

**Factors Associated with Patient Trust in Primary Care Physicians in the United States**

By

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CERTIFICATE OF APPROVAL

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Honors Thesis

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## **Abstract**

For a patient to efficiently communicate medical history and sensitive medical information, and to properly adhere to treatment plans put forward by his or her physician, a relationship of trust must be established. Data suggests that compassion and empathy shown by doctors, along with the encouragement they give their patients to play an active role in their treatment, contributes to the trust they earn. Outside the scope of the patient-physician interaction, multiple extrinsic factors play a role in the patients' social trust of the physician and the institution of healthcare. This study aimed to gain a better understanding of areas in which trust in physicians remain strong and determine what elements of trust have weakened. Due to the longevity and continuity of the relationship, primary care physicians were the focus of this study. A 39-item 5-point Likert scaled survey was administered to 100 participants in the United States online via Amazon Mechanical Turk (MTurk). Demographic characteristics such as gender, age, and form of health insurance were not significant. Primary care physician visits per year had a significant negative relationship to how participants responded to "I sometimes lie to my physician about drug or alcohol use." It was also found that patients who understand their physician's diagnosis and treatment were likely to follow their physician's advice. While the average response to all items scored 2.98 (5-point scale from 0-4), multiple items were found to have a substantial amount of negative responses indicating there are still areas in which the trust present in physician-patient relationships can be improved, including feelings of being rushed and feelings that physicians could do more for these patient's healthcare. However, these feelings did not have a significant impact on trust or satisfaction, future studies are needed to further explore these findings in order to derive practical applications from the relationship between these aspects of the physician-patient relationship.

## **Introduction**

The dynamic that trust has in a patient-physician relationship has only been empirically studied for the past three decades. The concept of trust is a multifaceted assessment influenced by many factors and can be divided into two broad categories; interpersonal trust and social trust. Interpersonal trust is characterized by an individual's confidence in the words, actions, and decisions of another (Zhang et al., 2018). Interpersonal trust is built over time through repeated interactions during which an individual's presuppositions about a person's trustworthy behavior can be tested (Mechanic & Schlesinger, 1996; Pearson & Raeke, 2000). Strong interpersonal trust encourages patients to reveal stigmatized information, accept prescribed changes in risky behavior, share thoughts and feelings so mental disorders can be diagnosed, and accept treatment. Social trust is defined as the trust an individual has in collective institutions. This sort of trust is influenced greatly by the media and general social attitudes towards institutions. In the healthcare setting, social trust can be defined as how much faith a patient has in the institutions of healthcare providers. The concept of social trust is important in providing a foundation to frame the interpersonal trust of a patient in his or her physician (Goold, 1998). Proper development of social and interpersonal trust has been found to foster better communication behaviors and transparency between patient and physician (Pearson and Raeke, 2000).

Outside of the definitions of interpersonal and social trust, trust in physicians can further be divided into two dimensions, trust in the physician's cognitive abilities and technical competence, and affect based trust such as characteristics of empathy and compassion (Zhang et al., 2018). These dimensions help to develop scales of trust specific to the service setting (Leisen & Hyman, 2004). Because patients lack the medical expertise to truly assess the technical performance of physicians, patients must trust that the physician is competent and motivated to

protect the interests of the patient. Medical competence is usually accepted by patients and not analyzed with scrutiny, as physicians have invested in extensive education that facilitates a degree of patient trust in the technical and cognitive capabilities of physicians. This sort of trust in the technical capabilities of physicians as a whole can be considered a form of social trust (Sweeney, 2018).

A patient's trust in his or her physician can serve multiple functions. A patient's trust in his or her physician can help reinforce the idea of the physician-patient relationship as a partnership. Because trust is the universally accepted basis for any human interaction (Gundlach & Murphy, 1993) a patient's trust in his or her physician is a necessary precondition for successful medical care (Leisen & Hyman, 2004). Trust is also important in a patient-physician relationship due to the nature of the exchange. The relationships between patients and medical professionals concern life or death and physical wellbeing directly. In addition, the traits of the medical practice often involve uncertainty and irreversibility (Kim et al., 2018). Research shows a trusting physician-patient relationship leads to an increase in patient satisfaction, increase in the probability of treatment adherence, and an improvement in the patient's health status (Pearson and Raeke, 2000). Patient trust should also help to decrease the possibility of a patient leaving a physician's practice or withdrawing from a health plan.

Anderson and Dedrick's (1990) Trust in Physician scale (TIPS) was the first study to measure trust specific to the patient-physician relationship. Using a 5-point Likert format, they evaluated 11 items assessing dependability, confidence, and confidentiality of private information. TIPS soon became a benchmark for future measures due to its excellent psychometric properties (Pearson & Raeke, 2000). Other scales include the Primary Care Assessment survey created by Safran et. al. (1998), which consisted of 8 Likert scaled questions

to assess the trust domains of integrity, agency, and competence and Kao et. al.'s (1998) Patient Trust Scale which included evaluations of elements of managed care systems on social trust. These scales can be seen in Table 1.

Most studies on trust in patient-physician relationships have been done in specialty practices, and not in primary care. In this study, primary care physicians (PCP) were the focus for many reasons, including the large volume of service use, the diversity of health conditions encountered, and the wide spectrum of medical decisions made on a daily basis. Primary care is defined as the provision of integrated, accessible medical care, which addresses a majority of individuals' healthcare needs including physical, mental, and emotional concerns. Primary care is at the heart of modern healthcare delivery and is credited with improving healthcare access and quality while also controlling costs (Platanova, Kennedy, & Shewchuk, 2008). Primary care is authorized to regulate healthcare and referrals for patients according to their medical needs and are the first level of healthcare that prioritizes and promotes preventive care in order to achieve high community health status (Sari, Prabandari, & Claramita, 2016). The relationships between patients and their primary care physicians are also of particular interest due to the unique continuous quality of primary care. Due to the far-reaching effects a patient's trust has on his or her healthcare, we must identify ways in which physicians can help develop and maintain this trust. Therefore, the purpose of this study was to observe patients attitudes regarding different aspects of their experiences with their primary care physicians, and identify factors which can predict levels of trust in the primary care physician-patient relationship. By identifying gaps in knowledge about trust we can help target new efforts to strengthen this vital element of medical relationships and improve healthcare in the United States.

## Methods

This study was based on a 39-item 5-point Likert scaled survey administered to 100 participants around the United States via Amazon Mechanical Turk (MTurk) on February 28<sup>th</sup>, 2019, from 9:00am-10:30am EST. Participants learned of the survey via MTurk and were instructed to respond to the 39 statements in regard to their experience(s) with their primary care physician. The survey was formatted via Qualtrics. Participants must have lived in the U.S and be 18 years of age or older. The study was approved by the Institutional Review Board (IRB) of the University of South Florida (Pro00038438). In addition, online informed consent forms from participants were completed before the start of the survey. The data was stored in a USF Box account.

The dependent variable in this study was trust. Trust was measured via responses to the 39 items of the survey, scaled 0-4 (0=strongly disagree, 4=strongly agree). Negatively worded items were reverse scored (0=strongly agree, 4=strongly disagree). The questions on the survey were developed using previous studies (Anderson and Dedrick, 1990; Kao et al., 1998; Safran et al., 1998) and questions assessing other dimensions which may influence a patient's trust of their PCP, such as extrinsic factors regarding office environment, were added. The independent variables assessed in this survey were demographic information, office location, environment, and wait times (items 1-7), aspects of the medical interview (items 8-19), and aspects regarding perceived physician competence and patient adherence (20-39), and can be seen in the Appendix.

Data were analyzed via JMP® 13. Contingency analyses and Pearson chi square were performed for each of the 39 items against the demographic information collected (age group,

gender, form of insurance, PCP visits per year) and against the other items in the survey to determine if certain factors produce a difference in response.

### **Participants**

The participants consisted of 56 men, 42 women, and 2 individuals who identified their gender as “other”. The sample was predominantly comprised of adults between the ages of 25 and 44, with 7 participants being 18-24 years of age, 60 being 25-34 years of age, 27 being 35-44 years of age, 4 being 45-54 years of age, and 2 being 55-64 years of age. Regarding form of health insurance 56 participants had employer provided health insurance, 19 had insurance provided by a private insurer, 19 had government provided insurance (Medicare, VA, etc.), and 6 were uninsured. The vast majority of participants (71) saw their primary care physician 1-2 times per year, 21 participants saw their PCP 3-5 times per year, and 8 saw their PCP over 5 times per year. Participant ethnicity and/or race was not queried.

### **Results**

Of the 39 items, 25 had less than 10% negative responses. Average response across all responses on all questions was 2.98 (strongly disagree=0, strongly agree=4), indicating that patients generally have high trust in their physicians.

#### **Items for Which Respondents Felt Most Favorably**

Of the 25 items which had less than 10% negative responses, 7 had an average response of greater than 3.25. These items include “It is easy to travel to my physician’s office” (3.95), “My physician’s office is in a safe neighborhood” (3.29), “My physician’s office has a clean, well maintained exterior” (3.26), “The interior of my physician’s office is clean and tidy” (3.31),



“I feel comfortable asking my physician questions” (3.27), “I trust my physician to keep my medical information confidential” (3.34), and “I trust my physician to admit me to the hospital when necessary” (3.35).

### **Items for Which Respondents Felt Least Favorably**

Eight of the remaining 14 items had only 10-24% negative responses, including “It is not too difficult to make an appointment with my physician” (12%), “I do not have to wait long at my physician’s office” (17%), “I do not feel rushed when seeing my physician” (16%), “I feel comfortable discussing sensitive information with my physician” (12%), “My physician has a good sense of humor” (11%), and “My physician would tell me if he/she made a mistake regarding my treatment” (13%). The remaining 6 items which had over 25% negative responses were “I sometimes lie to my physician about drug or alcohol use” (26%), “I worry my physician will judge me on my lifestyle choices” (35%), “My physician probably does not care about me as a person” (25%), “I feel as if my physician does not keep my sensitive information completely private” (25%), “Sometimes my physician could do more for my medical care” (37%), and “I sometimes do not trust my physicians judgement and want a second opinion” (32%). A statistically significant ( $p=.0065$ ) negative correlation was found between how many times participants saw their primary care physician per year and responses to “I sometimes lie to my physician about drug or alcohol use”

### **Discussion**

The majority of responses being positive indicates that participants generally have a good amount of trust in primary care physicians (average = 2.98). However, the many items with

either a substantial amount of negative responses or large variance indicates that there are many areas in which physicians can improve upon in order to increase patient trust.

### **Communication Behaviors**

The dimension of communication has been tightly linked to development of interpersonal trust in a patient-physician relationship, with three main themes contributing to this: proper information exchange and patient education, the development of mutual expectations and negotiation, and an active role of the patient in the interaction, which can all lead to greater trust and higher transparency between patient and physician.

Physicians in primary care are expected to have good communication skills so that they can provide optimal patient education and counseling processes (Sari, Prabandari, & Claramita, 2016). The ability of a physician to educate a patient and communicate a diagnosis and treatment plan in an understandable manner is vital to patient adherence. Communication of information in a clear and concise manner, along with explicit instructions, can help increase the probability of patients following prescribed treatments. If a patient does not fully understand his or her diagnosis or does not understand the reasons for certain treatments because of poor communication skills on the part of the physician, he or she is much less likely to adhere. In the current study, 88% of participants responded positively to the item “I can easily understand my physician’s diagnosis and treatment plans”, and 83% of participants responded positively to the item “I always try to follow my physician’s advice”. Of the 88 participants who responded positively to “I can easily understand my physician’s diagnosis and treatments plans”, 79 also responded positively to “I always try to follow my physician’s advice”. This provides evidence for the link between well communicated medical information and adherence to physicians’ recommendations. Patients who can easily understand their physician’s diagnosis and treatment

plans also tend to follow their physician's advice. This indicates that in order for patients to adhere to treatment plans they must be aware of the reasons why they are being treated.

In regard to expectations and patient role, feelings of being rushed have been hypothesized to contribute to distrust or dissatisfaction among patients. Time restraints have been shown to affect both social trust, as these feelings can lead to a distrust in the logistical side of healthcare, and interpersonal trust, as these feelings can contribute to a patient not feeling valued by the physician (Pearson and Raeke, 2000; Stewart et. al., 1999). Feelings of being rushed could be due to only being allotted a short amount of time to communicate with the physician, or time with the physician not being spent in a patient centric manner. Some studies show that longer visits are associated with provision of counseling and preventative care. Meneer et. al. (2018) found that longer consultations are associated with shared decision making, a communication behavior which positively influences interpersonal trust. Other studies, however, show that the amount of time spent between patient and physician is not critical to a patients' trust or satisfaction with his or her encounter, as long as the time is spent in a patient-centric manner (Goold & Lipkin, 1999; Stewart et. al., 1999). Furthermore, Stewart et al. (1999) found that positive consultations, defined as an encounter where both patient and physician are satisfied, took less time than negative consultations, defined as an encounter where both physician and patient are dissatisfied or have negative views about the encounter. Though feelings of being rushed could theoretically contribute to a decrease in patient centered behavior, leading to a decrease in positive consultations, this study did not find any significant difference in satisfaction or trust among responses to "I do not feel rushed when seeing my physician". Even though 16 of the 100 participants responded negatively to this item, of this 16 only three also responded negatively to "I always try to follow my physicians advice", only four of this 16

also responded negatively to “My physician and I collaborate to come up with a treatment plan that best fits my needs”, only five responded negatively to “I am satisfied with the care I receive from my physician”, and six responded negatively to “I feel as if I am my physician’s sole focus when seeing him/her”. Although feelings of being rushed did not have a large effect on collaboration of treatment plans and treatment adherence, the six who disagreed with being the sole focus indicate that these feelings of being rushed could cause patients to feel unimportant and could possibly lead to ineffective communication or bad health outcomes.

Thus, according to the results, proper information exchange is positively associated with treatment adherence, and feelings of being rushed can lead to patients not feeling as if they are the sole focus. However, feeling rushed did not seem to have a large negative impact on collaboration, treatment adherence, or satisfaction in the patient-physician interaction.

### **Trust in Physician Judgement**

Patients base trust in physicians’ judgements on the belief that their physician is honest and competent, will act in their best interest, and preserve confidentiality. This trust is linked with the sharing of sensitive health information, treatment adherence, and satisfaction among patients (Fiscella et. al., 2004). Due to the fact that most patients are not knowledgeable enough to draw accurate conclusions about the technical and clinical competencies of their physicians, it is thought that patients base trust in these competencies of a physician on the physicians’ interpersonal skills and general social trust in the healthcare system. Although healthcare was once regarded as a noble and incorruptible institution, it has been revealed to be just as imperfect as any other institution. In a survey taken in 1966, 73% of Americans had confidence in the

leaders of healthcare, only 34% responded this way in a survey taken in 2012 (Sweeney, 2018). This indicates a growing level of skepticism and criticism which physicians must face from their patients. However, even patients who distrust the healthcare system tend to like their own personal physician. These aspects of the healthcare climate in the United States indicate that the social trust patients have in physicians could be declining, which could theoretically affect a patient's willingness to disclose sensitive information, or affect patients perceived trustworthiness of their physician and their physicians' judgements.

Although almost one third of participants (32%) felt as if they do not always trust their physician's judgement and want a second opinion, this did not seem to significantly affect any other aspects of the patient-physician interaction. Of the 32 participants who responded negatively, only one responded negatively to "I always try to follow my physician's advice", one responded negatively to "My physician makes the best judgements regarding my medical care", and four responded negatively to "My physician is an expert regarding my medical issues". The fact that many patients do not always trust their physician's judgement, but still are satisfied with and trust their physician, indicates that there is a healthy level of skepticism among patients which does not seem to produce negative effects regarding treatment adherence or a patient's view of a physician as clinically competent. This skepticism could also be due to an emerging social distrust in the medical system which has yet to significantly affect patients' interpersonal trust with their own physicians.

The highest volume of negative responses was to the item "Sometimes my physician could do more for my medical care", in which 37% of participants responded "somewhat agree" or "strongly agree". Of the 37 participants who agreed with this statement, 25 also agreed that they sometimes want a second opinion. However, only three of these participants who felt their

physician could do more for their medical care also responded negatively to “I trust my physician to provide me with quality healthcare”, and only five responded negatively to “I am satisfied with the care I receive from my physician”. This indicates that while patients feeling that their physicians could do more for their healthcare may increase the likelihood that the patients may sometimes want a second opinion, it does not significantly affect patients’ satisfaction with the healthcare received from their physicians.

Similar to how sometimes wanting a second opinion could reflect a healthy level of skepticism, feelings that sometimes the physician could do more for a patient’s medical care could be a healthy indicator that patients are playing an active role in their healthcare. It is a double-edged sword that patients now seem to have less trust in their physicians’ judgements. While trust is necessary for proper communication of medical information, when trust is misplaced it can result in unnecessary or harmful procedures or prevent the patient from obtaining effective care. Over-trusting patients are less likely to seek a second opinion or to question inappropriate ways of dealing with health problems (Dwyer, Liu, & Rizzo, 2012). Although an increase in trust can positively affect the patient-physician relationship leading to positive outcomes, a surplus of trust can also be dangerous. Future studies are needed to find a proper medium between these two vices.

### **Physician-Patient Transparency**

For physicians to accurately and efficiently care for and diagnose patients, patients must also be transparent with their physicians and unafraid of judgement. If patients are not honest about drug or alcohol use and risky lifestyle choices, physicians cannot accurately diagnose or treat these patients, or provide them with any preventative health resources. A negative correlation was found between number of times primary care physician is seen per year and

response to “I sometimes lie to my physician about drug or alcohol use” (Fig. 1). As participants saw their primary care physicians more often, they tended to be more likely to agree with this item. Participants who saw their primary care physician 1-2 times per year responded “strongly agree” or “somewhat agree” 18.8% of the time. Participants who saw their primary care physician 3-5 times per year responded “strongly agree” or “somewhat agree” 42.85% of the time, and participants who saw their primary care physician over 5 times per year responded “strongly agree” or “somewhat agree” 50% of the time. This may seem paradoxical, since Kim et. al. (2018) have shown that a more recent visit with a physician is a good predictor of high trust, and Marcinowitz et. al. (2017) found that continuity of care was also a predictor of trust and satisfaction. However, there are other possible reasons as to why these patients would respond to this statement negatively. The first possible explanation is that these patients see their primary care physician more often due to bad health indicators. Bad health indicators can include smoking and low self-rated health. Health issues associated with smoking or other risky health behaviors can result in patients having to visit a primary care physician more often due to associated health issues. Low self-rated health can also cause patients to see their primary care physicians more often since they view themselves as unhealthy, therefore warranting more visits. These bad health indicators were shown to be strong predictors for not only low interpersonal trust in physicians, but also low trust in the healthcare system as a whole. Another possible reason for patients who see their primary care physician more often to respond to this statement negatively is fear due to the continuous nature of the relationship. Patients may be less willing to divulge sensitive information if they must see the physician again in the near future and don't want to feel embarrassed in subsequent interactions. Future studies are warranted to further

investigate the relationship between these aspects in order to improve patient-physician relationships.

### **Applications to Promote a Healthy Trust Between Physician and Patient**

There are many proposed ways to increase trust. One of these is by ensuring patients feel as if their concerns are being properly addressed in a short amount of time. This can be done by utilizing the time patients spend waiting in the exam room. Sweeney (2018) suggests that having a whiteboard in each exam room could help organize patients' thoughts. Instead of patients wasting time waiting for the physician, they could utilize the whiteboard to write down questions, concerns, and goals for the visit. This will provide the physician with a quick summary of the patient's objectives for the visit. This also will allow patients to gather and organize their thoughts in a visual manner. In addition, physicians can also utilize these whiteboards to educate patients. Many people are not auditory learners and may have trouble following and listening to verbal explanations of diagnoses and treatment plans. Physicians can utilize these boards to effectively communicate information about a patient's diagnosis or treatment plan in a more visual manner via diagrams and illustrations. This is also a cost-effective way to ensure the time spent with the physician is patient-centric and efficient.

Other possible applications in this field include multidisciplinary training programs for physicians aimed at developing strategies to build trust in the patient-physician relationship. Traditionally, teaching skills regarding patient-physician communication were achieved via exposure to role models during clinical rotations. These skills are constructed and taught by physicians, for physicians, and tended to focus more on clinical competence (Hamelin et. al.,



2012). However, we now know that clinical expertise is not enough to build trust in the patient-physician relationship. In order to move forward, we must engage in a multidisciplinary approach which combines the economic, psychological, and sociological aspects of trust to gain a clearer picture of the issue and its possible solutions. Further studies are needed to develop tools to specifically evaluate the interpersonal skills of physicians so that proper applications can be implemented. These strategies can help strengthen our understanding of the patient-physician relationship and lead to more effective implementations of the growing knowledge regarding the dynamics of these relationships.

## **Conclusions**

This study investigated possible factors that influence patients' trust in their primary care physicians across the United States. Age, gender, and form of insurance were observed to have no significant effect on the trust the patients placed in their physicians. Participants generally had a sufficient amount of trust (average response=2.98) in their primary care physicians on a five-point scale (0-4). It was found that patients who can easily understand their physician's diagnosis also are likely to follow their physicians' advice, and that feelings of being rushed contributed to feelings that the patient is not the sole focus of the encounter. However, this did not seem to negatively affect trust or satisfaction. It was also found that while most patients trust their physician and are satisfied, many of them feel as if their physician could do more for their care. A significant difference in response to "I sometimes lie to my physician about drug or alcohol use" ( $p=.0065$ ) was found in relation to how many times participants saw their primary care physicians per year, with participants who more frequently visited their primary care physician more often agreeing to this item. Future studies should focus on identifying and solidifying the factors which contribute most to patient trust and satisfaction, including subjective characteristics

of the patient. Though this study had a relatively small sample size (n=100), and relied on a self-reported survey, the results can help add to the basis of work needed to properly guide future studies aimed at increasing the trust between patients and physicians in order to simultaneously increase the efficiency and positive benefits of the patient-physician interaction.

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## Tables and Figures

Table 1. Existing scales to measure patient trust from past studies.

Trust in Physician Scale (Anderson and Dedrick, 1990)	Primary Care Assessment Survey (Safran et al. 1999)	Patient Trust Scale (Kao et al. 1999)
N/A	N/A	<i>How much do you trust your physician(s)...</i>
1. I doubt that my doctor really cares about me as a person.	1. I can tell my doctor anything	1. To put your health and well-being above keeping down the health plan's costs?
2. My doctor is usually considerate of my needs and puts them first.	2. My doctor sometimes pretends to know things when he/she is really not sure	2. To keep personally sensitive medical information private?
3. I trust my doctor so much that I always try to follow his/her advice.	3. I completely trust my doctor's judgment about my medical care.	3. To provide you with information on all potential medical options and not just options covered by the health plan?
4. If my doctor tells me something is so, then it must be true.	4. My doctor cares more about holding costs down than about doing what is needed for my health.	4. To refer you to a specialist when needed?
5. I sometimes distrust my doctor's opinion and would like a second one.	5. My doctor would always tell me the truth about my health, even if there was bad news.	5. To admit you to the hospital when needed?
6. I trust my doctor's judgment about my medical care.	6. My doctor cares as much as I do about my health.	6. To make appropriate medical decisions regardless of health plan rules and guidelines?
7. I feel my doctor does not do everything he/she should for my medical care.	7. If a mistake was made in my treatment, my doctor would try to hide it from me.	7. Judgment about your medical care?
8. I trust my doctor to put my medical needs above all other considerations when treating my medical problems.	8. All things considered, how much do you trust your doctor?	8. To perform necessary medical tests and procedures regardless of cost?
9. My doctor is a real expert in taking care of medical problems like mine.	N/A	9. To offer you high-quality medical care?
10. I trust my doctor to tell me if a mistake was made about my treatment.	N/A	10. To perform only medically necessary test and procedures.
11. I sometimes worry that my doctor may not keep the information we discuss totally private.	N/A	N/A

Table 2. Mean, mode, standard deviation, and variance in responses to each item. 0=strongly disagree, 4=strongly agree. Items in red were negatively worded and reverse scored.

Question	Mean	Mode	Standard Deviation	Variance
1. It is easy to travel to my physician's office	3.95	3	.89	.79
2. It is not too difficult to make an appointment with my physician	2.98	4	1.04	1.08
3. My physician's office is in a safe neighborhood	3.29	4	.86	1.08
4. My physician's office has a clean, well maintained exterior	3.26	4	.92	.85
5. The interior of my physician's office is clean and tidy	3.31	4	.84	.71
6. I feel welcomed and respected by the administrative/reception staff at my physician's office	3.06	3	.97	.94
7. I do not have to wait long at my physician's office	2.59	3	.99	.98
8. I feel as if I am my physicians sole focus when seeing him/her	2.88	3	.95	.91
9. I do not feel rushed when seeing my physician	2.84	4	1.08	1.17
10. I feel comfortable asking my physician questions	3.27	4	.87	.76
11. I feel comfortable discussing sensitive information with my physician	2.98	3	1.04	1.08
12. I sometimes lie to my physician about drug or alcohol use	2.87	4	4.69	4.29
13. I worry my physician will judge me on my lifestyle choices	2.44		4.61	4.07
14. I can easily understand my physician's diagnosis and treatment plans	3.29	4	.78	.61
15. my physician has a good sense of humor	2.65	3	.96	.93
16. my physician is compassionate and caring	2.98	3	.94	.88
17. my physician probably does not care about me as a person	2.46	4	4.75	4.43
18. I trust my physician to keep my medical information confidential	3.34	4	.85	.72
19. I feel as if my physician does not keep my sensitive information completely private	2.61	4	4.57	3.94
20. I trust my physician to prioritize my health above the need to keep down health plan costs	2.88	3	1.06	1.13
21. I trust my physician to inform me of all medical options, even if they are not covered by my insurance	2.93	3	.96	.93
22. I trust my physician to administer tests and procedures even when costly	2.95	3	.95	.91
23. my physician will prioritize my medical needs over all other considerations	2.87	3	.92	.85
24. I trust my physician to provide me with quality health care	3.2	4	.95	.90
25. I trust my physician to make appropriate decisions about when tests or procedures are medically necessary	3.08	3	.98	.95
26. I trust my physician to refer me to a specialist when necessary	3.18	3	.84	.71
27. I can easily get a referral from my physician	3.19	4	.87	.75
28. I trust my physician to admit me to the hospital when necessary	3.35	4	.77	.59
29. my physician is an expert regarding my medical issues	3.07	4	.92	.85
30. my physician makes the best judgements regarding my medical care	3.18	4	.85	.73
31. my physician puts my needs first	2.95	4	1.03	1.07
32. sometimes my physician could do more for my medical care	2.09	1	4.7	4.3
33. I sometimes do not trust my physician's judgement and want a second opinion	2.39	4	4.68	4.26
34. I always try to follow my physician's advice	3.18	3	.8	.65
35. my physician would never lie to me	2.92	3	.93	.87
36. my physician would tell me if he/she made a mistake regarding my treatment	2.73	3	1.08	1.16
37. my physician and I collaborate to come up with a treatment plan that best fits my needs	2.86	3	.98	.96
38. my physician is aware of any specialists I am seeing, and the treatments I am receiving from these specialists	3.09	4	.98	.96
39. I am satisfied with the care I receive from my physician	3.17	3+4	.86	.74

Table 3. Distribution of responses to each of the 39 items of the survey from strongly disagree-strongly agree. Gathered from Qualtrics.

Question	Strongly disagree	n	Somewhat disagree	n	Neither agree nor disagree	n	Somewhat agree	n	Strongly agree	n	Total
1. It is easy to travel to my physician's office	1.00%	1	5.00%	5	12.00%	12	42.00%	42	40.00%	40	100
2. It is not too difficult to make an appointment with my physician	1.00%	1	11.00%	11	16.00%	16	33.00%	33	39.00%	39	100
3. My physician's office is in a safe neighborhood	1.00%	1	3.00%	3	12.00%	12	34.00%	34	50.00%	50	100
4. My physician's office has a clean, well maintained exterior	1.00%	1	4.00%	4	15.00%	15	28.00%	28	52.00%	52	100
5. The interior of my physician's office is clean and tidy	0.00%	0	5.00%	5	10.00%	10	34.00%	34	51.00%	51	100
6. I feel welcomed and respected by the administrative/reception staff at my physician's office.	3.00%	3	3.00%	3	17.00%	17	39.00%	39	38.00%	38	100
7. I do not have to wait long at my physician's office.	2.00%	2	15.00%	15	21.00%	21	46.00%	46	16.00%	16	100
8. I feel as if I am my physicians sole focus when seeing him/her.	1.00%	1	9.00%	9	19.00%	19	43.00%	43	28.00%	28	100
9. I do not feel rushed when seeing my physician.	0.00%	0	16.00%	16	20.00%	20	28.00%	28	36.00%	36	100
10. I feel comfortable asking my physician questions.	1.00%	1	5.00%	5	7.00%	7	40.00%	40	47.00%	47	100
11. I feel comfortable discussing sensitive information with my physician.	2.00%	2	10.00%	10	13.00%	13	38.00%	38	37.00%	37	100
12. I sometimes lie to my physician about drug or alcohol use.	48.00%	48	20.00%	20	6.00%	6	23.00%	23	3.00%	3	100
13. I worry my physician will judge me on my lifestyle choices.	35.00%	35	16.00%	16	14.00%	14	28.00%	28	7.00%	7	100
14. I can easily understand my physician's diagnosis and treatment plans	0.00%	0	4.00%	4	8.00%	8	43.00%	43	45.00%	45	100
15. My physician has a good sense of humor.	2.00%	2	9.00%	9	31.00%	31	38.00%	38	20.00%	20	100
16. My physician is compassionate and caring.	1.00%	1	8.00%	8	15.00%	15	44.00%	44	32.00%	32	100
17. My physician probably does not care about me as a person.	27.00%	27	24.00%	24	24.00%	24	18.00%	18	7.00%	7	100
18. I trust my physician to keep my medical information confidential.	1.00%	1	4.00%	4	7.00%	7	36.00%	36	52.00%	52	100
19. I feel as if my physician does not keep my sensitive information completely private.	40.00%	40	19.00%	19	16.00%	16	12.00%	12	13.00%	13	100
20. I trust my physician to prioritize my health above the need to keep down health plan costs.	6.00%	6	4.00%	4	15.00%	15	46.00%	46	29.00%	29	100
21. I trust my physician to inform me of all medical options, even if they are not covered by my insurance.	0.00%	0	10.00%	10	20.00%	20	37.00%	37	33.00%	33	100
22. I trust my physician to administer tests and procedures even when costly.	1.00%	1	8.00%	8	18.00%	18	41.00%	41	32.00%	32	100
23. My physician will prioritize my medical needs over all other considerations.	0.00%	0	9.00%	9	23.00%	23	40.00%	40	28.00%	28	100
24. I trust my physician to provide me with quality health care.	2.00%	2	4.00%	4	13.00%	13	34.00%	34	47.00%	47	100
25. I trust my physician to make appropriate decisions about when tests or procedures are medically necessary.	2.00%	2	6.00%	6	14.00%	14	38.00%	38	40.00%	40	100
26. I trust my physician to refer me to a specialist when necessary.	1.00%	1	4.00%	4	10.00%	10	46.00%	46	39.00%	39	100
27. I can easily get a referral from my physician	0.00%	0	3.00%	3	21.00%	21	30.00%	30	46.00%	46	100
28. I trust my physician to admit me to the hospital when necessary.	0.00%	0	3.00%	3	9.00%	9	38.00%	38	50.00%	50	100

Table 3 (cont'd). Distribution of responses to each of the 39 items of the survey from strongly disagree-strongly agree. Gathered from Qualtrics.

Question	Strongly disagree		Somewhat disagree		Neither agree nor disagree		Somewhat agree		Strongly agree		Total
		n		n		n		n		n	
29. My physician is an expert regarding my medical issues.	0.00%	0	7.00%	7	18.00%	18	36.00%	36	39.00%	39	100
30. My physician makes the best judgements regarding my medical care.	0.00%	0	4.00%	4	17.00%	17	36.00%	36	43.00%	43	100
31. My physician puts my needs first.	2.00%	2	8.00%	8	20.00%	20	33.00%	33	37.00%	37	100
32. Sometimes my physician could do more for my medical care.	18.00%	18	23.00%	23	22.00%	22	24.00%	24	13.00%	13	100
33. I sometimes do not trust my physician's judgement and want a second opinion.	27.00%	27	25.00%	25	16.00%	16	24.00%	24	8.00%	8	100
34. I always try to follow my physician's advice.	0.00%	0	4.00%	4	13.00%	13	44.00%	44	39.00%	39	100
35. My physician would never lie to me.	0.00%	0	10.00%	10	18.00%	18	42.00%	42	30.00%	30	100
36. My physician would tell me if he/she made a mistake regarding my treatment.	4.00%	4	9.00%	9	24.00%	24	36.00%	36	27.00%	27	100
37. My physician and I collaborate to come up with a treatment plan that best fits my needs.	2.00%	2	7.00%	7	23.00%	23	39.00%	39	29.00%	29	100
38. My physician is aware of any specialists I am seeing, and the treatments I am receiving from these specialists.	2.00%	2	4.00%	4	20.00%	20	31.00%	31	43.00%	43	100
39. I am satisfied with the care I receive from my physician.	0.00%	0	6.00%	6	12.00%	12	41.00%	41	41.00%	41	100

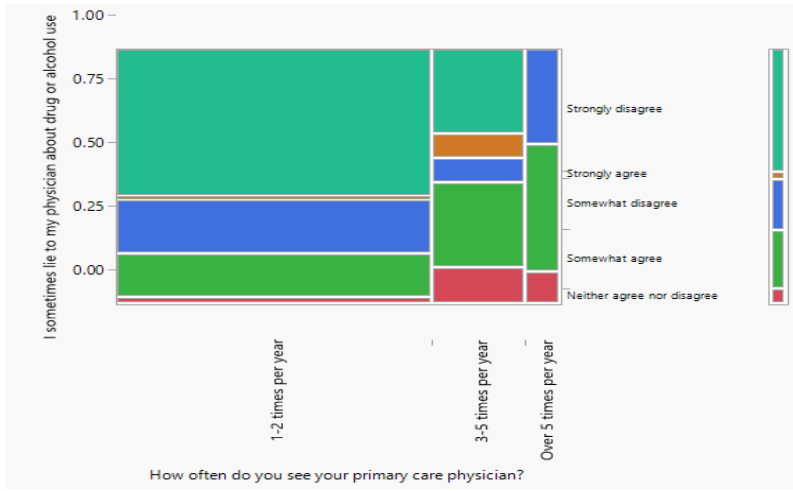


Figure 1. Response to "I sometimes lie to my physician about drug or alcohol use" by How often participants saw their primary care physician per year. Pearson chi square=21.251, P=.0065

## **Appendix A**

### **Survey**

Assessment of Patient Trust in Their Primary Care Physician

#### **1) Age**

- 18-24
- 25-34
- 35-44
- 45-54
- 55-64
- 65-74
- 75+

#### **2) Gender**

- Male
- Female
- Other

#### **3) Location**

Select state

#### **4) Select insurance type**

- Health insurance provided by an employer
- Health insurance provided by a private insurer
- Government provided health insurance (VA, Medicare, Medicaid, etc.)
- Uninsured



**5) How often do you see your primary care physician**

- 1-2 times per year
- 3-5 times per year
- Over 5 times per year

**Strongly disagree-strongly agree Likert Scale**

1. It is easy to travel to my physician's office.
2. It is not too difficult to make an appointment with my physician.
3. My physician's office is in a safe neighborhood.
4. My physician's office has a clean, well maintained exterior.
5. The interior of my physician's office is clean and tidy.
6. I feel welcomed and respected by the administrative/reception staff at my physician's office.
7. I do not have to wait long at my physician's office.
8. I feel as if I am my physicians sole focus when seeing him/her.
9. I do not feel rushed when seeing my physician.
10. I feel comfortable asking my physician questions.
11. I feel comfortable discussing sensitive information with my physician.
12. I sometimes lie to my physician about drug or alcohol use.
13. I worry my physician will judge me on my lifestyle choices.
14. I can easily understand my physician's diagnosis and treatment plans
15. My physician has a good sense of humor.
16. My physician is compassionate and caring.
17. My physician probably does not care about me as a person.
18. I trust my physician to keep my medical information confidential.
19. I feel as if my physician does not keep my sensitive information completely private.
20. I trust my physician to prioritize my health above the need to keep down health plan costs.

21. I trust my physician to inform me of all medical options, even if they are not covered by my insurance.
22. I trust my physician to administer tests and procedures even when costly.
23. My physician will prioritize my medical needs over all other considerations.
24. I trust my physician to provide me with quality health care.
25. I trust my physician to make appropriate decisions about when tests or procedures are medically necessary.
26. I trust my physician to refer me to a specialist when necessary.
27. I can easily get a referral from my physician
28. I trust my physician to admit me to the hospital when necessary.
29. My physician is an expert regarding my medical issues.
30. My physician makes the best judgements regarding my medical care.
31. My physician puts my needs first.
32. Sometimes my physician could do more for my medical care.
33. I sometimes do not trust my physician's judgement and want a second opinion.
34. I always try to follow my physician's advice.
35. My physician would never lie to me.
36. My physician would tell me if he/she made a mistake regarding my treatment.
37. My physician and I collaborate to come up with a treatment plan that best fits my needs.
38. My physician is aware of any specialists I am seeing, and the treatments I am receiving from these specialists.
39. I am satisfied with the care I receive from my physician.

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