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Karin V. Rhodes
University of Pennsylvania

Genevieve M. Kenney

Ari B. Friedman
University of Pennsylvania

Brendan Saloner

Charlotte C. Lawson

See next page for additional authors

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Abstract

Importance:

Current measures of access to care have intrinsic limitations and may not accurately reflect the capacity of the primary care system to absorb new patients.

Objective:

To assess primary care appointment availability by state and insurance status.

Design, Setting, and Particpants:

We conducted a simulated patient study. Trained field staff, randomly assigned to private insurance, Medicaid, or uninsured, called primary care offices requesting the first available appointment for either routine care or an urgent health concern. The study included a stratified random sample of primary care practices treating nonelderly adults within each of 10 states (Arkansas, Georgia, Illinois, Iowa, Massachusetts, Montana, New Jersey, Oregon, Pennsylvania, and Texas), selected for diversity along numerous dimensions. Collectively, these states comprise almost one-third of the US nonelderly, Medicaid, and currently uninsured populations. Sampling was based on enrollment by insurance type by county. Analyses were weighted to obtain population-based estimates for each state.

Main Outcomes and Measures:

The ability to schedule an appointment and number of days to the appointment. We also examined cost and payment required at the visit for the uninsured.

Results:

Between November 13, 2012, and April 4, 2013, we made 12,907 calls to 7788 primary care practices requesting new patient appointments. Across the 10 states, 84.7% (95% CI, 82.6%-86.8%) of privately insured and 57.9% (95% CI, 54.8%-61.0%) of Medicaid callers received an appointment. Appointment rates were 78.8% (95% CI, 75.6%-82.0%) for uninsured patients with full cash payment but only 15.4% (95% CI, 13.2%-17.6%) if payment required at the time of the visit was restricted to $75 or less. Conditional on getting an appointment, median wait times were typically less than 1 week (2 weeks in Massachusetts), with no differences by insurance status or urgency of health concern.

Conclusions and Relevance:

Although most primary care physicians are accepting new patients, access varies widely across states and insurance status. Navigator programs are needed, not only to help patients enroll but also to identify practices accepting new patients within each plan's network. Tracking new patient appointment availability over time can inform policies designed to strengthen primary care capacity and enhance the effectiveness of the coverage expansions with the Patient Protection and Affordable Care Act.

Author(s)
Karin V. Rhodes, Genevieve M. Kenney, Ari B. Friedman, Brendan Saloner, Charlotte C. Lawson, David Chearo, Douglas Wissoker, and Daniel Polsky

Original Investigation | HEALTH CARE REFORM

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Karin V. Rhodes, MD, MS; Genevieve M. Kenney, PhD; Ari B. Friedman, MS; Brendan Saloner, PhD; Charlotte C. Lawson, BA; David Chearo, MA; Douglas Wissoker, PhD; Daniel Polsky, PhD

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Author Affiliations: Author affiliations are listed at the end of this article.

Corresponding Author: Karin V. Rhodes, MD, MS, Center for Emergency Care Policy & Research, Department of Emergency Medicine, First Floor Ravdin, Perelman School of Medicine, University of Pennsylvania, Philadelphia, PA 19104 (Karin.rhodes@uphs.upenn.edu).

The Patient Protection and Affordable Care Act (ACA)[1] is projected to expand insurance to an additional 25 million Americans.[2] Although these expansions are intended to improve access to care for the newly insured, it is not known whether the primary care system can accommodate the increased demand, nor is it clear whether the system meets current demand. Several studies have raised concerns about our current primary care capacity,[3-6] particularly for Medicaid patients.[7,8] Given that access to primary care is considered a prerequisite for improved population health outcomes,[7,9] a strained primary care system may place many of the goals of the ACA at risk.

Having rigorously collected precise measures of access to care before ACA implementation will be critical to tracking and addressing any future primary care challenges identified.[10] A number of household and physician surveys (eg, the National Health Interview Survey,[11] the Behavioral Risk Factor Surveillance System,[12] and the National Ambulatory Medical Care Survey[13]) provide important information on access to care but have intrinsic limitations and may not accurately reflect the supply of available care, particularly for disadvantaged populations.[14-17]

Simulated patient (ie, audit) methodology can improve and complement standard surveys by directly measuring appointment availability and the timeliness of appointments for new patients seeking primary care. The use of simulated consumers to identify "business as usual" is a well-established empirical tool for measuring quality and access in private and public markets.[18-23] The goal of the current study was to simulate the experience of nonelderly adults with 1 of 3 insurance types—private, Medicaid, and uninsured—seeking new patient appointments in 10 diverse states to obtain precise estimates of primary care access before the ACA coverage expansions.

Methods

Between November 13, 2012, and April 4, 2013, trained field staff called primary care offices in Arkansas, Georgia, Illinois, Iowa, Massachusetts, Montana, New Jersey, Oregon, Pennsylvania, and Texas seeking a new patient primary care appointment. States were selected for diversity along a number of dimensions (Table 1), including region, primary care supply, proportion uninsured, expected decrease in uninsured after ACA implementation, and Medicaid fee structures. Selected states account for 28.2%, 25.7%, and 29.8% of the national nonelderly, Medicaid, and currently uninsured populations, respectively.[28]

We used a frequently updated commercial database of practicing physicians (SK&A),[31] organized by where physicians see patients, to identify all offices with at least 1 physician with a specialty of general internal medicine, family medicine, or general practice. We tested the comprehensiveness of the SK&A sample frame and found that it included more than 90% of offices. We did not find any bias in the offices out of the frame in terms of inclusion of safety-net providers such as federally qualified health centers and academic medical centers (eAppendix 1 in the Supplement). From this frame, we drew a stratified random sample of 12 108 potentially eligible offices for a preaudit telephone survey that collected basic information, including number of primary care providers per office (including physicians and midlevel providers), and confirmed eligibility, location, contact information, and the Medicaid managed care plans accepted at that office.

Eligible offices were defined as those where nonelderly adults from the general public receive outpatient primary care. We identified 2690 offices as ineligible (eg, duplicates, permanently closed, specialty care only, serving special populations, or otherwise not available to the general public) and 536 as unreachable despite a minimum of 5 call attempts on different days and times. To be eligible for a Medicaid call, the office had to have a contract with a named Medicaid plan, either a Medicaid primary care case management (PCCM) or a traditional full-risk model of Medicaid managed care plan. These offices and the names of the plans they accepted were identified primarily from the preaudit survey. State insurer lists of

Table 1. Characteristics of Study States

State	Region[24]	Nonelderly Population (Thousands)[25]	Primary Care Physicians per 100 000 Population[26]	Medicaid/ Medicare Care Fee Index[27]	Uninsured, %[28]	Expected Change in Uninsured Under the ACA, %[25]	Planning to Expand Medicaid to 138% of FPL[29]	Medicaid Coverage, %[28]	Medicaid Managed Care, %[30]	Medicaid Managed Care Plans, No.[30]
Arkansas	Southeast	2457	75.8	0.78	21	14.5	Yes[a]	23	79	0
Georgia	Southeast	88 28	72.7	0.86	21	12.6	No	15	92	3
Illinois	Great Lakes	11 434	82.3	0.57	15	9.1	Yes	18	55	3
Iowa	Plains	2613	92.7	0.89	12	4.8	Yes	14	83	NA
Massachusetts	New England	5434	129.4	0.78	6	1.1	Yes	19	60	6
Montana	Rocky Mountain	847	85.2	0.96	19	12.7	No	9	67	0
New Jersey	Mideast	7670	99.8	0.41	17	8.6	Yes	12	75	4
Oregon	Far West	3354	99.9	0.78	20	11.3	Yes	13	88	16
Pennsylvania	Mideast	10 355	99.3	0.62	12	7.8	Yes[b]	16	82	8
Texas	Southwest	22 783	68.5	0.68	28	16.9	No	14	65	45

Abbreviations: ACA, Affordable Care Act; FPL, federal poverty level; NA, not applicable.

[a] The alternate expansion plan in Arkansas uses the money allocated for Medicaid expansion under the Patient Protection and ACA to buy private insurance for about 250 000 eligible low-income residents.

[b] Pennsylvania has proposed a Medicaid expansion that is still subject to waiver from Centers for Medicare & Medicaid Services.

Medicaid providers were used to resolve cases where respondents to the preaudit survey were uncertain of the particulars of their Medicaid managed care contracts and to identify PCCM offices because these plans were underreported on the preaudit survey. An additional 3140 of the 8882 offices (35.4%) were found to be ineligible for Medicaid calls because they did not accept any Medicaid plan.

The audit sample was drawn, independently within insurance type, from the pool of eligible offices for that insurance type based on the proportion of the population with that insurance type in the county. Our target sample size per state was 700 calls for private, 700 for Medicaid, and 200 for uninsured to provide adequate power for state-level point estimates and state-by-state comparisons across a number of dimensions. In less-populous states (Arkansas, Iowa, Montana, and Oregon) and in Massachusetts we called the census of eligible offices. Although many offices were called more than once (with different insurance types), the purpose was to gain more precise estimates of overall differences across insurance types, not to compare acceptance within the same office.

The University of Chicago Survey Lab, Chicago, Illinois, conducted a total of 12 907 audit calls; 6101 were assigned to private, 5014 to Medicaid, and 1792 to uninsured scenarios. Call scripts (eAppendix 2 in the Supplement) were developed by the study team and refined through extensive piloting to ensure that each scenario would be realistic to an office scheduler. Ten callers, hired based on their voice to match "roles" by age, sex, and race/ethnicity, were extensively trained and monitored to maintain call consistency. We randomized between 2 clinical scripts within each insurance status. In one scenario, the patient requested a "routine" new patient appointment. In the other, the caller reported being advised to see a primary care provider (PCP) after receiving a very high blood pressure reading at a pharmacy or health fair. This "urgent" scenario was designed to be medically concerning but asymptomatic, so as not to prompt a referral to an emergency department. Because results did not substantially differ across scenarios, they were combined in all analyses.

Callers requested a specific physician, randomly selected from all primary care physicians listed in SK&A for that office, but accepted appointments with any available provider, including nurse practitioners and physician assistants. They requested the earliest possible appointment and did not volunteer their insurance status unless asked. When asked, the caller gave the name of a specific insurance plan. For Medicaid, the caller used the name of the specific capitated or PCCM plan previously identified as accepted by the office. For private insurance, we used a 2-step process. First, we used the plan with the highest market share in each office's county. In 77.5% of private calls, we were able to get an appointment using the plan with the highest market share. When a private caller was told that the office did not have a contract with that plan, we called a second time using the plan with the next-highest market share. Uninsured callers who received an appointment asked for the total cost and the amount of money needed at the time of the appointment. All appointments were canceled before ending the call or immediately thereafter.

We considered an appointment affirmatively scheduled if the patient was offered a specific date and time or was told that the specific appointment would be scheduled pending additional information (such as an insurance number). Appointments were considered denied if the caller was told that there was no appointment available. After an appointment was denied, the caller recorded the reason, if provided. For 11.7% of calls, we were unable to ascertain whether an appointment would be available. In many of these cases, the practice's electronic scheduling system required an insurance number before determining whether an appointment was available. These administrative barriers occurred at virtually the same rate for private and Medicaid calls within each state. However, states varied in the degree to which administrative barriers made it difficult to complete an audit call (eAppendix 3 in the Supplement). We dropped these cases for subsequent analyses, yielding a final sample of 11 347 calls.

We calculated weighted percentages and 95% CIs for the proportion of callers receiving an appointment by state and insurance category. Weights were based on the proportion of the population with each insurance type in the county. We used robust SEs clustered by county. Our unit of analysis was a physician office, and thus equal weight was given to each office regardless of size, but in sensitivity analyses we found results to be entirely insensitive to weighting by the size of each practice. Ten-state averages are based on a simple average across states. For appointments granted to uninsured callers, we also present the proportion requiring $75 or less at the time of the visit and the possibility of a payment plan. For offices granting appointments, we examined the distribution of days to an appointment by state and insurance status.

Results

As shown in **Table 2**, we completed about 1300 calls in each state—more in Massachusetts and fewer in the states with fewer primary care offices. The number of completed calls for each insurance scenario among the 11 347 cases in the analysis sample was 5385 (47.5%) for privately insured, 4352 (38.4%) for Medicaid, and 1610 (14.2%) for uninsured callers. By design, caller characteristics were equally distributed across each insurance status group. Across all calls, 75.6% of the appointments offered were with the PCP requested in the script, and 91.0% were with a physician. Only 9.0% of new patient appointments were scheduled with a midlevel PCP.

Figure 1 presents rates of new patient appointments by state. Across the 10 states, 84.7% of privately insured callers and 57.9% of Medicaid callers received a new patient appointment, with higher appointment rates found for the privately insured than for Medicaid callers in each state. Rates for privately insured callers were close to 90% in most states but were lower in Pennsylvania, Oregon, and Massachusetts (77.1%, 74.7%, and 66.5%, respectively). Rates for Medicaid callers were more variable: highest in Montana (76.9%), about 70% in Georgia, Iowa, and New Jersey; 59.1% in Texas; near 50% in Arkansas, Illinois, Massachusetts, and Pennsylvania; and at a low of 36.9% in Oregon. Reasons for not granting appointments dif-

Table 2. Sample Sizes and Sample Characteristics

Sample Characteristic	Total Calls	Insurance Scenario		
		Private	Medicaid	Uninsured
Sample size, No.				
10 states combined	11 347	5385	4352	1610
Arkansas	823	418	249	156
Georgia	1329	634	517	178
Illinois	1402	632	596	174
Iowa	910	383	373	154
Massachusetts	1772	905	714	153
Montana	362	124	108	130
New Jersey	1295	637	478	180
Oregon	858	414	296	148
Pennsylvania	1278	582	540	156
Texas	1318	656	481	181
Hypertension scenario, %	50.5	50.9	50.4	50.1
Female caller, %	50.6	50.6	49.4	51.9
Race/ethnicity of caller, %				
White	38.3	39.5	36.8	38.4
Black	38.1	37.9	38.9	37.4
Hispanic	23.7	22.6	24.3	24.2
Age of caller, %				
18-29 y	22.8	22.1	22.7	23.7
30-45 y	50.7	51.0	50.5	50.7
45-64 y	26.5	26.9	26.8	25.6
Proportion of practices by No. of physicians, %				
1	48.9	49.5	46.8	50.3
2-3	28.6	28.1	30.1	27.5
4-9	17.6	17.6	17.9	17.2
≥10	4.2	4.0	4.5	4.2

fered by insurance status: 90.5% of private and 28.3% of Medicaid callers not granted an appointment were told that the office was not accepting any new patients, whereas Medicaid callers were far more likely to be told that the denial was due to their insurance status (69.1%). An urgent health concern (untreated hypertension) had no influence on appointment availability.

The overall rate of new patient appointments for the uninsured was 78.8% with full cash payment at the time of the appointment (**Figure 2**). The median cost of a new patient primary care visit was $120, but costs varied across the states, as indicated in the figure legend. Only 15.4% of uninsured callers received an appointment that required payment of $75 or less at the time of the visit, because few offices had low-cost appointments and only one-fifth of practices allowed flexible payment arrangements for uninsured patients.

For patients who obtained appointments, wait times were fairly consistent across states and insurance status (**Figure 3**). Median wait times by state ranged between 5 and 8 days for private and Medicaid callers, and about 75% of both patient groups were able to get a new patient appointment in less than 2 weeks. The sole exception was Massachusetts, where the median wait time was 13 days for private and 15 days for Medicaid callers and the comparable wait times for the 75th percentile were 27 and 35 days, respectively.

Discussion

This study provides new insights into the experiences of nonelderly adults seeking new patient appointments with a PCP prior to the ACA's 2014 coverage expansions. Overall, 84.7% of private and 57.9% of Medicaid callers were able to make a new patient primary care appointment. In each of the 10 study states, callers posing as Medicaid patients were less successful than privately insured callers at obtaining appointments. If offered an appointment, median wait times for both privately insured and Medicaid callers were typically less than 1 week in most states and 2 weeks in Massachusetts, a difference that is inconvenient but unlikely to be clinically meaningful for a nonemergency condition. Our findings also highlight the steep prices and lack of flexibility in payment arrangements currently faced by uninsured adults seeking primary care.

This study was designed to generate baseline estimates of primary care access before the January 2014 insurance expansions planned under the ACA. We assessed access for nonelderly adults, the group most affected by the law's private and public insurance expansions.[1] In each study state, the vast majority of callers with private insurance were able to make a timely new patient primary care appointment with the first

Figure 1. Rates of New Patient Availability for Private and Medicaid Insurance Scenarios
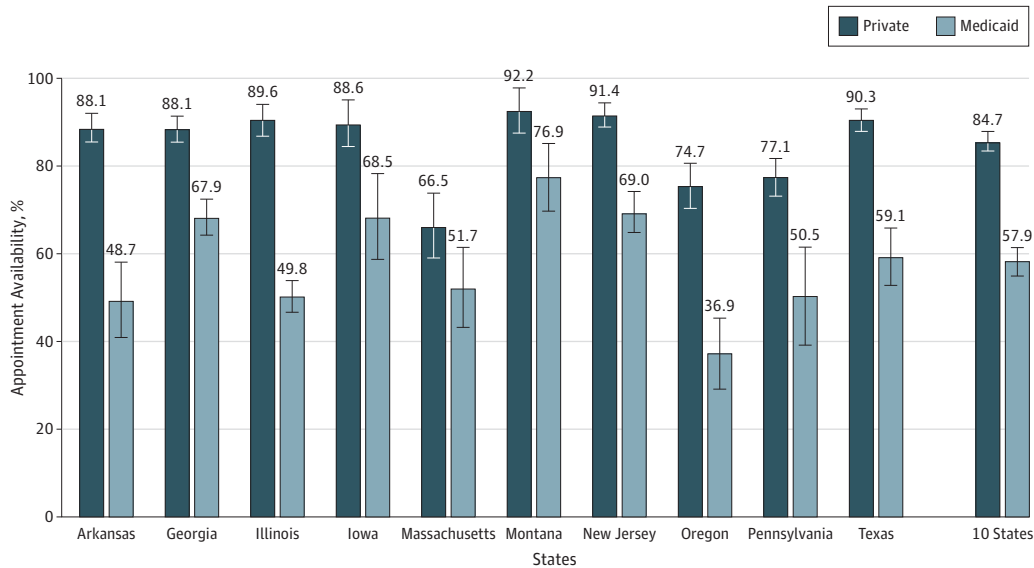
Estimates are weighted in proportion to patient populations by insurance status within states. Error bars represent 95% CIs.

Figure 2. Rate of New Patient Appointment Availability for the Uninsured Scenario
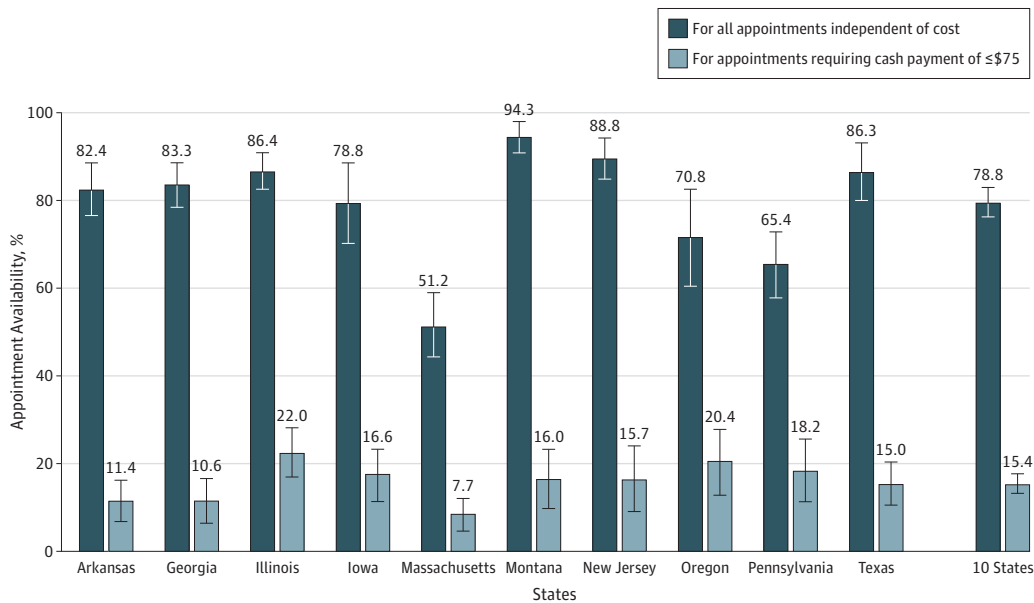
Estimates are weighted in proportion to patient populations by insurance status within states. Error bars represent 95% CIs. For the uninsured scenario, we defined appointments based on the definition of affordability, considering either all visits affordable or only those requiring cash payments no more than

$75 at the time of the visit. The median costs at the appointment for uninsured callers were $123, $130, $125, $143, $150, $150, $125, $176, $124, and $125 for Arkansas, Georgia, Illinois, Iowa, Massachusetts, Montana, New Jersey, Oregon, Pennsylvania, and Texas, respectively.

clinic they called, suggesting that the primary care system currently has the capacity to absorb new privately insured patients. The picture was more mixed for Medicaid callers and the uninsured.

For callers with Medicaid coverage, the rate at which callers were able to make a new patient appointment was 27 per-

centage points less than for callers with private insurance. This gap exists even though the Medicaid calls were made to the 64.6% of practices with PCCM or Medicaid managed care contracts. This lower rate of appointment acceptance for Medicaid calls implies that more effort will be needed for Medicaid beneficiaries to obtain new patient appointments. They may

Figure 3. Box and Whisker Plots of Days to Appointment for New Patients by State for Private Insurance and Medicaid Scenarios
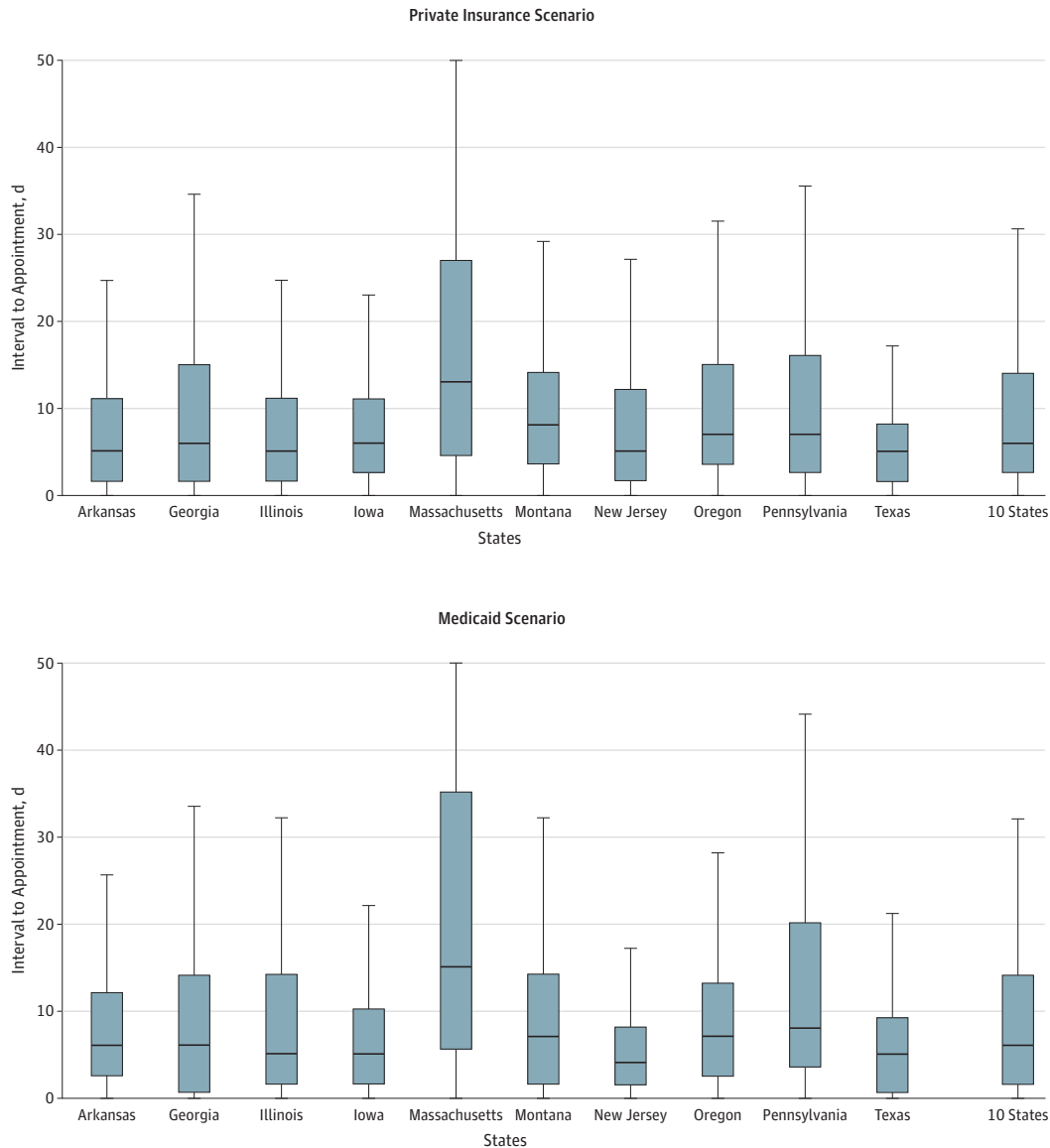
Black lines represent median interval to appointment in state, and upper and lower edges of boxes represent the 75th and 25th percentiles, respectively. Upper ends of whisker plots are truncated for Massachusetts (60 days for private and 79 days for Medicaid scenario).

need to call more offices before they find one that will grant them an appointment or spend more time gathering information to determine which offices are accepting new Medicaid patients. Given that Medicaid enrollment may increase by 40% or more in some regions under the ACA, ensuring the adequacy of the network of providers accepting Medicaid will be critical to translating coverage increases into gains in primary care access.[32] The ACA includes several provisions, such as new funding for community health centers, precisely to encourage provider participation in Medicaid. However, a provision that increases Medicaid primary care reimbursement to parity with Medicare rates seems to be experiencing implementation delays,[33-35] adding to the importance of monitoring access for new Medicaid enrollees.

We expect that the search issues currently faced by Medicaid patients will also be relevant for patients who are newly insured through the health insurance exchanges, particularly if they select lower-cost plans with more constricted provider networks. Ideally, the new marketplaces will provide clear information about the size and composition of provider networks offered under each plan option. Consumers should be able to search to see whether the physician they want is part of a given plan's network and learn whether that practice is accepting new patients. In anticipation of large insurance expansions in the public and private insurance markets, it will be important that navigator programs not only help patients enroll but also help them select plans that include practices with appointment availability and a PCP that is accepting new patients.

Our findings have important implications for the uninsured, particularly in states that are choosing not to expand Medicaid. After the Supreme Court ruling on the ACA,[35] a number of states, including several studied here (Georgia, Montana, and Texas)[29] indicated that they do not intend to expand Medicaid to adults with incomes below 138% of the federal poverty level in 2014.[29,36] Given that more than two-thirds of the uninsured in these 10 states have incomes below 200% of the federal poverty level,[37] our finding that only 15% of the uninsured could obtain an appointment for $75 or less at time of the visit suggests that access will continue to be problematic for this population.

Measuring access with a simulated patient (audit) methodology complements other measures of access. The audit study design can control for differences in patient preferences, knowledge, persistence, and perceived need for care that may not be adequately captured in household surveys. Household surveys can capture other important domains of access, such as having a regular physician, receiving preventive care, and perception of unmet need for medical care, but they do not adequately measure the capacity of the primary care system to absorb new patients.

The audit's experimental design also offers several advantages over standard physician surveys. Physician survey response rates rarely exceed 60%,[16] creating the possibility of nonresponse bias. Audit methodology eliminates both low response rates and social desirability bias that may result in underreporting of access problems, particularly for disadvantaged populations. The only study that validated physician self-reported data against administrative data found that physicians overestimated the number of Medicaid patients they treat by up to 40%.[17] Prior work found that physician report of Medicaid acceptance on their state licensure survey was both a poor positive and a poor negative predictor of their office's granting of Medicaid appointments.[22]

Physicians may not always be aware of the policies of the organizations for which they practice. The rate of PCP acceptance of new Medicaid patients reported in the recent National Ambulatory Medical Care Survey[38] for the 10 states in our study was 69%, higher than the 57.9% appointment rate we found when calling only offices that accepted Medicaid. Although physician surveys might capture whether any of a physician's current patients are insured by Medicaid or whether a physician's office has a Medicaid managed care contract, audit methodology can capture the actual experience of new patients seeking care.

Lack of new patient appointment availability has very different implications across the states we studied. In Texas, 28% of nonelderly adults are uninsured, with an expected decrease to 16.9% if the ACA is fully implemented. In contrast, the effect of the ACA in Massachusetts is expected to be negligible[25,32] because the majority (97%) of nonelderly adults are insured[39] and already have a usual source of care.[41,42] An audit design is uniquely able to measure the capacity of the system to absorb new patients who have not yet established care, something that will be particularly important to track in states with high uninsured rates and/or large expected increases in coverage.

As a model for the ACA, Massachusetts is essentially a post-reform state. Will primary care access for new patients in other states look like Massachusetts once ACA reforms take hold in those states? Our study is unable to answer that question because we do not have a baseline for Massachusetts prior to reform to determine if the differences in Massachusetts compared with other states can be attributed to Massachusetts insurance reform or whether there were differences that existed prior to reform. As shown in Table 1, Massachusetts differs greatly from the other states, as evidenced by the fact that its PCP per capita ratio is more than 30% higher than in other states.

This study has several important limitations. First, our callers were not real patients and were unable to provide insurance numbers or complete the appointment process in 11.7% of cases; however, the lack of meaningful differences in noncompletion rates between insurance categories suggests that these barriers did not substantially alter our results. Second, although the audit design can simulate the caller experience for offices called, it does not represent how newly insured patients would necessarily choose practices to make appointments. Leveraging the fact that patients are more likely to choose offices close to them, we attempt to overcome this limitation by sampling offices in proportion to the number of persons with that insurance status in that county, but this strategy may mask marked variation within counties. Third, our insurance scenarios are more optimistic than what one would expect from randomly calling offices: for the private insurance scenario, we used the plan with the largest market share in each county, and we did not investigate potential appointment barriers that may exist for those with high-deductible plans; for the Medicaid scenario, we called only practices using Medicaid managed care plans or PCCM plans accepted at those practices; for the uninsured scenario, appointments were calculated for those able to make full cash payments at the time of the visit.

Although we were striving to capture the status quo before ACA-related coverage expansions and increases in primary care reimbursement, some states were actively transitioning to Medicaid managed care during our period of data collection.[43-45] In Oregon, we encountered higher rates of administrative barriers and could not determine whether an appointment would be granted in almost 20% of calls made during the period when the state was transitioning from Medicaid managed care to care coordination organizations.[45] Therefore, caution is warranted when interpreting data collected during times of change. Finally, our measure of access is defined as the availability of new patient primary care appointments. Although this is a common measure of access tracked nationally and across states,[46-49] findings cannot be generalized to existing patients who have an established source of care.

Conclusions

We assessed current access to primary care for new patients in 10 states using a patient-centered approach that can be systematically replicated across states and tracked over time. Findings indicate that although capacity exists, the ability to obtain primary care appointments among new patients varies across states and insurance status. As the largest insurance expansion in 2 generations unfolds, it will be important to track the effect on access to care for newly and currently insured patients and the costs for those who remain uninsured or select high-deductible plans.

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--- Invited Commentary ---

Calling All Doctors
What Type of Insurance Do You Accept?

Andrew B. Bindman, MD; Janet M. Coffman, PhD

Through coverage expansion, the Patient Protection and Affordable Care Act (ACA) is expected to reduce a major barrier to health care access, the cost of care. However, the law does not ensure that an adequate number of physicians are available and willing to accept a patient's form of coverage.

One of the main ways that the ACA expands coverage is through the Medicaid program. One particular concern has been whether enough physicians are available to meet the demands for the care of these patients.[1] Some of the greatest increases in Medicaid coverage are projected to occur in geographic areas that already have practitioner shortages regardless of payment type. Low Medicaid reimbursement rates further compound the problem. In general, Medicaid programs pay physicians less than Medicare and commercial insurers.[2] Physicians are not required to accept Medicaid patients, and research indicates that physicians are less willing to accept these patients in states with lower payment rates.[3]

There is no systematic monitoring of whether physicians are willing to accept patients with Medicaid coverage. A common approach is to ask physicians through a survey. However, physician nonresponse and inaccurate reporting can undermine the validity of the results.

In this issue, Rhodes et al[4] describe a strategy for determining physicians' willingness to accept new patients with different types of insurance that closely reflects patients' experiences. They used a simulated patient methodology, which relied on trained staff using a script to call primary care offices in 10 states and request a new patient appointment. By using a reproducible clinical scenario and varying the expected payer information, the investigators were able to estimate the willingness of a sample of practices to accept privately insured, Medicaid, and uninsured patients.

The study was performed during the year before the expansion of Medicaid as a part of the ACA. The findings confirm what physician surveys had previously suggested: there is variation in physicians' willingness to accept new Medicaid patients across states, and in all states this rate is lower than the rate for privately insured patients. On average, callers with Medicaid coverage were only 68.4% as likely as privately insured callers to obtain a new patient appointment from a primary care physician for the same clinical problem but almost 4 times as likely as uninsured callers with a limited ability to pay. Among callers obtaining an appointment, wait times did not differ by insurance status.

The simulated patient methodology offers some advantages over physician surveys. It is not subject to nonresponse