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When Patients Govern: Federal Grant Funding and Uncompensated Care at Federally Qualified Health Centers

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Abstract

Objective—To determine if the proportion of consumers on federally qualified health center (FQHC) governing boards is associated with their use of federal grant funds to provide uncompensated care.

Methods—Using FQHC data from the Uniform Data System, county-level data from the Area Resource File and governing board data from FQHC grant applications, the uncompensated care an FQHC provides relative to the amount of its federal funding is modeled as a function of board and executive committee composition using fixed-effects regression with FQHC and county-level controls.

Results—Consumer governance does not predict how much uncompensated care an FQHC provides relative to the size of its federal grant. Rather, the proportion of an FQHC's patient-mix that is uninsured drives uncompensated care provision.

Conclusions—Aside from a small executive committee effect, consumer governance does not influence FQHCs' provision of uncompensated care. More work is needed to understand the role of consumer governance.

Keywords

Federally qualified health centers; consumer governance; uncompensated care; uninsured

Federally qualified health centers (FQHCs) are a critical source of primary care for approximately 20 million medically underserved people in both urban and rural areas nationwide.[1] They use income-sensitive sliding-fee scales to charge for care, but ultimately accept all patients without regard for their ability to pay. Consequently, FQHCs serve a disproportionate share of uninsured and low-income persons and provide a considerable amount of uncompensated care.

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To cover the costs of providing uncompensated care, FQHCs receive federal grants from the Bureau of Primary Health Care. However, despite the cost-effectiveness of FQHCs,[2] these funds often fail to fully offset the costs of the uncompensated care they provide. In 2000, the average annual cost of care for an FQHC patient was $406, while federal funding per uninsured patient was only $226. By 2007, the average annual cost of care per patient had risen to $552, while federal funding per uninsured patient had only increased to $270, increasing the funding gap from $180 to $282.[1] Consequently, FQHCs may find it increasingly difficult to maintain the organization's finances while pursuing their mission.

Faced with this challenge, there is evidence that some FQHCs adopt practices to reduce the amount of uncompensated care they provide. When patients cannot pay, some FQHCs simply write off the uncompensated care as bad debt. Others set up payment plans or use a collection agency to collect unpaid balances. Still others deny treatment and refer patients to other providers.[3] Federally qualified health centers with less financial slack in their budgets are more likely to adopt such practices, but it is unclear what factors determine how FQHCs decide how much uncompensated care they can afford to provide.[4,5]

One potential factor in these decisions is the FQHC's governing board, which is required to consist of at least 51% FQHC consumers. For decades, it has been assumed that consumer governance makes FQHCs more responsive to their community's needs.[6–8] Indeed, the concept of representation suggests that there is a positive association between *descriptive representation* (i.e., representatives sharing salient characteristics with those they represent) and *substantive representation* (i.e., representatives advocating for the interests of those they represent).[9–13] Accordingly, assuming that uncompensated care is in the interest of most FQHC patients, the proportion of consumers on the board should be positively associated with the amount of uncompensated care an FQHC provides, depending of course on the extent to which those board members resemble the typical low-income, uninsured FQHC patient.

While several studies have identified barriers to the effective implementation of consumer governance, none of these studies have empirically evaluated the relationship between board composition and organizational outcomes.[14–21] Thus, this study sought to determine the relationship between the proportion of consumers on the board and the FQHC's provision of uncompensated care relative to the amount of its federal grant. Informed by the link between descriptive and substantive representation, we hypothesized that boards with a greater proportion of representative consumer members will help sustain a mission towards the uninsured (as measured by the provision of uncompensated care) that would be absent—or significantly diminished—in boards with proportionally fewer consumers.

Methods

Data sources

Data on FQHCs were drawn from years 2002 – 2007 of the Uniform Data System (UDS), which is collected annually by the Health Resources and Services Administration (HRSA) and reports aggregate patient demographics and organizational staffing, service provision, and finances. After 2004, HRSA stopped releasing select financial variables for individual

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FQHCs, which they deemed proprietary. However, complete UDS data through 2007 were obtained for this study through a data use agreement with the George Washington University after intervention by Congressman Henry Waxman.

The Health Resources and Services Administration also compiles data from numerous sources to create the Area Resource File (ARF). The ARF contains county-level measures of both health care supply and population demographics. Select variables describing the characteristics of the counties in which FQHCs were located from six years of ARF data between 2002 and 2007 were merged with the UDS data to serve as controls.

Using UDS identification numbers, descriptions of board members from years 2003 – 2006 of FQHC grant applications were merged with the UDS/ARF dataset. These data, obtained by a Freedom of Information Act request, contain information on board members' names, consumer status, board tenure, board office held, and occupation. Board member data were collapsed to the FQHC level yielding the percentage of board members who were: 1. non-consumers, 2. non-representative consumers (whose socioeconomic status does not resemble that of the typical FQHC patient), and 3. representative consumers (whose socioeconomic status resembles that of the typical FQHC patient). The methods for categorizing FQHC board members into these three groups are described elsewhere.[22]

Exclusion criteria and missing data

The FQHC program includes Community Health Centers (CHCs), Migrant Health Centers, Health Care For The Homeless Programs, Public Housing Health Centers, and School-Based Health Centers. Federally qualified health centers that are not CHCs (i.e., do not receive CHC grant funds) are eligible to request a waiver of the consumer governance requirement.[23] Such waiver-eligible FQHCs were excluded from this study, while CHC grantees with other FQHC funding remained in the sample and were flagged to indicate additional funding sources. The analysis was limited to fully-operational federally-funded FQHCs by further excluding centers without at least one full-time medical provider, at least one full-time administrative staff person, and at least 5,000 annual patient encounters.[24] Federally qualified health centers in the U.S. Territories were also excluded.

Using these criteria, 907 unique FQHCs were included in the target sample. The data covered 4,716 FQHC-Years; from a starting population of 5,668 FQHC-Years; 952 FQHC-Year observations were excluded using the criteria of full operations and board presence. Data were not available for all of the sampled FQHCs, and, as Table 1 shows, the sample is limited to the 71.4% of included FQHCs for which grant application data were available.

An analysis of the excluded FQHCs using publicly available data indicated that the final sample was generally representative, although FQHCs missing data were likely to be more financially efficient, have lower costs relative to revenues, and derive a greater share of their revenue from grant funding. Missing data were not a concern in the ARF or the UDS. According to HRSA, blank entries in the UDS are not missing and should be considered synonymous with zero. Therefore, all "missing" values in the UDS data were recoded accordingly.

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Analysis

Using these data, each FQHC's uncompensated care ratio is modeled as a function of board composition, executive committee composition, the interaction between them, general time trends, and other FQHC-level and county-level factors, and is represented by Y in the equation:

$$Y_{it}=\alpha_0+Consumer_{i(t-1)}\beta+Office_{i(t-1)}\chi+Consumer*Office_{i(t-1)}\delta+W_{it}\gamma+T_t\lambda+\mu_i+\varepsilon_{it}$$

where i identifies the FQHC and t=1,…,T indicates the year between 2004 and 2007. *Consumer* is a matrix containing the categorical measure of the proportion of the board consisting of representative consumers, non-representative consumers, and non-consumers (reference group). *Office* is a matrix of two variables indicating the number of (a) representative and (b) non-representative consumer board members on the executive committee. *Consumer*Office* is a matrix containing a total of four interaction terms between the variables represented by *Consumer* and *Office*. W is a matrix of FQHC-level and county-level controls, T is a matrix of binary year indicator variables, μ is a matrix of FQHC-level fixed effects, and ε represents the unobserved time-varying error. Because a delay is expected between board composition at any given time and measurable outcomes resulting from the board's decision-making, the board composition variables are lagged by one year.

The uncompensated care ratio is calculated by summing the amount of an FQHC's bad debt and sliding fee discounts and dividing these uncompensated care costs by the total amount of federal FQHC grant funding the center received in the same year. This measure, constructed from UDS data, is used by HRSA to ensure that FQHCs are using grant funds appropriately to provide care to the uninsured.[25] The model also controls for a variety of county-level and FQHC-level factors, which may influence FQHC decision making and the amount of uncompensated care provided.[24,26]

Prior to the final analysis, a series of specification tests confirmed that a model with FQHC-level fixed effects was preferred over OLS ($F(816, 1354) = 10.20$, $p < .0001$) and random effects ($Chi2(42) = 69.66$, $p = .0046$). The results of a White test indicated that the model was heteroskedastic ($Chi2(45) = 193.65$, $p = 2.39e\text{-}20$) and the Wooldridge test for serial correlation in panel data indicated no autocorrelation ($F(1, 272) = 0.618$, $p = .4324$).[27,28] Thus, the model uses robust clustered standard errors at the FQHC level to improve model efficiency by controlling for heteroskedasticity.

Additionally, various functional specifications of several included variables (physician on the board, executive committee composition, board size, and site count) were modeled, and the specification with the greatest explanatory power was used in the final models. Pairwise correlations between all explanatory variables revealed no cases of perfect collinearity. While some variable pairs were highly correlated, the relationships observed were as expected.

Unobserved factor(s) that may have unbiased and theoretically consistent effects could be associated with board composition and uncompensated care provision. For example, a

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powerful CEO might exert influence on board member selection and also determine how actively the FQHC pursues payment.[29] Consequently, board composition and board size may be endogenous. One approach is to use an instrumental variable to conduct two-stage least squares (2SLS). However, identifying an instrument that is both strong and valid can be difficult, especially with panel data, where the instrument must predict variation over time. Several potential instruments were identified, and their strength was determined in a series of first stage regressions. None of the potential instruments were strong enough to use, especially given the problems presented by weak instruments.[30] Therefore, the 2SLS approach was abandoned.

Lastly, while board composition is assumed to determine organizational performance, organizational performance may determine board composition.[31–33] This issue was tested using a cross-lagged regression technique[32–34] to estimate the composition of the board in year 2 as a function of the uncompensated care ratio in year 1. The results, estimated using fixed effects models with FQHC-level robust clustered standard errors, suggested that the uncompensated care ratio does not predict board composition.

Results

The descriptive statistics for the sample appear in Table 2. During the study period, an average FQHC grantee had a staff of just over 100 employees working at one of six delivery sites, saw almost 16,000 patients and nearly 62,000 encounters annually. Of these, 70% were either uninsured or enrolled in Medicaid, almost half (48%) had asthma, diabetes, or hypertension and nearly half (49%) had incomes below poverty. Over the four year period, the average FQHC had an uncompensated care ratio of 1.08, indicating that it was providing an amount of uncompensated care equal to 108% of its federal grant. The average increased from 0.93 in 2003 to 1.12 in 2006, suggesting that over time the amount of uncompensated care FQHCs are providing is increasing at a faster rate than the size of their federal grants.

The results of the model to predict the uncompensated care ratio appear in Table 3. An uncompensated care ratio of 1 indicates that an FQHC provides an amount of uncompensated care exactly equal to the amount of its federal grant. It follows that a ratio below 1 is indicative of an FQHC using some portion of its federal grant for purposes other than providing uncompensated care, while a ratio greater than 1 indicates that an FQHC provides more uncompensated care than its federal grant can cover.

Contrary to the hypothesis, neither the proportion of representative ($F(3, 818)=0.85$, $p = .466$) nor the proportion of non-representative consumers ($F(3, 818)=0.74$, $p =.527$) on the board is significantly associated with the amount of uncompensated care an FQHC provides. However, the construct for the number of non-representative consumers on the executive committee is jointly significant ($F(3, 818)=2.90$, $p = .0343$). At mean values of representative and non-representative representation, each additional non-representative consumer on the executive committee is associated with an 0.02 unit increase in the uncompensated care ratio. For the average FQHC, this represents a 1.9% increase.

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In addition, a few significant variables were identified, which suggest that the growth in the amount of uncompensated care FQHCs are providing is outpacing the growth in the amount of their federal grants, that FQHCs with higher patient volume provide relatively more uncompensated care, and of course, that FQHCs that see a greater proportion of uninsured patients are providing more uncompensated care. Conversely, FQHCs with a greater proportion of patients age 65 or older and FQHCs that receive a public housing grant tend to provide relatively less uncompensated care.

From 2004 to 2007, the average FQHC's uncompensated care ratio increased by 0.1 units. For an FQHC that provided an amount of uncompensated care equal to the amount of its federal grant in 2004, this is the equivalent of an FQHC providing 10% more uncompensated care in 2007 than in 2004, holding its grant funding constant. For FQHCs that were already providing more uncompensated care relative to their grant funds in 2004, the effect in percentage terms is smaller, while for FQHCs that provided less uncompensated care relative to their grant funds in 2004, the effect in percentage terms is greater.

Federally qualified health centers that receive a public housing grant have an uncompensated care ratio 0.74 units lower than that of CHC-only grantees. Thus, if a CHC-only grantee spent every dollar of its grant on uncompensated care, a public housing grantee would only be expected to spend 26 cents of every dollar on uncompensated care, all else being equal. The total number of annual encounters is positively associated with the uncompensated care ratio. Each additional 100,000 annual encounters is associated with an 0.77 increase in the uncompensated care ratio. While such an increase in patient encounters is likely only relevant for the largest FQHCs, relative to a break-even point of 1, this is a very large effect.

The proportion of FQHC patients who are age 65 or older is negatively associated with the uncompensated care ratio. Each 10 percentage point increase in this age group is associated with an 0.24 unit decrease in the uncompensated care ratio. While the coefficient on Medicare was not statistically significant, the coefficient on the proportion of patients age 65 and above most likely reflects the universal coverage provided to all U.S. citizens through the Medicare program, especially considering that the proportion of patients uninsured is positively associated with the uncompensated care ratio. Each 10 percentage point increase in the proportion of patients without insurance is associated with an increase of 0.13 in the uncompensated care ratio.

Discussion

Despite facing enormous challenges, FQHCs have managed to provide primary care to some of the most vulnerable populations in the most underserved areas of the United States. For the last five decades, they have exemplified what it means to be core safety net providers, maintaining an open-door policy while relying on extremely limited resources. Largely due to this history of success, the Affordable Care Act (ACA) invests heavily in FQHCs, providing $11 billion in new funding over five years, permanently authorizing the program, and enlisting FQHCs to help train the next generation of the primary care workforce. The authors of the ACA also expect a significant return on their investment. FQHCs are being counted upon to meet the increased demand arising from the expansion of insurance

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coverage to tens of millions of Americans, as well as to continue providing uncompensated care to both the undocumented population not benefited by reform and those for whom non-financial barriers to access will remain even after the ACA is fully implemented.

Yet, this study clearly indicates that FQHC grant funding is not keeping pace with the amount of uncompensated care FQHCs are providing, as evidenced by the increase in the uncompensated care ratio from 2003 to 2006. While funding increases under the Affordable Care Act or subsequent budgets may temporarily reverse this trend, a more long-term solution is needed to target federal funds to organizations providing the most uncompensated care. Other safety net providers contend that they are able to serve vulnerable populations just as effectively as FQHCs without being governed by consumers and the results of this study strongly suggest that consumer governance has very little effect on the amount of uncompensated care an FQHC provides relative to the amount of its federal grant. Therefore, it is not clear whether federal funds for the provision of uncompensated care should be restricted to organizations with consumer majority governing boards.

The consumer governance provision is not the sole distinction between FQHCs and other safety net providers. Indeed, there are many substantial differences between FQHCs and other safety net facilities in the pursuit of their mission. For example, while FQHCs have a legally mandated option to treat all regardless of ability to pay, hospital-based ambulatory clinics face no such mandate, in many cases shielding them from the brunt of uncompensated care, even as they enjoy the advantage of tax-exempt non-profit status. It is for this reason that Congress has proposed setting a mandatory minimum level of charity care provision, which hospitals must provide to retain their non-profit status.[35] Similarly, because of the exceedingly high number of uninsured patients they serve, FQHCs have far less of an ability to cost-shift than providers that enjoy a more diverse payer mix.

Given the number of individuals who rely on the health care safety net and the disproportionate financial burden safety net providers shoulder, the decision of how to allocate limited financial resources should be based on sound empirical research rather than untested assumptions. Federal funds should be targeted to safety-net organizations that provide the most uncompensated care and grantees should be required to demonstrate that they provide an amount of uncompensated care that meets or exceeds the amount of their grant. With many FQHCs providing uncompensated care in excess of their federal grant award, FQHCs that consistently provides less uncompensated care than provided for by their federal grant should face the possibility of having their funding reduced if they cannot justify the discrepancy, and these funds should be reallocated to FQHCs in need of additional funding.

Limitations

This study has several limitations. First, the UDS data used here are self-reported and unaudited.[36] There is no way to assess the accuracy of the UDS data, but they remain the only comprehensive data available on FQHCs.

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Second, grant application data were not received for all FQHCs. While systematic differences between missing and non-missing data were minimal, this may limit the ability to generalize the results of this study to settings other than those described by the sample.

Third, while county-level factors are controlled for using ARF data, the county and the FQHC's service area are not necessarily synonymous. For smaller FQHCs with a single delivery site, the service area may be only a portion of a county. For large, multi-site FQHCs, the service area may span multiple counties or cross state lines. Consequently, some county-level factors affecting delivery sites lying outside the grantee's county may not be controlled for in the study. To the extent that those factors are time-invariant, the fixed effects models will control for them. Still, time-varying factors may persist and future studies should consider alternative ways to account for the diversity of settings in which large FQHCs with multiple delivery sites operate.

Finally, consumer governance may have less of an effect than expected for two reasons. First, it may be that the community's needs are widely known. Assuming everyone knows that uninsured patients need uncompensated care, then including consumers on the board adds nothing to identifying the community's needs.[37–39] Second, the law sets a high threshold at 51%. If the presence of one or two consumers on the board is sufficient to make the board responsive to the community, then any variation above 51% will be of no added value. Ultimately, what we would like to know is how much, if at all, the amount of uncompensated care provided by an FQHC would decrease if they were not governed by consumer majorities. A study similar to this one, comparing FQHCs to other safety net providers without consumer governance (e.g., free clinics, hospital emergency rooms, etc.) could determine whether a nominal level of consumer governance matters sufficiently.

Conclusion

Looking to the future, many questions remain to be answered about how to effectively integrate FQHCs into the broader health care system in the wake of the Affordable Care Act, which increases FQHC funding and expects the program to play a critical role in meeting the increased demand from tens of millions of newly insured Americans. Moreover, even with increased insurance coverage, demand for uncompensated care will remain, and FQHCs are expected to continue meeting that demand. The results of this study show that beyond the consumer majority, increased levels of consumer governance have little effect on how much of its federal grant funds an FQHC uses to provide uncompensated care. However, more work is needed to understand how FQHCs allocate their federal grant funds. Case studies of FQHCs willing to submit to a financial audit could help to answer this question, although poorly performing FQHCs would be unlikely to participate.

Federally qualified health centers that provide the most uncompensated care should be targeted for the receipt of additional federal funding, and if other providers without consumer governing boards can accurately document the level of uncompensated care they provide, Congress should consider allowing them to compete with FQHCs for federal grant funding. This does not mean, however, that the consumer governance requirement for FQHCs should be eliminated, as it may be beneficial in other ways. For example, prior work has demonstrated that consumer governance is positively associated with the provision of

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enabling services that help underserved patients get access to care.[40] Similarly, by incorporating the experiences of patients at the center, consumer governance may also play an important role in assessing the quality of care an FQHC provides. As health care systems in the U.S. and abroad grapple with the notion of how best to inform patients and involve them in different levels of health care decision making, identifying tangible benefits of consumer governance is an important area for future study.

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Table 1

Annual Number of FQHCs in Operation, 2002 – 2007

Year	Total Number of FQHC Grantees	Number Excluded	Total FQHC Sample	Total Number of Grant Applications
2002	843	156	687	Not Requested
2003	890	154	736	397 (54%)
2004	914	146	768	297 (39%)
2005	952	155	797	767 (96%)
2006	1,002	160	842	784 (93%)
2007	1,067	181	886	Not Requested
Total	5,668	952	4,716	**2,245**

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Table 2

Sample Specific Mean Descriptive Statistics for Select Variables

Variable	2003	2004	2005	2006	Overall
Uncompensated Care Ratio	0.93	1.09	1.11	1.12	1.08
Delivery Sites per FQHC	5.89	4.79	5.77	5.98	5.73
Unique Patients	16,707	12,590	16,258	16,214	15,837
Unique Encounters	65,234	49,150	63,472	63,487	61,894
Total FTEs	106.42	80.27	103.88	105.74	101.85
Board Size	12.60	12.40	12.57	12.36	12.48
% Representative Consumers on Board	27.77	27.46	26.66	25.42	26.53
% Non-Representative Consumers on Board	40.80	40.98	42.73	43.94	42.58
% of Boards with at least one Physician	33.50	30.30	32.59	30.48	31.71
Representative Consumers on Exec Cmte	0.74	0.75	0.74	0.74	0.74
Non-Representative Consumers on Exec Cmte	1.73	1.75	1.80	1.86	1.80
% of Patients ≤ 200% FPL	66.66	65.99	66.09	65.08	65.83
% of Patients FPL Unknown	24.13	25.98	26.66	28.31	26.70
% of Patients, Male	40.72	40.20	40.64	40.40	40.51
% of Patients, Non-White	54.58	55.06	56.00	55.40	55.42
% of Patients, Uninsured	37.84	38.21	39.16	39.09	38.77
% of Patients, Medicaid	31.64	33.71	31.85	31.31	31.87
% of Patients, Medicare	8.81	8.83	9.03	9.17	9.01
% of Patients, Other Public Insurance	2.20	1.69	1.80	1.75	1.84
% of Patients, Private Insurance	19.52	17.57	18.17	18.68	18.51
% of Patients, Chronic Illness	45.32	48.05	48.92	48.55	48.04
Observations (N)	397	297	767	784	2245

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Table 3

Results of a Fixed Effect OLS Model to Predict Uncompensated Care Ratio

	Coefficient
FQHC-Level Factors	
Board Composition (Lagged One Year)	
% Representative Consumers	0.00228 (0.00346)
% Non-Representative Consumers	−0.00358 (0.00360)
Board Size	−0.00324 (0.0100)
Physician on Board	0.0394 (0.0483)
# Represent. Consumers on Exec Cmte	−0.172 (0.124)
# Non-Represent. Consumers on Exec Cmte	−0.0177 (0.0811)
(% Represent. Consumers) × (# Represent. Consumers on Exec Cmte)	0.00167 (0.00166)
(% Represent. Consumers) × (# Non-Represent. Consumers on Exec Cmte)	−0.000995 (0.00146)
(% Non-Represent. Consumers) × (# Represent. Consumers on Exec Cmte)	0.00234 (0.00173)
(% Non-Represent. Consumers) × (# Non-Represent. Consumers on Exec Cmte)	0.00151 (0.00125)
FQHC Staffing	
Total FTEs	−0.00180 (0.00139)
Physicians as % of Staff	0.00149 (0.0109)
Funding Source	
Migrant Grantee	−0.135 (0.101)
Homeless Grantee	−0.0599 (0.0790)
Public Housing Grantee	−0.744** (0.245)
#Delivery Sites	−0.0117 (0.00769)
#Annual Patient Encounters	7.71e-06** (2.47e-06)
Metro Area	0.153 (0.292)
Patients by Age (19 – 64 Omitted)	
% Age < 5	−0.00434 (0.00766)
% Age 5 – 18	0.00518 (0.00595)
% Age ≥ 65	−0.0241* (0.0117)
Patients by Other Characteristics	

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	Coefficient
% Male	−0.00875 (0.00902)
% Non-White	−0.000521 (0.00197)
% with Chronic Illness	−0.00163 (0.00135)
Patients by Poverty Status (% Unknown Omitted)	
% with Income ≤ 100% FPL	0.000547 (0.00108)
% with Income 101 – 150% FPL	0.000503 (0.00235)
% with Income 151 – 200% FPL	−0.00280 (0.00253)
% with Income ≥ 201% FPL	0.000180 (0.00141)
Patients by Insurance Status (% Private Omitted)	
% Uninsured	0.0125*** (0.00357)
% Medicaid	0.000736 (0.00359)
% Medicare	0.00561 (0.00876)
% Other Public Insurance	−0.0143 (0.00910)
County-Level Factors	
Health Care Supply	
# Hospitals	−0.00243 (0.0360)
Physicians per capita	0.0223 (0.0860)
# FQHCs	−0.0129 (0.0112)
Population Characteristics	
% Male	0.00402 (0.0330)
% Non-White	0.0188 (0.0150)
% Hispanic	0.0267 (0.0269)
Per Capita Income	−6.33e-06 (5.28e-06)
% Uninsured	−0.0523 (0.0610)
% Unemployed	0.00719 (0.0180)
Time Trends (Year 2004 Omitted)	
Year 2005	−0.00178 (0.0395)
Year 2006	0.0528 (0.0317)
Year 2007	0.0997* (0.0395)

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	Coefficient
Constant	0.996 (1.855)
Fixed-Effects	819
R2	0.074
Observations	2230

Robust standard errors in parentheses

*** p<0.001,

** p<0.01,

* p<0.05