Department of Health and Human Services

OFFICE OF INSPECTOR GENERAL

THE PERINATAL SERVICE CAPACITY OF THE FEDERALLY FUNDED COMMUNITY HEALTH CENTERS:

URBAN CENTERS

DECEMBER 1992

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Department of Health and Human Services

OFFICE OF INSPECTOR GENERAL

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URBAN CENTERS

DECEMBER 1992 OEI-01-90-02330

EXECUTIVE SUMMARY

PURPOSE

This report describes recent trends in the perinatal service capacity of urban community health centers funded under Section 330 of the Public Health Service Act.

BACKGROUND

The high rate of infant mortality in the United States continues to be a cause for concern. The problem is particularly acute in the nation's urban areas: the 22 largest U.S. cities account for 14 percent of all live births, yet 19 percent of all infant deaths. The Public Health Service (PHS) recommends timely, high-quality care before, during, and after birth as an effective means of lowering the infant mortality rate and ensuring healthier newborns. A number of obstacles, however--including rising medical malpractice insurance costs, inadequate health insurance, and a decreasing supply of obstetric providers--prevent many women from obtaining perinatal care in a timely fashion.

Community health centers play an important role in reducing infant mortality by delivering comprehensive perinatal care to high-risk women in medically underserved areas across the nation. In 1991, PHS funded services at 212 urban centers; these represented 40 percent of all Section-330 centers. The Federal government provides additional support for the centers through PHS Section-329 and -340 grants for migrant workers and the homeless, Medicare and Medicaid reimbursements, Maternal and Child Health grants, and the National Health Service Corps.

In recent years the Federal government has made an increasing investment in the centers. Little information is available, however, on the extent to which the centers are able to meet the perinatal care needs of the women they serve. To examine the capacity of urban centers to provide perinatal care, we conducted a mail survey of all urban community health centers receiving Section-330 funds as of June 1991 (to which 84 percent responded); made site visits to 8 centers; held discussions with PHS administrators, State officials, and infant health experts; and reviewed relevant literature and PHS data. Our findings are based primarily on information reported by the centers to us and to PHS.

FINDINGS

The capacity of urban community health centers to provide perinatal care has increased in several respects since 1988.

- The number of prenatal clients served by the centers rose 23 percent between 1988 and 1990, from an average of 477 per center to 586. The number of births to center clients rose 17 percent during the same period, from an average of 320

per center to 374. Survey respondents reported a total of 87,560 prenatal clients and 51,826 births in 1990.

- The range of perinatal services increased at 76 percent of the centers. The services added at the largest number of centers were HIV counseling and testing, smoking-cessation programs, and classes in parenting and childbirth.

- The range of ancillary services--such as home visiting and transportation--increased at 37 percent of the centers.

- Sixty-five percent of the centers offered on-site assistance with enrollment in Medicaid in 1990, an increase from 23 percent in 1988. Eighty percent of the centers offered on-site assistance with enrollment in the Supplemental Food Program for Women, Infants, and Children in 1990, an increase from 68 percent in 1988.

- Total revenues for urban centers increased 31 percent between 1988 and 1990; this includes an 18 percent increase in Section-330 grant funding and a 59 percent increase in Medicaid reimbursements. Sixty-five percent of the centers reported that the amount of funding available for perinatal services has increased since 1988.

Despite these increases in capacity, demand for perinatal services at urban centers has continued to grow and many clients still do not receive the optimal coordinated package of care in a timely fashion.

- Six percent of the urban centers reported that they provided no perinatal services on site between 1988 and 1991. Our study did not examine the extent to which these centers made alternative perinatal care arrangements for their clients.

- Demand for services increased at 89 percent of the urban centers; 34 percent of these centers reported their capacity to meet this growing demand either decreased or remained the same.

- Many centers reported that they do not coordinate, as part of their perinatal case-management efforts, all of the health and social services recommended by the Public Health Service. This may, in part, reflect variations in the definition of "case management" among centers.

- On average, 51 percent of each center's prenatal clients entered care in the first trimester of pregnancy in 1990. Nationally, 76 percent of all women, 62 percent of minority women, and 58 percent of women in Healthy Start project areas entered care during the first trimester.

- On average, 26 percent of each center's first-trimester enrollees received fewer than 9 prenatal visits. Our study did not examine the extent to which these patients may have received care elsewhere.

- Thirty-six percent of the centers did not offer prenatal appointments at times convenient for working women.

Several major constraints seriously limit the capacity of urban centers to provide perinatal care.

Medical staff shortages. Medical staff shortages, in part as a result of cuts in the National Health Service Corps in the 1980's, present serious problems at 59 percent of centers. Although the number of prenatal clients increased an average of 23 percent at the centers, the number of obstetricians, family physicians, and certified nurse midwives increased an average of 12 percent. Twenty-four percent of centers reported that at least 1 obstetrician, family-physician, or nurse-midwife position had been vacant for longer than 1 year.

Medical malpractice insurance. The high cost of medical malpractice insurance has been a serious drain on resources at 56 percent of the centers. In late 1992, Congress took initial steps to address this problem by passing legislation (P.L. 102-501) that extends medical malpractice liability protection under the Federal Tort Claims Act (FTCA) to health care providers at the centers.

Medicaid policies and procedures. Seventy-six percent of the centers report serious problems stemming from Medicaid policies and procedures--such as a burdensome application process, low reimbursement rates, a limited range of covered services, or limited eligibility.

Inadequate health insurance. On average, 21 percent of each center's perinatal clients were uninsured in 1990. At 9 percent of the centers more than 50 percent of the perinatal clients were uninsured.

Unsatisfactory community support. Seventy-nine percent of the centers report serious problems stemming from unsatisfactory coordination of perinatal services in the community, a lack of other local providers willing to treat uninsured and publicly insured women, difficulty arranging obstetric backup for center staff and for consultation for high-risk clients, or difficulty obtaining hospital privileges for center staff.

Limited space. Limited space seriously hinders the provision of services at 64 percent of the centers. In addition, limited collocation of services on site seriously restricts the comprehensiveness of care at 23 percent of the centers.

COMPANION REPORTS

This is one of three reports on the capacity of the community health centers to provide perinatal care. Another report, *The Perinatal Service Capacity of the Federally Funded Community Health Centers: Rural Centers* (OEI-01-90-02331), examines recent trends in the perinatal care capacity of rural community health centers.

The third report, *The Perinatal Service Capacity of the Federally Funded Community Health Centers: An Overview* (OEI-01-90-02332), summarizes and compares data on the perinatal care capacities of the urban and rural centers. It also presents information on two areas of special policy interest: Medicaid reimbursements to CHCs and Comprehensive Perinatal Care Program funding of the centers.

That report identifies four major constraints that limit the perinatal care capacity of the community health centers: inadequate staffing, the high cost of medical malpractice insurance, ineffective ties between the centers and the Medicaid program, and unsatisfactory relationships between the centers and other community providers.

To enable the centers to meet increasing demand for services, these limitations must be addressed in the near term by a cooperative effort involving government at the Federal, State, and local levels, as well as non-governmental organizations. The third report offers a recommendation that the Public Health Service (PHS) and the Health Care Financing Administration (HCFA) work with the Assistant Secretary for Planning and Evaluation (ASPE) to draft and implement a plan of action that addresses the identified limitations. The report also includes formal comments on the draft reports from PHS, HCFA, and ASPE.

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INTRODUCTION

PURPOSE

This report describes recent trends in the perinatal service capacity of urban community health centers funded under Section 330 of the Public Health Service Act.

BACKGROUND

Birth Outcomes in Urban America: The high rate of infant mortality in the United States continues to be a cause for concern. Each year, approximately 40,000 infants die before their first birthday--about 1 percent of all infants born alive in the nation. In the 1950's, the U.S. ranked 5th among the world's nations in lowest infant mortality; today it ranks 23rd. The rate for black infants continues to be double that for white infants.[1] Infant mortality is particularly acute in the nation's urban areas, where poverty, unemployment, substance abuse, and AIDS have taken a severe toll. The 22 largest U.S. cities account for 14 percent of all live births, yet 19 percent of all infant deaths.[2]

Perinatal Care: A pregnant woman with no prenatal care is three times more likely to have a baby born at low birthweight--a key indicator of the risk of infant death--than a woman with adequate care. The Public Health Service (PHS) recommends timely, high-quality care before, during, and after birth as an effective way to lower the infant mortality rate and ensure healthier infants. Such perinatal care should include early and continuing risk assessment; health promotion; and medical, nutritional, and psychosocial interventions and follow-up.[3] A full course of care is especially vital for women at risk because of medical or social factors.

Several obstacles, however--including rising medical malpractice insurance costs, inadequate health insurance coverage, a decreasing supply of obstetrical providers, and a lack of physicians willing to treat low-income women--limit the availability and accessibility of perinatal care.[4] In 1989, almost 170,000 American women received no prenatal care until the third trimester, and another 86,000 received no care at all during pregnancy. Thirteen percent of whites received inadequate care; the proportion of blacks and Hispanics was twice that.[5]

Community Health Centers: Community health centers (CHCs) are key providers of perinatal services to high-risk women in medically underserved areas across the nation. The CHC program was established in 1965 to address the comprehensive health needs of the nation's medically underserved. The centers were expected "to provide not only the convenience of a one-door facility, instead of a city-wide scattering of services, but also improved care and a better relationship between the providers and recipients of health services."[6]

Federal administration of the CHC program was consolidated in 1975 under Section 330 of the Public Health Service Act. The total number of centers, however, has not been maintained at the level originally envisioned.[7] Moreover, the program was cut substantially in the early 1980's; the number of grantees fell from 867 in 1981 to 530 in 1983, a 39 percent decrease.[8] In 1991, PHS funded 212 urban community health center grantees, which represented 40 percent of all Section-330 grantees.[9] In 1992, PHS funded a total of 549 centers.

The Federal government supports the services provided by community health centers through PHS Section-330 grants as well as through Medicare and Medicaid reimbursements, Maternal and Child Health grants, PHS Section-329 and -340 grants for migrant workers and the homeless, the National Health Service Corps, and the Supplemental Food Program for Women, Infants, and Children.

In recent years, funding for the centers has increased,[10] and several initiatives have been implemented to expand center services and improve access to care. These include supplemental funding through the Comprehensive Perinatal Care Program (CPCP), expanded Medicaid coverage for pregnancy care, increased Medicaid reimbursement for center services through the Federally Qualified Health Center provisions of the Omnibus Budget Reconciliation Acts of 1989 and 1990, and Healthy Start grants to support community coordination of perinatal care. (For more information on Federal programs see appendix A.)

Little information is available, however, on the extent to which centers are able to address the perinatal care needs of the women they serve. A clear understanding of the centers' current capacity to provide perinatal care is vital to further planning and program design. In this report, we examine recent trends in the capacity of urban centers to provide these services.

COMPANION REPORTS

This is one of three reports on the capacity of the community health centers to provide perinatal care. Another report, *The Perinatal Service Capacity of the Federally Funded Community Health Centers: Rural Centers* (OEI-01-90-02331), examines recent trends in the perinatal care capacity of rural community health centers.

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That report identifies four major constraints that limit the perinatal care capacity of the community health centers. To enable the centers to meet increasing demand for services, these limitations must be addressed in the near term by a cooperative effort involving government at the Federal, State, and local levels, as well as non-

governmental organizations. That report offers a recommendation that the Public Health Service (PHS) and the Health Care Financing Administration (HCFA) work with the Assistant Secretary for Planning and Evaluation (ASPE) to draft and implement a plan of action that addresses the identified limitations. The report also includes formal comments on the draft reports from PHS, HCFA, and ASPE.

METHODOLOGY

This report is based on information gathered from a mail survey; site visits to several urban community health centers; discussions with PHS administrators, State officials, and infant health experts; and a review of the relevant literature and PHS data.[11]

We sent the mail survey to all 212 urban centers that received Section-330 funds in June 1991; 178 (84 percent) responded. Our findings are based primarily on the responses of those 167 urban centers (79 percent of all urban centers) that offered services on site during the 1988-91 period. (For detailed methodology see appendix B.)

Our review was conducted in accordance with the *Interim Standards for Inspections* issued by the President's Council on Integrity and Efficiency.

FINDINGS

THE CAPACITY OF URBAN COMMUNITY HEALTH CENTERS TO PROVIDE PERINATAL CARE HAS INCREASED IN SEVERAL RESPECTS SINCE 1988.

- ***The number of prenatal clients served by the centers rose 23 percent between 1988 and 1990, from an average of 477 per center to 586. The number of births to center clients rose 17 percent during the same period, from an average of 320 per center to 374. Survey respondents reported a total of 87,560 prenatal clients and 51,826 births in 1990.***

Seventy-eight percent of the centers reported that the size of their prenatal client caseloads grew between 1988 and 1990 (see figure 1). Caseloads grew more at those centers that served smaller caseloads in 1988, those that did not receive Comprehensive Perinatal Care Program (CPCP) funding, and those that served prenatal client populations that were more than half Medicaid-enrolled in 1990.[12]

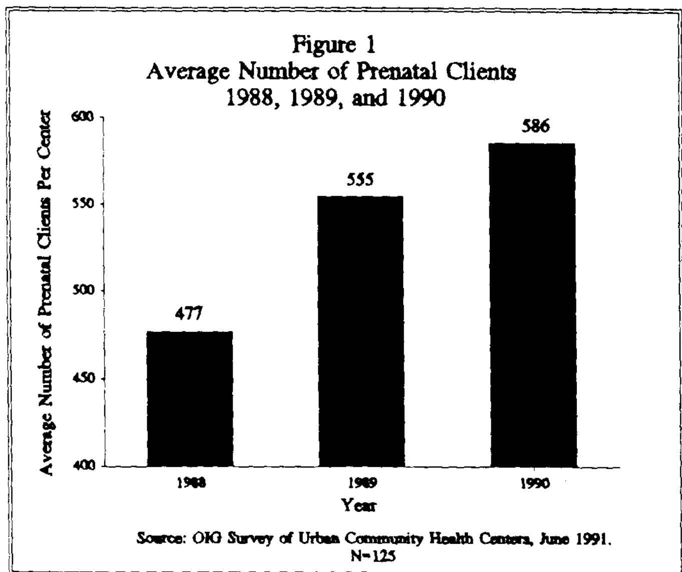


Figure 1
Average Number of Prenatal Clients
1988, 1989, and 1990

Source: OIG Survey of Urban Community Health Centers, June 1991.
N=125

Caseloads grew 95 percent between 1988 and 1990 at centers that served fewer than 200 clients in 1988, 25 percent at centers that served between 200 and 999 clients, and 5 percent at centers that served 1000 or more prenatal clients.[13]

Caseloads grew 35 percent at centers that did not receive CPCP grants, and 22 percent at centers that did receive these grants. The average caseload size, however, was larger at CPCP-funded centers.[14] Caseloads grew 35 percent at centers in which more than half of the perinatal population was Medicaid-enrolled in 1990, and 4 percent at centers in which less than half of the perinatal population was Medicaid-enrolled. The average caseload size, however, was smaller at centers with perinatal populations that were more than half Medicaid-enrolled in 1990.[15]

▸ ***The range of perinatal services increased at 76 percent of the centers. The services added at the largest number of centers were HIV counseling and testing, smoking-cessation programs, and classes in parenting and childbirth.***

Medical and Health Promotion Services: Between 1988 and 1990 there was an increase in the percentage of centers providing each of a representative range of perinatal medical and health promotion services, either on site or off site through paid referrals or contracts.[16] HIV counseling and testing services and smoking-cessation programs were added at the largest percentage of centers (see figure 2).

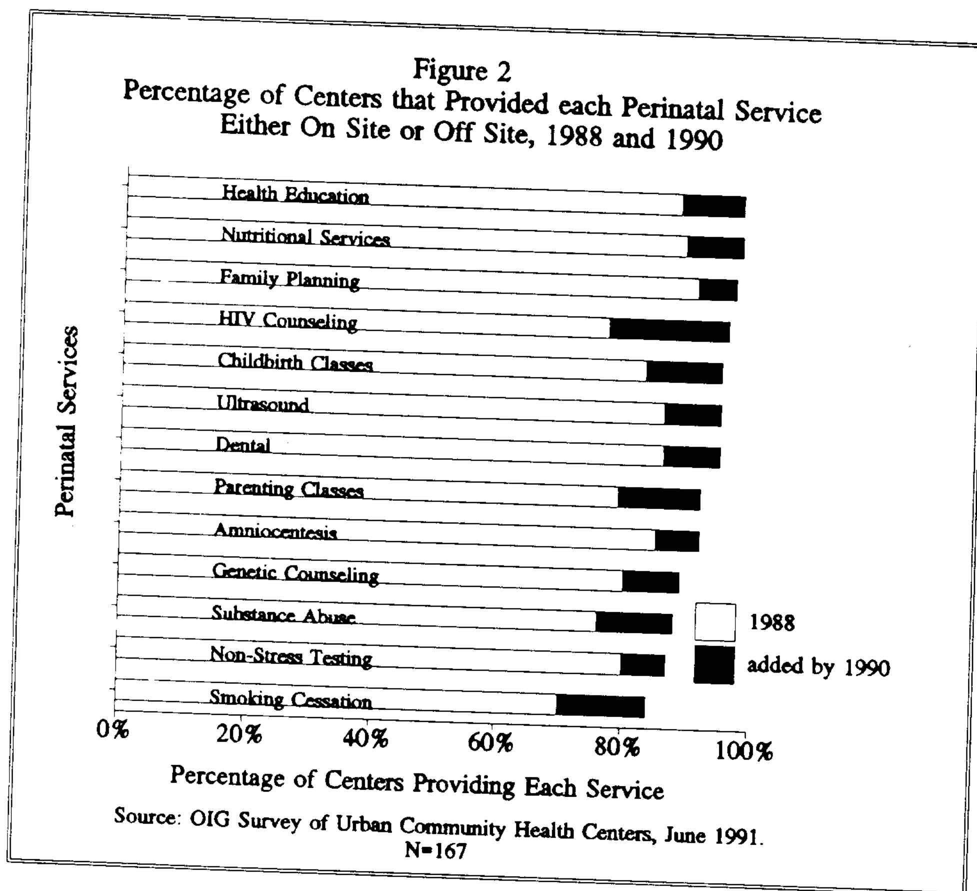


Figure 2
Percentage of Centers that Provided each Perinatal Service Either On Site or Off Site, 1988 and 1990

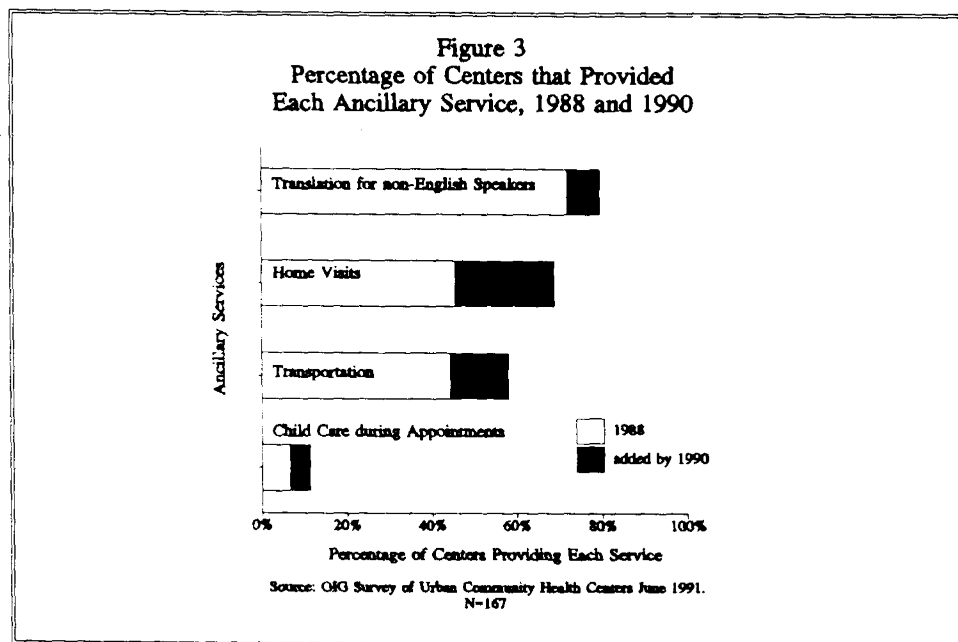
Source: OIG Survey of Urban Community Health Centers, June 1991.
N=167

Services on site: At the same time, 62 percent of the centers added at least 1 medical or health promotional service on site. The services added on site at the largest number of centers were family planning, health education, nutritional services, and HIV counseling and testing. In 1990, more than 90 percent of centers offered each of these services on site (see appendix C for survey responses).

- ***The range of ancillary services--such as home visiting and transportation--increased at 37 percent of the centers.***

Thirty-seven percent of all the centers added at least one service that facilitates access to perinatal care between 1988 and 1990.[17] Home-visiting services were added at the largest percentage of centers, and child care during appointments was added at the smallest percentage of centers (see figure 3).

Figure 3
Percentage of Centers that Provided
Each Ancillary Service, 1988 and 1990



Source: OIG Survey of Urban Community Health Centers June 1991.
N=167

- ***Sixty-five percent of the centers offered on-site assistance with enrollment in Medicaid in 1990, an increase from 23 percent in 1988. Eighty percent of the centers offered on-site assistance with enrollment in the Supplemental Food Program for Women, Infants, and Children (WIC) in 1990, an increase from 68 percent in 1988.***

A larger percentage of CPCP-funded centers than other centers provided on-site assistance with Medicaid and WIC enrollment. In 1990, 70 percent of CPCP-funded centers provided assistance with Medicaid enrollment and 84 percent provided assistance with WIC. By contrast, only 50 percent of the other centers provided assistance with Medicaid enrollment and 69 percent of them provided assistance with WIC.[18]

Between 1988 and 1990, however, a larger percentage of centers that did not receive CPCP funds added on-site assistance with Medicaid enrollment.[19]

- ***Total revenues for the urban centers increased 31 percent between 1988 and 1990; this includes an 18 percent increase in Section-330 grant funding and a 59 percent increase in Medicaid reimbursements. Sixty-five percent of the centers reported that the amount of funding available for perinatal services has increased since 1988.***

The PHS Section-330 grant represented 39 percent of total revenues for these centers in 1988 and 35 percent in 1990. Medicaid reimbursements amounted to 20 percent of total revenues in 1988 and 25 percent in 1990.[20]

Increased funding for perinatal services was correlated with increased capacity. As one administrator reported, center capacity had grown as a result of "increased funding from multiple sources." Some centers reported that implementation of the Federally Qualified Health Centers mandate had resulted in increased Medicaid reimbursements, which had been used to improve and expand center services. Many of the centers we visited drew a direct link between the Medicaid eligibility expansions and an increased capacity to care for more women. Some centers reported that they were finally receiving reimbursement for women they would have otherwise served, but for whom, in the past, they would not have received reimbursement.

DESPITE THESE INCREASES IN CAPACITY, DEMAND FOR PERINATAL SERVICES AT URBAN CENTERS HAS CONTINUED TO GROW AND MANY CLIENTS STILL DO NOT RECEIVE THE OPTIMAL COORDINATED PACKAGE OF CARE IN A TIMELY FASHION.

- ***Six percent of the urban centers reported that they provided no perinatal services on site between 1988 and 1991. Our study did not examine the extent to which these centers made alternative perinatal care arrangements for their clients.***

Eleven of the urban centers that responded to our survey did not offer perinatal services on site from 1988 to 1991.[21] Nine of these indicated that they referred clients to hospitals or other providers for perinatal services. Four expressed an interest in offering perinatal services, but noted that budgetary constraints or the inability to recruit obstetric providers prevented them from doing so. One administrator voiced a common sentiment when he stated: "there is a tremendous need in our community for perinatal services, but we cannot afford to offer them."

- ***Demand for services increased at 89 percent of the urban centers; 34 percent of these centers reported their capacity to meet this growing demand either decreased or remained the same.***

Several centers reported that they were overwhelmed by demand. Many have been periodically forced to turn away new perinatal clients because they do not have the capacity to serve them.

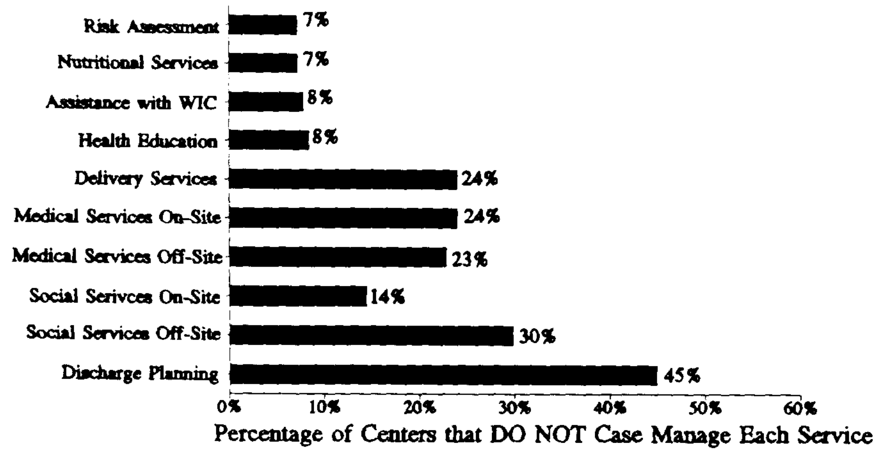
Fifty-two percent of the centers reported that Medicaid eligibility expansions had seriously increased demand for perinatal services, and 48 percent reported that Medicaid presumptive and continuous eligibility provisions had done so.[22] Centers also explained increased demand as a result of the downturn in the economy. A growing number of unemployed women have neither the income nor the health insurance to afford private medical care, and therefore seek subsidized care at the centers. Reflecting the perceptions of several administrators we interviewed, one reported that "demand has increased due to the drug epidemic, an increase in teen pregnancy, and an increase in the number of older women having children."

Also contributing to the increase in demand is the diminishing number of community providers who are willing to treat low-income and Medicaid patients. One center we visited was the sole provider of obstetric care in its service area. Many centers reported that, although there were private obstetricians in their service areas, none would care for Medicaid or uninsured women. One administrator summarized comments made by many we visited when he noted: "Our center is experiencing the effects of the withdrawal of private physicians from the Medicaid program, with a tremendous overflow of patients."

- ***Fifty-six percent of urban centers reported that they do not coordinate, as part of their perinatal case-management efforts, all of the health and social services recommended by the Public Health Service. This may, in part, reflect variations in the definition of "case management" among centers.***

According to the PHS, perinatal care should include risk assessment; health promotion; and medical, nutritional, and psychosocial services and follow-up.[23] To maximize the accessibility, quality, and comprehensiveness of services, the PHS requires centers to coordinate care through case management.[24]

Most centers provide some of the services recommended by the PHS, but 56 percent of them do not coordinate all of these services as part of a comprehensive case-management system. Forty-five percent reported that they do not coordinate discharge planning and 24 percent reported that they do not coordinate delivery services as part of their case-management efforts (see figure 4).



There is no common definition of what case management entails. One center director expressed the view of many we met when he said: "case management means a million different things to different people." Thus, centers might coordinate the delivery of services and not refer to such coordination as case management.

Nonetheless, 23 percent of the centers reported that limited case management seriously constrains their capacity to provide comprehensive care, and 10 percent reported that it has become a greater problem since 1988. Nineteen percent of the centers provided case management only for particular groups of clients, such as teens, substance abusers, or women identified as high-risk. An administrator at one center summarized a common problem when he explained that his limited social services staff "can only afford to give intensive services to those most in need." This center was unable to provide case management for clients referred to other providers for care. Other centers reported that staff who provide case-management services often lose track of high-risk clients when they refer them elsewhere for services.

Centers reported several problems that indicate inadequate coordination of care. The timely transfer of medical records to delivery facilities is a problem at 25 percent of the centers, and the transfer of records to other facilities is a problem at 31 percent. Further, centers reported that they do not reschedule appointments for an average of 29 percent of the perinatal clients who miss them. Follow-up care is also a problem: on average, 29 percent of each center's prenatal clients and 26 percent of their infants did not receive follow-up care at the centers within the first 8 weeks after birth in 1990.[25]

Although the CPCP was intended, in part, to support centers' case-management efforts, we found that CPCP-funded centers were no more likely than other centers to provide case management for all the services recommended by the PHS.

- ***On average, 51 percent of each center's prenatal clients entered care in the first trimester of pregnancy in 1990. Nationally, 76 percent of all women, 62 percent of minority women, and 58 percent of women in Healthy Start project areas entered care during the first trimester.***[26]

The PHS had set a goal to achieve 90 percent first-trimester enrollment for all women by the year 1990. This goal was not met, and has now been set for the year 2000. On average, 39 percent of each center's 1990 prenatal clients did not enter care until the second trimester and 10 percent did not enter care until the third. This compares with 1989 national rates of 18 percent of women entering in the second trimester and 4 percent in the third.[27] Although the CPCP was intended, in part, to encourage earlier entry into care, responses to our survey indicate that there was no significant difference between CPCP-funded centers and other centers with regard to the percentage of perinatal clients who entered care in the first trimester. Our study does not allow a comparison of CPCP grant recipients and other centers with regard to trends over time in first-trimester entry into care.

Several centers reported that motivating women to seek early prenatal care is among their biggest problems. Women with inadequate health insurance sometimes delay entry into care in an attempt to minimize the costs associated with care. Staff at several centers we visited agreed with one administrator who explained that some women who have had children before "believe that they are experts in perinatal care, and do not consult with physicians." Teenagers, who sometimes try to conceal their pregnancies, are apprehensive about prenatal appointments. Cultural biases against medical intervention lead some immigrant women to avoid care.

Additional barriers to care were suggested: staff at one center explained late entry into care as a factor of language barriers and the "fear of deportation of women who are not legal residents." The staff at another center explained that many of their clients are "so overwhelmed by life crises, including drugs, poverty, mental illness, and homelessness, that perinatal care is not a priority."

Although survey responses indicate that most centers conduct outreach, several centers indicated that their efforts are minimal. One administrator explained what was apparent at many centers we visited when he reported that, because his center was already overwhelmed by demand, outreach efforts had been temporarily suspended.

- ***On average, 26 percent of each center's first-trimester enrollees received fewer than 9 prenatal visits. Our study did not examine the extent to which these patients may have received care elsewhere.***

The American College of Obstetricians and Gynecologists recommends that women entering care in the first trimester receive a minimum of 9 prenatal visits.[28] On average, however, 26 percent of each center's first-trimester enrollees did not receive at least 9 prenatal visits in 1990. Although the CPCP was intended, in part, to encourage more prenatal visits, there was no significant difference between CPCP-funded centers and other centers with regard to the percentage of first-trimester enrollees who received at least 9 visits in either 1988 or 1990.

Women with limited financial resources and inadequate insurance coverage often minimize the number of their prenatal visits, especially when care is billed per visit instead of as a package for the full course of the pregnancy. One center administrator reported a problem common to many centers when he explained that long waits, both between scheduled appointments and in the crowded waiting room, discourage women from seeking care.

Difficulties with child care and transportation were cited as resulting in a reduced number of perinatal visits by many with whom we spoke. At one center, the staff noted that an inability to arrange child care discourages women from making and keeping appointments. One administrator said that public transportation to the center was very time-consuming. Another administrator reflected a common perception when she reported that "these women must constantly address basic living needs, and so lack interest in prenatal care." Drug abuse was cited at several centers as another factor that diminishes women's interest in prenatal care.

- ***Thirty-six percent of the centers did not offer prenatal appointments at times convenient for working women.***

Availability of Prenatal Appointments: In 1990, 36 percent of the centers provided no scheduled prenatal appointments in the early morning, in the evening, or on Saturdays. Such restricted appointment hours may force working women to choose between work and prenatal care.

Waiting Times: Thirty-five percent of the urban centers have waiting times for initial prenatal visits of two to four weeks and five percent have waiting times for initial visits of more than one month. Long waits for initial appointments can cause adverse effects. If a woman tests positive for pregnancy in her second month and then must wait four weeks for her first prenatal appointment, she may enter care in her second trimester. The implications of such waits are more problematic when pregnancy is detected later and when the mother is at high risk, as many center clients are.

In addition, 20 percent of the centers reported that office waiting times grew longer between 1988 and 1990. One center administrator said that "long waiting periods in clinic may be one reason patients neglect prenatal care." Another administrator reported that the most common client complaints concerned office waiting times and a crowded waiting room. These comments are consistent with the perceptions of many we interviewed.

SEVERAL MAJOR CONSTRAINTS SERIOUSLY LIMIT THE CAPACITY OF URBAN CENTERS TO PROVIDE PERINATAL CARE.

- ***Medical staff shortages, in part as a result of cuts in the National Health Service Corps in the 1980's, present serious problems at 59 percent of centers.***

Although demand for perinatal services increased 23 percent at urban centers, the number of full-time equivalent obstetricians, family physicians, and certified nurse midwives rose only 12 percent (see appendix C for survey responses). Forty-seven percent of the centers reported that at least 1 of these clinical positions was currently vacant (see table 1); and 24 percent reported that at least 1 of these positions had been vacant for over 1 year. In addition, 37 percent of the centers reported that medical staff shortages have become more severe since 1988, and 28 percent cited high medical staff turnover as a serious problem.

Table 1
Percentage of Centers Reporting at Least One Clinical Provider Position Vacant[29]

Staff Position	Currently Vacant	Vacant more than Six Months	Vacant more than one year
Obstetrician-Gynecologist	33%	27%	17%
Family Physician	22%	19%	11%
Nurse Midwife	14%	11%	6%

Source: OIG Survey of Urban Community Health Centers, June 1991
N=167

Recruitment and Retention Problems: Centers have historically faced serious problems recruiting and retaining medical staff. The work is demanding, and wages and benefits are generally not comparable to those in the private sector. One survey respondent reflected the view of several center clinicians with whom we spoke when he noted that providers who care for poor pregnant women put themselves "at risk of burn-out and bankruptcy."

A shortage of staff means more frequent on-call rotations, which in turn makes a center less attractive to prospective employees. Insufficient support from the wider medical establishment also contributes to reluctance on the part of providers to accept positions at centers where they might not be assured staff privileges at local hospitals or adequate backup from local providers. Unattractive facilities and locations in high-crime areas also hinder recruitment efforts.

National Health Service Corps: Centers have historically relied upon the National Health Service Corps for a large percentage of their providers, but this program experienced major funding cuts during the 1980's. Several center administrators with whom we spoke reported that they have often been unable to retain corps providers beyond their obligated terms of service and have found it difficult to replace them. (See appendix A for more information.)

Staffing Models: Obstetricians are in short supply, and many are unwilling to work in community health center settings. They are also the most expensive providers to support: Their salaries and medical malpractice insurance premiums are substantially higher than those of other providers. The medical director of one site we visited expressed a view common among experts when he remarked that nurse midwives, physician assistants, and nurse practitioners are "the future of inner city care" because of their lower cost. Family-physician and certified-nurse-midwife models of care also pose problems: The supply of family physicians and nurse midwives is limited; many obstetricians do not believe that family physicians or certified nurse midwives should perform deliveries and are reluctant to provide backup services for them; and many hospitals will not extend delivery privileges to them. Thus, these more affordable staffing models are impractical for many centers.

- ***The cost of medical malpractice insurance has been a serious drain on resources at 56 percent of the centers.***

Twenty-eight percent of the centers indicated that the cost of medical malpractice insurance has become a more serious limitation since 1988. A substantial increase in commercial medical liability insurance rates and cutbacks in the National Health Service Corps have resulted in dramatically increased expenditures on medical liability coverage for all centers. In 1990, insurance premiums amounted to an estimated 10 percent of all centers' total Federal grant funding--or 4.4 percent of center revenues.[30]

These costs have made it difficult for centers to expand their staffs, since scarce funds must be spent on insurance instead of salaries. Centers that contract for care have had difficulty paying the rising wages necessary to meet the insurance costs of private physicians. One center reported that it has been unable to obtain coverage at any cost.

Concerns about restricted staff productivity and increasing costs were echoed by many of the survey respondents and center administrators with whom we spoke. One center's insurance carrier placed a cap on the number of deliveries its family physicians could perform each year. A recent change in insurance coverage for midwives led to a substantial increase in another center's insurance rates.[31] Escalating malpractice costs led another center to ask, "what can be done to control malpractice costs for providers willing to volunteer time at the center?"

In late 1992, Congress took initial steps to address this problem by passing legislation that extends medical malpractice liability protection under the Federal Tort Claims Act (FTCA) to health care providers at the centers.[32]

- ***Seventy-six percent of the centers report serious problems stemming from Medicaid policies and procedures--such as a burdensome application process, low reimbursement rates, a limited range of covered services, or limited eligibility.***

On average, 67 percent of each center's perinatal clients were enrolled in Medicaid in 1990.[33] Despite recent changes in the Medicaid system intended to increase access to care, however, many Medicaid-related factors continue to hinder the centers' ability to provide comprehensive, timely care (see table 2).

Table 2
Percentage of Centers Citing Each of the Following Medicaid Factors as a Serious Limitation

Factor	Percentage
Burdensome application procedures	56%
Inadequate reimbursement rates	47%
Slow reimbursement process	43%
Restrictive eligibility criteria	41%
Limited range of covered services	38%

Source: OIG Survey of Urban Community Health Centers, June 1991
N=167

Application Process: The process of applying for Medicaid benefits is burdensome and confusing to both centers and their clients. As one center administrator noted, the complexity of the process frequently leads to patients' "failure to follow through with procedures for obtaining benefits." "The process is so time-consuming," another reported, that the experience of "women receiving Medicaid cards in their third trimester is very common." Several centers reported similar problems. A number of State Medicaid agencies had not begun to place eligibility workers at centers, even though recent Federal law had required them to begin doing so.[34]

According to a prior OIG report, only 26 States had adopted presumptive eligibility as of June 1991.[35] Our research indicates, however, that even some States that had adopted this option were not using it aggressively. At one center we visited--in a State that had officially implemented presumptive eligibility--a State eligibility worker in the clinic had never heard of it. An administrator at another center noted that even workers in the central welfare office were not familiar with this option. Such confusion among State welfare employees was reported by many of the center administrators with whom we spoke. Several respondents also reported that the presumptive eligibility process was so frustrating that many women miss medical appointments. Some centers have encountered difficulty finding other providers who accept presumptive eligibility clients on referral.

Reimbursement: The staff at several of the centers we visited noted that many necessary services are not covered by Medicaid. One administrator reported that "it is not possible to bill for all services rendered nor to collect reimbursements that will offset expenses;" another commented that "most specialty services are grant funded--we would not have them without grants."

The Federally Qualified Health Center (FQHC) provisions of the Omnibus Budget Reconciliation Acts of 1989 and 1990 called on the States to begin paying cost-based reimbursement to CHCs as of April 1, 1990. According to PHS records, however, only 27 States and the District of Columbia had begun paying higher FQHC-Medicaid rates as of May 1991. Most of these payments were at interim rates.[36] Since our survey, additional States may have begun to implement these provisions.

Eligibility: Many centers reported that Medicaid eligibility requirements are still too restrictive. Staff at one center echoed a common concern when they reported that centers are expected "to charge clients who can't pay." Further, according to OIG research, three States have not yet dropped an asset test for eligibility.[37]

- ***On average, 21 percent of center perinatal clients were uninsured in 1990.***

At 33 percent of the centers more than 25 percent of the perinatal clients were uninsured. At 9 percent of the centers more than 50 percent of the clients were uninsured. These clients received services at reduced rates, according to a sliding scale.

- ***Seventy-nine percent of the centers report serious problems stemming from unsatisfactory coordination of perinatal services in the community, a lack of other local providers willing to treat uninsured and publicly insured women, difficulty arranging obstetric backup for center staff and for consultation for high-risk clients, or difficulty obtaining hospital privileges for center staff.***

Community Coordination: The PHS expects that centers be "active participants in their community's health care system. . . . This typically means fostering partnerships and participating in consortia and task forces addressing the area's health care issues." These consortia should include local health departments, social services departments, hospitals, and other public and private health care providers.[38]

Twenty-six percent of the centers, however, do not participate in perinatal care consortia. Ten percent of the centers cited limited relationships with local community and government organizations as a factor that seriously hinders the provision of services. Centers reported wide differences in consortia membership (see table 3).

Table 3
Percentage of Centers Reporting the Participation of Each of the Following in a Community Perinatal Care Consortium

Teaching hospitals	54%	Government social services	34%
Local health departments	53%	Private-practice physicians	26%
Other health clinics	43%	Nonteaching hospitals	25%
Private nonprofit groups	42%	Local schools	20%
State health departments	35%	Other	10%

Source: OIG Survey of Urban Community Health Centers, June 1991
N=167

Many centers indicated that, although they participate in perinatal care consortia, these involve minimal activity and have limited results. Several centers noted that they participate in consortia addressing only specific problems--most commonly, substance abuse. Eighty percent reported that their consortium activities do not include local schools; 74 percent that they do not include private-practice physicians; and 65 percent that they do not include State health departments.[39]

The Local Medical Establishment: Sixty-one percent of the centers reported that a lack of other local providers willing to treat low-income and uninsured women seriously limits the comprehensiveness of center care; 35 percent reported that this shortage has become a more severe problem since 1988.

The PHS notes that "a key element in the quality and continuity of care is the integration of the clinical staff into the larger medical community . . . to assure follow-up of referred care and the availability of timely and quality consultations."[40] Centers indicated, however, that they face serious difficulties arranging both backup and referrals. Thirty-one percent of the centers reported serious difficulty arranging obstetric backup for certified nurse midwives and 22 percent reported such problems for family physicians. Twenty-one percent cited difficulty arranging consultation for high-risk clients as a serious limitation.

Many of the center administrators we interviewed reported that they are constrained by "negative attitudes on the part of providers, hospitals, and public agencies toward low-income pregnant women." Consistent with this concern, one center administrator noted that his center's biggest problem is the "provision or identification of referral/ ancillary services for patients, particularly for the uninsured." Another administrator noted that, "even when Medicaid rates went up, private doctors didn't come back" to the business of treating poor women. Similarly, the director of another center said that she had experienced great difficulty convincing local doctors to provide backup coverage and to take center referrals. Ultimately, she reminded doctors and the local for-profit hospital that they would be further burdened with nonpaying patients if they did not do their part in facilitating the center's provision of care.

Hospital Admitting Privileges:[41] The PHS recommends that, "to assure continuity of care, center physicians should have admitting privileges and medical staff membership at one or more hospitals."[42] Centers, however, reported many difficulties arranging admitting privileges. Fifteen percent reported a decrease between 1988 and 1990 in the percentage of staff providers with such privileges. Thirty-nine percent indicated that difficulty obtaining admitting privileges for staff obstetricians, family physicians, or nurse midwives is a serious limitation to care.

Inconsistent and restrictive hospital protocols for nurse-midwife practice were cited as a problem by many center administrators. Thirty-three percent of the centers cited difficulty obtaining privileges for nurse midwives as a serious problem. One administrator reported that each hospital in the community has a different protocol for nurse-midwife practice. Another noted that, although a local hospital allows midwives to deliver, it has very stringent requirements for obstetric backup; the center is limited by its inability to retain such backup.

Some hospitals are reportedly reluctant to extend privileges to any providers whose patients might become a financial drain: one center noted that a local hospital allows center physicians to deliver only patients with Medicaid or private insurance coverage; another noted that no local hospital takes uninsured patients.

- ***Limited space seriously hinders the provision of services at 64 percent of the centers. In addition, limited collocation of services on site seriously restricts the comprehensiveness of care at 23 percent of the centers.***

Thirty-eight percent of the centers reported that inadequate space has become a more serious problem since 1988. Illustrating the ways in which inadequate space can hinder service delivery, one administrator indicated that the small number of examination rooms at that center limits its providers' productivity. The center had temporarily stopped accepting new prenatal clients because of the lack of space. Another center had struggled for years to increase its clinical staff capacity; having recently done so, it must still limit the number of clients served because of space constraints. Still another noted that, in a recent survey of patient satisfaction, the

most common complaints were long waiting times and congestion in the waiting room. State Primary Care officials who had recently visited this center remarked that it was "so crowded that we had to go in through the employees' entrance."

Fifty-nine percent of the centers reported that no other public organizations, aside from Medicaid or WIC, and no private groups provided services on site in 1990. Those centers that cited limited space as a serious problem were significantly more likely than other centers to cite limited collocation of services on site as a serious constraint.

CONCLUSION

Section-330-funded community health centers play an important role in the provision of perinatal care in urban areas across the country. In this report we have stressed three themes concerning their performance of this role.

First, the centers' capacity to provide perinatal services has increased substantially since 1988. In terms of the number of clients served, the range of services offered, and budgetary resources, the centers have demonstrated considerable growth.

Second, increased demand has accompanied the growth in capacity. As a result, many center clients still do not receive all the services recommended by the Public Health Service. Limitations are particularly apparent in the scope of case-managed services offered by the centers and in the proportion of women who receive care during the first trimester of pregnancy.

Finally, there are several basic factors that constrain the centers' ability to provide more services in a more timely manner to more women. These constraints, documented in many previous studies as well as in ours, include staffing problems, Medicaid policies and procedures, medical malpractice insurance, relationships with other medical providers, and clinic space.

APPENDIX A

FEDERAL SUPPORT FOR PERINATAL CARE AT COMMUNITY HEALTH CENTERS

The Federal Government supports the perinatal services provided by community health centers both directly through Section-330 grants and indirectly through other mechanisms, including Medicare and Medicaid reimbursements, Maternal and Child Health grants, supplemental nutrition programs and targeted funds. In recent years, several initiatives have been implemented to improve center perinatal services and the access of women to those services, including the following:

Medicaid Expansions: Congress has mandated several changes in the Medicaid program. These include (1) **expanded eligibility:** States are now mandated to extend coverage to all pregnant women below 133 percent of the Federal poverty level, and have the option of extending coverage to women between 133 and 185 percent of the poverty level; (2) **continuous eligibility:** eligibility for coverage is now guaranteed throughout pregnancy and the postpartum period, regardless of income changes; (3) **presumptive eligibility**: eligibility for temporary coverage, limited to a maximum of 61 days for ambulatory services only, is based solely on self-reported income; (4) **expanded coverage:** case-management services are now reimbursable; and (5) **outstationing:** States must place eligibility workers at locations other than AFDC enrollment sites, including CHCs.

Federally Qualified Health Centers (FQHC): The Omnibus Budget Reconciliation Acts of 1989 and 1990 require State Medicaid programs to cover a core set of services provided by community health centers and to reimburse centers for the reasonable cost of covered services.

The Comprehensive Perinatal Care Program (CPCP): In 1988, the PHS launched this initiative to improve birth outcomes by encouraging earlier entry into care and more perinatal visits. The CPCP provides supplemental funding for enhanced services, including improved outreach and case management. Funds were first awarded in 1989. In FY 1991, 290 of the urban, rural, and migrant health centers received a total of $33 million in CPCP supplemental funding;[43] 80 percent of the urban respondents to our survey that offered perinatal services received CPCP funding for at least 1 year between 1988 and 1991. In fiscal years 1992 and 1993, $44.7 million was appropriated for CPCP.[44]

Healthy Start: In September 1991, HHS awarded competitive grants to 15 communities on the basis of their proposals for coordinated community programs to improve maternal and infant health care.

Several other ongoing Federal efforts play important roles in the centers' provision of perinatal care, including:

National Health Service Corps (NHSC): The PHS offers both scholarships and educational loan repayment to health providers who commit to work in designated Health Professional Shortage Areas for a given period. A large percentage of corps providers have traditionally worked in community health centers. After substantial cuts in program size in the early 1980's, the NHSC received increased funding in 1990; the number of loan repayment candidates is limited, however, and most scholarship recipients will not be available for service until the mid-1990's.

Supplemental Food Program for Women, Infants, and Children (WIC): The Department of Agriculture provides vouchers through this program to address the nutritional needs of pregnant and lactating women and their infants.

APPENDIX B

METHODOLOGY

We obtained information for this report through a mail survey of Section-330 grantees, site visits to several centers, a series of interviews, and a review of relevant literature and data.

Mail Survey: We sent a mail survey of perinatal services to all community health centers receiving Section-330 funding as of June 1991. Of the 212 urban centers, 178 (84 percent) responded, including centers in every HHS region and every State and territory in which urban centers are located, with the exception of Washington, D.C. A review of geographic and demographic information suggests no significant differences between respondents and nonrespondents.

Of the 178 urban respondents, 11 (6 percent) provided no perinatal services on site during the 1988-91 period. The numbers and percentages in the body of this report, unless otherwise noted, reflect the responses of those 167 centers (79 percent of all urban centers) that offered services on site in at least 1 year during the 1988-91 period.

Of the 167 respondents that provided services on site during the study period, 133 (80 percent) were CPCP-funded. For the purposes of this report, a CPCP-funded center is any center that received CPCP grant funding at any time, regardless of the year in which the initial grant was awarded.

Not all respondents provided complete information. We calculated trends presented in the body of this report from the responses of those centers that provided the relevant information for all years.

Unless otherwise noted, the statements in the body of this report that compare groups of centers (such as CPCP-funded centers and other centers) reflect statistical significance at the .05 level. In reporting responses to survey questions that solicited information on a scale, we combined responses of "moderately" and "substantially" and reported them as "seriously" or "serious."

Site Visits: The study team conducted site visits to eight urban centers: three in Massachusetts, two in Connecticut, and one each in Texas, Wisconsin, and Oregon. The team toured these facilities and interviewed management and clinical staff. We chose these centers based on discussions with regional PHS staff and with consideration of geographic representation and community size. Of the eight centers, seven had received CPCP funding.

Interviews: The study team held discussions with (1) officials in PHS's Bureau of Primary Health Care (BPHC) (then called the Bureau of Health Care Delivery and Assistance), both in headquarters and in those regional offices responsible for the oversight of site-visit centers; (2) State primary care association and cooperative agreement staff in those States and regions in which site-visit centers are located; and (3) infant and community health experts, including staff at the Children's Defense Fund, the National Commission to Prevent Infant Mortality, and the National Association of Community Health Centers.

Literature and Data Review: The team reviewed extensive literature in the areas of infant and community health. The Public Health Service provided us with financial data that were collected from the centers through the Bureau's Common Reporting Requirements reports, and with financial and user data that were collected from CPCP applicants through the Perinatal User Profile reports.

APPENDIX C

URBAN SURVEY RESPONSES

The Office of Inspector General survey was mailed to 212 urban community health centers in May 1991. Of the 178 (84 percent) that responded, 11 provided no perinatal services on site during the 1988-91 period. Below we present the frequencies and mean responses for those 167 centers that did provide services at some point during this period. Not all centers answered every question. The number of respondents to each field (N) is indicated in parentheses as appropriate.

Any discrepancies between the responses below and the data presented in the body of this report are a result of the methods used in aggregating data and caluculating trends. Please see appendix C for a discussion of statistical methodology.

Number of centers that offered perinatal services on site in each year:

1988: **Yes**=152 **No**=15
1989: **Yes**=159 **No**=8
1990: **Yes**=165 **No**=2
1991: **Yes**=164 **No**=3

A. CASELOAD	1988	1989	1990
1. Please indicate:			
		MEAN (N)	
a. the number of women who received *prenatal* care at your center:	481 (126)	530 (149)	558 (157)
b. the percentage of these clients who were **high-risk**, as defined by your center:	37% (92)	39% (115)	39% (128)
c. the percentage of these clients who were **low-risk**, as defined by your center:	49% (88)	48% (109)	49% (125)
d. the number of births to your center's clients:	321 (120)	354 (135)	362 (143)
2. Of the women who gave birth in your service area, what percentage received prenatal care at your center?	25% (71)	29% (81)	32% (79)

B. COMMUNITY COORDINATION

1. Does your center currently participate in a consortium of perinatal care providers?

Yes = 123 **No** = 44 If **YES**, please continue.

2. Which of the following participate in the consortium? (Please check all that apply):

a. state health department:	58	f. nonteaching hospitals:	41
b. local health department:	88	g. private-practice physicians:	44
c. health clinics:	72	h. gov. social service agencies:	56
d. schools:	34	i. non-profit organizations:	69
e. teaching hospitals:	90	j. other:	16

3. On the last page of this survey, briefly describe the coordination of consortium activities and your center's involvement.

C. CLINIC SITES AND HOURS

C. CLINIC SITES AND HOURS	1988	1989	1990
1. Please indicate the number of:		**MEAN (N)**	
a. clinic sites operated by your center:	1.95 (159)	2.01 (161)	2.06 (164)
b. clinic sites at which prenatal care was provided:	1.50 (158)	1.57 (161)	1.59 (165)
2. On how many days a week did your center provide scheduled prenatal appointments either **before 8AM** or **after 6PM**?	1.01 (153)	1.15 (157)	1.25 (162)
3. On how many **saturdays** a month did your center provide scheduled prenatal appointments?	0.48 (151)	0.45 (154)	0.50 (159)

D. Funding

1. Compared with 1988, the amount of funding available for perinatal care at your center in 1990 was:

Larger=109 **Smaller**=21 **Unchanged**=30

2. Please indicate the percentage of your center's 1990 perinatal clients covered by:

a. Private insurance:	6.95% (148)	c. Medicaid:	67.30% (152)
b. No insurance:	20.70% (149)	d. Other:	4.00% (155)

3. To what extent have the following factors resulted in increased demand for perinatal services at your center over the past three years?

	Not at all/ Somewhat	**Moderately/ Substantially**
a. Medicaid eligibility expansions:	62	87
b. Medicaid presumptive and continuous eligibility provisions:	68	81

E. PERINATAL OUTREACH

1. To which of the following groups does your center currently target specific perinatal outreach efforts? (Please check all that apply)

a. Teenagers:	140	c. Non-English speakers:	92
b. Substance abusers:	78	d. Other:	51

2. At which of the following locations does your center currently conduct perinatal outreach? (Please check all that apply)

a. Community centers:	98	d. Schools:	109
b. Shops:	27	e. Welfare offices:	52
c. Door-to-door in the neighborhood:	43	f. Churches:	59
		g. Other:	66

3. Through which of the following media does your center currently conduct perinatal outreach? (Please check all that apply)

a. Television:	34	d. Radio:	45
b. Newspapers:	69	e. Other:	49
c. Pamphlets:	132		

4. Compared with 1988, your center's outreach efforts in 1990 were:

Greater=114 **Smaller**=11 **The same**=32

5. Compared with 1988, your center's outreach efforts in 1990 yielded:

More clients=124 **Fewer clients**=7 **The same number of clients**=20

F. PERINATAL SERVICES

1. Please indicate which of the following services were provided by your center. If these were offered on site, please circle **On**. If these were offered off site--either through contract, affiliation, or paid referral--please circle **Off**.

	1988	1989	1990
a. Ultrasound:	**On**=42	**On**=51	**On**=57
	Off=101	**Off**=100	**Off**=103
b. Amniocentesis:	**On**=6	**On**=5	**On**=7
	Off=136	**Off**=143	**Off**=147
c. Genetic counseling:	**On**=14	**On**=17	**On**=22
	Off=119	**Off**=124	**Off**=126
d. Non-stress testing:	**On**=35	**On**=48	**On**=50
	Off=98	**Off**=90	**Off**=95
e. Dental care:	**On**=111	**On**=114	**On**=115
	Off=32	**Off**=36	**Off**=43
f. Nutritional services:	**On**=135	**On**=139	**On**=154
	Off=14	**Off**=17	**Off**=9
h. Health education:	**On**=139	**On**=147	**On**=158
	Off=10	**Off**=8	**Off**=6
i. Birthing classes:	**On**=84	**On**=95	**On**=106
	Off=54	**Off**=54	**Off**=52
j. Parenting/infant care classes:	**On**=87	**On**=98	**On**=121
	Off=45	**Off**=43	**Off**=32
k. Family planning:	**On**=150	**On**=154	**On**=160
	Off=2	**Off**=3	**Off**=3
l. Smoking cessation programs:	**On**=52	**On**=58	**On**=75
	Off=65	**Off**=66	**Off**=65
m. Substance abuse treatment:	**On**=25	**On**=28	**On**=44
	Off=102	**Off**=104	**Off**=103
n. HIV counseling/testing:	**On**=81	**On**=117	**On**=143
	Off=47	**Off**=29	**Off**=18

2. Compared with 1988, the **range** of perinatal services offered by your center in 1990 was:

Greater=127 **Smaller**=6 **Unchanged**=30

3. Were perinatal clients enrolled on-site at the center in the following programs?

a. Medicaid:	**Yes**=38	**Yes**=63	**Yes**=108
	No=117	**No**=94	**No**=56
b. WIC:	**Yes**=113	**Yes**=123	**Yes**=134
	No=43	**No**=36	**No**=31

	1988	1989	1990
4. Did other government or private social service organizations provide services on-site at your center?	Yes=42 No=113	Yes=49 No=110	Yes=66 No=99
5. Did your center facilitate access to perinatal care by providing the following services?			
a. Transportation to and from appointments:	Yes=74 No=80	Yes=89 No=71	Yes=97 No=67
b. Translation for non-English speaking clients:	Yes=120 No=32	Yes=127 No=30	Yes=133 No=28
c. Child care during center appointments:	Yes=11 No=145	Yes=14 No=147	Yes=19 No=146
d. Home visits:	Yes=76 No=78	Yes=103 No=58	Yes=115 No=50

G. STAFFING

	1988	1989	1990
1. How many **full-time equivalents** of each of the following provided perinatal services on-site at the center? (N=167)			
a. Obstetricians:	0.89	0.99	0.93
b. Family physicians:	0.64	0.72	0.75
c. Certified nurse midwives:	0.28	0.33	0.35
d. Nurse practitioners:	0.57	0.65	0.67
e. Physician assistants:	0.17	0.19	0.21

2. Please indicate below: (i) the number of your perinatal provider positions which are **currently** vacant; (ii) the number which have been vacant for more that six months; and (iii) the number which have been vacant for more than one year. (N=167)

	(i) Number of vacancies	(ii) More than six months	(iii) More than one year
a. Obstetrician:	0.41	0.34	0.20
b. Family physician:	0.25	0.20	0.13
c. Certified nurse midwife:	0.14	0.11	0.07

3. Compared with 1988, the percentage of your perinatal providers with admitting privileges at local hospitals in 1990 was:

Larger=44 **Smaller**=24 **Unchanged**=91

H. TIMING OF CARE

1. Please indicate the percentage of your center's 1990 prenatal clients who entered care in the:

a. First trimester: 50.8% (N=156)
b. Second trimester: 39.1% (N=154)
c. Third trimester: 10.3% (N=139)

	1988	1989	1990
2. Of those clients who entered care during the first trimester, and carried to term, what percentage received at least nine prenatal medical visits?	69.3% (67)	71% (94)	74% (108)
3. What percentage of your center's prenatal clients returned for postpartum visits during the first eight weeks after delivery?	66% (84)	66.4% (121)	71% (142)
4. What percentage of all infants born to center prenatal clients returned for newborn visits during the first four weeks after birth?	69.5% (79)	69.7% (110)	73.9% (128)

I. APPOINTMENTS FOR CARE

1. If a woman called today to schedule a pregnancy test, how long would she wait for an appointment?

Pregnancy tests are offered on a walk-in basis: 105

Less than one week: 47
One-two weeks: 12
More than two weeks: 3

2. If the pregnancy test were negative, would she be referred to family planning services?

Yes=150 **No**=16

3. If the pregnancy test were positive, how long would she wait for her first prenatal visit?

The first perinatal visit is provided in conjunction with the pregnancy test: 26

Less than two weeks: 75
Two-four weeks: 58
One-two months: 7
More than two months: 1

4. Compared with 1988, waiting room waiting times at perinatal appointments in 1990 were generally:

Shorter=56 **Longer**=33 **The same**=68

J. CASE MANAGEMENT

1. Does your center currently provide case management to promote the coordination of services for perinatal clients?

Yes=161 **No**=6 If **YES**, please continue.

2. Case management at your center is primarily conducted by (please check only one):

The client's primary care doctor:	4
The client's primary care nurse:	23
The appointments secretary:	0
A multidisciplinary team:	69
A center employee whose main responsibility is case management for perinatal clients:	59
Other:	6

3. Case management at your center is provided for (please check only one):

All perinatal clients:	129
All high-risk perinatal clients:	22
Only certain groups of perinatal clients:	16

4. Case management of perinatal clients at your center comprises (please check all that apply):

a. Risk assessment:	155
b. Planning of care:	152
c. Assessment of adequacy and appropriateness of services:	134
d. Client advocacy:	146
e. Contact with other organizations to arrange for services / schedule appointments:	159
f. Assistance with paperwork related to WIC, Medicaid, and other programs:	154
g. Discharge planning:	92
Coordination of:	
h. Medical services provided on-site at the center:	153
i. Medical services provided off-site:	129

Continued:

j. Delivery services:	127
k. Social services provided on-site at the center:	143
l. Social services provided off-site:	117
m. Nutritional services:	155
n. Health education:	153
o. Other:	26

5. Compared with 1988, the percentage of all center perinatal clients case managed by your staff in 1990 was:

Larger=140 **Smaller**=3 **Unchanged**=11

6. Does your center often encounter problems assuring the timely transfer of medical records to and from facilities to which perinatal clients are referred?

For delivery:	**Yes**=41	**No**=120
For other care:	**Yes**=52	**No**=103

7. Please estimate the percentage of cases in which your center contacts perinatal clients to reschedule missed appointments:

71% (N=151)

8. Please indicate the manner in which you contact clients to reschedule missed appointments (please check all that apply):

Mail=156 **Phone**=161 **Home visit**=112 **Other**=15

9. Are perinatal clients at your center routinely attended by either the same primary medical provider or the same provider team at each perinatal visit?

Yes=153 **No**=6

K. LIMITATIONS TO CARE Please indicate the degree to which each of the following factors limits your center's ability to provide perinatal services:

	Not at all/ Somewhat	**Moderately/ Substantially**
1. Shortage of medical staff:	67	95
2. Shortage of nonmedical staff:	112	47
3. High medical staff turnover:	113	44
4. High nonmedical staff turnover:	135	22
Difficulty obtaining admitting privileges at local hospitals for:		
5. obstetricians:	132	13
6. family physicians:	118	21
7. certified nurse midwives:	81	40
8. High cost of malpractice insurance:	68	88
Difficulty obtaining malpractice insurance for:		
9. obstetric providers:	120	27
10. all providers:	124	22
Difficulty arranging medical backup for:		
11. OB supervision of certified nurse midwives/ nurse practitioners:	97	43
12. OB supervision of family physicians:	99	28
13. coverage during center staff vacations, holidays, and weekends:	97	59
14. consultation for high-risk patients:	123	32
15. Limited relationships with local community and government organizations:	146	16
16. Lack of other providers in the community willing to treat uninsured or publicly insured women:	63	98
Non-acceptance of certified nurse midwives/ nurse practitioners:		
17. by the medical community:	101	46
18. by patients:	133	6
19. Inadequate center funding:	59	101
20. Difficulties related to funding obtained from many different sources:	83	71
Medicaid-related problems:		
21. slow reimbursement process:	93	69
22. inadequate reimbursement rates:	86	75
23. limited range of covered services:	99	60
24. restrictive eligibility criteria:	95	65
25. burdensome application procedures:	72	91
26. Limited case management:	119	36
27. Limited collocation of services:	111	33
28. Limited space:	58	102
29. Other	10	9

Which of these factors have become **LESS SERIOUS** or **MORE SERIOUS** limitations since 1988?

	More Serious	Less Serious
1. Shortage of medical staff:	60	23
2. Shortage of nonmedical staff:	19	21
3. High medical staff turnover:	17	14
4. High nonmedical staff turnover:	5	21
Difficulty obtaining admitting privileges at local hospitals for:		
5. obstetricians:	5	20
6. family physicians:	11	12
7. certified nurse midwives:	14	10
8. High cost of malpractice insurance:	43	11
Difficulty obtaining malpractice insurance for:		
9. obstetric providers:	16	12
10. all providers:	9	11
Difficulty arranging medical backup for:		
11. OB supervision of certified nurse midwives/ nurse practitioners:	27	13
12. OB supervision of family physicians:	14	13
13. coverage during center staff vacations, holidays, and weekends:	31	13
14. consultation for high-risk patients:	20	18
15. Limited relationships with local community and government organizations:	6	28
16. Lack of other providers in the community willing to treat uninsured or publicly insured women:	56	9
Non-acceptance of certified nurse midwives/ nurse practitioners:		
17. by the medical community:	11	24
18. by patients:	3	20
19. Inadequate center funding:	40	22
20. Difficulties related to funding obtained from many different sources:	36	12
Medicaid-related problems:		
21. slow reimbursement process:	30	30
22. inadequate reimbursement rates:	31	44
23. limited range of covered services	23	34
24. restrictive eligibility criteria:	30	52
25. burdensome application procedures:	37	37
26. Limited case management:	16	41
27. Limited collocation of services:	12	19
28. Limited space:	61	21
29. Other	6	1

L. CONCLUSION

1. Over the past three years, demand for perinatal care at your center has:

Increased=149 **Decreased**=7 **Not changed**=8

2. Over the past three years, your center's capacity to address the demand for perinatal care in your service area has:

Increased=106 **Decreased**=36 **Not changed**=22

OPEN-ENDED QUESTIONS: [Center responses are not included here]:

3. What are the three most significant barriers to delivering perinatal care that your center has faced in the past three years?

4. What special projects, initiatives, or programs has your center undertaken over the past three years to improve its ability to respond to perinatal care needs in your service area?

APPENDIX D

NOTES

1. National Center for Health Statistics (NCHS), 1992. The 1989 U.S. infant mortality rate was 9.8 deaths per 1,000 live births. The provisional rate for 1990 is 9.1 deaths per 1,000; and the provisional rate for 1991 is 8.9 per 1,000. These rates represent considerable improvement over the 1950 rate of 29.2, but the pace of improvement has slowed in recent years and has not been experienced equally by all segments of the population. According to the most recent international data, the 1988 U.S. infant mortality rate for whites alone places the nation 17th lowest in the world, while the rate for blacks alone places it 36th. Native Americans and Puerto Ricans also have infant mortality rates considerably higher than the national average.

2. NCHS, 1988. These are the most recent data available.

3. U.S. Public Health Service (PHS), *Healthy People 2000: National Health Promotion and Disease Prevention Objectives*, Washington, D.C., 1990, p. 366.

   PHS, *Caring for Our Future: The Content of Prenatal Care: A Report of the PHS Expert Panel on the Content of Prenatal Care*, Washington, D.C., 1989, p. 2.

4. Sarah S. Brown, editor: Institute of Medicine, *Prenatal Care: Reaching Mothers Reaching Infants*, National Academy Press, Washington, D.C., 1988, p. 4.

   Deborah Lewis-Idema, *Increasing Provider Participation*, National Governors' Association, Washington, D.C., 1988, pp. 20-23. An increasing number of physicians who practice obstetrics are unwilling to accept low-income or Medicaid-insured patients because of high malpractice premiums and low Medicaid reimbursement rates.

   In September 1990, the American College of Obstetricians and Gynecologists (ACOG) reported that, as a result of the risk of malpractice, 12 percent of its members had discontinued their obstetric practices, 24 percent had reduced or eliminated services to high-risk women, and 10 percent had decreased the number of deliveries they performed. Average obstetric premiums rose 248 percent between 1982 and 1989. (ACOG, prepared by Opinion Research Corporation, "Professional Liability and Its Effects: Report of a 1990 Survey of ACOG's Membership," Washington, D.C., September 1990.) The ACOG repeated this survey in September 1992, and found no statistically significant differences from the prior survey.

   In addition, as of 1987, 64 percent of family physicians who once provided obstetric services had discontinued such care. (American Academy of Family

Physicians, "Family Physicians and Obstetrics: A Professional Liability Study," 1987.)

5. NCHS, "Advance Report on Final Natality Statistics, 1989," *Monthly Vital Statistics Report*, vol. 80, no. 8, Supplement, December 12, 1991, p. 43. These 1989 data are the most current available.

   Alan Guttmacher Institute, *Prenatal Care in the United States*, New York, N.Y., 1987, vol. I, p. iv. Adequacy of care is a function of time of entrance into care and number of visits. During the period 1984-86, 24 percent of women entered care after the first trimester, 24 percent had fewer than 9 visits, and 34 percent received less than adequate care.

6. "Cohesion Sought in Medical Aids: Antipoverty Funds Used for Centralized Services," *The New York Times*, May 22, 1966.

7. Alice Sardell, *The U.S. Experiment in Social Medicine: The Community Health Center Program, 1965-1986*, University of Pittsburgh Press, Pittsburgh, PA, 1988, p. 66.

8. Bonnie Lefkowitz, Bureau of Primary Health Care (BPHC), PHS, "The Institutionalization of Community Health Centers," speech to the American Public Health Association, November 13, 1983, p. 4. This number represents consolidation as well as elimination of grantees.

9. As of June 1991, PHS also funded 302 rural community health centers. The capacity of these centers to provide perinatal services is addressed in the OIG inspection report *The Perinatal Service Capacity of The Federally Funded Community Health Centers: Rural Centers* (OEI-01-90-02331). Some community health centers received both Section-330 funds and Section-329 funds for care provided to migrant workers; an additional 71 centers received only Section 329 funding.

10. Section-330 funding was $435 million in FY 1989, $457 million in FY 1990, and $478 million in FY 1991. (Health Resources and Services Administration (HRSA) FY 1993 Justification of Appropriations, vol. 1, p. 63.)

    For FY 1992, $532 million was appropriated. The FY 1993 appropriation is $559 million. (BPHC and the Assistant Secretary for Management and Budget [ASMB].)

11. The Public Health Service provided us with financial data that they collected from the centers through the Bureau's Common Reporting Requirements reports and with financial and user data that they collected from CPCP applicants through the Perinatal User Profile reports.

12. Unless otherwise noted, all of the differences between groups (such as CPCP-funded centers and other centers) cited in this report are statistically significant at the .05 level.

13. Centers that served fewer than 200 prenatal clients in 1988 served an average of 110 in 1988 and 215 in 1990. Centers that served between 200 and 999 clients in 1988 served an average of 465 in 1988 and 581 in 1990. Centers that served 1,000 or more clients in 1988 served an average of 1,886 in 1988 and 1,971 in 1990.

14. In 1988--before CPCP funds were awarded--those centers that eventually received funding served an average of 526 clients; the other centers served an average of 231. In 1990, the CPCP-funded centers served an average of 641 clients; other centers served an average of 311.

    According to an internal BPHC draft report, "CPCP 1990 Data Report: Moving Ahead," CPCP-funded centers served 33,938 pregnant teens in 1990, which they report is more than triple the number served in 1988. Also according to this report, in 1989, CPCP-funded centers provided services to 13.4 percent of all pregnant teens age 15 or younger in the United States. The BPHC's CPCP data, however, does not permit a comparison of CPCP-funded centers and other centers.

15. These centers served an average of 372 prenatal clients in 1988 and 504 in 1990. Centers with perinatal populations that were less than half Medicaid-enrolled served an average of 811 clients in 1988 and 845 in 1990.

16. Our survey inquired about the provision of a representative range of perinatal medical and health-promotion services: ultrasound, amniocentesis, genetic counseling, non-stress testing, dental care, nutritional services, health education, childbirth classes, parenting/infant-care classes, family planning, smoking-cessation programs, substance-abuse treatment, and HIV counseling/testing.

17. Our survey inquired about the provision of four services that facilitate access to care: translation, transportation, home visiting, and child care during appointments.

18. Some centers are able to complete enrollment on site. Other centers only distribute forms or provide assistance in completing them. In such cases, applicants must complete the enrollment process at the appropriate State offices. Some centers reported that staff sometimes accompany clients to the State offices to facilitate the process. Some centers complete all nutritional assessment and paperwork for WIC on site, but clients must obtain vouchers at a different location.

19. There was a 163 percent increase in the number of CPCP-funded centers that provided Medicaid enrollment assistance on site. There was a 433 percent increase in the number of centers without CPCP funding that provided this service. In 1988, 35 CPCP-funded centers and 3 other centers provided on-site assistance with Medicaid enrollment. By 1990, 92 CPCP-funded centers and 25 other centers offered this service.

20. Bureau's Common Reporting Requirements (BCRR) Database, BPHC, PHS.

    This database contains self-reported financial and user data from Section 330 grantees. We derived the percentage change in center revenues from data for those 146 urban centers (82 percent of urban survey respondents, or 72 percent of all urban grantees) that both responded to our survey and provided financial data to BPHC through the BCRR form for the years 1988, 1989, and 1990.

    Total reported revenues for these 146 centers increased from $415 million in 1988 to $544 million in 1990. PHS Section-330 grants to these centers increased from $163 million in 1988 to $193 million in 1990. Medicaid reimbursements to these centers increased from $84 million in 1988 to $134 million in 1990. These centers received additional revenues from MCH block grants, Section-329 and -340 grants, WIC grants, Title X grants, Title XVIII Medicare payments, Title XX payments, other third party payments, patient collections, State and local revenues, and donations.

21. We excluded these 11 centers from the calculation of the statistics presented in the body of this report (see appendix B for detailed methodology).

22. In reporting responses to survey questions that solicited information on a scale, we combined responses of "moderately" and "substantially" and reported them as "seriously" or "serious."

23. PHS, *Caring for Our Future*, p. 2.

    PHS, *Healthy People 2000*, p. 366.

    In our survey, we used the terms "health education" for "health promotion" and "social services" for "psychosocial services."

24. BPHC, PHS, "Program Expectations," (hereafter P.E.), May 1, 1991, p. 21. This document outlines both requirements of law and regulation, and departmental priorities for the centers.

    BPHC, PHS, "Regional Program Guidance Memorandum 84-52," May 15, 1984.

25. Inadequate insurance, limited financial resources, long waits for appointments, an inability to arrange child care, and time-consuming transportation all discourage women from returning to the center. In addition, in some

immigrant communities, women are discouraged from leaving their homes for at least one month after delivery. Some women may receive follow-up care from other providers, but it is unclear to what extent the centers track these women after delivery.

26. NCHS, 1992. The 1989 data for national rates of entry into care are the most recent available. The average of 62.2 percent for minority women was calculated from rates for Mexican American, Puerto Rican, Cuban, Central and South American, other Hispanic, Chinese, Japanese, Filipino, Hawaiian, other Asian, American Indian/Alaskan Native, and Black women.

    The BPHC provided the rate for women in federally designated Healthy Start project areas. The BPHC calculated this rate from information reported by the 15 projects for a time period between 1984 and 1989. The project areas are: Aberdeen, South Dakota (rates are for the Northern Plains Native American populations in North Dakota, South Dakota, and Nebraska); Baltimore, Maryland; Birmingham, Alabama; Boston, Massachusetts; Chicago, Illinois; Cleveland, Ohio; Detroit, Michigan; Lake County, Indiana; New Orleans, Louisiana; New York, New York; Oakland, California; the Pee Dee region, South Carolina; Philadelphia, Pennsylvania; Pittsburgh, Pennsylvania; and Washington, D.C.

27. NCHS, *Monthly Vital Statistics Report*, 1991, p. 43. These 1989 data are the most recent available.

28. ACOG, *Standards for Obstetric-Gynecological Services*, 7th ed., Washington, D.C., 1989, p. 16.

    The PHS has required that "all centers, regardless of size, must assure that the services that they deliver conform to the *Standards for Obstetric-Gynecologic Services*" ("Perinatal Care: How to Establish Perinatal Services in Community Health Centers," PHS, 1985, p. 96.)

    A 1989 PHS report, *Caring for Our Future: The Content of Prenatal Care*, suggests slightly different guidelines. This report recommends that healthy women receive nine prenatal visits during a first pregnancy and seven prenatal visits during subsequent pregnancies (p. 50). The report suggests that women at risk, because of either psychosocial or physical factors, might require more prenatal visits (p. 71). Psychosocial and physical risk factors include inadequate personal support systems, single marital status, adolescence, advanced age, high stress and anxiety, less than high school education, low income, inadequate housing, inadequate nutritional resources, communication barriers, smoking, alcohol abuse, and illicit drug use (p. 79).

29. Nonresponses may have resulted in an underestimate of the percentage of centers with such vacancies.

30. U.S. General Accounting Office, *Medical Malpractice: Data on Claims Needed to Evaluate Health Centers' Insurance Alternatives* (HRD-91-98), Washington, D.C., May 1991, p. 1. These data are for all Section-330 grant recipients.

31. The clinic's midwives had originally been covered under its general liability policy, but must now be insured individually.

32. P.L. 102-501. Under the FTCA, center providers will be defended by the Justice Department in any medical malpractice litigation, and judgments will be paid out of a Justice Department fund, into which the centers will pay annual contributions. This liability protection will be provided for three years, after which time the financial benefits of the arrangement will be assessed.

33. On average, seven percent of each center's perinatal clients were privately insured and four percent were covered by other mechanisms in 1990.

34. The Omnibus Budget Reconciliation Act of 1990 required States to locate eligibility workers at sites other than AFDC enrollment sites, including CHCs, as of July 1991.

    Several administrators speculated that States lacked the funds needed to implement outstationing of eligibility workers. At one center, a State eligibility worker was stationed on site, but her effectiveness was limited because she was unable to access the regional Medicaid database and was not allowed to make long-distance telephone calls to the agency office.

35. OIG, *Medicaid Expansions for Prenatal Care: State and Local Implementation* (OEI-06-90-00160), January 1992, appendix E.

36. Bonnie Lefkowitz, BPHC, PHS, written communication to OIG, December 24, 1991.

37. OIG, Draft report *Medicaid Expansions for Prenatal Care: State Update* (OEI-06-90-00161), May 1992.

    At one site we visited, where only 5 percent of the perinatal clients were covered by Medicaid and 70 percent were uninsured (most clients were working poor and failed the asset test), the director noted that grant funds are necessary to subsidize sliding scale fees.

38. P.E., pp. 4-5.

39. Centers report a range of coalition activities, including formulation of recruitment and retention strategies; sharing of services; use of a common medical record; on-line appointment, registration, and data transfer with local hospitals; coordination of referrals; improved communication; telephone

hotlines; public forums for perinatal issues; media relations; contact with legislators; consultation with governmental agencies; and community education.

40. P.E., p. 18.

41. Our survey only addressed admitting privileges. During interviews, center staff reported hospital restrictions on the delivery privileges of certified nurse midwives and family physicians.

42. P.E., p. 19.

43. HRSA, FY 1993 Justification of Appropriations, vol. 1, p. 61.

44. BPHC and ASMB data.