

Factors Influencing Primary Care Providers' Decisions to Accept New Medicaid Patients Under Michigan's Medicaid Expansion

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As state and federal governments debate the future of the Affordable Care Act (ACA) and its Medicaid expansion, it seems likely that expanded Medicaid coverage will remain, but it will likely be modified by greater state flexibility in coverage and implementation.¹ The impact of expanded Medicaid in any form depends on several factors, including, crucially, the acceptance of Medicaid by healthcare providers and systems.

Payment has long been emphasized as a driver of physician participation in Medicaid. Prior studies have found that reimbursement level is important to healthcare providers' decisions to accept Medicaid.²⁻⁵ However, it is also important to carefully consider both the financial and nonfinancial factors that may influence providers' participation in Medicaid and other programs.⁶

Since the 1980s, research has examined several nonfinancial factors associated with physician Medicaid acceptance, including characteristics of "high-share" Medicaid providers, such as younger age, female gender, and nonwhite race.^{4,5,7-10} However, few studies have comprehensively examined which provider characteristics and practice settings may be associated with provider willingness to accept new Medicaid patients after the 1990s, when this was last examined in depth following the rapid growth of managed care. Given that influences on healthcare providers' willingness to see Medicaid patients may have changed in the era after ACA Medicaid expansion, this question is worth revisiting.

Because primary care providers (PCPs) deliver frontline access to care for patients, understanding the factors associated with an adequate supply of PCPs who accept Medicaid patients is critically important. Access to care for Medicaid patients depends on several dimensions, including (1) providers' willingness to accept any Medicaid patients, (2) the geographic distribution of available providers in relation to patients' location, and (3) providers' capacity and willingness to accept a greater number of Medicaid patients as demand rises (eg, after insurance coverage expansion). In the setting of Michigan's Healthy Michigan Plan (HMP)—which expanded Medicaid under the ACA through a federal section 1115 waiver that permitted state-mandated features, including an emphasis on primary care¹¹—prior studies have examined the first 2 dimensions

ABSTRACT

OBJECTIVES: Michigan expanded Medicaid under the Affordable Care Act (ACA) through a federal waiver that permitted state-mandated features, including an emphasis on primary care. We investigated the factors associated with Michigan primary care providers (PCPs)' decision to accept new Medicaid patients under Medicaid expansion.

STUDY DESIGN: Statewide survey of PCPs informed by semistructured interviews.

METHODS: After Michigan expanded Medicaid on April 1, 2014, we surveyed 2104 PCPs (including physician and nonphysician providers, such as nurse practitioners and physician assistants) with 12 or more assigned Medicaid expansion enrollees (response rate, 56%). To guide survey development and interpretation, we interviewed a separate group of 19 PCPs with Medicaid expansion enrollees from diverse urban and rural regions. Survey questions assessed PCPs' current acceptance of new Medicaid patients.

RESULTS: Of the 2104 surveyed PCPs, 78% reported that they were currently accepting additional Medicaid patients; 58% reported having at least some influence on the decision. Factors considered very/moderately important to the Medicaid acceptance decision included practice capacity to accept any new patients (69%), availability of specialists for Medicaid patients (56%), reimbursement amount (56%), psychosocial needs of Medicaid patients (50%), and illness burden of Medicaid patients (46%). PCPs accepting new Medicaid patients tended to be female, minorities, nonphysician providers, specialized in internal medicine, paid by salary, or working in practices with Medicaid-predominant payer mixes.

CONCLUSIONS: In the era after Medicaid expansion, PCPs placed importance on practice capacity, specialist availability, and patients' medical and psychosocial needs when deciding whether to accept new Medicaid patients. To maintain primary care access for low-income patients with Medicaid, future efforts should focus on enhancing the diversity of the PCP workforce, encouraging healthcare professional training in underserved settings, and promoting practice-level innovations in scheduling and integration of specialist care.

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of provider Medicaid acceptance. With regard to whether primary care practices accepted any Medicaid patients, these studies demonstrated increased availability of PCP practices offering appointments to HMP patients after Medicaid expansion^{12,13} despite rapid enrollment in the program,¹⁴ which was consistent with trends observed in 10 other states.^{15,16} Regarding provider distribution, these increases in appointment availability appeared to be geographically concentrated in regions with lower pre-expansion Medicaid acceptance.¹⁷

The current study examines the third dimension of providers' capacity and willingness to accept a greater number of Medicaid patients: whether PCPs who already have some Medicaid patients are willing to accept more in response to patient demand. In a recent study, Neprash and colleagues found that most physicians maintained or slightly increased their Medicaid participation rates after ACA Medicaid expansion, with greater increases observed in expansion states.¹⁸ Of note, approximately 20% of PCPs accounted for the care of 60% of Medicaid patients in that study. In other words, most increases in PCP Medicaid participation occurred among providers already caring for Medicaid patients. The authors of that study concluded that policy efforts to increase access to primary care should target existing Medicaid providers. Thus, focusing on PCPs already caring for Medicaid patients, we investigated what factors were associated with their continued acceptance of new Medicaid patients.

METHODS

Study Design

As part of a formal evaluation under contract with the Michigan Department of Health and Human Services (MDHHS) and required by CMS for a section 1115 waiver, we conducted a statewide survey of PCPs regarding their experiences with HMP enrollees, new practice approaches and innovations adopted or planned in response to HMP, and future plans regarding acceptance and care of HMP patients.¹⁹ As an evaluation of a public program, the University of Michigan and MDHHS institutional review boards deemed the study exempt.

Survey Sampling

The PCP sample was drawn from the MDHHS Data Warehouse, which stores data generated from encounters on all Medicaid and HMP enrollees and their providers, including provider demographics, specialty (assessed by linking National Provider Identifier [NPI] numbers from the Data Warehouse to each respondent's National Plan and Provider Enumeration System profile), practice setting, and health plan participation. From the Warehouse, 7360 NPI numbers were identified as the assigned PCP for at least 1 HMP managed care enrollee (adult Medicaid expansion group) in April 2015, 1 year after the HMP launch. Nurse practitioners (NPs) and physician assistants

TAKEAWAY POINTS

In the era after Medicaid expansion, the factors considered important to Michigan primary care providers (PCPs) when deciding whether to accept additional Medicaid patients included the capacity to accept any new patients (69%), availability of specialists for Medicaid patients (56%), reimbursement amount (56%), psychosocial needs of Medicaid patients (50%), and illness burden of Medicaid patients (46%).

- ▶ PCPs continuing to accept new Medicaid patients tended to be female, minorities, nonphysician providers, specialized in internal medicine, paid by salary, or working in practices with Medicaid-predominant payer mixes.
- ▶ Policy makers should consider these factors in addition to reimbursement policies to ensure adequate PCP capacity in states with expanded Medicaid coverage.

(PAs) who were listed as the assigned PCP were also included in the sample. We considered PCPs with at least 12 assigned members (an average of 1 HMP enrollee per month) eligible for the survey in order to assess the perspectives of PCPs who had sufficient experience with HMP patients to provide informed input on the primary care-oriented features of the program for another related study.¹⁹ Thus, 2813 PCPs with fewer than 12 assigned members were excluded. Of the remaining 4547 PCPs, exclusions included 25 with an NPI entity code that did not reflect an individual provider (20 organizational NPIs, 4 deactivated, and 1 invalid), 161 with only pediatric specialty, 4 University of Michigan physicians involved in the HMP evaluation, and 35 with out-of-state addresses greater than 30 miles from the Michigan border. After exclusions, 4322 PCPs (3686 physicians and 636 NPs or PAs) remained in the survey sample.

Although we focused on a PCP sample that already had assigned Medicaid patients, we considered the representativeness of the sample relative to the typical PCP. As the average US primary care panel size is approximately 1200 to 1900 patients,²⁰ the median number of assigned HMP members per PCP in our sample was 53; with HMP representing approximately one-third of all Michigan Medicaid enrollees, the estimated Medicaid proportion of the panel was approximately 6% to 15% of the total panel size. This is consistent with the national average Medicaid proportion of PCP panels, which has been reported to range from 9% to 20%.^{18,21}

Survey Development

The survey included standard measures of PCP demographic, professional, and practice characteristics, as well as items from prior surveys on decision making related to Medicaid patients.^{10,22} New items related to PCPs' decisions to accept Medicaid patients in the context of the state Medicaid expansion were developed based on qualitative interviews. Items were subsequently cognitively pretested with 2 PCPs (1 physician from a safety net clinic and 1 PA from a private practice) to ensure understanding prior to survey administration. The final survey was also pretested with 1 PCP to ensure appropriate timing and flow.

Qualitative interviews. To guide survey development and interpretation, we conducted 19 semistructured interviews with a separate group of PCPs caring for Medicaid/HMP patients between

December 2014 and April 2015. These interviews were conducted in 5 geographic regions across Michigan, purposefully selected to include racial/ethnic diversity and a mix of urban, suburban, and rural communities: city of Detroit, western Michigan, central lower Michigan, northeastern Michigan, and Michigan's Upper Peninsula. Interviewees included both physicians and nonphysician providers (ie, NPs/PAs) who worked at small private practices, federally qualified health centers (FQHCs), free/low-cost clinics, hospital-based practices, or rural practices ([eAppendix Table 1](#) [eAppendix available at [ajmc.com](#)]).

Interview topics included (1) provider awareness of patients' insurance and experiences caring for HMP patients; (2) PCP involvement in decision making about whether to accept Medicaid/HMP patients; and (3) factors that may affect PCPs' Medicaid acceptance decisions in the future, including knowledge of reimbursement changes such as the Medicaid primary care rate bump to the level of Medicare rates in 2013-2014.

Interviews were audio recorded and transcribed verbatim. Each transcript was reviewed iteratively by at least 2 members of the research team, with in-depth coding and thematic analysis^{23,24} performed using Dedoose software (SocioCultural Research Consultants, LLC; Manhattan Beach, California).

Survey Administration

The survey was initially mailed to the PCP sample (N = 4322) in June 2015 and included a personalized cover letter describing the project, a fact sheet about HMP, a paper copy of the survey, a \$20 bill, and a postage-paid return envelope. The cover letter also gave information on the option to complete the survey online. Two additional mailings with the same contents were sent to nonrespondents in August and September 2015. Data from mailed and online surveys returned by November 1, 2015, were included in the analysis.

Survey Outcomes and Measures

See [eAppendix A](#) for the full survey instrument. The dependent variable was PCPs' current acceptance of new Medicaid or HMP patients ("Are you currently accepting new patients with...[Medicaid; Healthy Michigan Plan; private insurance; Medicare; no insurance (ie, self-pay)]?"). In addition to standard PCP and practice characteristics, survey items measured independent variables of PCP attitudes regarding the importance of various patient- and practice-level factors in their practice's decision to accept new Medicaid/HMP patients (eg, reimbursement amount, practice capacity to accept any new patients, specialist availability, and illness needs of Medicaid/HMP patients) and their experiences caring for and expressed commitment to caring for underserved populations.

Survey Data Analysis

Descriptive statistics were used to report PCP characteristics, current acceptance of new patients, and responses to other individual survey items. Bivariate and multivariable logistic regression analyses were used to assess the association of independent variables with the

dependent variable of continued PCP acceptance of new Medicaid patients (yes/no).

PCP personal, professional, and practice characteristics with statistically significant associations at $P < .01$ were included as covariates in multivariable analyses, except for cases with expected collinearity (eg, nonphysician provider variable included but not specialty, payer mix variable included but not payment arrangement). For inclusion of items assessing attitudes toward underserved patients in the regression analyses, we created an index across all underserved attitudes items and calculated a score based on agreement level for multiple items (a score of 1 was assigned to a response of strongly disagree, 2 for disagree, 3 for neither agree nor disagree, 4 for agree, and 5 for strongly agree). Scores for individual items were summed to produce a scaled score for which higher numbers represented stronger agreement with commitment to caring for the underserved. A 2-sided $P < .05$ was considered statistically significant. All analyses were performed using Stata version 13 or 14.2 (Stata Corp; College Station, Texas).

RESULTS

Characteristics of PCP Survey Respondents

After excluding PCPs with undeliverable addresses (n = 501) and who were ineligible (n = 27; eg, retired, moved out of state) from the 4322 surveys sent, the final response rate was 56% (54% for physicians, 65% for NPs/PAs; n = 2104). See [eAppendix Figure 1](#) for a flowchart of survey response rates. There were no significant differences between respondents and nonrespondents with regard to gender, age, number of affiliated Medicaid managed care plans, and practice setting in an FQHC; PCPs with internal medicine specialty were less likely to respond (see [eAppendix Table 2](#) for comparison of PCP survey respondents and nonrespondents).

Nearly half (45%) of respondents were female and 79% were white ([Table 1](#)²⁵). Nonphysician providers (NPs/PAs) represented 17% of respondents. Family medicine (53%) and internal medicine (27%) were the most common specialties, and 82% of respondents were board certified. Most respondents (74%) had been in practice for at least 10 years. Fifteen percent practiced in an FQHC, and 35% had a payer mix that was predominantly Medicaid.

PCPs' Acceptance of New Patients

Although all survey respondents had at least 12 assigned patients with Medicaid/HMP coverage based on the survey sampling, 78% reported continuing to currently accept new Medicaid or HMP patients compared with 87% accepting new patients with private insurance, 84% with Medicare, and 76% with no insurance ([Figure 1](#)).

Attitudes Influencing PCPs' Medicaid Acceptance Decision

Most PCP survey respondents reported having at least some influence on the decision to accept or not accept Medicaid or HMP patients; 23% reported "the decision is entirely mine," 14% reported "I have

TABLE 1. Personal, Professional, and Practice Characteristics of PCP Survey Respondents (N = 2104)

	n/N ^a	%
Personal Characteristics		
Gender, female	936/2104	45
Race		
White	1583/1996	79
Black/African American	93/1996	5
Asian/Pacific Islander	224/1996	11
Other	96/1996	5
Ethnicity, Hispanic	46/2024	2
Professional Characteristics		
Provider type, nonphysician (NP/PA)	354/2104	17
Specialty		
Family medicine	1123/2104	53
Internal medicine	574/2104	27
NP	192/2104	9
PA	165/2104	8
Other	50/2104	2
Board certified	1695/2078	82
Years in practice		
<10	520/2006	26
10-20	676/2006	34
>20	810/2006	40
Practice Characteristics		
Small practice (≤5 providers) ^b	1157/2012	58
FQHC	311/2081	15
Predominant payer mix ^c		
Private	661/1912	35
Medicaid/HMP	677/1912	35
Medicare	421/1912	22
Uninsured	12/1912	1
Mixed	141/1912	7
Payment arrangement		
Fee for service	784/2089	38
Salary	946/2089	45
Capitation	44/2089	2
Mixed	275/2089	13
Other	40/2089	2
Urbanicity ^d		
Urban	1584/2104	75
Suburban/rural	520/2104	25

FQHC indicates federally qualified health center; HMP, Healthy Michigan Plan; NP, nurse practitioner; PA, physician assistant; PCP, primary care provider.

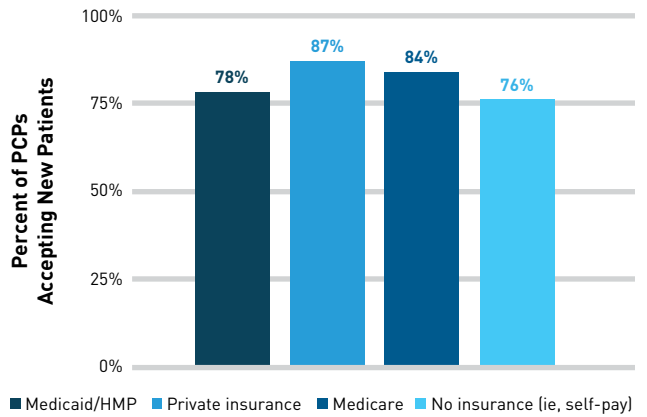
^aN may differ from overall sample N of 2104 due to item nonresponse.

^bDichotomized at sample median.

^cComposite variable of all current payers: Payer is considered predominant for the practice if more than 30% of physician's patients have this payer type and less than 30% of patients have any other payer type. "Mixed" includes practices with more than 1 payer representing more than 30% of patients or practices with less than 30% of patients for each payer type.

^dZip codes and county codes were linked to the US Department of Agriculture Economic Research Service 2013 Urban Influence Codes to classify regions as urban (codes 1 and 2), suburban (codes 3-7), or rural (codes 8-12).²⁵

FIGURE 1. PCPs' Continued Acceptance of New Patients by Insurance Type^a



HMP indicates Healthy Michigan Plan; PCP, primary care provider.

^aA total of 1575 (78%) PCP respondents who had at least 12 assigned Medicaid patients reported accepting new patients with either HMP or Medicaid.

a lot of influence," 21% reported "I have some influence," and 43% reported "I have no influence."

In interviews, the 19 PCPs described influences on the Medicaid acceptance decision at various levels (see themes in **Table 2**). At the provider level, the illness burden and psychosocial needs of prospective Medicaid patients influenced PCPs' decisions about whether to accept them, particularly for patients with complex chronic pain or mental health needs. At the practice level, the decision to accept new patients depended on the practice's capacity to provide sufficient care to established patients, including timeliness of appointments and ability to provide high-quality care. At the health system level, PCPs' decision making depended on the resources and administrative structure of their health system, including whether specialists were available to see Medicaid patients. Lastly, with regard to the policy environment, although most PCPs thought that reimbursement was important, many lacked knowledge of the 2013-2014 ACA primary care rate bump or other payment details yet continued to accept new Medicaid patients.

Based on these themes identified in the qualitative interviews, we asked PCP survey respondents to rate the importance of several patient- and practice-level factors to their practice's decision to accept new Medicaid or HMP patients ("Please indicate the importance of each of the following for your practice's decision to accept new Medicaid or Healthy Michigan Plan patients") (**Figure 2**). Factors considered very/moderately important to the Medicaid acceptance decision included the capacity to accept new patients with any type of insurance (69%), availability of specialists who see Medicaid patients (56%), reimbursement amount (56%), psychosocial needs of Medicaid patients (50%), and illness burden of Medicaid patients (46%).

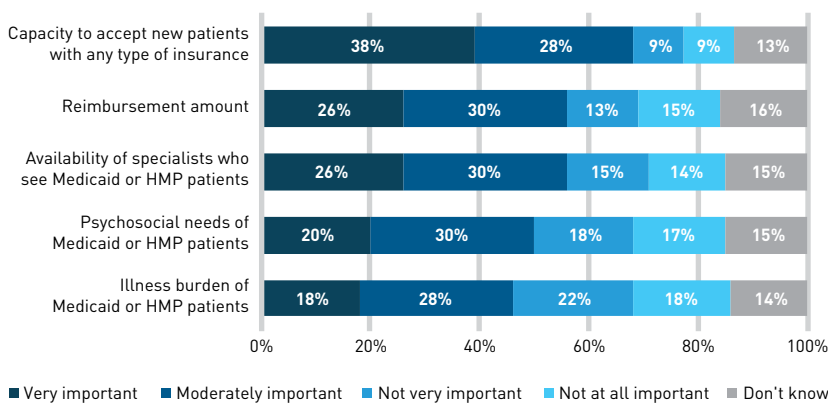
We also asked PCP survey respondents about their prior experience and attitudes toward caring for poor or underserved patients.

TABLE 2. Interview Themes Related to Factors Influencing PCPs' Decision Making on Acceptance of Medicaid Patients

Influence Theme	Illustrative Quotes
Provider Level	
Illness burden and psychosocial needs of prospective Medicaid patients	<p>"There are days when we'll look at each other and it's like, 'I think we've got enough people like that.' It's like the person who takes the energy of dealing with 6 ordinary people."</p> <p style="text-align: right;">-PCP in rural health clinic</p>
Practice Level	
Practice capacity	<p>"It has to do with what our capacity is. So, looking at schedules, looking at next appointments, are we able to adequately care for the patients that we're currently responsible for?"</p> <p style="text-align: right;">-PCP in urban free/low-cost clinic</p>
Health System Level	
Resources and administrative structures, including specialist availability	<p>"While our ability to care for [Medicaid patients] has dramatically expanded, our ability to tap into our disjointed healthcare system in terms of specialty care maybe hasn't changed a whole lot.... Private specialists don't really care if they're uninsured or if they have Healthy Michigan."</p> <p style="text-align: right;">-PCP in urban federally qualified health center</p>
	<p>"I think the actual decision as to whether to accept Healthy Michigan patients...is made at the health system level.... I wouldn't really be involved in making that decision, nor would most of my clinic leadership."</p> <p style="text-align: right;">-PCP in urban hospital-based practice</p>
Policy Environment	
Knowledge and attitudes toward reimbursement	<p>"For our clinic, [reimbursement amount] plays no role in whether we accept more Medicaid patients...we're gonna serve that population and take care of them.... We'll do whatever reasonably we can do to get paid for that, but that doesn't make or break the decision...."</p> <p style="text-align: right;">-PCP in urban free/low-cost clinic</p>
	<p>"If they were to all of a sudden say, 'OK, we're only going to reimburse 40% or 50% of what we used to,' that would be enough to put me out of business. So I would think twice about seeing those patients then, but as long as they continue the way they have been for the last 6 years that I've owned the clinic, I don't see making any changes."</p> <p style="text-align: right;">-PCP in rural health clinic</p>

PCP indicates primary care provider.

FIGURE 2. Importance of Various Factors to PCPs' Decision to Accept New Medicaid Patients*



HMP indicates Healthy Michigan Plan; PCP, primary care provider.

*Respondents were asked to "indicate the importance of each of the following for [their] practice's decision to accept new Medicaid or [HMP] patients."

More than half (57%) of respondents reported providing care in the past 3 years in a setting that serves poor and underserved patients with no anticipation of being paid. Nearly three-fourths (73%) felt a responsibility to care for patients regardless of their ability to pay, and nearly three-fourths (72%) agreed or strongly agreed that all practitioners should care for some Medicaid patients (see [Appendix Table 3](#) for full descriptive statistics of PCP attitudes about caring for underserved patients).

Factors Associated With PCPs' Medicaid Acceptance

In bivariate analyses, survey respondents were more likely to accept new Medicaid patients if the PCPs were younger, female, racial minorities, specialized in internal medicine, nonphysician providers (NPs or PAs), paid by salary, or working in FQHCs, rural practices, or practices with integrated mental health care or Medicaid-predominant payer mixes ([Table 3](#)). Multivariable analyses largely confirmed bivariate analyses: PCP respondents who were female (adjusted odds ratio [aOR], 1.32 vs male; 95% CI, 1.01-1.72), racial minorities (black: aOR, 3.46 vs white [95% CI, 1.45-8.25]; Asian: aOR, 1.84 vs white [95% CI, 1.21-2.80]), nonphysician providers (aOR, 2.21 vs physicians; 95% CI, 1.32-3.71), specialized in internal medicine (aOR, 1.47 vs family medicine; 95% CI, 1.09-1.97), paid by salary (aOR, 2.09 vs fee-for-service; 95% CI, 1.58-2.77), or working in practices with Medicaid-predominant payer mixes (aOR, 7.31 vs private-predominant payer mix; 95% CI, 5.05-10.57) or other nonprivate payer mixes were more likely to accept new Medicaid patients ([Table 3](#)).

Regarding PCP attitudes, in bivariate analyses, PCP survey respondents were less likely to accept new Medicaid patients if they deemed that overall capacity to accept new patients was very/moderately important or reimbursement was very/moderately important. Not surprisingly, PCPs were also more likely to accept new Medicaid patients if they had provided prior care to the poor or underserved or expressed a greater commitment to caring for this group. In multivariable analyses, we again found that PCPs who had previously provided care to underserved patients (aOR, 1.35; 95% CI, 1.05-1.73) or who expressed stronger commitment to caring for the underserved (aOR, 1.14 for each

TABLE 3. Multivariable Analysis of Association of PCP and Practice Characteristics With Continued Medicaid Acceptance^a

	Unadjusted OR (95% CI) of Medicaid Acceptance	Adjusted ^b OR (95% CI) of Medicaid Acceptance
Personal and Professional Characteristics		
Gender, female (vs male)	1.59 (1.28-1.98)**	1.32 (1.01-1.72)*
Race		
White	Reference	Reference
Black/African American	3.93 (1.80-8.57)*	3.46 (1.45-8.25)*
Asian/Pacific Islander	1.76 (1.20-2.58)*	1.84 (1.21-2.80)*
Other	1.94 (1.04-3.62)*	1.79 (0.84-3.80)
Ethnicity, Hispanic (vs non-Hispanic)	1.88 (0.79-4.48)	1.54 (0.56-4.22)
Years in practice		
<10	Reference	Reference
10-20	0.69 (0.51-0.93)*	0.87 (0.62-1.22)
>20	0.51 (0.38-0.68)**	0.82 (0.58-1.15)
Nonphysician provider (vs physician provider)	4.78 (3.09-7.40)**	2.21 (1.32-3.71)*
Specialty		
Family medicine	Reference	Reference
Internal medicine	1.43 (1.12-1.83)*	1.47 (1.09-1.97)*
NP	7.81 (3.95-15.45)**	3.53 (1.64-7.61)*
PA	4.07 (2.32-7.16)**	1.83 (0.94-3.56)
Other	2.86 (1.21-6.79)*	2.02 (0.75-5.45)
Board certified (vs not board certified)	0.57 (0.42-0.77)**	0.92 (0.64-1.32)
Payment arrangement		
Fee for service	Reference	Reference
Salary predominant	3.02 (2.36-3.85)**	2.09 (1.58-2.77)**
Mixed payment	1.34 (0.98-1.84)	1.43 (0.99-2.07)
Other payment arrangements	2.44 (1.01-5.93)*	1.33 (0.51-3.49)
PCP Attitudes		
Capacity very/moderately important	0.53 (0.41-0.68)**	0.59 (0.44-0.79)**
Reimbursement very/moderately important	0.64 (0.51-0.79)**	0.86 (0.67-1.10)
Specialist availability very/moderately important	0.95 (0.76-1.17)	1.11 (0.86-1.42)
Illness burden of patients very/moderately important	1.02 (0.83-1.27)	1.03 (0.81-1.32)
Psychosocial needs of patients very/moderately important	1.10 (0.89-1.37)	1.14 (0.89-1.45)
Provided care to the underserved in past 3 years	1.64 (1.33-2.03)**	1.35 (1.05-1.73)*
Expressed commitment to caring for underserved	1.16 (1.13-1.19)**	1.14 (1.11-1.18)**
Practice Characteristics		
Small practice with ≤5 providers (vs large practice)	1.18 (0.95-1.47)	1.27 (0.99-1.63)
Urban (vs rural/suburban)	0.69 (0.53-0.89)*	0.97 (0.72-1.31)
Federally qualified health center	2.40 (1.66-3.47)**	1.08 (0.70-1.65)
Mental health colocation	1.99 (1.42-2.79)**	1.16 (0.79-1.71)
Predominant payer mix		
Private insurance	Reference	Reference
Medicaid/HMP	8.64 (6.14-12.15)**	7.31 (5.05-10.57)**
Medicare	1.94 (1.47-2.55)**	2.04 (1.52-2.73)**
Mixed	3.32 (2.05-5.37)**	3.76 (2.24-6.30)**

HMP indicates Healthy Michigan Plan; NP, nurse practitioner; OR, odds ratio; PA, physician assistant; PCP, primary care provider.

P* < .05; *P* < .001.

^aEach cell represents a separate bivariate or multivariable logistic regression model.

^bAdjusted for covariates of gender, years in training, physician versus nonphysician provider, board certification, urbanicity, federally qualified health center status, and predominant payer mix, except for when independent variable is included in list.

point in composite score; 95% CI, 1.11-1.18) were more likely to accept new Medicaid patients. PCPs were less likely to accept new Medicaid patients if they considered overall capacity to accept new patients important (aOR, 0.59; 95% CI, 0.44-0.79).

We then repeated the bivariate and multivariable analyses for the subgroup of PCP survey respondents who indicated that they had at least some influence on the decision to accept Medicaid patients. The findings were similar to those of analyses with the full sample (data not shown).

DISCUSSION

The ACA's Medicaid expansion has been associated with increased access to care nationally^{2,15,16,26-32} and increased Medicaid acceptance among PCPs in Michigan,¹² even after expiration of the 2013-2014 primary care rate increase of Medicaid fees to Medicare levels.¹³ In our study, we found that PCP demographics, salary structure, history of caring for the underserved, and perceived practice capacity were all associated with continued acceptance of new Medicaid patients among PCPs who already had assigned Medicaid patients.

Our findings on provider characteristics associated with an increased likelihood of Medicaid acceptance were consistent with literature that predated the ACA Medicaid expansion. Specifically, female gender, nonwhite race, and nonphysician professional training (NP or PA) have been associated with greater provider Medicaid acceptance in earlier periods.^{4,5,7,9,33,34} These findings suggest that demographic characteristics of the primary care workforce can influence access for Medicaid patients and that integrating nonphysician providers in primary care practices may be beneficial to ensuring access for Medicaid patients. In fact, an earlier Michigan study found that an increase in Medicaid primary care appointment availability after HMP was associated with rising proportions of appointments offered with NPs or PAs, suggesting that nonphysician providers contributed to improved access.¹³

We also found that PCPs in safety net settings and other practices with Medicaid-predominant payer mixes were more likely to continue accepting new Medicaid patients, confirming findings from prior studies.^{3,10,35-37} Of note, FQHCs and rural health clinics receive higher Medicaid reimbursements than private practices. PCPs choosing to work in these safety net settings may be less likely to consider payment amounts important to their decisions to accept additional Medicaid patients.

Unlike in prior studies,^{2,3} in our adjusted models, PCP attitudes toward reimbursement were not significantly associated with the likelihood of Medicaid acceptance. Whether this relates to PCPs' lack of knowledge of reimbursement changes during the rate bump period, as found in our interviews, or other factors is uncertain. Other recent studies have demonstrated no association of the 2013-2014 Medicaid primary care rate bump with physician participation in Medicaid.^{21,38} Combined with our findings that experience and commitment to caring for the underserved were associated with PCP acceptance of Medicaid, these results suggest

that PCPs who continue to accept Medicaid patients do so, at least in part, out of a sense of professional duty.³⁹ It is possible that this may reflect a population-level shift in attitudes among the current generation of healthcare providers.⁴⁰ To encourage greater provider acceptance of Medicaid, policy makers should consider promoting experiences caring for underserved populations during professional training to broaden the pipeline of future healthcare providers accepting Medicaid.⁴¹

Like other studies, we found that concerns about practice capacity were associated with lower odds of accepting new Medicaid patients.¹⁰ Our qualitative findings demonstrated that PCPs were concerned about scheduling patients both with themselves and with specialists who would accept Medicaid. Interestingly, in our unadjusted model, mental health colocation was associated with PCPs' continued Medicaid acceptance. This suggests that PCPs who have access to resources for addressing behavioral and social needs may be more willing to accept new Medicaid patients who may have needs for such services that would otherwise be difficult to address in traditional primary care settings. To overcome PCPs' reported worries about having sufficient time to see their Medicaid patients or having access to Medicaid-accepting specialists for these patients, practice-level innovations targeting appointment scheduling, team-based care, and integration of specialists (eg, mental health professionals) may also facilitate PCPs' continued acceptance of Medicaid patients.

Limitations

This study has several potential limitations. First, measures are self-reported and prone to social desirability and other survey biases. Particularly regarding willingness of healthcare providers to accept new Medicaid patients, survey self-report may overestimate actual acceptance of new patients.⁴² Second, the sample included only PCPs who were assigned at least 12 HMP enrollees, which may limit generalizability. Decision making regarding acceptance of new patients may differ for PCPs with fewer or no Medicaid patients or for specialists. For example, PCPs with lower baseline numbers of Medicaid patients may place greater importance on reimbursement than PCPs with greater numbers of current Medicaid patients. The focus of this study was on continued acceptance of new Medicaid patients by PCPs with established Medicaid patients, as other studies have found that most increases in PCP Medicaid participation occurred among such providers. Third, we developed a new set of survey items not used in previous studies that assess PCP attitudes toward various factors related to their Medicaid acceptance decision. However, these items were developed based on prior literature and our qualitative interviews with PCPs caring for HMP patients, and they were cognitively pretested with physician and nonphysician PCPs serving HMP patients to ensure understanding and accuracy of responses. Fourth, this study was conducted within the context of a single state's Medicaid expansion. It is possible that other factors may be relevant to PCPs' Medicaid acceptance decision in other states, such as Medicaid reimbursement rates or local primary care practice innovations.

CONCLUSIONS

With continued innovation in Medicaid policy at the state and federal levels, identifying provider and practice factors that promote Medicaid acceptance among PCPs will be even more important. This study confirmed several of the same factors considered important to PCPs in prior studies—practice capacity, specialist availability, and medical and psychosocial needs of Medicaid patients—but in the era after ACA Medicaid expansion. In addition, PCPs in this study placed less emphasis on reimbursement, perhaps because many served in salaried positions, such as safety net clinics, or because they instead emphasized professional commitment to caring for the poor and underserved. To maintain primary care access for low-income patients with Medicaid, future efforts should focus on enhancing the diversity of the PCP workforce, encouraging healthcare professional training in underserved settings, and promoting practice-level innovations in scheduling and integration of specialist care. ■

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eAPPENDIX

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eAppendix A. Survey Instrument

Healthy Michigan Plan Evaluation: Perspectives of Primary Care Practitioners

Thank you for completing this survey about your views and experiences caring for patients enrolled in the Healthy Michigan Plan (the expansion of Medicaid in Michigan). We recognize the difficulty distinguishing Healthy Michigan Plan patients from others, especially other Medicaid managed care patients. Please do the best you can. *All individual responses will be kept confidential. Only aggregate responses will be reported.*

Section 1: Practice, Patient, and Personal Characteristics

Please answer questions about your practice with your primary practice location in mind.

1. In what year did you complete clinical training? _____

2. Are you board certified? No Yes → 2a. If yes, in which specialties? _____

3. What is the zip code for your primary practice location? _____

4. Not including yourself, how many of the following practitioners are associated with you at this location?
 - a. Physicians: _____
 - b. Nurse practitioners: _____
 - c. Physician assistants: _____
 - d. Nurse midwives: _____

5. Has your practice made any of the following changes in the past year? (check all that apply)
 - Hired additional clinicians (physicians, nurse practitioners, physician assistants, nurses, medical assistants)
 - Hired additional office staff
 - Consulted with care coordinators, case managers, community health workers, or similar professionals
 - Changed workflow processes for new patients
 - Co-located mental health within primary care

6. Regarding ownership of your practice, are you a:
 - Full-owner
 - Partner/part-owner
 - Employee → 6a. If employee, what type of entity is your employer?
 - University or teaching hospital
 - Hospital
 - Other (specify): _____

7. What best describes the primary way you are paid for seeing patients?
 - Fee-for-service
 - Salary based
 - Capitation or patient enrollment-based
 - Other (specify): _____

8. In the past three years, have you provided care in a setting that serves poor and underserved patients with no anticipation of being paid?

Yes No

9. What proportion of your established patients who request a same- or next-day appointment at your primary practice can get one?

Almost all (>80%) Most (60-80%) About half (~50%) Some (20-40%) Few (<20%) Don't know

9a. Over the past year, this proportion has:

Increased Decreased Stayed the same Don't know

10. Are you Hispanic or Latino? Yes No

11. What is your race? (check all that apply)

Black or African American Asian
 American Indian or Alaska Native White (European, Middle Eastern, other)
 Native Hawaiian or Pacific Islander Other (specify): _____

12. Please estimate the proportion of patients you see who are: (these do not have to add up to 100%)

- a. African American or Black: _____%
- b. Hispanic or Latino: _____%
- c. Do not speak English well enough to give an adequate history: _____%

13. Please estimate the percent of your patients who have each of the following as their primary source of health insurance coverage: (total should add to 100%)

- a. Private insurance _____ %
- b. Medicaid _____ %
- c. Healthy Michigan Plan _____ %
- d. Medicare _____ %
- e. No insurance (i.e., self-pay) _____ %

Total = 100%

14. Are you currently accepting new patients with...?

- a. Private insurance Yes No Don't know
- b. Medicaid Yes No Don't know
- c. Healthy Michigan Plan Yes No Don't know
- d. Medicare Yes No Don't know
- e. No insurance (i.e., self-pay) Yes No Don't know

Section 2: Experience with the Healthy Michigan Plan (HMP)

These questions ask about your experiences caring for patients enrolled in the Healthy Michigan Plan (Medicaid expansion). For more information about the Healthy Michigan Plan, see the enclosed Fact Sheet.

15. In general, how familiar are you with the Healthy Michigan Plan?

- Very familiar Somewhat familiar A little familiar Not at all familiar

16. How familiar are you with the following:

	Very familiar	Somewhat familiar	A little familiar	Not at all familiar
a. Specialists available for Healthy Michigan Plan patients	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. How to complete a Health Risk Assessment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Out-of-pocket expenses Healthy Michigan Plan patients have to pay	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. How to submit a Health Risk Assessment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Healthy behavior incentives that Healthy Michigan Plan patients can receive	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f. Mental health services available for Healthy Michigan Plan patients	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g. Dental coverage in the Healthy Michigan Plan	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

17. To what extent has your practice experienced the following since the Healthy Michigan Plan began in April 2014?

	To a great extent	To some extent	To a little extent	Not at all	Don't know
a. Increase in number of new patients	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Existing patients who had been uninsured or self-pay gained insurance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Existing patients changed from other insurance to Healthy Michigan Plan	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Increase in the number of new patients who haven't seen a primary care practitioner in many years	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

18. How much influence do you have in making the decision to accept or not accept Medicaid or Healthy Michigan Plan patients in your practice?

- The decision is entirely mine I have some influence
 I have a lot of influence I have no influence

19. Please indicate the importance of each of the following for your practice's decision to accept new Medicaid or Healthy Michigan Plan patients.

	Very important	Moderately important	Not very important	Not at all important	Don't know
a. Reimbursement amount	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Capacity to accept new patients with any type of insurance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Availability of specialists who see Medicaid or Healthy Michigan Plan patients	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Illness burden of Medicaid or Healthy Michigan Plan patients	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Psychosocial needs of Medicaid or Healthy Michigan Plan patients	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

20. How often do your Healthy Michigan Plan patients have difficulty accessing the following?

	Often	Sometimes	Rarely	Never	Don't know
a. Specialists	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Medications	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Mental health care	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Dental/oral health care	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Treatment for substance use disorder	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f. Counseling and support for health behavior change	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

21. How often do your privately insured patients have difficulty accessing the following?

	Often	Sometimes	Rarely	Never	Don't know
a. Specialists	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Medications	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Mental health care	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Dental/oral health care	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Treatment for substance use disorder	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f. Counseling and support for health behavior change	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

The questions on this page ask about your experiences with Health Risk Assessments (HRAs).

22. Approximately how many Health Risk Assessments have you completed with Healthy Michigan Plan patients?

- None 1-2 3-10 More than 10

23. How often do your Healthy Michigan Plan patients bring in their Health Risk Assessment to complete at their initial office visit?

- Almost always Often Sometimes Rarely/never

24. Please report your experience with the following:

	Yes	No	Don't know
a. My practice has a process to identify Healthy Michigan Plan patients who need to complete an HRA.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. I/my practice have been contacted by a Medicaid Health Plan about a patient who needs to complete an HRA.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. My practice has a process to submit completed HRAs to the patient's Medicaid Health Plan.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. I/my practice have received a financial bonus from a Medicaid Health Plan for helping patients complete HRAs.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

25. How much influence do the following have on completion and submission of the Health Risk Assessment?

	A great deal of influence	Some influence	A little influence	No influence	Don't know
a. Financial incentives for patients	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Patients' interest in addressing health risks	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Financial incentives for practices	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

26. For Healthy Michigan Plan patients who have completed their Health Risk Assessment, how useful has this been for each of the following:

	Very useful	Somewhat useful	A little useful	Not at all useful
a. Identifying health risks	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Discussing health risks with patients	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Persuading patients to address their most important health risks	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Documenting patient behavior change goals	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Getting patients to change health behaviors	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

The questions on this page ask about non-urgent emergency room (ER) use.

27. How much can primary care practitioners influence non-urgent ER use by their patients?

- A great deal Some A little Not at all

28. To what extent do you think it is your responsibility as a primary care practitioner to decrease non-urgent ER use?

- Major responsibility Some responsibility Minimal responsibility No responsibility

29. Does your practice offer any of the following to help Healthy Michigan Plan patients avoid non-urgent ER use?

	Yes	No	Don't know
a. Walk-in appointments.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Assistance with arranging transportation to appointments	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. 24-hour telephone triage	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Appointments during evenings and weekends	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Care coordination/social work assistance for patients with complex problems	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

30. In your opinion, to what extent do the following factors influence non-urgent ER use?

	Major influence	Minor influence	Little or no influence
a. The ER will provide care without an appointment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Patients believe the ER provides better quality of care	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. The ER offers quicker access to specialists	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Hospitals encourage use of the ER	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. The ER offers access to medicines for patients with chronic pain	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f. The ER is where patients are used to getting care	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

31. What, in your experience, could decrease non-urgent ER use by Healthy Michigan Plan patients?

32. Please think about what has changed for your patients who were previously uninsured and are now covered by the Healthy Michigan Plan. Rate the extent to which you think the Healthy Michigan Plan has had an impact on each of the following for these patients: (If you have no previously uninsured patients now covered by the Healthy Michigan Plan, choose “Don’t know” for all.)

	Great impact	Some impact	Little impact	No impact	Don’t know
a. Better control of chronic conditions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Improved medication adherence	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Better ability to work or attend school	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Improved ability to live independently	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Improved health behaviors	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f. Improved emotional wellbeing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g. Early detection of serious illness	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

33. When was the most recent time, if ever, you discussed out-of-pocket medical costs with a Healthy Michigan Plan patient?

- Yes No → *If no, SKIP to Question 36*

34. Thinking of the most recent time you discussed out-of-pocket medical expenses with a Healthy Michigan Plan patient, who brought up the topic? (check one)

- The patient
 Me
 Somebody else in the practice (e.g., clerical or nursing staff)
 Other (specify): _____

35. Thinking of the most recent time you discussed out-of-pocket medical expenses with a Healthy Michigan Plan patient, did the conversation result in a change in the management plan for the patient?

- Yes No Don’t remember

36. Given what you know about it, in general, do you support or oppose the continuation of the Healthy Michigan Plan?

- Support Oppose Don’t know

37. What changes would you suggest for the Healthy Michigan Plan?

38. Please rate your agreement with each of the following statements.

	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
a. All providers should care for some Medicaid/Healthy Michigan Plan patients.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Caring for Medicaid/Healthy Michigan Plan patients enriches my clinical practice.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Caring for Medicaid/Healthy Michigan Plan patients increases my professional satisfaction.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. It is my responsibility to provide care for patients regardless of their ability to pay.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

39. In general, to what extent do you agree or disagree with the following statements:

	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
a. I know what kind of insurance a patient has at the beginning of an encounter.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. I ignore a patient's insurance status on purpose so it doesn't affect my recommendations.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. If I need to know a patient's insurance status it is easy to find out.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. I only find out about a patient's insurance coverage if they have trouble getting something I recommend.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

40. Is there anything else you would like to tell us about the impact of the Healthy Michigan Plan on your patients or your practice?

41. If you are you interested in receiving a special summary of survey findings, please provide your email address below. (Your email will be used only for the purpose of sending survey findings.)

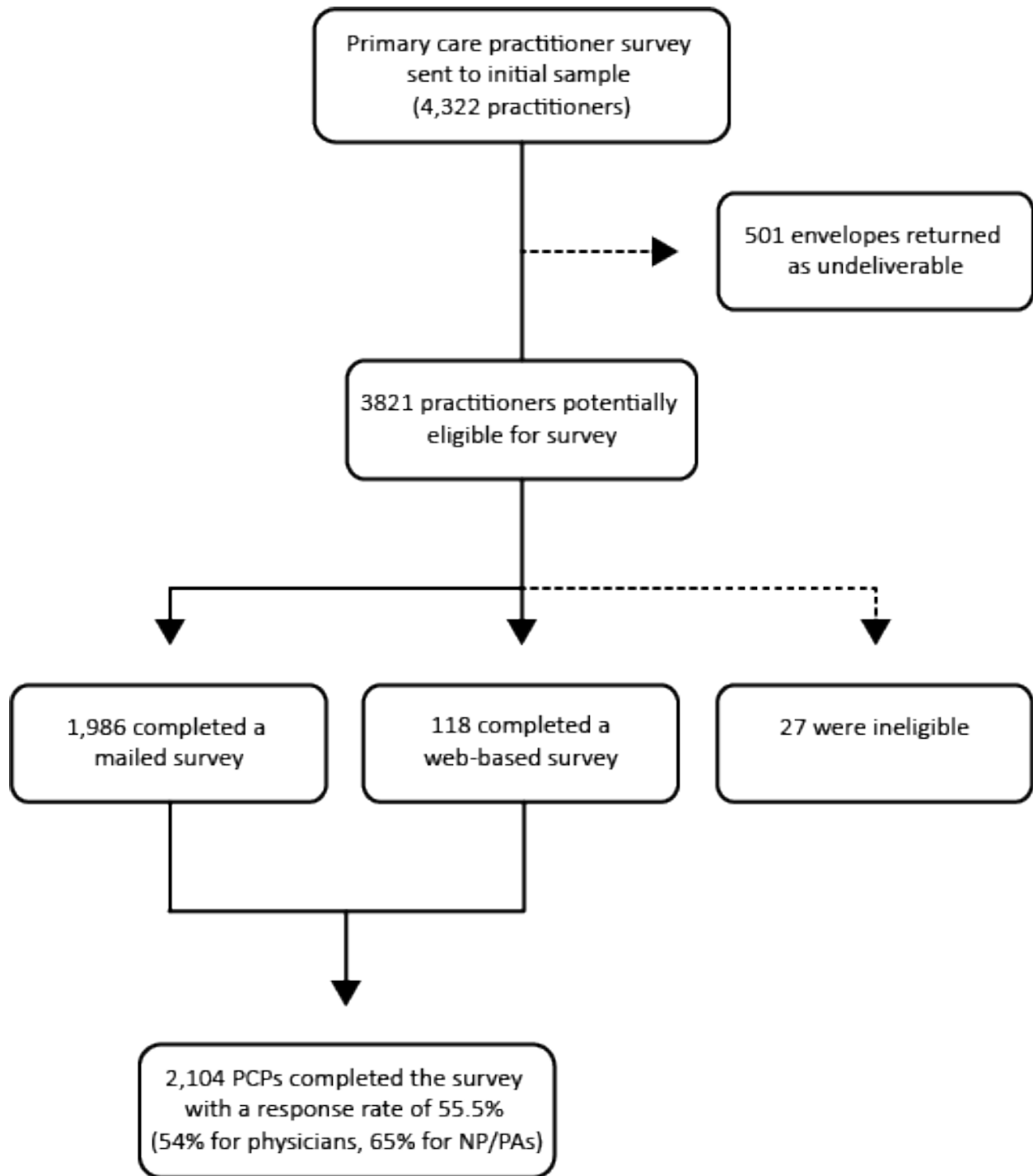
Email address: _____@_____

Thank you for completing this survey. Please return the survey in the envelope provided.

eAppendix Table 1. Characteristics of PCP Interviewees (N=19)

	n	%
Personal Characteristics		
<i>Gender</i>		
Male	12	63
Female	7	37
Professional Characteristics		
<i>Provider Type</i>		
Physician	16	84
Non-physician (NP/PA)	3	16
<i>Specialty</i>		
Family Medicine	14	74
Internal Medicine	2	11
Nurse Practitioner (NP)	1	5
Physician Assistant (PA)	2	11
<i>Years in Practice</i>		
<10 years	5	26
10-20 years	6	32
>10 years	8	42
Practice Characteristics		
<i>Practice type</i>		
Federally qualified health center (FQHC)	5	26
Large/hospital-based practice	3	16
Free/low-cost clinic	2	11
Small, private practice	7	37
Rural health clinic	2	11
<i>Urbanicity</i>		
Urban	12	63
Rural	7	37

eAppendix Figure 1. Flowchart of PCP Survey Response Rates



eAppendix Table 2. Characteristics of PCP Survey Respondents and Nonrespondents

	Respondents N=2104 (%)	Nonrespondents N=1690 (%)	<i>p</i> value
Gender			
Female	45	44	0.55
Male	55	56	
Age			
Birth year 1970 or earlier	71	70	0.32
Birth year 1971 or later	29	31	
Number of Medicaid managed care plans			
1 plan	21	20	0.48
2 plans	27	26	
3 or more plans	52	54	
Practice setting			
Federally qualified health center	15	15	0.86
Other setting	85	85	
Specialty			
Family medicine/general practice	55	51	<0.001
Internal medicine	27	36	
Nurse practitioner/physician assistant	17	11	
Other	1	1	

eAppendix Table 3. PCP Attitudes About Caring for Underserved Patients

	Strongly Agree	Agree	Neither	Disagree	Strongly disagree
All practitioners should care for some Medicaid/Healthy Michigan Plan patients	941 (45%)	555 (27%)	346 (17%)	150 (7%)	81 (4%)
It is my responsibility to provide care for patients regardless of their ability to pay	874 (42%)	642 (31%)	282 (14%)	190 (9%)	78 (4%)
Caring for Medicaid/Healthy Michigan Plan patients enriches my clinical practice	418 (20%)	590 (29%)	746 (36%)	246 (12%)	67 (3%)
Caring for Medicaid/Healthy Michigan Plan patients increases my professional satisfaction	379 (18%)	543 (26%)	794 (39%)	260 (13%)	88 (4%)