

ORIGINAL RESEARCH

Community-Based Health Care Navigation's Impact on Access to Primary Care for Low-Income Latinos

Sonali Saluja, MD, MPH, Michael Hochman, MD, MPH, Rachel Dokko, BA, Janina Lord Morrison, MD, MPH, Celia Valdez, BA, Steven Baldwin, MS, RD, Megha D. Tandel, MPH, and Michael Cousineau, DrPH

Introduction: Despite the Affordable Care Act's insurance expansion, low-income Latinos are less likely to have a primary care provider compared with other racial/ethnic and income groups. We examined if community-based health care navigation could improve access to primary care in this population.

Methods: We surveyed adult clients of a community-based navigation program serving predominantly low-income Latinos throughout Los Angeles County in 2019. We used multivariable logistic regression models, adjusting for sociodemographic characteristics, to calculate odds ratios for differences in access to primary care and barriers to care between clients who had experienced approximately 1 year of navigation services (intervention group) and clients who were just introduced to navigation (comparison group).

Results: Clients in the intervention group were more likely to report having a primary care clinic than the comparison group (Adjusted Odds Ratio [aOR] 3.0, 95%CI: 1.7, 5.4). The intervention group was also significantly less likely to experience several barriers to care, such as not having insurance, not being able to pay for a visit, and not having transportation.

Conclusions: Community-based navigation has the potential to reduce barriers and improve access to primary care for low-income Latinos. In addition to expanding insurance coverage, policymakers should invest in health care navigation to reduce disparities in primary care. (J Am Board Fam Med 2022;35:44–54.)

Keywords: Access to Health Care, Affordable Care Act, Health Policy, Hispanic Americans, Los Angeles, Minority Health, Poverty, Primary Health Care

Introduction

Primary care plays a critical role in providing patients with high-quality care through disease prevention and management.¹ Yet fewer than two thirds of Latinos report having a primary care

provider.² Disparities in access to primary care are most pronounced for Latinos and persons with lower incomes.^{3–5} While having insurance is strongly associated with access to routine care, barriers such as out-of-pocket costs, narrow networks, and provider availability can impede use of necessary services.⁶ Implementation of the Affordable Care Act (ACA) significantly reduced uninsurance rates, including for Latinos and those with low

This article was externally peer reviewed.
Submitted 21 June 2021; revised 29 August 2021; accepted 9 September 2021.

From The Gehr Family Center for Health Systems Science and Innovation, Keck School of Medicine of USC, Los Angeles, CA (SS, MH, MC); Keck School of Medicine, University of Southern California, Los Angeles, CA (RD, MDT); Division of Chronic Disease and Injury Prevention, Los Angeles County Department of Public Health, Los Angeles, CA (JLM); Maternal and Child Health Access, Los Angeles County, Los Angeles, CA (CV); Division of Maternal, Child, and Adolescent Health, Los Angeles County Department of Public Health, Los Angeles, CA (SB); Department of Population and Public Health Sciences, Keck School of Medicine of USC, Los Angeles, CA (MC).

Funding: This work was supported by grants UL1TR001855 and UL1TR000130 from the National

Center for Advancing Translational Science (NCATS) of the U.S. National Institutes of Health and the Gehr Family Center for Health Systems Science and Innovation. The content is solely the responsibility of the authors and does not necessarily represent the official views of the National Institutes of Health.

Conflict of interest: Study authors have no conflicts of interest to report.

Corresponding author: Sonali Saluja, MD, MPH, IRD 323, 2020 Zonal Avenue, Los Angeles, CA 90033 (E-mail: sonali.saluja@med.usc.edu).

incomes; however, equivalent gains in access to primary care were not similarly achieved.^{5,7-10} For example, in California, in the year after the ACA's expansion, low-income adults with Medicaid (free or near-free public insurance for low-income people) were less likely to be accepted by a new doctor than in the year prior.¹¹ Clearly insurance expansion alone is not sufficient to mitigate disparities in health care access.

Aside from uninsurance, several factors may contribute to lower rates of access to primary care among low-income Latinos, including immigration status, language barriers, lower levels of education, and low rates of public and private insurance acceptance among primary care providers.¹²⁻¹⁷ In combination, these factors further exacerbate the difficulties of navigating a complex health care system.

The problem of accessing primary care is particularly acute in Los Angeles County, where almost half of the residents identify as Hispanic or Latino, and 1 in 5 live below the federal poverty level. Yet after the ACA's implementation, a third or more of residents from these communities report difficulty getting medical care when they need it.^{18,19} In addition, hundreds of thousands of undocumented immigrants living in Los Angeles are generally ineligible for comprehensive Medicaid or subsidies to purchase plans on the state's ACA marketplace.²⁰ Like most states, California's Medicaid program relies on a largely managed care system. Many residents find the complex network of managed care plans and independent provider associations challenging to navigate, further complicating their ability to get needed care.^{21,22} Qualitative interviews with Los Angeles County safety-net patients suggest that systemic barriers—long wait times for an appointment, difficulty finding an accepting provider—and gaps in knowledge about the health care system can contribute to decreased use of primary care.²³

Health care navigators can complement the ACA's coverage expansion initiatives by helping people find and use health care services.²⁴⁻²⁷ Effective programs tend to include frequent interactions between navigators and their clients.²⁸⁻³² One study of a neighborhood-based intervention to identify and provide health care resources to Latinos through community health events found that primary care use increased for study participants 1 year later.³³ This study was limited to

examining the effects of 5 health events in 2 suburban neighborhoods in North Carolina, and the pre-post outcome analysis did not include statistical testing. Yet most studies examining the impact of navigation programs have been focused on those initiated in a clinical (emergency department or hospital-based) as opposed to community setting.³⁴⁻³⁸ To our knowledge, few studies have examined how community-based navigation programs might improve access to primary care for low-income Latinos, a population with 1 of the lowest rates of primary care use in the country.

The Los Angeles County Children's Health Outreach Initiative (CHOI) program, operated by the Los Angeles County Department of Public Health, funds and coordinates health care navigation services for people of all ages. While there are many community organizations that assist with insurance outreach and enrollment, CHOI employs a multitouch model of outreach, enrollment, utilization, and retention/renewal (OEUR) to foster long-term access to health care.³⁹ CHOI's trained navigators, often recruited from the targeted communities, organize outreach events (such as community presentations on the benefits of insurance), enroll eligible clients in insurance plans, help clients make medical appointments, refer clients to social services, and facilitate insurance renewal.⁴⁰ As part of the OEUR model, navigators are trained to help clients find an appropriate primary care clinic or provider. In addition, CHOI navigators engage in several formal "touches" or follow-up calls with their clients—at 30 days, 6 months, and 11 months after intake—to ensure that their clients are receiving necessary health services. The community-based CHOI agencies served more than 10,000 people from 29 different locations throughout Los Angeles County in 2019. An internal audit of CHOI agencies showed that 75% of CHOI clients were still enrolled in health care coverage 14 months after their initial intake.⁴¹ While the CHOI agencies have demonstrated their capacity to enroll clients in health care coverage, whether they effectively help their clients access primary care and overcome barriers to health care is not known.

In this study, we examine the impact of a community-based navigation program with an OEUR model on access to primary care for a predominantly low-income Hispanic population. We also evaluate the effects of community-based

navigation on reducing specific barriers to primary care.

Methods

We conducted a quasi-experimental evaluation of CHOI navigation using surveys of CHOI clients who had received 11 to 13 months of CHOI services (intervention group) and clients who had only received an initial intake appointment with CHOI agencies (comparison group). We have 2 main outcomes: having a primary care clinic and having a regular provider. We defined a primary care clinic as a “clinic, health center, hospital clinic, doctor’s office, Kaiser or HMO where 1 goes for regular or primary care.” We defined a regular provider as 1 or more personal doctors or primary care providers, including general doctors, physician assistants, or nurse practitioners but excluding specialists. Additional outcomes included having a checkup in the past year (only asked if patients had a primary care clinic), difficulty getting medical care when needed, and having an emergency department visit in the past year that did not result in a hospitalization. Lastly, we asked participants if they experienced barriers that may have led to delaying or avoiding care, including insurance and cost-related barriers, clinic-level barriers, and knowledge barriers. All outcomes are self-reported.

Study Setting and Participants

We selected 9 community-based CHOI agencies, with 29 different sites located throughout Los Angeles County, in the study. The agencies are geographically distributed across Los Angeles and use navigators that are representative (linguistically and culturally) of the population they serve. The agencies operate independently but are funded by the Department of Public Health to conduct health care navigation as part of CHOI. In addition, the agencies use the same OEUR model, have a shared electronic record system for all clients (allowing clients to be followed across agencies and longitudinally), and have monthly meetings and trainings to ensure consistent process across agencies and sites. Clients were referred to CHOI agencies from the health care system (hospital, emergency department, clinic, or health plan) or the community (friend or family member, school, Women, Infants, and Children program, other community agencies, brochure or advertisement, Department of Public

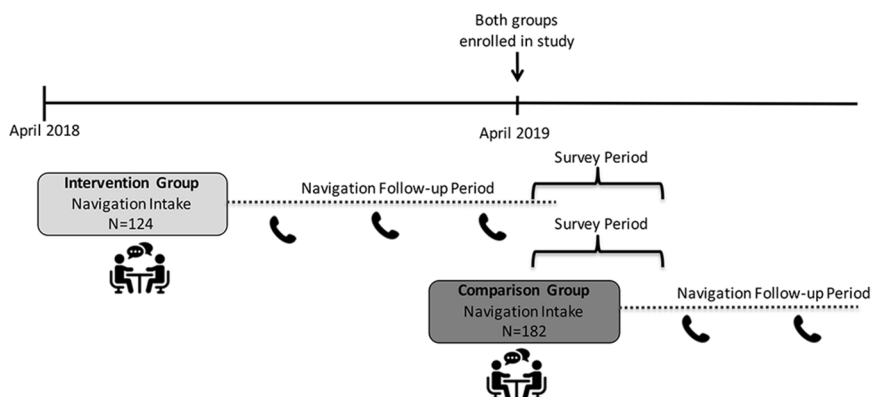
Social Services, or the Los Angeles County information hotline).

We surveyed 2 groups of CHOI clients: an intervention and a comparison group. We recruited participants in the comparison group from new CHOI clients presenting for their initial intake appointment. These clients had an intake appointment between April and October 2019 to assess their insurance and health care access needs but had not received follow-up navigation from CHOI navigators. Participants in the intervention group had their intake appointment with CHOI between February and November of 2018, 11 to 13 months before being surveyed. CHOI navigators had called these clients 30 days and then 6 months after their intake to assist with additional insurance enrollment or health care access needs. This included assisting clients with finding a clinic or primary care provider that was in their insurance plan network, language and gender concordant (if requested), and geographically accessible. Navigators may have provided additional support for services such as assistance with medical transportation, paying medical bills, or filling out medical forms, when necessary. We recruited participants in the intervention group from clients contacted as part of routine 11 to 13 month follow-up after their intake appointment.

CHOI navigators recruited both intervention and comparison group participants on a rolling basis, between April and October of 2019. Eligible study participants were CHOI clients between the ages 18 to 64, and spoke either English or Spanish (Figure 1). During recruitment, CHOI navigators assessed clients’ eligibility and collected basic demographic information including race/ethnicity, age, employment, education level, and insurance or health care coverage type. Navigators provided eligible and interested clients with a study phone number and informed them that they would receive a phone call from a research assistant within a week. After recruitment, research assistants from the study team who were trained in conducting phone surveys attempted to contact interested clients in their preferred language (English or Spanish) up to 3 different times. Participants who completed the 10 to 15 minute long survey received a \$10 gift card. All study activities were approved by the Department of Public Health’s Institutional Review Board.

Survey Design

We primarily used or modified existing validated survey questions on access to care, health care use,

Figure 1. Study design.

and general health to develop our survey instrument (see the Appendix).^{19,42} We translated the survey from English to Spanish and then back translated the questions to ensure accuracy. Questions asking about specific barriers to care had been cited in the literature or were barriers frequently observed by CHOI navigators. Surveys were reviewed by CHOI navigators, pretested with CHOI clients in both English and Spanish, and modified to improve question comprehension and increase the instrument's validity and reliability.

Statistical Analysis

We calculated differences in sociodemographic characteristics between the intervention and comparison group and compared them using a chi square (or Fisher's exact) test. We calculated unadjusted percentages of outcomes and barriers for the comparison and intervention groups. We created multivariable logistic regression models to calculate odds ratios and confidence intervals for differences in outcomes and barriers between the comparison and intervention groups. The models adjusted for age, race/ethnicity, sex, education, language, federal poverty level (FPL), employment, self-reported health status, and referral source. All tests were 2-sided with an α level set at 0.05 for statistical significance. All analyses were performed using Stata 16.1 (StataCorp, College Station, TX) and SAS 9.4 (SAS Institute, Cary, NC).

Results

We surveyed 306 participants: 182 (59%) in the comparison group and 124 (41%) participants in the intervention group (Table 1). Of the 442 clients

who were screened and found to be eligible for the study, 69% completed the survey. Response rates were similar between the comparison and intervention groups. Most participants in both groups were Hispanic and had incomes below 100% of the FPL. The majority were referred to the CHOI program from community organizations rather than from the health system. Participants in the intervention group were more likely to be 45 years or older (35% vs 22%, $P < .001$), not have completed high school (70% vs 49%, $P < .004$) and consider Spanish to be their primary language (86% vs 68%, $P < .001$) compared with the comparison group. Most chose to take the survey in Spanish.

Participants in the intervention group were 3 times more likely to report having a primary care clinic (adjusted odds ratio [AOR] 3.0, 95% CI, 1.7, 5.4) and more than 2 and a half times more likely to report having a primary care provider (AOR 2.6, 95% CI, 1.5, 4.4) compared with participants in the comparison group (Table 2). Participants in the intervention group were also 60% less likely to report having a somewhat or very difficult time getting care when they needed it (AOR 0.4, 95% CI, 0.2, 0.6). There was no significant difference between the groups in having a checkup (AOR 1.9, 95% CI, 0.7, 4.9) or an emergency department visit that did not result in a hospitalization in the past year (AOR 1.0, 95% CI, 0.4, 2.4). To isolate the impact of community navigation beyond insurance enrollment, we examined a subgroup of participants with Emergency Medicaid, which provides coverage only for an emergency department visit and associated hospitalization for most people. These people were ineligible for comprehensive insurance. We found that 68% of those with Emergency

Table 1. Characteristics of Study Participants

	Comparison Group n = 182% (n)	Intervention Group n = 124% (n)	P Value
Age			<0.001
18 to 34	54 (99)	26 (33)	
35 to 44	24 (44)	39 (48)	
45 to 54	16 (29)	25 (31)	
55 to 64	6 (10)	10 (12)	
Sex			0.384
Male	22 (40)	18 (22)	
Female	78 (142)	82 (101)	
Race/Ethnicity			0.183
Latino	90 (164)	94 (117)	
Non-Latino	10 (18)	6 (7)	
Employment status			0.179
Full time	17 (31)	23 (28)	
Part time	25 (45)	27 (33)	
Unemployed	55 (101)	45 (56)	
Don't know or refused	3 (5)	6 (7)	
Income as a percentage of federal poverty level			0.065*
<100%	65 (110)	70 (86)	
100 to 199%	19 (33)	24 (29)	
200 to 299%	11 (18)	3 (4)	
300 to 399%	4 (6)	1 (1)	
>399%	1 (2)	2 (2)	
Level of education			0.004
8th grade or less	25 (45)	27 (34)	
Grades 9 to 12	24 (44)	43 (54)	
Completed high school	16 (29)	10 (12)	
Some college or beyond	22 (40)	14 (17)	
Don't know or refused	13 (24)	6 (7)	
Primary language			<0.001
English	32 (59)	14 (17)	
Spanish	68 (123)	86 (107)	
Self-rated health			0.061
Excellent/very good/good	60 (110)	50 (61)	
Fair/poor	40 (72)	50 (62)	
Referral source to CHOI [†]			0.683
Health system	28 (50)	30 (36)	
Community	67 (120)	64 (78)	

Abbreviation: CHOI, Children's Health Outreach Initiative.

*Fisher's exact.

[†]Health system referral sources included emergency room, hospital, clinic, health plan, or online insurance enrollment (such as Covered California); community referral sources included friend or family member, school, Women, Infants, and Children program, other community agencies, brochure or advertisement, Department of Public Social Services, or 211 (Los Angeles County information hotline).

Medicaid in the intervention group had a primary care clinic compared with 37% in the comparison group ($P = .002$) (Appendix Table A1).

More than 80% of participants in the comparison reported having a barrier compared with 69% of people in the intervention group (data not shown). The most common barrier cited in both

comparison and intervention groups was lack of health insurance (Table 3). Clients in the intervention group were less likely to experience several barriers to primary care, including not having health insurance (AOR 0.3, 95% CI, 0.2, 0.5), not being able to afford to pay for a visit (AOR 0.4, 95% CI, 0.3, 0.7), not having a usual source of care

Table 2. Differences in Access to Primary Care and Health Care Use Among Children’s Health Outreach Initiative (CHOI) Clients

Outcome	Unadjusted % (n)		Adjusted* Odds Ratio (95% CI)
	Comparison (n = 182)	Intervention (n = 123)	
Has a primary care clinic	47.3 (86)	74.8 (92)	3.0 (1.7-5.4) [‡]
Has a primary care provider	34.6 (63)	59.0 (72)	2.6 (1.5-4.4) [‡]
Has difficulty accessing care	63.5 (113)	47.2 (58)	0.4 (0.2-0.6) [‡]
Had a checkup in the past year (n = 144) [†]	73.1 (49)	83.1 (64)	1.9 (0.7-4.9)
Any emergency room visits that did not result in a hospitalization in the past 12 months	91.2 (166)	90.3 (112)	1.0 (0.4-2.4)

Abbreviation: CI, confidence interval.

*Models are adjusted for age, race/ethnicity, sex, education, language, federal poverty level, employment, self-reported health status, and referral source.

[†]Only 144 participants who had a primary care clinic were asked if they had a checkup in the past year.

[‡]P < 0.01.

(AOR 0.4, 95% CI, 0.2, 0.7), not knowing how or where to get care (AOR 0.4, 95% CI, 0.2, 0.7), and not having transportation (AOR 0.4, 95% CI, 0.2, 0.9) (Table 3). CHOI services were not associated with reductions in other barriers, including visit(s) not being covered/approved by a health plan, not getting a timely appointment, not being able to contact the clinic, not liking their clinic or provider, long wait times to see a

doctor, clinic being closed, not being able to take time off work to get care, fear of getting medical care, and language, communication, or cultural barriers.

Discussion

We found that community-based health care navigation that used the OEUR model was associated with improved access to primary care among low-

Table 3. Differences in Barriers to Medical Care Among Children’s Health Outreach Initiative (CHOI) Clients

Have You Been Delaying or Avoiding Care Due to ...	Unadjusted % (n)		Adjusted* Odds Ratio (95% CI)
	Comparison (n = 182)	Intervention (n = 123)	
Insurance and cost barriers			
Lack of health insurance	61.5 (112)	36.6 (45)	0.3 (0.2-0.5) ³
Insurance/health plan that did not approve or pay for the visit	28.0 (51)	21.1 (26)	0.7 (0.4-1.2)
Could not afford to pay for the visit	53.0 (96)	35.8 (44)	0.4 (0.3-0.7) [†]
Knowledge barriers			
No usual place of care	48.9 (89)	33.3 (41)	0.4 (0.2-0.7) [†]
Did not know how or where to get care	47.2 (85)	28.7 (35)	0.4 (0.2-0.7) [†]
Clinic barriers			
Did not like clinic or provider	11.7 (21)	13.9 (17)	1.4 (0.6-3.0)
Could not get an appointment in a timely manner	26.4 (48)	27.6 (34)	1.4 (0.8-2.4)
Could not contact the clinic over the phone	18.1 (33)	19.5 (24)	1.1 (0.6-2.2)
Long wait times to see the doctor	22.1 (40)	23.6 (29)	1.1 (0.6-2.0)
Clinic was closed when they could go	20.3 (37)	14.6 (18)	0.8 (0.4-1.5)
Other barriers			
Lack of transportation	19.8 (36)	9.7 (12)	0.4 (0.2-0.9) [†]
Could not take time off work or leave children/family	30.2 (55)	20.3 (25)	0.6 (0.4-1.2)
Fear of getting medical care	18.7 (34)	17.1 (21)	0.7 (0.4-1.5)
Language, communication, cultural problems	12.6 (23)	12.2 (15)	0.6 (0.3-1.3)

Abbreviation: CI, confidence interval.

*Models are adjusted for age, race/ethnicity, sex, education, language, federal poverty level, employment, self-reported health status, and referral source.

[†]P < .01.

income Latinos. Although barriers to primary care were prevalent among all participants, clients who underwent community-based navigation experienced fewer barriers, particularly barriers related to insurance, cost of care, and knowledge.

While other studies have demonstrated patient navigation can effectively increase rates of primary care visits, most navigation interventions were initiated in the clinical setting, after an emergency department visit or hospitalization, and typically focused on patients with multiple comorbidities or those that had a higher risk of hospital readmission.^{28–32} We examined a community-based navigation program, which can open the door to primary care for those who have had limited experience with the health system. In addition, the agencies we studied serve primarily low-income Latinos, a group that suffers from lower rates of primary care. Similarly to other successful navigation interventions, the OEUR model employs several “touches,” or interactions with clients, to provide clients with assistance on multiple occasions. We speculate that the improved access to care may have been partially mediated by enrolling patients in insurance. However, since those without comprehensive insurance coverage (Emergency Medicaid) in the intervention group were also more likely to have a primary care clinic than their counterparts in the comparison group, we also believe that assisting clients with other barriers to care, such as the cost of care, transportation, and where to get care, were instrumental in increasing access to primary care. Notably, clinic-level barriers, such as obtaining a timely appointment and difficulty contacting the clinic, were prevalent and equally problematic in both the comparison and intervention groups. Given the predicted physician shortage the nation is facing, efforts to improve clinic accessibility by increasing our safety-net-serving primary care workforce are critically important.⁴³ Bringing Medicaid reimbursement rates to be on par with Medicare or private insurance is a first step to increasing Medicaid acceptance rates among providers and potentially growing the workforce. Expansion of safety-net clinic hours, with adequate support and compensation for providers and staff, could also help to improve access for working families. In addition, while initiatives that promote continuity of care in the safety net and grow the racial/ethnic diversity of providers may not directly impact access to care, they are important for the patient experience and

quality of care and could improve primary care use.^{44,45}

It is also important to consider the underlying factors that drive the need for health care navigation in the United States. Care fragmentation caused by high rates of insurance churning (loss and gain of insurance), changes in insurance plans, and narrow or changing provider networks can leave people confused about where and how to get care or worried that they will incur unaffordable out-of-pocket costs. In the United States, access to insurance and the type of insurance (ACA marketplace or employer based or Medicaid) can change based on a person’s income, employment status, and immigration status. Care fragmentation for low-income persons is associated with disruptions in physician care and medication adherence and negative health outcomes.⁴⁶ In California, as is the case in most states, Medicaid services are organized using managed care plans, which in turn contract with independent provider organizations. While such contracting may reduce health care costs, it also limits where enrollees can go to get care, potentially reducing both the number of visits and continuity of care.⁴⁷

Several limitations in our study should be noted. First, the intervention group only included participants who navigators could reach by phone a year after their intake. Thus, we may have included participants with more stable life circumstances and perhaps, by relation, more stable access to care, in the intervention group. However, participants in the intervention were less likely to speak English and had a lower level of education compared with the comparison group, characteristics that are associated with lower rates of primary care. Though we did adjust for these differences in addition to other characteristics, there may have been unmeasured confounders that we could not adjust for. Second, we surveyed the comparison group soon (median time of 9 days) after their intake, yet clients may have benefited from navigation services during that period, thus not fully reflecting their challenges with accessing care before receiving community-based navigation. Third, we relied on self-reported outcomes and were unable to verify primary care empanelment or office visits. We worked with the community agencies to develop a feasible study design to measure the impact of their program in a short period of time. Largely due to support from the navigation agencies and the Los Angeles

Department of Public Health, we achieved a high survey completion rate. Importantly though, since this study was not a randomized controlled trial, more rigorous evaluations of community-based navigation are needed to confirm our findings.

Conclusion

Community-based health care navigation is an important supplement to insurance expansion policies that can improve access to primary care. CHOI's OEUR model of outreach, enrollment, utilization, and renewal, which employs several "touches" with clients, has the potential to be replicated elsewhere and may benefit regions with similarly high rates of insurance churning, managed care plan enrollment, immigrants, racial/ethnic minorities, and low-income people as Los Angeles County. Millions of Americans, having lost their jobs and as a result their employee-sponsored insurance during the COVID-19 pandemic, are enrolling in Medicaid and marketplace plans.^{48,49} There is an urgent need for enhanced community-based health care navigation that can assist people not only with finding new health care coverage but also a clinic and primary care provider. Although the previous administration's public charge policy penalizing some immigrants for using public services has been reversed, embedded fear has discouraged many immigrants from accessing health care, increasing the need for culturally sensitive, community-based navigation from a trusted source of information.⁵⁰ The new administration recently increased navigator funding 8-fold from last year,⁵¹ changing course from the previous administration's dramatic cuts of nearly 90%^{52,53} and demonstrating a clear understanding of the critical importance of navigators.

Policy efforts both nationally and in California, such as a national or state-based single payer program, aim to decrease underlying fragmentation in health care through financing and delivery system reform.^{54,55} Yet these policy solutions are politically contentious and have uncertain outcomes. While broader policy solutions are necessary, the success of the CHOI program and OEUR model shows that community-based navigators are capable of narrowing the gap in access that the ACA's insurance expansion alone has been unable to completely close. By providing navigators with additional support and training to connect clients to primary care, we may begin to see concomitant gains in disease

prevention and management that we hoped to achieve under the ACA.

The authors would like to acknowledge the contributions of Ashley Recinos, Ricardo Poynton, Vanessa Mariscal, Lancer Shul, and the Children's Health Outreach Initiative Agencies' directors and staff.

To see this article online, please go to: <http://jabfm.org/content/35/1/44.full>.

References

1. Starfield B, Shi L, Macinko J. Contribution of primary care to health systems and health. *Milbank Q* 2005;83:457–502.
2. Levine DM, Linder JA, Landon BE. Characteristics of Americans with primary care and changes over time, 2002–2015. *JAMA Intern Med* 2020;180:463–6.
3. Martinez ME, Ward BW. Health care access and utilization among adults aged 18–64, by poverty level: United States, 2013–2015. National Center for Health Statistics; 2016. NCHS Data Brief No. 262.
4. DeNavas-Walt C, Proctor BD, Smith JC. Income, poverty, and health insurance coverage in the United States: 2012. Washington (DC): U.S. Census Bureau; 2013.
5. Shartz A, Long SK, Anderson N. Access to care and affordability have improved following Affordable Care Act implementation; problems remain. *Health Aff (Millwood)* 2016;35:161–8.
6. Burstin HR, Swartz K, O'Neil A, Orav EJ, Brennan TA. The effect of change of health insurance on access to care. *Inquiry* 1999;35:389–97.
7. Singh KA, Wilk AS. Affordable Care Act Medicaid expansion and racial and ethnic disparities in access to primary care. *J Health Care Poor Underserved* 2019;30:1543–59.
8. Kominski GF, Narissa JN, Sorensen A. The Affordable Care Act's impacts on access to insurance and health care for low-income populations. *Annu Rev Public Health* 2017;38:489–505.
9. Sommers BD, Gunja MZ, Finegold K, Musco T. Changes in self-reported insurance coverage, access to care, and health under the Affordable Care Act. *JAMA* 2015;314:366–74.
10. Wherry LR, Miller S. Early coverage, access, utilization, and health effects associated with the Affordable Care Act Medicaid expansions: a quasi-experimental study. *Ann Intern Med* 2016;164:795–803.
11. Alcalá HE, Roby DH, Grande DT, McKenna RM, Ortega AN. Insurance type and access to health care providers and appointments under the Affordable Care Act. *Med Care* 2018;56:186–92.
12. Rodriguez-Alcalá ME, Qin H, Jeanetta S. The role of acculturation and social capital in access to health care: a meta-study on Hispanics in the US. *J Community Health* 2019;44:1224–52.

13. Escarce JK, Kapur K. Access to and quality of health care. In: *Hispanics and the future of America*. Washington (DC): National Academies Press; 2006.
14. Fiscella K, Franks P, Doescher MP, Saver BG. Disparities in health care by race, ethnicity, and language among the insured: findings from a national sample. *Med Care* 2002;40:52–9.
15. Gresenz CR, Rogowski J, Escarce JJ. Community demographics and access to health care among U.S. Hispanics. Health Research and Educational Trust 2009;44:1542–62.
16. Livingston G. *Hispanics, health insurance and health care access*. Washington (DC): Pew Research Center; 2009.
17. Alcalá HE, Chen J, Langellier BA, Roby DH, Ortega AN. Impact of the Affordable Care Act on health care access and utilization among Latinos. *J Am Board Fam Med* 2017;30:52–62.
18. QuickFacts: Los Angeles city, California; United States [Internet]. U.S. Census Bureau; 2019 [cited 2021 Aug 28]. Available from: <https://www.census.gov/quickfacts/fact/table/losangelesciticifornia,US/RHI725219>.
19. 2018 LA County health survey—topics & data: difficulty accessing medical care [Internet]; 2018 [cited 2021 Aug 28]. Available from: <http://publichealth.lacounty.gov/ha/LACHSDataTopics2018.htm>.
20. McConville S, Hill L, Ugo I, Hayes J [Internet]. Health coverage and care for undocumented immigrants. Public Policy Institute of California; 2021 [cited 2021 Aug 28]. Available from: <https://www.ppic.org/publication/health-coverage-and-care-for-undocumented-immigrants/>.
21. McDonnell DD, Graham CL. Medicaid beneficiaries in California reported less positive experiences when assigned to a managed care plan. *Health Aff (Millwood)* 2015;34:447–54.
22. Tatar M, Paradise J, Garfield R [Internet]. Medi-Cal managed care: an overview and key issues. Kaiser Family Foundation; 2016 [cited 2021 Aug 28]. Available from: <https://www.kff.org/medicaid/issue-brief/medi-cal-managed-care-an-overview-and-key-issues/>.
23. Saluja S, McCormick D, Cousineau MR, et al. Barriers to primary care after the Affordable Care Act: a qualitative study of Los Angeles safety-net patients' experiences. *Health Equity* 2019;3:423–30.
24. Sommers BD, Maylone B, Nguyen KH, Blendon RJ, Epstein AM. The impact of state policies on ACA applications and enrollment among low-income adults in Arkansas, Kentucky, and Texas. *Health Aff (Millwood)* 2015;34:1010–8.
25. Chandrasekar E, Kim KE, Song S, Paintal R, Quinn MT, Vallina H. First year open enrollment findings: health insurance coverage for Asian Americans and the role of navigators. *J Racial Ethn Health Disparities* 2016;3:537–45.
26. Goodell S [Internet]. Navigators and Assisters. *Health Affairs*; 2013 [cited 2021 Aug 28]. Available from: <https://www.healthaffairs.org/doi/10.1377/hpb.20131031.857471/full/>.
27. Peart A, Lewis V, Brown T, Russell G. Patient navigators facilitating access to primary care: a scoping review. *BMJ Open* 2018;8:e019252.
28. Elliott K, Klein JW, Basu A, Sabbatini AK. Transitional care clinics for follow-up and primary care linkage for patients discharged from the ED. *Am J Emerg Med* 2016;34:1230–5.
29. Griswold KS, Homish GG, Pastore PA, Leonard KE. A randomized trial: are care navigators effective in connecting patients to primary care after psychiatric crisis? *Community Ment Health J* 2010;46:398–402.
30. Horwitz SM, Busch SH, Balestracci KM, Ellingson KD, Rawlings J. Intensive intervention improves primary care follow-up for uninsured emergency department patients. *Acad Emerg Med* 2005;12:647–52.
31. Kangovi S, Mitra N, Grande D, et al. Patient-centered community health worker intervention to improve posthospital outcomes: a randomized clinical trial. *JAMA Intern Med* 2014;174:535–43.
32. O'Brien GM, Stein MD, Fagan MJ, Shapiro MJ, Nasta A. Enhanced emergency department referral improves primary care access. *Am J Manag Care* 1999;5:1265–9.
33. Coffman MJ, de Hernandez BU, Smith HA, et al. Using CBPR to decrease health disparities in a suburban Latino neighborhood. *Hisp Health Care Int* 2017;15:121–9.
34. Wang ML, Gallivan L, Lemon SC, et al. Navigating to health: evaluation of a community health center patient navigation program. *Prev Med Rep* 2015;2:664–8.
35. Freund KM. Patient navigation: the promise to reduce health disparities. *J Gen Intern Med* 2011;26:110–2.
36. Gany F, Bari S, Gill P, Loeb R, Leng J. Step on it! Impact of a workplace New York City taxi driver health intervention to increase necessary health care access. *Am J Public Health* 2015; 105:786–92.
37. Bishop SE, Edwards JM, Nadkarni M. Charlottesville Health Access: a locality-based model of health care navigation for the homeless. *J Health Care Poor Underserved* 2009;20:958–63.
38. Kahn LS, Aiello J, Berdine DE, Fox CH. The use of telephonic case management to link a special-needs population with a primary care physician. *J Am Board Fam Med* 2009;22:585–7.
39. Rivas C, Wood M, Galloway-Gilliam L [Internet]. Policy framework for outreach, enrollment, retention and utilization for health care coverage in California; 2006 [cited 2021 Aug 28]. Available from: <https://chc-inc.org/wp-content/uploads/2019/11/Policy-Framework->

- for-Outreach-Enrollment-Retention-Utilization-for-Healthcare-Coverage-in-California.pdf.
40. Los Angeles County Department of Public Health Maternal, Child, & Adolescent Health Programs [Internet]. Children's Health Outreach Initiatives; 2021 [cited 2021 Aug 28]. Available from: <http://publichealth.lacounty.gov/mch/choi/choi.htm>.
 41. Increased access to health coverage, increased need for support: a snapshot from Los Angeles County [Internet]; 2019 [cited 2021 Aug 28]. Available from: <https://chc-inc.org/wp-content/uploads/2019/11/A-Snapshot-of-Los-Angeles-County-Department-of-Public-Health-Children%E2%80%99s-Health-Outreach-Initiative-CHOI.pdf>.
 42. Centers for Disease Control and Prevention [Internet]. National Health Interview Survey 2018 [cited 2021 Aug 28]. Available from: <https://www.cdc.gov/nchs/nhis/1997-2018.htm>.
 43. Association of American Medical Colleges [Internet]. The complexities of physician supply and demand: projections from 2018 to 2033; 2020 [cited 2021 Aug 28]. Available from: <https://www.aamc.org/media/45976/download>.
 44. Schwarz D, Hirschhorn LR, Kim J-H, Ratcliffe HL, Bitton A. Continuity in primary care: a critical but neglected component for achieving high-quality universal health coverage. *BMJ Glob Health* 2019;4:e001435.
 45. Saha S, Komaromy M, Koepsell TD, Bindman AB. Patient-physician racial concordance and the perceived quality and use of health care. *Arch Intern Med* 1999;159:997–1004.
 46. Sommers BD, Gourevitch R, Maylone B, Blendon RJ, Epstein AM. Insurance churning rates for low-income adults under health reform: lower than expected but still harmful for many. *Health Affairs* 2016;35:1816–24.
 47. Kern LM, Rajan M, Pincus HA, Casalino LP, Stuard SS. Health care fragmentation in Medicaid managed care vs. fee for service. *Popul Health Manag* 2020;23:53–8.
 48. McDermott Cox C, Rudowitz R, Garfield R [Internet]. How has the pandemic affected health coverage in the U.S.? Henry J. Kaiser Family Foundation; 2020 [cited 2021 June 19]. Available from: <https://www.kff.org/policy-watch/how-has-the-pandemic-affected-health-coverage-in-the-u-s/>.
 49. Coralo B, Rudowitz R [Internet]. Analysis of recent national trends in Medicaid and CHIP enrollment. Henry J. Kaiser Family Foundation; 2021 [cited 2021 Aug 29]. Available from: Available at: <https://www.kff.org/coronavirus-covid-19/issue-brief/analysis-of-recent-national-trends-in-medicaid-and-chip-enrollment/>.
 50. Bernstein H, Gonzalez D, Karpman M, Zuckerman S [Internet]. One in seven adults in immigrant families reported avoiding public benefit programs in 2018. Urban Institute; 2019 [cited 2021 Aug 28]. Available from: <https://www.urban.org/research/publication/one-seven-adults-immigrant-families-reported-avoiding-public-benefit-programs-2018>.
 51. U.S. Department of Health and Human Services [Internet]. HHS announces the largest ever funding allocation for navigators and releases final numbers for 2021 marketplace open enrollment; 2021 [cited 2021 Aug 28]. Available from: <https://www.hhs.gov/about/news/2021/04/21/hhs-announces-the-largest-ever-funding-allocation-for-navigators.html>.
 52. Trump administration slashes funding that helps consumers enroll in health insurance [Internet]. Community Catalyst; 2018 [cited 2021 Aug 28]. Available from: <https://www.communitycatalyst.org/news/press-releases/trump-administration-slashes-funding-that-helps-consumers-enroll-in-health-insurance>.
 53. Bates H, Loubier E [Internet]. The critical role of navigation in health care delivery: implications of federal funding reductions to navigator programs; 2019 [cited 2021 Aug 28]. Available from: <https://www.transformhc.com/wp-content/uploads/2019/08/Funding-Navigation-Services-FINAL-8.27.19.pdf>.
 54. Hart A, Bluth R [Internet]. New single-payer bill intensifies Newsom's political peril; 2021 [cited 2021 Aug 28]. Available from: <https://khn.org/news/article/new-single-payer-bill-intensifies-newsoms-political-peril/>.
 55. Medicare for All Act of 2021, 117th Congress (2021-2022) [Internet] [cited 2021 Aug 28]. Available from: <https://www.congress.gov/bill/117th-congress/house-bill/1976>.

Appendix

Table A1. Subgroup Analysis on Children’s Health Outreach Initiative (CHOI) Clients with Emergency Medicaid

	Comparison Groupn = 46% (n)	Intervention Groupn = 50% (n)	<i>P</i> Value
Primary care clinic			
Yes	37 (17)	68 (34)	0.002
No	63 (29)	32 (16)	