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# PRENATAL CARE APPOINTMENT

# SURVEY 2001



**BARRIERS TO  
ACCESSING PRENATAL CARE  
IN NEW YORK CITY**

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**ABSTRACT**

**Objectives.** The objectives of this project were 1) to assess the ability of uninsured, undocumented women to obtain prenatal care, 2) to identify barriers they face in gaining access care, and 3) to determine if barriers to prenatal care have changed over time.

**Methods.** All 140 facilities licensed to provide prenatal care in New York City were contacted between April and June of 2001. Four attempts were made to reach each facility. The caller posed as a 26 year-old woman in her ninth week of pregnancy, without insurance or legal documentation. If the facility was reached, the caller attempted to make an appointment for prenatal care. If she was unable to do so, the reason for her inability to secure an appointment was noted. Results were compared between private and public facilities. Accessibility was also compared between years for facilities that were in both the 1998 and 2001 surveys.

**Results.** Ninety-three percent of the facilities were accessible within four call attempts. Callers were able to make appointments at 79 (56.4%) of the 140 facilities; funding source (public v. private) did not affect the ability to make an appointment. The most frequent reasons given for not granting an appointment were the need to talk to a PCAP/financial director (21.6%), the need to repeat a pregnancy test (21.6%), and the need to register first (19.6%). These were also the most common reasons cited in the 1996 and 1998 surveys. Of the 60 facilities that did not provide appointments in the 1998 survey and were included in the present survey, 29 (48.3%) gave appointments to the caller in this survey. Many (41.4%) of the facilities that did not give appointments in either year cited the same reasons for their inability to grant appointments.

**Conclusion.** Reaching facilities by telephone is not a major barrier to prenatal care, however once a facility is reached barriers to securing an appointment continue to exist. The types of barriers that uninsured, undocumented women face in obtaining prenatal care have changed little over the years.

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## INTRODUCTION

### Background

Several studies suggest that prenatal care is associated with increases in birth weight and decreases in preterm delivery, respiratory failure, major illness, still birth and infant mortality.<sup>1-9</sup> Such research has led to the Healthy People 2010 objective for 90% of pregnant women to receive early and adequate prenatal care.<sup>10</sup> Prenatal care also positively impacts maternal health<sup>11</sup> and is often the first encounter a woman has with the healthcare system. This is especially true for adolescents, minorities, and those who are undocumented or have low incomes.<sup>12,13</sup> This contact may be the start of care that continues after pregnancy.

During prenatal care visits, women may receive genetic counseling, screening for diseases or infections that can affect the fetus, education on nutrition, smoking cessation, breastfeeding, contraception, and parenting. These services are especially important for those with high-risk pregnancies. Prenatal care may also provide linkage to social service and community-based organizations that can improve the health of women.

Optimally, women should receive healthcare before conception, as health during pregnancy is linked to health before pregnancy.<sup>14</sup> However, almost half of the pregnancies that occur annually in the United States are unplanned,<sup>15</sup> making care in preparation for conception difficult. Whether or

not preconception care is received, prenatal care should be initiated by the second missed period and certainly within the first trimester of pregnancy.<sup>16</sup> Despite this recommendation, many women do not receive early or adequate prenatal care. In 1998, 83% of women who gave birth in the United States received prenatal care in the first trimester.<sup>10</sup> In New York City, only 60% of women in 2000 received prenatal care in the first trimester.<sup>i,17</sup> Although this falls far short of the 90% recommendation, the percent of women receiving early care has increased substantially over the years; in 1989 in New York City only 46% of women received care in the first trimester of pregnancy.

### Improving Access to Prenatal Care

In the 1980's the federal government began major expansions in Medicaid that were intended, in part, to improve access to prenatal care.<sup>18</sup> These expansions were passed via the Omnibus Budget Reconciliation Acts (OBRA) of 1986, 1987, and 1989.<sup>19</sup> The 1986 Act extended Medicaid eligibility to families with incomes up to 100% of the federal poverty level and the 1987 Act provided states with the freedom to expand this limit to 185%. The 1989 Act mandated coverage for those with incomes up to 133% of the federal poverty level, while still allowing states to expand to 185%.<sup>19</sup> These legislative Acts promoted enrollment in Medicaid by permitting states to place enrollment workers outside of welfare offices to determine eligibility and process applications. Specific provisions for pregnant women were included in the legislation, such as the issuance of temporary Medicaid cards to pregnant women who

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<sup>i</sup> Approximately 11% of records filed in New York City in 2000 were missing information on trimester of entry into prenatal care and this may result in any underestimate of women entering prenatal care in the first trimester. However, if all records with missing information were assumed to have received care in the first trimester, which is unlikely, New York City would still fall short of the national average and the Healthy People 2010 goal.

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met income criteria (presumptive eligibility), accelerated processing of Medicaid applications for pregnant women (expedited eligibility), and the assurance of continuous coverage by Medicaid throughout pregnancy (continuous eligibility).<sup>18</sup> OBRA also separated Medicaid eligibility from eligibility for Aid to Families with Dependent Children (AFDC).

New York State sought to improve access to prenatal care with the development of the Prenatal Care Assistance Program (PCAP). PCAP is a New York State program that provides comprehensive prenatal care to women regardless of immigration status. The program was incorporated into Medicaid in January 1990. Pregnant women with incomes up to 200% of the poverty level are eligible for PCAP. PCAP facilities must provide extensive services for pregnant women including regular assessment of pregnancy risk, prenatal diagnostic and treatment services, nutrition screening and counseling, HIV counseling and testing, health and childbirth education, a postpartum examination no later than eight weeks after delivery, and arrangement for pediatric care.<sup>20,21</sup> PCAP facilities, which may be clinics or hospitals, have a contractual agreement with the New York State Department of Health to provide these services. PCAP providers are guaranteed an enhanced rate of payment for serving Medicaid eligible pregnant women.<sup>22</sup>

PCAP workers determine presumptive eligibility for Medicaid based on family size and the federal poverty level in relation to household income. This means that pregnant women can begin prenatal care services as soon as possible and

providers will receive payment for this care. Final eligibility is determined by the Local Department of Social Services or the Human Resources Administration by examining documents such as proof of income, proof of residency, photo identification and proof of age of dependent children and mother (if under 21). Citizenship is not a prerequisite for determining eligibility for PCAP, permitting undocumented women to be enrolled.

### **Barriers to Prenatal Care**

The Pregnancy Risk Assessment Monitoring System (PRAMS), a population-based surveillance system that exists in many states, has identified several barriers to prenatal care. Analysis of PRAMS data from 13 states<sup>ii</sup> from 1989 to 1997 revealed that race/ethnicity, age, education, and parity are related to timing of entry into prenatal care. Specifically, Hispanic women, non-Hispanic black women, those less than 20 years of age, women with less than 12 years of education, and multiparous women are more likely to have delayed or no prenatal care.<sup>23</sup> The top three reasons for delayed entry into prenatal in 1997 were: (1) “I didn’t know I was pregnant” (2) “I didn’t have enough money or insurance to pay for my visits” (this reason was even cited by 33% of women whose prenatal care was paid for by Medicaid or state programs), and (3) inability to get an appointment.<sup>23</sup> These data suggest that women face non-financial barriers to prenatal care.

Depression and unhappiness about pregnancy, long waiting times at clinics, fatigue, transportation, and clinic overcrowding have been identified as additional barriers to prenatal care for

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ii The 13 states were: Alabama, Alaska, Arkansas, Colorado, Florida, Georgia, Maine, North Carolina, New York (excluding New York City), Oklahoma, South Carolina, Washington and West Virginia. New York City began data collection for PRAMS in 2000. Data should be available for the city in 2003.

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low-income, urban pregnant women.<sup>24</sup> Other issues that may hinder a woman's ability to obtain prenatal care include lack of childcare, uncertainty as to whether to continue the pregnancy, substance abuse issues, and language or cultural barriers. For some pregnant women, basic issues such as trying to obtain food or shelter may take precedence over prenatal care.

### **Study Objectives**

In 1992 the New York City Department of Health's Bureau of Maternal, Infant and Reproductive Health (formerly the Bureau of Maternity Services and Family Planning) began a biennial to triennial telephone survey to assess the ability of uninsured, undocumented women to obtain an appointment for prenatal care at facilities in the city licensed to provide care. The objective is to identify barriers that women face in attempting to obtain prenatal care. The survey results are used to develop recommendations to increase access to prenatal care. For example, the 1992 survey was conducted in both English and Spanish and the recommendations from the survey led to the hiring of bilingual clerical staff in Health and Hospital Corporation (HHC) facilities to increase access for Spanish-speaking women seeking prenatal care.

The most recent survey, completed in 1998,<sup>25</sup> identified multiple unnecessary administrative barriers such as the need to make a separate registration visit, the need to be screened by PCAP or financial director, and the need to repeat a pregnancy test. To determine whether these barriers were the result of the lack of knowledge and training of the telephone clerks or a reflection of the site's policies, a follow-up survey with facilities that did not grant appointments for these reasons was completed. The response rate for the follow-up survey was 88 percent. Of the facilities

whose barrier was pre-registering, 59% stated that the need to register before obtaining prenatal care was not a site policy. Of the facilities that denied an appointment because the women needed to meet with a PCAP or financial director first, 92% stated that this was not their official policy. Of the facilities that failed to grant appointment because women needed to repeat a pregnancy test, 92% said that this was not their policy. The follow-up survey concluded that inconsistencies between staff practices and official policies existed. Recommendations for eliminating barriers were provided to site administrators and many reported that they would train their staff to eliminate the barriers. This report aims to examine barriers to prenatal care in 2001, specifically, to determine if the same barriers still exist.

### **METHODS**

The 2001 Prenatal Care Appointment Survey was administered over the phone to all 140 facilities in New York City that are licensed to provide prenatal care under Article 28 of the New York State Health Code. These facilities were either (1) Community Health Clinics (federally funded Section 330 clinics), (2) public clinics (HHC Diagnostic and Treatment Centers and other publicly funded clinics), (3) private clinics, (4) HHC hospitals (public hospitals), or (5) voluntary hospitals. For analysis, community health clinics, public clinics, and HHC hospitals were grouped as 'public' facilities; private clinics and voluntary hospitals were grouped as 'private'. This grouping into public and private facilities is slightly different than the previous survey years, where analysis was presented by each of the five categories.

To conduct the survey, a staff member posed as a 26 year-old single woman in her ninth week of

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pregnancy, working as a domestic without insurance attempting to make an appointment for prenatal care. If asked, the caller stated that she had written confirmation of pregnancy from one of the Department of Health's free pregnancy testing walk-in clinics. She also stated that she was residing in the country illegally.

Each survey began with the caller introducing herself with the phrase "I'm pregnant, do you provide prenatal care?" If the facility provided prenatal care, the caller asked if she could make an appointment. If she was not able to make an appointment, the reason for her inability to do so was noted and the survey was ended. If the clerk responded that the caller could make an appointment, the survey continued and the caller sought an appointment on the first available date.

Subsequent questions determined if the site had weekend or evening appointments, if being uninsured posed a problem, if the facility had a sliding fee scale, if they accepted Medicaid, and what the cost of the first visit would be. If the clerk quoted a price, the caller asked if it included laboratory tests and a sonogram. Other questions were designed to find out if the facility was a PCAP facility or if the facility had a program to assist low-income women with paying for prenatal care. The caller asked the clerk, "Do you have a program to help people like me who don't have money to pay for the prenatal care visits?" If the clerk answered yes, the caller tried to find out how to qualify for the program and what documents were necessary for qualification. The caller ended the survey by stating she was undocumented (i.e., did not have a visa, social security card, or green card) and asked if that would be a problem.

Attempts to reach a given facility were separated by at least three hours and no more than two

attempts were made on a particular day. Repeat attempts were not made during the hours of 12 p.m. and 1 p.m. to account for potentially reduced staff during lunch hours. If the telephone was not answered after 10 rings, if the caller was put on hold for more than five minutes, or if the caller was told to leave a message or got a recording to leave a message, the attempt was considered 'unsuccessful' and the facility was called back at a later time. If the caller could not get through to the facility after four attempts (i.e., the phone was busy, there was no answer, the caller was put on hold for more than five minutes or asked to leave a message) the site was classified as 'inaccessible' by telephone.

Data were entered and analyzed using SPSS software. The waiting time to get an appointment was calculated by counting the number of days between the date of the call and the date of the appointment. The dates of the appointment and call were included in the calculation but Sundays and holidays were excluded from the waiting time calculation, as many clinics do not operate on these days. As such, the waiting time may be a conservative estimate of the actual number of days the woman would need to wait to see a health care provider.

To facilitate comparison across survey years, the questions have been kept the same since the inception of the survey in 1992. In some years however facilities were called in English and Spanish, while in other years (including the present survey) they were called only in English. This was dependent primarily on the availability of bilingual staff to conduct the survey. In the 1998 survey, 64 of the facilities called in English did not provide an appointment for prenatal care. Sixty (93.9%) of these facilities were included in the present survey and a comparison was made of the 1998 and 2001 results for these facilities.

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## RESULTS

### Accessibility

A total of 140 facilities were called (67 public, 73 private) between April and June of 2001. Of these facilities, 130 (92.9%) were accessible by telephone. Of those that were accessible, 73.1% were reached on the first attempt, and 92.3% were accessible by one or two phone calls. Callers were able to make appointments at 79 (56.4%) of the 140 clinics called (Table 1). The funding source of the facility (public v. private) did not affect the likelihood of obtaining an appointment (OR=1.15, 95% CI 0.56, 2.37).

The most frequent reasons for not being able to grant the caller an appointment were the need to talk to a PCAP or financial director (21.6%), the need to repeat a pregnancy test at the clinic (21.6%), and the need to register first (19.6%) (Table 1). Reasons varied by funding source of the facility (this analysis was not completed in the 1998 survey). For public facilities, retaking a pregnancy test was the most common reason for not granting an appointment, stated by 37.5% of facility clerks but only 7.4% of clerks at private sites. The need to talk to a PCAP or financial director was the most common reason for the inability to obtain an appointment at private sites, cited by 33.3% of clerks, but only by 8.3% of clerks at public facilities.

Of the 60 facilities that did not provide appointments in the 1998 survey that were also contacted for the 2001 survey, 29 (48.3%) granted appointments in the present survey and 2 (3.3%) were inaccessible by phone (Table 2). Of the remaining 29, 12 (41.4%) did not grant appointments and gave the same reasons as in the 1998 survey (need to repeat a pregnancy test, need to

meet with a PCAP/financial advisor, or need to register in person), and 17 (58.6%) did not grant appointments but gave different reasons.

### Waiting time

In the present survey, the average waiting time between the call date and the appointment date was 8.3 days, with a range of 2-27 days (Table 1). Private facilities on average had longer waiting times (9.9 days) than public facilities (7.3 days).

### Financial Assistance

The majority of facilities reached (84.8%) reported having a program to assist low-income or uninsured women with payment for prenatal care (Table 3). Ten percent of the clerks stated that they did not know if their facility had a financial assistance program and four (5.1%) facilities said they did not have a program. When grouping 'no' with 'don't know', private facilities were less likely to report having a financial assistance program (OR=0.46, numbers too small for significance testing). Among PCAP facilities, 93.2% responded that they had a prenatal care financial assistance program and one clerk responded incorrectly, stating that they did not have a program to help uninsured women. Three clerks (5.1%) at PCAP centers did not know whether their facility offered a prenatal care financial assistance program.

Of the 79 facilities that granted an appointment, 61 were asked whether they had a sliding fee scale. It was not possible to ask all questions to all facilities, as clerks often rushed women off the phone once the appointment was made. Of the 61 facilities asked, 34 (55.7%) of the clerks reported having a sliding fee scale program, 16.4% stated they did not have one, 16.4% did not know if they had one, and 11.5% did not answer the question

when asked (Table 3). When grouping ‘no’ and ‘don’t know’ responses, private facilities were more likely to report having a sliding fee scale (OR=2.24, numbers too small for significance testing).

Of the 79 facilities that granted an appointment, 62 were asked whether they accepted Medicaid for full payment (Table 3). The majority

of facilities (93.5%) reported accepting Medicaid for full payment, however, this varied by funding source. All public facilities stated that they accepted it compared to 88.2% of private facilities (the remainder did not know if they accepted Medicaid for full payment).

Of the 79 facilities that granted an appointment, 72 were asked, “How much will the first

**Table 1.**

<b>APPOINTMENT OUTCOME AND WAITING TIME, BY TYPE OF FACILITY, 2001</b>						
	<b>Public</b>		<b>Private</b>		<b>Total</b>	
	<b>N</b>	<b>(%)</b>	<b>N</b>	<b>(%)</b>	<b>N</b>	<b>(%)</b>
<b>Yes</b>	39	58.2	40	54.8	79	56.4
<b>No</b>	24	35.8	27	37.0	51	36.4
<b>Inaccessible</b>	4	6.0	6	8.2	10	7.1
<b>Total</b>	67	100.0	73	100.0	140	100.0
<b>REASON FOR NOT GRANTING AN APPOINTMENT</b>						
<b>Talk to PCAP/Financial Dir.</b>	2	8.3	9	33.3	11	21.6
<b>Take their pregnancy test</b>	9	37.5	2	7.4	11	21.6
<b>Register first</b>	7	29.2	3	11.1	10	19.6
<b>See a nurse for screening</b>	3	12.5	2	7.4	5	9.8
<b>Apply for Medicaid</b>	0	0.0	5	18.5	5	9.8
<b>Other</b>	1	4.2	4	14.8	5	9.8
<b>Talk to social worker</b>	1	4.2	1	3.7	2	3.9
<b>Attend an orientation</b>	1	4.2	0	0.0	1	2.0
<b>Make appointment in person</b>	0	0.0	1	3.7	1	2.0
<b>Total</b>	24	100.0	27	100.0	51	100.0
<b>WAITING TIME IN DAYS BETWEEN DATE OF CALL AND DATE OF APPOINTMENT</b>						
<b>Mean</b>	7.3		9.9		8.3	
<b>Range</b>	2-20		2-27		2-27	

**Table 2.**

<b>APPOINTMENT RESULTS IN 2001 FOR FACILITIES WHO DID NOT PROVIDE APPOINTMENTS IN 1998 SURVEY</b>		
	<b>2001</b>	
	<b>N</b>	<b>(%)</b>
<b>APPOINTMENT MADE IN 2001</b>		
<b>Yes</b>	29	48.3
<b>No</b>	29	48.3
<b>Inaccessible</b>	2	3.3
<b>Total</b>	60	100.0
<b>REASON FOR NOT MAKING AN APPOINTMENT</b>		
<b>Same Reason as in 1998</b>	12	41.4
<b>Different Reason</b>	17	58.6
<b>Total</b>	29	100.0

Table 3.

<b>FINANCIAL ASSISTANCE, COST AND IMMIGRATION STATUS BY TYPE OF FACILITY, 2001</b>						
	<b>Public</b>		<b>Private</b>		<b>Total</b>	
	<b>N</b>	<b>(%)</b>	<b>N</b>	<b>(%)</b>	<b>N</b>	<b>(%)</b>
<b>AVAILABILITY OF PRENATAL CARE FINANCIAL ASSISTANCE PROGRAM</b>						
Yes	35	89.7	32	80.0	67	84.8
No	1	2.6	3	7.5	4	5.1
Don't Know	3	7.7	5	12.5	8	10.1
Total	39	100.0	40	100.0	79	100.0
<b>REPORTED AVAILABILITY OF PRENATAL CARE FINANCIAL ASSISTANCE PROGRAM AMONG PCAP FACILITIES</b>						
Yes	29	93.5	26	92.9	55	93.2
No	0	0.0	1	3.6	1	1.7
Don't Know	2	6.5	1	3.6	3	5.1
Total	31	100.0	28	100.0	59	100.0
<b>AVAILABILITY OF SLIDING FEE SCALE</b>						
Yes	12	42.9	22	66.7	34	55.7
No	7	25.0	3	9.1	10	16.4
Don't Know	4	14.3	6	18.2	10	16.4
No Response	5	17.9	2	6.1	7	11.5
Total	28	100.0	33	100.0	61	100.0
<b>ACCEPTANCE OF MEDICAID FOR FULL PAYMENT</b>						
Yes	28	100.0	30	88.2	58	93.5
Don't Know	0	0.0	4	11.8	4	6.5
Total	28	100.0	34	100.0	62	100.0
<b>COST OF FIRST VISIT</b>						
No charge/don't worry (contingent on PCAP acceptance)	17	53.1	23	57.5	40	55.6
Sliding scale fee	7	21.9	10	25.0	17	23.6
Regular price	4	12.5	5	12.5	9	12.5
Don't Know	4	12.5	1	2.5	5	6.9
No Response	0	0.0	1	2.5	1	1.4
Total	32	100.0	40	100.0	72	100.0
<b>RESPONSE TO WHETHER BEING UNDOCUMENTED POSED A PROBLEM</b>						
Yes	0	0.0	2	5.4	2	2.7
No	30	81.1	25	67.6	55	74.3
Don't Know	7	18.9	10	27.0	17	23.0
Total	37	100.0	37	100.0	74	100.0

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visit cost?" Over half of the clerks (55.6%) responded that there would be no charge for the first visit because the caller would likely receive PCAP (Table 3). Another 23.6% said the facility had a sliding scale fee. Only 13 facilities actually quoted a price. Of these, three sites quoted a range of prices depending on income, and ten quoted an exact price. Among the facilities that gave ranges of cost, the minimum price quoted was \$30 and the maximum price was \$175. For the sites that quoted an exact figure, the mean was \$79.83 and the range was \$40-\$195.

Out of the 79 facilities that granted appointments, 74 were asked whether being undocumented posed a problem. The majority of clerks (74.3%) stated this was not a problem and 23.0% didn't know if it would be an issue. Two clerks stated that being undocumented could pose a problem but did not cancel the appointments. Therefore, no one was denied an appointment because of immigration status.

## **CONCLUSIONS AND RECOMMENDATIONS**

A crucial factor in prenatal care access is the ability to schedule an appointment for care. In the present survey, 92.3% of the facilities were accessible by telephone with one or two phone calls. This is similar to the 1998 results, where 89.0% of the facilities called in English were reached with two calls. In 2001, appointments were made at 56.4% of the sites, compared to 49.6% in 1998. Although this is an improvement, the difference is not significant ( $p = 0.29$ ). These results indicate that contacting facilities by telephone is not a significant barrier, but that once clerks are reached there are barriers to securing an appointment.

The barriers most frequently cited in the current survey were the need to first talk to a PCAP or financial director (21.6%), to repeat a pregnancy test (21.6%), or to register before an appointment could be made (19.6%). These were also the most common barriers reported in the 1998 and 1996 surveys. It is important to note that among the facilities that did not grant appointments in 1998, 48.3% granted them in 2001, suggesting that the follow-up survey with site administrators may have had a positive impact. Despite this success, 41.4% of the facilities that did not give appointments in either year provided the same reasons for their inability to grant an appointment, suggesting that institution policies, not only staff training, may be creating barriers to prenatal care.

The need to make an extra visit before being able to see a medical provider places an additional burden on women who may need to take time off from work, get childcare, or make arrangements for transportation. This initial visit requirement also further delays a woman's entry into prenatal care. One solution to the requirements for registration or for meeting with a PCAP/financial director is to mail the patient a registration packet or a list of required documents and permit her to submit the paperwork at the time of the appointment. Another option is to allow the patient to talk to a financial director or register one-half hour before the appointment with the health care provider.

The requirement for a repeat pregnancy test before an appointment can be made is unreasonable because the caller stated that she had a Department of Health document confirming the pregnancy. To eliminate this barrier, clinicians can do a urine dipstick for pregnancy during the first prenatal care appointment to reconfirm the diagnosis.

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Waiting time for an appointment was 8.3 days in 2001, compared to 6.7 days among facilities called in English in 1998. Although eight days is not an extremely long period of time, it is a 23.9% increase from the previous year. It is therefore recommended that clinics increase their accessibility by offering a weekend day and/or evening clinic for working women who might be afraid to jeopardize their jobs by asking for time off to see a doctor.

Reported availability of financial assistance programs for prenatal care has been relatively stable over the past few years. In 2001, 84.8% of facilities reported having such programs available compared to 80.0% in 1998. However, twenty-three percent fewer facilities reported having a sliding scale fee in 2001 (55.7%) compared to 1998 (72.0%), which could pose a problem for women who do not qualify for PCAP under Medicaid.

As cost is likely to be a significant barrier for many women seeking prenatal care, it is also problematic that many clerks did not know if their facility had a financial assistance program or a sliding fee scale option, and did not know the cost of a prenatal care visit. Every effort must be made to reassure low-income women that financial assistance is available to encourage their entry into the health care system.

As in the 1998 survey, no one in the current survey was denied an appointment because of her immigration status. A significant number of clerks however, did not know (23.0%) or thought that being undocumented might be a problem (2.7%), but they granted appointments.

The results of this study indicate that administrative barriers continue to create unnecessary roadblocks, which may delay entry into prenatal care. These barriers are likely to be both policy related and the result of poor staff training, as evidenced by similar responses given among facilities not granting appointment in both the 1998 and 2001 surveys. There are certainly additional barriers to prenatal care that low-income women in the city face that were not examined in this study. For example, we know from the 1998 study that language is a significant barrier.<sup>25</sup>

Other potential barriers include long waiting time in clinics, insensitivity of staff, belief that prenatal care isn't useful, fear of authority, fear of deportation, previous bad experience with the health care system, and lack of childcare or time off work to go to prenatal care visits. Although cultural and psychosocial barriers to prenatal care may be difficult to address, institutional barriers can be eliminated with on-going training of clerks and modification of facility policies. Further efforts must be made to identify and resolve issues that interfere with timely entry into prenatal care.

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