sampling Methods**
- ☑ **Collect Data**
- ☑ **Pilot Your Evaluation Methods**

INTRODUCTION TO OUTCOME AND IMPACT EVALUATIONS

Congratulations for choosing to measure the outcome or impact of the SBHC services you provide! This is an advanced evaluation process and **we assume from this point forward that you will use this manual in conjunction with the expertise of a trained researcher.** We also reiterate our strong recommendation that you complete the logic model explained in Chapter 2 before proceeding any further. Outcome and impact evaluation implementation will not be successful unless you have the full backing of your stakeholders, so we suggest that you confirm a common interest of your stakeholders in the evaluation process.

Outcome/Impact evaluations involve several steps, including:

1) Reviewing your research goals and positing specific research questions.
2) Creating a timeline.
3) Choosing a study design.
4) Choosing sampling methods.
5) Selecting data collection techniques.
6) Piloting the evaluation.
7) Collecting data.

This seems like a lot, but to get started, here are some basic tips to keep in mind when conducting an outcome and/or impact evaluation:

- Keep your stakeholders involved throughout the process.
- Review the information you gather with stakeholders to interpret the data.
- Involve as many sections of the community as possible.
- Involve the community members themselves in collecting the data, if appropriate.

To help you plan to accomplish your assessment, you should start by reviewing the goal and objectives of your needs assessment from Worksheet 2.10. Then you should consider specific questions you want to have answered.

WORKSHEET 5.1: Outcome or Impact Evaluation Purpose and Specific Questions

Please use Worksheet 2.10 to answer the following questions.

Think about the goal of your outcome or impact evaluation. Overall, what do you hope to learn from this evaluation, or what is the PURPOSE of this evaluation? You can copy your goal from Worksheet 2.10 here.

Looking at your objectives from Worksheet 2.10, what are the SPECIFIC QUESTIONS you need to answer in order to achieve your objectives?

Objective 1:

Specific Questions—

Objective 2:

Specific Questions—

Objective 3:

Specific Questions

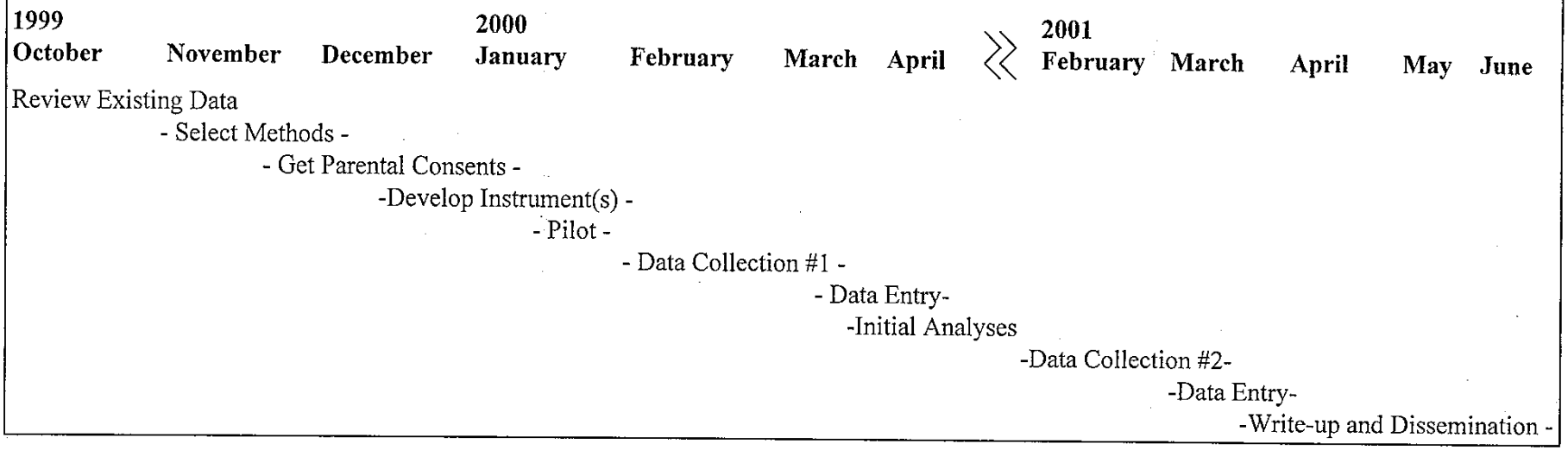
CREATING A TIMELINE

Creating a timeline and delegating tasks will help you plan and implement your outcome and/or impact evaluation. This should help keep you on task and help distribute the work into manageable pieces to keep your project moving along.

Outcome or impact evaluation efforts will rarely be completed in a period of months, and will more likely take place over several years, depending on the study design you choose. For instance, if you are interested in discerning if a SBHC classroom intervention results in immediate increased health knowledge, the evaluation may take only 6-8 months (provided you have the needed evaluation tools and a comparison population). Alternatively, if you have to develop a new instrument, gain cooperation from a comparison school, and are interested in evaluating the long-term effects of an initiative to reduce adolescent depression, you will need much more time.

We suggest components that may or may not be applicable to your evaluation in the sample imeline below. After studying the example, fill in as much of Worksheet 5.2 possible. For :xample, you may not know the date by when your pilot study will be complete, but you may know who will be responsible for the completion of that task. Once you have chosen from the methods described in the next section, you should come back to Worksheet 5.2 to fill in the remaining portions of your timeline.

Sample Outcome/Impact Evaluation Timeline*



*This timeline assumes that you have done preliminary work in obtaining administrative support, a process that cannot be rushed and may take several months to years to establish.

WORKSHEET 5.2: Developing Your Timeline

In the space provided below, designate when you anticipate the listed tasks to be accomplished, and who will assume primary responsibility for completion of that task.

TASK	TARGET DATE	PERSON(S) RESPONSIBLE
Gathering existing data & information on resources	_____	_____
Selecting methods & data sources	_____	_____
Selecting/creating instruments	_____	_____
Establishing viable comparison groups	_____	_____
Selecting samples and getting permission	_____	_____
Piloting methods	_____	_____
Collecting data (Time1)	_____	_____
Collecting data (Time2?)	_____	_____
Collecting data (Time3?)	_____	_____
Compiling and interpreting results	_____	_____
Reporting and disseminating findings	_____	_____

OUTCOME AND IMPACT EVALUATION METHODS

This section contains three parts:

1) choosing an appropriate study design,
2) sampling, and
3) data collection methods.

Each part will provide an essential aid to implementing an outcome or impact evaluation. The bolded words in this section are defined in Appendix A at the back of this manual, to give you a precise understanding of the terms used.

After reading through the following three sections: study design, sample size, and sampling methods, we <u>strongly recommend</u> you consult with a person trained in research and a senior statistician to receive feedback on your initial choices.

Choosing an Appropriate Study Design

The ideal study would be:

- quick,
- cheap, and
- show that SBHC services cause all students everywhere to enjoy numerous healthy outcomes.

In reality, no study design will have all these characteristics. This section is designed to give you explanations of basic study designs and examples of how they might be applied. It also includes a summary titled "Ups & Downs of SBHC Study Designs." Additionally, with this information you should be able to choose study methods which will best meet the goals and objectives of your evaluation.

Two types of analytic study designs are appropriate for outcome and impact evaluations: *quasi-experimental study designs* and *experimental study designs*. Non-experimental study designs are also described briefly because they are often used, even though results from such study designs may produce damaging false results. Non-experimental study designs are distinguished from quasi-experimental study designs by one specific attribute. Non-experimental studies do <u>not</u> use a comparison group, whereas quasi-experimental studies <u>do</u> use a comparison group. The quasi-experimental study design can be distinguished from the experimental study design in the way that the comparison group is established.

In this chapter, we describe two types of non-experimental designs and three types of quasi-experimental studies (also called observational studies): case-control studies, retrospective cohort studies, and prospective cohort studies. We also describe the single type of experimental study design (sometimes called an intervention study or randomized-control trial). The subsequent applications given for each study design are only examples that can be altered, combined with other study designs, or expanded to suit your needs.

Study Designs Appropriate for Outcome and Impact Evaluations

Non-Experimental Studies (no comparison group used)

- Post-test only Study
- Pre-test and Post-test Study

Quasi-Experimental Studies (uses comparison groups)

- Cohort Study (retrospective and prospective)
- Case Control Study

Experimental or Intervention Studies (uses control or comparison group)

NON-EXPERIMENTAL STUDIES

The distinguishing characteristic of a non-experimental study is the lack of an external comparison group. These studies are very fast and cheap to conduct, making them superficially attractive. Without an external comparison group, however, a beneficial outcome can be challenged because the outcome may be due to chance or another intervention in the community. Thus, we discourage the use of this study type, but recognize them as a first step many people take in conducting evaluations (Brindis, 1991).

POST-TEST ONLY STUDY

In this study design students receive an intervention and are then tested on their knowledge. This is similar to the academic grading system, where students are graded after an intervention (teacher's instruction) is given. There is no assessment of baseline knowledge, and therefore no way to assess the change in knowledge. This type of study can also be damaging if the results show a negative change related to the intervention, because there is little substantial means of explaining the results.

Post-test Only Study - Application

SBHC services were implemented in "Whatever" middle school. After a year of offering services, SBHC administrators decided to implement a post-test, asking all students at "Whatever" middle school to rate their ability to access health services. Access to services ranged from very difficult to very easy to obtain. Because no specific baseline level of access was assessed, the true change in service accessibility cannot be measured. Because a comparison group was not used, researchers were unable to know if the high rate of service access was related to SBHC services or a new state-wide health insurance scheme.

PRE-TEST / POST-TEST STUDY

This study design is somewhat better than the Post-test only design. In this study design, both pre-test knowledge and post-test knowledge are measured so that change can be calculated for each person. Thus the pre-test/post-test study design has an internal control group, but lacks an external control group. Lacking an external comparison group, any change might be due to chance or to another outside influence. Again, negative results may result which would be difficult to explain.

Pre-test/Post-test Study - Application

All fourth grade students in "Anywhere" school are given an intensive four-week nutrition intervention. Although a comparison population is not available, students are tested before the nutrition intervention is given (pre-test). After the four-week intervention the same population is tested again (post-test). The change between pre-test and post-test can be calculated for each student. The amount of change between pre-test and post-test for each student can be summed to create a score representing net change in knowledge. With a sufficiently high amount of change, SBHC staff decide to present these preliminary findings in a grant proposal, which requests funds for further research.

QUASI-EXPERIMENTAL STUDIES

Unlike non-experimental studies, quasi-experimental studies are strengthened by the use of an external comparison group in the evaluation. By measuring both an intervention and external comparison population the possibility that change occurred by chance or by some outside influence is controlled. The comparison group used in a quasi-experimental study is non-randomly assigned to the intervention or comparison group. Thus, even this study design does not control for self-selection or bias. For instance, those who choose to be part of the intervention may be intrinsically different than the comparison population that opts out of participation (Hennekens, Buring, 1987).

Comparison data for a quasi-experimental study can come in two forms: 1) data obtained from a comparison group established and measured, or 2) existing data, such as an existing national study or a previous study of a similar population in the community.

COHORT STUDY

A cohort study is most appropriate for outcomes that are relatively common, e.g., incidence of depression among adolescents. Cohort study population selection is based on access to or use of a SBHC, i.e., one part of the study population has access to use of a SBHC and the second does not. In these studies, data are used to compare the two populations on specific outcomes, e.g., do students with SBHC access score lower on depression inventories than those without SBHC access? A second phase of the question is whether adolescents who are depressed and who have used the clinic services have a reduction in depression, as compared to adolescents with no access or alternative access to care? In a cohort study, you select your sample based on the intervention received (SBHC access/no SBHC access or SBHC use/no SBHC use) and then look to see what outcomes are related to this intervention.

There are two types of cohort studies, retrospective cohort studies and prospective cohort studies, which are each described below.

RETROSPECTIVE COHORT STUDY

For this study design, two populations of students are selected, one which has had some level of exposure to SBHC services and a second without previous SBHC exposure. Then data are collected **retrospectively** at one point in time, through a survey and/or archived data. Data are analyzed to look for differences in the proportion of the two populations that experienced a specific outcome, e.g., depression or violent acts. Below are two examples of how a retrospective cohort study design might be used.

Retrospective Cohort Study - Application #1

This study design has been used previously to determine if SBHC access improves utilization of mental health and substance abuse services among adolescents. In the relevant study conducted by Kaplan et. al. (1998a), students with SBHC access and access to a HMO were compared with students who were similar in terms of age, sex, and socio-economic status, who had HMO access, but did not have access to a SBHC. They then used HMO and SBHC data to learn which services had been used by each of the students during the previous year. They found students with access to a SBHC were ten times more likely to have made a mental health or substance abuse visit than those without such access.

Retrospective Cohort Study - Application #2

This study design has been used to determine if SBHC services increase health service accessibility for elementary-aged Latino students. In this study by Kaplan et. al. (1998b), parents at two schools: one experimental school that contained a SBHC, and one comparison school that didn't have a SBHC, were asked to complete a survey describing their children's access to and use of health services in the previous year. Students at the school with a SBHC were more likely to have accessed dental services, as well as physical and emotional health services, and were less likely to have accessed ER services.

PROSPECTIVE COHORT STUDY

This study design is different from the retrospective cohort study in that it requires you to make data measurements at least two different points in time, once at baseline, before implementation of the intervention (SBHC services), and once after the intervention, when you collect data regarding your outcomes once again. You must track each student through this time period so that the change in each student can be assessed. Two applications are provided below.

Prospective Cohort Study - Application #1

This study design might be appropriate for a research team that is able to measure baseline data from an experimental and comparison school population where the SBHC has not yet been implemented. The researchers then could follow the **cohort** for two years, determining at two years post-intervention if the population with SBHC availability had higher rates of utilization of preventive health services than the population without SBHC services.

Prospective Cohort Study - Application #2

This study design could be used to investigate if SBHC services influence the rate of student absenteeism. This study would require excellent coordination with school personnel. Schools would need to track each student's absenteeism and preferably with a coded reason for the absenteeism, e.g., sickness, medical appointment, vacation, behavior problem, suspension, etc. This data would be collected for all students at both experimental and comparison schools for one year before implementation of SBHC services, creating baseline data. Then after one or two years of SBHC service provision, absenteeism information for experimental and comparison students would be collated and analyzed. You could use your data to test the hypothesis that absenteeism due to sickness and medical appointments decreased for the experimental school and remained consistent for the comparison school. However, the SBHC's presence may actually increase the number of students sent home because of an illness, but decrease absenteeism due to behavioral problems.

CASE-CONTROL STUDY

This study design is appropriate for situations where the outcome, e.g., full-term adolescent pregnancy or attempted suicide, is relatively rare.

For this study design, two groups of students are compared, a case group and a control group. The case group is composed of students who have experienced a particular outcome, e.g., attempted suicide. The control group is composed of students who are similar to the case group in terms of demographics or other characteristics, but have not experienced the outcome.

You speculate that the control group was more likely than the case group to have visited the SBHC. If proven, this implies the SBHC may help reduce suicide attempts. Please review the Case-Control Study applications on this and the next page. This type of study requires a large number of students in both groups in order to detect changes among groups.

Case-Control Study - Application #1

For example, if you can compile a list of all female students in a certain area who have full-term pregnancies and whose infants are healthy, those students would form your case group. To obtain a control group, you could select a random sample of full-term pregnancies in that same area whose full-term pregnancies resulted in unhealthy babies. Then you could determine the proportion of pregnant students with healthy babies who had SBHC access, and the proportion of full-term pregnancies that resulted in unhealthy babies who had SBHC access. Potential results are presented in the Application #1 contingency table on the next page. The table shows that healthy infants were more likely than unhealthy infants to have mothers who had SBHC access, implying SBHC service provision is related to healthier pregnancy outcomes.

Case-Control Study - Application #2

Both your case and control groups might be chosen from a population with a high rate of depression. The case group would be those students who report they have attempted suicide. The control group would be students of a similar socio-demographic profile, but who do not report having attempted suicide. Then you would determine the proportion of suicide attempters and non-attempters who had SBHC access. Using the contingency table from Application #2 as an example, your results may show that those without a suicide attempt were more likely than those with a suicide attempt to have SBHC access.

This study design has strong potential and, to our knowledge, has not yet been used in SBHC evaluation. The major drawback to this evaluation design is that you must find an appropriate control group using **retrospective** data. You also need a large enough sample with a well-matched comparison group in order to detect health conditions that are relatively infrequent. You would also need to be sure that the comparison group does not have other service interventions that may also contribute to the findings. We discuss in more detail in the data analysis section how you would use logistic regression or multiple linear regression to control for **confounding** variables.

APPLICATION #1 Contingency Table		
	SBHC Access	No SBHC Access
Healthy Baby	80% (80)	20% (20)
Unhealthy Baby	50% (50)	50% (50)

APPLICATION #2 Contingency Table		
	SBHC Access	No SBHC Access
Depressed, **no** suicide attempted	80% (80)	20% (20)
Depressed, suicide attempted	50% (50)	50% (50)

EXPERIMENTAL OR INTERVENTION STUDIES

An experimental study is a type of prospective cohort study, i.e., measurements are taken of students at baseline and then again after a specific intervention has been carried out. The experimental study design differs from the observational prospective study because with the experimental study design the researcher randomly assigns students to either an experimental or control group, e.g., limiting which students will have access to specific SBHC services and which will not. *(Note: In this manual a comparison group refers to the non-intervention group which is non-randomly assigned, as in the quasi-experimental designs; and a control group refers to the non-intervention group which is randomly assigned, as in the experimental designs.)* Intervention studies are the most rigorous of study designs. When well-designed and conducted, most **biases** are eliminated, providing the most direct evidence to judge whether SBHC services are related to specific outcomes.

This type of study may be most practicable with health education interventions or a new therapy or intervention, where the benefit of the program is unknown, because it may be unethical to randomly assign students to the control group if a program has a known benefit. For instance, denying help to students who would benefit from services, such as therapy for TB would be unacceptable. Also, school administrators and parents may be opposed to the idea of denying services to children. To date, true experimental studies of SBHC services have not been conducted or published. The following two experimental study applications are provided to suggest how you might apply the experimental study design, while maintaining ethical research standards.

Experimental Study - Application #1

This study design would be appropriate for assessing the effectiveness of a health education intervention, such as pregnancy prevention programs delivered to classrooms. You would take baseline measurements of all classrooms that might be eligible for the intervention. Then you can literally put all the classroom numbers in a hat and select half of the classrooms; these classrooms would receive the intervention and constitute the experimental group. The classrooms left in the hat would constitute the control group. After delivering the intervention to the experimental group in some designated time period, and the traditional services to the comparison group, you would survey both experimental and comparison classrooms again. If the change between pre-test and post-test was better for the experimental than the comparison classrooms, statistical analyses may show the intervention was effective. Negative results can also be helpful because resources should not be wasted on ineffective programs which can be revised, replaced, or eliminated.

Experimental Study - Application #2

An experimental study may also be conducted to assess the effectiveness of mental health therapy for depression. Because the incidence of depression is quite common among adolescents, a baseline survey of high school students could yield a large number of depressed students. For ethical reasons, all severely depressed students would receive treatment, but would be eliminated from the study. The remaining moderately depressed students would be randomly assigned to an experimental or comparison group. The experimental students may undergo individual or group therapy, while the comparison group would not receive any services (could be put on a waiting list until after the post-test was conducted, or receive traditional services, for example, referrals to community services). A post-test would be administered at some later point in time to both experimental and comparison groups. Proven effectiveness among moderately depressed adolescents could be claimed if statistical analyses showed the experimental group fared better than the comparison group.

The UPs & Downs
Of SHC Study Designs

On the Up Side, Non-Experimental Studies:

- are cheap and easy to conduct.

On the Down Side, Non-Experimental Studies:

- may produce results which are more harmful than helpful,
- may produce positive results which are somewhat meaningless,
- may produce negative results which can be obtained with little opportunity to explain the results, and
- cannot show a cause-effect relationship, e.g., a non-intervention group of students may have experienced the same change without the intervention.

On the Up Side, Case-Control Studies:

- are relatively quick and inexpensive for outcome and impact evaluations,
- are good for outcomes that take a long time to manifest, e.g., graduation,
- are good for outcomes that are rare, e.g., suicide, and
- allow you to investigate more than one explanation for the outcome at the same time, e.g., SBHC use, poverty, drug use.

On the Down Side, Case-Control Studies:

- require careful selection of an appropriate control **cohort**,
- are inefficient if the SBHC intervention is weak,
- cannot be **generalized** to a broader population, unless a study of the whole population is made,
- may show that establishing cause and effect is not possible, e.g., cannot prove SBHC use causes higher student retention, just that SBHC services are related to higher student retention, and
- are particularly prone to **bias**, e.g., people who have a negative outcome may be more likely to recall having used the clinic than those without such an outcome.

On the Up-side, Cohort Studies:

- can examine the effects of SBHC use on many outcomes,
- **prospective** studies can show **cause-effect** relationship,
- **prospective** studies minimize **recall bias** re: SBHC use and other confounders, and
- allows measurement of outcome incidence in both the experimental and comparison groups.

On the Down Side, Cohort Studies:

- are inefficient for rare outcomes, unless the SBHC intervention is very strong,
- **retrospective** studies require archived data,
- **prospective** studies are expensive and time-consuming, and
- **prospective** studies can have poor **validity** if many students (>20%) are lost at follow-up.

On the Up-side, Intervention Studies:

- provide the highest quality of data,
- provide evidence for **cause-effect** relationship,
- allows examining of the effects of SBHC use on many outcomes,
- are subject to the least amount of **bias** that may put in question the **validity** of results, and
- are most likely to produce **generalizable** findings

On the Down Side, Intervention Studies:

- are extremely expensive,
- require extensive efforts to follow-up on the **cohort**,
- can have poor **validity** if many students (>20%) are lost at follow-up,
- may not be ethical for certain interventions, and
- may encounter strong opposition by parents, schools, and medical professionals in the random assignment of students to experimental or comparison study groups, may be ruined by "contamination", i.e., students in the comparison group benefiting from the mere existence of the clinic in the school or other students receiving clinic services.

Table 5.1 - Summary of Quasi-Experimental and Experimental Study Designs

	Quasi-Experimental Study Designs			*Experimental Study Design*
	Case-Control Study	*Retrospective Cohort Study*	*Prospective Cohort Study*	*Experimental Study*
Prevalence of Outcome	Prevalence of outcome is rare, e.g., suicide attempts, full-term pregnancy.	Prevalence of outcome is common, e.g., absenteeism, depression, use of physical or mental health services.		
Role of Researcher	Observer of natural course of events, noting who gets an intervention and who doesn't; as well as who does and who doesn't develop a specific outcome.			Determines who will and who will not get the intervention and then follows the groups to see the outcomes.
Number/Timing of Data Collections	One - After the intervention and outcome have taken place.		A minimum of two: 1) baseline (before the intervention). 2) follow-up(s) (after intervention).	
Cohorts (Groups) Compared in Data Analyses	Case - Students who have negative outcomes, e.g., pregnancy, suicide ideation. Controls - Students similar to cases in many ways, but do not experience negative outcome.	Experimental/Intervention Cohort - Group that has received intervention, e.g., SBHC services. Control/Comparison Cohort - Group that has not received intervention, e.g., SBHC services.		
Conclusions That Can Be Drawn	Correlational inferences can be made, but **cause-effect** relationships cannot be established.		Cause-effect relationships can be established, but is most **generalizable** using the experimental study design.	

Sampling

Once you have chosen a study design, you then need to choose a sampling technique. In this section, we cover two topics, 1) estimating your sample size, and 2) choosing a sampling method. These two sections are essential in designing a successful evaluation. You must have an adequate sample size - but also choose appropriate sampling methods. **Again, we strongly recommend that you consult with a statistician on these issues.**

ESTIMATING YOUR SAMPLE SIZE

You want to be able to show that the SBHC intervention has made a "significant" impact on the health and well-being of the students — right? When conducting an outcome or impact evaluation, the term "significant" has a specific meaning; it means "statistically significant," not just interesting or seemingly important. In order for you to conclude from your impact or outcome evaluation that a certain intervention did or did not make a truly significant impact, you must know how many people to include in your sample. This step may also be required for grant proposal applications and publication of your results. Here again, we reiterate our recommendation that you involve a statistician to help you determine what sample size is truly needed for your evaluation.

- Too Small of a Sample - you will not be able to detect the effect of the intervention.
- Too Large a Sample - you will be wasting your time and money collecting unnecessary data.

This section is intended to give you a framework for thinking about the number of people you will have to include in your evaluation. For exact sample-size estimations you can consult a statistician and/or refer to *Statistical Power Analysis for the Behavioral Sciences, 2nd Edition* by J. Cohen (1988).

When you are analyzing data there is always the chance of falsely accepting or rejecting a hypothesis. You want to be sure to detect a change if there is one and be able to confidently say that there is no change if there is not one. When you choose your sample size you are choosing how much error you are willing to accept. The level of error you are willing to accept is expressed statistically in the "p-value" you accept and the power of your statistical test. The power of your statistical test depends on the strength of the intervention as well as the sample size.

Consider: if a SBHC intervention is weak and only makes a small difference in outcomes, then you will need to have a very large sample size to detect this difference. Alternatively, if the SBHC intervention is responsible for a drastic change in a condition, then the sample size can be smaller. Label the effect of your intervention according to the following descriptions (Cohen, 1988):

- A weak intervention effect is not evident to the naked eye (correlation between intervention and outcome is small, $r=0.10$, $r^2=0.01$), and the intervention effect is between 0.10 and 0.49. Most SBHC interventions will fall into this category.
- A medium intervention effect is an effect that is evident to the naked eye (correlation between intervention and outcome is still rather small, $r=0.243$, $r^2=0.06$), and has an effect size between 0.50 and 0.79.
- Large intervention effects, i.e., those grossly perceptible ($r=0.371$, $r^2=0.14$), have an intervention effect of 0.80 or larger.

We report below approximate sample sizes required for various intervention effect sizes if you use generally accepted probabilities of committing statistical errors, i.e., $p\leq0.05$; power=0.80. The sample sizes reported are for each sample, i.e., you need the specified number of people in both the intervention and comparison groups. For example, if your effect size is 0.30, you would need 175 people in your experimental group, and 175 people in your comparison group.

Effect Size and Sample Size Requirements
(Cohen, 1988)
Assuming p<0.05 and power is 0.80

Effect Size	Sample Size[a]
Small	
0.10	1571
0.20	393
0.30	175
0.40	99
Medium	
0.50	64
0.60	45
0.70	33
Large	
0.80	26
1.00	17
1.20	12
1.40	9

[a] Sample size required for each population, i.e., experimental and comparison.

If you **can** obtain an adequate sample size, you pass "Go" and are advised to proceed to the next sub-section, on sampling methods.

If you **cannot** obtain an adequate sample size, you are advised to stop here and either: 1) get funds for a larger sample size, 2) increase the potential impact of the intervention, 3) consult a statistician or research consultant on alternative study designs, or 4) abandon the evaluation and focus on conducting a more thorough process evaluation.

SAMPLING METHODS

Now you know which study design will work best, as well as the number of people you need to include in the study to get valid results. This section explains different methods of choosing experimental/intervention and control/comparison groups. After choosing a sampling method, you should proceed to the next section, "Data Collection Methods."

RANDOM (PROBABILITY) SAMPLING

The best way to choose a sample is to use probability sampling, which simply means using a sampling method where the probability of each person being included in the sample is known. There are four methods of probability sampling: 1) simple random sampling, 2) stratified random sampling, 3) systematic random sampling, and 4) cluster random sampling (Dawson-Saunders, Trapp, 1994).

For any of these selection methods, you need a comprehensive list of all possible participants in the evaluation, for instance an alphabetical list of all current students in a specific school (before proceeding you may want to confirm such a list with individual classroom teachers). This list is called your **sampling frame.**

To select a sample for an impact evaluation, the following rule of thumb is recommended (Kirby 1992):

1) include all students in the study population if the population is less than 1,500,
2) use one of the random sampling procedures described below to choose a random sample of 1,500 if your student population is larger than 1,500.

You can also use a random sampling method if your resources preclude you from sampling an entire population.

SIMPLE RANDOM SAMPLING

This is a sampling method in which each person has an equal chance of being selected for the study. You can randomly select students with or without a computer.

Selecting Random Samples With a Computer

Preferably, your sampling frame (e.g., the eligible population attending a school) can be given to you in a database format, e.g., ASCII file, which you can import into a statistical software program, e.g., SPSS, SAS. If you have this data available, **we recommend that at the same time** you also ask for other relevant data regarding each student, e.g., classroom, birth date, grade level, address, phone number, race/ethnicity, gender, SBHC registration status, class standing, free meal receipt status, insurance status, etc. Once the data are in the database, you can command the computer to select the needed number of students at random.

Selecting Random Samples Without a Computer

If you do not yet have access to such a statistical package, you can number the students and then use a random number table to select the needed number of students (Dawson-Saunders, Trapp, 1994). To use a random number table, you literally toss a die/dice to decide: 1) whether to read the table vertically (odd die throw) or horizontally (even die throw), 2) where to start on the table (roll die/dice for column and row, as well as number in the column and row); and 3) which part of each number to use, e.g., the first three numbers or the second three numbers. Random number tables are available in the back of many statistics books.

STRATIFIED RANDOM SAMPLING

Often it is necessary to be sure that people with specific characteristics are represented in your sample, especially if you want to report findings for certain subgroups, e.g., SBHC users. In order to make sure a specific section of your population is adequately represented, you could divide your student list into different sub-populations, e.g., SBHC users and non-users, and then select randomly (as described above) from each sub-population, e.g., select

half the needed sample size from the SBHC user population, and half from the non-user population.

SYSTEMATIC RANDOM SAMPLING

This is a method of random sampling where you simply choose every n^{th} person from your sampling frame. For instance, if sample size calculations suggest you need a sample size of 400 and there are 1200 students in the school, you would choose every third person from your list.

*CLUSTER RANDOM SAMPLING****

This is likely to be the most common form of random sampling in the schools, if you intend to administer questionnaires to selected students. This method would use a classroom as the basis for random selection, e.g., you would administer a questionnaire to every student in the randomly selected classroom. If you pursue this approach, you may want to mix this method with stratified random sampling, where you would select at random a classroom from each grade level, or to be sure each grade level (or other characteristic, e.g., special education classes) was adequately represented.

*** If you are using this technique, please see a statistician to help design your study, because sample size calculations are based on the number of clusters, rather than the number of individuals (Murray, 1998).

NON-RANDOM (PURPOSIVE) SAMPLING

When random sampling methods are not available, matching is a very useful method for obtaining a comparison group for your SBHC outcome or impact evaluation (see examples in the study design section of this chapter). With this method, you find a comparison population similar to the one given the intervention, e.g., the groups should be matched by age, sex, race and other influences which may affect outcomes.

MATCHED SCHOOLS

If you want to measure the effect of the SBHC on an entire school population, then finding a matched school would be your best sampling method. Using this method, you would apply

baseline measures to the comparison school and intervention school. You would follow the **cohorts** for some period of time, e.g., one year, and then measure your outcomes again in a post-test.

How to Recruit a Matched Comparison School

1) Request school district demographic data to find schools that are demographically similar and if possible, geographically nearby.
2) Meet with administrators of potential comparison schools, providing them a brief study description, study methods, and a letter of support from the school district.
3) Explain the incentives for comparison school participation, e.g., provision of two weeks of free immunizations (provided this would not impact your outcomes), a financial incentive, and/or useful data for the school.
4) Decide which potential school seems to offer the most promising level of cooperation and choose that school as your comparison school.

MATCHED STUDENTS

If your study is not interested in the effect of the intervention on the entire school population, you may select students that receive an intervention for your experimental group and students with similar characteristics for your comparison group. These matches could be made by matching demographic characteristics from community medical records, school records, or from baseline surveys.

QUOTA SAMPLING

In this sampling method, you decide how many persons you need with certain characteristics, e.g., you may need 50 parents whose children have used the clinic and 50 who have not. You could stand at an open-house night and ask parents if their child used the

clinic and if they would like to participate in the study, until you reached the total number of study participants needed. This is not an acceptable method of sampling for outcome and/or impact evaluations because it is biased, but it is very appropriate for needs assessments and/or process evaluations.

Convenience Sampling

Convenience sampling is a very common, but very poor, sampling method. An example would be asking the first ten people who walk into the clinic what they like about the SBHC. The level of satisfaction of these ten people would obviously not represent the satisfaction of the entire community. This type of sampling is more appropriate for process evaluations and needs assessments.

Snowball Sampling or Peer-Generated Comparison Group

This is a convenience method of sampling commonly used in qualitative studies, for instance, where students would be asked to supply names of three friends to be included in the study. Although there are ways to sample social networks that provide representative samples, those methods are beyond the scope of this review. Thus, as presented here, snowball sampling is not an appropriate method of sampling for an outcome or impact evaluation.

Data Collection Methods

Collecting data for an outcome or impact evaluation is likely to require use of existing data, SBHC clinical data, data from other clinics, and/or data from parents and students. Regardless of your evaluation, there are several data elements that should be collected for all outcome and impact evaluations. Some of these elements are similar to the ones collected for process evaluations.

CORE DATA ELEMENTS FOR OUTCOME AND IMPACT EVALUATIONS

BASELINE DATA

- Ethnicity/Race of student
- Gender of student
- Birth date (preferred) and Age of student
- Parent's education
- Household composition
- Student's receipt of free or low-cost meals
- Primary health care provider or site most often visited for medical/mental health care
- Insurance status of student
- SBHC availability/use
- Unique identifier for each student

When a large percent of population is Latino, collect data regarding acculturation, using either an acculturation scale (See Marín, Sabogal, Marín, Otero-Sabogal, Perez-Stable, 1987) or by noting the language in which the written questionnaire was completed, i.e., English or Spanish.

CLINICAL DATA

It is likely that in an outcome/impact evaluation you will need to collect clinical data from your experimental/intervention population, as well as from your comparison population. Below we detail data elements which might be collected by your clinic. School HealthCare ONLINE!!! (SHO!!!) has been used by numerous clinics throughout the U.S. Therefore,

these data fields in SHO!!! are included in the "Core" data elements that many clinics have collected.

These SHO!!! data elements have also been reviewed by SBHC directors from eleven different states who participated in a 1997 working conference regarding SBHC evaluation. These directors offered their recommendations of the SHO!!! data elements that are most important for evaluative purposes. The data elements shown on the next page with an '◊' indicate >50% of the eleven SBHC state directors thought that element should be collected for evaluative purposes. Note that other data elements might be essential for your SBHC, or your specific evaluation, e.g., housing status might be required information for your funders.

The following page contains a brief list of data elements that can be collected using School HealthCare ONLINE!!! (SHO). SHO has two different files, a registration file (for information of all registrants) and a visits file (for information about each visit). The "◊" indicates more than 50% of eleven state SBHC directors think it is an important data element for evaluation.

Proposed Clinical Evaluation Data Elements

The SHO!!! Registration File:

- registration date
- ◊ birth date
- ◊ sex
- ◊ race
- ◊ school
- ◊ risk factors
- source of referral to the clinic
- name of medical home
- ◊ age
- age in months
- primary insurance company
- ◊ primary insurance type
- ◊ total number of visits
- supplemental demographic codes
- ethnicity
- primary language of student
- primary language of family
- birth country
- date of entry into U.S.
- ◊ who patient lives with
- ◊ grade
- medical/emotional condition
- date of medical emotional condition
- housing status
- subsidized school lunch
- source of acute care
- source of primary care
- saw health care provider within last year
- history of number of external provider visits
- history of reasons for external provider visits
- seen in ER visit
- history of number of ER visits
- history of reasons for ER visits
- dental home
- original type of medical insurance coverage
- special education

The SHO!!! Visits File:

- ◊ visit date
- ◊ visit CPT codes 1-6
- ◊ risk factors
- ◊ referral code
- confidential visit code
- ◊ ICD9 Diagnoses 1-3
- ICD9 Diagnoses 4-6
- ◊ age at time of visit
- total visit charges
- primary insurance company
- ◊ primary insurance type
- ◊ provider
- ◊ type of provider seen, e.g., medical or mental health
- ◊ provider time with patient
- ◊ race
- ◊ school
- ◊ sex
- ◊ grade
- ◊ saw a provider within last year
- history of number of external provider visits
- type of external provider seen in last year export
- history of reasons for external provider visits
- seen in ER visit
- history of number of ER visits
- history of reasons for ER visits
- source of payment for medical care
- housing status
- medications
- dispensed or prescribed medications
- extra variables

To begin data collection for your outcome/impact evaluation, you should identify existing sources of data from the following two pages. After considering these data sources, you should complete Worksheet 5.3. to summarize existing sources of data that are applicable to your program.

EXISTING DATA SOURCES

Information Area	Specific Information Needed	Sources of Information
SBHC Data	• Number of SBHC registrants • Number of SBHC users • Diagnoses Assigned • Missing Data	• Management Information System, e.g., SHO!!!, Healthmaster • Chart review • Making the Grade web-site
Health Care Utilization	• Use of preventive health services • Use of contraceptive services • Emergency room use	• SBHC data • Community clinics • Hospitals • Managed care organizations • Planned Parenthood • Department of Health • National Center for Health Statistics and National Ambulatory Medical Care Society data
Health Care Access	• Insurance status • Employment figures • Difficulties receiving care • Ethnicity • Satisfaction • Visit compliance rates	• Census data • Department of Health • Department of Labor • Local needs assessments done by school, United Way or other non-profit • Satisfaction surveys
Chronic Health Conditions	• Most prevalent chronic conditions at school • Number of special needs children in school • Asthma prevalence	• SBHC data • Department of Health • School nurse • School district data • Local school data
Acute Health Care Conditions	• Injuries • Poisonings • Pharyngitis • Otitis Media • Acute respiratory infections • Injuries	• SBHC data • School Nurse • Community clinics • Hospital data • National, state, local surveys, e.g., CDC, NCHS "Advance Data" series

Information Area	Specific Information Needed	Sources of Information
Mental Health	• Prevalence of depression, suicide ideation, suicide attempts, suicide • Conflict disorders • Peer conflict	• SBHC data • School psychologists, social worker • National, state, local surveys, e.g., CDC Youth Risk Behavior sur
Substance Use	• Number of kids using alcohol, tobacco, marijuana, other illicit drugs • Perception of harm caused by substance use	• Substance use at school • Youth Behavior Risk Assessment (national CDC survey)
Violence	• Gang activity • Reports of child abuse/neglect • Fighting in school • Number of incarcerated youth • Number of homicide and assault cases	• Police department • Department of Social Services • Hospital records of child abuse • School records • Juvenile justice records • State Department of Criminal Justice • Children's Defense Fund • Clearinghouse on Child Abuse and Neglect Information • Youth Risk Behavior Survey
Demographics	• Age, ethnicity • Homelessness • Literacy statistics • Public assistance receipt • Receipt of subsidized school meals • Number of single parent families • Employment statistics • Income statistics • Transportation figures	• Census data • School districts • Department of Labor • Department of Social Services • City & county planning offices
School Performance	• Grades • Attendance • Suspensions/Expulsions • Graduation/Drop-out rates	• Local Schools • School Districts
Reproductive Health	• Delay in onset of sexual intercourse • Use of condoms/contraception • Use of more effective contraception • Rate of STDs • Early adoption of contraception • Reduction in number of sexual partners • Reduction in teenage pregnancy • Early entrance into prenatal care	• Youth Risk Behavior Survey • SBHC data • Public health department data • Better education outcomes for teenage parents • Improved school retention for teenage parents

WORKSHEET 5.3: Information and Data Sources Already Available

✎ *Please write in the "information area" and the "specific information needed." Then write in all the places you can look for that information. Check the box after you have found and reviewed the listed source.*

Information Area	**Specific Information Needed**	**Sources of Information**
Example: Core Data Elements	Ethnicity Birth date Grade Gender Free Lunch Receipt	☑ Denver Public School Records Census Tract Data

QUESTIONNAIRES AND INTERVIEWS

Developing a survey or an interview is a very difficult process, potentially taking several years to develop. Additionally, it is important to collect standard data elements so that results from different SBHC programs can be compared. Therefore, we encourage you to use questionnaires and interviews that have already been tested. Even if you do not use an established instrument in its entirety, you can use questions from instruments that might partially fulfill your needs. Please see the data collection instrument section in Chapter 3 to learn about existing data collection instruments, as well as considerations when modifying an existing instrument or constructing a new one.

SPECIAL ISSUES IN COLLECTING OUTCOME/IMPACT EVALUATION DATA

Whether you are collecting data from teachers, parents, students, or the clinic, you will be asking people (teachers, clinic staff, parents, students, and others) to take on additional tasks. Stakeholders' support can help make your requests more palatable to these people, so be sure you are going through this process with your stakeholders.

For an outcome or impact evaluation, you will likely be following students longitudinally. The difficulty in this endeavor needs to be stressed. This task requires adequate time and financial resources to motivate participants in continued participation. If greater than 20% of the students initially assessed are not assessed at the final data collection point, the results of your study may be biased. Thus, longitudinal prospective studies must be innovative in their methods of following students as they move in and out of the school system. Additionally, longitudinal studies cannot be anonymous because initial and subsequent data collection must be matched per student.

The use of a unique identifier is essential in outcome and impact studies so that you can link different data sources, i.e., survey and SBHC clinical data, or pre and post data In one evaluation, a database was obtained that contained students' names along with their school district ID number. When a survey was returned (with the student's name), a third identifier was assigned to that student, a unique identifier. Because the school district ID number was

part of the SBHC data, students' clinical data could be linked to their survey. You may choose to use social security numbers, if available, or a birth date and name code. For confidentiality purposes, be certain that surveys are sent for data entry without a number or identifier that can be linked to the respondent in any way except through your database (for example, each survey would have your unique identifier, not the school district ID#, or social security number).

Next, we provide five tips for data collection and case studies, illustrating how improved return rates have been achieved, while maintaining support for data collection efforts in schools:

1) Obtain a list, preferably in a database format, of potential study participants, so you can track return of materials and student attrition. Portions of the database can then be imported (when needed), into a word processing package to create updated lists of needed materials for teachers or SBHC staff.
2) If you are surveying students or parents, plan 6-12 months of time to get permission from school boards and administrators to conduct research in the school setting. If you plan to survey students, allow 1-3 months to obtain parental consents for student participation in SBHC evaluation.
3) Guard respondents' confidentiality carefully, e.g., remove names from surveys and replace with unique identifiers, or have students develop a unique identifier based on initials, birth date, and gender. Be sure teachers and/or SBHC staff collecting student or parent materials do not read surveys. Provide envelopes which can be sealed for return of materials and keep confidential materials in a locked cabinet
4) Provide incentives for teachers, students, and/or parents for their participation in the evaluation efforts.
5) Involve SBHC staff in the research, but respect their time limitations.

Show school and SBHC staff your commitment to the evaluation by visiting the school often for: a) retrieval of materials, b) meeting with SBHC staff and school administrators to

coordinate evaluation efforts, and most important, c) feeding back research progress and final results to school and SBHC faculty and administrators.

Case Study

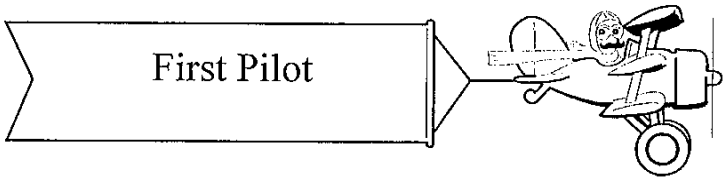
Researchers found that they had a limited consent form response rate from parents, i.e., 30% in some schools. As a result, research was suspended due, in part, to this evident lack of interest in the evaluation. In contrast, in another set of schools, 77% return rates were accomplished! What can account for this difference?

- More supportive school administrators who understood the purpose and value of the evaluation.
- An incentives scheme that awarded each teacher for their efforts in collecting parent surveys. Each teacher achieving at least a 60% return rate was given a $10 gift certificate to an educational supply store. Teachers achieving the highest percent of returned materials in a grade level were awarded an additional $20 gift certificate, thus creating competition between teachers to improve return rates. Additionally, the grade level with the highest percentage return rate was awarded a $200 gift certificate to an educational supply store, thus teachers within a grade level would encourage other teachers to achieve higher return rates.
- Focus groups to revise the survey instrument, making it shorter and more culturally sensitive so that parents would be more likely to complete the instrument.
- Use of a database to track students and the materials returned, so that updated lists of needed materials could be easily created for teachers.
- Attendance at several faculty meetings to update staff on return rates, second waves of administration procedures, and preliminary and final research results.

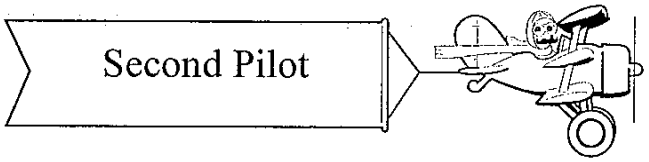
With this data collection advice, you should be ready to pilot your evaluation, as outlined on the following page.

PILOTING YOUR OUTCOME/IMPACT EVALUATION

YOU SHOULD ALWAYS PILOT YOUR EVALUATION!!! This entails pre-testing your instrument with a population very similar to the one you will use for the final data collection. You should pilot twice - once to work out the initial kinks and the second time to make sure the evaluation methods work as a whole (including survey revisions and data collection procedures). This step can save a great deal of time and money in the long run.



Ask 5-7 people similar to your intended audience to go through the questionnaire with you, reading back questions and responses in their own words. You want to see if they understand what you intend to ask, as well as response options open to them. You can also ask these people what they think of the questionnaire overall - is it threatening, pleasing to the eye, etc. This process should also be repeated for any different translations of the survey, e.g., for surveys translated into Spanish.



Using the revised questionnaire from the first pilot, use the same methods of data collection you will use for the actual administration with a smaller sample, e.g., 20-50 people. This will help you learn your potential response rate, as well as the completeness of data that will be returned to you. You can then make changes to collection procedures or survey questions to improve response rates and data completeness. Optimally, you would enter this data into a computer as you would the final data, to observe problems that might be encountered with data coding, entry, or analysis.

CHAPTER 5 SUMMARY

Success in conducting an outcome and impact evaluation hinges on three things:

1) completion of the logic model presented in Chapter 2,
2) involving expert help in conducting the evaluation, and
3) involving stakeholders throughout the entire process

Chapter 5 started with an introduction to outcome and impact evaluations, as well as directions for creating a timeline. The bulk of the chapter concerned implementing appropriate outcome and impact evaluation methods. Specifically, the insufficiency of non-experimental methods for this level of evaluation was discussed and the benefits and drawbacks of quasi-experimental and experimental methods were detailed. Each of the described methods were accompanied with study applications, providing examples of how each design might be employed. The methods section also included sampling methods, including sample size estimation and how to choose a sample. The final subsection within the larger methods section focused on data collection methods. Due to the complex nature of this evaluation, we also suggested piloting your data collection instruments and methods two times.

NEXT STEPS

Once you have completed all the parts of this chapter, you should then implement your main data collection efforts. Once your final data is collected, congratulate yourself, and proceed to Chapter 6, where instructions for compiling and analyzing your data are given. To help you disseminate findings use Chapter 7.

CHAPTER 6:

COMPILING AND

ANALYZING YOUR DATA

This Chapter Will Help You:

- ☑ **Identify Different Types of Data**
- ☑ **Compile and Analyze Qualitative Data**
- ☑ **Compile and Analyze Quantitative Data**

DIFFERENT TYPES OF DATA

At this point you may have several different data elements, i.e., surveys, interviews, SBHC data, focus groups, etc. Data obtained from these sources can be separated into two categories, qualitative data and quantitative data.

- Qualitative data is the type of data which results from open-ended questions, questions where there is no defined set of possible responses, for example you ask someone a question and they explain their response in an open-ended manner.
- Quantitative data is the type of data which results from closed-ended questions, questions where you ask a person to choose one response from a set number of responses. For example, if you ask someone how many servings of fruits they had in a day, the response options of 1, 2, 3, 4, or 5 or more, would be given. Quantitative data is also data collected through clinic encounters, e.g., diagnosis assigned, number of visits.

Both types of data have their strengths and weaknesses. Qualitative data are typically more difficult to analyze, but also provide "rich contextual data," and data containing important details, not limiting respondents to a set number of categories. Quantitative data are easier to analyze, but do not provide the richness and diversity of responses gained in qualitative data collection techniques. We encourage you to consider ways that you can combine qualitative and quantitative data as part of the same evaluation. Here are some examples of how to combine qualitative and quantitative data collection:

1) Use separate data collection techniques for qualitative and quantitative data collection, e.g., focus groups and surveys. Presentation of data can draw from both types of data.
2) Incorporate qualitative and quantitative questions into the same data collection methods, e.g., using an interview format, ask several closed-ended questions, as well as one to five open-ended questions.

3) A survey may be used to ask respondents what they like about their SBHC with a set number of response options, as well as a blank space for them to fill in any other unique responses they may have.
4) Qualitative data may be initially collected through focus groups or open-ended interviews to elicit possible response options for quantitative data collection.
5) A series of focus groups can be held after the initial quantitative analyses are completed to discuss the meaning, context, and interpretation of the data collected.

Utilizing both qualitative and quantitative data can help to overcome some of the inherent limitations in any one data collection approach. Furthermore, finding consistencies through the use of separate methodologies also helps to fortify your findings.

As an overview, qualitative data analysis involves gathering open-ended responses. As you collect data, the first few people will offer unique responses, and then respondents will most likely start to repeat responses similar to those previously heard. You should then start organizing responses into categories, or major themes. When you achieve repetition of all major themes using qualitative data collection, and find you are not acquiring new ideas, you may have exhausted the response options. This is considered reaching a "data saturation" point. If you continue to uncover new response categories, try to continue data collection efforts until you feel comfortable you have achieved a level of saturation.

Qualitative data can provide narratives and/or poignant quotes to help further attract attention to your findings. This type of data will often be used for needs assessments or process evaluations, and can be powerful in soliciting SBHC support from legislators, funders, and others who may feel comfortable with this level of data.

Quantitative data are analyzed differently from qualitative data. Quantitative data analysis requires compiling data in a database. Then the data are analyzed first for baseline frequencies, and then for higher level statistical tests. This type of data analysis will likely be the main type of data used in process, outcome, and impact studies, and may also be part

of a needs assessment. This data could also be useful in helping relate information on the SBHC to a variety of decision-making audiences. It may seem more valid to them because of the quantitative nature of the information.

COMPILING AND ANALYZING QUALITATIVE DATA

Qualitative data, including data from focus groups, open-ended interviews, or other open ended data solicitation techniques, can be analyzed in one of two ways, in a faster, easier way, or in the more methodologically rigorous way. The more methodologically rigorous techniques may be used to analyze data which will be formally presented and/or submitted for publication. Alternatively, if you are analyzing qualitative data that will not be used as an end in itself, e.g., to form response options or to give you a sense of which services are most needed, you might use the faster, less rigorous method.

The Fast-Track Approach

Some of the most powerful qualitative data supporting SBHCs will arise from case scenarios and interviews with people attesting to SBHC impact. This qualitative data might involve a parent's or student's description of how the SBHC made a difference in a child's life. Principals and teachers might be interviewed explaining how students' learning process is enhanced by having access to emotional and physical health services. This information can be disseminated in videos, written summaries, and testimony, which can provide compelling evidence for the continuing need for SBHCs.

Additionally, qualitative data might be obtained from open-ended questions on surveys or interviews. Open-ended questions might be used to create response categories for a survey. For instance, you might ask parents what aspect of the SBHC they like most, and what do they like least. From their answers, you will be able to develop the response categories most likely to be needed in survey questions. Some of the best surveys are developed using the language/phrasing that people in the community use in their natural speech, which might be noted in focus groups and key informant interviews (which are described in the needs assessment section of this manual).

The first step in summarizing your results to open-ended questions is to review a sample of the answers. From your sample and prior experience, you can create response categories which describe the individual responses. As you assign answers to these categories, you may need to change, combine, delete, or add categories. You should be generous with creating response categories. Answers that don't fit a category may require you to create a ew category or to put that response in an "other" category (although you should limit the number of "others" you have).

Below we list a number of hypothetical responses to an open-ended question, "What do you like most about SBHC health services?"

- The staff
- The hours
- The convenience
- Cheap
- Easy to get to
- Sandy
- Kids can go alone
- Don't have to get off work
- I trust the staff
- They are nice

The above responses might be categorized as follows:

1. SBHC staff	4	40%
2. Convenient times/location	4	40%
3. Price	1	10%
4. Avoid missed work	1	10%
Total	**10**	**100%**

There will inevitably be answers that seem to fit more than one category, e.g., "kids can go alone." This response could mean that the parent doesn't have to miss work, or that the location is convenient. The best way to check how you have categorized responses is to ask a second person to classify the same answers, using your response categories. You and the other person should agree at least 80% of the time on how responses are categorized. If you don't, then work together to confirm the choice of categories. Overlapping or insufficiently distinct categories could be combined, and excessively encompassing categories could be divided.

Methodological Approach

To compile data according to this approach, all the data collected should be typed out verbatim, i.e., interviews and focus groups should be recorded and transcribed in their entirety. Depending on the number of people you interview, these methods require planning for additional time, resulting from possibly hundreds of pages of transcribed notes, as well as resources to pay for transcript or key-entering of data. Once these data are key-entered into a computer, there are some data analysis packages which will help you identify major themes. In these systems (or through the use of the traditional word processing techniques) the computer can facilitate analyses by combining different categories of responses to ascertain their consistency across respondents. The QSR NUD*IST 4 (Non-numerical Unstructured Data-Indexing, Searching, & Theorizing) seems to be a very powerful tool for analyzing qualitative data and can be purchased from Sage Publications. The demonstration

version of this software, information on other research software, plus ordering information, is available from the Sage Publications web site, **www.scolari.com** or by contacting:

Sage Publications Software
Sage Publications, Inc.
2455 Teller Rd.,
Thousand Oaks, CA 91320
(805) 499-1325 phone
(805) 499-0871 fax

If you do not have any quantitative data to analyze, you should go to Chapter 7 after finishing your qualitative data analyses. Chapter 7 will help you use your findings. If you have quantitative data to analyze, please go to the next section.

COMPILING AND ANALYZING QUANTITATIVE DATA WITHOUT COMPUTERS

In this section, we describe how to compile and analyze data without computers. If you have statistical software, you can skip this section.

Compiling Quantitative Data

If necessary, data can be compiled without computers, especially if the amount of data is relatively small. For instance, if you only have a couple questions for each person, or if the number of people you question is small, then you would not have too much data to record. For example, five females students' contraceptive knowledge is tested before and after SBHC gynecological exams and recorded on a non-computerized spreadsheet (like the one shown below). Even if there were 500 students with two scores, this data could be easily recorded and used by the SBHC staff without a computer.

Sample Spread-sheet for SBHC Quantitative Data Compilation Without Computers

Pre-test and Post-test of Contraceptive Knowledge							
ID#	**Ethnicity**				**Pre-Test Knowledge of Contraceptives Score**	**Post-test Knowledge of Contraceptives Score**	**Change in Scores**
	Black	**Hispanic**	**Caucasian**	**Other**			
100	x				20	25	+5
101		x			19	26	+7
102		x			18	24	+6
103			x		15	17	+2
104		x			10	20	+10
Totals	**1**	**3**	**1**	**0**	**82**	**112**	**+30**

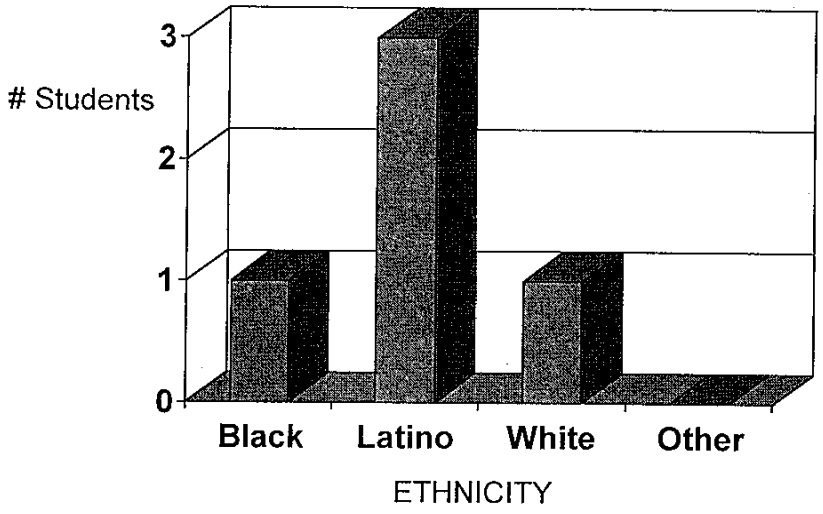
Analyzing Quantitative Data

You may not need a computer to help you with some simple data analyses. If you use a spreadsheet, in the above example you could describe several aspects of your data. Below are several steps for your data analysis.

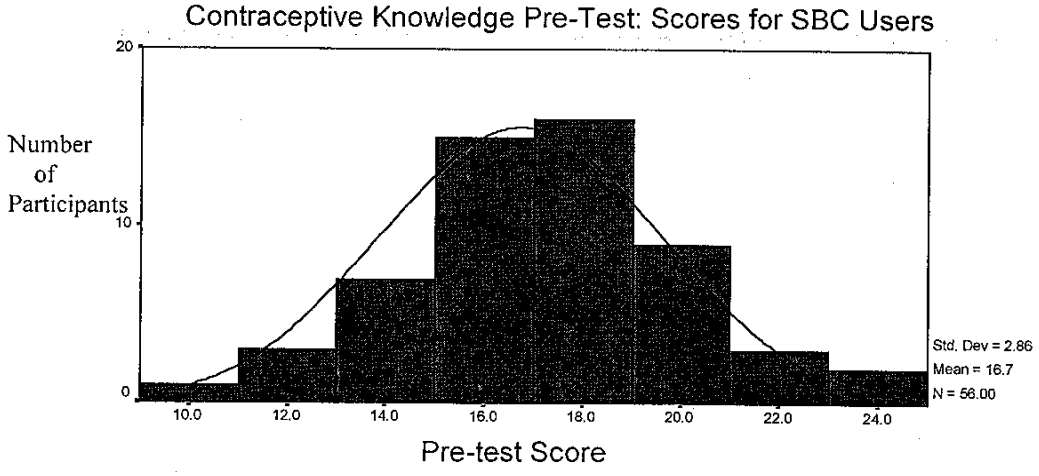
STEPS IN ANALYZING SINGLE VARIABLES

1) Tabulate your responses. For instance, you would calculate a "total" column for each of the variables, as shown in the above sample spreadsheet. You would report the total pre-test score and the total post-test score, in this example, 82 and 112, respectively, showing that students' cumulative knowledge changed 30 points between pre-test and post-test.
2) Calculate percentages for categorical variables, for instance race and gender. Using the data from the sample spreadsheet above, you would report that of the gynecological exam recipients 20% (n=1/5) were Afro-American, 60% (n=3/5) were Latino, and 20% (n=1/5) were Caucasian. This data could also be represented graphically, as in the following example:

Ethnicity of Female Students Receiving
Gynecological Exams at a SBHC



3) Graph numerical data e.g., scores on a test, number of SBHC visits, age of students etc., with a histogram. To make a histogram, make a graph that shows the frequency of observations receiving each specific response or score. See the graph below for an example.



4) Describe the "central tendency" of a single numeric variable. There are three measures of central tendency which can be used to describe variables: mean, mode, and median. The measure of central tendency used to describe a variable is dependent on the type of numeric data described.

If your variable is an interval or numeric variable and has a normal distribution when graphed, e.g., the distribution looks like the histogram shown in step 3 above, then you should use the mean (arithmetic average) as your measure of central tendency. When you report the mean of a variable, it is customary to report the standard deviation (which let's you know how close your mean approximates a larger population mean). A large standard deviation will likely result from surveying too few people to approximate your population mean. Using the mean and the standard deviation, you may also choose to calculate the 95% confidence interval of the mean. The 95% confidence interval is used to describe the variability of your mean. For instance, you may want to determine the mean age of SBHC users. You may only be able to sample a random 40 of your 300 SBHC users, which provides you with an estimate for the mean age of all 300 users. Because you have only sampled a portion of the population, you have only made an estimate of the mean age of the 300 users. By calculating the 95% confidence interval, you indicate a standard range of means in which the age of your population is likely to lie. The following example provides you with the steps necessary to calculate a mean, the standard deviation of a mean, and the 95% confidence interval.

Example of how to calculate a mean, a standard deviation of a mean, and the 95% confidence interval for the mean.

If we want to report the mean and standard deviation of the mean of the scores in the pre-test contraceptive knowledge example presented in the sample spreadsheet shown above we would:

1) calculate the mean, i.e.,
   (20+19+18+15+10)/5 (the number of observations) = 16.4
2) calculate the difference between each value and the mean, i.e.,
   20-16.4=3.6
   19-16.4=2.6
   18-16.4=1.6
   15-16.4=-1.4
   10-16.4=-6.4
3) square the differences found in step 2, and sum the differences, i.e.,
   $3.6^2 + 2.6^2 + 1.6^2 + (-1.4^2) + (-6.4)^2 = 12.96 + 6.76 + 2.56 + 1.96 + 40.96 = 65.2$
4) divide the sum in step 3 by 1 less than the number of observations, i.e.,
   65.2 / (5-1) = 16.3
5) The standard deviation is the positive and negative square root of step 4, i.e., $(16.3)^{½} = \pm 4.04$
6) The 95% confidence interval is calculated as the **mean $\pm$ (1.96*)(SD/(n)$^{1/2}$)**. In our example this is $16.4 \pm (1.96)(4.04/(5)^{1/2})) = 16.4 \pm 3.6 =$ **$CI_{95\%}$ = 12.8-20.0**

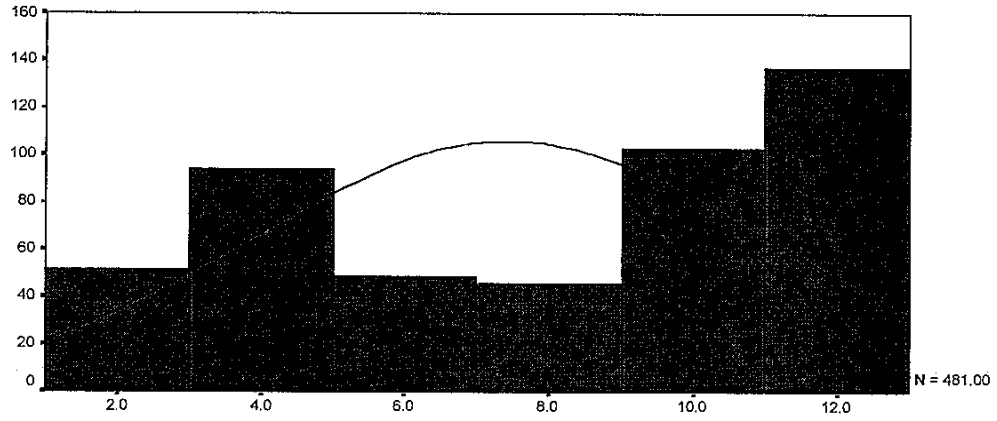
Therefore, the mean of the population is best described as lying between 16.4 $\pm$ 3.6, or between 12.8 and 20.0.

*1.96 is the constant used to calculate 95% confidence intervals.

If you graph your data and find your data is **not** normally distributed (see examples below), you should report the range of outcome values, i.e., the highest and lowest values. Also, you should report 1) the mode, and/or 2) the median measures of central tendency which best describe your data.

The mode is simply the value that occurs most frequently, e.g., in the numbers 4,4,4,12,6,6,10,11,3; the number 4 is the mode. If your data looks like Histogram 1 below, then you should report the primary and secondary modes, i.e., the most and second most frequent values. If your graphed data looks like Histogram 1, you should report the range of values, and the primary and secondary modes (12 and 10), respectively.

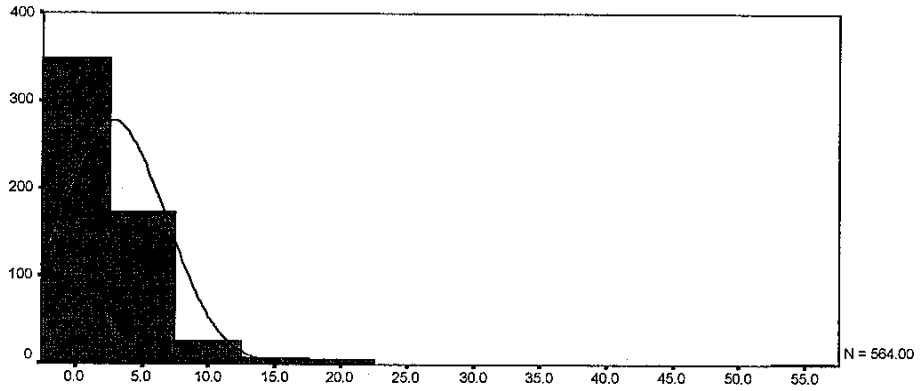
Histogram 1 of Non-normally Distributed Data



REGISTRATION MONTH - 6/27/96-5/30/97

The median is the value of the middle number in a series of numbers arranged from lowest to highest. If your graphed data looks like Histogram 2, then you would report the range and the median value. For example, if your numbers are arranged from lowest to highest: 3,4,4,4,6,6,10,11,12, then the fifth number in the series is the median, in this case, the number 6. If there is an even number of values, you would arrange the numbers from lowest to highest. Then you would select the two numbers in the middle, add them together, then divide by 2.

Histogram 2 of Non-Normally Distributed Data



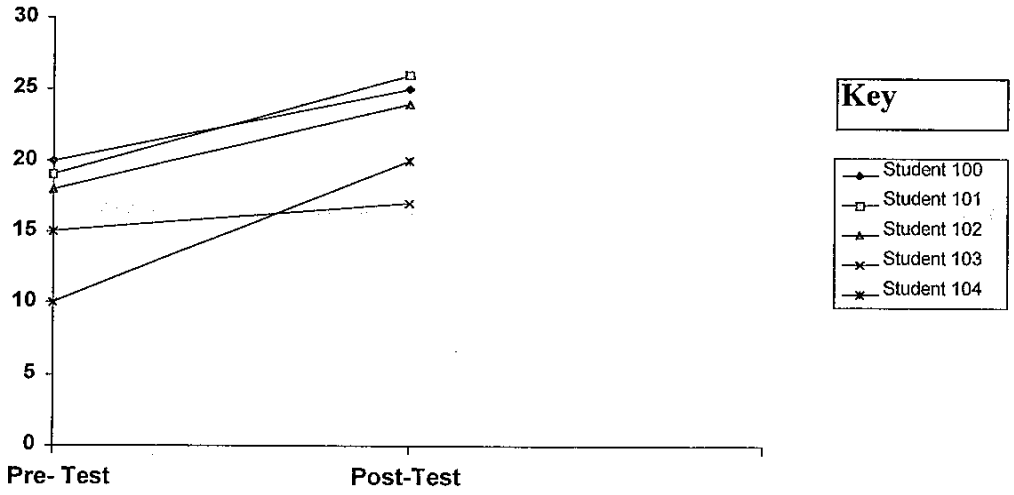
NUMBER OF PATIENT VISITS - 6/27/96-

ANALYZING THE RELATIONSHIP BETWEEN TWO VARIABLES

After calculating frequencies of each variable and making histograms, you are probably interested in finding out more about how two variables relate to one another. These type of analyses, which describe the relationship between two variables, are called bivariate analyses.

You might represent graphically how recipients' knowledge has increased or decreased as a result of your intervention, as in the example below. Statistical analyses of these data are discussed under the section analyzing your quantitative data with computers, which is later in this chapter.

Individual Students' Pre-Test and Post-Test Knowledge Scores



In the following example, pre-tests and post-tests of nutritional knowledge were administered to five students who had different ethnic backgrounds. First, post-test scores were subtracted from the pre-test scores to learn whether or not the change in knowledge was positive. Then a contingency table was made to explore how ethnicity might be related to intervention effectiveness (see table below).

This cross-tabulation shows Latino recipients of the intervention are not benefiting from the intervention in the same way as are the other ethnic groups. While 66.7% of Black and Caucasian recipients seem to benefit from the intervention, none of the Hispanic recipients benefit. Such information would suggest that the interventions need to be made more culturally sensitive for Latino recipients. You would likely want to do follow-up interviews and perhaps focus groups to understand these findings. You would also want to review the strategies used initially when planning the intervention. You would also need to be somewhat cautious in your interpretation of these initial findings because of the small sample size in your pilot study.

Change in Nutrition Knowledge by Ethnicity

			Change in Knowledge		
			Negative-No Change	Positive Change	Total
Ethnicity	Black	Count	1	2	3
		%	33.3%	66.7%	100.0%
	Caucasian	Count	1	2	3
		%	33.3%	66.7%	100.0%
	Latino	Count	3	0	3
		%	100.0%		100.0%
Total		Count	5	4	9
		%	55.6%	44.4%	100.0%

We suggest that these bivariate analyses be conducted with a computer if possible, so that statistical significance levels can be ascertained. If, however, you do not have access to a computer, this cross-tabulation is still very useful.

COMPILING QUANTITATIVE DATA WITH COMPUTERS

In this section, we describe how to go about compiling quantitative data into a computer, so that it can be later used for statistical analyses. We describe how to (or how to help others) enter data from surveys into a generic data format, like an ASCII file or a database. Then we explain how to import an ASCII file into a statistical software package. Generic ASCII files often result from downloading SBHC clinical data as well.

Entering Data Into a Database

HIRE SOMEONE

If you have the financial resources, it would be best to hire a company to key-enter survey or similar types of data, as these agencies usually guarantee at least 99% accuracy. This high level of accuracy is guaranteed by their ability to double-enter the data. Often you will need to provide such a company with a coding key, telling them the length of the field required for each item (question) on the survey or other instrument (see coding keys on next page).

DO-IT-YOURSELF

You may also choose to enter the data into a database on your own. This would be practical if you have not surveyed a large number of people, or if a volunteer will enter data and then you check the accuracy of data entry. You should create a data coding key in this case for your reference. Data entry accuracy can be checked in two ways.

- You can enter all the data twice in separate databases and then compare the databases, or
- You can enter all the data and then select a random 10% of the data to be checked against the database, e.g., one person reads off the survey and the second person

looks at the data that was entered in the database. If you find errors, you should recheck all records.

Coding Keys

Coding keys are used to be sure the data you collect is entered correctly into a generic database file, like an ASCII file (which is often the outcome of submitting your data to a data entry agency). A data coding key has four essential elements:

1) a way to identify the question or item of the research tool on a survey, e.g., page 1, question 1;
2) the possible range of values which can represent responses for each question, with the proper number of digits, e.g., 1, 2 or 00-09;
3) the value that should be entered if a question is blank (the missing value); and
4) if creating an ASCII file, there should also be a column in your coding key that describes where data for each item can be found in a line of ASCII data, for instance, the first four columns of data might be the location of the respondent ID.

We illustrate how to make a coding key with the following example. We will be writing a coding key for the sample survey below. Each of the response options in this survey has a small number next to the box which will be checked for that option. Each of these numbers represent a different response. Therefore, someone entering the data only needs to enter a number to represent a response for each question.

ID# _ _ _ _

1. Have you ever made a survey?

☐ 1 Yes ☐ 2 No

2. How many surveys have you made?

☐ 0 Zero ☐ 1 One ☐ 2 Two ☐ 3 Three ☐ 4 Four

☐ 5 Five ☐ 6 Six ☐ 7 Seven ☐ 8 Eight ☐ 9 Nine

When a coding sheet is created, a space needs to be designated for the 4-digit respondent ID# (4-digits in our example). In the first question, respondents can choose either "yes" or "no", corresponding to numerical coding of 1 and 2, respectively (a 1-digit field in our database). Also essential is to include in the coding key the values that will represent a question that is left blank. For the first question, "9" could be used as a missing value. For the second question, response options are 0-9, but because the value "9" is a response option, "9" cannot be used as the missing value option. Therefore, "99" is chosen as the missing response value for question #2 and our options need to be coded for a 2-digit field coded 00-99.

If three researchers completed the above two questions and the data entry agency entered the data in an ASCII file, then the data that is returned to you would look like the following:

```
0001101
0002299
0003909
```

The first line (or "record") of data corresponds to the first respondent. The first four digits in the first line indicates that the first respondents' ID# is "0001." The fifth digit (or column) in the first line indicates the respondent answered "yes" (coded "1") to the first question.

The sixth and seventh digits "01" indicate the respondent answered "1" to the second question.

The second line (or "record") of data corresponds to the second respondent, assigned ID# "0002". Their response to the first question was coded a "2" indicating "no" as their response to the first question. The second respondent did not answer the second question, and their response was therefore coded "99".

The third respondent (third line of data) was assigned the ID# "0003". This researcher did not respond to the first question (and was therefore assigned "9" as the missing response value for the first question). Their response to the second question was "09" so the sixth and seventh digits of the third record are "09".

Data entered into an ASCII file will need to be translated into a statistical software package. Thus, the final important element of a data entry key will be the data field position. As described below, the data field position simply indicates where the data for a specific question will be located in each data record.

SAMPLE CODING KEY

Item	**Response Options**	**Missing Values**	**Data Field Position**
Pg.1, ID#	0000-1000	9999	1-4
Pg.1, #1	1,2	9	5
Pg.1, #2	01-09	99	6-7

Entering an ASCII File into a Statistical Software Package

It is important to understand what the data file will look like when it is returned to you, because you will then need to enter the generic data file created by the key-punch agency into a statistical program so the data can be analyzed. When you read the generic file into the statistical program, you will need to "tell" the computer where each of the questions' responses are located in the record, and you will have to label each of the numeric responses. For instance, if you would want to enter the above three records into SPSS (a standard statistical software package), you would tell the computer that the first variable (the respondent ID#) corresponds to the first four digits of each record. The second variable (the first question on the survey) corresponds to the fifth digit of each record. The third variable (the second question on the survey) corresponds to the sixth and seventh digits in the record. You should use the import option in a statistical package to define and import each variable. Please refer to the reference manuals for specific statistical software you are using to complete the import.

Once you have entered your data, the next step is to run frequencies on each variable. By doing this, you will be able to see if there were data entry inaccuracies. For instance, if the question that has responses "yes" and "no" labeled "1" and "2" also has a value "6" in the frequency, you can go back and check that response and find the problem. After entering and spot-checking your data with frequencies, go to the next section on analyzing your data.

ANALYZING QUANTITATIVE DATA WITH COMPUTERS

Once your data are entered and the quality of data entry is assured, you are ready to conduct your analyses. If you are using SPSS, we suggest Statistical Methods for Health Care Research by B.H. Munro as a good reference. This reference explains most of the analyses you will need, and most important, it helps you read and understand the SPSS output you get. In this section, we describe the different types of quantitative data you might have, appropriate statistical techniques, and examples of SPSS output with directions on how to interpret the output.

Before you conduct any statistical test, you need to identify the type of quantitative data you have. Your data will be either, 1) nominal, 2) ordinal, 3) non-normally distributed numeric or interval data, or 4) normally distributed numeric or interval data.

- Categorical data without an inherent order are called **nominal data**, e.g., blood type (A,O,B), ethnicity (Latino, Afro-American, White), gender (male, female), yes/no responses.
- Categorical data with an inherent order to the data are called **ordinal data,** e.g., level of pain: none, a little, moderate, a lot, extreme. Notice that the distances between each category are not equal, i.e., the difference between "none" and "a little" is not the same as the difference between "a little" and "moderate."
- Numeric data, sometimes called interval or continuous data, that are not normally distributed, are termed **non-normally distributed interval data.**
- Numeric (interval) data that are normally distributed, are termed **normally distributed interval data.**

For further clarification on the differences between normally and non-normally distributed data, see the section of this chapter entitled "Compiling and Analyzing Quantitative Data without a Computer."

Reporting Frequencies for Different Types of Data

If you have nominal or ordinal data, you should report the percentage of respondents with each response option, as well as the percentage of respondents who left an item blank. For example, reporting on the gender composition of survey respondents, you would report there were 300 (30%) male respondents, and 700 (70%) female respondents.

For non-normally distributed numeric data, you should report the range of responses, as well as the median and modes. For example, if students reported the number of SBHC visits they made, this would likely be a non-normally distributed variable, and you would report the range as 1-54, the median as 3, and the mode as 2.

For normally distributed numeric data you should report the mean of the variable and its standard deviation. For example, you may use a standardized mental health assessment form that when scored has a normal distribution. You would report the mean of that sample as well as the standard deviation. If you need help with these terms, please turn back to the section entitled, "Compiling and Analyzing Data Without a Computer" (p. 211), where calculation of the mean and standard deviation is explained.

Overview of Statistical Tests for Different Types of Data

The four different types of data described above, require different statistical tests. Nominal data require nominal (categorical) methods. Ordinal and non-normally distributed numeric data require non-parametric methods. Normally-distributed numeric data require parametric methods.

The table below describes the different types of tests appropriate for your data. Remember, it is incorrect to analyze normally and non-normally distributed numeric data with the same methods. Non-normally-distributed numeric variables and ordinal data both require non-parametric methods. After deciding which type of test you want to conduct, you should read the next section "Interpreting Measures of Statistical Significance," and the "Explanation of

Confounding Variables." Then, you should select the tests appropriate for your analysis needs, and turn to the specific statistical test description in this chapter.

Summary of Selected Statistical Techniques

	Nominal Methods	Non-Parametric Methods	Parametric Methods
Compare 2 groups measured on one variable (Test for 2 independent samples)	Chi-square (use Fisher's exact statistic)	Mann-Whitney U	t-test
Compare >2 groups measured on one variable (Test for >2 independent samples)	Chi-square (use Fisher's exact statistic)	Kruskall-Wallis H	One-way ANOVA
Measure change between pre-test & post-test for one sample (Test for 2 related samples)	McNemar	Wilcoxon matched-pairs signed rank test	Paired t-test
Measure change between three or more repeated tests for one sample (Test for >2 related samples)	Cochran's Q	Friedman Matched Samples	Repeated Measures ANOVA*
Measure whether the change between pre-test and post-test are the same for two different populations	Loglinear Methods*	Loglinear Methods*	Repeated Measures ANOVA*
Measure association between 2 variables	Chi Square	Spearman Correlation Coefficient	Pearson's Correlation
Measure associations between outcome and >1 independent variable	Logistic Regression	--	Multiple Regression

* This method is not covered in this section, please refer to a trained statistician for advice.

Interpreting Measures of Statistical Significance

When you conduct statistical tests you are often interested to learn if the differences you find are "statistically significant." Statistical significance is indicated by the "p value" that accompanies the print-out of statistical tests. By convention, $p<0.05$ is the standard level of significance which warrants the claim that there is a "statistical difference." P values less than 0.01 are statistically more significant, and p values between 0.05 and 0.10 are often reported to indicate a "trend" in the data.

The meaning of statistical significance has often been misunderstood. Statistical significance means the difference between two groups is likely to be a consistent or a probable, real difference, not a difference that is due to chance. If two populations are significantly different statistically this does not mean that the difference between the two populations is clinically significant. You must judge whether the difference between the groups is of interest clinically.

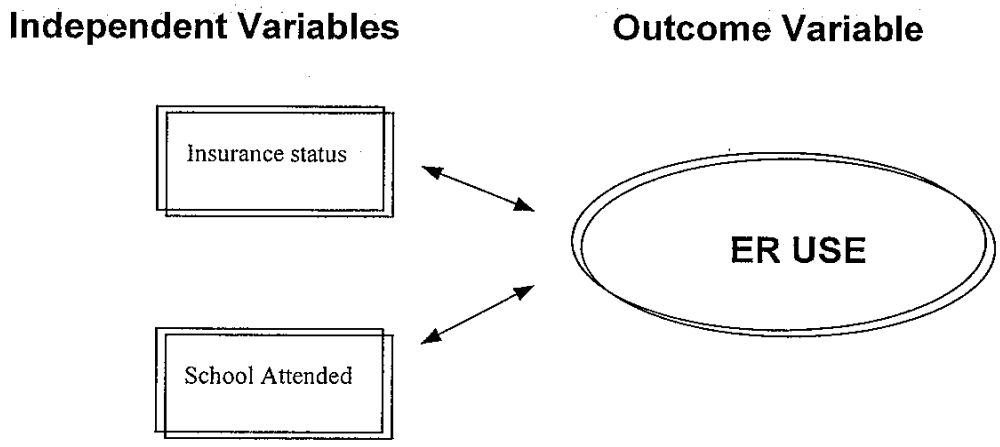
Furthermore, sample size is related to the power of your analyses, thus, whether or not your test will prove to be statistically significant. In a large enough sample, a very small difference between two populations may be statistically significant, but may not be clinically significant. For example, if the sample size were 1000, and 90% of Latino students benefited from the intervention and 85% of other students benefited from the intervention, the difference might be statistically significant, although a 5% difference may or may not be clinically very meaningful, e.g., you might invest a large amount of effort into increasing the effectiveness of a suicide prevention program by 5%, but probably much less effort into increasing contraceptive knowledge by 5%.

Conversely, if you conduct a study with a small sample size, and find a difference between your experimental and comparison group that seems clinically significant, but does not achieve statistical significance, the finding is still important. Often researchers using small samples will report p values that are between 0.05 and 0.10, indicating a "statistical trend."

To illustrate how sample size is related to statistical significance, we provide the following example. Sheila conducts a study finding that 90% of SBHC students are up-to-date on their immunizations, while only 60% of students at the comparison school are up-to-date. Statistical tests find that this difference is statistically different. Tom conducts a similar study and finds that 90% of SBHC users are up-to-date on their immunizations, while 60% of non-SBHC users are up-to-date, but his finding is not statistically significant (p=0.07). The reason for the difference in these findings is that Sheila's sample size (n=150) was much larger than Tom's (n=15). If Tom had a larger sample, it is likely that his findings would also have been statistically significant. Therefore, Tom's findings are important, although not statistically significant. Such findings could be used as a pilot study to solicit funds for a larger investigation.

Explanation of Confounding Variables

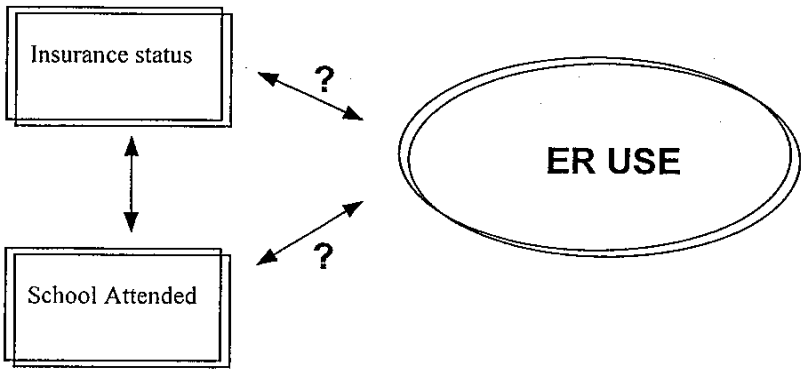
Another important concept to consider when conducting statistical analyses is the concept of "confounding variables". We explain this concept using the two illustrations below. In the first illustration, the two independent variables, insurance status and school attended, are each related to the outcome, use of an emergency room.



In the second diagram, the two independent variables are related to an outcome variable (as shown above), AND to each other. This is a 'confounding situation' where the relationships between each of the independent and outcome variables is put into question.

CONFOUNDING SITUATION

Independent Variables **Outcome Variable**



It is very common that two variables will overlap and confound each variables' relationship with the outcome. If two independent variables are significantly related to one another, and each of the two variables are related to the outcome, then you have a confounding situation. In such a situation, you should consider using logistic multiple regression and linear multiple regression techniques, which will control for confounding.

Using the Summary of Selected Statistical Techniques from earlier in this chapter, and with an understanding of p-values and confounding variables, you should be ready to select the appropriate data analysis method from the next sections, Nominal Methods, Non-Parametric Methods, and Parametric Methods.

Some of the methods described here are rather advanced and would benefit from consultation with a statistician, even if you can follow these instructions.

Nominal Methods

CHI-SQUARE ANALYSES

When you are analyzing nominal or ordinal data, you may simply be interested in learning whether two different populations have similar characteristics. In the example below, we were interested to know if less or more acculturated families (according to language in which the survey was completed, Spanish or English) were equally likely to have a mother living in the house. We, therefore, wanted to create a cross-tabulation between the two variables, whether the mother lives in the house, and the language in which the survey was completed. When this was done, the output that resulted is shown on the next page.

In the "Case Processing Summary" shown, all but 1% of the respondents had complete data for these two questions and, therefore, only 1% of the population was left out of the analyses. The "crosstabulation" shows 13.7% of respondents who responded in English did not have a mother living in the house, whereas only 5.9% of Spanish speaking respondents did not have a mother in the house. The third part of the SPSS cross-tabulation printout is the chi-square statistic and the associated significance level. In this example, the chi-square value is 17.54 and the corresponding significance level is less than 0.001, i.e., $p<0.001$.

HOW TO CREATE THE ANALYSIS SHOWN BELOW USING SPSS

This type of analysis is easily accomplished in SPSS by choosing from the "STATISTICS" menu the option "SUMMARIZE" and then "CROSSTABS". At that point, enter the two variables you want to analyze, one in the "ROW" box, and the second in the "COLUMN" box. Then select "STATISTICS..." and click on "CHI-SQUARE". Then select "CELLS..." and select which percentages you want to have shown. We selected "COLUMN" and column percentages were calculated in the cross tabulation.

CHI-SQUARE ANALYSES

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Home Lang_Surv	982	98.9%	11	1.1%	993	100.0%

MOTHLIV * LSURVEY Crosstabulation

			Language		
			1 ENGLISH	2 SPANISH	Total
Mother @ Home	0 NO	Count	53	35	88
		% within Language	13.7%	5.9%	9.0%
	2 MOTHER	Count	334	560	894
		% within Language	86.3%	94.1%	91.0%
Total		Count	387	595	982
		% within Language	100.0%	100.0%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	17.544[b]	1	.000		
Continuity Correction[a]	16.599	1	.000		
Likelihood Ratio	17.072	1	.000		
Fisher's Exact Test				.000	.000
Linear-by-Linear Association	17.526	1	.000		
N of Valid Cases	982				

a. Computed only for a 2x2 table

b. 0 cells (.0%) have expected count less than 5. The minimum expected count is 34.68.

MCNEMAR TEST

The McNemar test is an adaptation of the chi-square test where change is measured per person. For instance, in the following example, we present fictional data of students' insurance status before SBHC implementation (Insur1) and nine months after SBHC implementation (Insur 2). We first run the frequencies of the two variables, where "1" represents insured students, and "2" represents uninsured students (see below).

FREQUENCIES

Statistics

	N	
	Valid	Missing
INSUR1	270	16
INSUR2	270	16

INSUR1

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 Insured	79	27.6	29.3	29.3
	2 Uninsured	191	66.8	70.7	100.0
	Total	270	94.4	100.0	
Missing	0	16	5.6		
	Total	16	5.6		
Total		286	100.0		

INSUR2

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 Insured	170	59.4	63.0	63.0
	2 Uninsured	100	35.0	37.0	100.0
	Total	270	94.4	100.0	
Missing	System Missing	16	5.6		
	Total	16	5.6		
Total		286	100.0		

Then, we conduct a McNemar test, to analyze the change per student on this dichotomous outcome variable. The output from the McNemar includes a 2x2 contingency table, like the output for a chi-square analysis. The contingency table shows that there were 71 students who reported being insured at both times, before and after SBHC implementation. There were five students who were insured at time one, but not at time two. There were 86 students who were uninsured before SBHC implementation and insured by time two. There were 92 students who were uninsured at both time one and time two. The "test statistics" box indicates 254 people were included in the analyses, and that the chi-square value of the test is 70.330, which is significant, because p=0.000 (p<0.001) is less than 0.05.

HOW TO CREATE THE ANALYSIS SHOWN BELOW USING SPSS

This type of analysis is easily accomplished in SPSS by choosing from the "STATISTICS" menu, the option "NONPARAMETRIC TESTS" and then "2 RELATED SAMPLES". At that point, double-click on the two variables representing pre-test and post-test, in this example "insur1"and "insur2". Then click on "Options..." then click "Descriptives" and "Continue". Then under "Test Type" click "McNemar" and click "OK".

MCNEMAR TEST

Crosstabs

INSUR1 & INSUR2

	INSUR2	
INSUR1	1	2
1	71	5
2	86	92

Test Statistics[b]

	INSUR1 & INSUR2
N	254
Chi-Square[a]	70.330
Asymp. Sig.	.000

a. Continuity Corrected

b. McNemar Test

COCHRAN'S Q TEST

To illustrate the use of Cochran's Q test, we will build on the example used above for the McNemar test. Below is the frequency of the third measure of insurance status.

FREQUENCIES

Statistics

	N	
	Valid	Missing
INSUR3	281	5

INSUR3

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 Insured	62	21.7	22.1	22.1
	2 Uninsured	219	76.6	77.9	100.0
	Total	281	98.3	100.0	
Missing	0	5	1.7		
	Total	5	1.7		
Total		286	100.0		

If insurance status were measured three times, before SBHC implementation, nine months later, and 21 months after implementation, and you wanted to calculate whether or not this

change was significant, then you would use Cochran's Q test. In the output below, the frequencies of the three variables are given. In the second box of output, the test statistics are given for the 251 people who had complete data for all three variables. The Cochran's Q value is 91.659. With the two degrees of freedom (df=2), the test is significant at the $p<0.001$ level, meaning there is a significant difference. To assess where the significant difference lies (between measure one and two? and/or between measure two and three? and/or between one and three?), you would use McNemar tests.

HOW TO CREATE THE ANALYSIS SHOWN BELOW USING SPSS

This type of analysis is easily accomplished in SPSS by choosing from the "STATISTICS" menu, the option "NONPARAMETRIC TESTS" and then "K RELATED SAMPLES". At that point, double click on the three variables representing variables 1-3, in this case "insur1", "insur2", and "insur3". In the box headed "Test Type" you should click on "Cochran's Q" and then click "OK".

COCHRAN'S TEST

Frequencies

	Value	
	1	2
INSUR1	75	176
INSUR2	154	97
INSUR3	54	197

Test Statistics

N	251
Cochran's Q	91.659[a]
df	2
Asymp. Sig.	.000

a. 2 is treated as a success.

LOGISTIC REGRESSION ANALYSES

After conducting a chi-square test you obtain a result, e.g., there is or is not a relationship between two variables. Unfortunately, the result you found may or may not be real. That is,

the relationship or lack of relationship between one independent and one dependent variable may be a real relationship, or a result of a confounded relationship.

For instance, you may find, as shown in the next chi-square analysis example, insurance status is significantly related to whether or not students use the emergency room. In this example, those who were insured were twice as likely to visit an ER, e.g., 14.5% with insurance visited an ER, and only 7.7% of uninsured respondents visited an ER.

Insured vs. Visited ER

Crosstab

			Visited ER		
			0 TIMES	1-2 TIMES	Total
INSURED	1 YES	Count	301	51	352
		% within INSURED	85.5%	14.5%	100.0%
	2 NO	Count	539	45	584
		% within INSURED	92.3%	7.7%	100.0%
Total		Count	840	96	936
		% within INSURED	89.7%	10.3%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	10.979[b]	1	.001		
Continuity Correction[a]	10.254	1	.001		
Likelihood Ratio	10.633	1	.001		
Fisher's Exact Test				.001	.001
Linear-by-Linear Association	10.967	1	.001		
N of Valid Cases	936				

a. Computed only for a 2x2 table

b. 0 cells (.0%) have expected count less than 5. The minimum expected count is 36.10.

You may also know that whether or not a student has access to a SBHC is related to emergency room use, as shown in the next chi-square analysis.

School vs. Visited ER

Crosstab

			Visited ER		
			0 TIMES	1-2 TIMES	Total
School	0 SBHC	Count	505	42	547
		% within School	92.3%	7.7%	100.0%
	1 CONTROL	Count	371	58	429
		% within School	86.5%	13.5%	100.0%
Total		Count	876	100	976
		% within School	89.8%	10.2%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	8.922[b]	1	.003		
Continuity Correction[a]	8.298	1	.004		
Likelihood Ratio	8.848	1	.003		
Fisher's Exact Test				.004	.002
Linear-by-Linear Association	8.913	1	.003		
N of Valid Cases	976				

a. Computed only for a 2x2 table

b. 0 cells (.0%) have expected count less than 5. The minimum expected count is 43.95.

If you conducted a third chi-square analysis and found insurance status is significantly related to school attended, then you would have a confounding relationship situation. Logistic regression could then be used to determine if the significant findings you found in the initial chi-square analyses are only a result of confounding, or if there is indeed a relationship between each of the independent variables and the outcome variable.

In the SPSS Logistic Regression printout example shown on the next page, the independent variables, "School" and "Insurance Status" have been entered in a logistic regression equation with the outcome (dependent) variable, "Use of an ER".

This is a fairly complicated output, so we explain some of the more essential portions of the output. This analysis included 937 parents (see "Number of cases included in the analysis"). SPSS recoded the original coding of the outcome variable (ER use) from "1" and "2" to "0" and "1" respectively. The code "1" represents the response, "Student used the hospital ER". The independent variable for insurance status was coded 0=insured, 1=uninsured. The independent variable for school was coded 0=experimental, 1=comparison.

The "odds ratio" describing the relationships between the independent variables and use of the ER is found on the last line of the SPSS output, under "Exp (B)". An odds ratio of "1.000", as shown below for the variable "Insured", indicates that rates of hospital ER use were the same for insured and uninsured respondents, i.e., there is no significant relationship between insurance status and ER use, when "controlling for" the other independent variable, "School".

On the other hand, the odds ratio for "School", 1.8682, indicates that students at the comparison school (coded "1") were 1.8682 times more likely than those in the experimental school to visit the hospital emergency room. Furthermore, the odds ratio for "School" is statistically significant (look under the "Sig" column), i.e., p=0.0039.

Originally, insurance status and school were shown with chi-square analyses to be related to the outcome variable, ER use. However, when both of these variables were entered into a logistic regression equation, school, but not insurance status, was related to whether or not the student used the hospital emergency room. Thus, it would be misleading to report only the chi-square analysis of ER use and Insurance status, because, when controlling for school attended, insurance status is no longer significant.

HOW TO CREATE THE ANALYSIS SHOWN BELOW USING SPSS

This type of analysis is easily accomplished in SPSS by choosing from the "STATISTICS" menu, the option "REGRESSION" and then "LOGISITIC". On the left of the pop-up menu, you will see all your variables listed. Click on the outcome variable, in this case, "Visit ER", then click on the arrow next to "Dependent". To enter the independent variables, "School" and "Insured" into the equation, highlight each of those variables in the variable list and click the arrow next to "Covariates". Then click "OK".

LOGISTIC REGRESSION

```
      Total number of cases:      1010 (Unweighted)
      Number of selected cases:   1010
      Number of unselected cases: 0
      Number of selected cases:                  1010
      Number rejected because of missing data:  73
      Number of cases included in the analysis: 937

Dependent Variable Encoding:

Original        Internal
Value           Value
1               0
2               1

Dependent Variable..   Visit ER  #TIMES IN SCHL YR. TO ER FOR EMERGENCY

Beginning Block Number  0.  Initial Log Likelihood Function

-2 Log Likelihood    627.88528

* Constant is included in the model.


Beginning Block Number  1.  Method: Enter

Variable(s) Entered on Step Number
1..        School     Case source is
D:\STEPHANI\SPSSLSTJ\S97DATA\S97BWPAR.SAV
           Insured  NONE- TYPE OF HEALTH INSUR.
```

Estimation terminated at iteration number 4 because
Log Likelihood decreased by less than .01 percent.

-2 Log Likelihood	619.409
Goodness of Fit	937.009
Cox & Snell - R^2	.009
Nagelkerke - R^2	.018

	Chi-Square	df	Significance
Model	8.476	2	.0144
Block	8.476	2	.0144
Step	8.476	2	.0144

Classification Table for Visited ER
The Cut Value is .50

		Predicted			
		0 TIMES		1-2 TIMES	Percent Correct
		0	I	1	
Observed					
0 TIMES	0	839	I	0	100.00%
1-2 TIMES	1	98	I	0	.00%
				Overall	89.54%

---------- Variables in the Equation ----------

Variable	B	S.E.	Wald	df	Sig	R	Exp(B)
School	.6250	.2167	8.3162	1	.0039	.1003	1.8682
Insured	-3.6E-05	.0021	.0003	1	.9859	.0000	1.0000
Constant	-2.4619	.1634	226.9123	1	.0000		

Calculating 95% Confidence Intervals for Odds Ratios

When reporting confidence intervals it is customary to report the 95% confidence interval of the odds ratio, rather than the odds ratio alone. Yet SPSS does not calculate 95% confidence intervals for your odds ratio. The SPSS output does, however, provide all the information you need to calculate these intervals. To calculate the 95% confidence interval for the "School" odds ratio, 1.8682 (e^B)you need to use the "B" and standard error "S.E." values found in the columns appropriately labeled.

In our example, using the "School" variable:

B=0.6250

S.E.= 0.2167

The 95% confidence intervals of the odds ratio is calculated with the following equation: $e^{(B\pm 1.96*SE)}$. Plugging in the above values into this equation we get $e^{(0.6250\pm(1.96*0.2167)}$, or $e^{(0.6250\pm 0.4247)}$. To do this, we would enter into a calculator 1.96*0.2167, which equals 0.4247. Then press clear on your calculator.

For the upper confidence interval you would add 0.6250 + 0.4247 and then press the equals key, "=" (this should equal 0.8417). Next find and press the **"e^x"** key on a scientific calculator (this should give you the upper confidence interval, 2.8569, or 2.86).

To obtain the lower confidence interval enter 0.6250-0.4247 into the calculator, and press the equals key "=" (this should be 0.2003). Then find and press the **"e^x"** key (this should equal 1.2218, your lower confidence interval). Thus the 95% confidence interval of your odds ratio is 1.22-2.86.

Non-Parametric Methods

1 + 1 = 3

Ordinal data and non-normally distributed numeric data are often analyzed incorrectly, using parametric statistical tests on data that are neither interval data nor normally distributed. This may be because parametric data are more commonly used as illustrations in basic statistics courses, or because normally-distributed data are seen more often in published literature. Regardless of the reason, ordinal data deserve a special set of analyses that take into account the ordered nature of the data, but do not assume the data are normally distributed.

MANN-WHITNEY U

The Mann-Whitney U statistical test is very useful because ordinal and non-normally distributed numeric data are very common in SBHC research. The Mann-Whitney U test is to ordinal data what the t-test is to interval data. Two independent groups, e.g., experimental and comparison groups, that have ordinal outcome data (e.g., Likert scales or numeric non-normally distributed data), should be analyzed using this test. The Mann-Whitney U test would be used to compare two populations that respond to a satisfaction question using Likert scale responses (e.g., very satisfied, somewhat satisfied, not very satisfied, unsatisfied, very unsatisfied), or a depression inventory that is not normally-distributed.

For instance, in the example below, we wanted to assure ourselves that the case and comparison study mothers used for analyses had similar baseline rates of education (the variable for mother's education level was labeled "mothed"). First we ran the frequency of the variable "mothed".

FREQUENCIES

Statistics

	N	
	Valid	Missing
MOTHED	260	26

MOTHED

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 DID NOT GRADUATE HS	144	50.3	55.4	55.4
	2 HS GRADUATE	66	23.1	25.4	80.8
	3 SOME COLLEGE	50	17.5	19.2	100.0
	Total	260	90.9	100.0	
Missing	0	11	3.8		
	System Missing	15	5.2		
	Total	26	9.1		
Total		286	100.0		

Then, we used the Mann-Whitney U test to determine if the case and comparison school parents had similar levels of education. In SPSS output below, there were 63 comparison parents (coded .00) who had a mean rank of 60.82. The 52 case parents (coded 1.00) had the mean rank of 54.59. The "test statistics" box shows the Z statistic for this test is (-1.076), which has the p value of 0.282, which means the two samples are not significantly different.

HOW TO CREATE THE ANALYSIS SHOWN BELOW USING SPSS

This type of analysis is easily accomplished in SPSS by choosing from the "STATISTICS" menu, the option "NONPARAMETRIC TESTS" and then "2 INDEPENDENT SAMPLES". At that point, click on the test variable(s) you want to explore, in this example "mothed" coded for mother's educational status, then press the arrow key next to "Test Variable List". Next, select the grouping variable, in this example, "cas_con", and click on the arrow next to the box labeled "Grouping Variable". Under the "Grouping Variable" box, click on "DEFINE RANGE" and tell the computer the range of values that will represent your grouping variable. In our case, controls were coded "0" and cases were coded "1", so our range was 0 and 1. Then click "CONTINUE" and click on "MANN WHITNEY-U", and then click "OK".

MANN-WHITNEY U TEST

Ranks

	Cas_Con	N	Mean Rank	Sum of Ranks
MOTHED	.00	63	60.82	3831.50
	1.00	52	54.59	2838.50
	Total	115		

Test Statistics[a]

	MOTHED
Mann-Whitney U	1460.500
Wilcoxon W	2838.500
Z	-1.076
Asymp. Sig. (2-tailed)	.282

a. Grouping Variable: Cas_Con

KRUSKALL WALLIS ANOVA

If you want to compare three or more independent groups' non-parametric outcome variables, the Kruskall Wallis ANOVA is appropriate. An example of a comparison between three independent groups is the comparison of respondents from three different

schools (a categorical variable). The non-parametric outcome variable may be any ordinal or non-normally distributed numeric variable, e.g., number of SBHC visits.

For this example, to explore comparability of three schools at baseline in their reports of difficulty getting physical health care, we conducted a Kruskall Wallis test. Difficulty getting care was measured on a Likert scale from 1-3 representing "not hard," "a little hard," and "very hard". In the output shown next, the "ranks" box shows how many people responded to the question in each school (the "N" column) and the rank assigned to each school. The "test statistics" box shows that the chi-squared value was 2.019, and that there were two degrees of freedom (df=2). This output box also shows that the difference was not significant at the $p<0.05$ level, i.e., $p=0.364$. Mann-Whitney U tests are then used for post-hoc comparisons to learn (if there would have been a difference) exactly where the significant difference lies: between the first and second school? the first and third? the second and third?

HOW TO CREATE THE ANALYSIS SHOWN BELOW USING SPSS

This type of analysis is easily accomplished in SPSS by choosing from the "STATISTICS" menu, the option "NONPARAMETRIC TESTS" and then "K INDEPENDENT SAMPLES". At that point, click on the test variable(s) you want to explore; in this example "hrdphys1", then press the arrow key next to "Test Variable List". Then select the grouping variable, in this example, "school", and click on the arrow next to the box labeled "Grouping Variable". Under the "Grouping Variable" box, click on "DEFINE RANGE" and give the computer the range of values that will represent your grouping variable, in our case it was schools 1, 2, and 3, so our range was 1 and 3. Then click "CONTINUE" and click on "KRUSKALL-WALLIS H", and finally click "OK".

NPAR TESTS

KRUSKAL-WALLIS ANOVA TEST

Ranks

	School	N	Mean Rank
HRDPHYS1	1.00	74	105.35
	2.00	53	114.89
	3.00	95	114.40
	Total	222	

Test Statistics [a,b]

	HRDPHYS1
Chi-Square	2.019
df	2
Asymp. Sig.	.364

a. Kruskal Wallis Test

b. Grouping Variable: School

WILCOXON MATCHED-PAIRS SIGNED RANK TEST

In outcome and impact evaluations, pre-tests and post-tests are conducted when you want to analyze the change that occurs for each person between time one (before the intervention) and time two (after the intervention). Often, the variables you will be measuring are not normally distributed, e.g., score on a mental health scale, and therefore, you need a non-parametric data analysis technique. The Wilcoxon matched-pairs signed rank test can be used to test the change that takes place for two related samples.

In the following example, we use hypothetical data to demonstrate the use and interpretation of the Wilcoxon matched-pairs signed rank test. In a pre-test, (before SBHC implementation) and post-test (nine months after SBHC implementation), parents reported how difficult it was for their child to get a physical. Parents' response options were "not at all hard," "a little hard," and "very hard," coded 1-3, respectively (see frequency distributions below).

FREQUENCIES

Statistics

	N	
	Valid	Missing
HRDPHYS1	201	0
HRDPHYS2	139	62
HRDPHYS3	181	20

HRDPHYS1

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 not at all hard	157	78.1	78.1	78.1
	2 a little hard	37	18.4	18.4	96.5
	3 very hard	7	3.5	3.5	100.0
	Total	201	100.0	100.0	
Total		201	100.0		

HRDPHYS2

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 not at all hard	113	56.2	81.3	81.3
	2 a little hard	20	10.0	14.4	95.7
	3 very hard	6	3.0	4.3	100.0
	Total	139	69.2	100.0	
Missing	9	15	7.5		
	System Missing	47	23.4		
	Total	62	30.8		
Total		201	100.0		

The Wilcoxon data output on the next page shows the change per person between pre-test and post-test. In this example, six people had a lower score (less difficulty) in the post-test (hardphys2) as compared to the pre-test (hardphys1), i.e., hrdphys2<hrdphys1. Three people

reported increased difficulty in the post-test, compared to the pre-test, i.e., hrdphys2>hrdphys1. The remaining 130 people used in this analysis reported the same level of difficulty in the pre-test and post-test. In the test statistics box, the Z score is -0.577, and the difference between pre-test and post-test is not significant, i.e., p=0.564.

HOW TO CREATE THE ANALYSIS SHOWN BELOW USING SPSS

This type of analysis is easily accomplished in SPSS by choosing from the "STATISTICS" menu, the option "NONPARAMETRIC TESTS" and then "2 RELATED SAMPLES". At that point, click on the two variables representing pre-test and post-test, in this example "hrdphys1" and 'hrdphs2". Then click on the arrow key to the right of variable list, which transfers your two variables into the box headed "Test Pair(s) List". Then click on "WILCOXON" and click "OK".

NPAR TESTS

FREQUENCIES

Statistics

	N	
	Valid	Missing
HRDPHYS1	201	0
HRDPHYS2	139	62

WILCOXON SIGNED RANK TEST

Ranks

		N	Mean Rank	Sum of Ranks
HRDPHYS2 - HRDPHYS1	Negative Ranks	6[a]	4.50	27.00
	Positive Ranks	3[b]	6.00	18.00
	Ties	130[c]		
	Total	139		

a. HRDPHYS2 < HRDPHYS1

b. HRDPHYS2 > HRDPHYS1

c. HRDPHYS1 = HRDPHYS2

Test Statistics[b]

	HRDPHYS2 - HRDPHYS1
Z	-.577[a]
Asymp. Sig. (2-tailed)	.564

a. Based on positive ranks.

b. Wilcoxon Signed Ranks Test

FRIEDMAN MATCHED SAMPLES

This test is similar to the Wilcoxon test, but allows the comparison of more than two related samples. Building on the example used for the Wilcoxon test, suppose that a third survey were administered, a post-post-test. Because there are more than two tests, the appropriate measure is the Friedman matched samples test. The frequency distribution of the post post-test is presented below.

FREQUENCIES

Statistics

	N	
	Valid	Missing
HRDPHYS3	181	20

HRDPHYS3

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 not at all hard	158	78.6	87.3	87.3
	2 a little hard	22	10.9	12.2	99.4
	3 very hard	1	.5	.6	100.0
	Total	181	90.0	100.0	
Missing	9	9	4.5		
	System Missing	11	5.5		
	Total	20	10.0		
Total		201	100.0		

The output for this test, presented below, tells you that the mean rank for the third test is the lowest (representing the least difficult). The test statistics box shows that 136 people were included in the analyses, that the chi-square statistic for this test is 13.897, and that there is a significant difference between the three scores because the significance level, p=0.001, is less than 0.05. To learn where the significant difference lies, if the difference is between the first and second and/or the second and third and/or the first and third scores, you would conduct a total of three Wilcoxon matched paired signed rank tests.

HOW TO CREATE THE ANALYSIS SHOWN BELOW USING SPSS

This type of analysis is easily accomplished in SPSS by choosing from the "STATISTICS" menu, the option "NONPARAMETRIC TESTS" and then "K RELATED SAMPLES". At that point, double-click on the three variables representing pre-test, post-test, and post-post-test, in this example "hrdphys1", 'hrdphys2", and "hrdphys3". Then click on "FRIEDMAN" and click "OK".

NPAR TESTS

FRIEDMAN TEST

Ranks

	Mean Rank
HRDPHYS1	2.05
HRDPHYS2	2.03
HRDPHYS3	1.92

Test Statistics[a]

N	136
Chi-Square	13.897
df	2
Asymp. Sig.	.001

a. Friedman Test

SPEARMAN CORRELATION COEFFICIENT

If you are interested in seeing if two ordinal variables are correlated with one another, you should use the Spearman correlation coefficient. This bivariate (two variable) correlation coefficient is the non-parametric equivalent of the Pearson's correlation coefficient.

In the example used to illustrate this statistical technique, we explore how difficulty obtaining physical exams (hrdphys3) is correlated to difficulty getting mental health care (hrdmh). The output of this statistical test that is of most importance is the "rho" or "r" value. The rho value ranges from between 0.00 and 1.00, with r=0.00 indicating no correlation between the two variables, and 1.00, indicating a perfect correlation between the two variables, e.g., every person who said it was "very difficult" to get physical health services also said it was "very difficult" to get mental health services. In our "correlations" output, the Spearman rho value is 0.542, indicating a relatively high amount of correlation between the two variables. The next row of output describes the corresponding significance level, in this example p=0.000 (which is usually reported as p<0.001), is clearly significant, i.e., the correlation did not occur by chance. In the last row of output, the number of people who were included in the analysis, n=63, is shown.

HOW TO CREATE THE ANALYSIS SHOWN BELOW USING SPSS

This type of analysis is easily accomplished in SPSS by choosing from the "STATISTICS" menu, the option "CORRELATE" and then "BIVARIATE". At that point, double-click on the two variables representing the two ordinal variables you want to explore, in this example, "hrdphys1", 'hrdmh". Then click on "SPEARMAN" and click "OK".

NONPARAMETRIC CORRELATIONS

Correlations

			HRDPHYS3	HRDMH
Spearman's rho	Correlation Coefficient	HRDPHYS3	1.000	.542**
		HRDMH	.542**	1.000
	Sig. (2-tailed)	HRDPHYS3	.	.000
		HRDMH	.000	.
	N	HRDPHYS3	234	63
		HRDMH	63	63

**. Correlation is significant at the .01 level (2-tailed).

Parametric Methods

If your outcome variable is normally distributed, you can use the parametric statistical tests described below. These tests are likely to be uncommon in SBHC research, since relevant data is likely to be non-normally distributed, and require "non-parametric" methods of data analysis.

TWO INDEPENDENT-SAMPLES T-TEST

Comparison of the outcome of two independent groups can be accomplished with t-tests. In the example below, we compare male and female SBHC users on a test for mental health that ranges from 0-50. The t-test statistic is based on the comparison of the arithmetic mean

of the samples. In this example, males have a mean score of 24.969 and females have a score of 22.648. In the statistical output presented under the "Independent Samples Test" heading, the Levene's test for equality of variances, the test is not significant, i.e., $p>0.05$; therefore, you read the t-test statistics from the first line, where equal variances are assumed. The t-test value for this test is 4.377, and has a significance level, $p=0.000$, or $p<0.001$. This finding suggests the observed difference between the two means, 24.969 and 22.648, is not due to chance. Thus you can say that males and females differed "significantly" in their scores on the mental health scale. Again, this test does not tell you if the difference between the two means is clinically important, only that the observed difference is not a chance occurrence.

HOW TO CREATE THE ANALYSIS SHOWN BELOW USING SPSS

This type of analysis is easily accomplished in SPSS by choosing from the "STATISTICS" menu, the option "COMPARE MEANS" and then "INDEPENDENT SAMPLES T-TEST". Click on the variable you want to test, in this case "Mental Health", and then click the arrow corresponding to the "Test Variable(s)" box. Then click on the variable that codes for the sample, in this case "gender", and click on the arrow key next to "Grouping Variable". Then click on "Define Groups..." On the next pop-up screen enter the two values that correspond to the codes for the two groups, in this case "0" and "1", corresponding to males and females. Then press the "Continue" button. Then press "OK" on the pop-up menu.

INDEPENDENT SAMPLES T-TEST

Group Statistics

	GENDER	N	Mean	Std. Deviation	Std. Error Mean
Mental Health	0 Male	64	24.969	2.900	.363
	1 Female	44	22.648	2.398	.362

Independent Samples Test

	Mental Health								
	Levene's Test for Equality of Variances		t-test for Equality of Means						
								95% Confidence Interval of the Mean	
	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Equal variances assumed	1.423	.236	4.377	106	.000	2.321	.530	1.270	3.372
Equal variances not assumed			4.533	102.333	.000	2.321	.512	1.306	3.337

ONE-WAY ANOVA

The One-way ANOVA test is an extension of the t-test. With the t-test you can compare whether two independent groups (we used males and females) have a similar outcome in a dependent, normally distributed variable, e.g., mental health score. With the One-way ANOVA test you can test if three or more groups score similarly on a normally distributed outcome variable. In the example below, we explore whether mean mental health scores are significantly different for four different age groups, eight year-olds, ten year-olds, twelve year-olds, and fourteen year-olds.

The output for the One-way ANOVA test provides a table labeled "Descriptives", which shows mean and standard deviation statistics for the mental health score for each age grou (eight year-olds had a mean mental health score of 22.185 in this example). The table labeled ANOVA shows that the four age groups differ significantly from one another, i.e., F=12.083 and the p value (look under "Sig.") is 0.000, or $p<0.001$. The third table, labeled "Multiple Comparisons", shows the post-hoc analyses, which detail which groups differ from one another. In the first row under the column headings for the "Sheffe" post-hoc analyses we see that students who were eight years old had significantly lower mental health scores than students who were twelve years old, p=0.008. Eight year-olds had a

significantly lower mental health score than students who were fourteen years old, p=0.000, but were not significantly different from ten year-olds, p=0.577. The final table in this output shows the mean scores for eight and ten year-olds, and shows that they are not significantly different, i.e., "Sig.", p=0.577.

HOW TO CREATE THE ANALYSIS SHOWN BELOW USING SPSS

This type of analysis is easily accomplished in SPSS by choosing from the "STATISTICS" menu, the option "COMPARE MEANS" and then "ONE-WAY ANOVA". Click on the variable you want to test, in this case "Mental_1" and then click the arrow corresponding to the "Dependent List" box. Then click on the variable that codes for the sample, in this case "age", and click on the arrow key next to "Factor:". Then click on "Post Hoc..." In that pop-up menu click on "Sheffe", and click on "Continue". Then click on "Options..." In this pop-up menu, click on "Descriptive" and then click "Continue". Then click "OK".

ONE-WAY ANOVA TEST

Descriptives

			N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
							Lower Bound	Upper Bound		
MENTAL_1	AGE	8	27	22.185	2.434	.468	21.222	23.148	16.5	27.5
		10	27	23.167	2.157	.415	22.313	24.020	19.0	28.0
		12	27	24.648	2.818	.542	23.534	25.763	19.0	31.0
		14	27	26.093	2.767	.532	24.998	27.187	19.5	31.5
		Total	108	24.023	2.929	.282	23.465	24.582	16.5	31.5

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
MENTAL_1	Between Groups	237.192	3	79.064	12.083	.000
	Within Groups	680.500	104	6.543		
	Total	917.692	107			

POST-HOC TESTS

Multiple Comparisons

Dependent Variable: MENTAL_1

Scheffe

(I) AGE	(J) AGE	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
8	10	-.981	.696	.577	-2.960	.997
	12	-2.463*	.696	.008	-4.441	-.485
	14	-3.907*	.696	.000	-5.886	-1.929
10	8	.981	.696	.577	-.997	2.960
	12	-1.481	.696	.216	-3.460	.497
	14	-2.926*	.696	.001	-4.904	-.947
12	8	2.463*	.696	.008	.485	4.441
	10	1.481	.696	.216	-.497	3.460
	14	-1.444	.696	.237	-3.423	.534
14	8	3.907*	.696	.000	1.929	5.886
	10	2.926*	.696	.001	.947	4.904
	12	1.444	.696	.237	-.534	3.423

*. The mean difference is significant at the .05 level.

HOMOGENEOUS SUBSETS

MENTAL_1

Scheffe[a]

AGE	N	Subset for alpha = .05		
		1	2	3
8	27	22.185		
10	27	23.167	23.167	
12	27		24.648	24.648
14	27			26.093
Sig.		.577	.216	.237

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 27.000

PAIRED SAMPLES T-TEST

If you are interested in the change between pre-test and post-test for a normally distributed variable, this is the test for you! In our example, a mental health intervention has been designed, and its efficacy needs to be tested. To do this, a pre-test is conducted, then the intervention is implemented, then the post-test is done. The first box in the SPSS printout provides the means, sample size (N), standard deviations, and standard errors for the pre-test (MENTAL_1) and the post-test (MENTAL_2). The second box shows the "Paired Samples Correlations", the correlation between the two variables (see Pearson's correlation for interpretation). The third box shows that the t-test (t=7.374) was significant, p=0.000, or p<0.001, indicating the two samples differed significantly from one another. The mean score on the post-test was "statistically different" from the pre-test, but it is up to the researcher to determine whether the difference between the means (23.287-21.0231) is clinically meaningful.

HOW TO CREATE THE ANALYSIS SHOWN BELOW USING SPSS

This type of analysis is easily accomplished in SPSS by choosing from the "STATISTICS" menu, the option "COMPARE MEANS" and then "PAIRED SAMPLES T-TEST". Click on the two variables you want to test, in this case "Mental_1" and "Mental_2", then click the arrow corresponding to the "Test Variable(s)" box. Then press "OK".

PAIRED SAMPLES T-TEST

Paired Samples Statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	MENTAL_1	23.287	108	4.325	.416
	MENTAL_2	21.0231	108	2.9286	.2818

Paired Samples Correlations

		N	Correlation	Sig.
Pair 1	MENTAL_1 & MENTAL_2	108	.675	.000

Paired Samples Test

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference Lower	Upper			
Pair 1	MENTAL_1 - MENTAL_2	2.2639	3.1906	.3070	1.6553	2.8725	7.374	107	.000

PEARSON'S CORRELATION COEFFICIENT

This statistical test is appropriate for measures of correlation among two variables that are each normally distributed. As with the Spearman correlation coefficient, "rho" or "r" ranges from 0.0 to 1.0, with 0.0 indicating no correlation or association between the two variables, and 1.0 indicating perfect correlation among the variables. The p value accompanying this statistic may be significant, even when the correlation between the two variables is clinically unimportant. Thus, statistical significance does not equate clinical importance.

In the example below, we show the correlation between two variables, age and a mental health scale, both of which are normally distributed. The first box of output provides descriptive statistics for each of the variables. The second box provides the rho (r) for this test, 0.467, and the asterix indicates the "r" value is significant at the $p<0.01$ level. From this data we would conclude there is a fairly high correlation between age and mental health status, which is also significant.

HOW TO CREATE THE ANALYSIS SHOWN BELOW USING SPSS

This type of analysis is easily accomplished in SPSS by choosing from the "STATISTICS" menu, the option "CORRELATE" and then "BIVARIATE". At that point, double-click on the two variables representing the two normally-distributed interval variables, in this example, "age" and "Mental_1". Then click "Options..." and then click on "Means and standard deviations" under "Statistics". Then click "Continue". Then click "PEARSON" and click "OK".

PEARSON'S CORRELATIONS

Descriptive Statistics

	Mean	Std. Deviation	N
AGE	9.48	1.45	108
MENTAL_1	24.023	2.929	108

Correlations

		AGE	MENTAL_1
Pearson Correlation	AGE	1.000	.467**
	MENTAL_1	.467**	1.000
Sig. (2-tailed)	AGE	.	.000
	MENTAL_1	.000	.
N	AGE	108	108
	MENTAL_1	108	108

**. Correlation is significant at the 0.01 level (2-tailed).

MULTIPLE LINEAR REGRESSION

If you have a normally distributed outcome variable, then this may be an appropriate statistical technique to use. Multiple regression is a very useful technique, like logistic regression, for discerning the independent relationship between an independent variable, e.g., age, and an outcome variable, e.g., grade point average. Multiple regression can be used for explanation and prediction. You can enter nominal, ordinal, and interval data for independent variables (potential predictors of the outcome) of interest, and an interval outcome variable into the multiple regression model created in a statistical analysis package.

In SPSS, the multiple regression printout contains several parts. The first box in the output provides descriptive statistics for each of the variables entered in the model (independent and dependent variables). In the second box, correlations between each of the variables entered into the model are shown. The third box shows the "method" for selection of variables for the model. In regression you can force all the variables you want to examine into the model (as we did with the data entry method - "ENTER"), or the computer can enter (FORWARD entry method) or remove variables (BACKWARDS entry method). The BACKWARDS and enter METHODS of variable entry are the most common, and you can check SPSS help for a more detailed description of the data entry methods.

The fourth box in the SPSS multiple regression output is the "Model Summary." This provides the Adjusted R-squared value that has a special interpretation. The R-squared value ranges from 0.0 to 1.0, and if the R-squared value is a perfect 1.0, it means that the variables entered in the equation perfectly predict your outcome. In other words, you have considered all the variables that account for a specific outcome. In reality, this will probably never happen in your analyses. In our example, an Adjusted R-squared value of 0.354 means that the variables age and gender explained 35% of the variance that is related to the outcome variable, mental health, and 65% of the variance was not explained by this model. It is of interest to achieve the highest R-squared value possible. We look to the next table, the ANOVA table, to learn that our model is significant, i.e., Sig=0.000. This indicates the resultant R-squared value is not a chance occurrence (if $p<0.05$ it is not by chance, if $p>0.05$ your model has only accounted for the specified amount of the variance by chance).

The "Coefficients" box provides the standardized coefficients, the Beta values. These are called partial correlation coefficients. Each coefficient measures the relationship between the independent variable and the dependent variable, while controlling for the other independent variables. In other words, the beta coefficient measures "the relationship between an independent and a dependent variable, with the influence of the other independent variables held constant," (Munro, 1997). In our example, the "t" statistic shows that the significance value is $p=0.000$, or $p<0.001$.

MULTIPLE LINEAR REGRESSION

Descriptive Statistics

	Mean	Std. Deviation	N
MENTAL_1	24.023	2.929	108
GENDER	.41	.49	108
AGE	9.48	1.45	108

Correlations

		MENTAL_1	GENDER	AGE
Pearson Correlation	MENTAL_1	1.000	-.391	.467
	GENDER	-.391	1.000	-.015
	AGE	.467	-.015	1.000
Sig. (1-tailed)	MENTAL_1	.	.000	.000
	GENDER	.000	.	.437
	AGE	.000	.437	.
N	MENTAL_1	108	108	108
	GENDER	108	108	108
	AGE	108	108	108

Variables Entered/Removed[b]

Model	Variables Entered	Variables Removed	Method
1	AGE, GENDER[a]	.	Enter

a. All requested variables entered.

b. Dependent Variable: MENTAL_1

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.605[a]	.366	.354	2.354

a. Predictors: (Constant), AGE, GENDER

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	335.696	2	167.848	30.282	.000[a]
	Residual	581.996	105	5.543		
	Total	917.692	107			

a. Predictors: (Constant), AGE, GENDER

b. Dependent Variable: MENTAL_1

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	16.118	1.520		10.603	.000
	GENDER	-2.279	.461	-.384	-4.942	.000
	AGE	.932	.157	.461	5.935	.000

a. Dependent Variable: MENTAL_1

CHAPTER 6 SUMMARY — NEGATIVE AND POSITIVE RESULTS

The statistical analysis section provided in this manual is fairly complete, giving you a guide in how to approach qualitative data, and an in-depth guide to the use of SPSS in analyzing quantitative data. In your analyses you are likely to obtain unexpected findings, i.e., both positive and negative.

Negative results might be due to:

- inadequate sample size (little power),
- inappropriate study design (questionnaire doesn't measure what you intended, people don't understand the questions, post-test was taken too long after the intervention, etc.),
- too weak an intervention,
- unrealistic goals, your intervention is not directly linked to expected outcomes (revisit your logic model),
- only a portion of your group benefiting from the intervention, e.g., only the uninsured portion of the population experienced increased access to health services with SBHC implementation, or
- a bias in sampling, e.g., people who benefited from the intervention were not sampled at post-test.

Positive results might be due to:

- chance, e.g., if you conduct 100 statistical tests, and use a p value of 0.05, 5% of your tests will be "significant" as a result of chance,
- unexpected benefits of the program; you should revisit your logic model, and use other data collection methods to confirm that this finding is not a result of chance,
- bias from a confounding factor, e.g., a variable that you didn't measure or analyze caused the finding, but is related to a variable that you did measure, or

- bias in sampling procedures; those who didn't benefit from intervention were not measured at post-test.

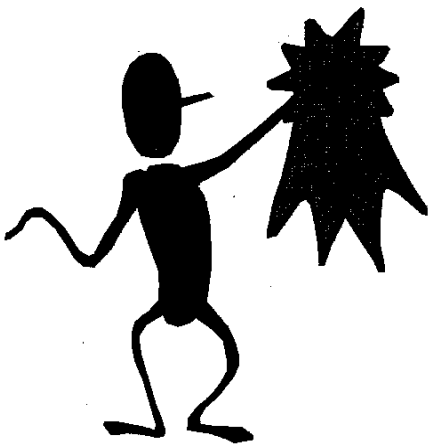
Whether expected or unexpected, you should consider all possible explanations for your positive and negative findings. If you find an intervention is ineffective, or that a process goal (e.g., equal SBHC use by males and females) has not been reached, then these results will help you in planning program modification, outreach techniques, or inspire qualitative research to discern which barriers prevent accomplishment of your specified goals.

Next Steps

Regardless of whether your results are positive or negative, you should use your results. They can help guide program development, can help you argue for more resources for improving an intervention, or can be disseminated to numerous communities to show how effective your program has been. Try to be positive about your evaluation efforts, regardless of their results. Evaluation is a difficult process, and you are commended for working this far into the evaluation manual! You should find ideas for using your results in the next chapter.

CHAPTER 7:

ACTING ON FINDINGS



This Chapter Will Help You:

- ☑ **Create an Evaluation Summary**
- ☑ **Feedback Results to Your Stakeholders**
- ☑ **Feedback to the Schools Concerned with Results**
- ☑ **Feedback to Professional Organizations, Media, and the Larger Community, as well as Local, State, and National SBHC Organizations**

ACTING ON YOUR FINDINGS

By this point you have selected your evaluation goals and methods, and collected and analyzed your data. It is easy to get so involved with conducting the evaluation that you may have forgotten the original purpose of these efforts! You probably conducted an evaluation because you wanted to get results which would help you make management, funding, and/or planning decisions related to the SBHC. For example, you may have planned to use the results of a needs assessment to guide the development of SBHC services and service goals. You may have evaluated your SBHC to show potential funders that your services deserve their contributions. In any case, you now have the results and it is time to use them!

SBHC evaluation results can be used to:

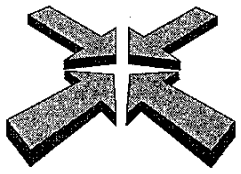
- guide program modification, as needed,
- increase staff morale,
- plan for future programs,
- demonstrate need for increased or continued funding,
- demonstrate how SBHCs can benefit managed care organizations,
- complete quarterly and annual reports showing how objectives are being met,
- inform policy makers of the role SBHCs can play in health service delivery, and
- more!!

Regardless of whether you have obtained positive or negative results, the results can and should be used in considering your program's next steps. If the evaluation demonstrates success, you may use those results to publicize your program, to increase funding, and/or to gain further community support. On the other hand, if results show that services need revising, or that services are outright ineffective, these results can be used to improve service and/or guide the use of existing resources to better meet SBHC goals.

CREATING AN EVALUATION SUMMARY

To help use your evaluation results, we suggest you first summarize your objectives, methods, results, and potential conclusions. We suggest here a report format which resembles the format used for many professional journals. Even if you do not intend to publish your results, this is a good format to summarize your extensive evaluation activities.

Summarizing evaluation efforts and results



Executive Summary. Briefly state the goals, objectives, methods, and results of your evaluation efforts. This should be no longer than two pages, double-spaced. It should give you or any other reader a complete picture of the evaluation and its context.

Clinic Background. Describe the history of the evaluation, e.g., a description of the clinic, the population served, the clinic personnel, the programs that are offered, and especially the unique aspects of the clinic.

Evaluation Background and Methods. Describe why the evaluation was conducted, as well as the study design, methods (including sampling, data collection methods), limitations, and previous, relevant evaluation activities.

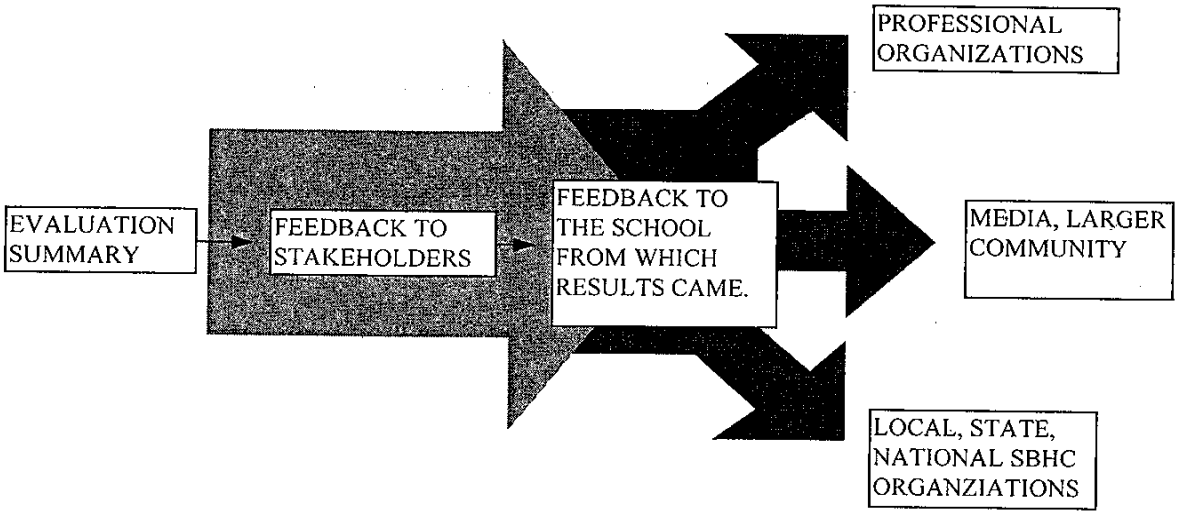
Results of the Study. Present your results without interpretation, e.g., you can report percentages and numbers from quantitative data, quotes and themes from qualitative data. The length of this section will vary, depending on the type and extent of information you provide. Be sure to present a balanced view of both positive and negative results.

Discussion of Results. Provide explanations of the findings and how the findings relate to other studies or comparable data. You should explain the relevance of these findings for

your community, as well as findings that might be useful for a larger audience, especially if your methods included a comparison group or randomization of the intervention.

Conclusions and Recommendations. Briefly summarize your findings and then make recommendations based on these findings, such as needed changes in program content or delivery, program expansion possibilities, and/or how these services might complement other existing health care delivery systems.

By summarizing your findings in this format, you have a solid summary of your efforts, which can be reviewed by stakeholders, giving them an opportunity to provide their insights into the findings and their interpretation. We use the diagram below to suggest how you can start using your results. As the diagram shows, after creating an evaluation summary, you first report back to the stakeholders. Stakeholders can then decide what to revise, who else should receive feedback, and how feedback should be delivered. After the results are fed back to the school community, you and the other stakeholders can determine which other avenues of dissemination you may want to pursue, e.g., dissemination to professional organizations, media, and/or local, state, and national SBHC organizations.



PROVIDING STAKEHOLDERS WITH FEEDBACK
GENERAL AND PERSONALIZED REPORTS

Having worked with stakeholders (SBHC staff, school principals, and others) throughout the evaluation process, you should have a good picture of the results that would likely interest each stakeholder. From your evaluation summary, you can extract the items that would most interest each person in a personalized report, as well as providing them with the larger overview in a general summary.

For instance, a principal might receive a summary, including all the general findings. Then you might also provide him/her with a more personalized report, showing results that principals may find most applicable. For example, you could create bar charts showing aggregated percentages of students who reported specific risk behaviors, as well as a bar chart showing the percentages of students who reported certain strengths. You might also want to give memorable quotes, as long as the anonymity of the respondent is assured. It may be wise to also confirm, before making the personalized report, the information that is most interesting to each stakeholder.

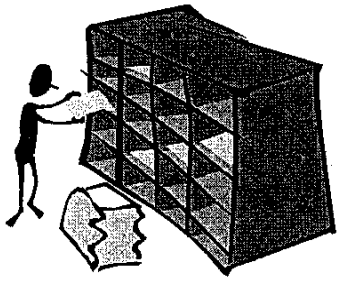
A comfortable forum in which you can communicate your findings to SBHC staff and other stakeholders is during a meeting where you provide a summary of your findings in a handout, e.g., bulleted findings, graphs, charts, etc. If the results are negative or unexpected, you will want to prepare explanations, including some potential contributing factors. You will also want to split the data results by gender, age, and ethnicity, and then apply a statistical test to determine whether any sub-group shows different results. In either case, attention to the evaluation procedures successfully completed, and/or some other positive aspect, should also be included.

FEEDBACK TO THE SCHOOL-BASED HEALTH CENTER SCHOOL MEETINGS, LETTERS, CEREMONIES, REPORTS

Regardless of whether the results are positive or negative, SBHC staff should receive the results of the evaluation, before the results are shared with the school community and other community organizations. Evaluation results can effectively unite SBHC and school staff, especially when teachers see how the SBHC helps their students. You can meet with teachers and SBHC staff during a school faculty meeting and provide them with results of the findings. Prepare handouts for everyone. SBHC staff could present some of the results, if that would strengthen the bonds between the SBHC and school staff. You might also bring food to the meeting, indicating the food is a token of appreciation for the hard work staff have contributed to the evaluation. If you are able to get food donated, you can say that "Jimmy's Bagels" also supports and appreciates the school's efforts.

Another format for a meeting would be to create a small ceremony, passing out certificates and/or gifts, such as art supplies to thank teachers who helped make the evaluation a success. Be sure to provide handouts and present a brief summary of the research results.

If you are unable to get time during a faculty meeting, you may create and reproduce a small report for teachers, with a contact number they can use if they want to ask questions. This report should be accompanied by a letter of gratitude for their efforts and, if possible, a small note of gratitude from the principal. Joint efforts by the school and SBHC administration will set a good example for cooperation for the school and SBHC staff.



FEEDBACK TO PROFESSIONAL ORGANIZATIONS - CONFERENCES AND PUBLICATIONS

There are several forums for providing information for professional organizations, including publications and presentations at conferences. Peer review journals that are appropriate for SBHC research results include (bolded titles often publish SBHC related articles):

- Advances in Pediatrics
- American Journal of Psychiatry
- Archives of Pediatrics and Adolescent Medicine
- Child Adolescent Social Work
- Community Mental Health
- Family Planning Perspectives
- Issues in Comprehensive Pediatric Nursing
- Journal Health Social Work
- Journal of Adolescence
- **Journal of Adolescent Health**
- Journal of Clinical Child Psychology
- Journal of Early Adolescence
- Journal of Mental Health Admissions
- Journal of Pediatric Health Care
- Journal of Primary Prevention
- **Journal of School Health**
- Journal of School Nursing
- Nurse Practitioner
- Pediatrics
- Psychiatric Annals
- School Psychology Quarterly

Additionally, the professional organizations with which you are affiliated are likely to have conferences where you can give an oral or poster presentation based on your results. Be sure that stakeholders have had an opportunity to review the results you will be presenting, particularly if you are presenting negative findings.

DISSEMINATION TO THE LARGER COMMUNITY

Media is a powerful tool for drawing attention to special activities of the clinic, as well as attention to interesting evaluation results. Media attention to various issues fluctuates according to recent events and perceived public opinion. The institution with which you are affiliated is likely to already have media contacts. Obtain a list of different media possibilities and cultivate relationships with those organizations, e.g., newspapers, TV stations, and radio stations, including the media contacts for child/adolescent health, and/or education issues. Once you have the names and numbers of contacts, you can approach the media in one or more of the following ways:

Public Service Announcements (PSAs) are short (15-30 second), free announcements that local media often produce. The PSAs should be brief, interesting, and clear. Before submitting a PSA, check each media group for length limitations and submission deadlines. Be sure you have also prepared the school principal and staff, as well as the SBHC staff for potential media coverage. These stakeholders should review the media information before submission. Be clear about the message(s) you are conveying.

Press Advisories are used to invite media to an event you are holding and should be no longer than one page. Press advisories should be sent out one week prior to the event; a follow-up call should be made on the morning of the event, if possible. You may want to invite media to a community meeting where SBHC results are presented, to a SBHC-sponsored health fair to show parent involvement in a community, to an educational theater sponsored by the SBHC, to a press conference, or to another community event. The title should be catchy, and the press advisory should contain the who, what, where, and when of the event, as well as press contacts. A sample of a press advisory follows:

HARLEY RIDERS DO SANTA'S WORK AT THE NOT-JUST-ANYWHERE SBHC

WHAT: Fifty Harley riders will deliver gifts to the Not-Just Anywhere SBHC. Gifts are sponsored by the Rocky Mountain Chapter of Harley Owners. Not-Just Anywhere SBHC is this year's recipient of these gifts because the recently conducted SBHC evaluation shows the incredible effects of SBHC services on students' health.

Anyone can come, Harley rider or not. The riders are meeting at the Rocky Mountain Harley Davidson shop in Englewood. They will leave the shop at 10 am.

WHEN: Sunday, December 8 at 10 am. The riders will depart the Harley shop at 10 am and arrive at the SBHC at 10:30 am.

WHERE: Start at 4204 S. Broadway, then down Broadway to 19th Avenue and then to Not-Just-Anywhere SBHC at 17th and Main St.

PHOTO OPS: Media are invited to meet at the Harley shop and catch a ride on a Harley. You do not have to ride a motorcycle to participate. If you do decide to ride, ask for Lon Uncapher--he'll be wearing the Santa suit.

Santa and Mrs. Claus will be riding a Harley.

Blinky the Clown will be on a Harley.

Evaluation findings on the effects of two years of SBHC operation will be presented.

CONTACTS: SBHC coordinator, Tebby Smith, 888-5555 (have her paged)
Lou Jones, Toy Run Coordinator, 777-3333

-###-

Press Conferences are meetings with the press that can be used to educate the public about a specific issue. Invite the press to a specific location where 2-3 speakers will present information. The speakers you choose for the press conference will depend upon the subject. If reporting technical results of a study, the principal evaluator might be a good speaker choice, as well as the SBHC director and school principal. Other press conferences might include SBHC staff, parents, or community members.

It is customary to have someone introduce each speaker with a short biographical sketch and to moderate questions at the end of the presentations. Invite media to these events by writing a press advisory. Be sure to give clear directions to the conference (with signs, etc.). Have someone greet the press and provide press packets (often including background information on SBHCs, local rates of morbidity the SBHC addresses, and statements from experts in the community, and/or public figures). Try to hold the conference in a place which provides photo-opportunities - not just bare walls and a desk. If you have permission from stakeholders, you might try to hold the conference in the SBHC or at a health fair.

News Releases are 1-2 pages, providing media with information you want them to print. The following is a portion of a news release that was written at a local hospital:

FOR IMMEDIATE RELEASE:

CONTACT:
Shirl Temple, 332-2222

COMMUNITY CORP. FOR KIDS DONATES FUNDS FOR NEW SBHC

DENVER - November 13, 1997 - Rick Bog, local spokesman for Community Corp. for Kids (CCK), visited the students at Ship Elementary and presented a check for more than $50,000 toward SBHC start-up costs. CCK donated the money when a community needs assessment showed the necessity of an SBHC in Ship Elementary. Funds will be used to purchase equipment and space for the first year of SBHC services.

The funds were raised during a three-week promotion in September in which CCK obtained $500 donations from each of 100 local community businesses. Last year CCK donated $20,000 in new textbooks to the school district with a similar fund drive.

"Our goal was to locate an active community interested in defining and addressing its students' needs. The needs assessment that was conducted at Ship gave CCK evidence of the enthusiasm and commitment of this community." said Annie Mott....

There are many other methods of delivering results back to the community. You can hold a community meeting organized through the Parent-Teacher Association or Parent-Teacher Organization. You could present your results in a school or SBHC newsletter. Below are several other ideas you could use to get the results of your study known by the community.

Other Media Possibilities

- Flyers
- Posters
- Pamphlets and brochures
- Paid advertisements
- Comic strips
- Question/answer newspaper column
- Billboards
- Buses/Trains
- Talk shows
- Videos for local TV
- Teen Theaters
- Health Fairs

LEGISLATION

If you are trying to affect legislation with your results, there are several tips you could use which we have drawn from the Advocates for Youth Advocacy Kit (Advocates for Youth, 1996). You should first, however, check to see if there is already a local SBHC advocacy group who has the responsibility for such activity. Whether you are communicating with your legislator by writing, face-to-face interview, by phone, or by testimony, Advocates for Youth suggest that you:

1) Target your efforts towards a few legislators.

2) Be gracious.

3) Be professional.

4) Be focused on one issue per call or letter.

5) Do your homework and know your legislator's position.

6) Make a personal connection, even if it is just that you are their constituent.

7) Consider yourself a helpful information source.

8) Tell the truth.

9) Know who else is on your side.

10) Know the opposition.

11) Don't be afraid to admit you don't have an answer.

12) Be specific in what you ask.

13) Follow-up.

14) Stay informed.

15) Don't burn bridges by getting upset.

16) Remember you are the boss (you pay them and you put them in office).

17) Try to nurture the relationship by keeping in contact.

18) Be flexible when plans change.

Responding to Legislators

Advocates for Youth also suggests how to respond to legislators who take various positions, from strongly agreeing to strongly disagreeing with your position. In every case, you should thank your legislator for his/her time.

- *If they are strong advocates* — ask them to take a leadership role, by sponsoring legislation, agreeing to write a newspaper article, signing a petition or letter of support, making a public speech, or providing a vote. Ask them to lobby undecided legislators. And thank them again.

- *If they agree with your position* — thank them and ask if they would be willing to help in any way beyond their vote, or if they would like to know about future opportunities to get more involved.

- *If they are undecided or noncommittal* — inform them of your interest in the legislation. Present information clearly and concisely, and ask them about their viewpoint. Offer to provide information they might be interested in. Follow-up by providing requested information, and thanking them for their support or state your disappointment in their position. Keep in touch.

- *If your legislator is opposed to your position* — thank the legislator for an opportunity to discuss your views. If they are willing to listen to your perspective, present substantiated information (as described above). If they are unmoveable on your position, ask them to refrain from lobbying other votes, and ask them to "walk" (be absent) when the vote

occurs. Stay in touch, but don't waste too much time to convince someone who is not going to change their perspective.

SHARING YOUR RESULTS WITH LOCAL, STATE, AND NATIONAL SBHC ORGANIZATIONS

Disseminating your evaluation results will assist SBHC organizations to learn from one another and help advance the field. If you have an effective program - share it with others! If your program is ineffective share with others the lessons you have learned. Tell them how evaluation has contributed to changes or renewed effort. To communicate with SBHCs locally, ask the medical director or coordinators of SBHCs in your area to suggest individuals who might be interested in the results.

Information can also be disseminated to state and national SBHC groups through SBHC newsletters, e.g., the "Access" Newsletter published and distributed by Making the Grade, (202) 466-3396, or on the web - www.gwu.edu/~mtg/. The National Assembly on School Based Health Care holds a large annual national conference and produces a newsletter, "Joining Hands." The National Assembly can be reached at 1-888-286-8727 or through their web page, Website: http://www.nasbhc.org/. If you need other contacts and/or information on events, post a message on the SBHC net, to which you can subscribe by contacting the List Manager of the SBHCNET at Making the Grade, (202) 466-3396, or sbhcnet@gwis2.circ.gwu.edu.

CHAPTER 7 SUMMARY

This chapter was intended to provide you with initial information to put your ideas into action! Think creatively about ways to share your SBHC program and evaluation findings. As a priority, consider ways you can incorporate the implications of your findings in improving your current efforts. Thus, evaluation efforts can be seen as a useful management tool that is not only helpful for your own program, but is also helpful to assure that the overall field is improved.

EVALUATION MANUAL

SUMMARY

The role of evaluation in helping create and sustain effective SBHC services cannot be over-stated. Evaluation aids SBHCs in their continuing efforts to further enhance SBHC services and prove the validity of SBHC health service delivery models that address student health care needs. SBHCs are in a unique place to address very specific student needs. However, without establishing a solid needs assessment, SBHCs might not capitalize on their potential to meet the most compelling student needs. Without conducting a comprehensive process evaluation, service delivery may proceed without treating the most needy portions of the population. It might allow implementation of an outcome/impact evaluation that will not be useful. If you have a seemingly effective program, which is addressing the most outstanding needs of students, but have no outcome or impact evaluation, these achievements will receive little recognition. Thus, needs assessments, process evaluations, and outcome and/or impact evaluations are all essential for developing and sustaining SBHCs.

We recognize that evaluation is challenging, requiring a great deal of time and commitment. We congratulate you in the efforts you have committed thus far in conducting your evaluation. Despite initial apprehensions about SBHC evaluation, we have witnessed first-hand how evaluations, even with their unavoidable pitfalls, clearly provide benefits that commit SBHC staff, sponsors, and advocates to further evaluation and service provisions. Overall, we hope this manual helps you be more effective in your community, while also helping you contribute to the gradual process of improving student health nation-wide.

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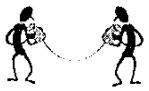

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Appendices

APPENDIX A: GLOSSARY OF TERMS

1) **Bias** — Systematic errors in collecting or interpreting data- The enemy of study designs and data collection instruments. The key concept of bias is "different." If cases are selected in a way that is different from the way controls are selected, and this difference is related to your outcome, then this bias may be the cause of your findings, for instance, of SBHC use. There are numerous types of bias, each of which may jeopardize the validity of your results. Here are some of the biases to guard against: **self-selection bias** — results from non-comparable criteria being used to select case and comparison populations; **observation bias** — results from non-comparable data being gained from the groups used for comparison, e.g., case and controls. This could be due to **interviewer bias** — interviewer asking questions differently, or interpreting responses differently. This could also be caused by **recall bias** — where respondents in one group recall an event more vividly than respondents in the second group, e.g., people whose babies are deformed at birth are more likely to recall exposure to a toxic substance than those whose babies are without birth defects.
2) **Cause-effect relationship** — If chance, bias, or confounding is not responsible for the significant results of a particular study, then you can conclude there is a relationship between the intervention (SBHC services) and the outcome, e.g., use of contraceptives. Yet you cannot claim SBHC services cause improvements in contraceptive use, only that they are related. Criteria for establishing cause-effect relationship include: strength of association, biological credibility of the cause-effect hypothesis, consistency of the findings, time sequence of supposed cause and effect, a dose-response relationship, and in some cases, descriptive data (Hennekens, Buring, 1987).
3) **Cohort** — Noun used to describe a group of students in a study design, i.e., the experimental and comparison cohorts in intervention studies, or the case and control cohorts in case-control studies.
4) **Confounding** (Variable or Factor) — Best described as a characteristic or experience of a person that is related to both the use of the SBHC and the outcome. For example,

students who are Hispanic/Latino are more likely to use the SBHC and are more likely to drop out of school than their white counterparts. This information needs to be collected along with the outcome data, so that analyses can control for the "confounding factor" to show the independent relationship, in this example, between SBHC use and school drop-out.

5) **Generalizability** — The degree to which your results are applicable to other populations. A study of adolescents showing that SBHC services improve student use of preventive health services will not be generalizable to an adult population, or a population of elementary-aged students, or to a population that is socio-demographically different, which is why sample selection is very important.
6) **Prospective** — Forward looking. An outcome has not taken place and data are being collected as the outcome occurs.
7) **Reliability** — Distinct from validity; this is a measure of repeatability. This measures the degree to which you get the same response if you ask the same person the same question (e.g., What is your their ethnicity?), four weeks apart.
8) **Retrospective** — Backward looking. An outcome has already taken place and data previously collected are used to learn what variables might be associated with the outcome.
9) **Randomization** — A sampling method which requires: 1) each student having an equal chance of being in the experimental or comparison group, and 2) assignment to either group to be independent of any other event or characteristic. This sampling method is preferred because it helps eliminate self-selection bias.
10) **Validity** — Distinct from reliability; this is a measure of how close a response or a conclusion is to the "real truth." You may ask a person their age and get the same response several times (e.g., 39); this response is then reliable. But if the real age of this person is 53, the validity of their response is poor.

APPENDIX B: RESOURCE LIST

Advocates for Youth
1025 Vermont Avenue, NW, Suite 200
Washington, DC 20005
(202) 347-5700
(202) 347-2263 fax

Carnegie Corporation of New York
437 Madison Avenue,
New York, NY 10022 USA
(212) 371-3200
(212) 754-4073 fax
Website: http://www.carnegie.org

Center for Reproductive Health Policy Research
Institute for Health Policy Studies
School of Medicine
1388 Sutter Street, Eleventh Floor
San Francisco, CA 94109
(415) 476-5254
email: brindis@itsa.ucsf.edu

Children's Defense Fund
25 E. St., NW
Washington, DC 20001
(202) 628-8787
website: http://www.childrensdefense.org/
email: cdfinfo@childrensdefense.org

Division of Adolescent and School Health (DASH)
National Center for Chronic Disease Prevention and Health Promotion
Centers for Disease Control and Prevention
4770 Buford Highway, NE
Atlanta, GA 30341-3717
(770) 488-3257
(770) 488-3112 fax
email: ccdinfo@cdc.gov.

Making the Grade
The George Washington University
School of Public Health and Health Services
1350 Connecticut Ave, NW #505
Washington, DC 20036
(202) 466-3396
(202) 466-3467 fax
Website: www.gwu.edu/~mtg

National Assembly on School-Based Health Care
1522 K. St. NW, Suite #600
Washington, DC 20005
Phone: 1-888-286-8727
(202) 289-5400
(202) 289-0776 fax
Website: http://www.nasbhc.org/

Office of School Health, Denver, CO
University of Colorado Health Sciences Center
School Health Resource Services
4200 E. 9th Ave, Box C287
Denver, CO 80262
(800) 669-9954

Teen Pregnancy Prevention Clearinghouse
MN Planning
300 Centennial Blvd., 658 Cedar St.
St. Paul, MN 55155
(612) 296-2571

The Lewin Group
9302 Lee Highway, Suite 500,
Fairfax, VA 22031-1207
(703) 218-5500
(703) 218-5501 fax

The Robert Wood Johnson Foundation
Post Office Box 2316
Princeton, New Jersey 08543-2316
Offices are at College Road East and
Route 1, Princeton, NJ.
(609) 452-8701
e-mail: mail@rwjf.org

School HealthCare ONLINE!!!
Technical Assistance
Angela McCaulley
Adolescent Medicine
The Children's Hospital
1056 E. 19th Ave, B516
Denver, CO 80218
(303) 764-8400
(303) 837-2962 fax
email: mccauley.angela@tchden.org

State Coalitions to Support School-Based Health Centers

(State chapters of the National Assembly on School-Based Health Care are indicated with an *- see the Assembly's web page, http://www.nasbhc.org/, for contact information updates.)

***California**
Jacob Moody
California Association of School-Based/School-Linked Health Programs
1000 Cayuga Ave.
San Francisco, CA 94112
(415) 469-4512
(415) 469-4096 fax
email: jacobM4418@aol.com

***Colorado**
Mary Lea Forington, President
Colorado Association for SBH Care
Metro Denver Provider Network
260 S. Kipling Street
Lakewood, CO 80226
(303) 239-7135
(303) 239-7157 fax

Connecticut
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Connecticut Association of SBHC, Inc.
255 Hempstead Street
New London, CT 06320
(860) 442-2797 x222
(860) 442-5909 fax
email: ChildAndFamily@cfapress.org

Illinois
Brenda Bannor
Illinois Coalition for SBHCs
Ravenswood Hospital Family Practice
4550 North Winchester
Chicago, Il 60640
(773) 878-4300 x2660
(773) 279-3982 fax
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(606) 288-4078
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***Louisiana**
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Louisiana Assembly on School-Based Health Care
c/o Cecilia School-Based Health Center
1017 School Street,
PO Box 24
Cecilia, LA 70521
(318) 667-7227
(318) 667-7228 fax

Maine
Cyndi Flye
Maranacook Student Health Center
P.O. Box 177
Readfield, ME 04355
(207) 685-4923 x318
(207) 685-9597 fax
email: flyec@mcs.csd10.k12.me.us

***Maryland**
Pat Papa, President
Maryland Assembly on School-Based Health Care
301 West Preston St.
Baltimore, MD 21201
(410) 528-0528

Massachusetts
Ruther Soderberg, Director
Massachusetts Coalition for School-Based Health Centers
c/o The Medical Foundation
95 Berkeley St.
Boston, MA 02116
(617) 451-0049
(617) 451-0062 fax
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***Michigan**
Kathleen Conway, President
School-Community Health Alliance of MI
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North Carolina
Kim Swab
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Making The Grade North Carolina
P.O. Box 29597
Raleigh, NC 27626-0597
(919) 715-3423
(919) 715-3295 fax
email: kim_swab@mail.ehnr.state.nc.us

***Oregon**
Barbara Haase
P.O. Box 1479
Eugene, OR 97440
(541) 686-3655
(541) 686-7229 fax
email: bhaase@peacehealth.org

Pennsylvania
Faye Ellis, President
Pennsylvania Assembly on School-Based Health Care
c/o Jefferson School-Based Health Center
50 St. Johns Street
Allentown, PA 18103
(610) 820-2395
(610) 821-3913 fax

***Texas**
Jenni Jennings, President
Texas Association on School-Based Health Care
P.O. Box 4967
Dallas, TX 75208
(214) 951-8669
(214) 951-9035 fax

***West Virginia**
Jennifer Mead and George Schaler
New River Health Association
Rt. 1, Box 615A
Scarbro, WV 25917
(304) 465-1378
email: gshaler@marshall.edu

APPENDIX C: SURVEYS FOR ELEMENTARY SCHOOL- STUDENT AND PARENT SURVEYS

HELLO STUDENT!

The University of Colorado is interested in kids' health. We hope you will help us to understand kids' health better by doing this survey. Your answers will help us to give students better health care in the Student Health Centers and to complete a research project on childrens' health.

When you are done with the survey, you should fold it in half and put it in the closed box at the front of the room without showing it to anyone. This will keep your survey private from others in the room. Your answers will not be given to your school or your parents. **BUT**, someone may need to be told if your answers on this survey show that you are very sick or have a very serious problem. Otherwise, nobody will know how you answered these questions. If you do not want to do this survey you do not have to, and you can skip or stop answering questions at any time. Nothing bad will happen to you if you decide not to take this survey.

While taking the survey, PLEASE ANSWER ALL THE QUESTIONS, AND BE AS HONEST AS YOU CAN. If any of the questions make you feel upset or sad, you can go to the School Nurse's Office for help. Or you can call Dr

If you have any questions about this survey, call Dr. Or you may call one of the people listed at the bottom of this paper. If you have questions about your rights as a person in a research project, you can call

I have read this page and understand that if I take this survey, my answers will be used to study and improve health care for children. I understand that it is my decision to participate in this survey. PLEASE PRINT, THEN SIGN YOUR NAME BELOW IF YOU AGREE TO FILL OUT THE SURVEY.

_____

PRINT your first and last name here

_____

SIGN your first and last name here

¡HOLA, ESTUDIANTE!

La Universidad de Colorado está interesada en la salud del estudiante. Esperamos que, al hacer esta encuesta, nos ayudes a entender mejor la salud de los niños. Tus respuestas nos ayudarán a dar a los estudiantes un mejor cuidado de salud en los Centros de Salud Estudiantil, y a terminar un proyecto de investigación acerca de la salud de los niños.

Cuando termines con la encuesta, debes doblarla por la mitad y colocarla en la caja cerrada que se encuentra al frente del salón, sin mostrarla a nadie. Esto hará que la encuesta sea privada y alejada del conocimiento de otros en el salón. No entregaremos las respuestas a nadie en la escuela, o a tus padres. PERO, necesitaremos decir a alguien si tus respuestas en esta encuesta muestran que estás muy enfermo o has tenido serios problemas. De otra manera, nadie sabrá cómo respondiste a estas preguntas. Si no deseas hacer esta encuesta, no tienes que hacerla; o puedes saltar algunas preguntas, o dejar de responderlas en cualquier momento. Nada malo te pasará si decides no contestar esta encuesta.

Si tomas la encuesta, POR FAVOR, RESPONDE A TODAS LAS PREGUNTAS TAN HONESTAMENTE COMO PUEDAS. Si alguna de las preguntas te hacen sentir nervioso o triste, puedes pedir ayuda en el Centro de Salud Estudiantil. O puedes llamar a Dr.

Si tienes algunas preguntas acerca de esta encuesta, llama al Dr.

O puedes llamar a una de las dos personas indicadas en la parte inferior de esta página. Si tienes preguntas acerca de tus derechos como persona en un proyecto de investigación, puedes llamar a

He leído esta página y entiendo que si hago esta encuesta, mis respuestas serán usadas para mejorar la salud de los niños. Entiendo que es mi decisión participar en esta encuesta. POR FAVOR ESCRIBE TU NOMBRE EN LETRA DE IMPRENTA Y LUEGO FIRMA EN LA PARTE INFERIOR SI ESTÁS DE ACUERDO EN LLENAR LA ENCUESTA.

_____

Escribe tu nombre y apellido en LETRA DE IMPRENTA

_____

Firma aquí

YOUR HEALTH

For Students in 4th and 5th Grade

Please help us find out more about your health. THIS IS NOT A TEST - PLEASE ANSWER EVERY QUESTION AND DO THE BEST THAT YOU CAN - THERE ARE NO RIGHT OR WRONG ANSWERS. **DRAW A CIRCLE AROUND YOUR ANSWERS.**

About Your Time and School

1. Do you belong to any clubs or sport teams? (circle one):

   (1) YES (2) NO

2. Do you read for fun? (circle one):

   (1) YES (2) NO

3. How much do you like school? (circle one):

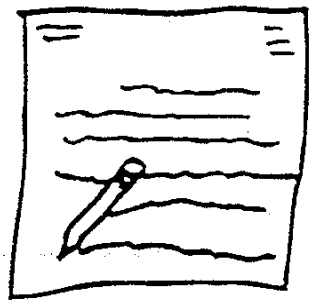
   (1) A LOT (2) A LITTLE (3) NOT AT ALL

4. How often do you get your school work done on time? (circle one):

   (1) All or most of the time

   (2) Some of the time

   (3) Hardly ever or never



5. Do you get free meals at school? (circle one):

   (1) YES (2) NO (3) I DON'T KNOW

6. I think gangs are: (circle one)

   (1) COOL

   (2) SILLY OR STUPID

   (3) SCARY

   (4) I DON'T KNOW WHAT A GANG IS

   (5) I DON'T KNOW HOW I FEEL ABOUT GANGS

TU SALUD

Para estudiantes en Cuarto y Quinto Grado

Por favor, ayúdanos a conocer más acerca de tu salud. ÉSTE NO ES UN EXAMEN. POR FAVOR, CONTESTA A CADA UNA DE LAS PREGUNTAS DE LA MEJOR MANERA QUE PUEDAS. NO HAY RESPUESTAS CORRECTAS O INCORRECTAS. HAZ UN CÍRCULO ALREDEDOR DE TU RESPUESTA.

Acerca de tu tiempo y la escuela

1. ¿Perteneces a clubes o equipos deportivos? (encierra tu respuesta en un círculo)

   (1) SÍ (2) NO

2. ¿Lees por entretenerte? (encierra tu respuesta en un círculo)

   (1) SÍ (2) NO

3. ¿Cuánto te gusta la escuela? (encierra tu respuesta en un círculo)

   (1) Me gusta mucho (2) Me gusta un poco (3) No me gusta por nada

4. ¿Cuán frecuentemente entregas tu trabajo a tiempo? (marca un círculo en tu respuesta)

   (1) Siempre o la mayor de las veces

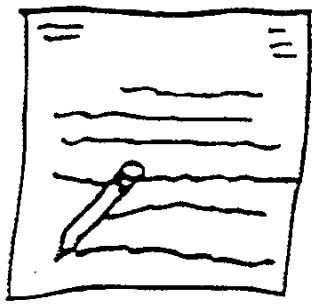
   (2) A veces

   (3) Casi nunca, o nunca

5. ¿Recibes comidas gratuitas en la escuela? (marca un círculo en tu respuesta)

   (1) SÍ (2) NO (3) NO SE

6 ¿Pienso que las pandillas son: (marca un círculo en tu respuesta)



   (1) lo máximo

   (2) una tontería

   (3) son algo para temer

   (4) No sé lo que es una pandilla

   (5) No sé cómo me siento acerca de las pandillas

7. Have you ever been invited to be a gang member ? (circle one):

(1) YES (2) NO

8. Are you worried about being asked to be in a gang? (circle one):

(1) YES (2) NO

About Your Health

1. Most of the time, how is your health? (circle one):

(1) GOOD  (2) OKAY  (3) NOT VERY GOOD 

2. Most of the time, how do you feel? (circle one):

(1) HAPPY  (2) OKAY  (3) UNHAPPY 

GOOD JOB! KEEP GOING!!

7. ¿Te han invitado alguna vez a unirte a una pandilla? (encierra tu respuesta en un círculo)

(1) SÍ (2) NO

8. ¿Te preocupa que te inviten a unirte a una pandilla? (marca un círculo en uno)

(1) SÍ (2) NO

Acerca de tu salud

1. ¿La mayor parte del tiempo, cuán buena es tu salud? (marca un círculo)

(1) FELIZ (2) REGULAR (3) INFELIZ

2. ¿La mayor parte del tiempo, cuán feliz eres? (marca un círculo en tu respuesta)

(1) FELIZ (2) REGULAR (3) INFELIZ

BUEN TRABAJO, CONTINUA

Do you have any of these? (circle one):

3.	Headaches	(3) Never	(2) Sometimes	(1) A lot of the time
4.	Feeling dizzy	(3) Never	(2) Sometimes	(1) A lot of the time
5.	Trouble breathing	(3) Never	(2) Sometimes	(1) A lot of the time
6.	Feeling tired	(3) Never	(2) Sometimes	(1) A lot of the time
7.	Feeling too thin	(3) Never	(2) Sometimes	(1) A lot of the time
8.	Feeling too fat	(3) Never	(2) Sometimes	(1) A lot of the time
9.	Stomach ache or belly pain	(3) Never	(2) Sometimes	(1) A lot of the time

10. How long ago was your last visit to a medical doctor? (circle one):

    (1) I have never been to a medical doctor

    (2) Six months ago

    (3) One year ago

    (4) Two or more years ago

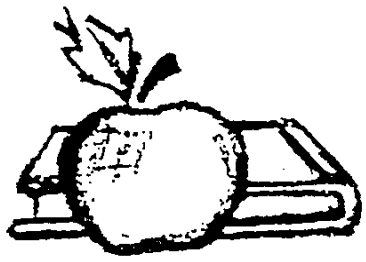
11. How long ago was your last visit to a dentist for a check-up? (circle one):

    (1) I have never been to a dentist

    (2) Six months ago

    (3) One year ago

    (4) Two or more years ago



¿Tienes alguno de estos? (indica uno)

3. Dolor decabeza	(3)	Nunca	(2)	A veces	(1)	Muchas veces
4. Mareos	(3)	Nunca	(2)	A veces	(1)	Muchas veces
5. Problemas respiratorios	(3)	Nunca	(2)	A veces	(1)	Muchas veces
6. Cansancio	(3)	Nunca	(2)	A veces	(1)	Muchas veces
7. Estar delgado	(3)	Nunca	(2)	A veces	(1)	Muchas veces
8. Estar gordo	(3)	Nunca	(2)	A veces	(1)	Muchas veces
9. Dolor de estómago o cólicos	(3)	Nunca	(2)	A veces	(1)	Muchas veces

10. ¿Cuándo fue tu última visita a un médico? (marca con un círculo tu respuesta)

(1) Nunca he ido al medico

(2) Hace seis meses

(3) Hace un año

(4) Hace dos años

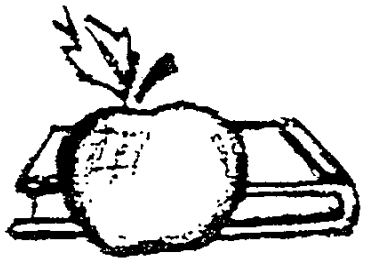
11. ¿Cuándo fue tu última visita al dentista para una revisión?

(1) Nunca he ido al dentista

(2) Hace seis meses

(3) Hace un año

(4) Hace dos años



Do you have any of these? (circle one):

12. Feeling sad	(3) Never	(2) Sometimes	(1) A lot of the time
13. Legs and arms hurting	(3) Never	(2) Sometimes	(1) A lot of the time
14. Doing badly in school	(3) Never	(2) Sometimes	(1) A lot of the time
15. Being worried	(3) Never	(2) Sometimes	(1) A lot of the time
16. Getting hurt	(3) Never	(2) Sometimes	(1) A lot of the time
17. Being picked on by other kids	(3) Never	(2) Sometimes	(1) A lot of the time
18. Wetting the bed or your pants	(3) Never	(2) Sometimes	(1) A lot of the time
19. Having bowel movement (pooping) in your pants or bed	(3) Never	(2) Sometimes	(1) A lot of the time
20. Getting into trouble a lot	(3) Never	(2) Sometimes	(1) A lot of the time
21. Problems in your family	(3) Never	(2) Sometimes	(1) A lot of the time
22. Having a bad temper	(3) Never	(2) Sometimes	(1) A lot of the time
23. Being afraid of a lot of things	(3) Never	(2) Sometimes	(1) A lot of the time
24. Burning or setting fire to things without permission	(3) Never	(2) Sometimes	(1) A lot of the time
25. Hurting an animal	(3) Never	(2) Sometimes	(1) A lot of the time

¿Tienes alguno de estos? (indica uno)

12. Estar triste	(3) Nunca	(2) A veces	(1) Muchas veces
13. Dolor de piernas y brazos	(3) Nunca	(2) A veces	(1) Muchas veces
14. No hacer bien en la escuela	(3) Nunca	(2) A veces	(1) Muchas veces
15. Estar preocupado	(3) Nunca	(2) A veces	(1) Muchas veces
16. Resultar herido	(3) Nunca	(2) A veces	(1) Muchas veces
17. Ser criticado por otros niños	(3) Nunca	(2) A veces	(1) Muchas veces
18. Mojar la cama o los pantalones	(3) Nunca	(2) A veces	(1) Muchas veces
19. Tener evacuación intestinal (ensuciar) en los pantalones o en la cama	(3) Nunca	(2) A veces	(1) Muchas veces
20. Estar frecuentemente en problemas	(3) Nunca	(2) A veces	(1) Muchas veces
21. Problemas en la familia	(3) Nunca	(2) A veces	(1) Muchas veces
22. Tener mal genio	(3) Nunca	(2) A veces	(1) Muchas veces
23. Tener miedo a muchas cosas	(3) Nunca	(2) A veces	(1) Muchas veces
24. Quemar, o poner fuego a, cosas sin permiso	(3) Nunca	(2) A veces	(1) Muchas veces
25. Herir a un animal	(3) Nunca	(2) A veces	(1) Muchas veces

26. Have you ever talked to Ms. Laura Pietarinen or some other counselor about your problems? (circle one):

(1) YES (2) NO

27. Since this school year started, did you go to a hospital emergency room? (circle one):

(1) YES (2) NO

28. Since this school year started, did you stay overnight in a hospital? (circle one):

(1) YES (2) NO

About Your Life

GREAT WORK! KEEP GOING!!

How often do you do these things? (circle one answer for each):

1. Smoke cigarettes (even one puff)	(1) Never	(2) One Time	(3) Sometimes
2. Drink alcohol (more than a taste)	(1) Never	(2) One Time	(3) Sometimes
3. Get drunk on alcohol	(1) Never	(2) One Time	(3) Sometimes
4. Smoke marijuana (pot, weed)	(1) Never	(2) One Time	(3) Sometimes
5. Sniff or huff something to feel high or dizzy)	(1) Never	(2) One Time	(3) Sometimes
6. Use chewing tobacco or snuff	(1) Never	(2) One Time	(3) Sometimes
7. Fake you are sick to get out of going to school	(1) Never	(2) One Time	(3) Sometimes

26. ¿Has hablado alguna vez con Ms. Laura Pietarinen, o algún otro consejero acerca de tus problemas?

(1) SÍ (2) NO

27. Desde que empezó el año escolar, ¿has estado en la sala de emergencia de un hospital?

(1) SÍ (2) NO

28. Desde que empezó el año escolar, ¿has pasado la noche en un hospital?

(1) SÍ (2) NO

BUEN TRABAJO, CONTINUA

Acerca de tu vida

¿Cuán a menudo haces estas cosas? (marca una respuesta para cada una)

1. Fumar cigarrillos (aun una bocanada)	(1)	Nunca	(2)	Una veces	(3)	A veces
2. Beber alcohol (mas que un sorbo)	(1)	Nunca	(2)	Una veces	(3)	A veces
3. Emborracharse con alcohol	(1)	Nunca	(2)	Una veces	(3)	A veces
4. Fumar marihuana ("pot", "weed")	(1)	Nunca	(2)	Una veces	(3)	A veces
5. Aspirar o soplar (algo, para estar intoxicado o mareado)	(1)	Nunca	(2)	Una veces	(3)	A veces
6. Mascar tabaco o tomar rapé	(1)	Nunca	(2)	Una veces	(3)	A veces
7. Simular enfermedad para no ir a la escuela	(1)	Nunca	(2)	Una veces	(3)	A veces

How often do you do these things? (circle one answer for each):

8. Carry a knife, gun, or other weapon	(1) Never	(2) One Time	(3) Sometimes
9. Get into a physical fight at school	(1) Never	(2) One Time	(3) Sometimes
10. Been threatened with a knife, gun, or other weapon	(1) Never	(2) One Time	(3) Sometimes

About You

1. What language do you speak at home most of the time? (circle one):

   (1) English (2) Spanish (3) Other, what language? (list): _____

2. Who lives in your home? (circle all the people who live with you):

   (1) Father
   (2) Mother
   (3) Foster parent
   (4) Step parent
   (5) Grandparent
   (6) Other Adults who are relatives
   (7) Other adults who are not relatives
   (8) Brothers or sisters

3. Does your family have their own apartment or house?

   (1) YES (2) NO

4. How many different places have you lived in since this school year started? (circle one):

   (1) 1 (2) 2 (3) 3 (4) 4 or more

5. Have you ever had to leave your family to live somewhere else, like a foster home or group home? (circle one):

   (1) YES (2) NO

¿Cuán a menudo haces estas cosas? (marca una respuesta para cada una)

8. Llevar consigo un cuchillo, revólver u otra arma	(1)	Nunca	(2)	Una veces	(3)	A veces
9. Participar en una pelea física en la escuela	(1)	Nunca	(2)	Una veces	(3)	A veces
10. Ser amenazado con un cuchillo, revólver u otra arma	(1)	Nunca	(2)	Una veces	(3)	A veces

Acerca de tí

1. ¿Qué idioma hablas en la casa la mayor parte del tiempo? (indica uno)

   (1) Inglés (2) Español (3) Otro, qué idioma? (indica:)_____

2. ¿Quién vive en tu casa (indica todas las personas que viven contigo):

   (1) Padre (5) Abuelo

   (2) Madre (6) Otros adultos que son parientes

   (3) Padre temporal (7) Otros adultos que no son parientes

   (4) Padrastro (8) Hermanos y hermanas

3. ¿Tiene tu familia un apartamento o casa propios? (indica uno)

   (1) SÍ (2) NO

YA CASI TERMINAS.

4. ¿En cuántos lugares diferentes has vivido desde que empezó el año escolar? (indica uno)

   (1) 1 (2) 2 (3) 3 (4) 4 o más

5. Alguna vez has dejado a tu familia para vivir en otra parte, como hogar temporal u hogar de grupo? (indica uno)

   (1) SÍ (2) NO

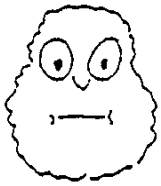
How often do you do these things? (circle one answer for each):

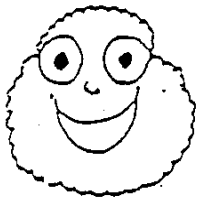
6. Have kids called you names	(1) Never	(2) Sometimes	(3) Often
7. Think that you are a pretty nice person	(1) Never	(2) Sometimes	(3) Often
8. Feel "stressed out"	(1) Never	(2) Sometimes	(3) Often
9. Feel safe on your way to school	(1) Never	(2) Sometimes	(3) Often
10. Feel safe when you are at school	(1) Never	(2) Sometimes	(3) Often

11. How do you feel at home? (circle the face that shows that feeling):

(1)  ANGRY

(2)  SAD

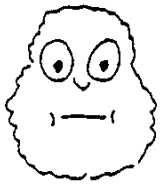
(3)  OKAY

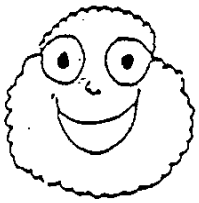
(4)  HAPPY

12. How do you feel about yourself most of the time? (circle the face that shows that feeling):

(1)  ANGRY

(2)  SAD

(3)  OKAY

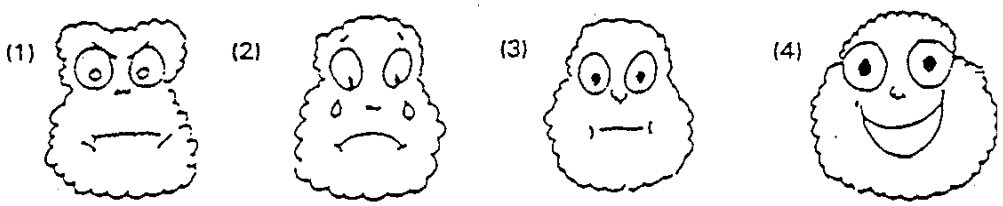
(4)  HAPPY

! ! ! The End - You Did It - Thank You ! ! !
Please fold your survey in half and put it in the box at the front of the room.

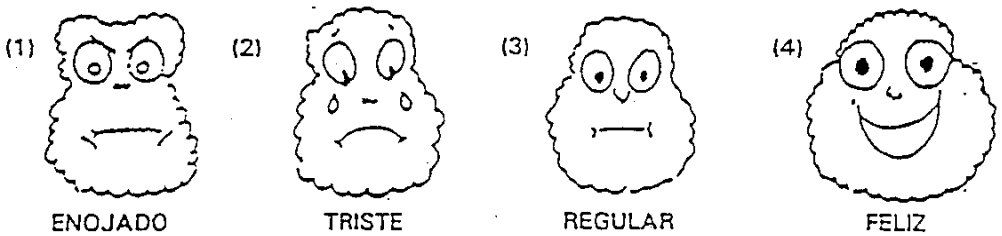
¿Cuán a menudo haces estas cosas? (marca una respuesta para cada una)

6. Ser insultado por los niños	(1) Nunca	(2) A veces	(3) Muchas veces
7. Pensar que eres una buena persona	(1) Nunca	(2) A veces	(3) Muchas veces
8. Tener tensión nerviosa	(1) Nunca	(2) A veces	(3) Muchas veces
9. Te sientes seguro en el camino a la escuela	(1) Nunca	(2) A veces	(3) Muchas veces
10. Te sientes seguro cuando estás en la escuela	(1) Nunca	(2) A veces	(3) Muchas veces

11. ¿Cómo te sientes en la casa? (indica la cara que muestra ese sentimiento)



12. ¿Como te sientes la mayor parte del tiempo? (indica la cara que indica ese sentimiento)



¡¡¡FIN - LO HICISTE - MUCHAS GRACIAS!!!

Por favor dobla la encuesta por la mitad y colócala en el cajón al frente del salón.

SCHOOL HEALTH SURVEY FOR PARENTS

Complete for children in ECE to 5th grade

Please help us find out more about your child's health by completing this survey. PLEASE ANSWER EVERY QUESTION. Each of the questions have instructions for you to follow. **There are no right or wrong answers**, so please be as honest as possible.

When the survey is completed, please return it to your child's classroom teacher or the Health Clinic at (where Rose, Deanna, and Jeannie Work). If you have questions about how to answer any of the questions in this survey, please call Karin or Stephanie . Your participation will help improve Health Clinic services. Thank You!

In this survey we ask about your child's health. Please complete separate surveys for each child who goes to school at so we can learn about each child's health.

I am completing this survey about the following child's health:

_____

Please print child's name and the grade that child is in

_____

Please print your name

ENCUESTA PARA LOS PADRES SOBRE SALUD ESCOLAR
Complete para niños de ECE a 5o. grado.

Por favor ayúdenos a saber más acerca de la salud de su niño(a), contestando a esta encuesta. POR FAVOR CONTESTE CADA PREGUNTA. Cada una de las preguntas tiene instrucciones que tiene que seguir. **No hay preguntas correctas o incorrectas**, así que, por favor sea lo más honesto posible.

Cuando termine la encuesta, por favor devuélvala al profesor del salón de clase de su niño, o la Clínica de Salud en la Escuela (Dónde trabajan Deanna, Rose, y Jennie). Si tiene preguntas sobre cómo contestar algunas de las preguntas de la encuesta, por favor llame a Karin o Stephanie, al . Su participación ayudará a mejorar los servicios de la Clínica de Salud en la Escuela. **¡Muchas gracias!**

En esta encuesta le preguntamos acerca de la salud de su niño. **Por favor responda encuestas separadas para cada niño que asiste e la Escuela Primaria** de tal manera que tengamos información acerca de la salud de cada uno.

Estoy respondiendo esta encuesta acerca de la salud del siguiente niño(a):

_____

Por favor escriba en letra de imprenta el nombre del niño(a),
y el grado en que se encuentra.

_____

Por favor escriba en letra de imprenta su nombre

About You and This Child

All the questions on this survey will be used to improve services offered to students. Your answers will be kept private.

1. **Are you this child's?** *(check one box):*

   1☐ Mother
   2☐ Father
   3☐ Step-Parent
   4☐ Foster Parent
   5☐ Grandparent
   6☐ Other, please describe_____

2. **Which adults live in this child's home?** *(check as many as you need):*

   1☐ Father
   2☐ Mother
   3☐ Stepfather
   4☐ Stepmother
   5☐ Foster father
   6☐ Foster mother
   7☐ Grandfather
   8☐ Grandmother
   9☐ Other adults who are relatives
   10☐ Other adults who are not relatives

3. **How many children live in this child's home?** *(write number on the line):*_____

4. **How many adults live in this child's home?** *(write number on the line):*_____

5. **Since the beginning of this school year (August 1996), how many times has this child changed or transferred schools?** *(check one box):*

   0☐ None 1☐ One time 2☐ Two or more times

6. **What education or training do you hope this child will complete?** *(check as many as you want)*

   1☐ High School graduate
   2☐ College degree (associates or bachelors),
   3☐ Graduate degree/beyond college (masters degree or PhD)
   4☐ Trade or vocational training (i.e., mechanic, beautician)
   5☐ Armed services (i.e., Army, Navy, etc.)

7. **What is the highest level of education completed by this child's mother?** *(check one box):*

   1☐ Attended Primary or Elementary School
   2☐ Completed Primary or Elementary School
   3☐ Attended Secondary or High School
   4☐ Completed Secondary or High School
   5☐ Some College/University
   6☐ College degree (e.g.,associate, bachelors, or advanced degree)
   7☐ Trade school, armed services, or other training

8. **What is the highest level of education completed by this child's father?** *(check one box):*

   1☐ Attended Primary or Elementary School
   2☐ Completed Primary or Elementary School
   3☐ Attended Secondary or High School
   4☐ Completed Secondary or High School
   5☐ Some College/University
   6☐ College degree (e.g., associate, bachelors, or advanced degree)
   7☐ Trade school, armed services, or other training

Acerca de Ud. y de este Niño

Se usarán todas las preguntas de esta encuesta para mejorar los servicios que se ofrecen a los estudiantes. Sus respuestas son confidenciales.

1. **¿Qué es usted del niño?** *(marque una casilla):*

   1☐ Madre
   2☐ Padre
   3☐ Padrastro/Madrastro
   4☐ Padre Temporal (foster)
   5☐ Abuelo(a)
   6☐ Otro, por favor describe _____

2. **¿Cúales adultos viven en la casa de este niño?** *(indique todos que correspondan):*

   1☐ Padre
   2☐ Madre
   3☐ Padrastro
   4☐ Madrastra
   5☐ Padre temporal (foster)
   6☐ Madre temporal (foster)
   7☐ Abuelo
   8☐ Abuela
   9☐ Otros adultos que son parientes
   10☐ Otros adultos que no son parientes

3. **¿Cuántos niños viven en la casa de este niño?** *(escriba el número en la línea)* _____

4. **¿Cuántos adultos viven en la casa de este niño?** (escriba el número en la línea) _____

5. **¿Desde el comienzo de este año escolar (agosto 1996), ¿cuántas veces este niño ha sido cambiado o transferido de escuela?** *(marque una casilla):*

   0☐ Ninguna
   1☐ Una vez
   2☐ Dos o más veces

6. **¿Qué educación o entrenamiento espera que complete este niño?** *(marque una casilla):*

   1☐ Graduado de Escuela Secundaria
   2☐ Graduado de Universidad (Título de Bachiller o Asociado)
   3☐ Título de postgraduado/superior a universidad (maestría o doctorado)
   4☐ Entrenamiento vocacional (por ejm., mecánica, salón de belleza)
   5☐ Fuerzas armadas (por ejm. ejército, naval, etc)

7. **¿Qué nivel de educación alcanzó la madre de este niño?** *(marque una casilla):*

   1☐ Asistió escuela Primaria
   2☐ Terminó escuela Primaria
   3☐ Atistió escuela Secundaria
   4☐ Terminó escuela Secundaria
   5☐ Algo de Universidad
   6☐ Título Universitario (por ejm., asociado bachiller, o título avanzado)
   7☐ Escuela Industrial, fuerzas armados u otro entrenamiento

8. **¿Qué nivel de educación alcanzó el padre de este niño?** *(marque una casilla):*

   1☐ Asistió escuela Primaria
   2☐ Terminó escuela Primaria
   3☐ Atistió escuela Secundaria
   4☐ Terminó escuela Secundaria
   5☐ Algo de Universidad
   6☐ Título Universitario (por ejm., asociado bachiller, o título avanzado)
   7☐ Escuela Industrial, fuerzas armados u otro entrenamiento

This Child's Physical Health

1. **In general, how is this child's physical health?** *(check one box):*

1☐ VERY GOOD 2☐ GOOD 3☐ FAIR 4☐ POOR

Has this child ever had:

(Check yes or no for each question):

2. Asthma or wheezing	1☐ YES	2☐ NO
3. Heart problems	1☐ YES	2☐ NO
4. Seizures or epilepsy	1☐ YES	2☐ NO
5. Anemia or poor blood iron	1☐ YES	2☐ NO
6. Physical disability	1☐ YES	2☐ NO
7. Developmental disability or delay	1☐ YES	2☐ NO
8. Urine or kidney problems	1☐ YES	2☐ NO
9. Hearing problems (i.e., wears a hearing aid)	1☐ YES	2☐ NO
10. Eye problems (i.e., wears glasses)	1☐ YES	2☐ NO
11. Other health problems	1☐ YES	2☐ NO

please list: _____

This school year, how many times has your child experienced:

(Check 0 Times, 1-3 Times, or 4 or More Times for each question)

12. Ear infections	0☐ 0 Times	1☐ 1-3 Times	2☐ 4 or More Times
13. Passing out or fainting	0☐ 0 Times	1☐ 1-3 Times	2☐ 4 or More Times
14. Headaches	0☐ 0 Times	1☐ 1-3 Times	2☐ 4 or More Times
15. Skin problems	0☐ 0 Times	1☐ 1-3 Times	2☐ 4 or More Times
16. Sore or strep throat	0☐ 0 Times	1☐ 1-3 Times	2☐ 4 or More Times
17. Stomach pain	0☐ 0 Times	1☐ 1-3 Times	2☐ 4 or More Times

La Salud Ftsica de este Niño

1. **En general, ¿cómo es la salud física de este niño?** (marque una casilla):

1☐ MUY BUENA 2☐ BUENA 3☐ REGULAR 4☐ MALA

Ha tenido esta niño alguna vez:

(Marque sí o no para cada pregunta):

2.	**Asma o ronco pecho**	1☐ Sí	2☐ NO
3.	**Problemas del corazón**	1☐ Sí	2☐ NO
4.	**Convulsiones o epilepsia**	1☐ Sí	2☐ NO
5.	**Anemia o falta de hierro en la sangre**	1☐ Sí	2☐ NO
6.	**Incapacidad física**	1☐ Sí	2☐ NO
7.	**Incapacidad o retraso en el desarrollo**	1☐ Sí	2☐ NO
8.	**Problemas del riñón o de la orina**	1☐ Sí	2☐ NO
9.	**Problemas de audición (por ejm., aparatos para el oido)**	1☐ Sí	2☐ NO
10.	**Problemas de los ojos (por ejm., usa anteojos)**	1☐ Sí	2☐ NO
11.	**Otros problemas de salud**	1☐ Sí	2☐ NO

por favor haga una lista: _____

En esta año escolar, cúantas veces su niño ha experimentado:

(Marque 0 veces, 1-3 veces, o 4 o más veces para cada pregunta):

12.	**Infecciones al oído**	0☐ 0 veces	1☐ 1-3 veces	2☐ 4 o más veces
13.	**Desmayos**	0☐ 0 veces	1☐ 1-3 veces	2☐ 4 o más veces
14.	**Dolores de cabeza**	0☐ 0 veces	1☐ 1-3 veces	2☐ 4 o más veces
15.	**Problemas de la piel**	0☐ 0 veces	1☐ 1-3 veces	2☐ 4 o más veces
16.	**"Strep" o dolores de garganta**	0☐ 0 veces	1☐ 1-3 veces	2☐ 4 o más veces
17.	**Dolores de estómago**	0☐ 0 veces	1☐ 1-3 veces	2☐ 4 o más veces

This Child's Emotional Health

The questions about this child's emotional health are included to improve the emotional health services offered to children. ***This information will be kept private.*** *There are no right or wrong answers, so please be as honest as possible*

1. **In general, how is this child's emotional health?** *(check one box):*

   ₁☐ VERY GOOD ₂☐ GOOD ₃☐ FAIR ₄☐ POOR

2. **How do you think this child feels about himself or herself?** *(check one box):*

   ₁☐ GOOD ₂☐ FAIR/OKAY ₃☐ NOT VERY GOOD

This school year, has this child experienced:

(Check yes, no, or I don't know for each question)

3. **Anxiety or nervousness**	₁☐ YES	₂☐ NO	₃☐ I don't know
4. **Hyperactivity**	₁☐ YES	₂☐ NO	₃☐ I don't know
5. **Behavior problems in school**	₁☐ YES	₂☐ NO	₃☐ I don't know
6. **Depression or sadness**	₁☐ YES	₂☐ NO	₃☐ I don't know
7. **Fighting or arguing with parent(s)**	₁☐ YES	₂☐ NO	₃☐ I don't know
8. **A Learning disorder**	₁☐ YES	₂☐ NO	₃☐ I don't know
9. **Other emotional problems**	₁☐ YES	₂☐ NO	₃☐ I don't know

please list: _____

This school year, how many times has this child done the following things:

(Check never, once, or more than once for each question)

10. **Gotten into a physical fight at school**	₀☐ Never	₁☐ Once	₂☐ More than once
11. **Been out of control when angry**	₀☐ Never	₁☐ Once	₂☐ More than once
12. **Felt stressed**	₀☐ Never	₁☐ Once	₂☐ More than once
13. **Felt fearful that someone close to him or her will die**	₀☐ Never	₁☐ Once	₂☐ More than once

La Salud Emocional de este Niño

Se incluyen preguntas acerca de la salud emocional de este niño para mejorar los servicios de salud emocional que se ofrecen a los estudiantes. ***Esta información se mantendrá en privado.*** *No hay respuestas correctas o incorrectas; por lo tanto, le pedimos que sea lo más honesto posible.*

1. **En general, ¿cómo es la salud emocional de este niño?** (marque una casilla):
   1☐ MUY BUENA 2☐ BUENA 3☐ REGULAR 4☐ MALA

2. **¿Cómo piensa que este niño se siente acerca de sí mismo?** (marque una casilla):
   1☐ BUENA 2☐ REGULAR 3☐ NO MUY BUENA

En este año escolar, este niño ha experimentado:

(Marque sí, no, o no sé para cada pregunta):

3.	**Ansiedad o nerviosismo**	1☐ SÍ	2☐ NO	3☐ NO SÉ
4.	**Hiperactividad**	1☐ SÍ	2☐ NO	3☐ NO SÉ
5.	**Problemas de conducta en la escuela**	1☐ SÍ	2☐ NO	3☐ NO SÉ
6.	**Depresión o tristeza**	1☐ SÍ	2☐ NO	3☐ NO SÉ
7.	**Peleas o discusiones con el padre(s)**	1☐ SÍ	2☐ NO	3☐ NO SÉ
8.	**Un problema de aprendizaje**	1☐ SÍ	2☐ NO	3☐ NO SÉ
9.	**Otros problemas emocionales por favor haga una lista:** _____	1☐ SÍ	2☐ NO	3☐ NO SÉ

En este año escolar, cuántas veces ha hecho este niño las siguientes cosas:

(Marque nunca, una vez, o Más de una vez para cada pregunta):

10.	**Participar en una pelea física en la escuela**	0☐ Nunca	1☐ Una vez	2☐ Más de una vez
11.	**Perder el control cuando está enojado**	0☐ Nunca	1☐ Una vez	2☐ Más de una vez
12.	**Sentirse muy nervioso o tenso**	0☐ Nunca	1☐ Una vez	2☐ Más de una vez
13.	**Temor que un querido pueda morirse**	0☐ Nunca	1☐ Una vez	2☐ Más de una vez

Getting Health Care for This Child

1. **During this school year, where has your child gone the most for his/her physical health services (i.e., shots, check-ups, physicals, sickness, colds)?**

   (check one box):

   1☐ Community clinic (e.g., La Casa, Quigg Newton)
   2☐ Valdez Health Clinic (where Deanna and Rose work)
   3☐ School nurse (Virginia Muñoz)
   4☐ Hospital clinic
   5☐ Private clinic (if you have private insurance, i.e., Sloans Lake, FHP)
   6☐ Kaiser
   7☐ Colorado Access provider
   8☐ Hospital emergency room
   9☐ Pharmacy
   10☐ Curandera/Espiritista
   11☐ Other _____

2. **Thinking about the place your child has gone the most for physical health services (the health service you marked in the last question), What do you like about that one service?**

   (check as many as you want):

   1☐ The people there are good with the children
   2☐ I feel comfortable with the people there
   3☐ The hours are convenient
   4☐ The people there communicate well with me
   5☐ My child gets an appointment quickly
   6☐ My child gets good follow-up care
   7☐ The cost is good
   8☐ The appointments don't take very lon
   19☐ It is easy for this child to get there
   10☐ This child doesn't miss much school
   11☐ The people there help me understand my child's sickness
   12☐ Other, please describe:_____

3. **Check all the other places your child has gone to get physical health services during this school year?**

   (check as many as you want):

   1☐ Community clinic (e.g., La Casa, Quigg Newton)
   2☐ Valdez Health Clinic (where Deanna and Rose work)
   3☐ School nurse (Virginia Muñoz)
   4☐ Hospital clinic
   5☐ Private clinic (if you have private insurance, i.e., Sloans Lake, FHP)
   6☐ Kaiser
   7☐ Colorado Access provider
   8☐ Hospital emergency room
   9☐ Pharmacy
   10☐ Curandera/Espiritista
   11☐ Other _____

4. **Check all the places this child has gone for emotional health services this school year? (e.g., care for depression, anxiety)?**

   (check as many as you want):

   1☐ Never needed this care
   2☐ Valdez Health Clinic Counselor (Jennie)
   3☐ Doctor's office
   4☐ Community or hospital clinic
   5☐ Mental health center (i.e., Mental Health Corporation, St. Pat's, Servicios de la Raza)
   6☐ Emergency room
   7☐ School counselor (Phyllis Green) or social worker (Virginia Benvenuti)
   8☐ Other (i.e., private therapist), please list:_____

Obteniendo Cuidado de Salud para este Niño

1. **Durante este año escolar, ¿dondé ha recibido su niño la mayoría de servicios de salud física (por ejm., vacunas, revisiones, exámenes físicos, enfermedades, resfriós)?**

   (marque una casilla):

   1☐ Clínica comunitaria (ejm., La Casa, Quigg Newton)
   2☐ Clínica de Salud en la Escuela Valdez (Deanna, Rose)
   3☐ Enfermera de la escuela (Virginia Muñoz)
   4☐ Clínica de hospital
   5☐ Clínica privada (si tiene seguro privado, por ejm., Sloans Lake, FHP)
   6☐ Kaiser
   7☐ Proveedor de "Colorado Access"
   8☐ Emergencia del hospital
   9☐ Farmacia
   10☐ Curandera/Espiritista
   11☐ Otro _____

2. **En relación al lugar donde su niño ha recibido la mayoria de servicios de salud física (aquél que indicó en la última pregunta), ¿qué le gusta acerca de este servicio?**

   (indique tantos como desee):

   1☐ La gente es buena con los niños
   2☐ Me siento cómodo con las personas de ese lugar
   3☐ Las horas son convenientes
   4☐ La gente se comunica muy bien conmigo
   5☐ Mi niño obtiene rápidamente una cita
   6☐ Mi niño recibe un buen control de salud
   7☐ El costo es bueno
   8☐ Las citas no duran mucho
   9☐ Es fácil para que este niño vaya allí
   10☐ Este niño no falta mucho a clases
   11☐ La gente allí me ayuda a entender la enfermedad de mi niño
   12☐ Otros, por favor describa _____

3. **Indique todos los otros lugares donde su niño ha recibido servicios de salud física, durante este año escolar.**

   (indique tantos como desee):

   1☐ Clínica comunitaria (ejm., La Casa, Quigg Newton)
   2☐ Clínica de Salud en la Escuela Valdez (Deanna, Rose)
   3☐ Enfermera de la escuela (Virginia Muñoz)
   4☐ Clínica de hospital
   5☐ Clínica privada (si tiene seguro privado, por ejm., Sloans Lake, FHP)
   6☐ Kaiser
   7☐ Proveedor de "Colorado Access"
   8☐ Emergencia del hospital
   9☐ Farmacia
   10☐ Curandera/Espiritista
   11☐ Otro _____

4. **Indique todos los lugares donde su niño ha recibido servicios de salud emocional, este año escolar. (por ejm., cuidado para depresión, ansiedad)**

   (indique tantos como desee):

   1☐ Nunca necesitó este cuidado
   2☐ Clínica de Salud en la Escuela Valdez (Jennie)
   3☐ Consultorio médico
   4☐ Clínica del hospital o comunidad
   5☐ Centro de salud mental (por ejm., Mental Health Corporation, Servicios de la Raza, St. Pat's)
   6☐ Sala de emergencia
   7☐ Consejero (Phyllis Green) o trabajador social (Ms.Benvenut de la escuela
   8☐ Otros, (por ejm., terapeúta privado),por favor, haga una lista:_____

5. **Check all the problems you have had when getting physical and/or emotional health services for this child?**

(check as many as you want):

1☐ Transportation
2☐ Health providers/staff do not speak Spanish
3☐ I wait too long at the appointment
4☐ It is hard to get an appointment
5☐ No health insurance
6☐ Services cost too much
7☐ Child is afraid to go
8☐ I have to miss work
9☐ I don't know where to go
10☐ I can't go when the service is open
11☐ My child misses school
12☐ Other reason? please list:_____
13☐ I have not had any problems when getting health services for this child

6. **Of all the health services you use for this child's health, with which one are you most satisfied?** ***(check <u>one</u> box)***

1☐ Community clinic (e.g., La Casa, Quigg Newton)
2☐ Valdez Health Clinic (Deanna, Rose, Jeannie)
3☐ School nurse (Virginia Muñoz)
4☐ Hospital clinic
5☐ Private clinic (if you have private insurance, i.e., Sloans Lake, FHP)
6☐ Kaiser
7☐ Colorado Access provider
8☐ Hospital emergency room
9☐ Curandera/Espiritista/Santera
10☐ Pharmacy
11☐ Other _____

7. **How hard is it to get immunizations for this child?** *(check <u>one</u> box)*

0☐ I don't know
1☐ Not at all hard
2☐ A little hard
3☐ Very hard
4☐ Impossible/ Unable to get this care

8. **How hard is it to get physical health services for this child (i.e., services for sickness, injuries, colds, immunizations, physicals)?** *(check <u>one</u> box)*

0☐ I don't know
1☐ Not at all hard
2☐ A little hard
3☐ Very hard
4☐ Impossible/ Unable to get this care

5. **Indique todos los problemas que ha tenido para obtener servicios de salud física y/o emocional para este niño.**

(indique tantos como desee):

1☐ Transporte
2☐ Proveedores/personal de salud no hablan español
3☐ He esperado mucho en la cita
4☐ Es difícil conseguir una cita
5☐ No tengo seguro de salud
6☐ El costo de los servicios es muy alto
7☐ El niño tiene miedo de ir
8☐ Tengo que faltar al trabajo
9☐ No sé dónde ir
10☐ No puedo ir cuando se ofrecen los servicios
11☐ Mi niño falta a la escuela
12☐ Otro razón? Por favor, indique:_____
13☐ No he tenido ningún problema para obtener servicios de cuidado de salud para este niño

6. **De todos los servicios que usa para la salud de este niño, ¿con cuál está más satisfecho?**

(marque <u>una</u> casilla):

1☐ Clínica comunitaria (ejm., La Casa, Quigg Newton)
2☐ Clínica de Salud en la Escuela Valdez (Deanna, Rose, Jennie)
3☐ Enfermera de la escuela (Virginia Muñoz)
4☐ Clínica de hospital
5☐ Clínica privada (si tiene seguro privado, por ejm., Sloans Lake, FHP)
6☐ Kaiser
7☐ Proveedor de "Colorado Access"
8☐ Emergencia del hospital
9☐ Farmacia
10☐ Curandera/Espiritista
11☐ Otro _____

7. **¿Qué difícil es obtener vacunas para este niño?** *(marque <u>una</u> casilla):*

0☐ No sé
1☐ No muy difícil
2☐ Un poco difícil
3☐ Muy difícil
4☐ Imposible/incapaz de obtener este cuidado

8. **¿Qué difícil es obtener servicios de salud <u>física</u> para este niño (por ejm., servicios para enfermedad, heridas, resfríos, vacunas, exámanes físicos)?** *(marque <u>una</u> casilla):*

0☐ No sé
1☐ No muy difícil
2☐ Un poco difícil
3☐ Muy difícil
4☐ Imposible/incapaz de obtener este cuidado

9. **How hard is it to get a "physical" for this child?** *(check one box)*

0☐ I don't know what a "physical" is
1☐ Not at all hard
2☐ A little hard
3☐ Very hard
4☐ Impossible/ Unable to get this care

10. **How hard is it to get emotional health services for this child (i.e., services for depression, anxiety, or behavior problems) ?** *(check one box)*

0☐ I don't know/never needed this service
1☐ Not at all hard
2☐ A little hard
3☐ Very hard
4☐ Impossible/ Unable to get this care

11. **How hard is it to get dental services for this child?** *(check one box)*

0☐ I don't know/never needed this service
1☐ Not at all hard
2☐ A little hard
3☐ Very hard
4☐ Impossible/ Unable to get this care

12. **This school year, have you been able to get health services for this child every time it has been needed?** *(check one box):*

1☐ YES 2☐ NO

THIS CHILD' S HEALTH CARE

1. **Does this child have health insurance?** *(check one box):*

1☐ YES 2☐ NO 3☐ I don't know

2. **Does this child have Medicaid coverage?** *(check one box):*

1☐ YES 2☐ NO 3☐ I don't know

3. **What type of health insurance does this child have?** *(check one box):*

1☐ NONE - No insurance
2☐ Medicaid
3☐ Aetna; Cigna; FHP; Qual Med; Sloans Lake
4☐ Kaiser
5☐ HMO
6☐ Blue Cross / Blue Shield
7☐ Private Insurance
8☐ Sliding Fee Scale
9☐ I Don't Know
10☐ Other - please list:_____

9. **¿Qué difícil es obtener un chequeo general para este niño?** ***(marque una casilla):***

0☐ No sé lo que es un "chequeo general"
1☐ No muy difícil
2☐ Un poco difícil
3☐ Muy difícil
4☐ Imposible/incapaz de obtener este cuidado

10. **¿Qué difícil es obtener servicios de cuidado de salud emocional para este niño (por ejm., servicios para depresión, ansiedad, o problemas de conducta?** ***(marque una casilla):***

0☐ No sé/nunca fue necesario
1☐ No muy difícil
2☐ Un poco difícil
3☐ Muy difícil
4☐ Imposible/incapaz de obtener este cuidado

11. **¿Qué difícil es obtener servicios dentales para este niño?** ***(marque una casilla):***

0☐ No sé/nunca fue necesario
1☐ No muy difícil
2☐ Un poco difícil
3☐ Muy difícil
4☐ Imposible/incapaz de obtener este cuidado

12. **Durante este año escolar, ¿ha podido obtener servicios de salud para este niño cada vez que se necesitaba?** ***(marque una casilla):***

1☐ SÍ 2☐ NO

El Cuidado de Salud de Este Niño

1. **¿Tiene este niño seguro de salud?** ***(marque una casilla):***

1☐ SÍ 2☐ NO 3☐ NO SÉ

2. **¿Está este niño protegido por Medicaid?** ***(marque una casilla):***

1☐ SÍ 2☐ NO 3☐ NO SÉ

3. **¿Qué clase de seguro de salud tiene este niño?** ***(marque una casilla):***

1☐ NINGUNO - Sin seguro
2☐ Medicaid
3☐ Aetna; Cigna; FHP; Qual Med; Sloans Lake
4☐ Kaiser
5☐ HMO
6☐ Blue Cross/ Blue Shield
7☐ Seguro Privado
8☐ Escala Variable de Costo
9☐ No sé
10☐ Otro - por favor indique: _____

4. **This school year, how many times has your child gone to a nurse or doctor? (Count up all the visits to all the health services this child has used. i.e., La Casa, Hospital clinic, Emergency room, Valdez Health Clinic.)**

(check one box):

1☐ 0 times 2☐ 1-2 times 3☐ 3-4 times 4☐ 5 or more times

5. **This school year, how many times has this child gone to see a counselor or social worker? (Think of all the counselors and social workers this child has seen, i.e., Virginia Benvenuti, Phyllis Green, Mental Health Corporation, private therapists, or Jeannie at the Valdez Health Clinic)**

(check one box):

1☐ 0 times 2☐ 1-2 times 3☐ 3-4 times 4☐ 5 or more times

6. **This school year, how many times did this child go to a hospital emergency room for a problem that was an accident, injury, or sudden, severe problem?** *(check one box):*

1☐ 0 times 2☐ 1-2 times 3☐ 3-4 times 4☐ 5 or more times

7. **This school year, how many times did this child go to a hospital emergency room for a problem that was not an accident, injury, or sudden, severe problem?** *(check one box):*

1☐ 0 times 2☐ 1-2 times 3☐ 3-4 times 4☐ 5 or more times

8. **In the past year (June 1996- May 1997), has this child had a "physical"?** *(check one box):*

1☐ YES 2☐ NO 3☐ I don't know what a "physical" is

9. **In the past year (June 1996- May 1997), has this child received a routine, yearly dental check-up (this check-up takes place regularly, even if your child doesn't have a dental problem)?** *(check one box):*

1☐ YES 2☐ NO 3☐ I don't know what a "yearly dental check-up" is

10. **How often are this child's physical health needs cared for at the Valdez Health Clinic? (where Deanna and Rose work)** *(check one box):*

1☐ None of the time 3☐ Most of the time

2☐ Some of the time 4☐ All of the time

4. **<u>En este año escolar</u>, ¿cuántas veces su niño ha visto a una enfermera o a un doctor? (Cuente todas las visitas a todos los servicios de salud que su niño ha usado; por ejm., La Casa , clínica del hospital, sala de emergencia, Clínica de Salud en la Escuela Valdez.)**

(marque <u>una</u> casilla):

1☐ 0 veces 2☐ 1-2 veces 3☐ 3-4 veces 4☐ 5 o más veces

5. **<u>En este año escolar</u>, ¿cuántas veces ha visitado su niño un consejero o trabajador social? (Recuerde todos los consejeros y trabajadores sociales que ha visto este niño; por ejm, Virginia Benvenuti, Phyllis Green, Mental Health Corporation, terapeútas privados, o Jennie en la Clínica en la Escuela Valdez)**

(marque <u>una</u> casilla):

1☐ 0 veces 2☐ 1-2 veces 3☐ 3-4 veces 4☐ 5 o más veces

6. **<u>En este año escolar</u>, ¿cuántas veces este niño ha estado en la sala de emergencia del hospital a causa de un accidente, herida, o un problema grave e inesperado?**

(marque <u>una</u> casilla):

1☐ 0 veces 2☐ 1-2 veces 3☐ 3-4 veces 4☐ 5 o más veces

7. **<u>En este año escolar</u>, ¿cuántas veces este niño ha estado en la sala de emergencia del hospital por un problema que <u>no fue</u> un accidente, herida, o problema grave e inesperado?**

(marque una casilla):

1☐ 0 veces 2☐ 1-2 veces 3☐ 3-4 veces 4☐ 5 o más veces

8. **<u>En el pasado año (junio 1996 - mayo 1997)</u>, ¿ ha tenido este niño un "chequeo general"?**

(marque una casilla):

1☐ Sí 2☐ NO 3☐ No sé lo qué es un "chequeo general"

9. **<u>En el pasado año (junio 1996 - mayo 1997)</u>, ¿ ha recibido este niño un chequeo general dental? (¿Se lleva a cabo este cheque aun cuando su niño no tenga un problema?)**

(marque una casilla):

1☐ Sí 2☐ NO 3☐ No sé lo qué es un "chequeo general dental"

10. **¿ Con cuanta frecuencia se cuidan las necesidades de salud <u>física</u> de este niño en la Clínica de Salud en la Escuela Valdez? (dónde trabajan Deanna y Rose) *(marque <u>una</u> casilla):***

1☐ Nunca 3☐ La mayor parte del tiempo

2☐ Algunas veces 4☐ Todo el tiempo

11. How often are this child's <u>emotional</u> health needs cared for at the Valdez Health Clinic? (where Jeannie works) *(check <u>one</u> box):*

1☐ None of the time
2☐ Some of the time
3☐ Most of the time
4☐ All of the time

12. Is the Valdez Health Clinic the place you go <u>most</u> of the time for this child's health care needs? *(check <u>one</u> box):*

1☐ YES
2☐ NO

<u>Satisfaction With The Health Services Your Child Uses</u>
This section is VERY important. Please take your time to complete this section. There are no right or wrong answers. This information is confidential.

1. How important is the Valdez Health Clinic to you and this child? *(check <u>one</u> box):*

1☐ Not important
2☐ A little important
3☐ Pretty important
4☐ Very important

2. If this child <u>has not</u> used the Valdez Health Clinic, why not?

(check as many as you want):

1☐ My child <u>has</u> used the Valdez Health Clinic
2☐ In general, we don't trust doctors and nurses very much
3☐ My child hasn't needed the Valdez Health Clinic
4☐ We like another place more than the Valdez Health Clinic
5☐ I didn't know about the Valdez Health Clinic.
6☐ The Valdez Health Clinic doesn't give the help/care my child needs
7☐ We don't like getting help/care at the Valdez Health Clinic.
8☐ Other (list)_____

3. Do you think this child will use the Valdez Health Clinic <u>in the future</u>? *(check <u>one</u> box):*

1☐ YES
2☐ NO
3☐ I DON'T KNOW

4. Overall, how satisfied are you with the <u>physical health services</u> this child has received at the Valdez Health Clinic? *(check <u>one</u> box):*

0☐ My child has not received <u>physical health</u> services at the Valdez Health Clinic
1☐ Very satisfied
2☐ Mostly satisfied
3☐ Somewhat dissatisfied
4☐ Quite dissatisfied

11. ¿ Con cuanta frecuencia se cuidan las necesidades de salud emocional de este niño en la Clínica de Salud Valdez? (dónde trabaja Jennie) ***(marque una casilla):***

1☐ Nunca
2☐ Algunas veces
3☐ La mayor parte del tiempo
4☐ Todo el tiempo

12. ¿ Es la Clinica de Salud Valdez el lugar que visita la mayor parte del tiempo para que cuiden de las necesidades de salud de esta niño? ***(marque una casilla):***

1☐ Sí
2☐ NO

Satisfacción con los Servicios de Salud que Usa su Niño

Esta sección es muy importante. Por favor tome su tiempo para completar esta sección. No hay respuestas correctas o incorrectas. Esta información es confidencial.

1. ¿Cuán importante es para Ud. y su niño la Clinica de Salud en la Escuela Valdez?

(Marque una casilla):

1☐ No es importante
2☐ Poco importante
3☐ Bastante importante
4☐ Muy importante

2. Si este niño no ha usado la Clinica de Salud en la Escuela Valdez, ¿por qúe no?

(indique tantos como desee):

1☐ Mi niño ha usado la Clínica de Salud en la Escuela Valdez
2☐ En general, no confiamos mucho en los doctores y enfermeras
3☐ Mi niño no ha necesitado de la Clínica de Salud en la Escuela Valdez
4☐ Nos gusta otro lugar más que la Clínica de Salud en la Escuela Valdez
5☐ No sabía acerca de la Clínica de Salud en la Escuela Valdez
6☐ La Clínica Valdez no ofrece la ayuda/cuidado que mi niño necesita
7☐ No nos gusta recibir ayuda/cuidado en la Clínica de Salud en la Escuela Valdez
8☐ Otro (indique)_____

3. ¿Cree Ud. que este niño usará la Clínica de Salud en la Escuela Valdez en el futuro?

(marque una casilla):

1☐ Sí
2☐ NO
3☐ NO SÉ

4. En resumen, ¿cuán satisfecho está con los servicios de salud física que este niño ha recibido en la Clínica de Salud Valdez? ***(marque una casilla):***

0☐ Mi niño no ha recibido servicios de salud física en la Clínica de Salud Valdez
1☐ Muy satisfecho
2☐ Mayormente satisfecho
3☐ Algo insatisfecho
4☐ Bastante insatisfecho

5. **Overall, how satisfied are you with the emotional health services at the Valdez Health Clinic?** *(check one box):*

   0☐ My child has not received emotional health services at athe Valdez Health Clinic
   1☐ Very satisfied
   2☐ Mostly satisfied
   3☐ Somewhat dissatisfied
   4☐ Quite dissatisfied

6. **If the Valdez Health Clinic closed, would you be able to get health care for this child?** *(check one box):*

   1☐ Yes, It would be easy to get other care
   2☐ Yes my child could get care, but it would be harder to get
   3☐ No, I don't think I could get the care this child needs
   4☐ I don't know

About You and This Child

1. **Does this child get free or low cost meals at school?** *(check one box):*

   1☐ YES 2☐ NO

2. **Does this child's family now get public assistance (e.g., AFDC, welfare, etc.)?** *(check one box):*

   1☐ YES 2☐ NO

3. **In general, what language(s) do you read and speak?** *(check one box)*

   1☐ Only Spanish
   2☐ More Spanish than English
   3☐ Both equally
   4☐ More English than Spanish
   5☐ Only English

4. **What was (were) the language(s) you used as a child?** *(check one box)*

   1☐ Only Spanish
   2☐ Spanish better than English
   3☐ Both equally
   4☐ English better than Spanish
   5☐ Only English

5. **What language(s) do you usually speak at home?** *(check one box)*

   1☐ Only Spanish
   2☐ Spanish better than English
   3☐ Both equally
   4☐ English better than Spanish
   5☐ Only English

5. **En resumen, ¿cuán satisfecho está con los servicios de salud emocional en la Clínica de Salud Valdez?** ***(marque una casilla):***

   0☐ Mi niño no ha recibido servicios de salud emocional en la Clínica de Salud Valdez
   1☐ Muy satisfecho
   2☐ Mayormente satisfecho
   3☐ Algo insatisfecho
   4☐ Bastante insatisfecho

6. **Si se cerrara la Clínica de Salud Valdez, ¿le sería posible obtener cuidado de salud para este niño?** ***(marque una casilla):***

   1☐ Sí, sería fácil obtener otro cuidado
   2☐ Sí podria obtener cuidado, pero sería difícil obtenerlo
   3☐ No, no creo que podría obtener el cuidado que este niño necesita
   4☐ No sé

Acerca de Su Persona y Este Niño

1. **¿Recibe esta niño comidas gratuitas o a precio reducido en la escuela?** *(marque una casilla)*

   1☐ Sí 2☐ NO

2. **¿Recibe actualmente la familia de este niño ayuda pública? (por ejm., AFDC, "welfare", etc?)** *(marque una casilla):*

   1☐ Sí 2☐ NO

3. **Por lo general, ¿qué idioma(s) leé y habla usted?** *(marque una casilla):*

   1☐ Solo español
   2☐ Español mejor que inglés
   3☐ Ambos por igual
   4☐ Inglés mejor que español
   5☐ Solo inglés

4. **¿Cuál fué el idioma(s) que Ud. habló cuando era niño(a)?** *(marque una casilla):*

   1☐ Solo español
   2☐ Más español que inglés
   3☐ Ambos por igual
   4☐ Más inglés que español
   5☐ Solo inglés

5. **Por lo general, en qué idioma(s) habla Ud. en su casa?** *(marque una casilla):*

   1☐ Solo español
   2☐ Más español que inglés
   3☐ Ambos por igual
   4☐ Más inglés que español
   5☐ Solo inglés

6. **In what language(s) do you usually think?** *(check one box)*

- 1☐ Only Spanish
- 2☐ Spanish better than English
- 3☐ Both equally
- 4☐ English better than Spanish
- 5☐ Only English

7. **What language(s) do you usually speak with your friends?** *(check one box)*

- 1☐ Only Spanish
- 2☐ Spanish better than English
- 3☐ Both equally
- 4☐ English better than Spanish
- 5☐ Only English

More About This Child's Emotional Health

Remember, this survey is confidential and will not be shared with school or clinic staff. We are only interested in this information because it may be related to your child's health.

1. **Since the beginning of this school year, has a parent of this child lost a job?** *(check one box):*

1☐ YES 2☐ NO

2. **Since the beginning of this school year, has a close friend or relative of this child died?** *(check one box):*

1☐ YES 2☐ NO

3. **Since the beginning of this school year, has a parent of this child divorced or separated?** *(check one box):*

1☐ YES 2☐ NO

4. **Since the beginning of this school year, has a parent of this child remarried or developed a new relationship?** *(check one box):*

1☐ YES 2☐ NO

5. **Since the beginning of this school year, has a parent or family member of this child gotten or had a serious illness?** *(check one box):*

1☐ YES 2☐ NO

- **Please put this survey back into the envelope it came in.**
- **Return it to Your Child's Teacher or the Valdez Clinic.**

THANK YOU VERY MUCH!!

6. **Por lo general, en qué idioma(s) piensa Ud?** *(marque una casilla):*

   1☐ Solo español
   2☐ Más español que inglés
   3☐ Ambos por igual
   4☐ Más inglés que español
   5☐ Solo inglés

7. **Por lo general en qué idioma(s) habla Ud. con sus amigos(as)?** *(marque una casilla):*

   1☐ Solo español
   2☐ Más español que inglés
   3☐ Ambos por igual
   4☐ Más inglés que español
   5☐ Solo inglés

Más Acerca de la Salud Emocional de Este Niño

Recuerde, esta encuesta es confidencial y la información no será compartida con el personal de la escuela o de la clínica. Sólo estamos interesados en esta información porque podría estar relacionada con la salud de su niño.

1. **Desde el comienzo de este año escolar, ¿ha perdido el trabajo un padre de este niño?** *(marque una casilla):*

   1☐ SÍ 2☐ NO

2. **Desde el comienzo de este año escolar, ¿ha fallecido un pariente o amigo cercano de este niño?** *(marque una casilla):*

   1☐ SÍ 2☐ NO

3. **Desde el comienzo de este año escolar, ¿se han separado o divorciado los padres de este niño?** *(marque una casilla):*

   1☐ SÍ 2☐ NO

4. **Desde el comienzo de este año escolar, ¿se ha vuelto a casar o iniciado una nueva relación, uno de los padres de este niño?** *(marque una casilla):*

   1☐ SÍ 2☐ NO

5. **Desde el comienzo de este año escolar, ¿ha tenido una enfermedad gravemente un padre o persona en la familia?** *(marque una casilla):*

   1☐ SÍ 2☐ NO

- ¡Por favor coloque la encuesta en el sobre que recibió
- Devuelva al profesor de su niño o a la Clínica Valdez

¡LE AGRADECEMOS MUCHÍSIMO!

APPENDIX D: SURVEYS FOR MIDDLE AND HIGH SCHOOL- TEEN AND PARENT SURVEYS

HELLO STUDENT!

The University of Colorado is interested in teens' health. We hope you will help us to understand teens' health better by doing this survey. Your answers will help us to give students better heath care in the Student Health Centers and to complete a research project on teenagers' health.

When you are done with the survey, you should fold it in half and put it in the closed box at the front of the room without showing it to anyone. This will keep your survey private from others in the room. Your answers will not be given to your school or your parents. **BUT**, someone may need to be told if your answers on this survey show that you are very sick or have a very serious problem. Otherwise, nobody will know how you answered these questions. If you do not want to do this survey you do not have to, and you can skip or stop answering questions at any time. Nothing will happen to you if you decide not to take this survey or any other survey that is part of this project.

While taking the survey, PLEASE ANSWER ALL THE QUESTIONS, AND BE AS HONEST AS YOU CAN. If any of the questions make you feel upset or sad, you can go to the Student Health Center for help. Or you can call if you have any questions about this survey, call

Or you may call one of the people listed at the bottom of this paper. If you have questions about your rights as a person in a research project, you can call

I have read this page and understand that if I take this survey, my answers will be used to study and improve health care for teenagers. I understand that it is my decision to participate in this survey.
PLEASE PRINT, THEN SIGN YOUR NAME BELOW IF YOU AGREE TO FILL OUT THE SURVEY.

_____

PRINT your first and last name here

_____

SIGN your first and last name here

TEEN HEALTH SURVEY

For Students in Middle School and High School

This is a survey about your health and health care needs. Your answers will help improve health care services for teens. THIS IS NOT A TEST - THERE ARE NO RIGHT OR WRONG ANSWERS - PLEASE ANSWER EVERY QUESTION AS BEST YOU CAN. Circle your answers to these questions or write them in the space provided. Thank you for your help.

About School

1. **Which best describes what kind of student you are?** (circle one):

   (1) Excellent student
   (2) Good student
   (3) Average student
   (4) Below average student

2. **Have you ever "dropped out" of school?** (circle one): (1) YES (2) NO

3. **Do you think you will be able to graduate?** (circle one): (1) YES (2) NO

4. **How much education or training do you plan to get?** (circle one):

   (1) Some high school
   (2) High school diploma
   (3) Some college
   (4) College degree (associate or bachelors degree)
   (5) Graduate school (beyond college)
   (6) Armed services (Army, Navy, etc.)
   (7) Undecided

About Your Time

1. **Do you have a job?** (circle one): (1) YES (2) NO

2. **How many hours do you work for pay each week?** (circle one):

   (1) 0 (2) 1-10 (3) 11-19 (4) 20 or more

3. **Do you belong to any school or neighborhood sports teams?** (circle one): (1) YES (2) NO

4. **Are you involved in any other school activities** (clubs, band, choir, plays, etc.)? (circle one): (1) YES (2) NO

5. **Do you belong to any groups in your community or church?** (circle one): (1) YES (2) NO

There may be people in your life who are always ready to help and support you and they are concerned about your feelings and well-being. How likely would you be to go to each person listed below for help and support? Circle a number for each person.

	Not at all Likely 0	Not Very Likely 1	Somewhat Likely 2	Very Likely 3	Extremely Likely 4
1. Parent(s)	0	1	2	3	4
2. Sister or brother	0	1	2	3	4
3. Other relative	0	1	2	3	4
4. Other adult	0	1	2	3	4
5. Girlfriend/boyfriend	0	1	2	3	4
6. Friend your age	0	1	2	3	4
7. Police	0	1	2	3	4
8. Teacher/Coach	0	1	2	3	4
9. Principal at school	0	1	2	3	4
10. Student Health Center/nurse	0	1	2	3	4
11. Religious leader	0	1	2	3	4
12. Social worker/Counselor	0	1	2	3	4
13. Probation officer	0	1	2	3	4
14. Doctor/ Nurse (not at school)	0	1	2	3	4

15. **How do you spend most of your free time?** (circle one):

(1) by myself (2) with one friend (3) with many friends (4) with my family

16. **Do you have a best friend?** (circle one): (1) YES (2) NO

17. **Do you have a boyfriend or girlfriend** (going steady or going with someone)? (circle one): (1) YES (2) NO

About Your Health

1. How good is your physical health in general? (circle one):

   (1) VERY GOOD (2) GOOD (3) OKAY (4) NOT VERY GOOD (5) BAD

2. Most of the time, how happy are you? (circle one):

   (1) VERY HAPPY (2) PRETTY HAPPY (3) NOT HAPPY OR UNHAPPY

   (4) UNHAPPY (5) VERY UNHAPPY

3. In the last year, did you have to stay overnight in a hospital because you were physically sick or hurt? (circle one):

   (1) YES (2) NO

   If yes, why? (write in):_____

   _____

4. Have you ever been hospitalized for emotional reasons? (circle one):

   (1) YES (2) NO

Where do you usually go when you are sick or in need of health care? (circle a number for each place listed below):

	Never 0	Rarely 1	Some of the time 2	Most of the time 3	All of the time 4
1. Medical doctor's office	0	1	2	3	4
2. Hospital emergency room	0	1	2	3	4
3. Community health clinic	0	1	2	3	4
4. Hospital clinic	0	1	2	3	4
5. Student Health Center nurse	0	1	2	3	4
6. Other (folk healer, drug store, chiropractor)	0	1	2	3	4

Where do you usually go for emotional or mental health care? (circle a number for each place listed below):

	Never 0	Rarely 1	Some of the time 2	Most of the time 3	All of the time 4
1. Medical doctor's office	0	1	2	3	4
2. Hospital emergency room	0	1	2	3	4
3. Community health clinic	0	1	2	3	4
4. Hospital clinic	0	1	2	3	4
5. School Health Center nurse	0	1	2	3	4
6. Mental health center	0	1	2	3	4
7. Private therapist (social worker, psychologist, psychiatrist)	0	1	2	3	4
8. Other (folk healer, religious leader)	0	1	2	3	4

How satisfied were you with the medical or mental health care that you received at your last visit to each of these places? (circle a number for each place listed below):

	Never Used 0	Very Dissatisfied 1	Somewhat Dissatisfied 2	Not Satisfied or Dissatisfied 3	Somewhat Satisfied 4	Very Satisfied 5
1. Medical doctor's office	0	1	2	3	4	5
2. Hospital emergency room	0	1	2	3	4	5
3. Community health clinic	0	1	2	3	4	5
4. Student Health Center/nurse	0	1	2	3	4	5
5. Hospital clinic	0	1	2	3	4	5
6. Mental health center	0	1	2	3	4	5
7. Private therapist (social worker, psychologist, psychiatrist)	0	1	2	3	4	5
8. Other (folk healer, drug store, chiropractor, religious leader)	0	1	2	3	4	5

In the last year, where were you seen for the following problems? Circle the corresponding number for each problem listed. If you did not have a particular problem in the last year, circle 0 for "did not have this problem."

	Did not have this problem	Emergency Room	Dr.'s Office	Student Health Center Nurse	Community Clinic	Hospital Clinic	Mental Health Center/Counselor	Other
	0	1	2	3	4	5	6	7
1. Asthma	0	1	2	3	4	5	6	7
2. Allergies	0	1	2	3	4	5	6	7
3. Physical/Sports exam	0	1	2	3	4	5	6	7
4. Injury	0	1	2	3	4	5	6	7
5. Ear infection	0	1	2	3	4	5	6	7
6. Cold/Flu/Sore throat	0	1	2	3	4	5	6	7
7. Immunizations	0	1	2	3	4	5	6	7
8. Headache	0	1	2	3	4	5	6	7
9. Stomach ache	0	1	2	3	4	5	6	7
10. Chest pains	0	1	2	3	4	5	6	7
11. Menstrual problems	0	1	2	3	4	5	6	7
12. Birth control/pregnancy	0	1	2	3	4	5	6	7

Continued on next page . . . . . .

In the last year, where were you seen for the following problems? Circle the corresponding number for each problem listed. If you did not have a particular problem in the last year, circle 0 for "did not have this problem."

	Did not have this problem	Emergency Room	Dr.'s Office	School Health Center Nurse	Community Clinic	Hospital Clinic	Mental Health Center/Counselor	Other
	0	1	2	3	4	5	6	7
13. Sexually transmitted disease	0	1	2	3	4	5	6	7
14. Emotional problems	0	1	2	3	4	5	6	7
15. Behavior problems	0	1	2	3	4	5	6	7
16. Problems between you and your parent(s)	0	1	2	3	4	5	6	7
17. Getting into trouble	0	1	2	3	4	5	6	7
18. Alcohol use	0	1	2	3	4	5	6	7
19. Drug use	0	1	2	3	4	5	6	7
20. Any other problems	0	1	2	3	4	5	6	7

Write in other problems here _____

More About Your Health

1. When you go to the doctor, do you usually see the same doctor, or do you see a different doctor each time? (circle one):

   (1) Same doctor (2) Different doctor

2. How often do you visit a medical doctor or nurse practitioner for regular check-ups or physical exams to make sure you are healthy? (circle one):

   (0) Never (1) Every 2-3 years (2) Once a year

   (3) Twice a year (4) More than twice a year

3. In the last year, (twelve months), how many times did you see a medical doctor or nurse practitioner? (circle one):

   (0) 0 (1) 1-2 (2) 3-4 (3) 5-8 (4) 9-10 (5) 11 or more

4. About how long ago did you go to the dentist for a check-up or cleaning? (circle one):

   (1) Have never been to a dentist (2) Within the past six months (3) Within the past year

   (4) Within the past two years (5) More than two years

5. How scared are you of going to the doctor? (circle one):

   (1) Not at all scared (2) Kind of scared (3) Very scared

6. How scared are you of going to the dentist? (circle one):

   (1) Not at all scared (2) Kind of scared (3) Very scared

7. How scared are you of going to a mental health counselor? (circle one):

   (1) Not at all scared (2) Kind of scared (3) Very scared

8. In the last year, how many times did you go to an emergency room? (circle one):

   (0) 0 (1) 1-2 (2) 3-4 (3) 5-6 (4) 7-8 (5) 9-10 (6) 11 or more

9. If you went to the emergency room for a problem, why did you chose the emergency room? (circle all that are true):

   (1) That's where I usually go.

   (2) I did not know where else to go.

   (3) No other place was open.

   (4) I was too sick or hurt too badly to wait.

   (5) My own doctor wasn't available.

   (6) Other (list) _____

10. In the last 90 DAYS (three months), how many school days did you miss due to physical illness? (circle one):

(0) 0 (1) 1- 2 (2) 3-5 (3) 6-10 (4) more than 10

11. In the last 90 DAYS (three months), how many times did you miss school to go to a medical or dental appointment? (circle one):

(0) 0 (1) 1-2 (2) 3-5 (3) 6-10 (4) more than 10

12. In the last 90 DAYS (three months), how many times did you miss school because you were very upset or very sad? (circle one):

(0) 0 (1) 1-2 (2) 3-5 (3) 6-10 (4) more than 10

13. In the last 90 DAYS (three months), how many times did you miss school because you overslept or were too tired? (circle one):

(0) 0 (1) 1-2 (2) 3-5 (3) 6-10 (4) more than 10

14. In the last 90 DAYS (three months), how many times did you miss school because you had business to attend to, such as, helping at home, working or looking for a job? (circle one):

(0) 0 (1) 1-2 (2) 3-5 (3) 6-10 (4) more than 10

15. In the last year, were you sick or hurt? (circle one):

(1) YES - *(If you marked "YES", go on to question # 16, below)*

(2) NO - *(If you marked "NO", go to question # 18, on page 9)*

16. If you answered "YES" to question # 15, did you get medical care when you needed it? (circle one):

(0) I did not need medical care-*(If you selected this answer, go to question #18 on page 9)*

(1) YES, I got medical care - *(If you answered "YES", go to question #18 on page 9)*

(2) NO, I did not get any medical care - *(If you answered "NO", go to question #17 below)*

17. If you didn't get medical care when you needed it, why not? (circle all that apply):

(1) Did not know how to make an appointment

(2) We do not have medical insurance

(3) My parents thought I did not need to go

(4) I did not want my parents to know

(5) My parents couldn't go and I did not have a way to get there

(6) The office wasn't open when I could go

(7) I could not miss school/too busy

(8) I was afraid to go

(9) It cost too much and I can't pay

(10) I did not know where to go

(11) Other_____

18. **How many times have you been pregnant or have you gotten someone pregnant?** (circle one):

(0) 0 (1) 1 (2) 2 (3) 3 (4) 4 (5) 5 or more

19. **How many children do you have now?** (circle one):

(0) 0 (1) 1 (2) 2 (3) 3 (4) 4 (5) 5 or more

20. **Have you ever had sexual intercourse (sex)?** (circle one):

(1) YES - *(If "YES", go on to question # 21)*

(2) NO - *(If "NO", go to question # 1 of the next section on the bottom half of this page, which starts - "Have you ever been treated for...")*

What did you or your partner use to prevent pregnancy the last time you had sex? (Circle each method that was used):

21. Condoms
22. Depo-provera (the shot)
23. Birth control pills
24. Norplant
25. Foam/jelly/cream
26. Sponge
27. Diaphragm
28. Withdrawal (man "pulls out")
29. Rhythm or counting days ("safe" time)
30. Nothing
31. Other

Have you ever been treated for or been told by a professional that you have any of the following? (circle yes or no):

1.	Asthma or wheezing	(1) YES	(2) NO
2.	Skin problems or acne	(1) YES	(2) NO
3.	Allergies or hay fever	(1) YES	(2) NO
4.	Sexually transmitted diseases (clap, trich, VD, crabs, gonorrhea, chlamydia, PID, herpes)	(1) YES	(2) NO
5.	Menstrual problems	(1) YES	(2) NO
6.	Pregnancy	(1) YES	(2) NO
7.	Respiratory problems	(1) YES	(2) NO

(continued)

Have you ever been treated for or been told by a professional that you have any of the following? (circle yes or no):

8.	Chest pains	(1) YES	(2) NO
9.	Problems with your parents	(1) YES	(2) NO
10.	Anxiety or nervousness	(1) YES	(2) NO
11.	Depression	(1) YES	(2) NO
12.	Other emotional problems	(1) YES	(2) NO
13.	Problems with alcohol use	(1) YES	(2) NO
14.	Problems with drug use	(1) YES	(2) NO
15.	Headaches or stomach aches	(1) YES	(2) NO
16.	Ear infections	(1) YES	(2) NO
17.	Any injury	(1) YES	(2) NO
18.	General health problem (cold, flu, strep)	(1) YES	(2) NO

How much of a problem has each of these been for you? (circle a number for each problem listed):

		Not a Problem 1	Kind of a Problem 2	A Big Problem 3
1.	Headaches	1	2	3
2.	Dizziness	1	2	3
3.	Passing out or fainting	1	2	3
4.	Sore throats	1	2	3
5.	Being too tired	1	2	3
6.	Stomach aches or belly pain	1	2	3
7.	Shortness of breath	1	2	3
8.	Feeling physically weak or having no energy	1	2	3
9.	Earaches	1	2	3
10.	Wheezing	1	2	3
11.	Chest pain	1	2	3
12.	Wetting the bed or your pants	1	2	3
13.	Soiling or having bowel movement (BM) in your pants or bed	1	2	3

(continued)

How much of a problem has each of these been for you? (circle a number for each problem listed):

		Not a Problem 1	Kind of a Problem 2	A Big Problem 3
14.	Problems with menstrual periods	1	2	3
15.	Fighting with your family	1	2	3
16.	Drug or alcohol use	1	2	3
17.	Losing interest in activities you usually like to do	1	2	3
18.	Problems sleeping	1	2	3
19.	Getting physically hurt or injured	1	2	3
20.	Eating problems (vomiting after eating, secret or binge eating)	1	2	3
21.	Feeling sad most of the time	1	2	3
22.	Crying all the time	1	2	3
23.	Not having control of your behavior	1	2	3
24.	Setting fires (other than in fireplace or campfire) without permission	1	2	3
25.	Hurting animals	1	2	3

26 Do you have any other physical or emotional problems? (circle one): (1) YES (2) NO

If yes, please list these problems below.

_____

_____

_____

How often do the following things happen to you? Read what each letter means, then circle the best answer for each item listed.

	Never in your life A	1-2 times in your life B	Once every few months C	1-2 times a month D	Once a week E	Every day F
1. Drive while using drugs or alcohol	A	B	C	D	E	F
2. Ride in a car with a driver who is high or drunk	A	B	C	D	E	F
3. Smoke cigarettes (even one)	A	B	C	D	E	F
4. Drink alcohol (more than a sip)	A	B	C	D	E	F
5. Get drunk on alcohol	A	B	C	D	E	F
6. Smoke marijuana	A	B	C	D	E	F
7. Use drugs	A	B	C	D	E	F
8. Be in a physical fight	A	B	C	D	E	F
9. Carry a weapon (knife, gun, other)	A	B	C	D	E	F
10. Feel very nervous or panicky	A	B	C	D	E	F
11. Feel helpless, sad or depressed	A	B	C	D	E	F
12. Feel so angry, you are afraid you will lose control	A	B	C	D	E	F
13. Feel like you are not good at anything	A	B	C	D	E	F
14. Hang out with gang members	A	B	C	D	E	F
15. Feel overwhelmed, pressured, or "stressed out"	A	B	C	D	E	F
16. Believe you will die at a young age	A	B	C	D	E	F

About You

1 What language do you usually speak at home? (circle one):

(1) English
(2) Spanish
(3) Other, what? (list):_____

2. In the past two years, how many times have you changed or transferred schools? (circle one):

(0) None
(1) One
(2) Two
(3) Three
(4) More than three

3. **Who lives in your home?** (circle all that apply):

(1) Biological father (birth)
(2) Biological mother (birth)
(3) Adoptive father
(4) Adoptive mother
(5) Foster father
(6) Foster mother
(7) Brother(s)
(7) Sister(s)
(8) Stepfather
(9) Stepmother
(10) Grandfather
(11) Grandmother
(12) Other adults who are relatives
(13) Other adults who are not relatives

4. **Are your parents divorced or separated?** (circle one): (1) YES (2) NO

5. **Do you get free or low cost school meals?** (circle one):

(1) YES (2) NO (3) I DON'T KNOW

6. **Does your family get public assistance?** (circle one):

(1) YES (2) NO (3) I DON'T KNOW

7. **Does your family have health insurance?** (For example; Kaiser, Comprecare, Blue Cross/Blue Shield, Prudential) (circle one):

(1) YES (2) NO (3) I DON'T KNOW

8. **Does your family have Medicaid?** (circle one):

(1) YES (2) NO (3) I DON'T KNOW

9. **How much education or training does your mother have?** (circle one):

(1) Some high school
(2) High school diploma
(3) College graduate (associate or bachelors degree)
(4) Some graduate school
(5) Graduate degree
(6) Armed services (Army, Navy, etc.)
(7) I don't know

10. **How much education or training does your father have?** (circle one):

(1) Some high school
(2) High school diploma
(3) College graduate (associate or bachelors degree)
(4) Some graduate school
(5) Graduate degree
(6) Armed services (Army, Navy, etc.)
(7) I don't know

11. **Have you ever been arrested?** (circle one): (1) YES (2) NO

12. **Have you ever had to go to court for something you did?** (circle one): (1) YES (2) NO

13. **Have you ever been in detention or lockup?** (circle one): (1) YES (2) NO

14. **Have you ever lived in a group home or residential care facility?** (circle one): (1) YES (2) NO

Your Health Concerns

1. **The last time you needed a check-up, how difficult was it for you to get one?** (circle one):

(0) Never needed (1) Not at all difficult (2) A little difficult (3) Somewhat difficult

(4) Very difficult (5) Impossible, I was not able to get the help I needed

2. **If you have ever needed treatment for an injury, how difficult was it for you to get treatment for this injury?** (circle one):

(0) Never needed (1) Not at all difficult (2) A little difficult (3) Somewhat difficult

(4) Very difficult (5) Impossible, I was not able to get the help I needed

3. **If you have asthma or some other long lasting illness, how difficult has it been for you to get treatment for your asthma or illness?** (circle one):

(0) Never had a long lasting illness (1) Not at all difficult (2) A little difficult (3) Somewhat difficult

(4) Very difficult (5) Impossible, I was not able to get the help I needed

4. **If you have ever had skin problems, how difficult has it been for you to get treatment for your skin problems?** (circle one):

(0) Never had skin problems (1) Not at all difficult (2) A little difficult

(3) Somewhat difficult (4) Very difficult (5) Impossible, I was not able to get the help I needed

5. **If you have ever had any problems with stress, your family or peers, how difficult has it been for you to get help for these kinds of problems?** (circle one):

(0) Never had these problems (1) Not at all difficult (2) A little difficult

(3) Somewhat difficult (4) Very difficult (5) Impossible, I was not able to get the help I needed

6. **If you think you have or if you have had a problem with alcohol and/or drug use, how difficult has it been for you to get help for these problems?** (circle one):

(0) Never had these problems (1) Not at all difficult (2) A little difficult

(3) Somewhat difficult (4) Very difficult (5) Impossible, I was not able to get the help I needed

7. **If you have ever needed information on preventing pregnancy, how difficult was it for you to get this information?** (circle one):

(0) Never needed (1) Not at all difficult (2) A little difficult (3) Somewhat difficult

(4) Very difficult (5) Impossible, I was not able to get the help I needed

8. **If you have ever needed to obtain a method to prevent pregnancy, how difficult was it for you to get one?** (circle one):

(0) Never needed (1) Not at all difficult (2) A little difficult (3) Somewhat difficult

(4) Very difficult (5) Impossible, I was not able to get the help I needed

9. **If you have ever thought that you might be pregnant, how difficult was it for you to get a pregnancy test from a medical professional?** (circle one):

(0) Never needed (1) Not at all difficult (2) A little difficult (3) Somewhat difficult

(4) Very difficult (5) Impossible, I was not able to get the help I needed

10. **If you have ever needed treatment for a sexually transmitted disease, how difficult was it for you to get treatment?** (circle one):

(0) Never needed (1) Not at all difficult (2) A little difficult (3) Somewhat difficult

(4) Very difficult (5) Impossible, I was not able to get the help I needed

THANK YOU FOR YOUR HELP!

ID:_____

SCHOOL HEALTH SURVEY FOR PARENTS

Complete for children in 6th - 12th grades

Please help us find out more about you and your child by completing this survey. PLEASE ANSWER EVERY QUESTION - AND BE AS HONEST AS POSSIBLE. Draw a circle around your answer or write your response on this form. There are no right or wrong answers. Your participation will help improve Student Health Center services. When you have completed the survey, use the self-addressed stamped envelope to return it to us. Thanks!

Please complete this survey for the child you are registering for school:

_____

Please print child's name

If you have received this survey by mistake, please call

Health Care Concerns

1. The last time your child(ren) needed a health check-up, how difficult was it for you to get them one? (circle one):

   (0) Never needed (1) Not at all difficult (2) A little difficult (3) Somewhat difficult

   (4) Very difficult (5) Impossible, I have been unable to obtain this care for my child(ren)

2. **How difficult has it been to get your child(ren) treated by a medical professional when they are sick?** (circle one):

   (0) Never needed (1) Not at all difficult (2) A little difficult (3) Somewhat difficult

   (4) Very difficult (5) Impossible, I have been unable to obtain this care for my child(ren)

3. **How difficult has it been to get your child(ren) treated by a medical professional for injuries?** (circle one):

   (0) Never needed (1) Not at all difficult (2) A little difficult (3) Somewhat difficult

   (4) Very difficult (5) Impossible, I have been unable to obtain this care for my child(ren)

4. **How difficult has it been to get immunizations for your child(ren)?** (circle one):

   (0) Never needed (1) Not at all difficult (2) A little difficult (3) Somewhat difficult

   (4) Very difficult (5) Impossible, I have been unable to obtain this care for my child(ren)

5. **If any of your children have an ongoing health condition or illness (for example, asthma or seizures), how difficult has it been for you to get treatment for them?** (circle one):

   (0) Never needed (1) Not at all difficult (2) A little difficult (3) Somewhat difficult

   (4) Very difficult (5) Impossible, I have been unable to obtain this care for my child(ren)

6. **If any of your children has ever had problems with stress, problems with behaviors, family or peers, or other emotional issues, how difficult has it been to get treatment for them?** (circle one):

   (0) Never needed (1) Not at all difficult (2) A little difficult (3) Somewhat difficult

   (4) Very difficult (5) Impossible, I have been unable to obtain this care for my child(ren)

7. **How difficult has it been to get dental care for your child(ren)?** (circle one):

   (0) Never needed (1) Not at all difficult (2) A little difficult (3) Somewhat difficult

   (4) Very difficult (5) Impossible, I have been unable to obtain this care for my child(ren)

8. How difficult has it been to get vision (eye) and hearing (ear) care for your children? (circle one):

(0) Never needed (1) Not at all difficult (2) A little difficult (3) Somewhat difficult
(4) Very difficult (5) Impossible, I have been unable to obtain this care for my child(ren)

9. If you have been unable to get your child services, why? (circle all that apply):

(1) I have been able to obtain services
(2) Services cost too much
(3) Services are too hard to get to
(4) I cannot miss work
(5) Other (list)_____

FOR THE NEXT SEVERAL SECTIONS, PLEASE ANSWER THE QUESTIONS AS THEY APPLY TO THIS STUDENT_____.
(name of student)

About This Child

1. Are you this child's (circle one):

(1) Mother (5) Father (9) Grandmother
(2) Adoptive mother (6) Adoptive father (10) Grandfather
(3) Foster mother (7) Foster father (11) Other
(4) Stepmother (8) Stepfather

2. In the past two years, how many times has this child changed or transferred schools? (circle one):

(0) None (2) Two (4) More than three
(1) One (3) Three

3. How much education has this child's mother completed? (circle one):

(1) Grade school
(2) Some high school
(3) High school diploma
(4) Some college
(5) College degree (bachelors or associate degree)
(6) Some graduate school
(7) Graduate degree
(8) Armed services (Army, Navy, etc.)

4. How much education has this child's father completed? (circle one):

(1) Grade school
(2) Some high school
(3) High school diploma
(4) Some college
(5) College degree (bachelors or associate degree)
(6) Some graduate school
(7) Graduate degree
(8) Armed Services (Army, Navy, etc.)

5. **Does this child have a best friend? (circle one):** (1) YES (2) NO

6. **Does this child have a boyfriend or girlfriend (going steady or going with someone)? (circle one):** (1) YES (2) NO

7. **How does this child spend his/her free time? (circle one):**

(1) By his/herself (2) With one friend (3) With many friends (4) With family

About This Child's Education

1. **Which of the following statements best describes the type of student that this child is? (circle one):**

(1) Excellent student

(2) Good student

(3) Average student

(4) Below average student

2. **What education or training would you like this child to complete? (circle one):**

(1) High school

(2) College graduate (associate or bachelors degree)

(3) Graduate degree/beyond college

(4) Armed Services (Army, Navy, etc.)

3. **Do you offer to help with your child's homework? (circle one):** (1) YES (2) NO

4. **Do you think this child will be able to complete high school? (circle one):** (1) YES (2) NO

5. **Has this child ever "dropped out" of school? (circle one):** (1) YES (2) NO

About This Child's Health

1. **How good is this child's physical health in general? (circle one):**

(1) EXCELLENT (2) VERY GOOD (3) GOOD (4) FAIR (5) POOR

2. **How good is this child's emotional health in general? (circle one):**

(1) EXCELLENT (2) VERY GOOD (3) GOOD (4) FAIR (5) POOR

3. **Has this child ever been hospitalized for emotional reasons? (circle one):** (1) YES (2) NO

4. In the last year (twelve months), how many times has this child seen a medical doctor or nurse practitioner? (circle one):

(0) 0 (1) 1-2 (2) 3-4 (3) 5-6 (4) 7-8 (5) 9-10 (6) 11 or more

5. In the last year, how many times did this child go to an emergency room? (circle one):

(0) 0 (1) 1-2 (2) 3-4 (3) 5-6 (4) 7-8 (5) 9-10 (6) 11 or more

6. In the last 90 DAYS (three months), how many school days did this child miss due to physical illness? (circle one):

(0) 0 (1) 1-2 (2) 3-5 (3) 6-10 (4) more than 10

7. In the last 90 DAYS (three months), how many times did this child miss school to go to a medical or dental appointment? (circle one):

(0) 0 (1) 1-2 (2) 3-5 (3) 6-10 (4) more than 10

8. In the last 90 DAYS (three months), how many school days did this child miss because he/she was very upset or very sad? (circle one):

(0) 0 (1) 1-2 (2) 3-5 (3) 6-10 (4) more than 10

9. In the last 90 DAYS (three months), how many school days did this child miss because he/she overslept or was too tired? (circle one):

(0) 0 (1) 1-2 (2) 3-5 (3) 6-10 (4) more than 10

About This Child's Health Care

1. About how long ago did this child go to the dentist for a check-up/cleaning? (circle one):

(1) Has never been to a dentist (2) Within the past six months (3) Within the past year
(4) Within the past two years (5) More than two years ago

2. About how long ago did this child go to a medical doctor or nurse practitioner for a regular health check-up? (circle one):

(1) Has never been to a doctor (2) Within the past six months (3) Within the past year
(4) Within the past two years (5) More than two years ago

3. When this child goes to the doctor, does he/she usually see the same doctor, or a different doctor each time? (circle one):

(1) Same doctor (2) Different doctor (3) I do not know

4. In the last year, was this child sick or hurt? (circle one):

(1) YES (2) NO - *(If you marked "NO", go to question # 7 on page 6)*

5. If you answered "YES" to question # 4, did this child get medical care when he/she needed it? (circle one):

(0) Did not need medical care - *(If you selected this answer, go to question # 7, below)*

(1) YES - *(If you answered "YES", go to question # 7, below)*

(2) NO - *(If you answered "NO", go to question # 6, below)*

6. If this child did not get medical care when he/she needed it, why not? (circle all that apply):

(1) I did not know how to make an appointment

(2) We did not have medical insurance

(3) It cost too much and I can't pay

(4) I did not have a way to get my child there

(5) The office wasn't open when I could go

(6) I was too busy

(7) My child was afraid to go

(8) My child could not miss school

(9) I did not know where to go

(10) I could not miss work

(11) Other_____

When this child is sick or needs health care, where does he/she usually get care? (circle one number for each place):

	Never 0	Rarely 1	Some of the time 2	Most of the time 3	All of the time 4
7. Medical doctor's office	0	1	2	3	4
8. Hospital emergency room	0	1	2	3	4
9. Community health clinic	0	1	2	3	4
10. Student Health Center/ nurse	0	1	2	3	4
11. Hospital clinic	0	1	2	3	4
12. Other (folk healer, drug store, chiropractor)	0	1	2	3	4

If this child has needed care for emotional or mental health problems, where has he/she obtained care? (Circle one number for each place):

	Never 0	Rarely 1	Some of the time 2	Most of the time 3	All of the time 4
13. Medical doctor's office	0	1	2	3	4
14. Hospital emergency room	0	1	2	3	4
15. Community health clinic	0	1	2	3	4
16. Student Health Center/ nurse	0	1	2	3	4
17. Hospital clinic	0	1	2	3	4
18. Mental health center	0	1	2	3	4
19. Private therapist (social worker, psychologist, psychiatrist)	0	1	2	3	4
20. Other (folk healer, drug store, chiropractor, religious leader)	0	1	2	3	4

How satisfied were you with the care that this child received at his/her last visit to these places? (Circle a number for each place):

	Never Used 0	Very Dissatisfied 1	Somewhat Dissatisfied 2	Not Satisfied or Dissatisfied 3	Somewhat Satisfied 4	Very Satisfied 5
21. Medical doctor's office	0	1	2	3	4	5
22. Hospital emergency room	0	1	2	3	4	5
23. Community health clinic	0	1	2	3	4	5
24. Student Health Center/ school nurse	0	1	2	3	4	5
25. Hospital clinic	0	1	2	3	4	5
26. Mental health center	0	1	2	3	4	5
27. Private therapist (social worker, psychologist, psychiatrist)	0	1	2	3	4	5
28. Other (folk healer, drug store, chiropractor, religious leader)	0	1	2	3	4	5

In the last year, where was this child seen for the following problems? Circle the corresponding number to indicate your answer. If your child was not treated for any of the reasons listed, circle 0 for "did not have this problem."

	Did not have this problem	Emergency Room	Dr.'s Office	Student Health Center/Nurse	Community Clinic	Hospital Clinic	Mental Health Therapist/Center	Other
	0	1	2	3	4	5	6	7
1. Asthma	0	1	2	3	4	5	6	7
2. Allergies	0	1	2	3	4	5	6	7
3. Physical/Sports checkup	0	1	2	3	4	5	6	7
4. Injury	0	1	2	3	4	5	6	7
5. Ear infection	0	1	2	3	4	5	6	7
6. Skin problems	0	1	2	3	4	5	6	7
7. Cold/Flu/Sore throat	0	1	2	3	4	5	6	7
8. Immunizations	0	1	2	3	4	5	6	7
9. Headache	0	1	2	3	4	5	6	7
10. Stomach ache	0	1	2	3	4	5	6	7
11. Chest pains	0	1	2	3	4	5	6	7
12. Menstrual problems	0	1	2	3	4	5	6	7
13. Pregnancy prevention	0	1	2	3	4	5	6	7
14. Prenatal care	0	1	2	3	4	5	6	7
15. Sexually transmitted disease	0	1	2	3	4	5	6	7
16. Anxiety (nervousness)	0	1	2	3	4	5	6	7

In the last year, where was this child seen for the following problems? Circle the corresponding number to indicate your answer. If your child was not treated for any of the reasons listed, circle 0 for "did not have this problem."

	Did not have this problem	Emergency Room	Dr.'s Office	Student Health Center/Nurse	Community Clinic	Hospital Clinic	Mental Health Therapist/Center	Other
	0	1	2	3	4	5	6	7
17. Depression	0	1	2	3	4	5	6	7
18. Other emotional problems	0	1	2	3	4	5	6	7
19. Behavior problems	0	1	2	3	4	5	6	7
20. Problems between parents and child	0	1	2	3	4	5	6	7
21. Alcohol use	0	1	2	3	4	5	6	7
22. Drug use	0	1	2	3	4	5	6	7
23. Any other problems	0	1	2	3	4	5	6	7

Write in other health problems here _____

Has this child ever been treated or diagnosed by a professional for any of the following? (circle yes or no):

1.	Asthma or wheezing	(1) YES	(2) NO
2.	Skin problems or acne	(1) YES	(2) NO
3.	Allergies or hay fever	(1) YES	(2) NO
4.	Sexually transmitted diseases (clap, trich, VD, crabs, gonorrhea, chlamydia, PID, herpes)	(1) YES	(2) NO
5.	Menstrual problems	(1) YES	(2) NO
6.	Pregnancy	(1) YES	(2) NO
7.	Respiratory problems	(1) YES	(2) NO
8.	Chest pains	(1) YES	(2) NO
9.	Problems with the family	(1) YES	(2) NO
10.	Behavior problems	(1) YES	(2) NO
11.	Anxiety (very nervous a lot of the time)	(1) YES	(2) NO
12.	Depression (very sad a lot of the time)	(1) YES	(2) NO
13.	Other emotional problems	(1) YES	(2) NO
14.	Problems with alcohol use	(1) YES	(2) NO
15.	Problems with drug use	(1) YES	(2) NO
16.	Headaches or belly aches	(1) YES	(2) NO
17.	Ear infections	(1) YES	(2) NO
18.	Any injury	(1) YES	(2) NO
19.	General health problem (cold, flu, strep, etc.)	(1) YES	(2) NO

How much of a problem has each of these been for this child? (circle one for each problem listed):

		Not a Problem 1	Kind of a Problem 2	A Big Problem 3
1.	Headaches	1	2	3
2.	Dizziness	1	2	3
3.	Passing out/fainting	1	2	3
4.	Sore throats	1	2	3
5.	Being overly tired	1	2	3
6.	Stomach aches or belly pain	1	2	3
7.	Shortness of breath	1	2	3
8.	Feeling physically weak or having no energy	1	2	3
9.	Earaches	1	2	3
10.	Wheezing	1	2	3
11.	Chest pain	1	2	3
12.	Wetting the bed or his/her pants	1	2	3
13.	Soiling or having bowel movement in his/her pants or bed	1	2	3
14.	Problems with menstrual periods	1	2	3
15.	Fighting with family members	1	2	3
16.	Illegal drug use	1	2	3
17.	Losing interest in activities he/she usually likes to do	1	2	3
18.	Problems sleeping	1	2	3
19.	Eating problems (vomiting after eating, secret or binge eating)	1	2	3
20.	Feeling sad most of the time	1	2	3
21.	Crying all the time	1	2	3
22.	Not having control of his/her behavior	1	2	3
23.	Setting fires (other than in fireplace or campfire) without permission	1	2	3
24.	Hurting animals	1	2	3

****

Using this number scale, indicate your best answer about how often you think this child does the following things by circling the corresponding statement:

	Never (Never in his/her life)	Sometimes (1-4 times a month)	Always (Every day)
1. Wears a seatbelt	Never	Sometimes	Always
2. Drinks alcohol (more than a taste)	Never	Sometimes	Always
3. Smokes cigarettes	Never	Sometimes	Always
4. Smokes marijuana	Never	Sometimes	Always
5. Uses drugs	Never	Sometimes	Always
6. Gets beaten up	Never	Sometimes	Always
7. Starts a physical fight	Never	Sometimes	Always
8. Carries a weapon (knife, gun, other)	Never	Sometimes	Always
9. Is threatened with a weapon	Never	Sometimes	Always
10. Takes part in gang activities	Never	Sometimes	Always
11. Feels very nervous or panicky	Never	Sometimes	Always
12. Feels sad or depressed	Never	Sometimes	Always
13. Feels so angry, he/she is afraid he/she will lose control	Never	Sometimes	Always
14. Feels like he/she is not good at anything	Never	Sometimes	Always
15. Feels overwhelmed, pressured or "stressed out"	Never	Sometimes	Always
16. Believes he/she will die at a young age	Never	Sometimes	Always
17. Feels fearful that someone close to him/her will die	Never	Sometimes	Always

****

More About This Child

1.	In the past year (twelve months), has a parent of this child lost a job? (circle one):	(1) YES	(2) NO
2.	In the past year (twelve months), has a close friend or relative of this child died? (circle one):	(1) YES	(2) NO
3.	In the past year (twelve months), has a parent of this child divorced or separated? (circle one):	(1) YES	(2) NO
4.	In the past year (twelve months), has a parent of this child remarried or developed a new relationship? (circle one):	(1) YES	(2) NO

More About This Child (continued)

5. In the past year (twelve months), has a parent or family member of this child gotten or had a serious illness? (circle one): (1) YES (2) NO

6. Have you talked to this child about protecting him/herself from abduction? (circle one): (1) YES (2) NO

7. Have you talked to this child about sexual reproduction? (circle one): (1) YES (2) NO

8. Have you talked to this child about pregnancy prevention? (circle one): (1) YES (2) NO

9. Have you talked to this child about AIDS prevention? (circle one): (1) YES (2) NO

10. If he/she is sexually active, do you believe that he/she is using any type of birth control? (circle one):
(0) He/she is not sexually active (1) YES (2) NO

11. If sexually active, do you think he/she is consistently using condoms to prevent sexually transmitted disease? (circle one):
(0) He/she is not sexually active (1) YES (2) NO

12. Has she ever been pregnant or has he ever gotten someone pregnant? (circle one): (1) YES (2) NO

13. Is she/he a parent now? (circle one): (1) YES (2) NO

14. Has this child ever been arrested? (circle one): (1) YES (2) NO

15. Has this child ever been in detention or in lockup overnight? (circle one): (1) YES (2) NO

16. Have you ever been required to go to court for something this child did? (circle one): (1) YES (2) NO

17. Has this child ever lived in a residential care facility or group home? (circle one): (1) YES (2) NO

About You and Your Child(ren)

1. How many of your children attend schools in the Montbello/Green Valley Ranch community? (circle one):

(1) One (2) Two (3) Three (4) Four

(5) Five (6) Six (7) Seven (8) More than seven

2. **Which adults live in your home?** (circle all that apply):

(1) Biological father (birth)	(7) Stepfather
(2) Biological mother (birth)	(8) Stepmother
(3) Adoptive father	(9) Grandfather
(4) Adoptive mother	(10) Grandmother
(5) Foster father	(11) Other adults who are relatives
(6) Foster mother	(12) Other adults who are not relatives

3. **How many children live in your home?** (write number): _____boys _____girls

4. **What language does your family usually speak at home?** (circle one):

(1) English
(2) Spanish
(3) Other

5. **Have you been divorced or separated?** (circle one):

(1) YES (2) NO

6. **What is your main occupation?** (for example, homemaker, secretary, engineer, sales person) (print clearly below):

_____

7. **Which category best describes your current employment status?** (circle one):

(1) Full time (2) Part-time (3) Not working at this time

8. **Do any of your children get free or reduced cost meals at school?** (circle one):

(1) YES (2) NO

9. **Does your family get public assistance?** (circle one):

(1) YES (2) NO

10. **What type of health insurance does (do) your child(ren) have?** (circle one):

(1) Medicaid
(2) Kaiser/HMO
(3) Private insurance company
(4) No insurance
(5) Colorado resident discount program
(6) Don't know

(7) Other (list)_____

Your Concerns

1. **How concerned are you that your child(ren) might need treatment for alcohol or drug abuse at some time?** (circle one):

   (0) Not at all concerned (1) A little concerned (2) Somewhat concerned
   (3) Very concerned (4) Extremely concerned

2. **How concerned are you that your child(ren) might need treatment for a sexually transmitted disease at some time?** (circle one):

   (0) Not at all concerned (1) A little concerned (2) Somewhat concerned
   (3) Very concerned (4) Extremely concerned

3. **How concerned are you that your child(ren) might need counseling about pregnancy prevention at some time?** (circle one):

   (0) Not at all concerned (1) A little concerned (2) Somewhat concerned
   (3) Very concerned (4) Extremely concerned

4. **How concerned are you that your child(ren) might become pregnant or get someone pregnant as teenagers?** (circle one):

   (0) Not at all concerned (1) A little concerned (2) Somewhat concerned
   (3) Very concerned (4) Extremely concerned

About The Student Health Center

1. **Has your child used the Student Health Center?** (circle one):

   (1) YES (2) NO - *(If "NO", go to question #3, on this page)*

2. **If your child went to the Student Health Center, how would you rate the quality of care that your child received there?** (circle one):

   (1) Poor (2) Fair (3) Good (4) Excellent

3. **If your child has not received any care from the Student Health Center, why not?** (circle all that apply):

   (1) My child has not needed services.
   (2) We prefer our own doctor.
   (3) It does not provide the services my child needs.
   (4) We do not think the Student Health Center provides quality care.
   (5) We have heard complaints about the Student Health Center.
   (6) We will not give our child permission to go to the Student Health Center.
   (7) We had a bad experience with another Student Health Center.
   (8) Other (list) _____

4. **What services would be helpful for your child to be able to get at the Student Health Center?** (write in below):

5. **What recommendations would you make to improve the Student Health Center?** (write in below):

THANK YOU FOR YOUR HELP!

APPENDIX E: SHO!!! COMMANDS

Data From SHO!!! Registration File

Number of registered students by gender and grade
- Select Reports from the School HealthCare - ONLINE main menu
- Select Registration Reports from the Administrator Master Reports Menu
- Select Age, Race, Sex, Grade from the Patient Registration Reports Menu

Number of registered students by insurance status
- Select Billing from the School HealthCare - ONLINE main menu
- Select Insurance Reports from the Patient Billing Menu
- Select either Type of Insurance or Ins. Companies from the Insurance Rates menu

Number of users by gender and grade
- Select Reports from the School HealthCare - ONLINE main menu
- Select Visit Reports from the Administrator Master Reports Menu
- Select Visit Statistics from the Reports based on Patient Visits Menu
- Select Individual Users from the Visit Statistics Menu

Number of users by insurance status
- Select Billing from the School HealthCare - ONLINE main menu
- Select Insurance Reports from the Patient Billing Menu
- Select Visits by Insurance from the Insurance Rates menu

Number of users by risk behaviors
- Select Reports from the School HealthCare - ONLINE main menu
- Select More from the Administrator Master Reports Menu
- Select Suppl Demo & Risk from the Administrator Master Report Menu
- Select Frequency of Risk Behaviors from Suppl Demo & Risk Reports Menu

Number of visits/student
- Select Reports from the School HealthCare - ONLINE main menu
- Select Visit Reports from the Administrator Master Reports Menu
- Select Visit Statistics from the Reports based on Patient Visits Menu
- Select Visits/Student from the Visit Statistics Menu

Data From SHO!!! Visits Files

Total number of visits
- Select Reports from the School HealthCare - ONLINE main menu
- Select Visit Reports from the Administrator Master Reports Menu
- Select Visit Statistics from the Reports based on Patient Visits Menu
- Select Age, Race, Sex or Visits by School from the Visit Statistics Menu

Diagnoses assigned to students by gender or grade (Custom Report)
- Press <F5> for the 'TCL'
- Type in the following to sort by sex:
LIST VISITS WITH VISIT.DATE FROM "1/1/98" TO "4/1/98" BY DIAGNOSIS.DESCRIPTION BREAK-ON DIAGNOSIS.DESCRIPTION '"UVL"' BY SEX BREAK-ON SEX '"UVL"' TOTAL COUNTER DET-SUPP ID-SUPP (P) <Enter>

- Type in the following to sort by grade:

LIST VISITS WITH VISIT.DATE FROM "1/1/98" TO "4/1/98" BY DIAGNOSIS.DESCRIPTION
BREAK-ON DIAGNOSIS.DESCRIPTION "'UVL'" BY GRADE BREAK-ON GRADE "'UVL'"
TOTAL COUNTER DET-SUPP ID-SUPP (P) <Enter>

Frequency distribution of all diagnoses assigned during a time period

- Select Reports from the School HealthCare - ONLINE main menu
- Select Visit Reports from the Administrator Master Reports Menu
- Select Diagnostic Statistics from the Reports based on Patient Visits Menu
- Select Diagnostic Statistics from the Diagnostic Summary Reports Menu

Frequency distribution of all diagnosis by category during a time period

- Select Reports from the School HealthCare - ONLINE main menu
- Select Visit Reports from the Administrator Master Reports Menu
- Select Diagnostic Statistics from the Reports based on Patient Visits Menu
- Select Supplemental Grouping for All or Primary Diagnosis from the Diagnostic Summary Reports Menu

The following explains the SELECT.USERS utility in SHO!!!. This utility is designed to prepare a selected list or statistical report of USERS meeting specific criteria from the VISITS file.

To run this utility press <F5> and then type **RUN BP SELECT.USERS** <Enter>

The utility will request two pieces of information. First, the dictionary name in the VISITS file containing the information you desire, and second, the specific data value. For example, you are interested in a list or statistics of USERS who have had a diagnosis of ACNE in the last year. The dictionary name in the VISITS file that contains diagnostic codes is DIAGNOSIS.CODE. A popup will appear for you to choose the dictionary name you need to use. Highlight DIAGNOSIS.CODE and press <Enter>.

Next the utility will request the specific data value. Enter in the diagnosis code for Acne, 706.1. (Be sure to enter the value exactly - including upper or lower case. For example, if you are searching for 'Medicaid' primary insurance, 'Medicaid' is different from 'MEDICAID' or 'medicaid'.)

After you have entered in the data value, you will be asked if you want to select visits during a specific time period. If you enter 'N' for no, the report will include all visits in the database. If you enter 'Y' the system will ask you to enter in the beginning and ending dates of your desired data range.

The system then asks if you want a statistical report instead of a listing of USERS. If you enter 'Y' the system will provide a statistical report. The system will then ask if you want to sort the USERS by a specific dictionary name. If you enter 'Y' a pop-up containing the dictionary names will appear. Highlight the dictionary name you wish to sort by and press <Enter>. You are able to sort by only one dictionary name.

The system then asks you to choose the dictionary names to include in the report. Highlight all the dictionary names you want to appear on the User Report and press <F9>.

IF YOU WANT A PRINTOUT OF THE REPORT, TYPE IN 'P' AND <ENTER>, OTHERWISE PRESS <ENTER> TO SEND THE REPORT TO THE SCREEN.

APPENDIX F: ACTING ON RESULTS - EXAMPLES

The Denver Post example was copied with permission from the Denver Post. The School-based health center newsletter was copied with permission from Bruce Guernsey.

THE DENVER POST

Voice of the Rocky Mountain Empire

★★ 25¢ — May vary outside metro Denver

Student HMO plan tested

Kaiser to insure poorer kids

By Ann Schrader
Denver Post Medical/Science Writer

Low-income schoolchildren who don't have health insurance can gain coverage under a plan to be announced today by Kaiser Permanente.

Called School Connections, the plan will enable 1,300 children in Denver, Sheridan and Adams County District 14 public school systems to receive full Kaiser benefits for $3 a month.

Kaiser officials said the two-year collaborative pilot program involving Kaiser, the state and the school districts, which begins Jan. 1, is the first of its kind in the nation. They didn't spell out what would happen at the end of the two years.

"Today, schoolchildren face greater health risks than ever before, and their parents can't afford health care for them," said Dr. Toby Cole, Kaiser's executive medical director. "We're very happy that School Connections will give their families peace of mind."

Gov. Roy Romer will join Kaiser in announcing the program.

The School Connections program will be available only at 20 schools that have school-based health centers. Enrollment will be on a first-come basis. It is limited to students of all ages who are eligible for the free and reduced-price school lunch program. Students will be accepted if their families meet financial needs guidelines.

"This is the working poor," said Sheridan High School Principal Ken Bostdorff. "They are working, but maybe they don't have health insurance through employment. They run into trouble, the kids get sicker, . . . the kids miss more school.

Please see INSURANCE on 22A

Kaiser testing student health plan

Participants in health-care plan

The following schools will offer the School Connections health-care plan:

■ Adams County District 14 — Alsup, Central, Dupont, Hanson, Kemp, Monaco and Rose Hill elementary schools; Adams City and Kerney middle schools; and Adams City and Lester Arnold high schools. (Contact Betty Pepin, 853-3279, for enrollment information.)

■ Denver Public Schools — Valdez Elementary School, Martin Luther King Middle School, and Montbello and North high schools. (Contact Barbara Ford, 436-7433, for enrollment information.)

■ Sheridan Schools — Ora Oliver Head Start, Alice Terry and Fort Logan elementary schools; Sheridan Middle School; and Sheridan High School. (Contact Linda Therrien, 894-0401, for enrollment information.)

INSURANCE from Page 1A

"This is a way to stop the vicious cycle," he added.

Parents or guardians of the children must fill out an application and pay $3 per month per child, with a maximum of $9 per family. The fee may be paid monthly or quarterly.

In return, the children will receive primary care and mental health services at no cost at their school-based health centers.

The children become Kaiser members and may receive full inpatient and outpatient services for a $5 co-payment. The services include lab tests, X-rays, after-hour care, emergency care, specialty care, hospitalization and home health care. Prescriptions won't carry a co-payment.

The school-based health centers offer services such as physicals, immunizations and treatment of minor illnesses. Some of the centers also provide mental health and chemical-dependency services.

Kaiser's Dr. Stefan Mokrohisky, who will be the liaison with the school centers, said the students who enroll probably haven't had good coordinated health care. The centers can communicate with specialists so that students get care earlier, which cuts costs in the long run and results in fewer missed school days.

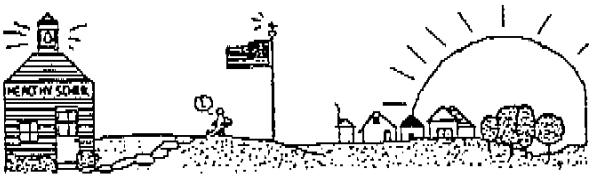
The school-based health center initiative at the Colorado Department of Public Health and Environment has assisted over the last decade in setting up and providing more than $600,000 per year in funding for many of Colorado's 20 school-based health centers.

Bruce Guernsey, who oversees the initiative at the health department, said 30 percent to 50 percent of students in some schools lack health insurance. Those most likely not to be insured are teenagers, since Medicaid does a good job of covering care for infants and toddlers but not for adolescents.

In the collaboration, Kaiser is spending $1 million each year, while the contribution of the school districts is the cost of running the health centers and the state's share is the funds it gives the centers.

Patti Shwayder, executive director of the health department, lauded Kaiser for being a health insurance leader and working "to assure access to health care for this vulnerable population."

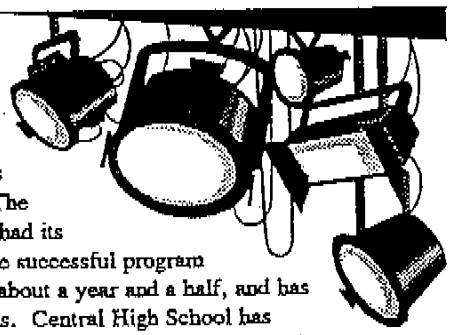
The School-Based Health Center Newsletter



This publication is devoted to educating the public about SBHCs

October 1996, Issue #2

New SBHCs In Pueblo



In August 1994 an idea was created. The idea was to open a school-based health center in Pueblo, Colorado. After many meetings and hours of work, it finally happened. The Pueblo SBHC at Central High had its grand opening on 4/24/95. The successful program has now been in operation for about a year and a half, and has expanded to serve three schools. Central High School has 88% student enrollment, Corwin Middle School has 83% and Risley Middle School has 72%.
A fourth school, Keating Alternative, has a 93% enrollment, and is served by Central.

In the spring of 1994, when planning for the SBHC began, a number of benefits were recognized: access to low cost health care for adolescents, excellent interagency collaboration, and high levels of community involvement. A small vocal group opposed the program, which resulted in limits on reproductive health services for teens.

"Obviously the positive issues outweighed the negative," notes Rhonda Johnston, nurse practitioner and Director of the program. "The major question that needed answered was where was the funding going to come from?" It was realized that if this idea was going to evolve into a reality, there would have to be funding from the community. Three different community partners gave their support: Parkview Episcopal Medical Center, Pueblo School District #60, and Communities in Schools Inc. Parkview Episcopal Medical Center provided 75% of total funding, Communities in School, Inc. 13%, and Pueblo School Distri #60 funded the remaining 12%.

The key agencies have very solid reasons for starting up the three SBHC programs. "This program is very much needed by our students, many of whom do not have health insurance. They frequently don't get the health services they need for serious problems which interfere with school," says Superintendent Henry Roman.

Parkview Episcopal Hospital saw this as an opportunity to enhance their community involvement and image. "We were responding to request by the schools, and to a community need. Parkview is in this community to stay, and believe it is important to assure that children are successful in school," said Eileen Dennis, Vice President of Patient Services at Parkview.

SBHCNET

Ever wonder if there is additional information about SBHCs on-line? Well, there is! SBHCNET is a listserv for individuals and organizations interested in school-based health centers and their constituencies. If you subscribe to SBHCNET you will have the opportunity to communicate, share information, and network with your colleagues nationwide. To date, there are approximately 97 subscribers to SBHCNET. If you would like more information on the SBHCNET or possibly would like to subscribe, contact Tara Smith at e-mail tksk@gwis2.circ.gwu.edu or call 202-466-3396; Fax 202-466-3467

The Department of Education has issued these RFPs: 1) To local school districts to receive funding for comprehensive health education programs. Applications should focus on creating a community-based program to promote healthy lifestyles and prevent risk behaviors. 2) To local districts or agencies in collaboration with districts to reduce rates of suspension and expulsion. To find out more, call Karen Connell (regarding #1) at 303-866-6903; or Dave Smith (regarding #2) at 303-866-6683.

REQUEST FOR APPLICANTS SOUGHT TO PLAN SCHOOL-BASED HEALTH SERVICES

The Colorado SBHC Initiative has received funding to support local planning in eight school communities to identify local student needs, activate the community, plan comprehensive health programs, and establish school-based primary health and mental health services.

- Grants are for $8,000.
- A skill-building day will be offered to selected communities in February.
- Applications are available in October, and due in December.
- Technical help will be provided to develop a business plan for long-term stable financing of school-based health services.

An optional bidder's conference will be held on November 4, 1996 in Denver. Call Bruce Guernsey at (303)692-2377 for further information.

INTERVIEW

Sally Rauch
Parent/Volunteer - Sheridan SBHC

Parents are rightly very cautious about where they send their children for health services, and so may have concerns about school-based health programs. But parents are very important in planning and supporting these locally-developed programs. One parent with direct experience shares some advice.

Sally Rauch is a parent who volunteers a portion of her spare time at the Sheridan's School-Based Health Center. Sheridan is a small community to the south of Denver. Sally originally got involved with the program because of her son's epilepsy. Because his pediatrician is 20 minutes away, Sally thought the Center would be much more convenient if he could receive treatment right there at school. But through her involvement with the Center's staff and planning group, she found that convenience is only one of the great features of this program.

In her role as a volunteer, Sally has become a strong proponent for the Center, referring both parents and kids to the program for services. She also drives students to and from the Center when the family doesn't have transportation.

Sally has received feedback from almost every group that has contact with the Center; teachers, parents and the kids. "Most of the feedback I receive is positive," Rauch states. She gives a few examples of the comments she has received: "People can get in and be seen quickly; the examinations are very thorough and not rushed; and the clinic is very easily accessible. Whether the family is on Medicaid or not, each parent is treated with the same courteous and professional manner."

Sally has some advice for parents who have concerns about their kids going to a SBHC. "Talk with other parents who are involved with the program; talk to kids who use the clinic; and set up an appointment to visit and educate yourself about the services and the staff."

Summary of State Survey Results

A survey of the state was recently conducted by the Office of School Health to learn more about the types of information and training local communities would like about SBHCs. 142 people returned the survey, representing 77 of the state's 176 school districts.

Fifty respondents indicated they were at the stage of gathering information on SBHCs, and 38 already had programs up and running.

At least 100 respondents scored these topics as of medium or high interest:

- Getting the community involved
- Student perspectives
- Presenting information to boards & committees about SBHCs
- Organizations that support SBHCs
- Marketing your school health services
- Financing & other survival issues (billing, contracting, coordination with other providers)
- Substance abuse counseling in schools
- Serving adolescents effectively
- How to interview adolescents with high risk behaviors
- Sample programs

Based on the results, these actions will be taken: 1) Available materials related to specific interests of respondents will be sent. 2) During the next two years, continuing education programs will be offered around the state to meet the identified needs.

SOURCE: The survey was conducted by the Office of School Health, UCHSC.

Workshop Announcement
" The Culture of Adolescence "

Energized, experienced trainers, and an established curriculum in core concepts in adolescent health, including assessing & reducing high risk behavior:
- October 17 & 18 in Denver
- November 14 & 15 in Pueblo

Call the Office of School Health at 303-270-6580.

Tips on Letter Writing
The Power of The WORD

Americans are frequently urged to write their editor of a newspaper, their Federal or State legislator, the Governor, or the President. Local and county officials should also hear from you on important issues. A good advocacy letter is a balanced piece of careful and thoughtful writing. Here are a few tips on better letter writing:

1. *Address only one topic per letter. If you must refer to two or more topics, make it clear that you are discussing several subjects.*
2. *Keep the letter to three substantive paragraphs on one to two pieces of letterhead. If you have additional, detailed information, enclose it as reference material.*
   - *1st Paragraph: State the reason for writing.*
   - *2nd Paragraph: Describe why the issue is relevant to you and others.*
   - *3rd Paragraph: Describe what you think needs to be done to improve or correct the situation.*

Close the letter with words of appreciation for the work already done by the official (regardless of whether you agree or disagree with the position previously taken) and offer future assistance.

P.S. It is helpful to your cause if you establish contact with your elected and appointed officials before you need to address a specific issue.

- By Beverly Buck, Center on Human Policy Development, UCD

SIX MESSAGES TO INCREASE PUBLIC AWARENESS & SUPPORT FOR SBHCS

Last January, a day-long meeting was held to create public relations strategies for SBHCs. Two themes were crafted into specific messages to reach key audiences. They can be used to build support for new and existing SBHCs. Use them in your letter writing, public presentations, and printed materials.

From a hard-nosed business perspective, three messages about the ***monetary benefits*** of school-based primary care:

1. **"Kids who are healthy do better in school, are more productive members of society, and are better prepared to participate in the workforce."**
   Businesses and communities benefit from healthy students who are able to concentrate on their studies. High school graduates take a productive place in the community, rather than draining resources.
2. **"SBHCs can improve school attendance and reduce drop-out rates."**
   Children who can access a SBHC spend less time away from class for needed health services. The cost of each dropout is estimated at $200,000 over a lifetime. Drop outs add to welfare and prison costs.
3. **"SBHCs emphasize prevention, and are better at it than other providers. They reduce overall health care costs."**
   SBHCs provide high quality, inexpensive services. They reduce overhead by locating in schools. Research indicates that utilization of medical services is not increased, but utilization of needed health supervision and counseling services do.

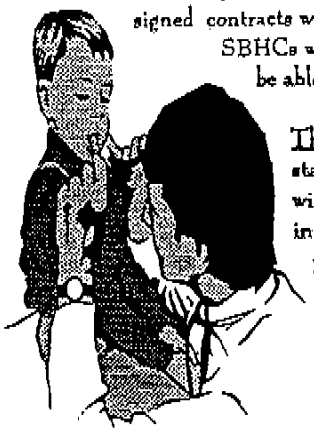
From a community perspective, three messages about the ***positive impact on child health, education and well being.***

1. **"SBHC improve access to basic health care for a vulnerable age group."**
   School-age children make fewer physician visits than other age groups, underutilizing primary care. During childhood years many decisions are made about health habits which affect future social behavior and productivity. SBHCs identify health problems early and intervene to reverse their effects.

(Continued on Page 4)

Two School-Based Health Centers Sign Contracts With Colorado Child Health Plan

Along with many other health care providers in the state, Commerce City Community Health Services and Sheridan Health Services have signed contracts with the Colorado Child Health Plan (CCHP). SBHCs which can qualify as a CCHP provider should al be able to negotiate contracts with other HMOs.



The CCHP: The Colorado Child Health Plan i state-sponsored managed care plan that contracts with physicians to provide a medical home to low income children. CCHP has participating providers in 22 counties and is expanding to 28 additional counties. The plan covers ambulatory services including primary and preventative care to children who are:

- financially qualified up to 185% of poverty
- age 12 and under
- not eligible for Medicaid.

To apply: A family completes a mail-in application, and pays an enrollment fe $25 per year per child. They are asked to identify a PCP which will serve as th child's health care provider.

The Primary Care Provider's (PCP) Role

- Provide around-the-clock access to primary care including well-child care, care for illness and injury.
- Coordinate care with specialty providers by obtaining authorization for all referrals and for outpatient surgery.

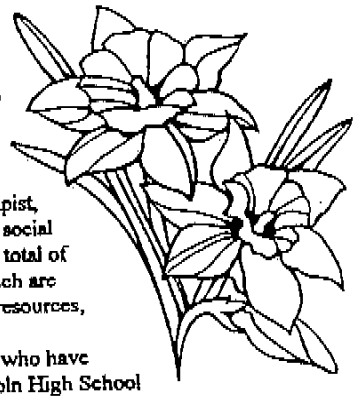
Qualifying providers receive a monthly capitation fee per child and fee-for-services not covered under the cap such as lab tests.

2. **"Healthy kids contribute to healthy schools and communities."**
Such health behaviors as substance abus, fighting and sexual behavior have an effect on school performance, crime and accident rates, and welfare roles. Communities can plan new SBH programs to improve these problems.

3. **"Healthy kids are better learners."**
When a child or teen has a medical or mental health problem, concentration on studies is difficult. Once the concern is resolved or under treatment, students are free to perform at their best.

GOVERNOR ROMER VISITS LOCAL SBHC

In conjunction with the program's eighth anniversary, on 4/24/96 Governor Roy Romer visited the school-based health center at Abraham Lincoln High School. The tour recognized the success that the center has had in providing health and mental health services to its students, and is widely recognized as a national model for SBHCs.



Romer said "I have been working hard to focus our agenda in Colorado on achieving the core elements necessary to make Colorado the best place to raise a child. Every child needs a high quality education and every child needs basic and preventive health care. This program at Lincoln High School improves access to necessary health care and improves the quality of teaching in the classroom. Its success demonstrates that we do know what works."

Established in 1988, Lincoln's school-based health center was one of the first comprehensive pgorgrams in Colorado, staffed by a team which includes a physician, a physician assistant, a mental health therapist, a drug and alcohol counselor and a health technician. This team works closely with the school nurse and school social worker. There are now eight such centers in Denver schools, serving a total of 12,000 students, and there are a total of 28 centers throughout Colorado serving about 24,000 students. The school-based health centers in Denver, which are located at six high schools, a middle school and an elementary school, have been funded in part by local pooled resources, and by $3.7 million in grants that have been raised by an interagency partnership during the past eight years.

Twenty-five percent of Lincoln students do not have health insurance. Even many of those students who have health insurance say they do not get needed health care elsewhere. Nearly half of the students surveyed at Lincoln High School said they would not feel comfortable seeking care from their family doctor for a sensitive problem.

SBHCs make sense as part of Governor Romer's effort to help make Colorado the best place to raise a child, he said to those attending the celebaration. "Clearly, the school-based health center initiative in Colorado is a success story. When children have access to these basic services in their school, they are more likely to get assistance for health needs, more likely to get help quickly and more likely to succeed in the classroom."

In his closing remarks, Romer said "I want to encourage others, legislators, managed care providers and the community leaders, to visit school based health centers such as this one to see how well they work and to learn from their experiences. We must work together to make sure that kids have all of the resources they need to succeed. We cannot stop short of serving the basic health needs of every child."

Shape-Up Across Colorado (SUAC)
Funds Available to SBHCs

The Governor's Council For Physical Fitness has entered into a joint venture with the State SBHC Initiative to provide a physical activity option that can be considered by all School-Based Health Centers.

The program is called Shape-Up Across Colorado (SUAC), run by the Council for several years. SUAC is intended to provide a way for students to begin and continue with a physical ativity program that is self-paced and monitored.

The Council will issue a RFP for School-Based Health Centers to adopt or adapt SUAC during 1996-97. Five grants of $1,000 will be awarded to help with the cost of materials, incentives, awards, and administration of SUAC. While SUAC was developed for grades 2-8, any grade might successfully institute it. Jack Beattie, Governor's Council Director, will be the key contact for SUAC and can be reached at 303-692-2503.

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