

Arkansas Works Simulated ‘Secret Shopper’ Patient and Provider Practice Survey Report

ARKANSAS WORKS EVALUATION PROJECT REPORT

ARKANSAS CENTER FOR HEALTH IMPROVEMENT

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Introduction

Arkansas Works

Arkansas is a largely rural state with significant healthcare challenges, including high health-risk burdens, low median family income, and limited provider capacity. Prior to initiating the Health Care Independence Program (HCIP), or “Private Option” (now officially titled Arkansas Works), Arkansas’s Medicaid (MCD) program had one of the most stringent income eligibility thresholds in the nation, largely limiting coverage to the aged, disabled, and parents with extremely low incomes and limited assets. Along with growing insurance premium costs in the private sector, this resulted in 25 percent of adult Arkansans being uninsured as of 2013.

In 2014, Arkansas opted to expand Medicaid coverage to Arkansans with incomes up to 138 percent of the federal poverty level (FPL) as permitted by the Patient Protection and Affordable Care Act (PPACA). Through an innovative premium assistance approach authorized via a Section 1115 demonstration waiver, the state used Medicaid funds to pay for private individual qualified health plans (QHPs) offered through the Health Insurance Marketplace. Most eligible individuals under the premium assistance approach obtained coverage through QHPs. However, individuals who were deemed medically frail were diverted into coverage provided directly through Medicaid. These two features were maintained as the program transitioned from the HCIP to Arkansas Works.

Purpose

A fundamental tenet of the Arkansas Section 1115 demonstration waiver centered around the federal equal-access requirements for Medicaid beneficiaries. Prior to the research conducted for this report, the evaluation team assessed differences in access between QHP and traditional Medicaid beneficiaries in three specific categories: 1) *geographic access* — the distances between beneficiaries and providers listed as in-network; 2) *realized access* — the differences between patterns of utilization for comparable individuals; and 3) *perceived access* — the differences in self-reported experiences in receiving clinical services.

As noted in the HCIP evaluation waiver interim report,¹ no differences were observed in geographic access to in-network primary care physicians between Medicaid and QHP enrollees. There were, however, significant differences in *realized* access to care (time to first contact with health care system and emergency room utilization) as well as significant differences in *perceived* access (based on responses to Consumer Assessment of Healthcare Providers and Systems [CAHPS] survey questions) to needed services.²

To better understand these observed differences and assess differentials in appointment access, the evaluation team conducted quantitative assessments of differences in ability to make appointments between QHP or Medicaid enrollees—*actualized access*. To achieve this, a simulated patient study, also known as a “secret shopper” survey, was undertaken. This study was similar to those conducted by Rhodes and colleagues in Arkansas and other states between 2012 and 2014^{3, 4} to enable an investigation of whether different primary care provider access rates existed across beneficiaries with private insurance versus Medicaid.

Simulated patient studies use trained actors who have been carefully coached to simulate an actual patient so accurately that the simulation cannot be detected by a skilled clinician. These individuals are often used for training health sciences students and conducting clinical skills assessments on such trainees. In performing a simulation, all aspects of a patient including body language, physical findings, emotional personality characteristics, and medical history are scripted and coached.⁵ In this study, specially trained simulated patients were used to place phone calls to providers and impersonate prospective patients seeking to obtain an appointment with a clinical provider.

Research Questions

This study investigated two primary questions related to access: (1) Are individuals with private insurance more successful in obtaining an appointment than those with Medicaid? and (2) When both are able to obtain an appointment, do those with private insurance receive appointments sooner than those with Medicaid?

Methodology

The study design identified the sampling frame as all primary care practices in Arkansas. Primary care practices were defined as those which employ primary care physicians or physicians with specialties of internal medicine or family or general practice.

Provider Practice Selection Criteria

Access to a single concise directory that provides a frequently updated list clearly identifying Arkansas's practicing providers and their practice locations, including their contact information across carriers, is not currently available. For this reason, a variety of sources was used to create the sampling frame. National Provider Identifier (NPI) numbers were extracted from the U.S. Centers for Medicare & Medicaid Services National Plan and Provider Enumeration System (NPPES) purchased from CarePrecise (www.careprecise.com). We selected these NPIs using taxonomy codes that represented the definition of primary care practices stated above (see Table 1 for taxonomy codes and their associated specialties). However, a disadvantage of using the NPPES data is that providers do not necessarily update their contact information regularly. For this reason, the contact information was extracted from Arkansas Works payer-submitted provider files using the selected NPIs. In cases where there were multiple NPI numbers for a single phone number, an effort was made to identify the NPI number that was associated with the practice and not an individual.

Providers or practices identifiable as being outside of the defined criteria (listed in Table 1) that were (a) urgent care or walk-in practices or (b) specialty practices outside of internal medicine and family or general practice were excluded. Any contact information related to the University of Arkansas for Medical Sciences (UAMS) was also removed, since there is a central scheduling number for all of their practices to which all callers would have been referred. Finally, all out-of-state phone numbers were also removed. The final list contained 1,166 phone numbers. These

phone numbers belonged to either an individual provider or group of providers at a practice. For this report the unit of analysis is considered to be a practice.

Table 1. Taxonomy Codes for Specialties

Specialty	Taxonomy code
Family Practice	207Q00000X
General Practice	208D00000X
Internal Medicine	207R00000X
Primary Care	261QP2300X
Clinic (poorly defined)	261Q0000X

Study Design

For this study, trained simulated patients from the Centers for Simulation Education at the University of Arkansas for Medical Sciences were used. Six simulated patients participated in the study: one African-American female, two white females, one African-American male, and two white males. Each of the simulated patients were randomly assigned a gender-consistent name, date of birth (age), and address.

The initial study design included four study groups that represented two healthcare coverage options, privately insured or Medicaid; and two reasons for scheduling an appointment, “new to the area and looking for a primary care provider (PCP)” or “family history of heart disease.” This design required each provider or practice phone number to be called by a simulated patient in each of the following coverage groups and reason-for-calling scenarios:

- QHP/new PCP
- QHP/heart disease
- Medicaid/new PCP
- Medicaid/heart disease

The study was conducted in two phases. The first phase consisted of calls to a random sample of 39 provider or practice phone numbers and was designed to test the operability of the initial study design. Once this pilot phase was completed, the remaining phone numbers were divided into lists and randomly assigned to the simulated patients.

Script

A script was developed by a team that included the executive director of the UAMS Centers for Simulation Education, members from the Arkansas Center for Health Improvement research team, a medical anthropologist from the Central Arkansas Veterans Healthcare System, and a former practice office manager. For the pilot phase, two introductions were possible, depending on the reason for calling. After indicating that they would like to make an appointment, and when asked what they would like to be seen for, simulated patients assigned to the heart disease group were to say that they would:

...like to schedule a check-up because my family has a history of heart disease. I haven't seen a doctor in a couple of years and I think it is time to get a check-up.

Simulated patients assigned to the new PCP group were asked to say that they were:

...looking for someone to be my regular doctor. I'm new to this area and I don't have a doctor yet.

If asked how they were feeling now, both groups were instructed to say that they currently felt fine and just needed a check-up. They waited to be asked about their health care coverage and answered if and when prompted to do so. If asked for an insurance card number, simulated patients were asked to tell the appointment scheduler that they did not have it with them and ask if they could bring the card when they came in. It was noted if the practice did not schedule appointments based on this reason. All simulated patients were instructed to ask why they could not get an appointment if they were unable to schedule one. Simulated patients were asked to take the first available appointment, if given an option. If the appointment they were given was more than two weeks away, they were directed to ask if they could obtain an earlier one. The simulated patients were required to ask for the provider's name if they were not given one and were instructed to ask if the provider was a doctor or a nurse.

Pilot Phase

From the information collected during the first 118 phone calls, the evaluation team learned that:

1. It was unnecessary to specify that a patient had a family history of heart disease. Practice schedulers were interested in whether or not the patient was new to their practice first and tended to ask what the appointment was specifically for only after an appointment was scheduled.
2. The calls took more time than originally anticipated.
3. Simulated patients were placed on hold occasionally for as much as 15 minutes at a time.
4. Some practices asked for a Social Security number before being willing to schedule an appointment.
5. Nearly 25 percent of the phone numbers in this sample were not associated with a primary care practice and were thus invalid, resulting in exclusion from the study.

Study Phase

Based on the findings during the pilot phase, the following changes were made to the initial study design prior to making the rest of the calls:

1. The reason for calling for all simulated patients was changed to "looking for a new PCP."
2. Simulated patients were asked to hang up if on hold for more than 5 minutes at a time, to record that they were on hold for longer than 5 minutes, and to try calling back at another time. No more than three attempts (for a total of 15 minutes on hold) to secure an appointment were made per provider or practice.

3. A field was added to record whether a simulated patient was asked for a Social Security number prior to an appointment being scheduled.
4. A checkbox was added to indicate if a call could not be completed. The simulated patient was also given an opportunity to record why the call could not go through (i.e., disconnected, wrong number, etc.).

A summary of the patient profiles and reason-for-appointment scenarios for each of the six simulated patients is presented in Table 2. Telephone number lists 1 and 2 were used during the pilot phase; each number on the list was called by a simulated privately insured patient and a simulated Medicaid patient for each reason-for-appointment scenario. After the pilot study, the process was streamlined to just one reason, a new PCP, and the remaining telephone numbers were split into three groups to be called by a simulated privately insured patient and a simulated Medicaid patient from each group.

Table 2. Simulated Patient Profiles^a

Caller	Gender	Age	Insurance	Reason for call during Pilot study	Pilot study phone sample	Reason for call during study phase	Study phase phone sample
A	F	37	QHP	Heart disease	List 1 n = 17	New PCP	List 3 n = 369
B	F	56	Medicaid				List 4 n = 370
C	F	29	QHP	New PCP	List 2 n = 21		List 5 n = 370
D	M	45	Medicaid				
E	M	30	QHP	Heart disease			
F	M	38	Medicaid				

Data Collection

Simulated patients used SurveyMonkey as an electronic data collection tool with the script template incorporated for ease of concurrent data recording during telephone interviews. In cases where the simulated patients did not have electronic access to SurveyMonkey, data was compiled on paper versions of the data collection instrument. All paper logs were required to be entered into SurveyMonkey by the simulated patient who made the call. The data collection forms also included two open-ended comment boxes. One was to collect information related to the reason that an appointment was not scheduled, and one was included at the end to give the simulated patient an opportunity to record any observations about the call. Copies of the data collection tools are contained in Appendices 1 and 2.

^a Names, addresses, and dates of birth were generated using www.fakenamegenerator.com

Coding Open-Ended Responses

Analysts reviewed notes on responses given to callers, and codes were developed to group types of open-ended comments by the callers on the reasons for no appointment being made and their other observations related to the calls. Some themes were expected by the evaluation team, such as providers not taking new patients and/or limited availability, but other themes also emerged over the course of the study. To validate the coding methodology, two independent coders separately coded the reasons for no appointment being made and the simulated patient’s observations, based on the themes that were identified. The codes were compared, and if there was a disagreement between codes, the coders would discuss and come to an agreement. The comments and code descriptions are located in Appendix 3.

Analysis

Only successful calls were included in the study. Successful calls were defined as those calls where a simulated patient was able to speak to a person at a primary care clinic and initiate the process of making an appointment (See Table 3).

Table 3. Proportion of Successful Contacts With Primary Care Clinics by Simulated Patient Coverage

Coverage	Successful calls	
	n	%
QHP	653	56.5%
MCD	503	43.5%
Total	1,156	100.0%

Of successful calls, a proportion were excluded from the analyses for one of three reasons:

1. The simulated patient was told their telephone number was already “in the system.” These were practices that belonged to large healthcare systems that shared electronic information, such as through an emergency medical record/appointment scheduling system.
2. The provider maintained a “concierge” panel of patients. These providers were generally independent physicians who only accept privately insured patients who pay a premium practice subscription fee to receive preferential treatment by providers.
3. Data were missing. These were calls that were identified during the coding process that were missing information vital to the analysis; for example, calls in which there was no way to tell whether insurance was asked for before or after an appointment was made.

Table 4 presents the percentage of overall calls included for analysis.

Table 4. Allocation of Successful Primary Care Contacts

	QHP		MCD	
	n	%	n	%
Successful contact made	653		503	
Excluded	114	15.8%	20	3.4%
Already in the system	109	15.0%	16	2.7%
Calls to concierge providers	2	0.3%	4	0.7%
Missing data	3	0.5%	0	0.0%
Included for analyses	539	82.5%	483	96.0%

For the analyses in this report, providers and practices that were successfully contacted by both a simulated privately insured patient and a simulated Medicaid patient were assessed.

A total of 347 providers or practices received successful calls from both. Of these 347 practices, 157 consistently asked both groups about coverage prior to scheduling an appointment, while 190 practices asked only one or neither simulated patients prior to scheduling an appointment. Of these 190 practices, 115 asked only one simulated patient about insurance, while 75 practices never asked either simulated patient about insurance type prior to scheduling an appointment. The Results section contains outcomes based on both of these denominators.

Results

Were Patients Able to Schedule an Appointment?

For the 347 practices contacted by both QHP and Medicaid simulated patients, 57.3 percent of simulated QHP patients were able to schedule an appointment, compared to 30.3 percent of Medicaid patients. Figure 1 depicts the outcomes of appointment attempts.

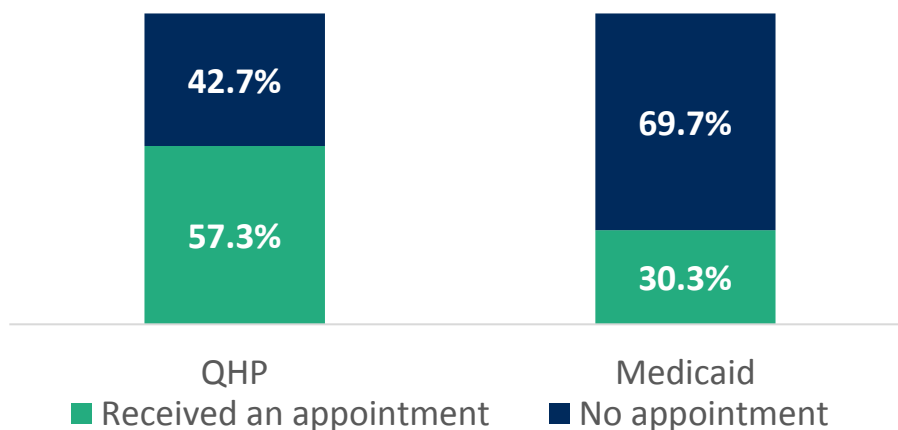


Figure 1: Overall Rates of Appointments Among Providers and Practices Successfully Contacted (n=347).

Does Coverage Type Matter When Scheduling an Appointment?

Of the 347 practices with paired QHP and Medicaid contacts, 190 practices did not consistently (i.e., asked one simulated patient and not the other) or never asked about coverage type before determining scheduling availability. Conversely, 157 asked the simulated patients about coverage before either scheduling an appointment or informing the caller that no appointments were available.

Anticipating that knowledge of coverage type could affect availability, responses were stratified by practices that did not and those practices that did ask prior to scheduling decisions. Figure 2 depicts results of these analyses.

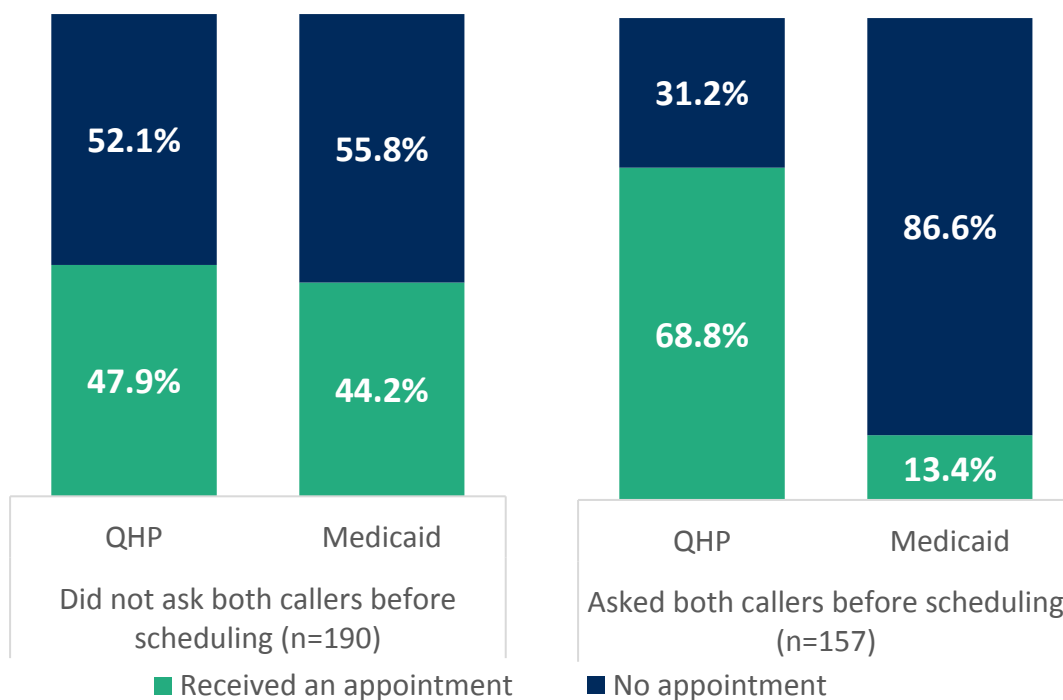


Figure 2. Rates of Appointments for Coverage Based on Whether the Scheduler Knew Coverage Type (n=347).

Among the 190 practices that did not ask about coverage prior to either scheduling an appointment or informing the caller that no appointments were available, 47.9 percent of those in the QHP and 44.2 percent of those in Medicaid obtained a scheduled appointment. However, among the simulated patients for whom 157 of the practices asked about coverage before scheduling, 68.8 percent of those in the QHP, and only 13.4 percent of those in Medicaid, were able to obtain a scheduled appointment.

What Were the Reasons for Not Receiving an Appointment?

Table 5 contains the principle reasons given by providers and practices for not being able to schedule an appointment, grouped by whether coverage type was determined prior to appointment denial.

Table 5. Reasons for not receiving an appointment

Reason Category	Did not ask both callers before scheduling (n=190)		Asked both callers before scheduling (n = 157)	
	QHP n (%)	Medicaid n (%)	QHP n (%)	Medicaid n (%)
Coverage not accepted	2 (1.1)	13 (6.8)	1 (0.6)	47 (29.9)
No Medicaid slots or not accepting new Medicaid patients	--	5 (2.6)	--	43 (27.4)
Call Medicaid first and/or get assigned	--	6 (3.2)	--	19 (12.1)
Medicaid doesn't cover well visits, only sick	--	--	--	2 (1.3)
Screening or paperwork required prior to appointment (pre-approval)	38 (20.0)	29 (15.3)	19 (12.1)	6 (3.8)
Not accepting new patients	28 (14.7)	31 (16.3)	1 (0.6)	0 (0)
Specifically indicated that the physician must pre-approve the patient	10 (5.3)	8 (4.2)	9 (5.7)	4 (2.5)
Required Social Security number	5 (2.6)	1 (0.5)	2 (1.3)	1 (0.6)
Required insurance number	3 (1.6)	2 (1.1)	4 (2.5)	8 (5.1)
Required to fill out paperwork at office	3 (1.6)	1 (0.5)	2 (1.3)	0 (0)
Office to call back	3 (1.6)	2 (1.1)	3 (1.9)	2 (1.3)
Other reasons	7 (3.7)	8 (4.2)	8 (5.1)	4 (2.5)
Total callers not receiving appointment	99 (52.1)	106 (55.8)	49 (31.2)	136 (86.6)

Does Coverage Type Matter in Appointment Waiting Time?

Of those who received a scheduled appointment and were asked about coverage type, we assessed whether time to appointments varied between simulated patients in QHPs and those in Medicaid. Table 6 presents time to appointments for simulated QHP patients and their Medicaid counterparts, grouped by providers and practices who consistently asked (n=157) both QHP and Medicaid patients for coverage type and those who never asked (n=75) either patient for coverage type prior to scheduling the appointment.

These two groups were used to compare appointment wait times because both QHP and Medicaid individuals were treated the same within each group (i.e., either both patients were asked about insurance or neither patient was asked about insurance). Practices that only asked

one patient about insurance type prior to scheduling an appointment (n=115) were not included in this comparison.

Table 6. Appointment Wait Time by When Coverage Type Was Consistently Asked or Never Asked and Coverage Type

	Coverage type	n	Average wait	Shortest wait	Percentile			Longest wait
					25 th	50 th	75 th	
Asked both callers before scheduling and gave both an appointment (n=157)	QHP	19	8.4	1	4	6	9	47
	Medicaid	17	8.6	1	5	6	9	47
Did not ask either caller about coverage and gave both an appointment (n=75)	QHP	19	4.7	1	2	4	7	12
	Medicaid	18	6.0	1	4	5.5	8	14

Among practices that inquired about coverage status prior to scheduling but did offer appointments, there was no difference in appointment wait times between simulated patients in QHPs and those in Medicaid. There was an appointment wait difference of 1.3 days when coverage type was never asked prior to scheduling suggesting a potential post-acceptance delay for Medicaid patients.

Limitations

One of the challenges of this study was the difficulty in identifying all primary care solo providers and practices in Arkansas. There were 3,011 primary care physicians (family practice, general practice, internal medicine) licensed to practice in Arkansas in 2017.⁶ Not all PCPs who maintained licensure saw patients in 2017. In addition, multiple PCPs may serve in practices that have one contact phone number to schedule appointments. In total, our sampling frame consisted of 1,166 unique phone numbers of individual providers and practices. It is reasonable to assume that our sampling frame is representative of the majority of solo providers and practices offering primary care appointments in Arkansas.

Some practices required a Social Security Number or insurance member number before they would discuss possible appointment slots. It is difficult to ascertain whether callers to those practices would have received an appointment had they been able to provide this information. When simulated patients were asked for this information, they responded that they did not have it or were not comfortable providing it. These requests occurred in approximately 10 percent of the 157 practices that asked for insurance prior to scheduling and therefore are not likely to be impactful on findings.

Discussion

The findings of this study are consistent with the findings of the final Health Care Independence Program evaluation Interim and Final reports. These findings determined that Medicaid-enrolled individuals covered by QHPs experienced better perceived and realized access when compared with individuals in traditional Medicaid. This final report also showed that initiation of care occurred more rapidly for those enrolled in premium-assistance private insurance than for those newly enrolled in the Medicaid program. Finally, from consumer surveys, QHP enrollees experienced a greater ability to get needed “care, tests, and treatment” and receive “an appointment for a check-up or routine care as soon as needed,” compared to their Medicaid enrollee counterparts.

Findings from this study provide additional insight into the reasons for disparities in primary care access. Simulated patients with QHP coverage were more successful at obtaining an appointment compared to simulated patients with Medicaid coverage. The percentage of simulated patients with QHP coverage receiving an appointment, after being asked about insurance, was more than five times higher than the percentage of simulated patients with Medicaid coverage receiving an appointment (68.8 percent and 13.4 percent, respectively). Most of this differential in ability to obtain appointments was associated with the practice inquiring about coverage type before offering appointment. If simulated patients were able to obtain an appointment, there was virtually no difference in wait times for those with private insurance and those with Medicaid (8.4 days and 8.6 days, respectively).

Arkansas’s use of a premium assistance approach to Medicaid expansion appears to have resulted in comparatively better primary care access for those with private insurance. These differences in primary care access have an impact on the uptake of clinical preventive services, appropriate disease management, and utilization of emergency room services. This study provides additional insight into the reasons why differences in primary care access exist between adults with Medicaid and adults with private insurance. Further examination of the reasons why providers are not accepting Medicaid or accepting new Medicaid patients is warranted.⁷ The results in this study and the differential payment rates noted in the final evaluation report raise questions about the ability of Medicaid to achieve comparable access to private insurance carriers. More broadly, the findings indicate that Medicaid programs nationwide will continue to experience challenges in meeting the federal equal access requirements through delivery system strategies that pay providers significantly lower rates.

¹ *Arkansas Health Care Independence Program (‘Private Option’) Section 1115 Demonstration Waiver Interim Report*. Little Rock, AR: Arkansas Center for Health Improvement, March 2016 (these results were also included in the final report).

² *Arkansas Health Care Independence Program (‘Private Option’) Section 1115 Demonstration Waiver Final Report*. Little Rock, AR: Arkansas Center for Health Improvement, June 2018

³ Rhodes KV, Kenney GM, Friedman, AB, et al. Primary Care Access for New Patients on the Eve of Health Care Reform. *JAMA Intern Med*. 2014; 174(6):861-869. Doi:10.1001/jamainternmed.2014.20

⁴ Rhodes KV, Basseyn S, Friedman, AB, et al. Access to Primary Care Appointments Following 2014 Insurance Expansions. *Annals of Family Medicine* 2017; 15(2):107-112. Doi:10.1370/afm.2043

⁵ HS Barrows *Simulated (Standardized) Patients and Other Human Simulations, 1987*. See <https://www.aspeducators.org>

⁶ Brock M, Lehing L, Louie S. *Arkansas Health Professions Manpower Statistics 2017*. Arkansas Department of Health. https://www.healthy.arkansas.gov/images/uploads/pdf/Manpower_Report_2017-Revised.pdf

⁷ This finding compares with a 2013 study of primary care clinics in Arkansas that indicated that nearly nine of 10 offices indicated that they were accepting new Medicaid patients.

<http://www.achi.net/Content/Documents/ResourceRenderer.ashx?ID=30> Arkansas Center for Health Improvement. *Arkansas Health Care Workforce: A Guide for Policy Action*. Little Rock, AR: Arkansas Center for Health Improvement, March 2013.