

Articles

Effect of California's Proposition 187 on the Use of Primary Care Clinics

JOSHUA J. FENTON, MD, *San Francisco, California*; NANCY MOSS, PhD, *Union City, California*; and HEIDI GHATTAS KHALIL, MSW; and STEVEN ASCH, MD, MPH, *Los Angeles, California*

California's ballot proposition 187, passed by the voters in November 1994, threatened to discontinue undocumented immigrants' eligibility for most health services while mandating that health care professionals report suspected undocumented patients to authorities. Although the proposition has not been put into practice, reports suggest that its passage was associated with a decline in the use of health services by some groups. To assess the effects of the passage of Proposition 187 on the use of primary care services, we surveyed a representative sample of California clinics serving low-income groups (n = 129). Using a mailed questionnaire and phone interviews with clinic directors, we obtained qualitative and quantitative data regarding the effects of the passage of the proposition on clinic use. Among primary care clinics statewide and clinics serving predominantly Latino patients, we detected no significant decline in total monthly visits following the election. Nevertheless, half of clinic directors (51%) thought that the number of clinic visits declined after the passage of Proposition 187, and many directors thought that the deterrent effects of the election persisted for weeks to months after the election. Whereas the number of visits probably declined at some clinics, only a small minority of patients at most primary care clinics could have been deterred from seeking care after the passage of Proposition 187.

(Fenton JJ, Moss N, Khalil HG, Asch S: Effect of California's Proposition 187 on the use of primary care clinics. *West J Med* 1997; 166:16-20)

In November 1994, a large majority of California voters passed ballot proposition 187, which would have made undocumented immigrants ineligible for most health services.¹ Under Proposition 187, undocumented immigrants would have been eligible only for state-funded emergency medical care and selected services deemed essential to protect the public health. The proposition would also have required health care professionals to report suspected undocumented immigrants to the Immigration and Naturalization Service.

Although the implementation of Proposition 187's health provisions was immediately forestalled by legal challenges, its passage was followed by widespread anecdotal reports of the decreased use of health services (M. Cabanatuan, "Clinic Use Drops: Fewer Hispanics in Prenatal Care: False Rumors from Prop. 187 Blamed," *The Modesto Bee*, March 22, 1995, p 1), in addition to reports of adverse clinical consequences following patient delays in seeking health care (L. Romney, "Youth Dies as Medical Treatment Is Delayed," *Los Angeles Times*, November 23, 1994, p 3). A recent study per-

formed in San Francisco County demonstrated a substantial decrease in the use of outpatient mental health services by young Hispanics following the election,² and researchers at Los Angeles County's largest county hospital recently reported a decline in the use of ophthalmology clinic services after the passage of Proposition 187.³ These reports have raised concerns that patient fears of consequences related to Proposition 187 may have led to a statewide decline in health service use among California immigrants, despite efforts by most county health departments to disseminate accurate information regarding the proposition's legal status. Because the proposition targeted the predominantly poor undocumented immigrant population,^{4,5} health clinics serving low-income communities were likely sites of any decline in service use that may have occurred after the passage of Proposition 187. To date, however, there have been no systematic examinations of the statewide effects of the passage of Proposition 187 on the use of health services.

We surveyed the directors of a statewide representative sample of primary care medical clinics serving low-

From the Department of Family and Community Medicine, University of California, San Francisco (Dr Fenton); Northern California Cancer Center, Union City (Dr Moss); and the Department of General Internal Medicine, Los Angeles County and University of Southern California Medical Center (Ms Khalil and Dr Asch).

This research was funded by the James Irvine Foundation, with additional funds provided by the Southern California Studies Center.

An earlier version of this paper was presented at the annual meeting of the American Public Health Association in November 1995.

Reprint requests to Joshua J. Fenton, MD, Dept of Family and Community Medicine, San Francisco General Hospital Medical Center, Bldg 80, Ward 83, 995 Potrero Ave, San Francisco, CA 94110.

income groups in California to gather data regarding the effect of the passage of Proposition 187 on the use of primary care services. We chose to examine primary care services because primary care clinics are often the most accessible source of medical care for California immigrants. Our methods generated quantitative and qualitative data regarding the proposition's effects on clinic visits and individual users of primary care services. Because the clinic sample is representative of clinics serving California's low-income population, our data provide insight into the statewide effects of the passage of Proposition 187 on the use of primary care services.

Methods

Clinic Sample

We constructed a sampling frame of all public and not-for-profit primary care medical clinics serving predominantly low-income groups in California by updating a previous comprehensive database of primary care clinics.⁶ Because the database includes all not-for-profit or publicly funded primary care clinics serving adults in California in 1990, we updated it by including additional medical clinics listed in the most recent state survey of health care facilities (1993) for indigent patients⁷ conducted annually by the California Office of Statewide Health Planning and Development. The sampling frame consisted of 446 clinics representing each of California's counties, from which we selected a random sample of 145. The sampling probability of each clinic was weighted by its annual number of patient visits in 1993, so clinics with larger numbers of annual patient visits had proportionally larger probabilities of inclusion in the sample. Because we sought a representative sample of clinics providing primary care medical services to predominantly low-income patients, we later excluded responding clinics if half or more of the clinic visits were for non-primary care medical services (such as dialysis, rehabilitation, mental health, or substance abuse counseling) or if half or more of a clinic's patients had private health insurance.

Data Collection

We administered separate instruments for mail surveys and follow-up phone interviews of the clinic directors between July and August 1995. The three-page mailed questionnaire contained closed-ended items requesting data on the clinic characteristics, total visits in the months surrounding the passage of Proposition 187, and the perceived effects of the passage of Proposition 187 on clinic service use. In particular, we requested total monthly visit data for October 1993 to March 1994 and October 1994 to March 1995, and each director was asked to respond to the closed-ended items: "Did you or your clinic staff notice any change in the number of patient visits after the passage of Proposition 187?" and "Have you heard of any individual who delayed seeking care at your clinic due to fears related to Proposition 187?"

After the completed mailed questionnaire was received, trained interviewers conducted a semistructured phone interview with each responding director that was designed to elicit qualitative details regarding the effects of Proposition 187 on clinic patients and their use of services. Interviewers asked directors who were aware of a person who delayed care, "Have you or your staff observed any clinical consequences related to individuals delaying services due to fears related to Proposition 187?" A research assistant and one of us (J.J.F., H.G.K.) checked each returned questionnaire for completeness and the validity of all responses.

Data Analysis

Quantitative analyses. We analyzed the clinic visit data to test the hypothesis of a relative decline in total visits to primary care clinics serving low-income groups in November 1994 (the month of the election) compared with October 1994. We also tested the hypothesis that larger declines in visits occurred at clinics serving larger groups of Latino patients.

Before analyzing clinic visit data, we standardized the total number of monthly visits at each clinic from October 1994 through March 1995 as a percentage change relative to the same month in 1993 to 1994, which adjusted for clinic size and seasonal variation in clinic use. We then tested the hypothesis of a statewide decline in November using a one-tailed *t* test, comparing the mean percentage change in total visits in November and October. This test of significance had 95% power to detect an 8% relative decline in November, with a one-tailed α of .05.⁸

We conducted similar analyses after stratifying the clinics into tertiles by the proportion of Latino patients served at each clinic. We then performed two hypothesis tests comparing the mean percentage change in total visits in November and October 1994 at clinics serving the greatest proportions of Latino patients (>65% and between 30% and 65% Latino patients served). These hypothesis tests had 90% power to detect a 12% relative decline in November with a one-tailed α of .05.⁸

Using directors' responses to closed-ended survey items, we calculated the proportion of clinic directors who perceived a decrease in the total number of visits after the election and who were aware of a person who delayed care because of fears related to Proposition 187. We then used two-tailed tests of significance (*t* test or χ^2) to compare the characteristics of clinics according to whether their directors perceived a decrease in total visits after the passage of Proposition 187.

Analysis of qualitative data. We used techniques of thematic analysis to identify trends in directors' responses to interview questions.⁹ Responses were categorized by thematic content, and illustrative quotes or anecdotes were selected to highlight recurrent themes of directors' comments. In evaluating directors' responses to open-ended questions regarding the clinical consequences of patient delays in care, we defined a "clinical consequence" as a patient delay that resulted in medically pre-

ventable pain, suffering, hospital admission, or death.

Results

Of 145 sampled clinics, 129 met the criteria for final inclusion in the survey. Of the 16 ineligible clinics, 10 provided predominantly dental, mental health, or substance abuse services; 4 clinics had closed; 1 clinic was a private practice serving mostly privately insured patients; and 1 was a children's shelter. In the final sample of 129 clinics, 34 of 58 California counties were represented. Although we sampled 29% of the clinics in the sampling frame, clinics in the final sample were the sites of 50% of the annual visits in 1993 to clinics in the sampling frame.

We obtained mail survey responses from 121 of the 129 eligible clinics (94%) and conducted follow-up phone interviews with all but one director of responding clinics. We obtained complete monthly visit data for 90 of 129 eligible clinics (70%) but excluded data from two clinics where directors indicated that clinic visits had declined substantially after the election for reasons other than Proposition 187 (such as staffing or program changes). Visit data from a third small clinic was also excluded because it disproportionately affected the mean percentage change in visits during the months surrounding the election. After these exclusions, data from 87 of 129 clinics were available for the final analysis (67%). Clinics where directors did and did not provide total visit data were not significantly different with regard to setting, the ethnicities of their patient populations, types of clinical services provided, or the proportion where directors perceived a decrease in total visits following the passage of Proposition 187.

The clinics varied widely in terms of the ethnic composition of their patient populations, the clinical services provided, and the annual number of patient visits (Table 1). Although some clinics served predominantly white or African-American patients, most clinics served a substantial proportion of Latino patients. Similarly, a sizable proportion of patients at most clinics did not speak English as a primary language. As expected, a small fraction of most clinics' patients were privately insured.

Effect on the Monthly Number of Clinic Visits

Relative to the same month in the previous year, the total number of visits to responding clinics increased by a mean of 7.0% in October and a mean of 4.8% in November 1994 (Table 2), and the increase in the total number of visits in November (after the election) was not significantly less than that in October (before the election) ($P = .11$, 1-tailed). Similarly, there was no substantial statewide decline in the number of visits from December 1994 to March 1995 after the election.

At clinics serving predominantly Latino patients (>65% of total visits by Latino patients), the total number of visits increased by a mean of 12.7% in October and a mean of 7.6% in November 1994 relative to the same months in the previous year. Thus, although the

TABLE 1.—Characteristics of Responding Clinics (n = 121)

Variable (No. of Clinics With Complete Data)	Mean %	(SD)*
Distribution of patient ethnicities by clinic (n = 121)		
African American	9	(13)
Asian	9	(18)
Latino	47	(30)
White	32	(27)
Other ethnicities	3	(7)
Distribution of clinical services by clinic (n = 117)		
Geriatrics	10	(16)
General adult medicine	36	(23)
Prenatal care or obstetrics	14	(14)
Family planning	11	(10)
Pediatrics	25	(17)
Other services†	4	(8)
Patients with private health insurance (n = 117)	6	(8)
Patients not speaking English as primary language (n = 115)	45	(28)
Annual visits (n = 115)	28,690	(31,190)

SD = standard deviation

*Because of rounding, the sum of mean percentages may not total exactly 100%.

†Other services include mental health, dental, and so forth.

increase in November was significantly less than that in October ($P = .04$, 1-tailed), clinics serving a greater proportion of Latinos experienced substantial net annual growth in total visits despite Proposition 187. Similar mean increases in the number of visits in October and November occurred at clinics serving 30% to 65% Latino patients, but the mean increase in November was not significantly less than in October ($P = .13$, 1-tailed). In contrast, the total number of visits at clinics serving a smaller proportion of Latinos (<30% Latino patients) decreased from October 1994 to January 1995 relative to the previous year.

Perceived Effects on Clinic Service Use

In response to the question, "Did you or your clinic staff notice any change in the number of patient visits after the passage of Proposition 187?" half of clinic directors (51%) indicated that patient visits decreased following the election (Table 3). Of these 62 clinic directors, nearly all (97%) specified that the number of visits by Latino patients decreased, and directors of clinics serving a greater proportion of Latino patients were more likely to have perceived a decrease in patient visits after the election ($P < .001$). The median duration of the perceived decrease in the number of patient visits was seven weeks, although 17 directors (14%) indicated that the decrease in the number of visits persisted up to the time of the survey eight to nine months after the election. Whereas many directors thought that the passage of Proposition 187 deterred only a few patients from receiving care, some directors' comments suggested sizable declines in patient visits. For example, one director said, "The day after the election . . . the waiting room was empty. We have four providers who are usually too busy to see everyone. For the weeks following the election, they weren't busy at all."

TABLE 2.—Monthly Mean Percentage Change in Total Visits at California Primary Care Clinics, October 1994 through March 1995 (Relative to Same Months in Previous Year)

Clinics by Size of Latino Population (Tertiles)	Oct	Nov	Dec	Jan	Feb	Mar
>65% Latino patients (n = 29)	12.7*	7.6*	1.4	5.1	7.2	3.5
30% to 65% Latino patients (n = 28)	11.4†	7.5†	4.4	0	4.6	-0.6
<30% Latino patients (n = 30)	-2.7	-0.5	-6.0	-3.3	4.1	1.6
All clinics (n = 87)	7.0‡	4.8‡	-0.2	0.5	5.3	1.5

*P = .04, 1-tailed. †P = .13, 1-tailed. ‡P = .11, 1-tailed.

When asked, “Have you heard of any individual who delayed seeking care at your clinic due to fears related to Proposition 187?” half of clinic directors (51%) indicated that they were aware of such a patient. Overall, two thirds of directors (65%) either perceived a decline in visits or were aware of a person who delayed care due to fears related to the proposition. Directors commonly remembered patients who chose not to seek health care because of the fear of deportation or misinformation regarding the legal status or content of the proposition. Several directors recalled clinic patients who believed Proposition 187 applied to both legal and undocumented immigrants. Nevertheless, many directors thought that most clinic patients were well informed with regard to the uninterrupted availability of clinic services after the passage of Proposition 187.

In response to an open-ended question regarding the clinical consequences of patient delays in receiving care, six directors (5%) reported clinical consequences of delays in care. One case involved a young man who refused care for an abscess and later died of septic shock. In another case, two parents delayed obtaining care for their young son’s infected hand laceration, which ultimately required surgical treatment at a tertiary medical center. Another clinical consequence involved an undocumented man who delayed care for nearly a month after sustaining bone fractures in an accident. The director of the clinic where he was finally served said, “[He] was afraid to see the doctor because he was afraid of Prop 187. . . . He had just been drinking a lot to kill the pain.”

Discussion

Although nearly two thirds of directors of primary care clinics serving low-income groups in California thought that Proposition 187 deterred some persons from seeking care at their clinics, we detected no substantial effect of the passage of Proposition 187 on total clinic visits. Given the high power of our analysis to detect a small (8%) relative decline in the number of clinic visits, our analysis provides convincing evidence that the passage of Proposition 187 was not associated with a sizable decline in patient visits to California primary care clinics. Indeed, despite the passage of Proposition 187, total visits to clinics serving predominantly Latino populations increased substantially in the month of the election compared with the previous November. Although the passage of Proposition 187 may have stemmed the more robust

TABLE 3.—Clinic Directors’ Responses to Survey Items Regarding the Effect of the Passage of Proposition 187 on Patients’ Use of Services, Delays in Care, and Adverse Consequences of Delays (n = 121)

Outcome Perceived	Clinics, %
Decrease in visits after the passage of Proposition 187	51
Aware of a patient who delayed care	51
Either a decrease in visits or a patient delay	65
Aware of a clinical consequence of a delay in seeking care*	5

*Based on directors’ responses to open-ended survey items.

growth in total visits that these clinics experienced in October, Proposition 187’s effect on total visits at primary care clinics serving large Latino populations was almost certainly small relative to other factors affecting clinic service use.

The results of this survey should allay some concern regarding large deterrent effects of Proposition 187 on immigrants’ use of health services. Despite reports of sizable declines in health service use among some groups,² our data suggest that most immigrant patients were aware that clinic services remained available despite the election. The extensive efforts of many community organizations and health departments to educate patients regarding the legal status of Proposition 187 may have contributed substantially to patients’ awareness of the uninterrupted availability of clinic services following the election.

A seeming discrepancy exists between our analysis of clinic visit data and the clinic directors’ perceptions of declines in patient visits following the passage of Proposition 187. Half of directors perceived a decrease in patient visits after the election, and half indicated that they knew of a patient who delayed receiving care because of the proposition. If large numbers of patients were deterred from care after the election, some decline in the total number of visits should have occurred in November 1994 relative to October. Some may infer from these data that directors were mistaken in their perceptions and attributed incidental fluctuations in service use to Proposition 187. Although this may have occurred in some instances, a minority of patients at many primary care clinics in California probably chose to delay care in the context of Proposition 187, and clinic staff probably noticed the absence of these patients. Recalling these patients, the directors at these clinics may have cited decreases in the number of patient visits in response to

our survey when in fact relatively few of their patients were deterred from seeking care.

Alongside other evidence suggesting sizable local declines in health service use after the November 1994 election, our study suggests that the passage of Proposition 187 probably had considerable deterrent effects among some groups but a relatively small effect among most health service users. For example, researchers in San Francisco have documented a sizable decline in Hispanics' use of mental health services after the passage of Proposition 187,² and investigators in Los Angeles recently reported a decline in Hispanics' use of county ophthalmology services after the election.³ In another report, the public health department in the largely rural Stanislaus County cited a 50% decline in Hispanics' use of county prenatal services in the five months after the election (M. Cabanatuan, "Clinic Use Drops," *The Modesto Bee*, March 22, 1995, p 1). Together these reports strongly suggest that Proposition 187 had sizable local effects on Hispanics' use of a range of health services in both urban and rural settings. Because we detected no statewide decline in primary care visits, however, our study suggests that substantial declines in health service use after the passage of Proposition 187 were probably the exception rather than the rule. It remains uncertain why Proposition 187 may have had strong deterrent effects in some locales and not others with similar demographic, geographic, and economic characteristics. Alternatively, Proposition 187 may have more strongly deterred the use of certain health services, such as prenatal care and mental health, while having little effect on the use of primary care services.

Several limitations of our study warrant recognition. First, our monthly clinic visit data were not adequate to detect short-term declines in clinic visits occurring in the two weeks following the passage of Proposition 187. In addition, these data were insufficient to control for other trends in clinic visits that could have obscured any effect of the election. Second, much of our data relied on the perceptions of clinic directors, which were subject to both personal and recall biases. These data nevertheless represent the perspectives of senior practitioners and managers on the front lines of patient care and warrant consideration alongside other evidence. Finally, although our sample was comprehensive and our response rate high, we did not include several types of clinics in our sampling frame, including private physicians' offices, tribal health clinics, and pediatric or obstetric and gynecology clinics operated by city, county, state, or federal governments or in affiliation with medical training institutions. Our survey results, therefore, generalize only to

primary care clinics serving adults specifically or providing full-spectrum primary care, including pediatrics, adult medicine, and obstetrics and gynecology.

Conclusions

The passage of Proposition 187 did not substantially affect the number of visits to primary care clinics serving low-income groups in California, although individual patient delays in obtaining care were widely perceived by clinic directors. Along with other evidence, our study suggests that the passage of Proposition 187 had substantial deterrent effects among some groups in some locales but a comparatively small effect in most communities. Some components of California's Proposition 187, such as its mandate that service providers report suspected undocumented immigrants to authorities, seem to have deterred some persons from seeking health services even in the absence of Proposition 187's implementation. In the event that Proposition 187 or similar legislation is implemented, immigrants' widespread avoidance of health services would seem inevitable, regardless of health department attempts to maintain access to emergency services and services necessary to protect the public health. Legislatures and the public should consider the possibly deleterious public health effects of policies that could engender fear among immigrants in the United States.

Acknowledgment

The following provided invaluable contributions to this study: Paula Braveman, Martha Shumway, Kristin Marchi, George Flores, Lisa Baumeister, the Pacific Institute for Women's Health, and research assistants Monica Quezada and Andrew Fenton.

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