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A CASE STUDY  
OF AN ELEMENTARY SCHOOL - BASED  
HEALTH CLINIC

---

A Dissertation  
Presented to  
the Faculty of the Department of  
Educational Leadership and Policy Analysis  
East Tennessee State University

---

In Partial Fulfillment  
of the Requirements for the Degree  
Doctor of Education

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by  
Sheila Kay Jones  
May 1996

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**APPROVAL**

**This is to certify that the Graduate Committee of  
Sheila Kay Jones  
met on the  
25th day of March, 1996.**

The committee read and examined her dissertation, supervised her defense of it in an oral examination, and decided to recommend that her study be submitted to the Graduate Council, in partial fulfillment of the requirements for the degree of Doctorate of Education in Leadership and Policy Analysis.

Marge Hill  
Chair, Graduate Committee

Louise L. Mackay

Whitfield B. East

Russell F. West

Signed on behalf of  
the Graduate Council

Ray G. Kendall  
Interim Dean School of  
Graduate Studies

ABSTRACT  
A CASE STUDY  
OF AN ELEMENTARY SCHOOL-BASED  
HEALTH CLINIC

by  
Sheila Kay Jones

The purpose of this study was to perform a qualitative analysis of an elementary school-based health clinic (SBHC). This situational analysis was performed to further understand the impact of accessible primary health care on an elementary school population. Data were collected through 30 participant interviews of parents, educators and medical personnel. Additional data were collected through the clinic files, and a t-test was used to compare the attendance and achievement data of clinic consumers for the clinic year against records from the previous year.

The researcher presented information on the steps of SBHC development to include community campaign procedures. The investigation was performed to not only understand the procedural steps of clinic development, but also to document any issues which surfaced in the process.

Some of the major recommendations as a result of this investigation were:

1. The health needs of community children must be viewed as a community concern and not one exclusively owned by the school.
2. The community as a whole, must come together in the form of an advisory board holding a broad representation of the community.
3. School communities should assess their school public to understand the level of need for instituting a SBHC.
4. A community needs assessment should be performed to understand the medical services currently available to children.
5. SBHC files and operations must meet the standards and norms of the profession.

6. Funding and liability issues should not limit the vision of clinic development.

7. Health management organizations and/or insurance companies should be approached for financial consideration with SBHC development due to the apparent cost effectiveness of health service delivery.

8. Staff development opportunities should be provided school nursing personnel so they can grow to understand how to develop community partnerships and their role within them.

9. SBHCs must address the physical, mental, and emotional needs of children.

10. SBHCs must operate within the norms and standards customarily practiced in any medical clinic.

11. Funding nor liability issues should not be given more attention then will.

12. A longitudinal study should be conducted after five to ten years to determine the impact SBHCs have on the lives of children.

INSTITUTIONAL REVIEW BOARD

This is to certify the following study had been filed and approved by the Institutional Review Board of East Tennessee State University.

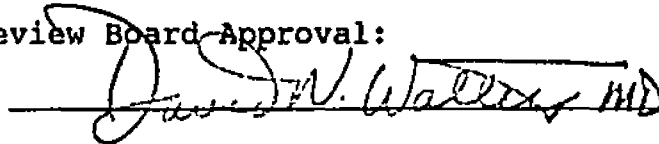
Title of Grant Project: A Case Study of an Elementary School-Based Health Clinic

Principal Investigator: Sheila Kay Jones

Department: Educational Leadership and Policy Analysis

Date Submitted: November 28, 1995

Institutional Review Board Approval:

  
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Chairman, Institutional Review Board



## ACKNOWLEDGMENTS / REFLECTIONS

"Because of the littleness of your faith; for truly I say to you, if you have faith as a mustard seed, you shall say to this mountain, 'Move from here to there,' and it shall move; and nothing shall be impossible". Matthew 17:20

In the big picture, words somehow seem so trite. My appreciation, please know, goes beyond that which I can write on a page. I do, however, hope to share a bit of my heart...

I am indebted to my insightful and distinguished committee members Dr. Russell West, Dr. Chip East, and Dr. Louise MacKay and my chair, Dr. Marie Hill. Their direction was never dictated or pointed. The doors to them were always open; yet, they never told me the way. Through questions and conversation they made more clear my intentions and allowed me to determine the most appropriate path. This permitted true growth.

Dr. Marie Hill, my confidant and friend, receives a special note of gratitude. More than anyone, she has modeled the idea that we as leaders can and should be encouraged to be different. Her willingness to embrace those around her was refreshing. Her modeling of true leadership has affirmed and refined my beliefs in myself.

This accomplishment is shared with many friends and family members. My colleague, Eloise Jurgens with whom I shared many hours over the phone, and also my best buddy Robin Crawford, who always instructed me to "go for it",

I say thank you. I also am grateful to my church family for their prayers and words of encouragement.

I am beholden to my husband, Gary, who sacrificed much of himself, and his work, so I could fulfill this mission. Never could this have happened without his generous loving support. My children, although young, showed wisdom beyond their years, willingly sacrificing themselves. Their loving support came through so vividly understanding the need when Mommy had to study or be absent sometimes at bedtime. Caiti, Hanna, and Molly this is dedicated to you, in the hopes you too will see the gifts God has granted you and the expectations He holds for each one of us to seek out, and go beyond in the quest for His knowledge.

One could not forget to thank those most involved with my being. To my mother, Evelyn Sands, who is presently not cognizant to understand this feat, I pay tribute. Although not formally educated, she always, in her own quiet way, without words, encouraged me to go forward. I love you Mom, more than you will know! Last but never least, I honor my God. Oh how humbled I am. You came into my life when I felt alone and misdirected. You were never just with me you have carried me through much. I am so unworthy, you have heard my prayers and know my heart and still yet blessed me beyond compare. Words could never express the debt I owe . . .

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CHAPTER 1  
OVERVIEW OF THE STUDY

Education professionals, physicians, and other health care providers have held an assumption that healthy children learn more effectively and efficiently than children suffering from health problems. Several school-based health initiatives have been established as a result of this assumption. School-based health clinics (SBHCs) are an innovative initiative, designed to provide primary comprehensive health care to school-aged children (Stephens, 1995). Schools are a public institution with an opportunity to improve the health of children.

If all children are expected to achieve their educational potential, then schools must be equipped to address the multifaceted problems of today's youth. American children are increasingly experiencing a variety of challenges never imagined just a few years ago. The toll on children is evident in daily statistics of increasing crime rates, increasing drop out rates, and lower achievement and standardized test scores (Wehlage, Rutter, Smith, Lesko, & Fernandez, 1989). Social problems in neighborhoods, problems within families, and stresses of life can contribute to physical health problems, which, in turn, can cause or contribute to behavioral problems. These problems, often established in childhood or adolescence, are continued

throughout adulthood. With nearly 95% of all children and youth between 5 and 16 years of age attending school, school-based health interventions in the school are a logical approach (Kirby, 1990). Historically, schools have been at the hub of communities making them the likely location for intervention services (Sullivan, 1992).

The physical and mental health of children affects their ability to learn. Teachers know that learning is easier when a child feels well (Brink & Nader, 1984). Any health problem-- hunger, poor vision or hearing, dental caries (cavities), or child abuse-- can interfere with concentration and attention when a child is in the classroom. Having children remain on task and be attentive is far more likely to occur when preventable physical and emotional discomforts are diagnosed and treated.

Accessible primary health care can minimize the physical and emotional health problems children face (Rowe, 1987). Physical and mental health problems cause children to miss school, lack energy, be distracted, or have other problems that impair their ability to learn (Health/Education Consortium, 1990). Compromised health situations can also induce behaviors found inappropriate in the classroom. This is readily evident with the growing number of attention deficit disorder cases that have been diagnosed during the last five years (Zirkel, 1994). Children who are not able to remain on task or have

inappropriate "acting out" behaviors in the educational setting not only risk losing precious academic information, but often are disciplined in a manner that compromises additional class time. To overcome this great loss of human potential, educators, medical providers, business and political leaders, and the public at large must collectively address the issue.

Delivery of health services in the school is not a new phenomenon. The first school health service model emerged between the 1890s and early 1900s in Massachusetts (Porter, 1987; Stone, 1990). The main role of school-based health services at that time was to keep contagion out of the school (Porter, 1987). Immunization attempts have been implemented because of childhood epidemics such as polio, diphtheria and tuberculosis. These early attempts to control disease were successful; however, since that time, a new life threatening disease, AIDS, has surfaced. Today AIDS, poverty, homelessness, drug abuse, and pregnancy are the morbidity's plaguing the nation's children (Sullivan, 1992).

HIV infection has raised new issues, while stretching health resources presently available to schools. Schools must take steps to educate and prepare children, staff, and faculty about the disease. Palfrey, et al. (1994) found there to be 4,906 AIDS cases reported for children between the ages of 0 and 12, which indicates a need to be more



proactive with this population. These researchers stated that because of advancement in medical treatments available to these patients, 50% of this population will survive into their school years. Pediatric AIDS cases will increase due to the rising rate of HIV infection among women. The World Health Organization (WHO) estimates more than 13 million women will have been infected with the virus before the year 2000 (UN Chronicle, 1994). Additionally, this United Nations report indicated cases of AIDS in women increased by 10% between 1992 and 1993.

The nation's economic and social systems reflect the serious repercussions of ignoring the issues of children's health and their success in life and school. Underachievement, school failure, and related health and social problems are far more financially draining than the cost of treating these problems (National Commission on the Role of the School and the Community in Improving Adolescent Health, Executive Summary, 1990).

Many of the deterrents to providing health care are related to cost. The type of health care received is often determined by cost alone. As Lisabeth Schorr and her husband David, co-authors of *Within Our Reach: Breaking the Cycle of Disadvantaged* (1989), explained: "How health services are paid for determines, more than anything else, how the health system operates - what services are

available, who provides them, and who receives them." (p. 118).

A child's ability to learn may be impacted by the simplest health problem. Heazlett and Whaley (1976) studied the effects of the common cold on a child's perceptual ability. Findings indicate perception and learning performance are negatively affected when a cold is present. Because the common cold is the most contagious disease in the US, results of this study are meaningful.

Screening programs are one vehicle to detect health problems that might impede the learning of school age children. It is common for school systems to use this technique to look at groups of children. Screening services are often targeted for immunizations, diagnosis or treatment of specific disease, or prevention. This technique, however, is not currently reaching all the children who need such services, with about 12 million children not receiving basic preventive care such as health screenings, exams, or immunizations in proper intervals (Newacheck, 1989).

The health problems of school children must be investigated and the causative factors identified (Kornguth, 1991). Approximately 7.5 million of 62 million school-age children (12%) suffer from a chronic disease (Zanga & Oda, 1987). Lack of access to a medical provider can contribute to more frequent and lengthy school absences. Kornguth (1991) also reports that parents promote absenteeism through

decisions to keep children home all day for routine provider visits, such as immunizations. The National Health Screening Program reports absences due to illness are more frequent in low-income families. Additionally, Kornguth (1990) noted that the educational level of the mother and the availability of health insurance are factors which impact childhood health related absences.

The challenge for educational and community leaders is to address the health needs of school children in an efficient cost effective manner. This study will investigate the development of a school-based health clinic to further understanding of the impact accessible primary health care has had on children attending this school. For the sake of this study, this clinic will be referred to as the CARE clinic and is unique because (a) the delivery of care is provided by pediatric residents, (b) there are no fees for services, (c) the clinic offers on site mental health delivery, and (d) it is operated as a collaborative partnership between the school district and the local university.

#### Statement of the Problem

The future success of children is dependent upon academic success. Children who do experience academic success are statistically less likely to: (a) drop out of school, (b) exhibit unacceptable social/criminal behaviors,

(c) depend on society through transfer payments or (d) engage in criminal activities (Weiss, Farrar, & Petrie, 1989). When children feel good about themselves, their overall health is promoted to a level conducive to learning (Schultz, Glass, & Kamholtz, 1987). One strategy to improve the health behavior of children is to interact with and educate youth as they develop health habits, while providing treatment and knowledge, skills, and motivation for engaging in healthy behaviors.

#### Purpose of the Study

Physician services are utilized less frequently by school-aged youth than other populations (Council on Scientific Affairs, 1988). Children are dependent upon their adult caretakers to intervene when health needs are present. Parents often may not have the tools, whether it be finances, education, or transportation, to provide appropriate health care, prevention, and early intervention. The purpose of this study is to explore the steps taken for development of an elementary school-based health clinic and examine the impact accessible primary health care has on a specific population.

## Definition of Terms

### Case Study Research

"The in-depth study of instances of a phenomenon in its natural context and from the perspective of the participants involved in the phenomenon" (Gall, Borg, & Gall, 1996, p. 754).

### School-Based Health Clinics (SBHC)

A facility located in a school building or adjacent to a school building, where an array of services is provided by medical and social services personnel (Dryfoos, 1993). Services often found in SBHC operations are ones that promote health of students through prevention, case finding, early intervention, and remediation of specific health problems. Services can also be found relating to the provision of first aid and triage of illness and injuries (Elders, 1993).

### Accessible Primary Health Care

Many variations of accessible primary health care exist. This study will focus on care that treats both physical and emotional problems; prescribes and/or dispenses medication; and provides early detection of acute, chronic, and psycho-social problems (Kirby & Lovick, 1987).

### Resident Physician

"A resident physician is a scholar who has a breadth and depth of knowledge that facilitates the practice of medicine" (P. Bagnell, personal communication, March 3, 1995).

### Research Questions

The educational literature, along with the qualitative analysis, will be explored to study the following questions:

1. What procedural steps were taken to establish and operate the CARE SBHC?
2. What community campaign was adopted to successfully realize this operational clinic?
3. What issues developed in establishing the CARE SBHC? How were they resolved?
4. What is the impact of the CARE clinic on the lives of children?

### Delimitations

This study is delimited to a specific SBHC environment.

The delimitations then, are as follows:

1. children 3 years of age to 11 years of age,
2. the medical and social concerns normally appropriate to the preadolescent child,
3. a school having fewer than 350 children with a 17% minority population,

4. interviews with individuals who were available, and connected to the clinic through working in its design, operations, or as a clinic consumer, and

5. short term data, as data were collected just one year after the clinic opened.

#### Assumptions

The following assumptions were used in this study:

1. the information provided in the interviews was honest, accurate, and free from bias, and

2. the data collection methods were accurate and correct.

#### Overview of the Study

Children today must be provided the support necessary to overcome any obstacles for academic achievement. A high school degree, at one time, was not necessary to enter the work force in manufacturing positions or for joining the armed forces. As this is no longer true, children must be equipped to become as successful as possible in order to compete in the world today. It is therefore necessary to investigate avenues that may impact the positive future development of children. Investigating the development of a SBHC will provide educators and medical professionals alike with information for informed decision making when designing primary comprehensive health care programs for children.

The research in this study was organized into five chapters. Chapter I serves as an overview to the problem. Included in this chapter are information on the purpose of the study, study questions, definition of terms, significance of the study, delimitations, and assumptions.

Chapter II presents the review of the related literature. The literature presented is limited to information concerning health and children, health and school achievement, health and attendance, and primary comprehensive health care and school based health clinics.

Chapter III presents information concerning the research methodology of the study. It includes the proposed research design, data collection, and analysis procedures.

Chapter IV provides the data and analysis findings. Information as reported through the interview process is presented along with the attendance records and achievement scores collected from the sample.

Chapter V concludes the study. Presented in this chapter is the conclusions, recommendations, and study implications.



## CHAPTER 2

### REVIEW OF RELATED LITERATURE

Over 2000 years ago Polybius said: "It may have been possible in the past for things to have happened in isolation, but from this time forth, the world must be seen as an organic whole where everything affects everything" (Foegen, 1990, p. 131). Attention given to environmental issues such as the ozone layer, deforestation, and acid rain is important because of the interdependency of the world. Children are a natural resource for all nations; therefore, solutions to problems affecting them must also be approached from a global standpoint.

Health concerns, too, are not limited to local communities. They are basic to the global society of the world. The World Summit for Children is an example of the global interest on health policies of developing countries. The summit, proposed initially by UNICEF in 1988 in its State of the World's Children Report, involved collaborative efforts of 161 countries (Pebley, 1991). The summit issued the need for a "World declaration on the survival, protection and development of children" (p. 171). The concern striking the world is whether health care issues should be addressed selectively, or should a comprehensive primary health plan be implemented (Walsh & Warren, 1979). Providing children with an appropriate level of wellness is

the main goal. The epidemiological outbreaks through history have involved illness issues such as measles, tetanus, diphtheria, polio, pertussis, and tuberculosis. Immunization programs have been implemented to limit the outbreak of these diseases yet many health needs of children go unaddressed daily.

This chapter reviews the literature on children and health issues as they relate to school and school performance. Four distinct research areas appropriate to this study surfaced in the available literature. This review will present; literature concerning health and children, health and absenteeism, health and learning, and primary health and school-based health clinics.

### Health and Children

In a classroom in Canton, Mississippi, Kenny had trouble seeing the blackboard. His teachers showed impatience as he fell behind in his schoolwork. One teacher slapped him when he did not move out of her way. Another told his mother that she 'didn't have the time to teach him'. When Kenny was nine, his third-grade teacher called him a fool, and his mother took him out of school. Not until he was fourteen was his eyesight tested. He was found to have a serious but correctable vision problem. His mother tried

to re-enroll him in school, but Kenny, ashamed of failure and unwilling to start again with younger children remains at home, unhappy and unschooled (Schorr & Schorr, 1989, p. 86).

The aforementioned, is but one example of what may readily occur with children. This example was of an American youth, but the concern for children and health is apparent throughout the world. Within the 189 countries in the world (Information Please Almanac, 1995), the approach to enhancing the life and specific needs of citizens vary. Each country has also approached health related needs of school children differently. In the last century Europe forged ahead of the United States. A French law enacted in 1842 required that a physician inspect all students and school premises (Duke, 1980). Similar steps were enacted in Sweden in 1868 and Germany in 1869. Brussels took this challenge further, by being the first European city to organize regular health inspection in 1874. This inspection process required that all children be inspected every three months by a vision specialist and a dentist (Anderson & Creswell, 1976).

Five major types of health programs operate within most countries, including the United States. According to Stone and Perry (1990) the first major program is a government agency that regulates and delivers health services. Secondly, auxiliary government agencies offer health service

functions. For instance, the primary function of the Department of Agriculture in the United States is to manage agricultural issues, yet it orchestrates food commodities for the disadvantaged. This program was developed to provide nutritional supplements to maintain an appropriate level of wellness.

The third type of program actively addressing health issues are voluntary health organizations. These organizations operate to aid in the health plight of citizens. An example of this in the United States would be the Lions Club, and their efforts toward eye conditions and sight problems. Through financial contributions, as well as donated glass frames, the organization works to unite those in need with services. Many more such causes operate similarly throughout the world.

Independent health care enterprise organizations such as Blue Cross and Blue Shield are the fourth level of health delivery. Such organizations function as gatekeepers and fund services. The gatekeeping role stems from being the primary payer source. As the payer source, ultimately they are responsible for the health care coverage of those under their plan; therefore, they become the gatekeepers for service in order to monitor and limit health care cost. Private health care providers make up the remaining health service programs operating throughout the world. Medical providers deliver hands on health care to patients in need.

Medical provider services are fee based and are often paid by health insurance agencies, government programs, or private pay. A former US Surgeon General, C. Everett Koop, agreed with Stone and Perry's analysis of the various levels of health care, and felt that they were not adequate. He wrote:

In this country, health and education services are provided by a complex mix of public, private and voluntary agencies and organizations. We must develop new organizations. We must develop new organizational relationships at the family and community levels among schools, physicians, public health agencies and social service organizations (Health/Education Consortium, 1990, p. 7).

Health issues and concerns are not constant from country to country. For instance, vision in China is a serious health problem for children (Bin, Fu, & Qi, 1990). According to Bin, Fu, and Qi, many children are forced to work long hours under poor lights, causing visual strain. Because of the numbers of children this affects, vision continues to be a concern for Chinese children.

In Japan, a socialized health care system has operated since 1961. National and local governments, along with private providers, serve all Japanese. The system is a fee controlled medical delivery system. Environmental problems and behavioral issues are recent health care concerns for

Japanese children (Watanabe, Mori, Haneda, Grunbaum, & Labarth, 1990).

Medical care is primarily provided through a socialized health care system in Europe too. In the Federal German Republic, more than 90% of the population are members of the Mandatory Sickness Fund (Institute for Health Systems Research, 1988). The German Medical Association in 1989, by order of the Federal Ministry of Youth, Family, Women, and Health analyzed the most important health problems of school age children. Researchers discovered obesity, dental caries, traffic accidents, mental disorders, and sexual abuse serious child health concerns for German youth (Glasner-Moller, Greiser, Korte, & Rieger-Ndakorerwa, 1990).

Child health issues in England and Wales compare favorably to other developed countries (Office of Population Consensus and Survey, 1989). Major child health concerns revolve around behaviors inappropriate with positive future health. Smoking, alcohol abuse, and poor nutritional habits are behaviors established young in life that determine later health status (Nutbeam, Farley, & Smith, 1990). In 1948, the United Kingdom established a social health system, the National Health Service (Nutbeam, 1989). Due to the importance of early identification and health education, the National Health Service rewards private practitioners monetarily for each young person registered with them.

A national system of health care in Canada is provided for all citizens. Provincial or Territorial Ministries of Health Education hold the financial responsibility of health related services within the schools (Mutter, 1988). Canadian youth are characterized as being relatively healthy. Nutrition, dental caries, and poor social behaviors such as early age tobacco and alcohol usage are health related factors Canadians must address with their student population (Mutter, Ashworth, & Cameron, 1990).

America, by world standards, is rich. Industry, technology, and higher education, to name a few, are areas of prosperity. Nevertheless, American children lack access to regular health care necessary to prevent disease, disabilities or to treat acute and chronic health conditions (Committee on Government Operations: Health Care, 1994). Since 1993, with the instillation of the Clinton democratic presidential administration, a serious effort has been made to overhaul the United States health care system (Elders, 1993).

In 1992, one of every five American children had no comprehensive health coverage (Sullivan, 1992). Many children who do have health insurance have insurance carriers who fail to cover preventative care or preexisting conditions. Often, due to the cost of medical care, it is assumed that these statistics pertain mostly to low-income populations. The Children's Defense Fund 1994 Report

dispels this notion with their claim that the number of non-poor children without private insurance is on the rise. This population, according to this report, in 1993 made up 8.65 million of the uninsured child population.

To adequately present the health needs of American children other statistics are pertinent. For instance, Nader (1990) reported the infant mortality rate in the U. S. ranks 17th among industrialized nations. Other information explains the number of deaths of children under the age of one existing in a calendar year, per one thousand births. Japan reported 4.3, Finland, 5.2, Germany 6.3, Denmark and Canada had 6.8, while America had 7.9 (US Bureau of Census, 1995). America, unlike the other countries listed, does not operate under a socialized medical system and had the highest expenditures of health care compared to the gross national product with 14.1%. This information alone is not noteworthy; however, comparing this figure to other countries such as Japan which reports 7.3%, Germany 8.6%, Denmark 6.7%, and Canada who came closest to the US with 10.1% the picture becomes more vivid (US Bureau of Census, 1995).

The poverty level for Americans include roughly 12 million children. Insurance is not a luxury experienced by all Americans as children are more likely to have no insurance than adults. The family unit has changed and with



this three-fifths of American children live all or part of their life with one parent (Sullivan, 1992).

According to Sullivan (1992), Medicaid legislation was enacted in 1965. Schorr (1970) describes Medicaid as being an offshoot program of Medicare, which is a government sponsored insurance program originally established to assist the elderly to meet the cost of health care. Medicaid was legislated later, in response to rising health care costs, to assist the poor in meeting their health needs. No one could have predicted the escalation in health care spending that has occurred since then. Although Medicaid was designed to fill gaps in medical coverage and services the reality has been that Medicaid has not provided the breadth of coverage originally envisioned. Paul Starr, a medical historian of the period, described Medicaid as, "the original sin of American health policy" (Schorr, 1970, p. 114). Never could it be envisioned that the demand would be so great that it very quickly would surpass the financial supply.

Hospital emergency room records indicate a need to examine more creative approaches for medical service coverage. Each state continues to look for innovative approaches to improve health insurance coverage. Expansion initiatives to facilitate access to health coverage for low-income children have been undertaken in more than half of the states (Children's Defense Fund: Health, 1994).

State-financed children's health insurance has been the model of choice for New York, Pennsylvania, Massachusetts, and Minnesota. Other states have initiatives to expand Medicaid eligibility for a more comprehensive statewide health care reform. Tennessee's Medicaid waiver allowed the state to establish TennCare. The Governor's TennCare Roundtable published a Report to the Policy Advisory Committee on TennCare (1995) that stated in the preamble that 20% of the state's budget will be encumbered to cover almost 25% of the population.

Managed care plans are the basis of health care coverage with TennCare. Applicants may either choose a managed care provider or have one assigned. Once accepted into TennCare, the next step involves finding a medical provider who will not only accept TennCare as the payer source, but a provider who accepts the patient's managed care provider (B. Marrs, personal communication, May 24, 1995). Accessibility of appropriate services for children is a major problem, with or without some type of medical coverage. Kahne and Kelley (1993) expressed the seriousness of this problem:

Unfortunately, the children and families who might benefit from services the most are often the hardest to reach. It is relatively advantaged at-risk youth who are able to link up with programs and services and receive assistance. The 'truly disadvantaged' may not

have even the marginal resources necessary to discover available programs and services or to pay for transportation to service delivery sites. (p. 192)

Local health departments often design, develop and implement the local health programs. Programs range from health care clinics to community wide immunization or disease prevention efforts (Sullivan, 1992). Lovato, Allensworth, and Chan (1989) reported school health responsibility belongs to the health department in 15 states (30%), the education department has control in 11 states (21%), and in 18 states (35%) the responsibility is shared by these two departments. The remaining 7 states (14%) list agencies such as human resources or environmental departments as having program oversight.

American children have a right to be educated, and a right to be healthy (Novello, 1991). Healthy, educated citizens should be a national goal of the United States citizens and government. An objective would be that every child arrive in the world healthy, and enter school ready to learn. A legislative attempt to address this challenge has occurred through the development of *Goals 2000: Educate Americans Act* (Riley & Shalala, 1994). The Secretary of Health and Human Services states:

Our children need consistent, sound health information and access to health services, beginning in their families and continuing in their schools and

communities. There is no question that our schools have a key role to play in helping our children begin a lifetime of good health. (p. 135)

*Goals 2000* was an outgrowth of an initiative on national standards and goals for education that was developed during President George Bush's administration. *Goals 2000*, which was passed in Congress in March, 1994, incorporated eight goals. These goals are noteworthy in they are indirectly related to health and children. The first goal was that by the year 2000 all students will start school ready to learn. Improving graduation rates so no fewer than 90% of students stay in school through graduation was also emphasized. To accomplish this, standards and achievement levels will be set for grades 4, 8, and 12 in English, mathematics, science, history, and geography. Additionally, *Goals 2000* stressed the need to strengthen skills in curricula such as mathematics and science. Health concerns impact a child's readiness to master these goals (Lavin, Shapiro, & Weill, 1992).

The federal government has focused more on productive schools and opportunities to make American schools as competitive as possible. Another such initiative involves the National Commission on the Role of the School and the Community in Improving Adolescent Health, working with the National Association of State Boards of Education and the American Medical Association. These agencies focused on the

health crisis of U. S. adolescents and produced, in 1992, *Code Blue: Uniting for Healthier Youth*. Findings reported were:

1. attention must be given to investigate resources in support for health care because the state of adolescent health in America constitutes a national emergency,

2. health status and school performance are interrelated and this relationship can not be ignored,

3. four major recommendations were:

(a) to guarantee all children access to health care, regardless of ability to pay,

(b) make the community the front line in the battle of child health,

(c) organize services around people, not people around services, and

(d) urge schools to play a stronger role;

4. create a strategic plan of action for federal and state governments (Lavin, et al., 1992, p. 226).

### Health and Learning

Given the relationship between health and learning, addressing any single issue in isolation is rarely enough. Effective school strategies need to look beyond academics to the often unmet and interrelated health needs that limit school

performance (Council of Chief State School Officers, 1991, p. 12).

Science and technology are rapidly transforming the world. In the present economic/business society competition is stiff and technical competence is required. Tomorrow's work force must have technologically-based skills and hold the ability to adapt these skills to keep abreast with the ongoing changes in technology. These skills will be required for careers from early entry manufacturing positions through upper level management. The groups presently at the bottom of the economic and educational ladder, blacks and Hispanics will represent one third of the young population in the year 2000. It is also been speculated that by the year 2000 fewer college age students will enter the work force (Carnegie Council on Adolescent Development, 1989). To impact this different world, constructive interventions that can influence lifelong behaviors must be created.

At an early age children need to acquire skills that will allow them to have a strong sense of self, perform higher level thinking skills, feel comfortable with close human relationships, and have a sense of belonging and usefulness. Formal education programs provide children the opportunity to grow and prepare for the future through the establishment of a strong intellectual foundation. Chances for school success for children are profoundly affected by

many non-school factors. Life outside of school creates intense demands and pressures that negatively impact school achievement (Koppich & Kirst, 1993).

"Good health and learning are intimately connected", according to the assistant chairman of the department of pediatrics at the University of New Mexico School of Medicine, Clark Hansbarger (American Association of School Administrators, 1990, p. 2). Health problems and self-destructive behaviors, such as drug usage, often result in academic and social problems which often precipitate dropping out of school. Overall health also affects education. Educators and health providers alike realize children who are at risk of school failure also are at-risk for poor health (Dunkle, 1990). Learning comes easier to a healthy child; yet, learning can easily be impaired by even the smallest health problem. It is not hard to understand how vision or hearing problems would interrupt the learning process. According to Dr. Michael McGinnis, Director of the Office of Disease Prevention and Health Promotion:

A student who is not healthy, who suffers from an undetected vision or hearing defect, or who is impaired by drugs and alcohol, is not a student who will profit from the educational process. Likewise, an individual who has not been provided assistance in the shaping of healthy attitudes, beliefs, and habits early in life

will be more likely to suffer the consequences of reduced productivity in later years (Elders, 1992, p. 127).

It follows then that other conditions commonly experienced, such as hunger, dental problems, or impaired mental health would have a dramatic effect on school performance.

Unattended physical and mental health problems cause children to lack energy, be distracted, and miss school, all impairing their ability to learn (Health/Education Consortium, 1990). "Attention to health needs in the broadest sense is required in order to increase academic achievement" (National Commission on the Role of School and the Community in Improving Adolescent Health, 1990, p. 9).

Chinn (1973) explored the relationship between health and school problems and found several significant correlations between health problems and school problems. The study involved 46 first grade students, 26 of whom failed (Score < 88) the statewide administered Cognitive Skill Assessment Battery (CSAB), and 20 who passed (Score > 88) the CSAB. An individual health screening was given to each student by the school nurse. Screening variables of weight, height, eyes, ears, teeth, heart, neuromuscular, blood pressure and hemoglobin, health history, birth weight, and birth complications were recorded. Chinn's study concluded that health problems are related to achievement. Analysis of the data indicated that students from low-income



families tended to have more health related problems in regard to nutrition, and children in single parent homes are more at risk for health problems. A need for school district participation in health habit instruction, nutrition, and preventive medical care was indicated (Chinn, 1973). Additionally, educational and social rank, along with emotional cues are found to relate with classroom problems (Brown, Grubb, Wicker, & O'Tuel, 1985).

A report published by the Education Commission of the States (Newman & Buka, 1990) synthesized seven preventable factors that impact learning. Listed areas of prevention are low birth-weight, prenatal drug and alcohol exposure, maternal smoking, lead poisoning, malnutrition, and child abuse and neglect. Further research from Newman and Buka reveal "New evidence indicates that by school age a troubling 12% of children -more than 450,000 additional children each year- suffer damage that prevents them from learning as well as their natural endowment would allow" (Newman & Buka, 1990, p. 1).

Schools must be equipped to address these multifaceted problems if children are expected to achieve their educational potential. In recent years, growing attention has been paid to the relationship between health and learning. Efforts made to improve schools through reform initiatives that ignore dimensions involving children's health will not necessarily achieve improved school

performance. The same is true for health improvement initiatives ignoring health education. The relationship between good health and educational achievement has been reinforced in studies of school-restructuring when the importance of bringing health resources into the school is highlighted (Dryfoos, 1993)

Various professional organizations, and even legislative initiatives, are emphasizing the essential concern for health services. *Turning Points*, a report published by the Carnegie Council on Adolescent Development (1989), provides insight on the challenge to prepare American youth for the 21st century. It seems the rapid transformation of the world in the area of science and technology will require more skill and work adaptability for today's youth to compete. According to this report: "Most young adolescents attend massive, impersonal schools, learn from unconnected and seemingly irrelevant curricula, know well and trust few adults in school, and lack access to health care and counseling" (Carnegie Council on Adolescent Development, 1989, p. 15). This report calls for the placement of health coordinators in every school to organize necessary physical and mental health resources.

The establishment of the aforementioned initiatives has brought more attention from the federal government. There presently is a focus on more productive schools and creative program opportunities to address the areas of concern in

American education. Clearly there is no one answer that will address the problems of children in relationship to school success. *Turning Points* and *Goals 2000* are initiative examples established in support of the need to look at the problems from a child centered approach.

#### Health and Absenteeism

National, state, and local reports have been published indicating a high correlation between excellent school attendance and academic success (Carruthers, 1993). One objective of school health programs is to keep children in school and functioning at optimal levels for learning (Kornguth, 1990). Excessive school absenteeism impacts school and, later, adult performance. Kornguth (1991) states: "If children are of sufficiently low income (Medicaid eligibility varies from state to state), school nurses can anticipate that children from these families will be absent more frequently".(p. 273)

More importantly, absenteeism is often caused by physical or psychological health problems associated with other risk behaviors that directly impact health (Klerman, 1988). Excessive school absence, not related to physical health, is a social problem that often begins in the elementary years according to Jessor and Jessor (1977), who performed early work in this area. Robins and Ratcliff (1980) took the research a step further when they

investigated black school boys born in the early thirties in St Louis, Missouri. Robins and Ratcliff found that truancy (20 or more absences a quarter) began in the primary years (first or second grade) and often predicted high school truancy. Furthermore, this study found that 35% of the truant elementary school children exhibited four or more of eleven juvenile deviant behaviors. These investigators also reported that school truancy was associated with dropping out of school, low earnings as an adult, as well as other deviant adult behaviors, such as criminal involvement.

A significant number of school absences are reported for physical illness. A study of pupils who demonstrated symptoms of the common cold was made to understand more fully how a cold effects perceptual ability and learning performance. Learning tasks appraised in this study included reading comprehension, visual perception, and auditory perception. Seventh grade students with two or more cold symptoms were compared with students without cold symptoms. Results indicated a significant difference in performance on all three tests. The perceptual learning performance of subjects suffering from cold symptoms were adversely affected (Heazlett & Whaley, 1976).

Moreover, an examination of the National School Health Services Program disclosed data related to the probability of absence found through health screening findings. Children with two or more diagnosed health related problems

were absent 24% annually from school. Older children had more diagnosed problems but were not more likely to be absent than younger children. These findings also indicated that girls were more likely to be absent than boys, but the number of diagnosed illnesses did not vary by gender.

Children whose mothers had less than a high school education were more apt to have diagnosable health concerns such as heart, bone or spine, and dental problems (Kornguth, 1991).

Nutrition is crucial in the cognitive development of children. The Center on Hunger, Poverty, and Nutrition Policy 1994 reports poverty is the primary factor with poor nutrition. Additional findings indicate under-nutrition does impact learning and cause permanent retardation of physical, brain and cognitive development. Derelian (1994) has most recently studied nutrition in regards to classroom attention. He indicated students' time on task is greatly reduced when facing hunger. Performance outcomes such as achievement test can be affected by this finding. Derelian also indicated acting out behaviors often accompany hunger. Children do not compensate their feelings of hunger and typically require more disciplinary intervention by teachers.

Asthma is a common chronic condition among children and affects twice as many children as any other illness (National Heart Lung and Blood Institute, 1991). Asthmatic conditions result in a considerable amount of school and

play time loss. In fact, the Committee on Government Operations 1994 report lists asthma as the most common chronic disorder among young people and is the leading cause of school absence. Asthma exacerbations account for 25% of the school absences by all school age children (Majer & Joy, 1993; Parcel, Gilman, Nader, & Bruce, 1979).

The start of the absenteeism cycle is unknown. When absenteeism first occurs, perhaps during the elementary years, school performance may not reflect a great deal of difference. Repeated absences, however, may interfere with the learning scope and sequence of many curricula. A study by the South Dakota State Department of Educational and Cultural Affairs performed the South Dakota Dropout Study to determine the relationship of absenteeism to the dropout problem (South Dakota State Department of Education and Cultural Affairs, 1993). This study collected dropout information from all South Dakota school districts offering secondary services. Participants in the study included 178 public school districts and 11 private schools. The dropout rate was calculated by dividing the cumulative enrollment by the number of dropouts in the school. This study reported 10th grade students as the most likely group to leave school. The most common reason given for why children left school was excessive absences. Results of this study indicate absenteeism is a factor worth exploring in regard to school success.

Programs that attempt to reduce school absence attack the problem from various perspectives. Healthy Kids for the Year 2000 (1990) presents the following:

Education is the key to helping people make informed, healthy choices; and children need to be healthy in order to learn. We must invest now in comprehensive school health education programs, or bear the consequences tomorrow of increased crime, welfare dependency, delinquency, and even-more burdensome health care costs (The American Association of School Administrators, 1990, p. 15).

#### School-Based Health Clinics

Schools for many years have made attempts to address school health issues. The history of school health services spans over 100 years (Porter, 1987). Schools became involved in children's health, because of the outbreak of contagion (Kort, 1984). Polio, typhus, and diphtheria are a few examples of the contagious diseases communities were experiencing. The US "melting pot" held a mixture of cultures and languages, as well as illnesses that had to be recognized and treated. As language and economic limitations were experienced by the masses, it was hard to address health issues in any other fashion, except to seek to treat children at school. It seems this occurred because most immigrants who came to America, from the many and

diverse cultures of the world, moved into areas already inhabited by people of their own nationality (Hewlett, 1991). Living within one's own ethnic neighborhood hindered acquisition of the American language and customs. A sick child was often treated at home with home remedies and distinct cultural methodologies. Children mingled at school; therefore, they were exposed to many illnesses, some perhaps unfamiliar to their family culture. Economics, language barriers and cultural unfamiliarity hindered children from receiving appropriate medical care. Because of this, nurses started to visit schools to make daily inspections of children for fever, lice, and rashes (Means, 1975). From this need, school based health care evolved.

Numerous organizations, commissions, councils and conferences have contributed to the development of at-school health treatment in America. William Alkide, an advocate in the early 1800s for physician involvement in schools, was the first leader to create a publication of school construction and maintenance standards (Means, 1962). In 1840, in Concord, Maine, he stated: "Our schools ought to have regular physicians, as much as our houses of industry, our almshouses, or our penitentiaries" (Wilson, 1964, p. 361). In 1948, the famous *Report of the Sanitary Commission of Massachusetts* was published by Lemuel Shattuck. Found in this publication was the notion:



Every child should be taught early in life, that to preserve his own life and his own health and the lives and health of others is one of the most important and constantly abiding duties. Everything connected with health, happiness, and long life depend upon this.

(p. 5)

The school health service concept in America dates back to the time of public school origin. The first original health model in the US was conceptualized in the early 1900s (Anderson & Creswell, 1976). This model presented an organization of the school health program with primary importance on school health services, health instruction, and healthful school environments.

The breadth and depth of available health services in regards to at-school delivery is broad. Allensworth and Kolbe (1987) chronicle health service delivery involving appraisals to include: health and dental examinations, teacher health assessments, vision and hearing testing, measurement in height and weight, and cleanliness. Prevention steps included: communicable disease control, safety, emergency care, and first aid. Remedial work involved: follow up services, correction of defects, and practitioner services (Allensworth & Kolbe, 1987).

Schools provide the organizational context for sustained contact with children (Stephens, 1995; Koppich & Kirst, 1993). Schools are strategically placed in local

communities, providing easy access for, and to, children. Traditionally, schools have been the hub for various community activities. It is not uncommon for the community to utilize the school to pursue recreational enjoyment, to host community performances, or as a polling station. Additionally, schools offer little negative stigma, which is not always true for other social agencies.

SBHCs are comprehensive health centers located in or near a school. In 1991, a study by the Center for Population Options reported 328 SBHC sites in operation. A 1995 report documents 622 clinics, almost double what was reported just four years earlier (Stephens, 1995). These clinics, found often in urban settings, offer a variety of services. The findings, according to this report, suggested the focus for a SBHC initially was to offer a wide range of services. Substance abuse prevention, pregnancy prevention, health promotion, mental health, and dropout prevention are all hopeful outcomes of clinic services. The comprehensive services available from current SBHC models include health examinations, screenings, treatment of minor injuries and illnesses and counseling services, primarily on a referral basis (Dryfoos, 1993).

A North Carolina study supported through funding from the Robert Wood Johnson Foundation investigated school-based clinic use and school performance (McCord, Klein, Foy, & Fothergill, 1993). The purpose of this study was to

determine the effect clinic registration and usage had on student absenteeism, suspensions, withdrawals and promotions, as well as graduation rates. The researchers studied 322 high-risk high school students. On average, these students were present 56% of the time. Twenty-four percent of absences were due to school suspensions. Statistics report that of these high school students, 26% were promoted or continued their schooling through graduation. Additionally, of the 189 students registered on the clinic rolls at the clinic, only 149 actually utilized clinic services. Findings from this research indicate that the 149 students who used the clinic were nearly three times more likely to stay in school, be promoted, or to graduate than the 40 remaining students who were registered but did not use the clinic. Specifically, this study reported students who were registered for the clinic and used clinic services attended school 20 additional days than students who were not registered (McCord et al., 1993, p. 94).

Clinics may be developed by a school system, health department or other outside agency. Governance may be assumed solely by the school or shared between the school and the outside agency collaborating with the project. The literature does not emphasize one method over another. It seems this decision is dependent on the participating parties and the distinct availability of services within each community. Clinics are operated to meet the needs of

the population they serve, but some common characteristics are: (a) each has some type of school affiliation; (b) each offers comprehensive medical care including diagnosis and treatment of minor illness, physical examinations, and specialized care to include social and mental health services; and (c) each attempts to promote extensive networking with existing community resources maximizing student services (Killip, Lovick, Goldman, & Allensworth, 1987). The collaborative make up of SBHC provide more varied opportunities for staffing. School nurses, naturally, play a vital role on the school health care team. A multi-disciplinary staff of a combining health professionals would seem to more appropriately address the myriad of health needs for youth in the 1990s. Kozlak (1992) introduced the concept of the school nurse acting in a health management role. This role not only deals with diagnosis, treatment and follow-up of conditions, but also with teaching and coordination of health education activities. Kozlak continues to state the challenge for the year 2000 will be for school nurses to play more vital roles in coordination of personnel and services as well as evaluating program outcomes to determine if program goals and objectives are being met. Presently, the school nurse role and job description vary widely from district to district (Thurber, Berry, & Cameron, 1991).

Through the years some school districts have chosen to eliminate nurse positions due to financial cutbacks. In this scenario, school health is looked at as an auxiliary service relative to other educational needs (Igoe & Campos, 1991). The medical needs of children have to be assumed by someone, and often are tasked to the school secretary. Drug therapy programs children are on with attention deficit disorder and other diagnoses should force schools to rethink responsibility being placed on non-licensed personnel.

Procedural Steps. Procedural steps in SBHC development were not distinctly presented in the literature. Collective review of the literature found that the first step in the design of a SBHC was to have a community implementation task force (Elders, 1993). This group of concerned individuals often are the local decision making body of political, school, and community business leaders. Through the development of a needs assessment, the task force uncovers information to validate the medical needs of school age children (Jehl & Kirst, 1992). To formulate a needs assessment with an accurate depiction of the community, the task force must work together, reaching out to all community agencies that serve children (Nader, 1991). Accumulation of this information can come via different routes. Not uncommon are interviews, data match surveys, action research, focus groups, and previous demographic studies.

Gathering appropriate information is not limited to information from health organizations. All agencies serving children have information and resources that assist in the formulation of a more complete picture of child issues. This process fosters a close networking experience for people on the task force team, initiating collaborative working relationships.

Systems planning is the next step for clinic development and requires negotiation of functional rules that define roles and participant incentives (Levin, 1994). Effective collaborative community planning requires dealing with the issue of ownership (Gardner, 1993). If any one agency takes on the project, other agencies tend to withdraw. Therefore, an effort to promote joint decision making and cross-agency training is necessary. Cross agency training refers to educating others on the task force about neighboring disciplines. For instance, the terms IEP or Chapter I have little meaning to a non-educator. Conversely, educators are not accustomed to terms dealing with protocols, CBCs, or other technical medical terms. Standards of operation are often different from one profession to another. A benefit for interagency working relationships might be the enlightenment that is shared concerning professions and their differences. Networking opportunities among the various disciplines provide not only education, but also a sense of understanding and sensitivity

to other professionals who also work with children. Interagency networking is cost-effective and necessary for more effective service delivery. college and university programs are changing program requirements to reflect this need. Education majors will be required to have courses within other academic disciplines, and vice versa, as a means of collaborative enlightenment. The joining of separate helping agencies is referred to as "inter-professional collaboration" (Lawson, 1995, p. 6). This exposure and understanding is invaluable to the promotion of collaborative programming and service integration for the successful operation of SBHC.

Once the community need has been determined, steps must be initiated in order to develop fiscal strategies (Dryfoos, 1993). Based upon the findings of the needs assessment, the clinic's scope, purpose, and outcomes are established. School-based health programs derive funds from diverse sources. The majority of SBHC funding according to the Center for Population Options 1993 Update on *School-Based and School-Linked Health Centers* stems from state, local, and private funding sources. Additionally, a limited amount of funding comes from private insurance and by clinic participants themselves. In 1991-1992 the median clinic budget was \$132,500 (Center for Populations Options, 1994). Maternal and Child Health funding opportunities, along with other state health department programs, according to the

Center for Populations Options, made up more than half of this funding. Few programs are financially solvent and almost all rely on a mix of unreliable and inconsistent funding. Monies are available from state and private foundations; a drawback is that extensive effort and time is necessary to make application, with no guarantees of actual funding approval. Robert Wood Johnson grants are the most well known foundation monies for SBHC operations. These grant opportunities have limits and require recipients to find alternate funding sources to become self sufficient after the funding years (Dryfoos, 1993). Beyond grants, private and third party (Medicaid) funding avenues are available for financial support (Elders, 1992; Blum, Pfaffinger, & Donald, 1982).

In addition to Medicaid, other possible funding sources are Drug Free Schools, Office of Substance Abuse Prevention, Juvenile Justice, Division of Adolescent and School Health of the Centers of Disease Control, and AIDS prevention monies (Dryfoos, 1993). About 30% of students served in SBHC are eligible for Medicaid. Barriers were found through a survey to tapping this funding. Common barriers include: (a) students lack of knowledge of their eligibility, (b) the prohibitive time and work involved with billing, (c) refusal of payment by the paying source, (d) schools not being recognized as qualified service agencies, and (e) the issue of confidentiality (Palfrey, 1991).



Agencies commonly will jointly fund clinic operations. Control, however, could surface as an issue impacting the original working arrangement (Gardner, 1993). Management issues are crucial and play a major role in funding. Medical professionals base the economy of their services upon itemization of time spent on each individual client. The economy of educational services are distributed across client pools in a programmatic fashion, versus the individual tracking customary in health services (Levin, 1994).

A strategic step-by-step plan must be developed to handle the community campaign necessary to bring a SBHC to fruition. The first strategy would be to develop documentation supporting the need for a SBHC. Secondly, key individuals must be involved in all planning phases. During this phase, some communities organize community meetings to educate the public. Key speakers, articulate in addressing the public concerns, are an invaluable part of this process. Proactive media involvement is important in order to make the public aware of the need to address youth health issues. The last step, to preclude or limit controversy, is to identify the opposition and be prepared to counter any arguments. Once the community accepts the notion of a clinic, a director who is a: "committed, child advocate, wholesome individual with good interpersonal skills" (Rienzo

& Button, 1993, p. 271) is needed to project a positive image.

Problems SBHC Encounter. Even though the literature suggest that SBHCs are proving to be effective, limitations and problems exist. SBHCs often operate in conjunction with the school day and school year. Center access is not available after school, on weekends, or during the summer holidays. Special arrangements must be made to provide alternate care sites for appropriate coverage.

School size may be another limitation. Schools with a larger student population can create a more cost effective delivery system than schools with more modest numbers. These numbers are not exact. The number of consumers would have to be a factor in determining the cost effectiveness of a SBHC. The formula to determine this cost would include data on the source of services, the type of services, as well as the funding source.

Controversy experienced in most communities where SBHCs exist presents an additional limitation. This problem stems from the relationship between public and private medicine (Kort, 1984). Health care reform has exacerbated this concern. Medical providers can be intimidated by the thought of competition. If school age children can receive comprehensive primary care at the school, there is a potential loss of patients in the neighboring clinics.

Medical professionals are being asked to rethink their service delivery, and the threat of loss of funding has been the impetus for change.

The political ramifications of primary health programs in schools such as SBHCs, focus on the controversial aspects that often occur. Sixty of 90 SBHCs participating in a national survey encountered opposition (Rienzo & Button, 1993). The major opposition came from national organizations such as the National Right to Life, Christian Coalition and the Christian Broadcasting Network, the Catholic Church, along with other fundamentalist networks. Forming broad based coalitions when collaborating in the development of a SBHC will help insure constituencies that will help and support the program (Allensworth & Kolbe, 1987).

The term "clinic" seems to initiate public fear that contraception issues will be handled. Many clinics purposely do not address birth control or pregnancy issues. They choose to refer all students requiring such services to other agencies. Although there is sometimes public pressure against this practice, it is not medically prudent or, perhaps, ethical to both deny such services and also fail to refer patients in need of further or specialized care. The perception attached to this issue is that children, if provided a resource, will become sexually active.

Albuquerque, New Mexico, experienced the ramifications of

this issue to such a degree leaders decided the term "health clinic" was not an acceptable title. To show the broad base of services their school clinics offer, they chose to rename their services as "health centers" (Rienzo & Button, 1993). Some community members consider it inappropriate to have access to clinic services in schools. Controversy, whether clinics are at the elementary or secondary level, has sometimes limited funding, services, or operations (United States General Accounting Office, 1995).

A problem that can also confront SBHC operations, especially those located in inner-city areas, is the magnitude of health problems. Sexual abuse and neglect, along with violent social behaviors, demand care from both the physical and the mental health perspective. These services can be quite complicated, and required for undetermined lengths of time. In addition, parental consent is required for prudent clinic participation. A major challenge is for clinics to communicate with the parents and legal guardians of children and secure a signed permission statement that the child has permission to be treated in the clinic. (Pacheco, Powell, Cole, Kalishman, Benon, & Kaufman, 1991).

Financing is the last, but not the least, of SBHC obstacles. Fiscal constraints are apparent across the board for human service institutions. The unusual funding patterns most clinics work under are often not reliable, and

many are not financially solvent. States and local communities need to be proactive and assist in the acquisition of stable, long-term financing. As the search for medical reform continues in this country, it seems that the cost effectiveness of the SBHC concept should surface as an important issue. Insurance companies claim the average annual health cost for children in America as \$2500, yet, SBHC statistics report an average expenditure of \$125 to \$150 per student (Kirby & Lovick, 1987).

The combination of limitations and problems affecting SBHC operations indicate they cannot be adopted in every community. First, the school community might find the concept too controversial. This concern is not an issue aligned with any specific grade level. The biggest concerns lie in the area of contraceptives which with secondary clinics make up just 20% of the volume of care (Keenan, 1986). A community campaign early on in the clinic design phase is therefore suggested in an attempt to educate the public. Keenan addresses another obstacle that has previously been addressed, and that is numbers of students being served. If a school is very large it might be argued that the attempts would be futile when measured against the needs of the entire population. Conversely, if a school is quite small it might be assumed that the needs are not prevalent enough to warrant a SBHC. The last issue to be reckoned with is finances. In a time of financial cutbacks,

some might argue this is not the school's responsibility, nor can it afford to be.

### Summary

Information was provided in this literature review relevant to health issues as they affect children and school performance. This review initiated with a global, national, and local perspective of health and children. Human health concerns and the study of health issues is not a new phenomena.

This review of the literature may provide insight into steps necessary for the future clinic development. Communicable health issues can no longer be accepted without taking some action. Not only must action come due to the threat of such deadly and devastating issues as AIDS, but also due to the realization that poor health interrupts learning. While America competes quite well on the world market, the care of the nation's children in regards to health is lacking.

The benefits of a SBHC concept and the steps necessary for strategic implementation are clear. Many Americans, citizens and educators alike, are uneasy about the thought of the school taking on another responsibility. The literature, however, argues that health is intimately related to learning, and that children are accessible in schools. The established role of the school in the

community along with the space the facility can provide make the school an appropriate choice. Furthermore, the school is well-established and also holds ties that are broader than the local community. Schools are connected with state and municipal funding sources offering an existing administrative structure which can contribute to the provision and coordination of services (Chaskin & Richman, 1993). Kornguth (1990) believes: "The ideal reduction in school absenteeism would be achieved with school-based clinics staffed by school nurse practitioners who could access health systems, treat minor problems, and refer problems that require medical intervention".(p. 99)

## CHAPTER 3

### METHODS

#### Overview of the Methods

Chapter 3 identifies the methods and procedures used to conduct a case study investigation into the development of a school-based health clinic (SBHC). The impact a SBHC has on attendance and achievement will also be examined. The clinic under investigation was developed in the 1993-94 school year and became operational in 1994-95. The CARE SBHC is within an elementary school located in Northeast Tennessee within an urban school district. The school serves fewer than 350 children in a neighborhood with a 17% minority population. Children from preschool through the fifth grade attend this school and are from 3 to 11 years of age.

The traditional family has been in jeopardy throughout the United States for several years, and this Northeast Tennessee Appalachian region is no exception. The demographic profile of this school community, as provided by the First Tennessee Development District (1994), presents a challenged public. Information obtained through a conversation with the Director of Special Programs for this school district, provides additional demographic information. Information pertaining to children attending



the school holding the SBHC under investigation indicates that: (a) 65% of the families have a female as the head of household, (b) 90% of the children receive free or reduced lunches, and (c) 45% of this school's student population are projected to graduate from high school (D. Chupa, personal communication, August, 1995).

### Study Design

Borg and Gall (1989) list five types of case study research: historical case studies trace the development of an organization; observational case studies usually focus on a specific organization such as a school or class and focus on the interaction of a group of individuals; oral case histories are first person narratives of a single individual collected through extensive interviews over a long period of time; a clinical case study seeks to understand a particular individual such as a learning disabled child; the last type is the model chosen for this study and is a situational case study. This study will analyze the development of a particular SBHC from the point of view of the major participants.

The investigator elected to interview individuals who had been actively involved with the design, development, and or daily operations of the CARE SBHC. Additionally, a paper trail was undertaken to understand attendance and achievement records of clinic participants. These records

seem restrictive for this study due to the limited number of years of clinic operation. This decision moreover, was based on the future use of the finding for synthesis studies. Patton (1990) explained:

Synthesis studies are usually done on case studies with a common focus, such as elementary education or health care for the elderly. However, one can also learn lessons about effective human intervention processes more generically by synthesizing case studies on quite different subjects (p. 426).

Research in natural inquiry involve the human element. Value structures of study participants and the researcher must be silenced. According to Eisner and Peshkin (1990) and Patton (1990), the value of qualitative discoveries lies in the search for truth. Merriam (1988) shared the importance of assessing reliable and valid results in qualitative research:

All research is concerned with producing valid and reliable knowledge in an ethical manner. A qualitative case study is no exception. In fact, because of the nature of this type of research, these concerns may loom larger than in experimental designs wherein validity and reliability are accounted for at the start. (p. 163)

### Case Participants

Participants in this study were selected because of their knowledge and level of participation with the SBHC under investigation. Interviews were conducted with subjects who had some direct working relationship with the clinic, either through participating in its design, its daily operations, or as consumers of clinic services. Additional interviews were conducted with people who had indirect affiliation. For instance, classroom teachers had indirect affiliation with clinic services through clinic referrals for services or knowledge of children using services.

### Procedures

Permission to conduct this study was obtained from East Tennessee State University's Internal Review Board. The school superintendent and district school board housing the SBHC under investigation were also contacted requesting permission to perform the study. Consent forms were required of all research participants (See Appendix A). Interviews were scheduled in phases and arranged in no certain order. Interviews were scheduled in this manner based on the availability and convenience of the participant. Prior to each interview, participants were mailed a packet of information. Included in the packet were a letter of introduction; a brief description of the

study; an Informed Consent Form; and a copy of the letter of approval from the school board.

Data collection techniques were based on techniques suggested by Patton (1990), coined "qualitative interviewing". Patton indicated:

The purpose of open-ended interviewing is not to put things in someone's mind (for example, the interviewer's preconceived categories for organizing the world) but to access the perspective of the person being interviewed. We interview people to find out from them those things we cannot directly observe. (p. 278)

Single-session interviews were conducted to discover the respondents' perspective of the school-based clinic.

Techniques in active listening were employed to check the accuracy of understanding by the researcher. Active listening techniques involve restating what was stated by the interviewee to check for clarity.

Verbatim transcripts were made based on the audio (recorded) account of the interview. Following each interview, a personal log of information was noted by the investigator. These annotations document "the ideas, behaviors, and non-verbal cues" (Guba & Lincoln, 1981, p. 182) necessary to offer a more complete picture of the interview.

### Data Collection

The researcher was the instrument of choice in this qualitative analysis (Miles & Huberman, 1994). The data were a collection of detailed descriptions concerning the historical development of the clinic, reports of clinic operations, and the persons involved. Interviews were conducted and tape recorded with written permission given prior to the actual interview. The purpose of conducting audio taping was to be certain that no aspects of the interviewees' responses were accidentally or subjectively missed. According to Dexler (1970), interviews are either focused, with a structure to obtain specific information, or unstructured, with a more exploratory approach. He stated: "In an unstructured interview, the format is non-standardized, and the interviewer does not seek normative responses. Rather, the problem of interest is expected to arise from the respondent's reaction to the broad issue raised by the inquirer" (p. 68).

Information obtained from the interviews was collected and recorded descriptively to present a historical reconstruction. Data collection techniques were as follows:

1. Open-ended, non-structured personal interviews were conducted through use of an interview guide for the major clinic participants. Two focus group interviews were hosted with teachers and parents separately providing their

viewpoints. All participants were instrumental in establishing the framework, rationale, funding, and legal concerns for the project.

2. Demographic information was reported through the Intake Demographic Sheet. The Intake Demographic Sheet was developed by the researcher to gather data.

3. Tennessee Comprehensive Assessment Program (T-CAP) scores were reported for students who were consumers of clinic services for 1994-95 against T-CAP scores for 1993-1994 prior to clinic services.

4. Attendance records were collected from the district for children who were consumers of clinic services as compared to the year prior to clinic services.

#### Phase I Interviews: Conceptual Development Personnel

Personal open-ended interviews were conducted with the following individuals who were instrumental in the design of the SBHC:

Retired Principal - The principal of the school was also concerned about the many unaddressed medical needs of children attending this school. Having worked with this school population for 24 years, she consulted with the school nurse on ways they could explore obtaining on-site medical assistance for the children.

Assistant Director, Department of Pediatrics - The Director of the local medical school's Department of Pediatrics was the first person outside the school district approached with the program idea.

#### Phase II Interviews: Service Delivery Personnel

Personal open-ended interviews were conducted with the following medical personnel who worked in the SBHC:

School Nurses (2) - Two school nurses assisted physicians during clinic operations.

Home School Visitor (1) - The Home School Visitor was tasked to be the liaison among the clinic, parent public, and teachers.

Medicine Pediatric Residents (9) - One resident physician from the local College of Medicine worked in the clinic each month. The resident arrived at the clinic on Monday mornings during the school academic year at approximately 9:00 and worked throughout the morning as long as necessary to meet patient appointments.

#### Phase III: Teachers and Parent Focus Groups

Parents of the 101 children who utilized the clinic were interviewed through focus groups. A focus group is a

small (6-12) member, relatively homogeneous group that meets with a trained moderator who facilitates a 90 to 120 minute discussion in a non-threatening, relaxed environment about a selected topic (Kaase & Harshbarger, 1993). A focus group was determined to be appropriate based on the number of participants and to provide a support group atmosphere to parents who typically do not participate in any school events. The environment should be relaxed and non-threatening. Morgan (1988) explained:

Focus groups are basically group interviews, although not in the same sense of an alternation between the researcher's questions and the research participants' responses. Instead the reliance is on interaction within the group, based on topics that are supplied by the researcher, who typically takes the role of moderator (Morgan, 1988, p. 10).

The goal of a focus group is to elicit participants perceptions, feelings, attitudes, and ideas. Bers, (1989) goes on to explain, "Focus groups do not generate quantitative data, information, or numbers that can be projected to a larger population". (p. 261)

The parent selection process did not and need not conform to a strict sampling technique according to Bers (1989) since it is not the goal to generalize to a larger population. The parents, in this study, were selected based on the frequency of their children's participation in the



clinic. An attempt was made to secure parents whose children used clinic services infrequently, as well as those who frequently used the clinic. Several parents representing children from all grade levels were selected.

For the purpose of internal validity, a moderator was chosen and trained based on her understanding of the research process and objectivity. Since the moderator needed an understanding of health issues in regard to public needs, a registered nurse was selected to monitor the focus group sessions. Her 21 years of public health experience as a nurse and nursing supervisor provided skills to encourage a good working rapport with focus group participants.

Training for the moderator took place to assure the quality of the session's tone, and ensure she was able to encourage participation, and probe for a true understanding of the group's feelings, attitudes and behaviors (Kaase & Harshbarger, 1993). The training of the moderator included the reading of this study to provide her with a thorough understanding of the project. Secondly, she was given a tour of the clinic and familiarized with its operations to support understanding of the experiences the focus group participants might share.

The next step in the moderator's training involved examining the medical files of participating students. This examination was made so that she could better grasp the patient needs and more fully understand clinic services and

the patient public. Confidentiality of the records and the information within them was specifically addressed. The moderator, as a medical professional, understood this information was not to be shared and was strictly for the purpose of this study.

A practice focus group experience was conducted with a group of 12 parents prior to the actual focus group experience for the study. Interviews were conducted and tape recorded with written permission given prior to the actual interview. Encoding information obtained through the interviews was performed to define discrete categories of responses (Bers, 1989).

A teacher focus group was also developed and conducted. The selection of these participants involved approaching a teacher from each grade level (typically there are two classes per grade level). Teachers were asked to volunteer for the study. Volunteers were asked to participate based on the involvement their students had in the clinic. Audio taping of these sessions was necessary to appropriately reconstruct the data. Audio tapes were kept by the researcher as a means of validity.

#### Phase IV: Review of Records

Research records involved reporting the Tennessee Comprehensive Assessment Program (T-CAP) results for all clinic participants. The T-CAP scores of students who were

clinic consumers were collected for the clinic year and compared against the previous year through a t-test. This is a simple one-variable study in which statistical data determine if a significant difference exists between two means (Hittleman & Simon, 1992). The t-test according to Wiersma, 1969, is a procedure to distinguish the difference between two means. The purpose of this procedure is to determine the probability of an observed difference. The null hypothesis is the belief that no difference exists. This statistical process involves the establishment of a pre-determined level of significance, in this case (.05).

This procedure was also utilized to compare the attendance records of the students. Attendance records were reviewed for students who were consumers of clinic services. A t-test was used to compare the data collected for the clinic year against attendance records for the previous year.

#### Data Analysis

Inductive analysis was used to examine the data collected after each interview. Patton (1990) described this process: "Inductive analysis means that the patterns, themes, and categories of analysis come from the data; they emerge out of the data rather than being imposed on them prior to data collection and analysis." (p. 390). The steps necessary to carry out this process include data reduction,

unitization, categorization, creditability, triangulation, and peer debriefing.

#### Data Reduction

Audio taping of the interviews by the investigator, and then transcription of the tapes by a contracted typist, is a necessary step supported by the literature (McCracken, 1988). The purpose of transcription is to allow the researcher to review the verbatim conversations while looking for units of information. At the conclusion of each interview, the researcher also recorded her anecdotal comments concerning the interview. Such comments took into consideration the climate of the interview and any other noteworthy information about the event.

#### Unitization

The process of unitization was described by Lincoln and Guba (1985) as a form of type coding. "Codes are efficient data-labeling and data-retrieval devices" (Miles & Huberman, 1984, p. 64). Patterns and answers to the original study questions start to emerge through sifting collected data. A number of software packages are available to perform this task. The researcher selected a code based theory building program, NUD.I.S.T.. This program was designed to allow the researcher to enter data and categorize it into nodes. Nodes are information niches that can have "children" which

of course shows a distinct relationship. Other information can be placed in "siblings" which simulates a family tree. The benefit of this program is with its ability to perform sophisticated search routines. These search routines allow the researcher to make connections to develop a conceptual structure (Weitzman & Miles, 1995).

### Categorization

After unitization techniques, clustered data can be categorized for ease of use and cross-referencing. Establishing broad areas of categorization is usually the first phase of this process. For instance, categories representing situations, settings, behaviors, or methods provide insightful information (Hittleman & Simon, 1992). Categorization leads the researcher to develop theories pertaining to the research.

### Creditability

This term is somewhat synonymous with verification in scientific inquiry referring to the method of choice to validate the collected data. In this study, validation was accomplished through triangulation. The process of triangulation takes place through gathering information from several sources about the same behavior or event (Hittleman & Simon, 1992). Triangulation is the act of supporting a finding by showing that independent measures do not

contradict it and preferably agree with it to some degree (Miles & Huberman, 1984).

### Triangulation

Triangulation techniques utilized for the benefit of this study included: (a) audio taping of the interviews, (b) contractual transcriptions of the interviews, (c) researcher's journal of additional information, (d) gathering data through use of individual and focus group interviews, (e) use of an independent moderator for focus group interviews, and (f) collection of attendance and achievement records. Additionally, a peer debriefer was used as a means of internal validity.

The researcher has had a working relationship with some clinic participants based on the clinic's involvement with the non-profit organization, Communities In Schools (CIS). The researcher acted in the capacity of Executive Director of CIS during the clinic's design phase and through its first year of implementation. CIS was the facilitating organization responsible for the working contract between the medical school and the school district. Once the SBHC became operational, CIS was not a primary entity and the College of Medicine and the school district were the collaborative operating agencies. The researcher resigned her position as Executive Director prior to undertaking this study as not to compromise the research validity.

### Peer Debriefing

Peer debriefing establishes an additional element of credibility. Lincoln and Guba (1985) advocated peer debriefing as a method to keep the honesty and integrity of the researcher operating at the utmost professional level. The researcher would never purposely influence the study results, however a peer active in the research process helps to ensure that personal bias is not a factor. According to Lincoln and Guba, the peer debriefer should: (a) be someone with a similar age as the researcher, (b) have knowledge about qualitative research techniques as well as some working knowledge about the research topic, (c) not be an authority figure, and (d) keep a written record of the interaction between themselves and the researcher throughout the study. A doctoral colleague, acted as peer debriefer: She has 19 years of public teaching experience teaching foreign language and language arts. Her qualifications for peer debriefer lies in her research area, integrated schools. The SBHC concept falls within the integrated schools realm. Therefore, this peer debriefer was appropriate with her knowledge of the literature on the concepts of integrated services and of qualitative research (See Appendix E).

External validity methods, such as transferability, were not necessary according to Lincoln and Guba (1985). In

naturalistic inquiry, as with this study, external validity is not a factor.

### Instrumentation

Methods of instrumentation were shared previously. A preliminary interview guide was developed prior to the first interview (See Appendix B). These questions were established as a guide based on information found through the review of literature. The questions were then presented to the chair of this doctoral committee, the moderator, the peer debriefer, and to the school principal. The initial questions were used as a guide but in no way were to limit any additional information that could facilitate a thorough investigation. As the interviews progressed the interview guide questions were revised based on the emerging information. The purpose of the interview guide was to elicit responses on the development and implementation of the CARE SBHC and to understand more fully how each interviewee perceived this process. More importantly, it was necessary to discern what impact this SBHC had on the lives of the children attending this school.

### Ethical Codes

Research projects encompass many phases of investigation and with each there are ethical codes. Ethical codes guide research behavior, and the researcher



determines that level of ethical operations based on the researchers' continual communication and interaction with the research participants. Throughout this study, every effort was made to inform study participants of the investigative process. Attempts were made to obtain informed consent, and not to exploit, intervene, reform, nor advocate, the SBHC operation.

#### Summary

The qualitative case study analysis was designed to include as much information as possible to perform a thorough investigation. In this chapter the procedural framework of the study has been presented. The framework included a profile of the northeast Tennessee region, and the study design. The investigator provided information concerning the population of the study, procedures undertaken, along with data collection and methods of analysis. Instrumentation and ethical considerations followed to conclude the methodologies. Data analysis will follow in Chapter 4.

## CHAPTER 4

### DISCUSSION OF STUDY RESULTS

The purpose of Chapter 4 is to present results of the data collection. The data techniques utilized in this chapter are those presented in Chapter 3. These techniques were designed to answer the research questions found in Chapter 2 of this study.

The purpose of the study was to explore the procedural steps of the development and operation of an elementary school-based health clinic. Additionally, the study examined what impact this clinic had on the lives of children attending the school.

This qualitative inquiry allowed the researcher much latitude in data collection. The strength of this situational analysis was the inquiry made with the people most involved with the SBHC under investigation. Thirty study participants were interviewed to understand their attitudes, experiences and perceptions of this particular clinic. These interviews were conducted either one on one, or in a focus group. Respondents participating in this study represented professionals from the fields of medicine and education, as well as members of the parent public. Participants were initially contacted in writing informing them of the study. Each respondent was telephoned as a means of follow-up.

The response from all participants was positive and the focus group interview session for the teachers was well attended. The parent public, however, was not as receptive. From the 101 students who utilized clinic services in the 1993-94 school year, 30 families were contacted by mail to participate in a focus group interview. The interview was scheduled during a time the principal advised as being convenient for parents, one hour before the close of school. The letter mailed to the families, was over the principal's signature and, per her suggestion, was phrased in a manner to allow the parents to understand that findings from this investigation would be considered for any future decisions made about the CARE clinic (See Appendix C). Each family was then contacted by phone to confirm receipt of this correspondence and to answer any questions they might hold.

One parent attended this meeting. Based on the poor response to the focus group interview approach, the researcher took additional steps to conduct individual interviews from the parent public to obtain a broad representation of opinions. Parents at the school to pick up their children were asked questions about their impression of the clinic if their children had an opportunity to visit it for services. Based on this information and the parents willingness to participate, individual interview sessions were held. To ensure confidentiality, names have been omitted. Responses for the

case participants will be referred by title or profession as Teacher, Parent, Resident, Doctor, or by the position they held in the organization.

A demographic profile questionnaire was administered to all study participants to determine a study profile. The data in this inquiry indicated information on gender, ethnicity, birth region, age, profession and educational level. Eighty three percent of the 30 total participants were female. Of those participating, 97% were white, ranging from 26 to over 60 years of age. The median age of participants was 43. Three of the participants were foreign born. Many of the interviews were with educationally or medically trained personnel who were college graduates. The remaining 8 participants were parents. One of the 8 held a high school diploma. The remaining parents left school prior to graduation.

#### Research Question Findings

The following four research questions were the focus of this investigation. These questions were presented in a chronological fashion beginning with the procedural process of clinic development and ending with the impact the clinic has had on children attending this school.

Research Question #1:

What procedural steps were taken to establish and operate this SBHC?

This question was posed to study participants and an investigation was made through clinic files to gather a better understanding of the developmental process. According to the account given by the principal who retired from the school in 1990, the need for medical services beyond what a part-time school nurse could provide was identified several years ago. Recollections of her experiences with the children summarized the need.

Daily, we saw the need. Children were not getting appropriate health care and they would come ill to school. If they were sent home the parents did not have the money to take them to the doctor, so they would stay home a while and then come back to school with whatever it was that sent them home in the first place. The parents often did not have the funds or the transportation to get them to the appointments, so they would end up taking them to the emergency room. Because of this, they would see different doctors and they did not have the best of care, and therefore we thought there needed to be a better way.

The school district is fortunate to be located in a community with many medical services. As with most communities, the county health department delivers a myriad

of services. Geographically however, the health department was located on the opposite side of town from the population with the greatest need, this school region. Over and above county services, the city has 2 regional hospitals and a veterans hospital, along with a school of medicine, two nursing programs, and one nurse practitioner program. In early phases of discussion, it was determined by CIS, the dropout prevention facilitating agency, and the school nursing staff, that the medical training programs at the university might have been interested in this clinic as a training site. When approaching the university medical school and the department of nursing it was discovered that even though the nursing department and nurse practitioner program held an interest, they already were overextended and did not have the manpower to assist with this clinic. The local university medical school was the program which came to the school's attention in early dialogue.

According to clinic files, the first official meeting between the school district and the university, took place on September 10, 1993 (School-Based Clinic Feasibility Meeting Minutes, September 10, 1993). The original intention was for the clinic to be an integral part of a comprehensive community-based program. The more specific intent was to educate and provide a myriad of resources for children at risk. Decreasing the school drop-out rate was a

specific long term objective. The attending physician for the medical school recalled:

The aim of this clinic was more than just to deliver health care. The real aim of this clinic was part of a project that was trying to keep kids in school. This had a role to play, but it was only one part of a project that was trying to keep kids in school. First was to get me to understand that, and second was to see if we could start to help provide health care through the school.

The intent of the initial meeting was to obtain a commitment from the university residency program. Prior to establishing a meeting with the Assistant Director of the Department of Pediatrics at the medical school, an investigation was made to the Center of Population Options to inquire about schools in the United States which were operating a elementary SBHC, and additionally, to locate any operating in conjunction with medical school residents. Information was then forwarded to the director of drop-out prevention with names of existing programs throughout the United States. Several school districts throughout the nation were contacted by telephone to request information about the SBHC which was in operation in their district. The clinic operation in Albuquerque, New Mexico was the contact that seemed to provide the most insight. The collaborative effort between the Albuquerque School District

and the Department of Pediatrics at the University of New Mexico Medical School, along with the local health department, seemed to reflect more closely the type of program that would fit the dynamics in this Northeast Tennessee region. The Albuquerque operation became a valuable resource for the designers of this clinic. At the time, the school nurse was in search of any and all information that could better describe a global picture of SBHCs. This understanding was necessary to be successful in taking the clinic under design from a vision to a reality. Found in the clinic files were several documents sent from Albuquerque detailing specific routines concerning their clinic operations. Information on contractual issues which would eventually need to be addressed also were available.

After careful review of the Albuquerque literature, the school nurse and the director of CIS, the recently adopted school drop-out prevention program, met to present the clinic concept to the Assistant Director of the Department of Pediatrics Residency Program. The minutes from this meeting indicate a focus of the meeting was to discuss the need and feasibility of a school district and university partnership (School-Based Clinic Feasibility Meeting Minutes, September 10, 1993). The physician attending this meeting and in charge of resident placement was not convinced this would benefit the training experiences of the



residents. As the Graduate Education Coordinator for the Medical School stated:

We had to put this forth to the Accreditation Board of Pediatrics and the Credidation Council on Graduate Education. We had to ask them if this would follow their guidelines. We have essential guidelines that we have to follow and if this experience does not fall into a category, then no. You cannot do anything out of the ordinary. Our number one concern is to educate the resident, not service the people. We hope to use the training, and by it service the people. We have faculty on board who do service. What the resident does is train through service.

Once the medical school could see the vision and understand the learning opportunities that a school of 350 children from the ages of three to eleven years of age could offer, the SBHC idea became more feasible.

Subsequent meetings with program designers were organized to address logistical concerns of the clinic. Early in the negotiations, the school district, through the voice of the principal of the building, indicated:

I felt the two key players in this were the school district and the medical school. I really felt like we needed to listen very strongly to the medical school because we had to work with their schedule, we had to

work with their residents, we had to take them when they were available.

This willingness to make concessions addressed "control issues" noted in the literature as a common negotiation hurdle in collaborative endeavors (Gardner, 1993).

Educators at the school wanted the children they served to receive medical services on-site. Therefore, they assumed a more passive role during this phase of design. The medical experts would have greater knowledge about the logistics of running a primary care clinic, making them the likely voice to identify the clinic logistical concerns. The medical school expressed an interest in establishing well-defined guidelines for the residents to follow to ensure quality training in this program, and to provide essential health care services to the youth who suffer the greatest risks. The physician facilitating negotiations between the two organizations at the October 20, 1993 School-Based Clinic Feasibility Meeting, according to the meeting minutes, expressed the following logistical needs:

- 1.) An identifiable person who will work with the program on a long-term basis, and to whom the residents will look for stability and continuity of purpose. This person need not be a health care worker, but could be an administrative person involved with the school system.

2.) A defined time slot set aside for this clinic to be in operation - once or twice a week; one hour or a half day. This would become more predictable as needs are addressed. A close assessment must be made to ensure our mission of serving the youth at risk - whether health, mental, or social risks are involved.

3.) Continuity of care was recognized as important to ensure proper structure and to give some type of reward to both the giver and receiver of this care. The program would be a constructive experience in primary health care (School-Based Clinic Feasibility Meeting Minutes, October 20, 1993).

**Research Question #2:**

What community campaign was adopted to successfully realize this operational clinic?

The community was an integral part of the development of this clinic for various reasons. Through a Family Resource Survey, the community was polled to learn their perceptions of their needs. The State of Tennessee had during that academic year awarded funding to this school district in the amount of \$50,000 toward a grant proposal to initiate a Family Resource Center for this school's community public. The Family Resource Center was to be established to address the educational, social and the

health needs of this population. A survey was administered to 622 families in the general area to understand more fully what exactly this public, if given the choice, would identify as their most crucial needs. As predicted by the school staff, the number one concern identified by this public was for on-site health services (See Appendix D).

Not long after this survey was administered, another Request For Proposals (RFP) came to the attention of the school system from the Robert Wood Johnson Foundation. The Robert Wood Johnson, *Making the Grade: State and Local Partnerships to Establish School-Based Health Centers* required each applying system to conduct a systemwide survey and needs assessment. This national program was established to provide grants for state-community partnerships to increase the availability of comprehensive school-based health services for children and youth, including primary care, mental health services, and drug and alcohol counseling. The funding amount was to be in excess of two million dollars for a five year grant period. The district was quite interested in this funding opportunity which supported a collaborative community commitment in addressing children and school health needs (Robert Wood Johnson Foundation, 1993).

The district, in compliance with the RFP guidelines, administered a system-wide survey. Of the more than 4,000 surveys returned, the district found strong support (72%) in

favor of a site based school clinic operation. An additional requirement for the grant application was the formation of a local advisory board which held a broad representation of the community. A mix of community leaders representing government, business, the clergy, education, health, and social services were asked to participate. This board became a crucial entity in the community campaign for school-based health issues. The board also participated in the community survey by taking the surveys to their respective places of employment and polling their staff and patrons to ensure the community was being represented.

The board met monthly to discuss and discern what medical needs were apparent in the district at large. Based on this networking and survey results, strategies were discussed to determine how, as a community, these issues should best be addressed. This board became the voice of the community and worked to not only identify the child health issues of the community at-large, but also to identify local resources available to address these problems.

Early in the planning, the Assistant Director of the Pediatric Rotation from the medical school wanted to present to fellow practitioners the plans to open and operate this clinic. To make an official announcement in this regard, a briefing was given during a morning pediatric association breakfast. The response of this group was non-committal,

except for a few negative opinions. The practitioners were concerned about the continuity of care and the threat this clinic might have to their private practices. Not long after the community participated in the survey for the Robert Wood Johnson Grant, it became apparent there were rumblings from practitioners in the community. The principal of the school described the situation by saying:

I did hear a little negative response was brewing in the community with some pediatric folks on how this clinic might impact their practice. I think this was pretty much worked out when they realized that these students would not be patients of theirs anyway.

The medical school's graduate education coordinator held a like memory:

The private practitioners provided another concern. We had to convince them that this would not interfere with their practice. They were concerned that the care would be fragmented. There was a meeting at the hospital with all the pediatric folks and there was a little opposition there. Several private pediatricians were vocal but once they were convinced that they too could be involved, I have heard not much since.

The graduate coordinator also shared that this reaction was similar to what was experienced when the university first announced the opening of the medical school. It was her impression that much of the concern was with the "newness"

of the project. The facilitating physician who ran the briefing with area pediatricians provided this comment:

Some people were re-assured, and some people were unsettled but felt they had little power to intervene. I don't think that I ever pretended that we were going to stop if they opposed the plan. It wasn't truly a problem. It's just a matter of how far you would go politically to make people comfortable and answer their questions, and when you should stop and just get on with things. In the end, one group was reasonably supportive and the other never really approved.

A second year resident, who was not familiar at all with the developmental process of this clinic, shared an experience that he had with the community after referring a child in the clinic back to their pediatrician for follow-up care:

I had one run-in with a private doctor in town. We had seen a child, who was one of his patients, in the school clinic. His family did not have insurance and they went with the child to the school that day, and they wanted him to be seen in the school clinic. I saw the patient and made some recommendations. Since spring break was to follow the next week, he was told to follow-up with his own doctor. The mother contacted the doctor to obtain an appointment and the doctor was irate that we wanted him to follow-up the patient. We assumed we were doing him a favor, but he was upset

because we had seen his patient in the first place. He said that we should be able to provide continuity of care. This experience disappointed me.

A third year resident held this opinion about the political ramifications of delivering free clinical services:

We need to work with the blessings of the other practitioners in town with the understanding that we aren't out to steal their business. We aren't out to drive them out of business so that everything will be ours. We are trying to provide a service for people who either can't afford to go to the doctor or can't make it. We are trying to relieve some of the burden that practitioners had previously. In the field of private practice, practitioners see patients that can not pay, this clinic should relieve some of this burden. Getting this point across to the practitioners in the area is something that is important.

Once the logistical concerns were addressed, the clinic organized a kickoff event to make known the collaboration that was being undertaken in the community to address the health needs of children. A community wide health fair was held during the summer prior to the opening of the clinic in the fall of 1994. No limitations in regards to geographic location or income were placed on this service. Advertising for the event occurred through television, radio advertisements and in the newspaper. Collaborative efforts



went beyond the university and school district in this event. The National Guard, the county health department, and other local practitioners who worked in audiology, optometry, and general dentistry came to participate. Children came from as far as two hours away to obtain these services. A parent shared this about the health screening experience:

The best is that we did not have to wait to see the doctors, and that was good because I was there with three children. I was much impressed that they brought all these resources together willingly and for no pay. It is unbelievable that it took this long to realize that we have all these resources. Thank goodness this Health Fair was planned for us to use them.

An attending resident stated:

I remember that we had the big Health Screening Fair, and that seemed to pull out the community. That's an area that we did do some good. We had brief physical exams on all these kids, and got some people on the track of some services that they wouldn't have had otherwise.

The clinic opened the second week of school. Parents were given fliers of information about the clinic at school registration. Several parent permission slips were sent home with each child. Directions about clinic services and questions that the parents had to answer concerning why they

were requesting their children be seen at the clinic were covered on the slips. The most necessary portion of this slip was parent authorization. For liability issues, this signature was required for every clinic visit.

A clinic Open House took place the first week of October to bring the community into the facility to see that the SBHC vision had materialized. Educational leaders, community leaders from city government, as well as other influential people were on hand to celebrate in this newfound partnership.

#### Research Question #3:

What issues developed in establishing this SBHC? How were they resolved?

#### Liability

The collaborative efforts of these two bureaucracies had to be addressed in prudent fashion. Control issues between the organizations about operating this clinic never seemed to be an issue. The medical school was providing resident physicians to treat patients. The school was responsible for support staff, operating supplies, and liability issues surrounding the facility. The contract between the two parties specifically stated:

##### 1. SCOPE

A. The District will provide space for use by the Provider at \_\_\_ Elementary School. The District will

retain responsibility for maintenance, repair, heating, cooling, lightening, plumbing, telephone, and custodial services.

B. The Provider will provide Second and Third year residents to support a student health clinic (the clinic) at the school, which clinic shall offer the services in Addendum A to this agreement.

C. The provider will operate the clinic in conformity with School Board policy, a copy of which is attached hereto as Addendum B.

D. The District assumes all responsibility for financial management of the clinic such as nursing support, supplies, etc.

E. The Provider will adhere to all requirements of law and professional ethics relating to the maintenance and confidentiality of Clinic treatment records.

F. Provider will provide an annual report regarding the operation of the Clinic. A preliminary report will be provided on or before January 31 of each year. A final report will be provided on or before June 30 of each year (School District/University Contract, August 22, 1993).

Comments concerning this contract and the issue of liability vary somewhat. The attending physician believed:

The school has to be satisfied that they are not liable for health care matters that are beyond their ability

to control, and the university who is responsible for the resident training program must be reassured that this does not increase their liability with the residents.

The principal and retired principal were asked specifically about fears they held when considering the SBHC operation and legal liability. Their responses somewhat mirror one another. The retired principal's opinion was:

I think that liability is just part of the whole school experience. If you are really going to serve children you try to abide by the regulations but you still go forward. Physical Education classes, after school programs and care, all present a risk. You take a risk every day with many other services which are offered in the building and you just go on.

The current principal stated, "The principal of the school is always liable. Of course, the school board assumes the responsibility of litigation". When asked what she felt the apprehensions of the school board were in this regard, she explained, "I think legally they wanted to be certain that the clinic was set up appropriately. They trusted us to get this started. Once the superintendent gave his support I think that is all that was needed".

### Funding/Equipment/Supplies

The school facility was a very old building with limitations. Space in this school was at a premium; however, when it was determined the clinic would be coming to the school, an appropriate room was found. Medical care requires access to water, an outside entrance for parents, and restroom facilities within close proximity. The school was fortunate to have such a place available with these amenities. Equipment necessary for examining children was minimal. A privacy screen and an examination table were most necessary. Through word of mouth, it came to the attention of the designers that a local physician's estate was being liquidated. Contact was made to this family with favorable response. This physician's office was located on the same side of town as the school, and had treated some of the same families. This physician had served the indigent population in this neighborhood for many years. The items selected were a scale, blood pressure cuff, ophthalmoscope, examining table, three examination lights, protective paper, medicine cabinet, and infectious waste container. The school maintenance personnel retrieved the equipment, and the Board of Education received the donation estimated at about \$4,000.

Customary office supplies were required to perform business duties in a professional manner. The room selected to be used for the clinic held an existing office. Existing

equipment used by the clinic were a computer and printer, telephone/fax, copier, desk and file drawers, and paper and supplies.

Medical supplies were yet another issue. The Family Resource Grant answered the supply problems with \$4,000 for medical services. These funds were more than enough to purchase the necessary initial supplies. The ordering of first aid equipment is not an uncommon expense for schools. First aid supplies are typical line items. The additional supplies requested for the clinic were minimal and the cost did not greatly exceed the school's customary allotment.

The principal explained:

I suppose in terms of additional cost for supplies an extra \$800 to \$1,000 a year would be ideal for the clinic if we think about adding extra equipment regularly to help the medical personnel in their screenings.

Funding was not a concern found in this investigation either through speaking with participants or in reading the documents and files found in the clinic. The retired principal, who was in charge of the Family Resource Grant funding, stated:

Funding was never an issue at the level we were operating. There was no cost for the nurses- the school system donated their support; there was no cost

for the doctors, it was all in-kind; then the Family Resource Grant support.

The physician in charge explained:

I do not know of any funding problems I just think people were willing to produce what they could. It seemed there was such good community support we were able to get the small amount of money we needed without any major difficulties. We were not talking about major dollars. The residents recognize this is part of their training program and they enjoyed it. I do not think there was any thought of them being paid, nor do I think they would have had as much fun if they had been paid.

#### Laboratory Services

Organizing authorities made a conscious decision not to perform laboratory services on site. In the development stage, it was not clear what requirements would govern such an operation. The residents, up to this point, had practiced in medical settings with existing operating practices and licenses. Not knowing exactly what the medical needs of these children would be, an inquiry was made to the State of Tennessee Department of Health and Environment to understand requirements of laboratory operations under the Clinical Laboratory Improvement Act

(CLIA) of 1988, which is a federal regulatory system under the Health and Human Services Department.

The facilitating physician originally asked for supplies that would allow tests to be run on urine, blood counts, hemoglobin, and strep screens. These tests were intrusive procedures, and considered moderately complex, requiring licensing. An initial fee with an approximate cost of \$500, and annual renewal fees costing approximately \$125 were involved. Requirements to be set up as a lab are complicated, not to mention the initial expense incurred for equipment purchases. The county health department nurse consulted in this regard remembers:

If the clinic was to draw any fluids, or store any drugs, then CLIA would be the authorizing agency requiring special regulations and guidelines. For instance, they would monitor the temperatures for the refrigerators storing drugs. They also would visit the site to inspect annually or bi-annually. All of this is regulated by the state.

One more option was offered to the clinic designers, and that was to obtain a waiver from CLIA. This option was easy and inexpensive, but it required a licensed physician's signature. If the attending physician signed a document reporting that this lab would be used exclusively for the purpose of diagnosing patients under his care, then CLIA would have registered the clinic but waived any regulatory



concerns. The physician governing the residents could have done this, even with the residents performing the work, because they practice under his authorization, direction, and license. The physician had misgivings about this responsibility and declined to pursue the on-site laboratory options. When asked in the interview his opinion about not having on-site lab work he responded:

I do not think that is a drawback. Once in a while we have had problems in having children seen who are not going to be able to pay and we must look for someone who will do it for free. That has not been difficult with some groups, but more difficult with others. Most people are very willing not to worry about money. When they worry about money it is just a policy matter when you start doing things for free it puts you in a vulnerable position.

The nurses on-site made the following comments concerning the inability to perform laboratory test:

(Nurse 1):

The patients are not getting lab work and things like that, but they are getting medical care and advice that they wouldn't otherwise be getting even without all the technology attached.

(Nurse 2):

Say the child needs a throat culture or something. It's a limitation or a weakness. In this setting,

where we have so many places we can refer a child to, and with the transit system that we have we can send them to the regional health office, the health department or over to University Pediatrics.

Another opinion that was noteworthy concerning the decision not to perform on-site laboratory work is that from a third year resident:

Most parents have no trouble with you looking at a child's ears, hearing the child's chest, but when you start sticking the child with a needle it is a whole other ball game. They may even tolerate you looking at the child's urine, but when you start using needles the parent involvement takes on a different nature. Although it would be nice to expand the services you might be defeating the purpose. It seems to me if one wanted to keep the clinic cheap and keep it accessible it would be better to run it on a shoestring, and farm out to the community or refer the patient back to their regular provider for laboratory services.

The parents noticed the limited treatment services in the clinic but seemed appreciative to have their children looked at by a physician. One parent shared:

The doctors are so nice and spend a lot of time looking at my boy and asking me questions. Like they wanted to know about what my son's symptoms were, and for how long, and things like that. They wanted to take some

tests, and said that they would call me about getting them. The next day they called and told me what to do and where to take him.

### Continuity of Care

Concern arose between the two entities about monitoring and maintaining issues regarding the continuity of care. This area of concern is legitimate involving prudent patient follow up care. Both the resident and the nursing support were not constant in the building. Residents did a month rotation in the clinic and worked just one half day a week in the school. The school nurses rotate within the school system. Two nurses worked on Monday mornings during the SBHC hours. One of these two nurses is assigned to this school and works again in the school on Thursdays.

Dialogue on how operating practices would be established was an important factor for prudent care. The age of patients and the likelihood that they may not come to the clinic accompanied by a parent magnified this concern. Should the diagnosis require a prescribed medication, for instance, concern focused on the procedures appropriate to insure the parent was aware of the appointment findings and would receive the prescription. The child could not be expected to handle this responsibility, therefore, the Family School Coordinator (FSC) assumed this role. This

position was already established in the school as a liaison with families.

The Family School Coordinator has much of the responsibility for locating the family when a diagnosis from the clinic warrants parent contact. This task, sometimes involved a home visit. The FSC explained:

First we talk to the child if the parent is not home to find out where the parent might be, and we may contact the neighbor or contact the emergency number on the enrollment card. If we find the family member has no transportation then I will deliver the prescription to them at their home. It is not uncommon for the doctor or school nurse to call the family at home and the parent request that the prescription be called right to the pharmacy.

The school nurse recounted procedures for school-family communiqués, "We have a home school visitor in place who will help with transporting children and getting them an appointment with the specialist if need be." An attending resident shared his thoughts about prescriptions and communications between the clinic and homes:

I have been at the clinic four months now. Usually the parents haven't been present while I examined the children. The kids are dropped off in the morning with a permission slip from the parents and then they are scheduled throughout the morning. If we have any

findings we either contact the parent or send a note home with the child. Some children do not have phones, so it's hard to get in touch with the parent or the parents are at work. I haven't had very much interaction with the parents. This causes a problem because of the age of the children. You cannot explain many things to them or be assured that the information gets passed along. We hope that if we write everything down on a note that can be passed along to the parents by the teacher that it is going to cover most of the areas. At the same time, this is a one way dialogue and it's kind of hard to get feed-back from the parents if they have questions.

#### Procedural Operations

School families were sent permission slips at the beginning of the year as a required procedure before the child could visit the clinic. Teachers were also made aware of their ability to make clinic referrals through contact with the Family School Coordinator. The FSC completed a permission slip and sent it home with the child. Through the week, appointments are made in the office. The nurse explained, "What happens is the school secretary takes requests, and if they seem appropriate, she puts them on the list and we see them. Because of the nature of our positions, we don't get to triage." A parent explained her

experience when she arrived at the school for an appointment:

I came in, then they called my boy down when it was time for our appointment and they were ready. My appointment was at 11:00 and they never called him till about 11:30. The nurses weighed him and took his temperature and asked what the problem was, cause I kind of knew already it was strep. They even took my temperature cause I was running a fever too and they looked into my throat. They either wrote me a prescription or I had to call my doctor.

Following behind these appointments the child either would be taken home or sent home according to the situation.

All children needing follow-up are scheduled back the following week or in two weeks. Follow up care in the clinic was mentioned often in the interviews as a strength. One resident shared, "I think we did very well with follow-up for minor problems. The kids had to come to school anyway". A pediatrician shared her opinion on this aspect of clinic procedures:

A lot of children who wouldn't come back for recheck on ear infections and things like that, have a chance to do that through the clinic. I think it insures rechecking kids and follow-up.

This opinion was supported in a third year resident's testimony:

In a regular clinic it is pretty hard to do follow-up. It depends on the parents. A lot of times they are working, and it takes them a lot of time to get the child to the doctor for the initial visit. Trying to get patients to return in three weeks to recheck the child's ears when they have finished the antibiotics and are doing great is too much.

Research Question #4:

What impact has this SBHC had on the lives of children?

Accessibility

This question reflects a benefit of the SBHC in this elementary school. Previous data shared information regarding experiences with the clinic. This question is somewhat subjective in nature and "led" the study participants to formalize an opinion about the SBHC and determine what, if any impact the clinic has had on the lives of children attending this school.

The teachers' impressions about working in a school with a clinic were positive. The biggest reason they gave for it being successful is typified by one teachers account: "It is here where the kids are". Clinic accessibility was often stated as being positive for children. One teacher recounted:

One child, a new one to my class, had been at school one day since Christmas vacation and we were well into January. I had to make a home visit. The father couldn't take the child to the doctor because his insurance had changed and he had not received his new insurance card. I told him about the clinic. He said he knew nothing about it even though I know I sent the information and permission slips home. He brought the child to school on Monday and the child was seen by the doctor; he had very bad strep. They wrote him a prescription, the father got it filled and the child became 200% better, so that helped them.

Another teacher recounted a similar experience:

I saw a child that had a chronic sort of thing and it could have really damaged her health but it was caught and treated early and if it had not been for the clinic she would not have had adequate care. Her dad had temporary custody because her mother had abandoned her, and he went to Missouri to get her; he did not have custody of her so he could not get her on TennCare.

The Graduate Education Coordinator, when asked about beneficial aspects of the clinic said, "Easy access is the greatest strength". This opinion was shared by the faculty at the school. These situations illustrate the need the clinic has filled with families who apparently fall between



the cracks of available services. Confirmation of parents supporting this claim established a more vivid picture:

I know that many parents that had Medicaid or TennCare were not as excited with the start of the clinic as I was cause they could take their kids to the doctor. I was very pleased with the clinic because I couldn't, I had no insurance. Every time my child got sick I would say "there goes \$50". We are now getting TennCare because we pay a premium. But since I have had TennCare I still choose to bring my child here because it is free, and he does not have to leave school.

The following represented an additional parent's viewpoint:

The school does not know what they have given to us, and our children. I try with my kids, and so does my husband. He works everyday, and I have a part time job, but we can't ever seem to get ahead. This clinic has allowed our kids to be seen without worry about the bill. I don't run my children to the doctor for every sniffle neither. But when they are really sick I don't lay at night and hear them cough and cough and wonder when I should not worry about the money, and take them in.

### Critical Health Findings

A concern that was brought to the attention of the clinic designers by the staff of the University of New

Mexico, dealt with patient triage. The clinic could not be misused by inappropriate referrals. If the clinic were used for routine sickness such as the common cold, time restraints would limit the opportunity of seeing more serious illness. Prioritizing the patient load, through patient triage, would minimize the chance of being overrun with children with minor problems. This area remained unaddressed according to the attending nurses:

I was a bit worried, and still am that we are not seeing all the things that we should see. Sometimes it seems that we are seeing things that we shouldn't see in that setting. Things that are not severe enough, or they came just because we were there.

A now practicing pediatrician who then was a third year resident shared similar concerns. She shared, "I wanted to see us picking up more chronic health care problems, or making more of a difference to more kid's lives". During the first week of clinic operations, a six year old child was brought in for a physical. This child had been at the clinic Health Fair and the time ran out for her to get a complete physical. She was rescheduled for the clinic, held two days later. The child had been having behavior problems in class and the mother had also stated some concerns with her defiant behaviors at home. During the exam, the child was found to have been sexually abused. This was known to the mother who accompanied the child to the exam. The

parent explained that the child's' father, her ex-husband, was the perpetrator. He presently was in prison for this abuse to his daughter. This case had taken place when the child was four years old in a neighboring state. The child and parent were not undergoing counseling at the time, and the school had not been made aware of the child's history. With this finding, the doctor consulted with the school counselor, and within a week, the child and parent were in a family counseling program. Together In Educating Students (TIES), is a mental health program run in cooperation with the local mental health agency. This program operates in the school and was established to deliver on-site services with no concern about ability to pay. Having services at the school removed the negative stigma that can accompany mental health issues. Additional findings were shared by a resident:

One five year old child was referred to the clinic from his classroom teacher. The referral was made due to observed persistent lethargic behaviors from the child, after suffering a cold. The parent accompanied the child to the clinic, and stated this was the child's first time to a pediatrician. I examined the boy and had suspicions that the child had muscular dystrophy. I referred him to the University Clinic the next day where test were performed and unfortunately my suspicions were confirmed. The good that came from

this is the parents were made aware of the disease and educated on how to deal with it. Also they now can prepare themselves for the worst that lies ahead.

A third year resident reported:

Another 5 year old child was examined in the clinic and a heart murmur was detected. This child was referred to a cardiologist where it was found that the child suffered from an aortic stenosis. This disease affects the large blood vessel of the heart. The disease can cause high blood pressure in the upper extremities, and also infections. The heart can also enlarge with this disease. This can be extremely dangerous.

A different resident shared his opinion on the value of the clinic to children. He explained, "We have picked up other problems as well as seen general pediatric cases, more serious problems, and I think if you pick up one of those out of three years it's worth it".

#### Attendance/Achievement

An examination of attendance and achievement records of the 101 children using clinic services was made to determine if the clinic, in fact, had impacted these areas. To determine if the clinic had an impact, records had to be compared between the year prior to clinic services and the first year of clinic services. There were 19 students with

retrievable data on file. The limited number of students having available information clearly represents the transient nature of this population. According to Walling (1990) mobility of students and their families is not unusual for children of parents climbing the corporate ladder or for indigent populations. This population represents the latter of these two economic groups. Results of a dependent t-test administered on the pre- and post-attendance data indicate there is no significant difference in the matched paired mean scores of this clinic population (See Table 1). Furthermore, the match paired t-test results on the pre- and post- Tennessee Comprehensive Assessment Program (T-CAP) scores of this population also failed to show a significant mean difference (See Table 2).

Table 1

Pre- and Post- Median Attendance Data on Clinic Participants

Variables	Median	t-Value	Probability	df
Pre- Attendance	11	-1.78	0.090	18
Post- Attendance	16			

Table 2

Pre- and Post- Mean Achievement Data as reported from the Tennessee Comprehensive Assessment Program (TCAP) on Clinic Participants

Variable	Mean	t-Value	Probability	df
Pre- T-CAP	667.7	0.246	0.807	18
Post- T-CAP	658.3			

Study participants were asked their impression of what impact the school clinic had on the attendance and academic achievement of children who visited the clinic. The school counselor stated, "If the child can receive early intervention and be at school and in the classroom, doing topnotch work, this has to be advantageous". She went on to share that on days when the clinic is not operational she estimates between 15 and 20 children come to the office with illness related concerns.

An inquiry was made into the typical routine that takes place at the school when sick children surface. The Counselor shared, "When a child comes to the office, the secretaries take temperatures and do somewhat 'Mom' type therapy. Some of these children truly are ill with valid maladies, but many of them are invalid." She explained some children may have perhaps vomited at home before school or had been sick throughout the night and the parent sent them to school anyway. She seemed somewhat empathetic as she explained some parents legitimately felt the need to go to work and held this at a greater priority. When a child is ill or complains of illness the school can only call the parent, if they can reach them to pick up their child

"Speculation would seem to indicate that early intervention would help absenteeism" responded one third year resident. Another shared:

I would think so, because medical issues are a constant. Children often experience sinusitis, and recurrent otitis media. We're there and we are able to see the children when they are sick. This means they do not have to miss a day of school if they have something routinely minor like this. Often if they have to go to the physician they miss a whole day of school because parents often don't bring them back. Knowing the classes the student comes from, you are likely to respond more aggressively to other children in the class who come down with similar symptoms. The more they are in school the more likely they are going to absorb some academic learning.

Most of the respondents who shared their speculation that the SBHC could impact attendance and achievement based their responses on the ideal situation, of a full time clinic. The overseeing physician was cautious with his response. He explained,

If you had the manpower to be involved in that school and have a presence on a full-time basis, it would be interesting. To deliver health care with continuity, around the clock, would be needed to see if that made a difference in health care of those people, and in turn find out what differences it made in the school.

### Additional Findings

This researcher uncovered additional noteworthy information. This information does not focus on specific benefits for children and families in this community, but presents concomitant benefits which at the time of introducing the clinic were not foreseeable.

### Resident Autonomy

The resident training program agreed to this partnership because it was felt the experience would provide appropriate learning. Every resident stated that they enjoyed the autonomy experienced in this clinic. Prior to the opening resident autonomy was not considered a positive outcome. Residents stressed that in this clinical experience, more than any other, they had to rely on their knowledge to render care. Limitations of this clinic including limited parent participation, no laboratory services, and no on site overseeing physicians forced the resident to be more thorough with the patient. They had to look for hands-on signs from the children to prudently practice. This situation did not limit them because they would eventually talk to the parent, they could refer the patients for testing, and their supervisor was just a phone call away. Yet, they felt the clinic offered them a training field all of their own. The residents shared gains from this experience:



It's interesting to see the different views of different kinds of practices. I am not one to just order lab tests for the sake of ordering them. If I had a patient that needed a CBC or urinalysis, I could send them over for testing without a problem. Usually, it is a good practice to obtain a good history wherever you practice and I do the same there. You have to rely more, per se, than you would necessarily in the clinic on a thorough history and hands on diagnosis. In the office you would have more access to different tests.

#### Community Outreach

The SBHC also offered residents with a vehicle by which they felt they could help the community. Because the clinic provides free patient care, they commented about the opportunity to be concerned and help in the community. One resident shared:

I don't think residents tend to be very involved in the community. Life is sort of home and the hospital. It provided another dimension for me being involved in the community. I liked feeling like I had the opportunity to do something if the need arose.

A fellow resident shared insights that he gained at the annual meeting of pediatric residencies. He stated, "They are really pushing getting back to grass roots pediatrics and getting back into the community, getting involved with

primary care and prevention". The SBHC focused on dealing with patients. In practicing medicine without the factor of dollars, or insurance, or anything else, the residents shared that they could practice the type of medicine they were taught to practice.

### Socialized Medicine

Three of the respondents were foreign born and came from countries where socialized medicine was practiced. One physician was from Canada, another from India, and the third was from Great Britain. Medical customs practiced in their home countries varied from what they have experienced in this country. Each participant was asked specific questions based on these experiences. This information is relevant to this study due to the interest in America to improve the delivery of quality health care, accessible to all Americans, at an affordable rate.

The Indian doctor shared he remembered as a child doctors coming to his home to give immunizations. He went on to share that as a third world country, Indians do not all have the privilege of an education. He stated:

The opportunity to see a physician is something every Indian has the privilege to do, but to get into hospital is challenging. The regulations to practice medicine there are not strict. India needs doctors to take care of the great number of people in the country.

I could go there and put up a sign and practice easily but you only get a few dollars for your services.

The attending physician from Canada reviewed the adoption of the Canada Health Act. This act caused Canadians to pay for physician health services but allowed for free hospital care. He recalled, "My income tripled when we went to this system." Before this act physicians practiced with a sliding scale for services. This act forced standard fees. He stated,

When Medicare came in we got paid for what we did. My income tripled the first month because I got paid for what I did. Prior to this, I wrote off thousands of dollars without thinking about it because I was serving the people in my community. You just did it. There were some observations that I made through this.

First, there is more to being indigent than in being poor. Some people do not like the organization of the rules and coming to a physician at an appointed time or having to come back to the same physician. There is a social component to health care problems that cannot be solved with money. Secondly, I think the philosophies of the medical community lost some of its gentleness. Time was looked at as money and when you're paid for everything then you look at the cost of what you make per hour. Some greediness is part of that philosophy.

The English born resident felt his experiences in this country has made him realize American medical technology is better than in England. He also added, "Technology may be more advanced, but there is something to be said for equal treatment for all community members".

### Fears

The only fear which the investigation uncovered was one that concerned all professionals. The respondents in both the medical and educational fields stressed the need for the community not to view this clinic exclusively for primary care. This was also the concern voiced with the community pediatricians early on with the development of the SBHC idea. Indigent populations medical care is often fragmented. They are less likely to establish a consistent patient/provider relationship and instead visit walk in clinics and emergency rooms according to need. The SBHC option could become another vehicle for consumers to utilized in this manner. The nurses operating the clinic held the greatest concern in this area. One nurse commented,

I think, one of the things too, is that there have been some situations where people have tried to make this clinic their primary care provider. They have depended on it when they needed to seek care elsewhere.

This clinic had no intention of filling the total medical needs of the 350 children attending this school. A now practicing pediatrician, who was a third year resident at the clinic, admits,

"If the goal is to provide a cheap way either to be screened for a major problem, or get treated for a relatively minor problem then I do not see where this clinic was not able to meet those objectives.

#### Summary

Results from this study indicate that the CARE SBHC provided more benefits to the school than could have been foreseen prior to its opening. This research finding is valuable for program creators. Prior to program implementation, only certain benefits may be anticipated. After program implementation extended benefits can be discovered. The researcher provided information concerning findings through the thirty study participant interviews and also through the archival findings of the clinic files. Discussion of these findings and recommendations will follow in Chapter 5.

CHAPTER 5  
DISCUSSION AND RECOMMENDATIONS

Discussion

The strategy to improve the health of children through school-based health clinics is to treat, interact with, and educate youth as they develop health habits while providing the knowledge, skills, and motivation for engaging in healthy behaviors. This qualitative case study was designed to explore the procedural steps of development and to understand the operations of an elementary school-based health clinic. In addition, the investigation of this Northeast Tennessee SBHC took place to understand what impact the clinic has had on the lives of the children it serves.

Based on the research, the following issues emerged and warrant further discussion:

1. The SBHC provided more than health care. The vision was to develop a myriad of services in the realm of health, education and social awareness. The development of this clinic was one step, of many, to help children most at risk. The participants realized that the clinic had a valuable role, but it would work inter-dependently with other services. The success of this interdisciplinary approach is shown quite vividly with the mental health therapy program, TIES, and the CARE clinic. It is not

uncommon for medical services to be cumbersome in regard to referral services. Interviews revealed a case of a sexually abused 6 year old who was discovered at the clinic through a routine physical. The CARE clinic reacted very prudently, and areas of confidentiality seemingly did not hinder the ability to get much needed help for this family. The resident in this situation brought this finding to the attention of the school counselor, who immediately contacted the mother of the child to ask if she would be interested in receiving on-site therapy for her daughter and herself. The parent agreed to participate in this program and services were started the next week.

From this scenario, it would seem that the system worked expeditiously. The child is the one who seemed to truly benefit. The parent had reported to the school her concerns about the child acting out and being difficult to manage. The child's teacher also had the same concern. The missing link was that the parent never stated the child's history, and she had not thought to seek professional counseling. The physician in this case was able to intercede, and because of the working relationship between the school and clinic, the child was able to obtain immediate attention and help.

2. The SBHC was established as a partnership. The university and the school district jointly took on the development and daily operation of the clinic. These

efforts were facilitated by an outside dropout prevention agency. The facilitator of Communities In Schools (CIS) had no control or connection with either agency. Communities In Schools acting independently as a non-profit agency focused on the needs of at-risk youth. This component provided a comfort zone for the involved parties. The position of CIS facilitated negotiations removing "control issues". This finding contradicts Gardner (1993) who found control issues typically occur as obstacles within collaborative pursuits.

3. Community support was an additional strength. The school district, acting on the Robert Wood Johnson request for proposals, engaged in appropriate initiating behaviors. A SBHC advisory board of community members was formed, and the community wide survey of business, corporate and social agencies was undertaken; both outcomes were due to the pursuit of this grant. These steps were not considered prior to this point. Requirements of the grant led designers to broaden community involvement. These actions were quite appropriate and fostered positive community good will regardless of their success in receiving the Robert Wood Johnson funding. The school district's application to secure grant funds supports the Center for Population Options 1993 Update on School-Based and School-Linked Health Centers. The Update focused on the funding sources typically pursued for SBHC development and daily operations.



These avenues are not constant, and most clinics therefore find it challenging to be financially solvent.

4. Funding was never a concern or a hindrance with the development of the CARE SBHC. The parties involved, once committed to the vision, were totally committed to making the clinic a reality. According to the literature, SBHCs are often supported through grant dollars. The operating cost for this clinic were estimated to be less than \$3,000. Minimal as the costs were, the needs fell into an appropriate niche of previously awarded funding. Liability issues and funding often are stumbling blocks in program development. In this case, neither area became an insurmountable issue. This research finding was atypical when compared to the literature. Typically with strategic planning and program development, programs grow as a result of funding. In development of the CARE clinic, the clinic was planned first and concerns about funding sources were secondary issues.

5. Clinic services were purposely limited. The residents, by and large, felt that the ability to perform minimal laboratory tests would provide another dimension to the on-site care. The nurses seemed to feel that, at this level of care, this was not necessary. The principal of the school and the Assistant Director of the Department of Pediatrics supervisor of the residents, felt that on-site testing would elevate the clinic to a level where it would

become burdensome. Laboratory testing would involve regulatory measures, more cost, more oversight and in short provide more complications than benefits. The insight of this decision was yet another prudent step which seemed to facilitate clinic development. Had the need or desire for on-site laboratory services been considered essential, the clinic may have never materialized or would most likely not have become operational at the time that it did. The principal of the school also was insightful in feeling that the need for laboratory services was secondary to getting doctors into the school and the clinic opened.

6. Continuity of care was stated as an issue early on in the design phase of the CARE SBHC. The research found this to be an unresolved issue. When a medical finding was discovered through the SBHC, the operating procedures directing that action start with a call to the family by the nurse while the doctor is on site. If the parent is not available, the Family School Coordinator continues to attempt to make contact. The appropriateness of this decision remains a question. The nurse is only available during clinic hours and returns to the school on Thursdays. The FSC is placed in the position to relay medical information to the parent. The question remains if this is a prudent decision to leave such a responsibility to a non-medically trained person. The school district would be liable should a problem arise with the delivery of this

information. It is possible that a lawsuit could arise even with a registered nurse delivering patient information to a parent; however the actions of the school district would be weighed against normal and customary practices of the profession. Nurses often are given this type of responsibility. Under the existing procedures, the school system could be vulnerable if any cases were challenged in court.

7. Patient triage is a serious responsibility. Presently, this falls initially to the Family School Coordinator (FSC). She receives the referral permission slips from families and teachers. Her decisions to make appointments is based on the information she hears or reads on the referral. The morning of the clinic, the nurses review the appointments and triage for those scheduled. The reservation remains, as to whether or not the initial triaging is an appropriate responsibility for a non-medically trained school employee. As a result of this investigation, particularly the participant interviews, the researcher was concerned with the prudence of this decision. The possibility of a court case resulting from these practices is a real one. The norms and standards of the profession leave such serious medical decisions in the hands of medically trained personnel. Should a case be brought before a court concerning this operating practice the school system could find itself actively trying to defend

themselves. Additionally it seemed apparent that little action was taken to see a patient on the morning of the clinic on a walk-in basis. Not triaging patients to see children who are actively sick the morning for the clinic seems to be a shortcoming. Patient triage practices in the CARE Clinic apparently differ from other medical clinic operations. Addressing these problems would not seem difficult. For instance, perhaps all appointment requests should be sent into the district central office where the nurse could accept and make the appointment calendar. The nurse would be able on Thursdays to see the scheduled patients and reevaluate the appointment calendar. Such actions would possibly alleviate the school system from the question of error or negligence in regards to patient appointment triage.

8. Attendance and achievement considerations for school youth go beyond that which can be assessed in a study such as this one. The variables affecting these two areas are broad and hard to measure in a case study investigation with just one year of clinic operation.

9. The development of this clinic and its placement in the school seemed appropriate. Parents, teachers, and the medical community were in agreement that the strength in the CARE clinic was its accessibility in the school. The benefits of this placement were:

- (a) Children can be pulled easily from class with minimal missed academic time.
- (b) If a child misses an appointment, another child can fill it with no down time for practitioners.
- (c) Medical providers are accessible to teachers for consultation and education.
- (d) The clinic provides early intervention for contagion which typically infects school communities such as strep and lice.
- (e) Preventative education can be easily practiced.
- (f) The residents and the school are making a positive community connection fostering an element of trust and concern.
- (g) Early identification of serious illness can occur.
- (h) Children can be taught how to access health care and a positive relationship can be fostered with a medical provider.
- (i) Children can easily be taught the responsibility they hold for themselves in maintaining an appropriate level of wellness.

#### Recommendations

The following are recommendations based on the discussion of the findings of this investigation.

1. School districts should assess their school public to understand the level of need for instituting a SBHC. This would not be a constant with every school or every district.

2. A community needs assessment is necessary to understand what medical services are currently available to

children for each particular school, the district at large, and the local community.

3. Because resident services are not available to all communities, each community should approach existing practitioners and make them aware of the health needs of school children. This dialogue would facilitate community networking and creative solutions to the documented needs.

4. The health needs of community children must be viewed as a community concern, and not one exclusively owned by the school.

5. A local advisory board holding a broad representation of the community is an essential initial first step in addressing school-health clinic issues. Community members who represent government, business, education, the clergy, and social and health services can facilitate the community campaign and promote harmony and education for the moral concerns which can accompany SBHC development.

6. Staff development opportunities should be provided to school nurses so they can grow to understand how to develop community partnerships. According to the literature this role would be foreign to existing school nursing personnel because they often are the sole medically trained provider to meet the health needs of vast number of children (Kozlak, 1992). Additionally, this is not a typical role and would not be one found easily modeled.

7. Mental health issues of children should be included with any school health program. These needs require specialized services. A SBHC should not exist if it is only to deliver the assistance necessary for minor physical illnesses. Mental instability is a growing concern with youth today; this is reflected by the increasing number of teen suicides experienced in America (Weis, Farrer, & Petrie, 1989). The seriousness of the needs of American youth, coupled with the hopelessness they must feel, support the need for mental health specialists being available for children.

8. Through this study, comments were made concerning the need and value of health education programs. The residents particularly seemed interested in outreach through classroom education. Health education programs are integral in the development of personal wellness. These programs should be delivered in the classroom by the practitioners working in the clinic. This places the practitioner in a more positive light and more than this, fosters a comfort level between the providers and the students, and with that a deeper understanding between provider and patient. This opportunity is one not afforded most individuals. Typically, children are accompanied to a provider's office by a parent, and the parent usually is the party engaged in dialogue with the doctor. In a SBHC operation, the provider/student relationship can be fostered through the

time the doctor and patient share during the appointment, as well as the time spent in the educational programs.

9. In-school clinics must operate under the prudent norms and standards of the profession. SBHC are accountable to the patients they serve as seriously as if the clinic were a private one. The medical records must be maintained and protected against violations of confidentiality. As with all public records, the medical files can be subpoenaed and therefore should be professionally maintained in a judicially appropriate manner consistent with existing walk-in clinic practices to protect all parties concerned.

10. Health management organizations and/or insurance companies should be considered for possible funding sources due to the cost effectiveness Kirby and Lovick (1993) claim can be expected with SBHC operations.

11. Funding should not be given more attention than will. Funding and liability issues must inevitably be addressed, but should not be the total focus of concern in developing a collaborative partnership such as a SBHC. When decisive steps are made for program implementation, and the need is apparent, there is no limit to what coordinated efforts can or will do for the benefit of others.

12. A longitudinal study should be made after 5 to 10 years to determine the impact SBHCs have on children.



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## APPENDICES



**APPENDIX A**  
**STUDY PARTICIPANT CONSENT FORM**

East Tennessee State University  
College of Education  
Department of Educational Leadership and Policy Analysis

**INFORMED CONSENT FORM**

PRINCIPAL INVESTIGATOR: Sheila Kay Jones

TITLE OF PROJECT: A Case Study on an Elementary  
School-Based Health Clinic

The purpose of this study is to document the procedural process of school-based health clinic development and to determine if attendance or achievement is impacted through direct, weekly access to primary comprehensive health care services. Each participant will be interviewed in depth regarding their experience of school-based clinic development, design, implementation, and clinic day to day operations.

This study is not an experiment; no variables are being manipulated. The interview will take approximately one to one and one half hours of your time. Risks for participating and inconveniences will be minimal. Participating in this study is strictly voluntary. You may refuse to answer any questions you find uncomfortable, or quit at any time. The interview will be audio recorded and transcribed for response accuracy. All information which you provide will be kept strictly confidential.

I understand the procedures to be used in this study and the possible risks involved. I also understand that participation in this study is strictly voluntary and that I may withdraw at any time by notifying Sheila Jones whose phone number is 547-0511.

I understand if there are any questions or research related problems at any time during the study, I may contact Sheila Jones at 547-0511 or Dr. Marie Hill at 929-4415. I consent to participate in this study.

\_\_\_\_\_

date

\_\_\_\_\_

signature of respondent

\_\_\_\_\_

date

\_\_\_\_\_

signature of investigator

**APPENDIX B**  
**PARTICIPANT INTERVIEW GUIDES**

## INTERVIEW GUIDE

TITLE OF PROJECT: *A Case Study of an Elementary School-Based Health Clinic*

### **Phase I Questions** \_\_\_\_\_ **(Originators)**

1. Please describe your profession and position.
2. In what capacity are you familiar with the development of the MVC?
3. How did the idea of this clinic come about?
4. Can you tell me how the clinic is doing, and in your opinion what the feelings are toward having it?
5. What procedural steps were taken to establish and operate this SBHC?
6. What community campaign was adopted to successfully realize this operational clinic?
7. What problems do you see were encountered? What were the funding issues? Do you have any information concerning legal considerations?
8. Do you feel accessible health care, as provided in this clinic has made a difference in school attendance or school achievement?
9. What impact do you believe the SBHC has had on the lives of children attending this school?
10. What other information would you like to offer to provide a complete picture of this SBHC?
11. Who else can you suggest I interview for this study?

**INTERVIEW GUIDE**

**TITLE OF PROJECT:**        *A Case Study of an Elementary School-Based Health Clinic*

**Phase II Questions** \_\_\_\_\_ **(Workers)**

1.     Please describe your profession and position.
2.     In what capacity are you familiar with the development of the MVC?
3.     How do you feel about the MVC?
4.     Give your impression on how successful you feel the clinic has been and in what regard?
5.     What procedural steps were taken to establish and operate this SBHC?
6.     What community campaign was adopted to successfully realize this operational clinic?
7.     Are you aware of any problems encountered in establishing this SBHC?
8.     What impact, if any, do you feel this health clinic has had on the lives of children attending this school?
9.     Do you feel accessible health care has made a difference in attendance or academic achievement of children attending this school?
10.    What are the strengths of the clinic?
11.    What are the weaknesses of the clinic?
12.    How do you think the parents feel about the clinic?
13.    Does your opinion of SBHCs differ now than before you had experience with this clinic?
14.    What other information would you like to offer to provide a complete picture of this SBHC?
15.    Who else can you suggest I interview for this study?

## INTERVIEW GUIDE

TITLE OF PROJECT: *A Case Study of an Elementary School-Based Health Clinic*

### **Phase III Questions - \_\_\_\_\_ Focus Group (Parents)**

1. What was your initial feeling when you heard a clinic would be operating out of MVS?
2. Did you have any reservations about the SBHC coming into the school, if so explain?
2. Do you know how the clinic has been received?
3. Do you feel the school should be the place for clinic services?
4. Are you aware of any of the steps taken to establish and operate this SBHC?
5. How did you learn about the clinic?
6. What problems do you see were encountered in establishing this SBHC?
7. Do you feel medical care like this has made a difference in the attendance or academic success of the children attending this school?
8. In your opinion, what impact has the SBHC had on the lives of children?
9. What do you feel are the strengths of the clinic?
10. What do you feel are the weaknesses of the clinic?
11. Now that your child has been in a school having a SBHC would you like to see a clinic in any future schools your child should attend?
12. What other information would you like to offer to provide a more complete picture of this SBHC?
13. Is there any others you can suggest should be interviewed for this study?

## INTERVIEW GUIDE

TITLE OF PROJECT: *A Case Study of an Elementary School-Based Health Clinic*

### **Phase III Questions - Focus Groups (Teachers)**

1. What was your initial feeling when you heard a clinic would be operating out of MVC?
2. Did you have any reservations about the SBHC coming into the school, if so explain?
3. As teachers, what is your present feelings about the clinic?
4. Do you feel the school is the appropriate place for clinic services?
5. What steps were taken to establish and operate this SBHC?
6. What community campaign was adopted to successfully realize this clinic?
7. Do you know of any problems that were encountered in establishing this SBHC?
8. Do you believe this clinic has had any impact on the lives of children attending this school? If so how?
9. Do you feel accessible health care has made a difference in the attendance or academic achievement of children attending this school?
10. What do you feel are the strengths of the clinic?
11. What do you feel are the weaknesses of the clinic?
12. How do you feel the children feel about the clinic?
13. Has the clinic benefited you as a teacher or the students you serve?
14. Having experience working in a school with a SBHC, should you leave this school, would you like to see a clinic in any future schools you work in?
15. What other information would you like to offer to provide a complete picture of this SBHC?

**APPENDIX C**  
**PARENT LETTER**



January 8, 1996

Dear Guardian of \_\_\_\_\_:

The school-based health clinic is in its' second year of operation and it is appropriate to understand the value the clinic has had on you the parent or guardian of a \_ child. If you value having the physicians come to the school to treat the children who attend here please take thirty minutes out of your schedule to participate. This opportunity for you to evaluate the clinic and share your feelings, concerns and experiences about the clinic will be held on Monday, January 29th at 2:00 p.m. in Room 212 at the school. You specifically are being asked to participate because the clinic records indicate your child has utilized the clinic.

A doctoral student from ETSU who is conducting a study on school-based health clinics will be conducting this informal meeting. Parents interested in providing their opinion will be asked questions as a group. These questions **will not** be of a personal nature, and no one will know who has participated in this study, nor that this study is being taken place at \_\_\_\_\_.

The doctors who come to our clinic come on a voluntary basis and they would like to know how we as a community feel about the time they donate to our clinic. Please take the time to share 30-45 minutes with us and your opinions. For the future success of the clinic we need parent and community input

Please call 4xx-xxxx to confirm your attendance or send the attached form back to school with your child. Thank you in advance for your willingness to help us learn more about how we can better serve you and your family.

Sincerely,

Dr. (Principal)  
Enclosures

**APPENDIX D**

**FAMILY RESOURCE CENTER  
SURVEY RESULTS**

## RESULTS OF FAMILY RESOURCE CENTER SURVEY

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October 19, 1993

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160 surveys were returned with the following responses:
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On-Site Health Services	76%
Tutoring (Elementary through Senior High)	72%
Drug and Alcohol Education and Counseling	67%
On-Site GED Classes	59%
Employability and Job Skills Training	58%
*On-Site Child Care	54%
Family Counseling	53%
Training and Support for Day Care Center Workers	49%
Legal Advice and Counseling	46%
On-Site Social Work Services	38%
Parenting Education	38%
Respite Care	18%

\* There may have been some confusion as to the interpretation of training and support for Day Care Center Workers, since this number is so high. It may have been confused with the services for the EDUCARE program. The purpose of this service was to assist day care center workers in meeting the inservice requirement for licensing.

**APPENDIX E**

**AUDIT FINDINGS**

February 22, 1996

Ms. Shella Jones, Doctoral Candidate  
East Tennessee State University  
Educational Leadership and Policy Analysis  
501 Warf-Pickel Hall  
Johnson City, TN 37614

RE: Dissertation Audit Report

Ms. Jones:

I am pleased to submit to you this auditor's report for inclusion in your doctoral dissertation. Procedures for auditing naturalistic studies, found in Appendix B of Guba and Lincoln's *Naturalistic Inquiry* (1995) were used to conduct this audit. The findings of this audit process are:

1. Data was found to be both complete and comprehensive. The data was well organized, thus reducing confusion. The data provided for audit was appropriate and the linkages obvious. I, therefore, confirm the audibility of the data.
2. Using procedural information from our audit discussions and a review of your field and debriefing notes' revealed no evidence of researcher bias. Findings selected at random were traced to the raw data, interview notes, document entries, and audit discussions, showing indications of careful attention to the possibility of alternative findings. Your findings are based on the data and are now confirmed.
3. An examination of sampling procedures, the establishment and any necessary modification of working hypotheses, and the flow of methodological decisions were easily identifiable, purposeful, and relevant to a naturalistic study. The process of inquiry used by the researcher is seen as both appropriate and thorough, thus establishing the dependability of the study.
4. The use of data triangulation, organized document notes and entries, systematic peer debriefing, and integration of audit plans into the research design lead me to confirm the credibility of this study.

My observations and audit activities lead me to conclude that you have maintained the highest professional standards, research ethics, and practices of research. This addition to the literature on school-based health clinics will contribute much.

Sincerely,



Eloise Jurgens, B.S., M.A.  
Doctoral Candidate, ELPA, COHORT IV

## VITA

## SHEILA KAY JONES

- Personal Data:** Date of Birth: 3-12-54  
 Birth Place: Cincinnati, Ohio  
 Marital Status: Married
- Education:** Deer Park High School/ Cincinnati, Ohio/ June 1972  
 University of Cincinnati/ Cincinnati, Ohio/  
 Berea College/ Berea, Kentucky/ Physical Education/  
 B.A./ December 1976  
 Indiana University/ Bloomington, Indiana/ Physical Education/  
 M.S./ August 1979  
 University of Alaska/ Anchorage, Alaska/ School Administration  
 M.Ed./ June 1990  
 East Tennessee State University/ Johnson City, Tennessee/  
 Doctorate in Education in the Department of Educational  
 Leadership and Policy Analysis/ Ed.D./ May 1996
- Professional Experience:** 1979-1982 - Teacher: P.E./ Sex Education/ Family Planning;  
 Field Hockey Coach - Ramsey School System - Ramsey, NJ  
 1984-1985 - Teacher: Physical Education/ Health/ Volleyball Coach  
 Licking R-VIII Schools - Licking, MO  
 1986-1988 - Director of Parent Education - Waynesville R-VI  
 Schools - Waynesville, MO  
 1990-1991 - Adjunct Instructor - University of Alaska -  
 Anchorage, AK  
 1993-1995 - Executive Director - Communities In Schools -  
 Johnson City, TN
- Honors/  
 Awards:** 1979 - Coach of the Year  
 Ramsey Schools - Ramsey, NJ  
 1983 - Certificate of Achievement  
 United States Military Community  
 1983 - Official Commendation  
 Department of Defense  
 1985 - Coach of the Year  
 Licking, MO  
 1993 - Model Dropout Prevention Program  
 Tennessee Department of Education

- Presentations:**
- 1993 - Tennessee Organization of School Superintendents  
Dropout Prevention Presentation - Nashville, TN
  - 1994 - Tennessee Department of Education,  
Model Dropout Prevention Conference  
Nashville, Memphis and Gatlinburg
  - 1995 - Civitans, Rotary, Lions, League of Women Voters,  
ETSU Graduate Classes  
Dropout Prevention Research - Johnson City, TN

- Professional  
Development:**
- 1993 - Communities In Schools Regional Conference  
Lenoir, North Carolina
  - 1993 - Tennessee Organization of School Superintendents  
Dropout Prevention Presentation - Nashville, TN
  - 1994 - Tennessee Department of Education,  
Model Dropout Prevention Conference  
Nashville, Memphis and Gatlinburg
  - 1994 - National Association of Secondary School Principals  
Mentoring and Coaching Development Program  
East Tennessee State University - Johnson City, TN
  - 1994 - Superintendent's Leadership Class  
Johnson City, TN
  - 1994 - Communities In Schools National Conference,  
Arlington, VA
  - 1995 - Johnson City Chamber of Conference  
Leadership 2015 - Johnson City, TN