

# Insurance Status and Access to Urgent Ambulatory Care Follow-up Appointments

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**I**N 2005 US RESIDENTS WILL MAKE about 114 million visits to hospital emergency departments (EDs).<sup>1</sup> More than 80% will be treated and discharged with a recommendation for follow-up care. Patients who have a primary care clinician are generally referred back to their usual source of care for follow-up. However, many ED patients, both insured and uninsured, either lack an established relationship with a primary care clinician or have reported difficulty obtaining timely appointments with their usual source of care.<sup>2</sup> For those with a potentially serious condition that requires urgent follow-up, timely access to outpatient care is essential to avoid the costs of hospitalization or an adverse outcome.

It is difficult to measure access to outpatient care objectively. Surveys of private physician offices and ambulatory clinics are prone to social desirability bias, and the validity of patient surveys may be compromised by selection, recall, and nonresponse bias.<sup>3</sup> In 1994, the Medicaid Access Study Group<sup>4</sup> circumvented these problems by training research assistants to pose as patients seeking care for 1 of 3 minor but physically uncomfortable health problems. In the 9 cities involved in that study, only 44% of callers who reported that they were covered by Medicaid could secure an appointment at any point and only 8%

**Context** There is growing pressure to avoid hospitalizing emergency department patients who can be treated safely as outpatients, but this strategy depends on timely access to follow-up care.

**Objective** To determine the association between reported insurance status and access to follow-up appointments for serious conditions that are commonly identified during an emergency department visit.

**Design, Setting, and Participants** Eight research assistants called 499 randomly selected ambulatory clinics in 9 US cities (May 2002–February 2003) and identified themselves as new patients who had been seen in an emergency department and needed an urgent follow-up appointment (within 1 week) for 1 of 3 clinical vignettes (pneumonia, hypertension, or possible ectopic pregnancy). The same person called each clinic twice using the same clinical vignette but different insurance status.

**Main Outcome Measure** Proportion of callers who were offered an appointment within a week.

**Results** Of 499 clinics contacted in the final sample, 430 completed the study protocol. Four hundred six (47.2%) of 860 total callers and 277 (64.4%) of 430 privately insured callers were offered appointments within a week. Callers who claimed to have private insurance were more likely to receive appointments than those who claimed to have Medicaid coverage (63.6% [147/231] vs 34.2% [79/231]; difference, 29.4 percentage points; 95% confidence interval, 21.2–37.6;  $P < .001$ ). Callers reporting private insurance coverage had higher appointment rates than callers who reported that they were uninsured but offered to pay \$20 and arrange payment of the balance (65.3% [130/199] vs 25.1% [50/199]; difference, 40.2; 95% confidence interval, 31.4–49.1;  $P < .001$ ). There were no differences in appointment rates between callers who claimed to have private insurance coverage and those who reportedly were uninsured but willing to pay cash for the entire visit fee (66.3% [132/199] vs 62.8% [125/199]; difference, 3.5; 95% confidence interval –3.7 to 10.8;  $P = .31$ ). The median charge was \$100 (range, \$25–\$600). Seventy-two percent of clinics did not attempt to determine the severity of the caller's condition.

**Conclusions** Reported insurance status is associated with access to timely follow-up ambulatory care for potentially serious conditions. Having private insurance and being willing to pay cash may not eliminate the difficulty in obtaining urgent follow-up appointments.

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could get an appointment within 2 working days without agreeing to pay a substantial cash co-payment.

It is not known whether Medicaid and uninsured patients who have been evaluated in an ED and found to have

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an urgent or potentially dangerous health problem face similar barriers to outpatient care. To help provide information on this issue, we adopted the same approach used by the Medicaid Access Study Group<sup>4</sup> but used much more serious clinical scenarios. Our primary goal was to determine whether insurance status was associated with the timing and availability of an appointment for urgent ambulatory follow-up care after reportedly being discharged from the ED. Our secondary goal was to assess overall access to follow-up care for patients reportedly treated and released from the ED with a potentially serious health condition.

## METHODS

### Survey Sample

To achieve population and geographic diversity, 9 US cities were selected. The sampling frame was developed using the ambulatory care follow-up lists of EDs located in each city. In consultation with the study site directors, a convenience sample of local EDs was identified and a list of follow-up clinics was generated using all the condition-appropriate follow-up clinics from each ED. For the purpose of this study, *clinic* was defined as any site where appropriate follow-up physician care was available. The sampling frame included hospital and health system clinics, community clinics, and private physician offices. From this list, follow-up clinics were randomly sampled for the survey. Safety net clinics were identified by asking site directors to identify where they would refer an uninsured patient or a Medicaid beneficiary. Because the number of these clinics was limited, all safety net clinics were contacted.

### Survey Methods

Calls were made from a central computer-assisted telephone interview (CATI) center (University of Chicago Survey Laboratory) by graduate students who were hired to pose as patients. Callers were trained using standard interview questions and data collection forms that were developed

during a pretest phase of the study. To ensure reproducibility, all 8 callers were supervised throughout the study and a subset of calls was monitored.

Three clinical conditions were chosen based on the need for urgent follow-up care: community-acquired pneumonia (pneumonia severity index class III),<sup>5</sup> asymptomatic accelerated hypertension with a diastolic blood pressure greater than 110 mm Hg, and possible ectopic pregnancy (low abdominal pain, vaginal bleeding, and an indeterminate ultrasound). Women using the "possible ectopic pregnancy" vignette contacted only obstetrics and gynecology and family medicine clinics. Men used the pneumonia and hypertension vignettes. The survey center designated clinics as *out of scope* if the clinic employee who handled the call reported that the clinic did not provide care for the clinical condition. For example, a family medicine clinic that did not accept obstetric patients was judged to be out of scope for the possible ectopic pregnancy vignette. When an out-of-scope clinic was identified, it was excluded from the analysis and a replacement clinic was randomly selected from the sampling frame.

Each clinic in the study was called twice by the same caller using the same scripted clinical vignette. None of the clinics in the final analysis was omitted and no clinic was sampled for more than 1 comparison. During 1 call, the caller claimed to have private insurance; on the other call, the caller either reported that he/she was a Medicaid beneficiary or was uninsured. The order of the calls was randomly assigned by the computer-assisted telephone interview system. To minimize the likelihood that a caller would be identified, the survey center required at least 14 days between the first and second calls. Furthermore, the survey center blocked caller identification on all outgoing calls.

If a clinic refused to complete its appointment screening process without a specific insurance number or Social Security number, it was classified as "unable to complete the protocol." If a

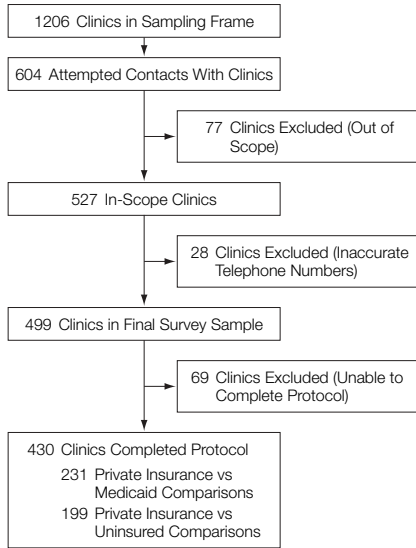
clinic's telephone number was incorrect or disconnected, research assistants sought to correct any clerical errors. If the incorrect telephone number was verified as the number patients were receiving from the referring EDs, this clinic was classified as a "wrong number" and a replacement clinic was randomly chosen. Failed appointments due to incorrect telephone numbers were excluded from the analysis.

Callers began each call stating they had been seen in a community ED the previous night and needed a follow-up appointment. Callers did not use the name of the local ED in their initial appointment request; however, when requested they provided it. If the caller was offered an appointment more than a week after the call, the caller asked to be seen sooner and stated that the emergency physician had urged the patient to be seen as soon as possible. Callers used details from their clinical condition to emphasize the importance of obtaining an urgent appointment (eg, "I went to the ER last night for a cough and they told me I had pneumonia. I'm a diabetic and I've had some kidney problems, so the ER doctor wanted me to follow up. I need to make an appointment.") Whenever a caller who claimed to be uninsured was offered an appointment, he/she asked if cash would be required at the time of the visit and if so, how much. If the required amount exceeded \$20, the caller offered to bring \$20 to the appointment and arrange a plan to pay the balance later. If callers were unable to obtain an appointment, they asked the clinic staff why they could not be seen.

Callers used a series of standard responses when they were asked for specific insurance information, identification numbers, or both. These phrases were developed during the pilot phase of the study and were selected to maximize the likelihood of a successful appointment. For example, callers stated that they did not have their insurance card with them during the call, but that their insurance type allowed them to choose their own provider and that they would bring their identification card

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**Figure.** Survey Sample



Sampling strategy for the 1206 clinics included in the study's sampling frame. Clinics were deemed out of scope when staff stated that the clinic was inappropriate for the patient's clinical condition. Study staff verified that "inaccurate telephone numbers" were actual numbers given to patients by emergency departments. Clinics were classified as "unable to complete protocol" when callers could not provide required information such as a Social Security number.

with them to the appointment. Callers did not provide any false identification numbers to clinic staff.

**Outcome Measures**

The primary outcome was the percentage of callers by insurance status who successfully secured a follow-up appointment within a week of their call. Because of the data collection protocol, we also recorded appointment success rates for uninsured callers both with and without the \$20 cash restriction at the time of the appointment. If a clinic offered an uninsured caller an appointment within a week but required more than \$20 to arrange the appointment, that call would be classified as a successful appointment for an uninsured caller with unlimited cash payment and a failed appointment for an uninsured caller who was limited to a \$20 payment at the time of the appointment. The a priori definition of a successful appointment for an uninsured patient was an offered appoint-

ment within 7 days with a maximum \$20 cash payment and an offer to pay the balance later. To avoid blocking appointments for actual patients, all appointments were cancelled at the end of each call.

To protect the confidentiality of clinics and their staff, all clinic identifiers were removed from the study database prior to the analysis. The only clinic-level data retained in the analysis database was the safety net status of the clinic.

**Data Analysis**

The unit of analysis was the clinic, and appointment rates were compared using the paired calls to each clinic. One analysis compared appointment rates for callers claiming to have private insurance vs Medicaid coverage; the other compared appointment rates for callers claiming to have private insurance vs no insurance coverage. Significance was determined using McNemar's test of paired proportions ( $\alpha = .05$ ). Assuming a baseline appointment rate of 60% in the privately insured group, we calculated that 200 clinic pairs would be needed to detect a 20% difference in appointment rates with 90% power after adjusting for differences by vignette and city. Because the study did not involve actual care of patients and the confidentiality of contacted clinics was closely guarded, it was approved for nationwide administration by the institutional review boards of the principal coinvestigators (B.R.A., K.V.R.) and the survey center (K.V.R.). All analyses were conducted using STATA version 8.2 (StataCorp LP, College Station, Tex).

**RESULTS**

During the 10-month study period (May 2002 through February 2003), the survey center attempted to contact 604 clinics (FIGURE). Seventy-seven clinics (12.7%) were deemed out of scope and were excluded from further analysis. Of the remaining 527 clinics, 28 (5.3%) were excluded because an incorrect telephone number was provided by the referring ED. Of the 499 clinics in the final survey sample, callers were un-

able to complete the study protocol with 69 clinics (13.8%). The remaining 430 clinics completed the study protocol (response rate, 430 [86.2%] of 499). It took the survey center an average of 2 calls (range, 1-7 calls) to complete the study protocol for each insurance type. Ninety-eight percent of the clinics completed a financial screening process with the callers.

Of the 430 clinics with 2 completed contacts (860 completed appointment attempts), 406 (47.2%) of 860 contacts resulted in an appointment within 7 days. For the private insurance vs Medicaid comparison, 231 clinics were contacted twice. A caller claiming to have private insurance was more likely to secure a prompt follow-up appointment than when the same caller claimed to be covered by Medicaid (63.6% [147/231] vs 34.2% [79/231]; difference, 29.4 percentage points; 95% confidence interval [CI], 21.2-37.6;  $P < .001$ ). For the private insurance vs uninsured comparison, 199 clinics were contacted twice. Again, callers had higher appointment rates when they claimed to be privately insured than when the same callers stated they were uninsured and offered to bring \$20 at the time of the visit (65.3% [130/199] vs 25.1% [50/199]; difference, 40.2 percentage points; 95% CI, 31.4-49.1;  $P < .001$ ). If callers claiming to be uninsured could pay cash for the entire charge at the time of their visit, there was no difference in rates of securing a timely appointment (private insurance vs uninsured paying cash, 66.3% [132/199] vs 62.8% [125/199]; difference, 3.5 percentage points; 95% CI, -3.7 to 10.8;  $P = .31$ ). The median cash charge for a follow-up visit was \$100 (range, \$25-\$600).

TABLE 1 reports survey results by clinic type, clinical vignette, and city. Access to care within a week of contact did not differ by clinic type (safety net vs nonsafety net) for Medicaid callers (37.5% vs 33.7%; difference, 3.8 percentage points; 95% CI, -14.0 to 21.7;  $P = .67$ ) or uninsured callers (33.3% vs 23.8%; difference, 9.5 percentage points; 95% CI, -8.2 to 27.2;  $P = .29$ ) when uninsured callers limited their available

cash to \$20 at the time of the visit. When all offered appointments were considered (even those beyond the 7-day time frame), safety net clinics were only marginally more likely to provide a follow-up visit to Medicaid callers than nonsafety net clinics (62.5% vs 44.7%; difference, 17.8 percentage points; 95% CI, -0.9 to 36.4;  $P = .06$ ). Safety net clinics were less likely than nonsafety net clinics to offer a timely appointment to a privately insured caller (50.8% vs 66.6%; difference -15.8 percentage points; 95% CI, -28.9 to -2.6;  $P = .02$ ).

In 72% of the completed cases, the callers did not believe the clinic staff had tried to discover the nature or seriousness of their clinical condition. The clinical vignette used in a call was not associated with appointment success. There was no appreciable city-by-city variability in access to follow-up care for privately insured or uninsured patients; however, access to follow-up care for Medicaid callers differed markedly among cities.

Callers recorded the reasons they were refused appointments (TABLE 2). Callers who claimed to have Medicaid coverage were generally told that the clinic did not accept Medicaid; this was true for 74.6% (91/122) of the Medicaid callers who were refused appointments. Callers claiming to be privately insured who were refused appointments, in contrast, were generally told either that the clinic was not accepting new patients at that time (31.1% [19/61] of callers) or that no appointment times were available soon enough to meet the caller's needs (23.0% [14/61] of callers). Of the 199 callers who claimed to be uninsured, 125 were initially offered an appointment under the assumption that they would pay cash for their visit. Clinics subsequently refused appointments to 75 of these 125 callers when a request was made to pay \$20 at the time of the visit and arrange payment for the balance.

**COMMENT**

The findings in this study raise concerns about access to outpatient care.

The nationwide trend toward more aggressive outpatient care of ED patients with potentially serious conditions raises important questions—is timely access to follow-up care available to those who need it? If so, how is access influenced by the patient's insurance coverage? The conditions we

**Table 1. Overall Appointment Rates\***

	No. of Successful Appointments Within 7 Days/Total No. of Calls (%)			
	Private Insurance	Medicaid	Uninsured	
			Cash Payment Limited to ≤\$20	Unlimited Cash Payment
Overall	277/430 (64.4)	79/231 (34.2)	50/199 (25.1)	125/199 (62.8)
Clinic type				
Safety net	30/59 (50.8)	12/32 (37.5)	9/27 (33.3)	15/27 (55.6)
Nonsafety net	247/371 (66.6)	67/199 (33.7)	41/172 (23.8)	110/172 (63.9)
Vignette				
Pregnancy	92/151 (60.9)	33/73 (45.2)	16/78 (20.5)	47/78 (60.3)
Pneumonia	90/139 (64.7)	24/79 (30.4)	12/60 (20.0)	40/60 (66.7)
Hypertension	95/140 (67.9)	22/79 (27.8)	22/61 (36.1)	38/61 (62.3)
City				
Phoenix	27/35 (77.1)	7/20 (35.0)	2/15 (13.3)	7/15 (46.7)
Los Angeles	40/52 (76.9)	14/27 (51.9)	4/25 (16.0)	19/25 (76.0)
Denver	26/43 (60.5)	2/24 (8.3)	3/19 (15.8)	7/19 (36.8)
Jacksonville	18/32 (56.3)	3/17 (17.6)	3/15 (20.0)	9/15 (60.0)
Atlanta	19/31 (61.3)	6/17 (35.3)	3/14 (21.4)	8/14 (57.1)
Chicago	49/71 (69.0)	21/35 (60.0)	13/36 (36.1)	28/36 (77.8)
Minneapolis/St Paul	31/54 (57.4)	20/31 (64.5)	5/23 (21.7)	12/23 (52.2)
New York	41/65 (63.1)	4/37 (10.8)	8/28 (28.6)	20/28 (71.4)
Dallas/Ft Worth	26/47 (55.3)	2/23 (8.7)	9/24 (37.5)	15/24 (62.5)

\*The table displays the appointment rates within 7 days for privately insured, Medicaid, and uninsured callers by clinic type, clinical vignette, and city. The results for uninsured callers are displayed twice: first using a \$20 cash restriction at the time of the appointment and second using the appointments obtained if the callers were able to pay any cash amount requested by the clinic.

**Table 2. Reasons for Failed Appointments\***

	Total No. of Failed Appointments/Total No. of Calls (%)			
	Private (n = 430)	Medicaid (n = 231)	Uninsured (n = 199)	
			Cash Payment Limited to ≤\$20	Unlimited Cash Payment
Total failed appointments	153/430 (35.6)	152/231 (65.8)	149/199 (74.9)	74/199 (37.2)
Appointment offered ≥8 d	92/153 (60.1)	30/152 (19.7)	43/149 (28.9)	43/74 (58.1)
Appointments refused	61/153 (39.9)	122/152 (80.3)	106/149 (71.1)	31/74 (41.9)
Reasons for refusal				
Clinic is not accepting new patients	19/61 (31.1)	12/122 (9.8)	2/106 (1.9)	2/31 (6.5)
Clinic does not take Medicaid	NA	91/122 (74.6)	NA	NA
Clinic does not serve uninsured patients	NA	NA	8/106 (7.5)	8/31 (25.8)
No times available until too far in the future	14/61 (23.0)	6/122 (4.9)	10/106 (9.4)	10/31 (32.2)
Clinic would not accept \$20 cash limit	NA	NA	75/106 (70.8)	NA
Other	28/61 (45.9)	13/122 (10.7)	11/106 (10.4)	11/31 (35.5)

Abbreviation: NA, not applicable.

\*The table displays the reasons for failed appointments by reported insurance status. The results for uninsured callers are displayed twice: first using a \$20 cash restriction at the time of the appointment and second using the appointments obtained if the callers were able to pay any cash amount requested by the clinic. The reasons for appointment refusals are identified for each insurance type.



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selected—accelerated hypertension, pneumonia severity index class III pneumonia, and possible ectopic pregnancy—clearly warrant timely follow-up. The challenge faced by the callers in our study is no different than that faced by millions of discharged ED patients each year—finding a clinic or physician who is able to see them for a newly diagnosed health problem.

Insurance coverage is widely recognized as an enabling factor for accessing health care services. The Institute of Medicine recently documented that in the United States the uninsured get about half of the medical care of those who are insured, and as a result, those without insurance tend to have more illness and shorter life expectancy than those with health insurance.<sup>6-8</sup> Furthermore, the committee noted that uninsurance may have important “spill-over effects” that compromise the economic viability of health care clinicians and institutions, particularly in communities with large numbers of uninsured citizens.<sup>9</sup> If this is true, the consequences of uninsurance may extend beyond the uninsured and hinder access to care for insured and uninsured alike.

In light of known relationships between health insurance and access to care in the United States, it is not surprising that callers who are uninsured face barriers to securing timely access to follow-up care. It may be surprising to some that appointment rates for callers covered by Medicaid were only marginally better than those for uninsured callers who offered to pay \$20. This raises questions about the adequacy of Medicaid reimbursement for outpatient care. We noted wide disparities in the rate of follow-up appointments granted to Medicaid callers by city (from a low of 8% in Denver to a high of 65% in Minneapolis/St. Paul). Although we did not collect Medicaid reimbursement data and cannot directly explain these differences, variation in Medicaid payment rates may be contributing to the observed differences. Skaggs et al<sup>10</sup> reached this conclusion in a study of access to ortho-

pedic care for pediatric Medicaid beneficiaries in California. Currie et al<sup>11</sup> found that states that increased their Medicaid fee ratios experienced small but significant reductions in infant mortality. These observations cast doubt on the wisdom of reducing payments to maintain the solvency of state Medicaid programs because doing so may compromise beneficiaries' access to care.

Our results illustrate how the anticipated rates of reimbursement may influence access to care. If uninsured callers were able to pay the full cash charge at the time of their visit, they were granted timely appointments at the same rate as callers with private insurance. However, it is unlikely that many uninsured patients could readily pay the median requested amount of \$100 for a follow-up visit, let alone the maximum requested charge of \$600. Regardless of insurance status, 98% of clinics contacted in this study screened callers to determine insurance status, whereas only 28% attempted to determine the severity of the caller's condition.

Callers posing as uninsured or Medicaid patients were no more likely to secure a timely appointment from safety net clinics than from nonsafety net clinics. There are 2 potential explanations for this observation. One is that these clinics are so financially strained that they cannot afford to accommodate poorly paying patients. Alternatively, the capacity of these clinics may be so limited that they can no longer accommodate new patients within the 1-week time frame used in this study. That privately insured callers experienced considerable difficulty getting a timely appointment from safety net clinic suggests that the latter explanation is more likely. The lower appointment rate at safety net clinics for callers who claimed to be privately insured also may reflect the mission of some safety net clinics to serve only the poor or uninsured.

The disparities we noted in access to care among uninsured, Medicaid, and privately insured patients are consistent with other reports on the impact of health insurance status and access to care.

However, one third of the clinics we contacted could not provide access to a new patient with private insurance within a week, even though the callers stated that they had just been seen in a local ED, diagnosed with an urgent health problem, and advised to arrange follow-up care as quickly as possible. This suggests that the challenge of securing timely access to outpatient care extends beyond the ranks of the uninsured. Because our callers were trained graduate students who developed significant expertise with the appointment scheduling process, our results may represent a best-case scenario for new patients at follow-up clinics.

Timely follow-up care is necessary to prevent adverse outcomes and reduce unnecessary hospitalizations. Ambulatory care access barriers create challenges for both emergency patients and clinicians. It may be unsafe to discharge a patient with a potentially serious health problem if timely and appropriate follow-up cannot be ensured at the time of the ED visit. However, if emergency physicians err on the side of caution and admit more patients with “borderline” diagnoses, this will impose considerable costs on patients, their families, employers, hospitals, and insurance plans. Alternatively, emergency physicians may ask their patients to return to the ED for ongoing care when traditional follow-up care cannot be guaranteed, but this practice could contribute to ED crowding and inefficient use of ED resources.

Although emergency physicians routinely refer discharged patients to follow-up clinicians, the appropriate timing of follow-up appointments for discharged ED patients has not been studied widely. It is possible that the routine recommendation to follow-up “within a week” is saturating the capacity of ambulatory clinics, thereby preventing timely access to care for patients who truly require urgent follow-up care. To avoid this issue we carefully selected conditions for which timely follow-up care is warranted. Nevertheless, evidence-based guidelines that prioritize the need for follow-up care after ED

discharge would be a helpful resource for both clinicians and patients.

Our findings are of particular concern given the progress some systems have made with improving timely access to care. The advanced access model is an approach to ambulatory clinic scheduling that offers same-day appointments to patients.<sup>12,13</sup> It has been shown to reduce delays and increase the continuity of primary care for patients with chronic conditions.<sup>14</sup> Although we do not know whether the advanced access model was in place at any of the study clinics, it appears that advanced access may be the exception rather than the rule in US ambulatory clinics. The widespread use of this model could improve the availability of timely follow-up care for ED patients.

Because our study required the use of deception, we conducted it with a number of ethical safeguards. The telephone calls to office staff were made in a routine manner that attempted to minimize time spent on the telephone. When an appointment was secured, it was cancelled at the end of the call so the appointment slot would be available for an actual patient. The study investigators were blinded to the identities of the clinics and staff who handled these calls. After data collection was completed, we mailed debriefing letters to all 1206 clinics in the sampling frame. This letter disclosed the nature of the study and reported results by city. Clinic managers and physicians were advised that their clinic might have been contacted during the study, and they were invited to contact us with any questions or concerns. We did not receive any replies to this debriefing letter.

Our study is limited in several respects. The most important limitation is that all of our callers were, by definition, posing as new patients at every clinic they contacted. It is therefore inappropriate to extrapolate our findings to patients who have a usual source of care. These patients likely would have less difficulty securing timely appointments for follow-up care and often may be able to bypass clinic receptionist staff

to speak directly with their physician. However, this does not negate the importance of our findings for several reasons. First, an analysis of the Medicare Expenditure Panel Survey indicates that even those ED patients who have a usual source of care report difficulties scheduling an appointment or experience long waiting times for an appointment.<sup>2</sup> Although this analysis did not address the need for urgent appointments, it does illustrate that having a usual source of care does not guarantee timely access to care. Second, even if appointment rates are higher for patients with a usual source of care, the disparities in appointment rates we observed across insurance types may still persist. And third, even though most patients are fortunate to have a usual source of care, tens of millions of US residents do not have a relationship with a primary care clinician.<sup>15</sup>

Because our callers were not actual patients, they could not complete the appointment process if a specific health insurance policy or Social Security number was required. However, 86% of clinics completed the survey protocol without requiring this information. We believe that the loss of these clinics did not appreciably alter our findings. If anything, the inclusion of these clinics would result in even greater disparities in appointment rates, since clinics that require this information during the telephone interview may be even less likely to offer appointments to callers claiming to be uninsured or have Medicaid coverage. The 9 US cities we surveyed were chosen for geographic and ethnic diversity. We did not, however, obtain a random sample of clinics from the entire population of US health care clinicians. Therefore our findings cannot be generalized to rural communities. Many emergency physicians contact on-call physicians directly from the ED to ensure that selected patients have access to timely follow-up care. Although we agree that this practice is often effective, it is not a practical system-wide solution given the volume of patients in most EDs and the limited number of on-call physicians.<sup>16</sup>

Our sample included a number of incorrect or disconnected telephone numbers. We confirmed that these numbers were being provided to patients referred by EDs in these communities. Since this was not an isolated phenomenon or one that was limited to a single city, it probably reflects the experience of many ED patients seeking follow-up care and is another operational problem that deserves attention. Finally, it is important to note that the offer of a follow-up appointment does not guarantee appropriate care. Likewise, failure to authorize a follow-up appointment over the telephone does not mean a clinic would have refused care if the patient presented in person. However, it is unlikely that many patients would seek care in person if they were refused an appointment over the telephone.

These study findings suggest that reported insurance status influences access to follow-up appointments for patients with conditions requiring urgent ambulatory follow-up care. While this is particularly true for Medicaid beneficiaries and the uninsured, some privately insured patients and uninsured patients paying cash may experience considerable difficulty obtaining urgent appointments. Although the ultimate consequences of these access barriers are not known, they may result in patients' delaying needed follow-up care, risking adverse outcomes, or requiring additional emergency care or hospitalization.

**Author Contributions:** Dr Asplin had full access to all of the data in the study and takes responsibility for the integrity of the data and the accuracy of the data analysis. Dr Rhodes served as the principal co-investigator throughout the design, implementation, analysis, and reporting of the study.

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