

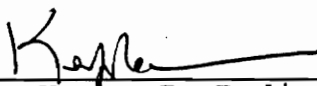
Physician Utilization Patterns and
Family Characteristics of Participants in the Comprehensive
Health Investment Project

by

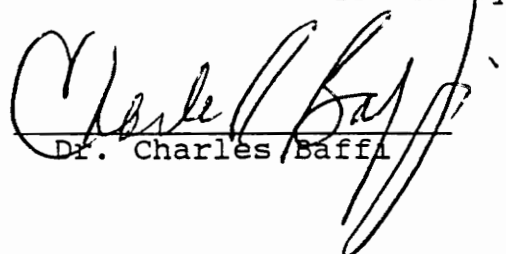
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Chapter I

INTRODUCTION

In America, children who are born to low-income families lack many advantages that are afforded to the more fortunate. One of the most crucial disadvantages inherent to children living in poverty is inadequate access to quality health care. Millions of disadvantaged children in this country are denied health care services which are vital to their physical, mental, and emotional development. The denial of crucial health care resources to this nation's disadvantaged children has resulted in a continuous decline in their health status. Numerous studies have demonstrated that children from low-income families invariably endure a greater number of severe health problems, have higher mortality rates, as well as higher rates of disabling handicaps (Nugent et. al., 1988).

As the number of children living in poverty in this nation continues to grow, the provision of appropriate health care services to them becomes increasingly difficult. If this problem is not sufficiently addressed, the health status of children living in poverty will continue to lag behind the health status of children from higher income groups as will their access to needed health care services. The delivery of quality health care services to

disadvantaged children requires new and innovative approaches, involving both the public and private sectors. This paper seeks to explore the scope of this problem as well as examine some viable options for providing quality health care to the children of low-income families.

SCOPE OF THE PROBLEM

Unequal distribution of health care services and facilities and the lack of sufficient health care insurance are the two most important socioeconomic barriers to good health for low-income families. The rising cost of health care services in this nation has made health insurance indispensable. There are in excess of 31 million uninsured Americans who have no ready access to needed health care. In addition, there are an estimated 200 million Americans who have inadequate health insurance coverage for costs associated with acute illness, catastrophic illness, and long term care (Roybal, 1987). Between 1982 and 1985, the uninsured population in this nation increased by 15% (from 30.3 million to 34.8 million) (Edelman, 1988). The number of uninsured children in this nation has risen at an alarming rate as well. Between 1982 and 1985, their numbers increased by 16% (from 9.6 million to 11.1 million). In 1986, the Current Population Survey cited the percentage of uninsured

children in this nation still rising at 19%. Currently, there are over four million uninsured children living in poverty who are not eligible for Medicaid (Waxman, 1989). Most of these children are not eligible for Medicaid coverage because their family's income exceeds the strict cut-off levels established by Medicaid. Under present Medicaid guidelines, if a child is not receiving AFDC or is above seven years of age the probability that he will be eligible for Medicaid coverage is very low.

Surprisingly, the indigent or the economically disadvantaged only comprise approximately 25% of the nation's uninsured. The largest and fastest growing group of the uninsured are the "working poor" and their dependents. Together they constitute about 75% of the American uninsured population. Over half of all uninsured children reside in families whose head is employed on a full-time basis. The "working poor" are those people whose employers do not offer health benefits, yet they do not qualify for any federal, state, or local government assistance. Providing adequate health care to the children of the "working poor" poses a special problem. Because their parents are employed, these children do not meet eligibility requirements for government programs such as Medicaid, AFDC, and Headstart. Mullan

(1987) states, "The provision of services to these people presents a major ethical, economic, and technical challenge to the public and the makers of public policy" (p.113). The public sector has definitely failed in its attempts to meet this challenge .

Inadequate access to health care services and facilities appears, to some extent, to be also a function of geographic region of residence. Families which reside in Medically Underserved Areas (MUA's) fall victim to unevenly distributed health care resources. MUA's are regions without the adequate number of physicians, or regions where persons do not have ready financial access to primary care providers or suffer from poor health outcomes. MUA's are designated by four factors: (1) the primary care physician to population ratio; (2) the infant mortality rate (3) the percentage of the population living below the federal poverty level; (4) the percentage of the population that is age 65 years old and older (Virginia Systems Agency, 1989). In Virginia, over 21% of the state's population resides in areas that are currently designated as medically underserved. Many states have attempted to provide health care services to underserved communities through community health centers.

The lack of adequate health insurance and the inequities in distribution of health care resources are not the only factors which influence access to proper health care for the disadvantaged children in this country. Several other socioeconomic barriers to health care deserve mentioning. Changes in the nature of both the national and health care economy have decreased the ability of health care providers to shoulder the burden of charitable care. The "pro competitive" environment in the recent health care economy has left non-profit health care providers struggling to survive, thus diminishing their charitable capacity. In addition, the number of non-profit providers in this nation is shrinking because they can not compete in such an economy. This has had considerable impact on the disadvantaged child's access to health care. In the past, indigent families were often dependent on non-profit providers such as community hospitals, for free medical care. Now, as the number of non-profit providers in this nation continues to diminish, indigent families are increasingly being forced to seek alternative sources of health care.

Other factors which hinder the low-income child's access to proper health care include lack of parental knowledge about the health care system, parental perceptions

of their child's health status, inadequate day care, and the lack of transportation to health care facilities. Parental knowledge of the health care delivery system may directly affect the utilization of health care services by their children. Low-income families tend to utilize primary care services less frequently than families in higher income categories. Additionally, these families often utilize health care services in an inappropriate manner. For example, low-income families often go to costly hospital emergency rooms when seeking routine primary care services. Parental perceptions of their child's health status may also determine how often their child receives needed medical attention. The literature suggests that low-income parents' perceptions of their child's health tends to be more favorable than those of higher income parents. As a result, children living below the poverty level are much less likely to see a physician than those living above it (US HHS, 1989). The literature also suggests that children from poorer families do not receive health care until later in the course of their illness and, as a result, require more hospitalization. Finally, insufficient means of transportation as well as lack of adequate day care certainly play a role in the disadvantaged child's access to health care. This is reflected in the extremely high

absentee or cancellation rates for appointments at health departments in rural areas; the figure is estimated as greater than 40% (US HHS, 1986).

Along with inadequate access to appropriate health care services, children from low-income families often fall victim to substandard quality of available health care. The two primary reasons for this are the failure of existing government programs (e.g. Medicaid) in the provision of comprehensive health care services to children in poverty and the lack of continuity in available health care services. Typically, government health programs underserve disadvantaged children in a variety of ways. The public health sector provides these children with health care services that are fragmented, impersonal, and lacking in comprehensiveness. The following section will review to what extent this problem has been dealt with in both the public and private sectors.

Public Sector Initiatives

In terms of governmental programs that serve the needs of disadvantaged children, AFDC (Aid for Dependent Children), WIC (Special Supplemental Food Program for Women, Infants, and Children), Medicaid, and Headstart represent the bulk of government efforts. For the most part, these

"band-aid" type of programs have been incapable of keeping up with the ever growing needs of poverty stricken children in our nation.

WIC. The WIC program which has proven to have a positive impact on improving the nutritional health of children, serves only about 40 percent of its eligible population (Eldeman, 1988.). The WIC program has been unable to reach all its eligible population for two reasons. First, WIC's public outreach efforts have failed to identify all those eligible for the program. Second, because of limited funding, WIC can not keep pace with increasing need. This inadequacy is recurrent in the majority of government programs for low-income children.

Medicaid. Medicaid represents the largest health care program for the indigent in this nation. Medicaid, which originated out of Title XIX of the Social Security Act, seeks to provide health care coverage to anyone who is defined as "medically indigent." According to Medicaid guidelines, the medically indigent are those individuals who do not qualify for welfare but whose income impedes their ability to pay for medical care. Eligibility criteria for Medicaid are based primarily on a families income level.

However, a child's eligibility for Medicaid benefits is also based upon his age. After a child surpasses seven years of age, it is more difficult for him to obtain Medicaid benefits.

Medicaid, whose impact in improving access to health care for needy children is well documented (Rosenbach, 1989), has also fallen short in its efforts to meet the health care needs of all children living in poverty. Even though the percentage of children covered by Medicaid has risen steadily in the past 15 years, only about half of American children living in poverty receive Medicaid benefits. In the past, many children were considered ineligible for Medicaid because they did not meet the eligibility criteria for AFDC. Fortunately, the Omnibus Budget Reconciliation Act of 1986 (OBRA) provided states with the option of providing health coverage to families living up to the poverty level without raising AFDC levels (Hill, 1988). The effects of this legislation remain to be seen. However, it is likely that Medicaid will continue to show room for improvement. In addition to Medicaid's inability to cover the bulk of disadvantaged children in this nation, its failure in providing equal access to "mainstream" health care has also been a point of strong criticism (Levey, 1986). Mainstream health care refers to

the standard or quality of health care that middle and upper class families enjoy. The literature suggests that this failure is a result of Medicaid's reliance on private physicians, of the discontinuity of its services, and of the perfunctory attitudes of its health care providers (Waxman, 1989). The Early and Periodic Screening, Diagnosis and Treatment program represents an effort to improve the effectiveness of Medicaid.

Early and Periodic Screening, Diagnosis and Treatment Program (EPSDT). EPSDT, a program that specifically targets disadvantaged children and their primary health care needs has proven to increase access to vital health care services. Established during the late 1960's, EPSDT represented the first significant public sector initiative for financing preventive and continuing health care for indigent children in this nation (Tompkins, 1979). EPSDT is the largest federal health care program for children in this country, currently serving over 10 million. This program which is funded under Medicaid, seeks to address the health needs of indigent children through proactive and comprehensive strategies including program outreach, Medicaid eligibility identification, case management, and providing support services.

The objectives of the EPSDT are to: (1) reach all children eligible for Medicaid and encourage and help parents to participate; (2) to evaluate each child with observations and tests that will effectively determine whether or not he or she may have any significant unmet need for health care; (3) it seeks to provide diagnostic services for each child at risk to determine whether a problem or need is actually present and the exact nature and extent of any such problem; (4) it seeks to provide preventive and treatment services for all children who need them; (5) it strives to plan and arrange for the early identification and treatment of any needs which are likely to arise in the future and provide education that will promote the use of preventive health services (U.S. Department of Health, Education, and Welfare, 1975). Although EPSDT has been somewhat successful in accomplishing its objectives, some argue that the program needs to improve in its procedures and reimbursement levels in order to be widely effective (Jones, M., Nickerson, J., 1986). Specifically, EPSDT effectiveness have been hindered by inadequate public outreach strategies; some argue that more personal contact is needed if EPSDT efforts are to be successful. In addition, inadequacies in the program's reimbursement procedures has hurt EPSDT effectiveness. The EPSDT is often unable to attract quality physicians because

of insufficient or low reimbursement levels.

Headstart. Other government programs, such as Headstart, have demonstrated considerable success in furnishing disadvantaged children with the same opportunity for healthy physical, mental, and emotional development as their more fortunate counterparts (Washington, 1985). Headstart is a comprehensive, developmental, preschool intervention program which seeks to improve the disadvantaged child's health, emotional/social development, mental process, expectations for success, interpersonal/intrafamily relationships, social responsibility, and feelings of self worth (Washington, 1985). Head start provides a vast array of services to disadvantaged and handicapped children. These services include social services, health care or medical services (e.g. health education, primary care services, dental care, visual and auditory screening, immunizations, and physical therapy services for the handicapped), pre-school educational services, and parent education. In short, Headstart addresses a wide range of family needs ranging from employment training and health care to family counseling (Washington, 1985). Headstart has enjoyed considerable success since its inception, however, because of lackluster government support and difficulties with

outreach, the program only serves approximately 15% to 18% of its eligible population (Washington, 1985).

In the past 5-10 years, the federal government has taken some steps to improve maternal and child health public sector initiatives in this nation. The expansion and strengthening of Medicaid under Title V of the Social Security Act provides an example. This federal initiative has as its goal to enable states to extend and improve services for promoting the health of mothers and children, especially in underserved areas. Through the allocations of Maternal and Child Health Block Grants under Title V, the federal government provides monetary support for grants-in-aid programs. These programs use grant funds to provide maternal and child health care services such as prenatal care, baby clinics, school health services, immunizations, public health nursing, nutrition services, and health education. These special project grants, which have recently become widespread, are awarded on the basis of their potential for regional or national significance. By this move, the public sector has come one step closer in assuring that no area of this nation is underserved by maternity and pediatric services.

Private Sector Initiatives

Within the past 10-15 years, the private sector has found itself playing a growing role in the provision of health care services to families who experience difficulty in accessing health care. For the most part, private sector efforts have come in the form of free clinics and prepayment programs (e.g. HMO's, PPO's).

Free Clinics. Free clinics, which originated in the late 1960's out of the neighborhood health centers, directly deliver free medical, dental, and psychological care to anyone regardless of income. These clinics, which are staffed mostly by volunteers, have been surprisingly durable through the years despite limited private and public funds and patient donations. Free clinics have demonstrated some success in improving access to health care for the disadvantaged in this nation (Ginzberg, 1985). Free clinics provide the disadvantaged with access to primary health care services in a number of ways. First, these clinics provide medical care to the indigent free of charge without the hassles of bureaucratic "red tape." Eligibility requirements for free-clinics are typically less rigid than government health care programs such as Medicaid. Second, free clinics are readily accessible to the indigent because they are

typically located within the center of a community. Free-clinics, however, are not without their inadequacies. These clinics often fail to attract quality physicians or adequate numbers of physicians; they can provide only a very limited range of health care services; and they are often understaffed and overcrowded. In addition, some argue that the increasing number of for profit institutions may lead to a reduction in the availability of "free care" in some communities. Currently, one-third of America's largest 100 cities report having no public "free care" institution (Ginzberg, 1985).

Prepayment Programs. Prepayment programs such as health maintenance organizations and preferred payer organizations typically provide comprehensive health care services to a voluntarily enrolled population for a fixed fee. These type of private programs generated much enthusiasm in the public sector during the late 70's and early 80's because of their potential for reducing the health care burden on the government. Prepayment programs were thought to be a viable option for increasing access to medical care to the uninsured. These programs increase access by providing community-based health care services at a lower cost to the patient. However, because prepayment programs are profit-

making organizations which respond to the health care needs of a population on the basis of financial incentive, they are reluctant to serve low-income families.

The provision of quality health care to this nation's disadvantaged children demands new direction. The public sector can no longer respond to this problem with a host of "safety net" programs lacking many of the key ingredients needed for successful delivery of quality health care. New and creative approaches to health care delivery involving both the public and private sectors are pivotal in addressing this problem. Key components of such new strategies will undoubtedly include comprehensive health services programs that emphasize early intervention, continuity and management of care, preventive health education, professional advocacy, and community empowerment. The following sections discuss some contemporary strategies for health care delivery that embody these key components.

Community-oriented Primary Care (COPC). The development of COPC in this country is an attempt to integrate both public health and primary care approaches to health care delivery to provide a more unified, comprehensive health program for the community. COPC is best defined as a modification of the

traditional model of primary care in which the primary care practice or program systematically identifies and address the health problems of a defined population (Nutting, 1987). COPC contains four essential elements: (1) definition and characterization of the community (2) identification of the community's health problems (3) modification of the health care program in response to the community health needs identified (4) monitoring the impact of program modifications (Institute of Medicine, 1989).

History and Development of COPC. The concept of community-based continuous health care has been around for quite awhile. The term "community-oriented primary care" was first used by Sidney Clark and was based on his experiences as a primary care physician in South Africa in the 1950's. His assignment in Africa was to set up a clinic in a rural area which previously had no health care facilities. In essence what Dr. Clark proposed was the addition of a community approach to the standard practice of primary care. This approach later became known as COPC (Institute of Medicine, 1989).

The concept of COPC is a fairly recent phenomena in the United States. COPC's origin can be traced backed to the

late 1960's during the Johnson administration. Neighborhood Health Centers, the first significant federal initiative to address the health needs of underserved communities, arose out of Johnson's declaration of "War on Poverty ." These health centers were a definite reflection of the COPC model of health care delivery; they were community-based clinics that served the indigent population and minorities who had become eligible for health insurance under the Medicaid legislation passed in 1965 (Institute of Medicine, 1989).

There are also many contemporary methods of health care delivery, both in the public and private sectors, which mirror the principles of COPC. In the public sector, Community Health Centers, which grew out of the neighborhood health centers employ all the essential components of COPC. Neighborhood health centers sought to provide primary care to underserved populations as well as confront the health problems of the local community. Today, these centers have evolved into federally funded community health centers.

Pre-paid group practices (e.g. HMO's, PPO'S) and family medical practices are the two best representations of COPC in the private sector. Health Maintenance Organizations are profit-making institutions which encourage health care providers to respond to the perceived health needs of a community by providing them with economic incentives.

Subsequently, HMO's utilize all four of the essential elements of the COPC model in their efforts to improve their cost effectiveness. In contrast, family medical practices reflect the principles of COPC in a much broader sense. Family medical practices mirror the concept of COPC in their efforts to provide community-based, continuous, and personalized health care to their patients. The emergence of family practice as a more mature discipline may actually provide the best hope for COPC in that it emphasizes a commitment to the broader social context of patient care (Nutting, 1989).

The four elements of COPC may be expressed in a variety of ways in different health care settings. Nutting (1986), examined the diversity of expression of COPC principles in seven randomly selected COPC practices in the United States. The study revealed that full expression of these four elements of COPC in a health care practice is inhibited by two factors. First, the financial structure of COPC practices offers little flexibility in undertaking COPC activities (Nutting, 1986). Because COPC practices are typically government funded, their financial resources are often limited. Consequently, these practices may not have financial capability to engage in vital COPC activities such

as monitoring the impact of program modifications. Second, the lack of practical quantitative techniques inhibit the ability of COPC practices to evaluate the impact of COPC activities (Nutting, 1986).

Although COPC is far from being the predominant mode of health care delivery in this nation, it has gained considerable attention. COPC's increasing recognition as a viable option for health care delivery is no surprise; given its potential for alleviating many of the problems associated with health care delivery to the disadvantaged. The two most important benefits of COPC are its flexibility and its ability systematically approach a community's health care problems. COPC's flexibility is evidenced in its ability to be implemented in a variety of health care settings and its ability to tailor its services to a community's particular health care needs. Nutting (1989), summarizes the primary benefit of COPC in the following statement: "COPC provides a strategy for defining and addressing a target population and an opportunity to market primary care services to the needs of that population" (p.7). Because COPC can target health care services so precisely, it maximizes the use of traditional methods of health care delivery resources in ways that traditional

methods of health care delivery do not (Mullan, 1982). Another benefit of COPC is that it seeks to do more than just provide health care services to a population; it seeks to promote broader social change. COPC promotes social change through empowering a community to be proactive in health care delivery; By allowing a community to identify their own particular health care needs and involving the community in program modifications, COPC encourages or empowers the community to take an active role in structuring their own health care services. Finally, the most exciting benefit of COPC is that it creates a sense of rejuvenated commitment and eagerness among health care providers and practitioners because they actually see how their activities relate to the overall improvement of a community's health (Nutting, 1987).

The literature cites many barriers to the implementation or full expression of the four elements of the COPC model. Nutting (1989) suggests that the following obstacles often hinder the effectiveness of COPC: difficulty in defining communities, limited set of resources at the disposal of providers, insufficient data systems, lack of provider as well as practitioner knowledge about COPC practices, difficulty in measuring impact of COPC, insufficient reimbursement levels, and the fact that many

COPC practitioners may find themselves alone in their advocacy. Other hindrances to the implementation of COPC include the lack of convincing evidence that COPC can broadly improve the health status of nonpoverty populations and the lack of physician interest in COPC approach resulting from educational shortcomings in the American medical education system (O'Conner, 1989).

COPC's Role in Maternal and Child Health

COPC could play an important role in improving maternal and child health outcomes in this nation. The COPC approach would not only enable disadvantaged families to achieve better access to vital health care services, it would also increase the likelihood that these families would utilize services more appropriately. In addition, COPC could improve the overall quality of maternal and child health services for the disadvantaged as well. COPC would improve the quality of maternal and child health care services by decreasing fragmentation of services, increasing the comprehensiveness of such services, and by making these services less impersonalized. The significance of COPC in addressing the health care needs of poverty stricken populations is quite obvious. The COPC approach would improve access for low-income children through its efforts

to define and characterize the community. This emphasis on defining and characterizing a community would help to assure that those children eligible for government assistance are readily identified. COPC's emphasis on identification of community health problems would also have a positive impact on the disadvantaged child's access to medical care. Once practitioners become more familiar with health problems in the community, they can mobilize resources more quickly and efficiently. The quality of maternal and child health services would be improved by the systematic nature of the COPC approach. COPC's methodical approach to health care delivery would help decrease the fragmentation of existing health care services. COPC's commitment to addressing the social context of patient care would also improve maternal and child health services by making such services more personable and empowering disadvantaged families to play an active role in their health. The following section will examine an innovative approach to health care delivery that embodies many of the COPC principles.

COMPREHENSIVE HEALTH INVESTMENT PROJECT (CHIP)

The Comprehensive Health Investment Project (CHIP) is a public/private venture presently serving over 400 children ages 1-6 living in the Roanoke Standard Metropolitan

Statistical Area which includes the cities of Roanoke and Salem and the counties of Roanoke, Craig and Botetourt. CHIP's mission is stated as follows: "CHIP seeks to make available community-based continuous, quality medical care to children and to maximize the appropriate use of community health resources by: (1) providing primary care to children within their communities; (2) increasing the use of the Health Department by those who are eligible; (3) improving immunization levels; (4) decreasing inappropriate use of hospital emergency rooms." (CHIP 1988). CHIP serves children who are at or below 150 percent of the poverty level, are not covered by private insurance, and have no routine health care. Participants in the program include private physicians, dentists, and other specialists; public health physicians and dentists; Total Action Against Poverty (the regional Community Action Agency); social service agencies; and the Roanoke City and Allegheny Health Districts.

Program Description

CHIP offers a vast array of different services in order to meet the multiplicity of needs their clients require. CHIP's range of services include: care coordination, immunizations, WIC, children's specialty services (e.g. case-finding, initial eligibility determination, case

management, and counseling), nutritional education, patient education, pharmacy services, laboratory services, dental services, and outreach. A group of both private and public physicians in the community provide primary and acute medical care to CHIP participants and are reimbursed at a Medicaid rate. Essentially, CHIP services are comprised of the following four components: outreach and enrollment, primary health care and supportive services, care coordination, and parent involvement (CHIP, 1988).

CHIP Process

The outreach and enrollment process begins when a child is referred to CHIP. CHIP referrals typically come from one of the following community agencies: Women/Infants/Children Program for Roanoke City (WIC), Children's Specialty Services (CSS), and the Roanoke Free Clinic. These agencies refer children to CHIP who meet specific eligibility criteria. These criteria include: the child must be 1-5 years of age; the child's family income must be below 150% of the poverty level; the child must reside within the cities of Roanoke, Vinton, or Salem, or the counties of Roanoke, Botetourt, or Craig; the child has no routine medical care; and/or the child has special health care needs. Once it is confirmed that a family meets this

criteria, the family is then enrolled in CHIP.

Enrollment of CHIP participants involves two phases. First, the family is required to come into the CHIP office and complete a family intake profile form, eligibility forms, and a self-administered health history questionnaires. A CHIP nurse or outreach worker is present during this process; nurses and outreach workers are responsible for supervising CHIP enrollees while the parents are completing these forms. In addition, the nurse and outreach workers are responsible for administering the family intake profile. Second, the parents or guardians undergo an orientation process. During this time, the nurse coordinator explains to parents what services CHIP will provide to their child. Parents are also informed about the goals of the CHIP program. The families are then required to sign a medical record release and a patient/provider contract which outlines CHIP goals and services.

Once the immediate needs of the child are identified by the parents and the nurse coordinator, referrals to the appropriate services are made. The process of care coordination initiates soon there after. After the needs of the child have been identified, the nurse coordinator develops a plan of action. The child is then assigned a CHIP participating physician. The nurse coordinator closely

monitors the child; she makes sure the child keeps all medical appointments, ascertains the outcome of each medical visit, and schedules any follow-up visits. The nurse coordinator is informed as to the outcome of each medical visit through a patient encounter form that is completed by the physician and returned to CHIP. The care coordination component is integral to CHIP's design. The purpose of care coordination services is to promote the efficient and effective utilization of health care resources by CHIP families.

How does CHIP compare with other maternal and child health programs for the disadvantaged in this nation? Figure 1.0 contrasts CHIP with eight similar maternal and child health programs in terms of funding sources, range of services, and methodological similarities and differences.

Figure 1.0. COMPARISON OF CHIP WITH SIMILAR MATERNAL & CHILD HEALTH PROGRAMS

- 1.) **Program Name: Healthy Families**
Location: Topeka, KS.
Primary Funding Source: MCH

Range of services: The primary function of this program is care coordination and networking of maternal and child health services.

Similarities with CHIP: Healthy Families is similar to CHIP in the following ways: it employs home visits, it links families with community-based resources, it works to help children get immunizations and other support services, and it stresses parental involvement.

Major Differences with CHIP: Health Families differs from CHIP in that it not responsible for actual delivery of primary care service.

- 2.) **Program Name: Improving the Health of Migrant Mothers**
Location: NC
Primary Funding Source: MCH

Range of Services: The program's services include birth coaching, outreach, translation, transportation, breastfeeding classes, and bilingual social services.

Similarities with CHIP: Improving the Health Status of Migrant Mothers is similar to CHIP in that it emphasizes case management and public outreach. Additionally, this program, like CHIP, is nurse managed.

Major Differences with CHIP: This program differs from CHIP in that its population is more narrowly defined, it is not directly responsible for primary care delivery, it employs an extensive needs assessment, it does not integrate the private sector, and its focus is statewide.

Source: Abstracts of Active Projects FY 1989. Office of Maternal and Child Health, US Department of Health and Human Services, Rockville, MD. p. 323-327.

Figure 1.0. COMPARISON OF CHIP WITH SIMILAR MATERNAL & CHILD HEALTH PROGRAMS

3.) Program Name: Healthy Children Project
Location: Pittsburgh, PA
Primary Funding Source: MCH

Range of Services: The program's services include the provision of health insurance (Blue Cross) and health education.

Similarities with CHIP: Healthy Children parallels CHIP in the following manner: it seeks to increase the disadvantaged child's access to primary care services, it involves the private sector in its strategy, and it aspires to be replicated.

Major Differences with CHIP: Healthy Children differs from CHIP in that it involves parents in health education classes to increase their sense of control over their child's health status and their ability to negotiate the health care system, it focuses on financing health care services rather than service delivery, it employed an extensive needs assessment, and health education and health promotion are more emphasized.

4.) Program Name: LINC
Location: Michigan
Primary Funding Source: MCH

Range of Services: The program's services include the provision of tertiary care and support services.

Similarities with CHIP: LINC is similar to CHIP in that it seeks to increase access to and improve utilization of child health services through care management and coordination of support services, it stresses parental involvement, and its services are comprehensive.

Major Differences: LINC differs from CHIP in that it targets only children with special health care needs (e.g. chronically ill children), it utilizes support services to a greater degree, it focuses on the education of health care providers, and it utilizes more sophisticated means of family needs assessment and periodic review of those needs.

5.) Program Name: Family-centered Community-based Project
Location: AR
Primary Funding Source: MCH

Range of Services: The primary focus of this program is to educate professional health care providers, community agencies, and families about family-centered, community - based services.

Similarities with CHIP: This project is similar to CHIP in that it emphasizes care management, continuity, and comprehensiveness of health care services, it utilizes community resources, and it uses multidisciplinary teams.

Major Differences with CHIP: This project differs from CHIP in that it targets only children with special health care needs, it emphasizes eligibility identification to a greater extent, it is not directly responsible, and it has a statewide focus.

6.) Program Name: Volunteer Nurse Managed Clinic
Location: TX
Primary Funding Source: ?

Range of Services: The clinic's services include immunizations, health status assessment, and referrals to appropriate health agencies.

Similarities with CHIP: The clinic is similar to CHIP in that it emphasizes case management, coordination of support services, and is nurse managed.

Major Differences with CHIP: The clinic differs from CHIP in that its primary focus is health promotion and its services are not as comprehensive.

Source: Abstracts of Active Projects FY 1989. Office of Maternal and Child Health, US Department of Health and Human Services, Rockville, MD. p. 323-327.

Figure 1.0. COMPARISON OF CHIP WITH SIMILAR MATERNAL & CHILD HEALTH PROGRAMS

**7.) Program Name: Charles Henderson
Location: AL
Primary Funding Source: Private Trust**

Range of Services: This program's services include primary pediatric care, dental care, health education, specialty clinics (e.g. audio screening), family planning, prenatal care, and school-based health education.

Similarities with CHIP: This program is similar to CHIP in the areas of comprehensiveness of health services and its emphasis on early intervention and health promotion.

Major Differences with CHIP: The program differs from CHIP in that its services are more comprehensive in nature, there is a greater emphasis on training health professional, they serve a larger population (children from birth to 19 years), it is set in a rural environment, and it is more mature in its stage of development, especially evaluation.

Source: Abstracts of Active Projects FY 1989. Office of Maternal and Child Health, US Department of Health and Human Services, Rockville, MD. p. 323-327.

In comparing CHIP with similar types of programs that target maternal and child health, some major differences are readily apparent. For the most part, CHIP differs from these programs in two major areas: First, CHIP's services are more multidimensional than other maternal and child health programs. CHIP not only provides basic primary care; it provides a vast array of preventive and support services as well (e.g. day care, employment counseling, and health education). Second, CHIP's comprehensive approach goes beyond the boundaries of traditional models of health care delivery (including COPC), in a variety of ways. CHIP emphasizes each essential element of the COPC model of health care delivery; its also stresses some additional characteristics of completely effective COPC as well. Abramsom (1988), cites the following five areas that are crucial for truly effective health care delivery: (1) satisfaction of the basic requirements of good primary medical care (accessibility, comprehensiveness, and continuity of care); (2) the use of multidisciplinary teams; (3) community outreach; (4) liaison and cooperation with other services and agencies, including those outside the health sector. CHIP has certainly stressed the concepts of accessibility, continuity, and comprehensiveness of health

care. The CHIP staff is comprised of a variety of disciplines including public health nurses, health educators, social workers, and lay outreach workers. In terms of community outreach, CHIP has established an extensive referral network; CHIP also places a strong emphasis on going out into the community and actively recruiting participants for its program.

In summary, on the surface, the CHIP program appears to be a very innovative mechanism for health care delivery to indigent families. However, because of the program's immaturity, in depth evaluation of CHIP's overall effectiveness has not determined. Before evaluation can take place, CHIP must answer the following questions: What type of client is CHIP currently serving? What services are actually being delivered to CHIP participants? How are CHIP clients utilizing particular services? What are the costs of those services?

Purpose

The purpose of this study was to conduct a descriptive analysis in order to determine the physician utilization patterns and family characteristics of participants in the Comprehensive Health Investment Project.

Significance

In Virginia and across the Nation, rising health care costs, coupled with strict Medicaid eligibility requirements, have created a population with limited or no access to the health care delivery system. Determining the appropriate solutions to inadequacies in health care services to the disadvantaged is not an easy assignment. New and creative approaches to health care delivery, involving both the public and private sectors, are pivotal in addressing this problem.

COPC's unique approach to comprehensive health care delivery seems to be a step in the right direction. It appears that COPC may have the potential to alleviate many of the pressing concerns associated with health care delivery to the disadvantaged. However, in order to be successful, COPC based programs such as CHIP, must emphasize each essential element of the COPC model. This study will assist the CHIP program in undertaking the first step of the COPC model; defining and characterizing the community. In defining and characterizing the community, the literature suggests it is important to first determine who the clinic is currently serving. The purpose of this step is to discover how CHIP participants might differ from other individuals in the community. This study aspires to

characterize CHIP participants in terms of demographics and physician utilization patterns. In addition, this study seeks to contribute to the knowledge base of health education as well as suggest some possible avenues for future research.

Limitations of Study

The limitations of this study are twofold. First, descriptive family information (e.g. family income, number of adults living in home, family size, age, gender, race, and employment status) and utilization information (e.g. number of physician visits, medical costs accrued by each CHIP participant) can not be obtained on all CHIP participants. This study is hindered by the fact that this type of information can only be collected on about half of CHIP participants. Therefore, there may be some question as to whether or not the results of this study are generalizable to CHIP participants as a whole. Second, because of inadequacies in CHIP patient records, researchers were unable to collect a substantial amount of patient information that is integral in defining and characterizing its clientele (e.g. marital status, race of child, family income levels, utilization of health care services other than physicians visits).

Definitions

1. family head- This term refers to the person whose job is the primary source of income for the family.

2. sick-child visit- This term refers to a type of physician visit in which a child comes for treatment of a pre-existing medical condition.

3. well-child visit- This term refers to type of physician visit in which a child receives basic health services for the prevention of illness or disability. Medical services that are typically delivered during a well-child include assessment of growth and development, nutrition information and other types of health education, screening, and immunizations.

4. medically underserved area- This term refers to the population of a urban or rural area with a shortage in personal health services.

5. primary health care services- This term refers to diagnostic, treatment, consultive, referral, and other services provided by physicians or by physician extenders (e.g. physicians' assistants and nurse practioners). These

services also include diagnostic laboratory and radiological services, preventive health services (e.g. health education), prenatal and post-partum care, immunizations and family planning services.

6. disadvantaged- This term refers to a person or family living below the federal poverty level.

7. medically indigent- This term refers to an individual who meets the following criteria. A medically indigent person is one who (1) has an income below the federal poverty level; (2) is without or does not have adequate health insurance coverage; (3) does not qualify for public health programs; and (4) has a catastrophic illness that generates expenses that exceed 50% of the persons gross annual income.

Chapter II

METHODOLOGY

In order to analyze the characteristics and family profiles of CHIP clients, data were collected from each participant's file. Each CHIP patient file includes the following information: a family intake profile, a pediatric health history questionnaire, correspondence summaries, a parent attitude survey, a medical records release, the attending physician's notes on the child's progress (includes diagnosis and treatment), growth charts, demographic information and provider encounter forms. CHIP also employs the Patient Care Management System to compile much of the information contained in patient files. The following provides a description of the content of the CHIP patient files.

Patient Files

Family Intake Profiles

The Family Intake Profile (Appendix A) is an instrument employed by Headstart to assess the short and long term needs of disadvantaged families. For this study, data were collected from the family needs and background sections of the family intake profile. The background section consists

of the following information: average yearly income, education levels, employment status, extent of dependence on government assistance (e.g. Medicaid/Medicare, AFDC, SSI) and the availability of transportation. The family needs section contains information describing the family's immediate perceived needs; this includes financial assistance, housing, transportation, education/training, mental health, health/nutrition, family relationships, parenting, and other needs. This section also contains a checklist that enables outreach workers to ascertain whether or not these needs have been met later on.

Child Health History Questionnaires

The Milcom Pediatric Health History Form (Appendix B) is a self-administered questionnaire that assesses a child health status in order to determine the immediate and long term health needs of the child. This questionnaire contains information about the history of illness in both the mother and child, family health behaviors (e.g. nutrition), and the extent to which family has utilized medical care. This questionnaire is completed upon initial enrollment. There is no evidence of this instrument in the literature.

Parent Attitude Survey

The Parent Attitude and Survey (Appendix C) was developed by CHIP to evaluate parental attitudes and perceptions regarding preventive health and health care services. The parent attitude survey is completed upon initial enrollment of the child into CHIP.

Patient Care Management System

The Patient Care Management System is a computerized patient record management system employed by CHIP. Currently, Chip compiles the following information about each child on the Patient Care Management System: purpose of patient visits (include primary, secondary, and tertiary diagnosis); enrollment by age, gender, and race; and types of services provided (also broken down by age, gender, and race).

Data Collection

Data were obtained exclusively from the family intake profiles and from patient billing statements. It was determined that these two data sources provided the most relevant and reliable sources of information. The pediatric health history questionnaire, correspondence summaries, parent attitude survey, and provider encounter forms were

excluded because there was some question as to their validity and reliability and their relevance to this study. The pediatric health history questionnaire was excluded because it could not provide any useful information for this study. In reviewing responses to the Milcom questionnaire, it was readily apparent that parents did not fully understand many of the questions being asked by the health history questionnaire. Parental responses to the questions on this survey were almost uniform. In addition, at the time this study began, the Milcolm survey had only been completed on a small portion of CHIP's families, thus this information was not likely to be representative of CHIP's entire clientele.

Correspondence summaries were excluded because it would have been impossible to compile them into any meaningful form. These summaries were often vague, difficult to read, and did not provide any information that would be directly relevant to this study. Parent attitude and satisfaction surveys were excluded from this study because less than one quarter of CHIP families had completed these surveys at the time the study began.

Information from the provider encounter forms was not employed in this study because there was some question as to

the accuracy of the information compiled on these forms. Patient encounter forms are supposed to be completed by the physician after each visit. The purpose of these forms is to provide a record of what actually takes place during each visit and the outcome of a particular visit. However, because of time constraints, physicians often do not complete these forms entirely or not at all. Subsequently, CHIP nurses have to complete the forms themselves, sometimes several days after the actual encounter took place. As a result, information from provider encounter forms often conflicted with patient billing statements. This led the researchers to question whether or not encounter forms were an actual representation of CHIP utilization patterns.

Collection of data started the second week of March 1990 and continued for approximately 3-4 weeks. Evaluators gathered information from patient files twice weekly. This process involved the following four stages: (1) accessing patient files; (2) training researchers to gather data; (3) gathering family profile and utilization data from patient files and patient billing statements; (4) compiling patient data for descriptive analysis.

Subjects

Subjects chosen for this study met the following criteria: (1) they were all active clients of the CHIP program; (2) they must have completed a family intake profile. A total of 205 nonrandomly selected families were originally chosen for this study. This represents approximately, 40% of the total number of CHIP families.

Protocol for Data Collection

In order to gain access to patient files, written permission was obtained from the Director of the CHIP program. A letter was submitted to Michael Clark MD, requesting permission for evaluators to go through patient files and collect data. Evaluators were granted permission to collect data from patient files as long as efforts were made to preserve patient confidentiality and anonymity.

Before data collection began, evaluators met several times with the CHIP Evaluation Advisory Committee and CHIP staff members. The CHIP Evaluation Advisory Committee is a volunteer community board comprised of local physicians, social workers, Total Action Against Poverty (TAP) representatives, CHIP's program director, and an evaluation team from Virginia Polytechnic Institute. This committee was formed in order to guide long-term evaluation of the CHIP

program. CHIP staff members who took part in these meetings included the program coordinator, the nurse coordinator, a public health nurse, and an outreach worker.

The primary purpose of meeting with the CHIP evaluation committee and CHIP staff members was to involve them in the data collection process. Members of the evaluation committee and CHIP staff were asked the following questions: (1) What data would be most useful to collect? (2) Where will researchers find particular types of data? (3) What are some barriers that evaluators might encounter during data collection?.

CHIP staff members and the CHIP evaluation committee were also asked to review data collection instruments. Evaluators proposed three data collection grids (Appendix D,E,F) for the two groups to review before implementation. The committees were asked to provide feedback as to the feasibility of these data collection grids. After several revisions, the CHIP evaluation committee and CHIP staff approved these instruments for implementation.

Before data collection began, evaluators underwent a 30 minute training session at the CHIP office. During this training session, evaluators were given the three data

collection grids and were instructed as to how they should be used. Evaluators were informed about the purpose of this study as well. Each evaluator was taken through a couple of patient files and patient billing statements for practice. At the end of the training session, time was allotted for a short question-answer period.

The next step of data collection involved procuring CHIP patient files and then assigning each file a number. First, outreach workers were asked to generate a list of families who had completed a family intake profile. Outreach workers were instructed to exclude families not currently participating in CHIP; 12 inactive files were excluded from this study. A list of 205 families was compiled and distributed to those collecting the data. These 205 families represented all of the active families in CHIP who had completed a family intake profile.

In addition, CHIP's fiscal assistant was asked to identify which families on this list are seen by PHYSICIANS TO CHILDREN; a private sector health care provider for CHIP. A total of 65 of the 205 families in our sample were identified as having Physicians To Children as their provider. The Physicians To Children patient billing

statements were selected because they provide a clear description of the types of services provided during each visit, patient diagnosis, and cost per service. Billing statements from other CHIP providers such as Lewis Gale or Parkway Physician's were excluded from this study because they were very vague and difficult to interpret. In both the Lewis Gale and Parkway Physicians billing statements it was difficult to ascertain the purpose and outcome of each physician visit. For example, often these two billing statements did not specify whether or not the child had come in for a sick-child or well-child visit. In addition, because these two statements are based on a retrospective billing system, it would have been too difficult to determine actual costs per service.

Once these two lists were generated, evaluators began to collect data from the family intake profiles and patient billing statements. Data obtained from the family intake profiles was recorded on two family profile grids (Appendix D,E). Utilization information (e.g. number of physician visits, services provided, diagnosis, and cost per service) obtained from patient billing statements was recorded in the utilization grid (Appendix F). These instruments had to be developed especially for this study.

In part A of the family profile grid (Appendix D), evaluators entered the following data: the family number; the family's average yearly income; family size; the number of adults living in the home; the age, gender, educational level, and employment status of the family head; and whether or not the family was dependent on AFDC, Medicaid, WIC, or Food Stamps at the time of enrollment. In part B of the family profile grid (Appendix E), evaluators entered the perceived needs of each CHIP family. In each row, evaluators entered whether or not the CHIP family indicated they had the following needs: financial, employment, education/training, acquisition of housing, transportation, health and nutrition, mental health care, and interpersonal relationships, and parenting. Raw totals were entered at the bottom of each of these grids.

Data obtained from patient billing statements was collected in the utilization grid (Appendix F). Evaluators entered into this grid, the patient's number, the date the services were provided, the primary diagnosis, the service provided, cost per service, and monthly costs.

Through data collection evaluators discovered that the family needs assessment and the patient billing statements

were often incomplete or required some clarification. Therefore, researchers reviewed the completed family profile and utilization grids with outreach workers, nurses, and CHIP's fiscal assistant. The purpose of this was to fill in missing values or relevant information and to check the accuracy of the information already obtained.

Family profile information was obtained on 172 of the 205 families. A total of 33 families were excluded for one of two reasons (1) the family needs assessment had not been adequately completed on the family; (2) the family's file was missing at the time data collection began and could not be obtained through follow-up. As stated previously, utilization information (e.g. number of physician visits, services provided, diagnosis, and cost per service) was obtained on 65 of the 205 families. Data obtained from family profile and utilization grids was compiled and descriptive statistical analyses were performed using the NUMBER CRUNCHER statistical program.

Treatment of Data

Means and statistical intervals were calculated for the following categories: (1) family profile information (employment status, education levels, extent of dependence

on government assistance, age and gender characteristics, family size, and number of adults living in home); (2) perceived needs of the family (housing, financial, employment, education, health/nutrition, mental health, family relationships, parenting, transportation, and technical training); (3) utilization information (types of services provided, types of diagnosis, number of visits, fee/service, and monthly costs). The following groups of data were excluded because of too many missing values: average income, single parent home, and SSI.

Chapter III

RESULTS AND DISCUSSION

In this chapter the results of this study are presented and divided into the following three categories (1) problems with data collection; (2) family profile information; (3) perceived family needs; (4) utilization information.

Problems With Data Collection

During data collection, evaluators encountered a number of problems. This study revealed three factors that impeded data collection. First, researchers found many inconsistencies in data sources. In short, information from one data source often conflicted with information from another data source. For example, information regarding average income levels for each CHIP family could be found on three different data sources; on the eligibility form in the patient's file, in the family intake profile, or on the Patient Care Management System. It was discovered, however, that the income level of a particular family often varied depending upon which data source it came from. This held true for other data sources as well. Family descriptive information (e.g. marital status, number in family, educational levels, and employment status) found in the family intake profile was often different from that found on

the patient eligibility forms. Utilization information (e.g. type of service provided, diagnosis, and number of physician visits) found on the patient encounters often conflicted with patient billing statements. Second, researchers encountered problems with incomplete or missing data. It was not uncommon to come upon forms in the patient's file that had not been adequately completed. For example, frequently the needs section of the family intake profile was either partially completed or not completed at all. In addition, family descriptive information (educational levels, age, gender, marital status, race, dependence on government programs, and employment status) was often not entered on the patient eligibility form and family intake profiles. Finally, evaluators discovered that the family intake profiles were sometimes being completed by the parents themselves. This was not how the instrument was intended to be used. Consequently, forms that were completed by parents were very vague, inaccurate, and difficult to interpret.

Family Profile Information

Descriptive statistical analyses were calculated to determine characteristics of the "typical" CHIP family. This section summarizes the means and statistical intervals obtained from the family head information. The age

characteristics of the family head are provided were broken down as follows. The average age of the CHIP family head in this sample was 27.9 years old (n=132). Of the 132 CHIP family heads sampled, 7.6% were between the ages of 15 and 18; 12.1% were between 19 and 21 years of age; 55.4% were between 22 and 30 years of age; 24.2% were between 31 and 45 years of age; and .8% were over 45 years of age.

Although, most of CHIP family heads are between the ages of 22 and 30 years old; there appears to be a substantial number of family heads between the ages of 15 and 21 years (n=26). Twenty percent of CHIP family heads are under 21 years of age. Sixteen percent of the CHIP family heads are over the age of 35 and 10% are 40 years old or older.

Gender

In terms of gender, a large percentage of CHIP family heads in our sample were female. Data collected from the family needs assessment showed that 41% of CHIP family heads are female (n=162).

Education Levels

Mean education levels of the family head were also computed. The mean level of education for the CHIP family head was 11 years (n=163). In addition, 2.1% of CHIP family heads sampled had completed 5-6 years of school; 3.5% had completed 7-8 years of school; 17.8% had completed 9-10 years of school; 66.5% had completed 11-12 years of school; 6.4% had completed 1-2 years of college; and 3.6% had completed 3 or more years of college.

A substantial percentage of CHIP family heads have completed high school. In fact, 53% of CHIP family heads in our sample had either completed high school or had obtained a Graduate Equivalency Degree (GED). In addition, it should be noted that 10% of them had one or more year of college.

Employment Status

The percentage of family heads who were employed and unemployed at the time of enrollment was calculated. As expected, a large percentage of CHIP family heads were unemployed at the time of enrollment. Forty-two percent (n=162) of CHIP family heads in the sample were unemployed. evaluators were unable to determine what portion of the

unemployed family heads were actively seeking employment or were disabled. It was also impossible to determine whether or not the family head was employed on a full or part-time basis.

Family Structure

The mean number of adults in the CHIP family's home was 2 per household. Of the 175 CHIP families sampled, 43.3% have one adult in the home; 53.2% have two; 1.2% had three; 1.2% have four; and .6% have five or more adults in the home. The mean family size was four per household. Out of 175 families, 45.7% have 2-3 members in their family; 44.4% have 4-5 members; 8.6% have 6-7 members; and 1.3% have 8-9 members. None of our sample families had 9 or more members in their families.

Extent of Dependence on Government Programs

The proportion of CHIP families dependent on AFDC, Medicaid, Food Stamps, and WIC at the time of enrollment was calculated on 172 families. Of those 172 families, 19.4% were receiving AFDC at the time of enrollment, 34.5% were receiving Medicaid, 62.4% were receiving Food Stamps, and 62.7% were receiving WIC. The only two government programs which CHIP parent were utilizing or had access to before

entering CHIP are the federal food stamp program and WIC. Only a small percentage of the families were on Medicaid (34.5%) and AFDC (19.4%).

Perceived Needs of CHIP Families

The percentage of CHIP families in the sample population that cited housing, financial, employment, educational, health/nutrition, mental health, family relationships, parenting skills, or transportation needs at the time of enrollment was calculated for 165 families. Of those families, 36.6% indicated they needed assistance in obtaining adequate housing; 37.2% of the families indicated they needed immediate financial assistance; 37.5% felt they needed assistance in obtaining employment or furthering themselves in their existing jobs; 56.1% indicated they had educational needs; 36.2% of the families cited health and nutritional needs; 8.9% of the families indicated a need for mental health counseling; 6.7% and 33.6% of the families indicated they needed assistance with family relationships and parenting skills respectively; and 27.3% of these families had transportation needs.

CHIP parents appear to be primarily concerned with with furthering their education; over half of CHIP parents indicated that they wanted to improve themselves educationally. In contrast, only about one third of CHIP parents felt they needed assistance in obtaining housing, financial support, and employment. In addition, CHIP families apparently do not consider mental health care, family relationships, and access to transportation as being important or immediate needs for their family.

Physician Utilization Patterns of CHIP Families

Descriptive statistical analysis was conducted in order to determine the utilization patterns of CHIP families in the sample population. The results of this analysis are divided in the following categories: types of primary diagnosis, number of well-child versus sick-child visits, average cost per primary care service, average number of physician visits per month, and average monthly cost per child. Of 182 physician visits, 38% of these visits resulted in a diagnosis of otitis; 26% of these visits resulted in a diagnosis of upper respiratory infection; 14% of these visits resulted in a diagnosis of nasopharyngitis; 7.6% of these visits resulted in a diagnosis of tonsillitis; 4.2% of these visits resulted in a diagnosis of viral illness; and

10.2% of these visits resulted in other categories of illness. Thirty-four percent of physician visits by patients in our sample were for well-child check-ups. The average CHIP patient in our sample visited the physician 2.8 times per month. The average cost per physician service was \$21.00. The average monthly cost per child was \$62.00.

The percentage of sick-visits per child is almost double the percentage of well-child visits per child. Evaluators were unable to break down physician visits into specific services; specific types of services provided during each office visit were not always outlined in the patient billing statements. However, the types of diagnosis give an indication as to what services might have been rendered during each visit. The most useful statistic that could be derived from patient billing statements was the number of well-child versus sick-child office visits per child. Utilization patterns are discussed in greater detail later in this chapter and chapter IV.

DISCUSSION

The results of this study appear to indicate that in comparison with national statistics, the demographic structure of the CHIP families sampled is atypical for disadvantaged families in terms of education levels and employment status. The CHIP family head appears to be better educated than one might expect for indigent families. Approximately, 53% of CHIP family heads in our sample had completed high school or had obtained a GED. According to national statistics, only about 10% of the heads of families living under the federal poverty level ever finish high school. In addition, a surprising percentage (10%) of CHIP families had completed one or more years of college. Nationally, the figure stands at about 5% for disadvantaged family heads (US Department of Health and Human Services, 1986). In terms of employment status, approximately 58% of CHIP family heads reported being employed at the time of enrollment. Nationally, about 42% of disadvantaged family heads are employed (US Department of Health and Human Services, 1986).

The extent of dependence on AFDC, Medicaid, Food Stamps, and WIC by CHIP families is somewhat unclear. It would appear that a large percentage of CHIP families sampled were

dependent on federal food stamps (62.4%) and WIC (62.7%) at the time they enrolled in CHIP. These two groups are mutually exclusive. In contrast, only a small percentage of CHIP families were receiving Medicaid (34.5%) and AFDC (19.4%). However, because this information was obtained on some of the families after they had been in the program for some time these statistics may be misrepresentative to an extent. Through follow-up, researchers attempted to delete family needs assessments that were completed in this manner. The low percentage of CHIP families on Medicaid is not particularly surprising. As stated in chapter I, Medicaid covers only about 50% of those children who are eligible. Also, one might expect a higher proportion of CHIP families to be on AFDC since 41% of family heads are single females.

The results of this study may imply that the perceptions of CHIP parents about their family needs might be somewhat skewed. For example, only 37% of CHIP parents sampled indicated they have financial needs and only about 38% reported they need assistance in seeking employment. Their responses are quite surprising since, all CHIP participants are at or below 150% of the federal poverty level.

The percentage of parents citing needs in the areas of mental health, family relationships, and parenting skills were also surprisingly low; given the fact that poverty stricken families often have a high incidence of mental illness and problems with family relations (US Department of Health and Human Services, 1986). Only 8.9% of CHIP parents reported a need for mental health assistance and only 6.7% reported they needed help with family relationships. In addition, only 34% of CHIP parents sampled reported they would like to improve their parenting skills to some degree. The validity of these particular responses may be hindered by self-report bias. Parents may have been reluctant to indicate they need mental health or family counseling either because they are not aware of the problem or they are concerned about how the CHIP professional might perceive them. In fact, these parents may have been uncomfortable in answering such intrusive questions. They may even have been afraid that CHIP professionals may perceive them as being unfit parents and try to remove their children from the home. This bias may have also influenced parental response in regards to health and nutritional needs of their children. Only 36% of CHIP parents felt their family had immediate health or nutritional needs. Parents may have felt that indicating that their child had pressing health or

nutritional needs implied that they are not good parents or do not take adequate care of their child.

In contrast, a significant percentage of CHIP parents indicated needs in the area of education. Approximately, 56% of CHIP parents indicated that they would like to further their education. This may imply that for the most part, CHIP parents are willing to take an active role in improving their family's quality of life. Overall, it appears that CHIP parents, like many other disadvantaged parents may not be fully aware of family needs. Subsequently, CHIP parents may require professional assistance in identifying family needs.

In reviewing the CHIP physician utilization patterns, the following statements can be made. First, the distribution of illnesses seen in these children is not surprising. Most of these ailments are very common for a population of this age. There is no evidence to support the conclusion that this group of disadvantaged children have suffered an unusually high incidence of illnesses either before or after they entered the CHIP program. Second, the large percentage of "sick-visits" per child is not necessarily indicative of the quality of CHIP's case management. As discussed in chapter I, disadvantaged parents

often hesitate to take their child to a physician when the child first shows symptoms. Consequently, the physician sees the child at a later stage of the illness; thus, the child may require a greater number of "sick-visits" in order to treat a particular illness. The fact that the number of sick-visits per child is almost three times the number of well-child visits does not necessarily imply CHIP families utilized primary care services inefficiently. In fact, the opposite may be true. CHIP may have actually encouraged increased utilization of services. There is evidence to support this in the literature (US Department of Health and Human Services, 1989). A recent study conducted by the Office on Maternal and Child Health found that the number of physician visits for indigent children was between four to twelve contacts per year (US Department of Health and Human Services, 1989). The results of this study indicate that the average CHIP child see the physician as much thirty times per year. It also is important to note that the overwhelming majority (78%) of these sick-visits were made at the physician's office, not the hospital emergency room. Finally, the cost information (e.g. cost per service, cost per child per month, and average monthly costs per child) obtained from this study does not provide a great deal of useful information. It is difficult to directly link cost to

specific services or to determine cost effectiveness of this program due to the nature of CHIP's billing system.

It is important to note that data obtained from the family needs assessment should be interpreted cautiously. The primary reason for this discretion is that the validity and reliability of the information obtained from the family needs assessment instrument are suspect for several reasons. First, self-report bias is not the only factor which might have influenced parental responses to the family needs assessment. During data collection researchers discovered that a substantial portion of the needs assessments had been completed by the parents themselves not the outreach worker and the nurse as intended. Second, it is likely that outreach workers and nurses were not consistent in how they have asked family members needs assessment questions. Finally, the quality of the instrument itself is questionable. For example, the lack of specificity in family needs questions may have influenced parental responses; questions on the entire instrument are very vague and leave a lot of room for individual interpretation.

Chapter IV

SUMMARY

The purpose of this study was to characterize the CHIP family in terms of demographic information and perceived family needs and to determine the utilization patterns of CHIP participants. Descriptive data were collected from patient files on 175 families currently enrolled in CHIP. Based on these data, evaluators were able to characterize 175 CHIP families in terms of family structure, age, gender, educational level, and employment status; and extent of dependence on government assistance. The results of this study are as follows: (1) the majority of CHIP family heads are male; the average CHIP family head is 27.9 years old, has completed the eleventh grade, and is employed; (2) the average CHIP family has 2 adults in the home and has between 2-4 total family members; (3) at the time of enrollment, 19.4% of CHIP families were receiving AFDC benefits, 34.5% of CHIP families were receiving Medicaid, 62.4% of CHIP families were receiving Food Stamps, and 62.7% of CHIP families were enrolled in WIC; (4) CHIP participants see a physician on the average of 2.8 times per month; 34.2% of physician visits are for "well-child" check-ups; the average cost per service was \$21.00; while average monthly cost for primary care services per child was \$62.00.

CONCLUSIONS

Based on the results of this study, the conclusions are as follows: First, CHIP families appear to exhibit certain demographic characteristics that are atypical of disadvantaged families with respect to age, educational levels, unemployment rates, and family structure. However, because of inadequacies in CHIP's record keeping, it is impossible to determine to what extent the demographic structure of CHIP families in the sampled population is representative of CHIP's entire clientele. During the course of this study, it became apparent that CHIP did not have an adequate mechanism by which it could record the same demographic information on each family enrolled in the program. CHIP records family demographic information on the patient eligibility form (CHS-1), the Family Intake Profile, and the Patient Care Management System (PCMS). However, these instruments are being used inappropriately by CHIP personnel. During this study, evaluators found that vital sections of the CHS-1 and the Family Intake Profiles were not completed. Consequently, several important demographic categories had to be eliminated from study (e.g. marital status, race, and income levels). These are vital indices in defining and characterizing CHIP's community.

Second, it appears that CHIP families perceive fewer needs than one would expect for indigent families. It is difficult to determine whether or not CHIP families differ from other indigent families in their perceptions of family needs, because the literature provides no such standard for comparison. Additionally, the validity and reliability of the family needs questionnaire is indeed questionable. The questions regarding family needs are very vague and misleading.

Finally, there is some evidence in the literature to support the conclusion that CHIP participants utilize primary care services more frequently than other indigent families. It is impossible to ascertain whether or not CHIP increased the utilization of primary care services by its participants because there are no data for such a comparison. In addition, because utilization information could only be obtained on less than 25% of CHIP participants, these patterns may not be necessarily reflective of CHIP participants as a whole.

RECOMMENDATIONS

This study has identified some major areas of change that must take place before the CHIP program can be adequately evaluated. First, CHIP must make an effort to improve its data base. Improvement of CHIP's data base could be achieved through the following steps: (1) CHIP needs to employ better instrumentation for recording family demographic information, for assessing family needs, and for assessing the child's health history. The Headstart family needs assessment that CHIP uses to obtain demographic information and to assess family needs is not effective. This inventory was designed specifically for Headstart not CHIP. Therefore, outreach workers and nurses using this inventory collect a great deal of information that is not relevant to the CHIP program. In addition, this inventory is too long and cumbersome and only adds to the workload of CHIP outreach-workers and nurses. CHIP would be better served by designing its own family needs assessment specifically for their program. Ideally, this new tool would be very concise and easy to implement within CHIP's given setting; (2) CHIP also needs to employ additional instrumentation to measure the effectiveness of its unique components (e.g. parental involvement, educational interventions). Initially, when this study began, evaluators

had hoped to review CHIP's unique components such as case management, educational interventions, and parent involvement. Unfortunately, it was found that these particular activities were not being documented in an organized, consistent, and interpretable manner. Presently, CHIP outreach workers and nurses only keep a loose log of these activities. (3) CHIP needs to improve the organization of patient records (e.g. patient files and patient billing statements). During the course of this study, evaluators often could not find patient files because of inadequacies in CHIP's filing system. Files were not kept where they were supposed to be or were out of alphabetical order. In order to improve the organization of patient records, the following steps should be taken: establish a central location for all patient records, follow-up on patient records to ensure they are adequately completed, develop uniform checklists for enrollment and recertification (APPENDIX G), assign each CHIP family a patient and a family number, and develop a list of CHIP patients by outreach worker, nurse, and provider; computerize patient files. (4) evaluation inservices should be provided for CHIP outreach-workers and nurses. In these inservices, CHIP outreach-workers and nurses would be instructed as to the correct use of data collection instruments and inventories. These

inservices would also educate CHIP outreach-workers and nurses about their role in the evaluation process.

References

- Abramson, J.H., (1988). Community-oriented primary care--- Strategy, approaches. and practice: A review. Public Health Reviews, 16, (16), 35-98.
- Alexander, C., S., Klassen, A., C., (1986). Curtailment of Well Child Services by a Local Health Department: Impact on Rural 2-year olds. Public Health Reports, 101 (3), 301-308.
- Baston, R., Nolan, T., Davidson, R., Little, J., (1987). The Charles Henderson Child Health Program: An overview and five year summary of progress. Southern Medical Journal, 80 (6), 758-760.
- Bidder, R., T., Smith, G., S., (1983). Breaking the cycle of deprivation: does preschool intervention work? Health Visitor, 56, 64-65.
- Comprehensive Health Investment Project, (1988). Second Quarter Report, April-June 1988, pp.2-12.
- Comprehensive Health Investment Project, (1988). A Funding Proposal for the Kellogg Foundation, pp. 2-13.
- Edelman, M.W., (1983). Death by poverty, arms, or moral numbness. America Journal of Orthopsychiatry, 53, (4), 593-601.
- Edelman, M.W., (1988). The health of America's children. Health Aims 4, (2), 3-5.
- Ginzberg, E., (1985). The U.S. Health CARE System: A Look at the 1990's, (1st ed.) New York: Rowman and Allanheld Publishing. pp. 48-57.
- Gortmaker, S., L., (1981). Medicaid and health care of children living in poverty and near poverty. Medical Care, 19 (6), 567-582.
- Hansen, C., M., (1979). Child health problems and programs in two underdeveloped areas of the USA. Child: Care, Health and Development, 5, 323-334.
- Hill, I., (1988). Viewpoints: education and Medicaid. Health Aims 4, (2), 6-8.
- Institute of Medicine; Bureau of Health Care Delivery Assistance (1989). Community Oriented Primary in Action: A Practical Manual for Primary Care Settings. p. 1-78.

Jones, M., Nickerson, J., (1986). A Time Series Study of the Effectiveness and costs of EPSDT outreach in Maine. Public Health Reports, 101, (1), 68-76.

Karmall, J., Madeley, R. J., (1986). Mother's attitude to a child health clinic in a deprived area of Nottingham. Public Health Reports, 100, 156-165.

Levey, L., A., Mac Dowell, N., Levey, S., (1986). Health care of the poverty and nonpoverty children in Iowa. American Journal of Public Health, 76 (8), 1000-1003.

Mullan, F., (1987). Poor People Poor Policy: Government Programs for the Disadvantaged. Health Affairs, 12, Spring 1987. 113-117.

Mullan K., (1982). Community-Oriented Primary care: an agenda for the '80s. The New England Journal of Medicine, 22, (6), 1076-1079.

Nutting, P.A., Conner, E.M., (1986). Community-oriented primary care: an examination of the US experience. American Journal of Public Health, 76, (3), 279-281.

Nutting, P.A., (1987). Examining the Distribution of care in a community. In: Nutting, PA, ed. Community-oriented Primary Care: from principles to practice. Washington, D.C.:Health Resources and Services Administration, Public Health Service, 1987. pp.212-226.

Nutting, P.A., (1989). Community-Oriented Primary Care: from principle to practice. Washington, D.C.:Health Resources and Services Administration, Public Health Service, 223-364.

Nugent, K.E., Linares, A. Z., Brykczynski, K., Crawford, F., Fuller, S., Riggs, H. L., (1988). A model for providing health maintenance and promotion to children from low-income, ethnically diverse backgrounds. Journal of Pediatric Health Care, 2, (4), 175-180.

O'Conner, P.J., (1989). Is Community-Oriented Primary Care a viable concept in actual practice?: An opposing view. The Journal of Family Practice, 28, (2) 203-208.

Rosenbach, M.L., (1989). The impact of Medicaid on physician use by low-income children. American Journal of Public Health, 79, (9), 1220-1226.

Roybal, E., (1987). The Uninsured and Underinsured in America: A Nation at Risk of Inadequate Health Care and Catastrophic Costs. A Report from the House Select Committee on Aging. Sept 1986. pp. 33-46.

Tompkins, R.F., (1979). Children's advocacy and primary health care. Journal of Health, Politics, Policy, and Law, 3 (4), 519-554.

U.S. Department of Health, Education, and Welfare; Social Rehabilitation Service. A guide to screening for the Early and Periodic Screening, Diagnosis and Treatment Program under Medicaid. pp.1-23.

U.S. Department of Health and Human Services, (1986). Bureau of Maternal and Child Health and Resources Development. Health Status of the Disadvantaged: Chartbook 1986. pp. 2-48.

U.S. Department of Health and Human Services, (1989). Bureau of Maternal and Child Health and Resources Development. Child Health USA'89. pp.3-48.

U.S. Department of Health and Human Services, (1989). Office of Maternal and Child Health. Abstracts of Active Projects FY 1989. pp.323-327.

Virginia Systems Agency, (1989). A Plan to Make Primary Health Care Available: A Health Planning Monograph. pp. 2-5.

Washington, V., (1985). Head Start: How appropriate for minority families in the 1980's? American Journal of Orthopsychiatry, 55, (4), 577-590.

Waxman, H.A., (1989). Kids and Medicaid: progress but continuing problems. American Journal of Public Health, 79, (9), 1217-1218.

Appendix C
Parent Attitude Survey

C H I P

PARENT ATTITUDE SURVEY
(Complete on initial enrollment and one year later)

NAME: _____ S.S.# _____

DATE: _____ QUESTIONNAIRE # _____

COMPLETED BY: _____ RELATIONSHIP: _____

START: _____ STOP: _____

We would like to know your feelings about your child's health and health care. Please check the answer which is closest to your own beliefs.

1) I feel that good health care is available for my child when needed.

___ ALWAYS ___ SOMETIMES ___ NEVER

2) A child needs regular check-ups, even when not sick.

___ YES ___ NO

3. A child should go to the dentist:

___ Only with a toothache

___ After loss of baby teeth

___ For regular check-ups, starting at age 3

4) Regular exercise is important for young children.

___ VERY IMPORTANT ___ SOMEWHAT IMPORTANT ___ NOT IMPORTANT

5) The foods I feed my child can help to keep him/her healthy.

___ YES ___ NO

6) Getting shots on time is very important for my child.

___ VERY IMPORTANT ___ SOMEWHAT IMPORTANT ___ NOT IMPORTANT
(over)

Appendix D
Family Profile Grid A

FAMILY PROFILE GRID A

Fam. #	Pat. #	sex	B.D	OW	age / race	provide	#adult	avg. income / family size	ed. level	emp. stat.	age/sex	AFDC	MEDICA	F.S.	WIC	family head info			
																1st QT	2nd QT	3rd QT	4th QT

Appendix E
Family Profile Grid B

Appendix F
Utilization Grid

Appendix G
Family Profile Grid A (revised)

Enrollment and Recertification Form

Family Head Info															
Family Number	Parent Number	Sex of Child	D.O.B.	O.W. Nurse	Air/Race of Child	Provider Name	Number of Adults	Average Income Family Size	Education Level of Head	Employment Status	Air/Sea of Family Head	AFDC	Medicaid	Food Stamps	WIC
—															
—															
—															
—															

LD
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1990
W542
C.2



Pediatric Health History Questionnaire

You have been asked to complete this health history questionnaire so that your doctor will have the information necessary to give better care to your child. The questionnaire has been designed to make it as easy as possible for you to provide this information. It will become a major part of your child's confidential medical record.

Begin by opening this page out flat on a hard surface. Please, do not fold it back on itself. Read all instructions carefully before answering any questions. When you do answer, PRINT firmly using a ball-point pen.

If you are not the child's mother, please answer YES or NO to only those questions of which you have first hand knowledge.

Please take whatever time you need to finish each section. Don't worry if you can't remember, or aren't sure of the answer to any part or question. You'll have a chance to go over it later with the doctor.

Thank You.

IF YOUR CHILD IS ILL, AND YOU WOULD RATHER DEVOTE YOUR FULL ATTENTION TO HIM (HER), YOU MAY ASK THE RECEPTIONIST TO HELP YOU WITH THIS QUESTIONNAIRE, OR YOU MAY FILL IT OUT AFTER SEEING THE DOCTOR.

IDENTIFICATION DATA (PLEASE PRINT)

Child's Name _____ last _____ first _____ nickname _____
 Birthdate _____ Male _____ Female _____
 Child Lives With _____ Tel. No. _____
(write: mother, father, parents, etc.)
 Address _____ street number _____ city _____
 Child's School _____ Tel. No. _____
 Address _____ street number _____ city _____
 Delivery Hospital _____
 Address _____ city _____ state _____

DATE _____ CHART NO. _____

Mother's Name _____
 Circle SINGLE SEPARATED Last School Grade _____
 One: MARRIED DIVORCED WIDOWED
 Address Bills to: _____ last name _____ first name _____
 Address _____ street number _____ city _____ state _____ zip _____
 Employer _____
 Address _____ street number _____ city _____
 Health Insurance _____ Policy No. _____
 Medicaid or Welfare Number (if any) _____

CHILD'S BIRTH HISTORY

During your pregnancy with this child, did you:

Have high blood pressure? YES() NO()
 Have diabetes or sugar in your urine? YES() NO()
 Have albumin or protein in your urine? YES() NO()
 Have a urinary tract infection? YES() NO()
 Have a venereal disease (herpes, gonorrhea, syphilis)? . YES() NO()
 Have German (3 day) measles? YES() NO()
 Take medicines prescribed by your doctor? YES() NO()
 Smoke cigarettes? YES() NO()
 If yes, how many packs a day? _____ per day
 Drink alcoholic beverages? YES() NO()
 Use drugs such as heroin, speed, cocaine, LSD? YES() NO()

How long was your pregnancy? _____ months
 How early did you start seeing the doctor? _____ month

Was this child premature? YES() NO()
 Was more than one baby born? YES() NO()
 Did you have a difficult delivery? YES() NO()
 Was it a breech (bottom first) delivery? YES() NO()
 If YES: Or, was it a cesarean delivery? YES() NO()

What was your child's weight at birth? _____
 Was there an Rh problem? YES() NO()
 Was anything wrong with your child at birth? YES() NO()
 If YES, what? _____

FAMILY ILLNESSES

Please mark an "X" in the boxes where your child's blood relatives have ever had any of the following illnesses. Some examples of illnesses are shown in parentheses().

Allergies (medicines, foods, pollen).
 Birth defects
 Blood disease (hemophilia, anemia, leukemia). . .
 Bone or joint disorders
 Cancers or malignancies
 Chronic lung disease (asthma, chronic bronchitis)
 Eye or ear disorders
 Glandular disease (diabetes, thyroid disease) . . .
 Heart trouble
 Kidney or urinary disease
 Mental retardation
 Muscle disease (weakness, poor control)
 Nerve disease (cerebral palsy, epilepsy).
 Psychiatric condition
 Rheumatic fever
 Tuberculosis (T.B.)
 Venereal disease (syphilis, gonorrhea)
 Other _____

Father	Mother	Father's Side	Mother's Side	Sisters	Brothers

If your CHILD has ever been hospitalized for any serious medical illness or operation, enter the most recent occurrences below. Check this box if there were more than two hospitalizations.

MATERNAL AND FAMILY HISTORY

How many children have you (mother) had? _____
 Which one is this child? _____
 Have you (mother) had any premature births? YES() NO()
 Have you (mother) had any cesarean births? YES() NO()
 Have you (mother) had any miscarriages? YES() NO()
 Mother's age now _____ Mother's height _____
 Father's age now _____ Father's height _____
 Number of people living in child's home _____
 Who spends most time caring for child (father, mother, etc.)? _____

	HOSPITALIZATION (1)	HOSPITALIZATION (2)
Illness or operation		
Year hospitalized		
Name of hospital		
City and state		

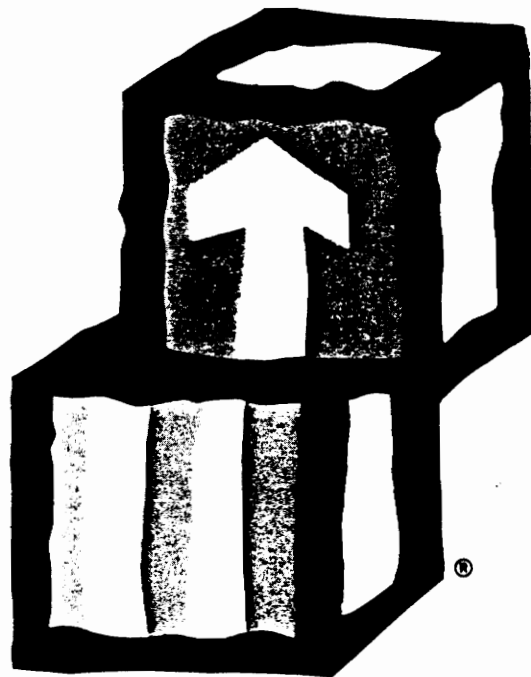
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C.2

Model Family Needs Assessment Process

Instruments



HEALTH

Please describe any mental/physical handicaps and other health related conditions of members of their household. Write the name of each person with such problems in the left column below. Then describe briefly the problems or conditions for each in the middle column and list current services being received and the name of the agency providing the services in the right-hand column:

5. Describe any mental or physical handicaps:

<u>Name</u>	<u>Handicapping Condition</u>	<u>Current Services/Agency</u>
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

6. Describe medical/dental/nutritional problems/concerns:

<u>Name</u>	<u>Problems/Concerns</u>	<u>Current Services/Agency</u>
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

INCOME

7. What is family's gross income? \$ _____ per year
Verified by _____

EDUCATION

8. Describe participation in adult education, vocational training programs, employment skills, and other specialized training of all adults in household.

<u>Name</u>	<u>Training Experiences</u>
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

9. Primary language spoken in the home:

10. EMPLOYMENT

- Is head of household employed? Yes No
- a. What type of work does head of household do? _____
- b. What type of work would head of household like to do? _____
- c. Does head of household need/want a job, or if employed, a new job? Yes No
- d. Does head of household need/want job training? Yes No
- e. What are problems preventing employment? Transportation Child care Health Other
- Specify: _____

11. a. Are other adults in household employed? Yes No Who: _____
- b. Do any unemployed adults need/want a job? Yes No Who: _____
- c. Do any adults need/want job training? Yes No Who: _____

SOCIAL SERVICES

12. Has family received: (Check all boxes that apply for each service)

<u>Services</u>	<u>Currently Receiving</u>	<u>Received in Past</u>	<u>Never Received</u>
AFDC/Welfare	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Food Stamps	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Medicaid/Medicare	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Unemployment Insurance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
SSI	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
WIC	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other social services received	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Specify: _____