"Racial Disparities in Michigan Health Care"

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ABSTRACT

A secondary analysis was performed of the Michigan State of the State Survey #18 (1999) to assess racial disparities in Michigan health care. It was found that Michigan minorities tend to be less satisfied with their health care providers and with the care at Michigan hospitals than their White counterparts. Some of these disparities may be created or reinforced, in part, by the fact that minorities are less likely to have health insurance than Whites. However, contrary to some previous studies done at the national level, racial/cultural barriers do not appear to play a significant role in causing these racial disparities. Further study is needed at the state population level to better identify specific disparities and test possible

causes and influences regarding racial disparities in Michigan health care.

INTRODUCTION

Minority issues regarding the health care experience are a growing concern both in Michigan and nationwide. Advocates for minority healthcare equality have protested that minorities are not experiencing the level of quality and satisfaction with health care that they deserve. Michigan has unique educational and social resources to address these issues, but although many studies have been done at the national level, very little research has been done at the state population level. It is important to identify what disparities exist and to isolate the causes. One way to do this is to analyze what has been discovered in the national studies and use that to identify what to look for at the state level.

Michigan is home to four medical colleges and countless allied health programs. The State of Michigan, along with these programs, has a long history of pride in their efforts to thwart racial disparities and inequality in health care. However, Michigan health care providers may not be effectively recognizing and addressing these issues. In this analysis, I examine how Michigan minorities feel about their overall health and their satisfaction with the health care they receive, as compared with the White majority. I explore which racial disparities exist and, for those that appeared significant, I test lack of health insurance and racial/cultural barriers in the patient-provider

relationship as possible contributors to causing these racial health care disparities.

DATA SOURCE AND OBJECTIVES

I performed a secondary analysis of health and health care satisfaction related questions included in the Michigan State of The State Survey #18, administered in summer 1999. I had the following question objectives as I searched among the survey questions for relevant data for my analysis:

1. Are Michigan minorities less satisfied with their health and health care than Whites?
2. Are Michigan minorities less likely to have health insurance than Whites, and if so, does this play a causal role in any disparities found?
3. Are Michigan minorities more satisfied when their health care provider is of the same race?

I developed question 2 because nationally, minorities are more likely to be uninsured than Caucasians. Lack of health insurance can reduce both access to health care and the quality of care a patient receives. Furthermore, lack of health insurance causes a financial constraint that limits the uninsured patient's choice in health care providers. This may further limit the minority patient's satisfaction with his or her health care.

I developed question 3 because it seems intuitive that most people would feel more comfortable when their health care provider is of similar racial and ethnic background. However,

minorities do not always have access to such a provider. Despite improvements through recruitment efforts by Michigan's allied health and medical colleges, minorities still tend to be underrepresented as providers in many areas of health care. Some scholars suggest that minorities may not be getting the level of care they desire because of cross-cultural or cross-racial barriers created by the inability of minorities to access a health care provider of the same racial background.

HYPOTHESES AND VARIABLES

My first hypothesis was that Michigan minorities are less satisfied than the White majority with their health care providers. Second, I hypothesized that Michigan minorities are less satisfied than the White majority with the quality of care at Michigan hospitals. Third, I hypothesized that Michigan minorities are less satisfied than the White majority with their overall health.

In my analysis, I examined two possible causal factors; lack of health insurance, and racial or cultural barriers in the provider-patient relationship. I expected that any racial disparities observed in respondent satisfaction with the health care provider might exist, in part, because of actual racial or cultural barriers between providers and patients of different racial backgrounds. Specifically, I hypothesized that Michigan minorities would be less likely to rate their health care provider unfavorably and more likely to rate their health care

provider favorably if that provider was of the same racial background.

I also hypothesized that minorities are less likely than the White majority to have health insurance and that lack of health insurance coverage might also be part of the cause of racial disparities. My hypotheses relating to this aspect were that, because they are less likely to have health insurance, Michigan minorities would be less satisfied than the White majority with both their health care providers and the quality of care at Michigan hospitals. This is because lack of health insurance increases financial barriers that limit choices in health care, and the uninsured may be treated differently by the health care industry in terms of quality care because the uninsured are a higher liability for non-payment than those who carry health insurance.

The independent variable was race. Race was recoded into a new variable (RACE1), which included the categories of White and Minorities. The minority category includes Blacks (African Americans), Asians, Native Americans, Alaska Natives, Hispanics or Latinos, Hawaiian Islanders, and Pacific Islanders. I recoded in this way because, besides White and Black, all other minority race categories had very small sample sizes. Since it was not possible to analyze these smaller minorities separately, I combined all minorities into one category.

The dependent variables used to measure satisfaction with the health care provider, (P1) and (P2), included the survey

respondent's satisfaction with their primary health care provider's technical skills and personal skills respectively. Since percentages and distributions were similar for both variables and they were highly correlated; the Pearson Correlation was .703 and gamma was .793. I therefore combined them into the new variable (OHPR2), as an overall rating of the health care provider.

For a more complete assessment of racial disparities in Michigan health care, another dependent variable (L5A) measured Michigan residents' satisfaction with the quality of care provided by hospitals in the state.

My last dependent variable was the respondents' overall rating of their general health. I wanted to see if there were any differences or similarities in how respondents felt about their health care and how they actually rated their health. If I found any racial differences in satisfaction with health care, I wanted to be able to compare those finding to see if racial differences existed in how respondents felt about their actual health. Overall health was measured with the variable (H1).

The first intervening variable (I1) was the respondent's status regarding health insurance. The second intervening variable (HS2a) measured whether or not the health care provider was of the same racial background as the respondent.

The Variables table below summarizes the names and labels for all of the variables used in this analysis. In addition, the actual wording of the questions is given for reference, as are

the responses. Recoded and indexed variables are also noted. For all variables, responses of "don't know" were negligible in number and were recoded as missing.

Variables

	Variable Name	Variable Label	Question Wording
Independent			
Race	Race CD4-> RACE1	Race–In 2 Categories	Which of the following are you? Please specify one or more of the following: Are you white, African American or Black, Hawaiian or other Pacific Islander, Asian, or American Indian or Alaska Native? Recoded-> Whites = Whites and Minorities = all others.
Dependent			
Satisfaction With Healthcare: Healthcare Provider Technical	P1 Indexed in OHPR2	Technical Skills	In general, when you receive health care, how would you rate the Technical skills of your health care providers, that is, the thoroughness, carefulness, and competence? Would you say it is excellent, very good, good, fair, or poor?
Satisfaction With Healthcare: Healthcare Provider Personal	P2 Indexed in OHPR2	Personal Manner	In general, how would you rate the personal manner of your health care providers, that is, their courtesy, respectfulness, sensitivity, and friendliness? Would you say it is excellent, very good, good, fair, or poor?
Satisfaction With Health Care Index	OHPR2 Index of P1+P2	Overall Health Care Provider Rating	Index of P1+P2. (Gamma between them was .793.)
Actual Health	H1	Overall Health	Would you say that in general your health is excellent, very good, good, fair, or poor?

Satisfaction With Healthcare: Hospital Care	L5A	Quality Michigan Hospitals	How would you rate the quality of care in Michigan hospitals? Would you say it is excellent, very good, good, fair, or poor?
Intervening			
Insurance Coverage	I1	Insurance Coverage	Do you have health insurance coverage from any source, including Medicare, Medicaid, private insurance from your employer or union, coverage from another family member, or individually purchased coverage? Yes or No
Race of Provider	HS2a	Provider Same Race	Is your usual doctor or provider the same race as you? Yes or No

LITERATURE REVIEW

There has been much scholarly research on the subject of disparities in health care, yet there are few definitive conclusions. Furthermore, most studies have been performed by scholars of medicine, public health, and their subfields. Research by scholars in other social science fields is much less prevalent, and more could be beneficial to identify disparities and their causes.

Studies are usually consistent in finding which racial disparities exist in opinions about health care and health outcomes. Where many studies differ is in their conclusions about the reasons for these disparities. While most scholars agree that minorities are underinsured and face more financial barriers than Whites do, recent studies have shown that disparities continue to exist even in the absence of these barriers (Institute of Medicine, 2002).

For example, Fiscella et al. reported that racial and ethnic disparities in health care quality are most strongly associated with socioeconomic status. This study found that by "acting through the agents of poorer nutrition and housing, lower education and economic opportunity, and greater environmental risk, both lower socioeconomic status and minority race/ethnicity are associated with poorer health and shorter survivals." The study also found that "ethnic minorities report lower health care satisfaction and greater discrimination" (Fiscella et al. 2000, 2579).

However, Fiscella et al. concede that because race and ethnicity are so intertwined with socioeconomic status, it is difficult to isolate the causes and relationships of the disparities that exist. However, based on the data reviewed, they concluded that socioeconomic status is the "most powerful determinant in primary health care use and satisfaction" (Fiscella et al. 2000, 2579).

In another interesting article, Katz (2001) focused on patient preferences and physician-patient relations as a cause of more negative health outcomes in minorities. He found racial and ethnic disparities in both access to health care and use of health care (Katz 2001, 1507). In this study, statistics regarding the use and availability of a wide range of innovative medical procedures were reviewed. It was found that minorities, especially African-Americans and Hispanics, were less likely to undergo appropriate medical procedures for their ailments (Katz 2001, 1506).

Katz's explanations for these disparities include "differences in health insurance; resources for out-of-pocket costs; geographic proximity to care and adequate transportation; literacy and knowledge; cultural traditions favoring nontraditional or noninvasive care; confidence or self-efficacy in the ability to complete the regimen; trust and cultural compatibility with physicians; and subtle and overt racism" (Katz 2001, 1507). It is also important to note Katz's point that "members of these groups may receive fewer technologically intensive interventions because they tend to prefer less intervention," and that "few studies have investigated explicitly the link between racial, ethnic, and sex differences in preferences and disparities in use, and the findings of these studies are inconsistent" (Katz 2001, 1506).

Van Ryn and Fu (2003) studied disparities specifically as a result of interpersonal relationships between patients and physicians. These researchers found that disparities do indeed exist and focused on barriers in provider-patient relationships as a cause (Van Ryn and Fu 2003, 255). They found that health care providers do have a strong influence on how their patients perceive health care and on the decisions that patients make regarding their use of health care. Specifically, it was found that "providers may intentionally or unintentionally reflect and reinforce societal messages regarding help seekers' fundamental value, self-reliance, competence, and deservingness. Providers may both have and intentionally or unintentionally communicate

lower expectations for patients in disadvantaged social positions (owing to their race/ethnicity, income, education, class, or any stigmatized characteristic) than for their more advantaged counterparts. In this way, providers can influence help seekers' expectations for the future, the degree to which they expect to obtain the resources and help they need, and their expectations for improvements in their situations or conditions, which in turn may account for some of the disparities observed in outcomes and health status" (Van Ryn and Fu 2003, 250). They also note that there is a shortage of specific research in this area.

In another study, Saha, Arbelaez, and Cooper (2003) performed a secondary analysis of data from the Commonwealth Fund's Health Care Quality Survey. The authors hypothesized, and found, that both satisfaction with and use of health services were lower for minorities than for Whites (Saha et al. 2003, 1718). They then explored some of the possible causes. These authors concluded that minorities are less likely than Whites to have adequate health insurance, and that this discrepancy plays a causal role in creating racial disparities in health care satisfaction, findings that are consistent with earlier studies they cited (Saha et al. 2003, 1719). The main focus of this study, however, was an analysis exploring how patient-physician relationships contribute to racial disparities in health care. It was concluded that barriers in provider-patient interpersonal relationships are a contributor to racial disparities in health care (Saha et al. 2003, 1719). However, the authors also noted

that the strength of the relationship between these variables was much weaker in their study than in previous literature, suggesting that racial, cultural, and ethnic barriers in the patient-physician relationship may be declining (Saha et al. 2003, 1719-1720).

In an analysis of two earlier Michigan surveys (State of the State Surveys #5 [1995]and #13 [1997]), Hogan and Mickus found that African Americans were twice as likely as whites to be uninsured, and twice as likely to report that they were in fair or poor health (Hogan and Mickus 2000, 4). The main reason cited for not seeking care was "lack of insurance" (Hogan and Mickus 2000, 6). However, comparing the results for 1995 and 1997, they also noted that the importance of lack of insurance coverage as a barrier to securing the benefits of primary health care for Michigan's African American population had been reduced (Hogan and Mickus 2000, 6).

Bonham and Nerenz studied racial disparities in Michigan health care as well. They found "marked disparities among racial and ethnic groups in the vast majority of measures of health, access to health care, and quality of care (Bonham and Nerenz 2002, 8). They noted that minorities tend to have lower incomes than whites, and lower income individuals or households are less likely to be insured (Bonham and Nerenz 2002, 10). This was especially interesting to me since part of my study will test a similar hypothesis. Interestingly, they also found that the

disparities existed even among those with insurance and those with good incomes (Bonham and Nerenz 2002, 8).

Most of the previous literature on this subject seems to suggest that both interpersonal relationships with health care providers and socioeconomic status play a role in very real and observable racial disparities in health care. There is no shortage of research suggesting that disparities exist, but there is a serious gap in research examining what factors, besides socioeconomic status, play a significant role in causing these disparities. Consequently, without knowing all of the causes, health care providers cannot adequately address the problem.

FINDINGS

RACIAL DISPARITIES IN SATISFACTION WITH HEALTH CARE PROVIDER

First, I looked at how Michigan residents rate their health care providers. I used the indexed measure of the variables (P1Technical Skills) and (P2-Personal Manner) to measure the respondent's overall satisfaction with their health care provider, as explained earlier. The N is 734 because those respondents who indicated they did not have a healthcare provider in an earlier survey question were coded as missing for the variables (P1 and P2) by the State Of The State Survey in the data set. Again, content validity was measured using a Pearson Correlation and Gamma (see "Variables" table above).

Table 1 shows that Michigan minorities are less likely than Michigan Whites to rate their health care providers' technical

and personal skills as excellent or very good. Additionally, Michigan minorities are more likely to rate their health care providers as fair or poor. Both the Chi Square statistic and the symmetric measures such as gamma show this relationship to be significant. It appears that Michigan minorities are less satisfied with their health care providers than their White counterparts. Racial disparities do appear to exist in how Michigan residents feel about the quality of their health care providers.

Table 1: Overall Rating of Health Care Provider by Race

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
OHPR2 Overall Health Provider Rating * RACE1 Race in 2 categories	734	77.2%	216	22.8%	950	100.0%

*Missing data is due to "not applicable" responses.

OHPR2 Overall Health Provider Rating * RACE1 Race in 2 categories Crosstabulation

		RACE1 Race in 2 categories		Total
		1.00 White	2.00 Minorities	
OHPR2 Overall Health Provider Rating	2.00 Excellent	Count	362	40	402
		% within RACE1	56.8%	41.2%	54.8%

2				Rating	categories	
	4.00	Count	198	30	228	
	Very Good					
	% within RACE1	31.1%	30.9%	31.1%		
	in 2				categories	
	6.00	Count	66	16	82	
	Good					
	% within RACE1	10.4%	16.5%	11.2%		
	in 2				categories	
	8.00	Count	9	5	14	
	Fair					
	% within RACE1	1.4%	5.2%	1.9%		
	in 2				categories	
	10.00	Count	2	6	8	
	Poor					
	% within RACE1	.3%	6.2%	1.1%		
	in 2				categories	
Total						
Count		637	97	734		
% within RACE1		100.0%	100.0%	100.0%		
Race in 2						
categories						

(Continued)

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	39.379(a)	4	.000

Likelihood Ratio	26.959	4	.000
Linear-by-Linear Association	26.313	1	.000
N of Valid Cases	734		

Symmetric Measures

		Value	Asymp. Std. Error(a)	Approx. T(b)	Approx. Sig.
Nominal by Nominal	Phi	.232			.000
	Cramer's V	.232			.000
Ordinal by Ordinal	Gamma	.329	.084	3.402	.001
N of Valid Cases		734			

RACIAL DISPARITIES IN HEALTH INSURANCE

Most studies at the national level have shown that minorities are less likely than Whites to have health insurance, creating larger financial barriers for minorities that may have an effect on how they feel about the quality of their health care. Table 2 shows Michigan minorities, like national trends, are less likely to have health insurance than the White majority.

Table 2: Race By Health Insurance Coverage

Case Processing Summary

Cases		
Valid	Missing	Total

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ó Likelihood Ratio	ó6.373	ó1	ó.012	ó	ó	ó
ó Fisher's Exact Test	ó	ó	ó	ó.010	ó.008	ó
ó Linear-by-Linear Association	ó7.361	ó1	ó.007	ó	ó	ó
ó N of Valid Cases	ó920	ó	ó	ó	ó	ó

Symmetric Measures

	ó Value	ó Asymp. Std. Error(a)	ó Approx. T(b)	ó Approx. Sig.
ó Nominal by Nominal	ó Phi	ó.089	ó	ó.007
	ó Cramer's V	ó.089	ó	ó.007
ó Ordinal by Ordinal	ó Gamma	ó.359	ó.123	ó2.184 ó.029
ó N of Valid Cases		ó920	ó	ó ó

RACIAL DISPARITIES IN SATISFACTION WITH HEALTH CARE PROVIDER-EFFECTS OF HEALTH INSURANCE

Next, I controlled for health insurance status to see if lack of health insurance played any causal role in the relationship. Table 3 shows the same variables as Table 1 with insurance added as the control variable. The relationship between race and satisfaction weakened slightly among the insured, but increased very markedly among the uninsured. Uninsured whites were overwhelmingly more likely to rate their health care provider excellent as compared to minorities. The strength of this relationship is evident by its gamma value of

.812. It does not appear that health insurance, or lack thereof, is the reason for racial disparities in how Michigan residents rate their health care providers since minorities are less likely to rate their health care provider highly regardless of whether or not they have insurance. Nevertheless, it is extremely important that racial disparities in ratings of health care providers are so much larger among the uninsured. Better data on this subject needs to be collected and studied because this measure of satisfaction with health care refers only to those who have a regular health care provider. Those respondents who did not indicate they had a regular health care provider were not administered this question during the survey.

Table 3: Overall Rating of Health Care Provider By Race And Health Insurance Coverage

Case Processing Summary

Cases						
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
OHPR2 Overall Health Provider Rating * RACE1 Race in 2 Categories * I1 Insurance Coverage	735	77.3%	215	22.7%	950	100.0%

OHPR2 Overall Health Provider Rating * RACE1 Race in 2 Categories * I1 Insurance Coverage

RACE1 Race in 2 Categories	Total

I1 Insurance Coverage: 1 YES			1.00 White	2.00 Minorities	Total
OHPR2 Overall Health Provider Rating	2.00 Excellent	Count	329	37	366
		% within RACE1 Race in 2 Categories	55.5%	44.0%	54.1%
	4.00 Very Good	Count	191	27	218
		% within RACE1 Race in 2 Categories	32.2%	32.1%	32.2%
	6.00 Good	Count	63	15	78
		% within RACE1 Race in 2 Categories	10.6%	17.9%	11.5%
	8.00 Fair	Count	8	2	10
		% within RACE1 Race in 2 Categories	1.3%	2.4%	1.5%
	10.00 Poor	Count	2	3	5
		% within RACE1 Race in 2 Categories	.3%	3.6%	.7%
Total		Count	593	84	677
		% within RACE1 Race in 2 Categories	100.0%	100.0%	100.0%

Table 3: Overall Rating of Health Care Provider By Race And Health Insurance Coverage Continued

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within RACE1 ó6.8%   ó7.1%   ó6.9% ó ó   ó   ó   óRace
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ùòòòòòòòòòòòòòòòòòôòòòòòòòòòòòòòòòòòôòòòòòòòòòòòòòòòòòôòòòòòòòú ó   ó   ó   ó%
within RACE1 ó   ó21.4%   ó5.2% ó ó   ó   ó   óRace
in 2   ó   ó   ó   ó ó   ó   ó
óCategories   ó   ó   ó   ó
ó   ùòòòòòòòòüòòòòòòòòòòòôòòòòòòòòòòòòòòòòòôòòòòòòòòòòòòòòòòòôòòòòòòòòòòòòòòòòòôòòòòòòòú ó
óTotal   óCount   ó44   ó14   ó58   ó ó   ó
ùòòòòòòòòòòòòòòòòòôòòòòòòòòòòòòòòòòòôòòòòòòòòòòòòòòòòòôòòòòòòòú ó   ó   ó%
within RACE1 ó100.0%   ó100.0%   ó100.0%ó ó   ó
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óCategories   ó   ó   ó   ó
õòòòòòòòòòòòòòòòüòòòòòòòòòòòòòòòòòòòüòòòòòòòòòòòòòòòòüòòòòòòòòòòòòòòòòüòòòòòòòòòòòòòòòòüòòòòòò÷ Chi-Square Tests
öòòòòòòòòòòòòòòòòòòòòòòòòòòòòòòòûòòòòòòòòòûòòûòòòòòòòòòòòòòòòòø óI1
Insurance Coverage   óValue   ódfóAsymp. Sig.   ó ó
ó   ó ó(2-sided)   ó
ùòòòòòòòòòòòòòòûòòòòòòòòòòòòòòòòòòôòòòòòòòòòòòòòòôòôòòòòòòòòòòòòòòòòòú ó1 YES
óPearson   ó16.071(a)ó4 ó.003   ó ó
óChi-Square   ó   ó ó   ó ó
ùòòòòòòòòòòòòòòòòôòòòòòòòòòòòòôòôòòòòòòòòòòòòòòòú ó
óLikelihood   ó11.591   ó4 ó.021   ó ó

Ratio					
Linear-by-Linear Association	10.603	1	.001		
Valid Cases	677				
					5 NO
Pearson Chi-Square	23.049(b)	4	.000		
Likelihood Ratio	21.737	4	.000		
Linear-by-Linear Association	20.998	1	.000		
Valid Cases	58				

Table 3: Overall Rating of Health Care Provider By Race And Health Insurance Coverage Continued

Symmetric Measures

Insurance Coverage		Value	Asymp. Std. Error(a)	Approx. T(b)	Approx. Sig.
					1 YES
Ordinal by Ordinal	Gamma	.245	.094	2.365	.018
N of Valid Cases		677			
					5 NO
Ordinal by Ordinal	Gamma	.812	.099	3.798	.000
N of Valid Cases		58			

RACIAL DISPARITIES IN SATISFACTION WITH HEALTH CARE PROVIDER-EFFECTS OF PROVIDER RACE

As another possible explanation for racial disparities in the health care provider rating, I hypothesized cultural or

racial barriers may exist between the provider and patient when the provider is of a different racial background. Specifically, I thought that all respondents, and especially minorities, would rate their health care providers more favorably if that provider was of the same race.

Table 4 illustrates the results of the cross-tabulation controlling for the health care provider's race. I found that, contrary to my hypothesis, and contrary to many of the similar national studies, Michigan minorities and Whites were both more likely to rate their health care provider favorably, and were less likely to rate their health care provider unfavorably, if the healthcare provider was White. This finding surprised me, but it appears that cross-racial and cross-cultural barriers in the provider-patient relationship are not a major contributor to racial disparities in how Michigan residents rate their health care providers. That is, whites continue to be more satisfied than minorities with health care providers even when providers are the same race as respondents (i.e., having a minority provider does not raise minority satisfaction to the same level as that of whites), and when health care providers are not the same race as respondents, there are no racial differences in satisfaction (i.e., having a white provider does not decrease the satisfaction of minorities below the satisfaction level of whites). This is statistically illustrated by the disappearance of significance using the Chi Square value in the "NO" category in Table 4.

Table 4: Overall Rating of Healthcare Provider By Race And Healthcare Provider Race

Case Processing Summary

Cases	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
OHPR2 Overall Health Provider Rating * RACE1 Race in 2 Categories * PR2 Provider Same Race	737	77.6%	213	22.4%	950	100.0%

(continued)

OHPR2 Overall Health Provider Rating * RACE1 Race in 2 Categories * PR2 Provider Same Race

RACE1 Race in 2 Categories		PR2 Provider Same Race		Total
		1.00 White	2.00 Minorities	
OHPR2 Overall Health Provider Rating	1.00 Excellent	Count	278	10	288
		% within RACE1 Race in 2 Categories	59.3%	30.3%	57.4%
	4.00 Very Good	Count	142	8	150
		% within RACE1 Race in 2 Categories	30.3%	24.2%	29.9%
	6.00 Good	Count	44	8	52
		% within RACE1 Race in 2 Categories	9.4%	24.2%	10.4%

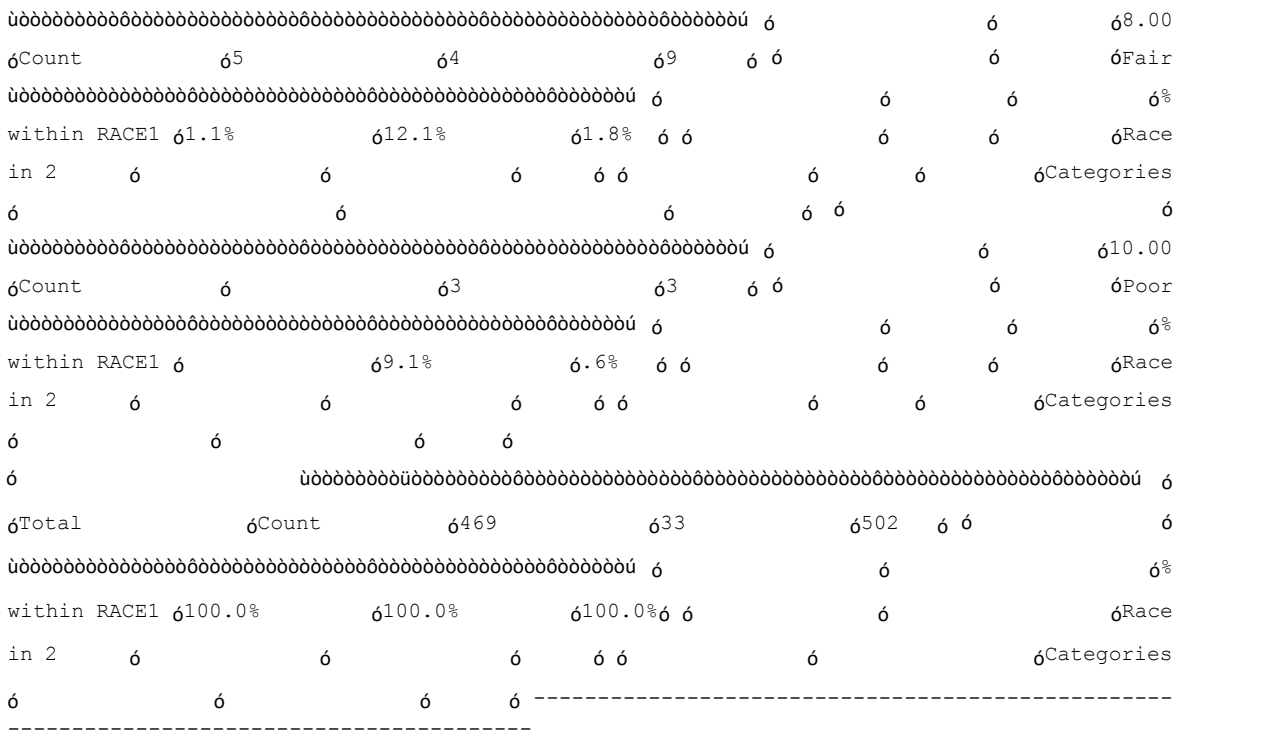
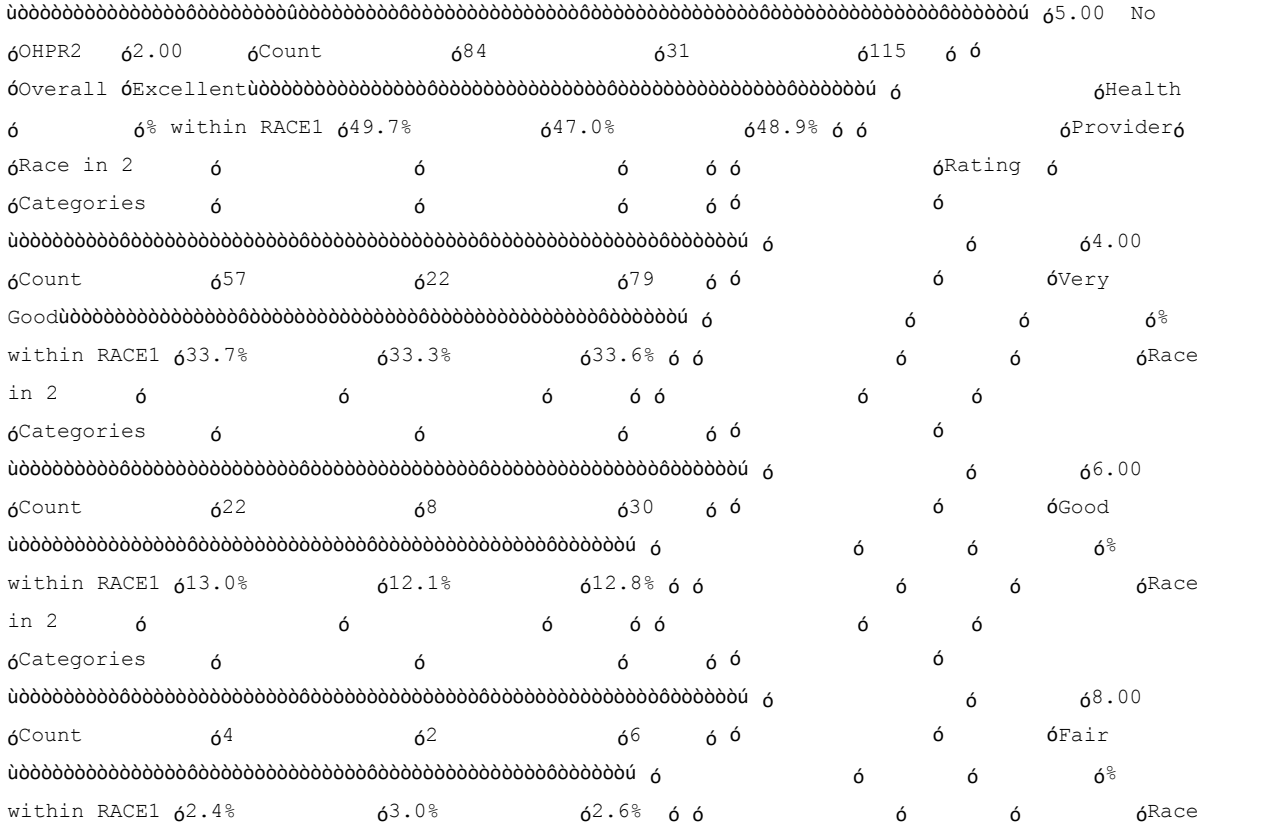


Table 4: Overall Rating of Healthcare Provider By Race And Healthcare Provider Race Continued



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in 2      ó            ó            ó      ó ó           ó      ó
óCategories   ó            ó            ó     ó ó            ó
ùòòòòòòòòòòôòòòòòòòòòòòòòòòòòòòòôòòòòòòòòòòòòòòòòòòòôòòòòòòòòòòòòòòòòòòòôòòòòòòòú ó            ó       ó10.00
óCount        ó2           ó3           ó5     ó ó            ó       óPoor
ùòòòòòòòòòòòòòòòòòòòôòòòòòòòòòòòòòòòòòòòôòòòòòòòòòòòòòòòòòòòôòòòòòòòú ó            ó       ó       ó%
within RACE1 ó1.2%         ó4.5%         ó2.1%  ó ó          ó       ó       óRace
in 2      ó            ó            ó      ó ó           ó      ó
óCategories   ó            ó            ó     ó
ó             ùòòòòòòòòüòòòòòòòòòòôòòòòòòòòòòòòòòòòòòòôòòòòòòòòòòòòòòòòòòòôòòòòòòòòòòòòòòòòòòòôòòòòòòòú ó
óTotal          óCount         ó169          ó66           ó235   ó ó             ó
ùòòòòòòòòòòòòòòòòòòòôòòòòòòòòòòòòòòòòòòòôòòòòòòòòòòòòòòòòòòòôòòòòòòòú ó            ó             ó%
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óCategories   ó            ó            ó     ó
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Tests
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Provider Same Race       óValue    ódfóAsymp. Sig.    ó ó
ó        ó  ó(2-sided)       ó
ùòòòòòòòòòòòòòòòûòòòòòòòòòòòòòòòòòôòòòòòòòòòòòôòòôòòòòòòòòòòòòòòòòòòú ó1.00
Yes      óPearson        ó75.113(a)ó4 ó.000          ó ó
óChi-Square   ó         ó  ó             ó ó
ùòòòòòòòòòòòòòòòòòòòôòòòòòòòòòòòòòôòôòòòòòòòòòòòòòòòòòòú ó
óLikelihood   ó37.104    ó4 ó.000          ó ó
óRatio        ó         ó  ó             ó ó
ùòòòòòòòòòòòòòòòòòòòôòòòòòòòòòòòòòôòôòòòòòòòòòòòòòòòòòòú ó
óLinear-by-Lineaó42.475   ó1 ó.000          ó ó
ór Association ó         ó  ó             ó ó
ùòòòòòòòòòòòòòòòòòòòôòòòòòòòòòòòòòôòôòòòòòòòòòòòòòòòòòòú ó            óN of
Valid     ó502     ó  ó            ó ó          óCases
ó         ó  ó             ó
ùòòòòòòòòòòòòòòòôòòòòòòòòòòòòòòòòòôòòòòòòòòòòòôòòôòòòòòòòòòòòòòòòòòòú ó5.00
No       óPearson        ó2.708(b) ó4 ó.608          ó ó
óChi-Square   ó         ó  ó             ó ó
ùòòòòòòòòòòòòòòòòòòòôòòòòòòòòòòòòòôòôòòòòòòòòòòòòòòòòòòú ó
óLikelihood   ó2.393    ó4 ó.664          ó ó
óRatio        ó         ó  ó             ó ó
ùòòòòòòòòòòòòòòòòòòòôòòòòòòòòòòòòòôòôòòòòòòòòòòòòòòòòòòú ó
óLinear-by-Lineaó.977     ó1 ó.323          ó ó
ór Association ó         ó  ó             ó ó
ùòòòòòòòòòòòòòòòòòòòôòòòòòòòòòòòòòôòôòòòòòòòòòòòòòòòòòòú ó            óN of
Valid     ó235     ó  ó            ó ó          óCases
ó         ó  ó             ó
õòòòòòòòòòòòòòòòüòòòòòòòòòòòòòòòòòüòòòòòòòòòòòüòòüòòòòòòòòòòòòòòòòòò÷
```

Table 4: Overall Rating of Healthcare Provider By Race And Healthcare Provider Race Continued

Symmetric Measures

Provider Same Race		Value	Asymp. Std. Error(a)	Approx. T(b)	Approx. Sig.	PR2
Nominal by Nominal	Phi	.387			.000	
	Cramer's V	.387			.000	
Ordinal by Ordinal	Gamma	.581	.109	3.475	.001	
N of Valid Cases		502				
5.00 No						
Nominal by Nominal	Phi	.107			.608	
	Cramer's V	.107			.608	
Ordinal by Ordinal	Gamma	.070	.122	.572	.567	
N of Valid Cases		235				

The respondent's rating of the quality of health care in Michigan hospitals provides another measure of satisfaction with health care. In the survey, this question was given to all respondents, resulting in much less missing data and a larger sample than the variable (OHPR2), which measured satisfaction with the health care provider. Table 5 shows a similar directional relationship, but with even larger percentage differences, as the measure of health care provider satisfaction did (see Table 1). The relationship is significant and fairly strong, as shown by the Chi Square calculation and symmetric measures in the table. Michigan minorities are less likely to rate Michigan hospitals favorably, and are more likely to rate them unfavorably, than Whites. It appears that, as I hypothesized, Michigan minorities are less satisfied than the White majority with the quality of care at Michigan hospitals.

Table 5: Quality Of Michigan Hospitals By Race

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Quality Michigan Hospitals * RACE1 Race in 2 Categories	885	93.1%	65	6.9%	950	100.0%

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(continued)

L5A Quality Michigan Hospitals * RACE1 Race in 2 Categories Crosstabulation

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ó RACE1 Race in 2 Categories ó Total ó ó
ùòòòòòòòòòòòòòòûòòòòòòòòòòòòòú ó ó ó 1.00
White ó 2.00 ó ó ó ó
ó Minorities ó ó
ùòòòòòòòòòûòòòòòòòòòûòòòòòòòòòòòòòòòòòôòòòòòòòòòòòòòòòòòôòòòòòòòòòòòòòôòòòòòòú ó L5A
ó 1 ó Count ó 82 ó 5 ó 87 ó
ó Quality ó EXCELLENTùòòòòòòòòòòòòòòôòòòòòòòòòòòòòòòòòôòòòòòòòòòòòòòôòòòòòòú
ó Michigan ó ó % within RACE1 ó 10.7% ó 4.1% ó 9.8% ó
ó Hospitals ó ó Race in 2 ó ó ó ó ó
ó ó ó Categories ó ó ó ó ó
ó ùòòòòòòòòòôòòòòòòòòòòòòòòòôòòòòòòòòòòòòòòòòòôòòòòòòòòòòòòòôòòòòòòú ó
ó 2 VERY ó Count ó 220 ó 23 ó 243 ó
ó ó GOOD ùòòòòòòòòòòòòòòôòòòòòòòòòòòòòòòòòôòòòòòòòòòòòòòôòòòòòòú ó
ó ó % within RACE1 ó 28.8% ó 18.9% ó 27.5% ó ó ó
ó Race in 2 ó ó ó ó ó ó
ó Categories ó ó ó ó
ó ùòòòòòòòòòôòòòòòòòòòòòòòòòôòòòòòòòòòòòòòòòòòôòòòòòòòòòòòòòôòòòòòòú ó
ó 3 GOOD ó Count ó 314 ó 41 ó 355 ó ó ó
ùòòòòòòòòòòòòòòôòòòòòòòòòòòòòòòòòôòòòòòòòòòòòòòôòòòòòòú ó ó ó %
within RACE1 ó 41.2% ó 33.6% ó 40.1% ó ó ó
ó Race in 2 ó ó ó ó ó ó
ó Categories ó ó ó ó
ó ùòòòòòòòòòôòòòòòòòòòòòòòòòôòòòòòòòòòòòòòòòòòôòòòòòòòòòòòòòôòòòòòòú ó
ó 4 FAIR ó Count ó 118 ó 37 ó 155 ó ó ó
ùòòòòòòòòòòòòòòôòòòòòòòòòòòòòòòòòôòòòòòòòòòòòòòôòòòòòòú ó ó ó %
within RACE1 ó 15.5% ó 30.3% ó 17.5% ó ó ó
ó Race in 2 ó ó ó ó ó ó
ó Categories ó ó ó ó
ó ùòòòòòòòòòôòòòòòòòòòòòòòòòôòòòòòòòòòòòòòòòòòôòòòòòòòòòòòòòôòòòòòòú ó
ó 5 POOR ó Count ó 29 ó 16 ó 45 ó ó ó
ùòòòòòòòòòòòòòòôòòòòòòòòòòòòòòòòòôòòòòòòòòòòòòòôòòòòòòú ó ó ó %
within RACE1 ó 3.8% ó 13.1% ó 5.1% ó ó ó
ó Race in 2 ó ó ó ó ó ó
ó Categories ó ó ó ó
ùòòòòòòòòòüòòòòòòòòòôòòòòòòòòòòòòòòòòòôòòòòòòòòòòòòòòòòòôòòòòòòòòòòòòòôòòòòòòú ó Total
ó Count ó 763 ó 122 ó 885 ó ó
ùòòòòòòòòòòòòòòôòòòòòòòòòòòòòòòòòôòòòòòòòòòòòòòôòòòòòòú ó ó %
within RACE1 ó 100.0% ó 100.0% ó 100.0% ó ó ó Race
in 2 ó ó ó ó ó ó Categories

ó ó ó ó
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Chi-Square Tests

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óValue ódfóAsymp. Sig. ó ó ó
ó ó(2-sided) ó
ùôôôú
óPearson ó41.250(a)ó4 ó.000 ó
óChi-Square ó ó ó ó
ùôôôú óLikelihood
ó36.365 ó4 ó.000 ó óRatio ó
ó ó ó
ùôôôú
óLinear-by-Linea ó33.572 ó1 ó.000 ó
ór Association ó ó ó ó
ùôôôú óN of
Valid ó885 ó ó ó óCases
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(continued)

Symmetric Measures

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óValueóAsymp. Std. óApprox. T(b)óApprox. Sig.ó ó
ó óError(a) ó ó ó
ùôôôôôôôôôôôôôôôûôôú óNominal
by óPhi ó.216 ó ó ó.000 ó
óNominal ùôôú ó
óCramer's Vó.216 ó ó ó.000 ó
ùôôú óOrdinal
by óGamma ó.396 ó.068 ó5.213 ó.000 ó óOrdinal
ó ó ó ó ó ó
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Valid Cases ó885 ó ó ó ó ó
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RACIAL DISPARITIES IN SATISFACTION WITH MICHIGAN HOSPITAL CARE-EFFECTS OF HEALTH INSURANCE

Controlling for health insurance coverage did have an effect on racial evaluations of the quality of care in Michigan

hospitals, as illustrated in Table 6. Among those who have health insurance, the percentage differences and significance shows that racial differences remain. However, among the uninsured, the Chi Square calculation shows that there is no longer a significant relationship between race and satisfaction with hospital care. This was an interesting and unexpected finding. Further study is needed to ascertain why there are racial disparities in Michigan residents' satisfaction with the quality of care in Michigan hospitals among those who have health insurance, but not among the uninsured.

Table 6: Quality Of Michigan Hospitals By Race By Insurance Coverage

Case Processing Summary

Cases					
Valid		Missing		Total	
N	Percent	N	Percent	N	Percent
L5A Quality Michigan Hospitals * RACE1 Race in 2 Categories * I1 Insurance Coverage	888	93.4%	62	6.6%	950	100.0%

L5A Quality Michigan Hospitals * RACE1 Race in 2 Categories * I1 Insurance Coverage Crosstabulation

			RACE1 Race in 2 Categories		Total
			1.00 White	2.00 Minorities	
I1 Insurance Coverage	1 YES	Count	76	4	80
L5A Quality Michigan Hospitals	EXCELLENT				

ó% within RACE1 ó10.8% ó3.8% ó9.9% ó ó óHospitalsó óRace
in 2 ó ó ó ó ó ó ó óCategories
ó ó ó ó ó ó
ùòòòòòòòòòôòòòòòòòòòòòòòòòôòòòòòòòòòòòòòòòòòôòòòòòòòòòòòòòòòòòôòòòòòòòòòú ó ó ó2 VERY
óCount ó211 ó21 ó232 ó ó ó ó óGOOD
ùòòòòòòòòòôòòòòòòòòòòòòòòòôòòòòòòòòòòòòòòòòòôòòòòòòòòòòòòòòòòòôòòòòòòòòòú ó ó ó ó%
within RACE1 ó29.9% ó20.2% ó28.7% ó ó ó ó ó óRace
in 2 ó ó ó ó ó ó ó óCategories
ó ó ó ó ó ó
ùòòòòòòòòòôòòòòòòòòòòòòòòòôòòòòòòòòòòòòòòòòòôòòòòòòòòòòòòòòòòòôòòòòòòòòòú ó ó ó3 GOOD
óCount ó294 ó33 ó327 ó ó ó ó ó
ùòòòòòòòòòôòòòòòòòòòòòòòòòôòòòòòòòòòòòòòòòòòôòòòòòòòòòòòòòòòòòôòòòòòòòòòú ó ó ó ó%
within RACE1 ó41.7% ó31.7% ó40.4% ó ó ó ó ó óRace
in 2 ó ó ó ó ó ó ó óCategories
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óCount ó98 ó33 ó131 ó ó ó ó ó
ùòòòòòòòòòôòòòòòòòòòòòòòòòôòòòòòòòòòòòòòòòòòôòòòòòòòòòòòòòòòòòôòòòòòòòòòú ó ó ó ó%
within RACE1 ó13.9% ó31.7% ó16.2% ó ó ó ó ó óRace
in 2 ó ó ó ó ó ó ó óCategories
ó ó ó ó ó ó
ùòòòòòòòòòôòòòòòòòòòòòòòòòôòòòòòòòòòòòòòòòòòôòòòòòòòòòòòòòòòòòôòòòòòòòòòú ó ó ó5 POOR
óCount ó26 ó13 ó39 ó ó ó ó ó
ùòòòòòòòòòôòòòòòòòòòòòòòòòôòòòòòòòòòòòòòòòòòôòòòòòòòòòòòòòòòòòôòòòòòòòòòú ó ó ó ó%
within RACE1 ó3.7% ó12.5% ó4.8% ó ó ó ó ó óRace
in 2 ó ó ó ó ó ó ó óCategories
ó ó ó ó
ó ùòòòòòòòòòüòòòòòòòòòôòòòòòòòòòòòòòòòòòôòòòòòòòòòòòòòòòòòôòòòòòòòòòòòòòòòòòôòòòòòòòòòú ó
óTotal óCount ó705 ó104 ó809 ó ó ó
ùòòòòòòòòòôòòòòòòòòòòòòòòòôòòòòòòòòòòòòòòòòòôòòòòòòòòòòòòòòòòòôòòòòòòòòòú ó ó ó%
within RACE1 ó100.0% ó100.0% ó100.0%ó ó ó ó óRace
in 2 ó ó ó ó ó ó ó óCategories
ó ó ó ó ----------

Table 6: Quality Of Michigan Hospitals By Race By Insurance Coverage Continued

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óL5A ó1 óCount ó7 ó1 ó8 ó ó óQuality
óEXCELLENTùòòòòòòòòòòòòòòòôòòòòòòòòòòòòòòòòòôòòòòòòòòòòòòòòòòòôòòòòòòòòòú ó óMichigan ó
ó% within RACE1 ó11.9% ó5.0% ó10.1% ó ó óHospitalsó óRace
in 2 ó ó ó ó ó ó ó óCategories
ó ó ó ó ó ó
ùòòòòòòòòòôòòòòòòòòòòòòòòòôòòòòòòòòòòòòòòòòòôòòòòòòòòòòòòòòòòòôòòòòòòòòòú ó ó ó2 VERY

Count	8	2	10		GOOD
within RACE1	13.6%	10.0%	12.7%		Race
in 2					Categories
					3 GOOD
Count	20	9	29		
within RACE1	33.9%	45.0%	36.7%		Race
in 2					Categories
					4 FAIR
Count	21	4	25		
within RACE1	35.6%	20.0%	31.6%		Race
in 2					Categories
					5 POOR
Count	3	4	7		
within RACE1	5.1%	20.0%	8.9%		Race
in 2					Categories
Total	Count	59	20	79	
within RACE1	100.0%	100.0%	100.0%		
Race in 2					
Categories					

Chi-Square Tests

Insurance Coverage	Value	df	Asymp. Sig. (2-sided)	
1 YES				
Pearson Chi-Square	42.024(a)	4	.000	
Likelihood Ratio	36.570	4	.000	
Linear-by-Linear Association	32.023	1	.000	
Valid	809			N of Cases

ùòòòòòòòòòòòòòòôòòòòòòòòòòòòòòôòòòòòòòòòòôòòòòòòòòòòòòòú ó5 NO

ópearson ó6.244(b) ó4 ó.182 ó ó ópi-

Square ó ó ó ó ó

ùòòòòòòòòòòòòòôòòòòòòòòòôòòòòòòòòòòòòòú ó

ólikelihood ó5.890 ó4 ó.208 ó ó óRatio

ó ó ó ó ó

ùòòòòòòòòòòòòòôòòòòòòòòòôòòòòòòòòòòòòòú ó óinear-

by-Linea ó1.247 ó1 ó.264 ó ó ór

Association ó ó ó ó ó

ùòòòòòòòòòòòòòôòòòòòòòòòôòòòòòòòòòòòòòú ó óN of

Valid ó79 ó ó ó ó óases

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õòòòòòòòòòòòòòüòòòòòòòòòòòòòüòòòòòòòüòòüòòòòòòòòòòòò÷

(continued)

Symmetric Measures

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Insurance Coverage óValueóAsymp. Std. óApprox. T(b)óApprox. Sig.ó ó

ó óError(a) ó ó ó

ùòòòòòòòòòòòòòûòòòòòòòòòòòòòûòòòòòòòòòôòòòòòòòòòòòòòôòòòòòòòòòòòòòú ó1 YES

óNominal by óPhi ó.228 ó ó ó.000 ó

ó óNominal ùòòòòòòòòôòòòòòòòòòòòòòôòòòòòòòòòòòòòú ó

ó óCramer's Vó.228 ó ó ó.000 ó

ó ùòòòòòòòòòòòòòòôòòòòòòòòòòòòòôòòòòòòòòòòòòòôòòòòòòòòòòòòòú ó

óOrdinal by óGamma ó.413 ó.073 ó4.982 ó.000 ó ó óOrdinal

ó ó ó ó ó ó

ó ùòòòòòòòòòòòòòüòòòòòòòòòôòòòòòòòòòòòòòôòòòòòòòòòòòòòú ó

óN of Valid Cases ó809 ó ó ó ó

ùòòòòòòòòòòòòòôòòòòòòòòòôòòòòòòòòòòòòòôòòòòòòòòòòòòòú ó5 NO

óNominal by óPhi ó.281 ó ó ó.182 ó

ó óNominal ùòòòòòòòòôòòòòòòòòòòòòòôòòòòòòòòòòòòòú ó

ó óCramer's Vó.281 ó ó ó.182 ó

ó ùòòòòòòòòòòòòòôòòòòòòòòòôòòòòòòòòòòòòòôòòòòòòòòòòòòòú ó

óOrdinal by óGamma ó.165 ó.190 ó.852 ó.394 ó ó óOrdinal

ó ó ó ó ó ó

ó ùòòòòòòòòòòòòòüòòòòòòòòòôòòòòòòòòòòòòòôòòòòòòòòòòòòòú ó

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õòòòòòòòòòòòòòüòòòòòòòòòòòòòòòòòòòüòòòòüòòòòòòòòòòòòüòòòòòòòòòüòòòòòòòòòò÷

RACIAL DISPARITIES IN OVERALL HEALTH

Finally, in Table 7 I looked at how respondents rated their overall health. I hypothesized that Michigan minorities would be less likely than Whites to rate their overall health favorably, and that minorities would be more likely to rate their overall health unfavorably. The percentages listed in the table would seem to indicate such a relationship. However, when I tested for significance using Chi Square, I found that, although the percentages are in line my hypothesis, the relationship is not significant. These differences could have been found by chance. Therefore, on this basis I could not reject the null hypothesis for these variables. On the other hand, the gamma is significant but its value is relatively low. Michigan minorities rate their health care lower than the White majority, but when asked to rate their overall health, the racial differences are not strong enough to be consistently significant.

Table 7: Overall Health By Race

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
H1 Overall Health * RACE1 Race in 2 Categories	920	96.8%	30	3.2%	950	100.0%

H1 Overall Health * RACE1 Race in 2 Categories Crosstabulation

RACE1 Race in 2 Categories		Total

ùòòòòòòòòòòòòòûòòòòòòòòòòòòòú ó ó ó1.00
White ó2.00 ó ó ó ó
óMinorities ó ó
ùòòòòòòòûòòòòòòòòûòòòòòòòòòòòòòòôòòòòòòòòòòòòòòòôòòòòòòòòòòòòòôòòòòòú óH1 ó1
óCount ó240 ó29 ó269 ó
óOverallóEXCELLENTùòòòòòòòòòòòòòôòòòòòòòòòòòòòòôòòòòòòòòòòòòòôòòòòòú óHealth
ó ó% within RACE1 ó30.2% ó23.2% ó29.2% ó ó ó
óRace in 2 ó ó ó ó ó ó
óCategories ó ó ó ó
ó ùòòòòòòòòòôòòòòòòòòòòòòòôòòòòòòòòòòòòòôòòòòòòòòòòòòòôòòòòòú ó ó2
VERY óCount ó272 ó39 ó311 ó
ó óGOOD ùòòòòòòòòòòòòòôòòòòòòòòòòòòòôòòòòòòòòòòòòòôòòòòòú ó ó
ó% within RACE1 ó34.2% ó31.2% ó33.8% ó ó ó óRace
in 2 ó ó ó ó ó ó óCategories
ó ó ó ó
ó ùòòòòòòòòòôòòòòòòòòòòòòòôòòòòòòòòòòòòòôòòòòòòòòòòòòòôòòòòòú ó ó3
GOOD óCount ó191 ó36 ó227 ó ó ó
ùòòòòòòòòòòòòòôòòòòòòòòòòòòòôòòòòòòòòòòòòòôòòòòòú ó ó ó%
within RACE1 ó24.0% ó28.8% ó24.7% ó ó ó óRace
in 2 ó ó ó ó ó ó óCategories
ó ó ó ó
ó ùòòòòòòòòòôòòòòòòòòòòòòòôòòòòòòòòòòòòòôòòòòòòòòòòòòòôòòòòòú ó ó4
FAIR óCount ó68 ó13 ó81 ó ó ó
ùòòòòòòòòòòòòòôòòòòòòòòòòòòòôòòòòòòòòòòòòòôòòòòòú ó ó ó%
within RACE1 ó8.6% ó10.4% ó8.8% ó ó ó óRace
in 2 ó ó ó ó ó ó óCategories
ó ó ó ó
ó ùòòòòòòòòòôòòòòòòòòòòòòòôòòòòòòòòòòòòòôòòòòòòòòòòòòòôòòòòòú ó ó5
POOR óCount ó24 ó8 ó32 ó ó ó
ùòòòòòòòòòòòòòôòòòòòòòòòòòòòôòòòòòòòòòòòòòôòòòòòú ó ó ó%
within RACE1 ó3.0% ó6.4% ó3.5% ó ó ó óRace
in 2 ó ó ó ó ó ó óCategories
ó ó ó ó
ùòòòòòòòüòòòòòòòòòôòòòòòòòòòòòòòôòòòòòòòòòòòòòôòòòòòòòòòòòòòôòòòòòú óTotal
óCount ó795 ó125 ó920 ó ó
ùòòòòòòòòòòòòòôòòòòòòòòòòòòòôòòòòòòòòòòòòòôòòòòòú ó ó%
within RACE1 ó100.0% ó100.0% ó100.0%ó ó
óRace in 2 ó ó ó ó ó
óCategories ó ó ó ó
õòòòòòòòòòòòòòüòòòòòòòòòòòòüòòòòòòòòòòòòüòòòòòòòòòòòüòòòòòò÷

(continued)

Table 7: Overall Health By Race Continued

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	7.061(a)	4	.133
Likelihood Ratio	6.529	4	.163
Linear-by-Linear Association	6.153	1	.013
N of Valid Cases	920		

Symmetric Measures

		Value	Asymp. Std. Error(a)	Approx. T(b)	Approx. Sig.
Nominal by Nominal	Phi	.088			.133
	Cramer's V	.088			.133
Ordinal by Ordinal	Gamma	.167	.071	2.282	.022
N of Valid Cases		920			

CONCLUSIONS

Although Michigan minorities do not demonstrate much difference from the White majority in how they rate their overall health, stronger disparities do exist when minorities rate the quality of their health care providers and the quality of care in Michigan hospitals. Michigan minorities are less likely to have health insurance, which may create a barrier or stigma that influences some of the disparities observed, but not for all

measures. However, in contrast to much of the previous literature describing national trends, disparities in health care for Michigan minorities do not appear to be caused by racial/cultural barriers created by interracial provider-patient relationships. Surprisingly, minorities appear to rate their health care provider more favorably when that provider is not of the same racial background. There may be a social stigma attached to minority health care providers that is not being recognized and addressed in Michigan. Further study is needed to explore other possible causes for these disparities and to examine why minorities rate providers of a different race more favorably than health care providers that are of the same race.

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