“THEY TOLD ME I WAS PREGNANT”: THE INTERSECTION OF QUALITY, SATISFACTION AND REPUTATION AT A CAMPUS HEALTH CLINIC

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On my honor
I have neither given nor received
unauthorized aid on this thesis.

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ABSTRACT

Patient satisfaction is regarded as a health outcome goal and an indicator of care quality; however, sociological factors can influence patients irrespective of service quality, potentially disconnecting the medical encounter from the report of satisfaction. This study considered the poor long-term reputation of Boettcher Health Center at Colorado College as an opportunity for: 1) quantifying quality ratings and satisfaction levels, 2) insight into the clinic's reputation, and 3) suggestions for aligning quality, satisfaction and reputation. An online survey of 700 students found that overall quality ratings were above average for all services and satisfaction levels were above 50 percent for all healthcare goals, while respondents' written responses were mostly negative. Statistical analyses revealed significant effects of race, income, insurance type and parental involvement upon quality ratings and satisfaction. This study has implications for understanding liberal arts college students as a unique patient demographic which may be suspicious of healthcare services due to the likelihood of having been raised in an upper-class family.

As is common at institutions of higher education across the nation, Colorado College has a campus health clinic - Boettcher Health Center - that aims to address the unique health needs of its college students with convenient, quality care. Students seek care from one location for: acute illness and injury, mental wellness and disorders, sexual health and substance concerns, routine physicals, and vaccines. Although the clinic is widely utilized, campus lore surrounding the quality of services paints the picture of a painfully incompetent clinic.

Most students voluntarily offer stories of Boettcher's incompetency in casual conversation. In fact, animated discussions are not uncommon between students on campus; the classic punchline is that no matter what, someone in the crowd has been told she was pregnant by Boettcher Health when all she reported was a sore throat. A health clinic that misdiagnosed and overprescribed to the degree that students claim would pose a serious threat to the wellbeing of the campus population. These claims warrant concern for the quality of care administered at Boettcher Health Center.

Have students actually been wrongly told they were pregnant by Boettcher Health? Without invalidating the frustrations expressed by students, it's hard to differentiate truth from fiction in such stories. A primary question is whether or not the lore surrounding Boettcher is an accurate reflection of its quality or of student satisfaction, or of both. Other factors are probably at play as students casually chat about the failures of Boettcher. For example, does the degree of apparent dissatisfaction vary between gender or race? If certain groups of students more often report poor care, it is possible that sociodemographics affect satisfaction in healthcare independent of the actual clinical encounter at Boettcher Health. In other words, it's possible that students -

or certain types of students - are more likely to judge their campus healthcare harshly regardless of its objective quality. Or, perhaps certain groups actually experience poorer quality of care and these injustices are magnified in student conversation. Another factor that may be at play is the blatant perpetuation of falsities. If students' actual satisfaction with care is markedly different from what they perceive to be the common opinion, this might suggest that the incompetency of Boettcher isn't factual. If no one is reporting dissatisfaction but everyone is assuming others are dissatisfied, where is the disconnect? Why is this frustration with Boettcher Health Center perpetuated?

Obviously, many questions surround Colorado College students' health center. Exploring the roots of student dissatisfaction with Boettcher Health Center is an important part of addressing student health concerns, informing physicians on how to best serve their patients and improving the Colorado College community. The present study seeks: 1) a measurement of student opinion of the quality of Boettcher services and student satisfaction, 2) insight into how and why student lore is perpetuated, and 3) concrete suggestions for campus changes to ensure better care for students, or to begin the process of dispelling what may very well be falsities.

LITERATURE REVIEW

Healthcare today is both advanced and complicated, requiring coordination between administrative, financial and medical staff to ensure efficient and appropriate care for patients. Positive health outcomes are not only dependent upon quality care, but also upon the patient's ability and desire to seek out medical care and comply with treatment. Patient satisfaction has surfaced in recent years as both a measurement of care

quality and a predictor of positive health outcomes (Pascoe 1983; Williams 1994), and has therefore become an important goal for care providers.

A satisfied patient is more likely to seek, continue and comply with treatment, which is a clear indicator of its importance (Pascoe 1983; Ware, Snyder, Wright, & Davies 1983; Williams 1994). Specifically, research shows that utilization of services increases with satisfaction, as does appointment keeping behavior, appropriate prescription medicine use and willingness to follow medical instruction (Pascoe 1983). For these reasons, it is clearly in the interest of the public health sector as well as physicians to ensure that patients feel well-served throughout appointments and treatment. Indeed, patient satisfaction as a health service goal is valid for these reasons.

While the link between satisfaction and compliance remains uncontested, patient satisfaction as a measurement for care quality is significantly more complicated. The goal of satisfaction began to be encouraged institutionally only recently, beginning in 1983, when the National Health Service published the recommendation that management "ascertain how well the service is being delivered at local level by obtaining the experience and perceptions of patients and the community" (Williams 1994:509). The origins of the institutional assumption of satisfaction's correlation to quality are closely tied to the shift in consumerist culture; patients have become consumers in an industry that commodifies care as a product. Given that context, our culture began to shift toward holding the healthcare experience accountable for comfortable offices, short waiting times, reasonably affordable services, accurate diagnoses, and effective treatment via reports on patient perception. Satisfaction is only to be a direct indicator of quality, however, if several assumptions are met. One of those is that a valid and reliable method

of satisfaction measurement be feasible. One such instrument, arguably the instrument of choice today, is the Patient Satisfaction Questionnaire (PSQ) developed in the 1980s by Ware and colleagues (1983). Although it comes in varying forms, the objective is to capture the subjective preferences of patients and realities of care quality, and hinges upon patient ratings of eight specific aspects of health care: interpersonal manner, technical quality, accessibility, finances, outcomes, continuity, environment and availability (Ware et al. 1983). The comprehensive definition of quality by the PSQ is revered for its reliability and validity, seemingly providing a way to measure satisfaction and link it to health care quality.

The PSQ ultimately may overlook the second assumption about satisfaction - that satisfaction is solely a patient's evaluation of the interaction between appropriate expectations and actual service experience. For satisfaction to be an indicator of quality, it must be an unbiased evaluation of the health care services received by that patient. Research on the factors that affect and predict patient satisfaction with healthcare is bringing into question how, when and why patients actually develop and articulate their feelings, and may disqualify the claim that patient satisfaction correlates with care quality, regardless of whether it can be measured by the PSQ or other self-report instruments.

Determinants of Healthcare Satisfaction

The assumption made by those who correlate patient satisfaction with quality care is valid to some degree. Surely a patient is more likely to report dissatisfaction if her physician forgets to review contraindications for a prescription, if the waiting room is unsanitary, or if her confidentiality is breached. These are just a few of the examples that

demonstrate poor quality care as also being dissatisfactory. The Institute of Medicine (IOM) defined quality healthcare in 1990 as "the degree to which health services for individuals and populations increase the likelihood of desired health outcomes and are consistent with current professional knowledge," with the six specific aims of care being safe, effective, patient-centered, timely, efficient and equitable (Richardson & Corrigan 2002). Patients' perceptions of these facets of quality are, to some extent, a determinant of their satisfaction, and it is telling that patient satisfaction is considered under the patient-centered aim of the IOM. The medical encounter - from the waiting room to the patient gown to the blood draw, the bill, and the follow-up phone call - should be held accountable for the patient's health outcomes and may rightly determine a judgement of the experience. But other contextual factors are crucial in understanding why a patient might report dissatisfaction with the care received, and at times act independently of the quality of care. Unfortunately, the literature at this point is inconclusive as to the degree to which patient satisfaction is determined by the quality of the medical encounter versus contextual psychological and social factors.

Psychologically speaking, the "postpurchase response" that determines reported consumer satisfaction is routed cognitively, affectively and by attribute base (Oliver 1993). The cognitive route is the process of forming expectations and comparing performance or service to those expectations. An example of this cognitive postpurchase response relevant to the healthcare topic is when a patient learns to expect a doctor's professional greeting - a handshake and eye contact - and does not receive those things during a clinical visit; at this point the patient would be likely to report dissatisfaction. This raises the question: is the consumer's expectation in this case, which ends up

defining a dissatisfactory experience, properly reflecting poor quality of care? There is room here for the argument that a physician failing to shake hands and make eye contact with a patient may be demonstrating poor social skills in American culture but should not determine whether the administered quality of care is thought of as lesser, as long as the physician's diagnoses and treatments are appropriate.

The affective route incorporates emotions as part of the determination of satisfaction; positive emotions such as joy and interest tend to predict satisfaction whereas anger, disgust or contempt predict the opposite. Emotions essentially mediate the satisfaction response, so a client who leaves a clinical setting feeling angry - even if the quality of care was acceptable - is more likely to report dissatisfaction.

The attribute base route of postpurchase response has been studied in specific relation to the health care setting. Research supports a nuance within the effect of negative emotions on satisfaction (Dubé, Bélanger, & Trudeau 1996). While positive emotions are the most consistent predictors of satisfaction, two distinct types of negative emotions emerge by way of attribution. Other-attributed - "other" being actors in the healthcare experience other than the patient - negative emotions such as frustration and suspicion are predictors of dissatisfaction. Situationally-attributed emotions such as anxiety and tension actually predict higher satisfaction with medical and support services. The implications for this psychological explanation of satisfaction are that quality of care is not the only variable affecting patient satisfaction; for doctors to receive a satisfactory PSQ score, they must do more than uphold the standard protocols of care. They also have to ensure that patients aren't feeling angry or frustrated, something that can be impossible to do in a hospital setting.

Sociologically, the contextual determinants of satisfaction with healthcare further confuse the ability of satisfaction to indicate the quality of healthcare. The race, class, gender and age of patients determine many aspects of their interaction with healthcare, and subsequently affect: 1) legitimately differing qualities of care and health outcomes and 2) socially differing satisfaction.

Race. With the rise of medical epidemiology, new light has been cast on racially based health disparities in the United States. Even thirty years ago, research showed fewer surgical operations performed for racial minorities than for whites, and more operations performed by residents in training on non-whites than on whites (Donabedian 1985). A few more examples of poor quality of care depending on race or ethnicity are: blacks, Hispanics and Asians experience worse quality of care for more than half of the measures of the National Healthcare Quality Report (Kelley et al. 2005), blacks and Hispanics are less likely to receive certain screenings and immunizations (Kelley et al. 2005), and minority racial or ethnic groups see lower quality hospital care (Fiscella, Franks, Gold, & Clancy 2000).

Today, minorities utilize health services less often (Han & Lee 2016), which is most likely related to their likelihood of reporting lower satisfaction than whites (Han & Lee 2016; Kelley et al. 2005). This finding is consistent with evidence for the lower quality of care that these groups see, although may be affected by more than one variable. For example, specific cultural taboos surrounding healthcare, discriminatory fear, and language barriers may prevent persons from minority groups from accessing care or reporting accurate satisfaction.

Class. Socioeconomic class, particularly as characterized by income and education, also has a significant independent effect on the quality of healthcare received. For example, patients with higher income are less likely to suffer postoperative morbidity while mothers with lower income see higher rates of preventable maternal mortality (Donabedian 1985). Additionally, low income persons experience lesser quality of care for two thirds of the measures of the National Healthcare Quality Report (Kelley et al. 2005) and fewer preventative examinations and immunizations, controlling for race (Fiscella et al. 2000).

Contrary to expectations, lower social classes are more likely to report higher satisfaction with their healthcare (Like & Zyzanski 1987). Perhaps this has to do with a lower standard of learned expectations compared to higher classes, but research in the area is minimal. Regardless, socioeconomic class is an example of a variable acting independently of care quality.

Gender. Quality of healthcare can also vary between genders. The literature consistently confirms the fact that females are more likely to seek care - especially preventative care (Anspach 2010; Kent, Patel & Varela 2012) - but are less frequently offered invasive procedures regardless of medical specialty (Kent, Patel, & Varela 2012). Relatedly, American women suffer greater morbidity while men have, on average, shorter lifespans (Lorber & Moore 2002).

Similarly to the paradox that socioeconomic class presents, females tend to be more satisfied with their healthcare than men (Like & Zyzanski 1987; Pascoe 1983). Even though men have relatively less incidence of disease and more often receive advanced procedural options for treatment, they report lower levels of satisfaction with

their healthcare. This may have to do with differing expectations due to less exposure to the healthcare system or an effect of gender roles. For example, as women are traditionally less aggressive and more subordinate, they may be less likely to complain about services due to social desirability. This is especially pertinent when considering that most women are served by male doctors.

Age. A final contradiction in the quality of care received by a demographic and its subsequent satisfaction is that of age. One in five elderly patients are prescribed inappropriate and potentially harmful medications (Kelley et al. 2005), an indicator of decreased quality of care. Still, older patients tend to be more satisfied with the care they receive (Like & Zyzanski 1987; Pascoe 1983). Again, little research has been conducted as to why satisfaction and quality are not positively correlated in this population, but it may be a generational effect; expectations that the younger generation of patients have for health services may be higher and therefore be reflected in more critical satisfaction ratings. Regardless, we can conclude that satisfaction isn't always inferred from quality.

Another factor to be considered is the demographic characteristics of the care provider; race, gender and age are not equally distributed among practicing doctors in the U.S. According to a 2008 study, 75 percent of doctors are white, with Asian, black and Latino doctors accounting for the other 25 percent, decreasing respectively (Castillo-Page 2010:17); therefore, black and Latino patients are both 200 percent underrepresented proportionally by the physician population (2015 U.S. Census). As of 2014, 50 percent of doctors are between 40 and 60 years of age, with 66 percent of all doctors being male (Young et al. 2015:11). These patterns are significant because research has shown that satisfaction increases when patient and physician sociodemographics match, and tend to

decrease when a "nonnormative" doctor is assigned to a patient rather than chosen (Pascoe 1983). Given that, many patients are predicted to have worse health outcomes and compliance due to decreased satisfaction simply because of their race or gender. Just as importantly, patient expectations about their doctors have been found to independently affect satisfaction, meaning that a person's belief about who or what their doctor should be can affect subsequent evaluation of the physician, irrespective of the actual care experience (Williams 1994). That means that a black, female doctor might receive dissatisfied reviews from a white patient who was assigned to her or from a patient who was expecting a white male physician, regardless of her ability to provide quality care.

In sum, data show that health care quality can vary with sociodemographics, and that satisfaction levels often respond to them, but also can be affected independently by the facts of race, age, gender and class in the context of healthcare. While satisfaction is a health service goal in ensuring positive health outcomes through compliance, we must be careful to assume a link between a dissatisfied patient and poor care.

The Niche of College Health Centers

Many colleges and schools across the nation provide health services to students from on-campus facilities. These clinics aim to treat and address the dominant physical and mental health issues in students conveniently and appropriately; some of the services most utilized by students are in sexual and substance health (Soleimanpour 2010). College campus clinics tend to be unique specifically because of the niche that they represent in serving young people. One of the most striking facts about campus clinics is the negative student rhetoric surrounding them. One example from a BuzzFeed webpage is a meme with the text, "When you go in for a cold and they test you for chlamydia,"

with an image of a woman looking shocked and disgusted, followed by, “When you go in for a sprained ankle and they test you for chlamydia” with the image of a young girl looking unamused (Kee 2015). Other cynical jokes criticize campus clinics for excessive pregnancy testing, Z-pack prescriptions, lack of privacy, difficulty navigating insurance, and care questions deemed insensitive by students (Kee 2015). Do students present challenging expectations, are campus clinics unprepared to serve patients adequately, or have rumors persisted into student popular culture, becoming legend (Mullen 1972)?

Student expectations and priorities in service. One study of high school clinics in California found that clients were most satisfied by the free services, their convenience and assured confidentiality, as well as the staff’s non-judgemental attitudes, friendliness and ability to listen. Those same clients were least satisfied with the wait time at the school center, the small size of the clinic spaces and limited hours of operation (Soleimanpour 2010). Another study conducted by Bates College sought to identify students’ top areas of concern regarding their college clinic. The problematic themes included: quality of medical care including testing access, staff credentials, inconsistent hours, condition of the building, confidentiality concerns including medical record management, lack of mental health support and staff turnover (Zsiga & Steidel 2016). Just between these two studies, similarities arise in the dissatisfaction of student patients, including concerns over clinic hours of operation and the physical facility; these issues highlight some of the values that student clients consider in health care.

Another issue discussed with campus clinics is that of cultural competency between staff and marginalized student communities, such as racial minorities and the LGBTQ+ community. Stanford University reported on the common problems that

providers and clients face in navigating cultural barriers, and the relative success of one program aimed at improving those challenges. In general, students of color and the gay community felt dissatisfied due to invisibility on campus in the eyes of service providers while the primarily white healthcare staff reported a lack of confidence in speaking with students of color, and specifically navigating conversations around sexual health with the LGBTQ+ community (Edwards 1994). In attempting to overcome these barriers, campus health service workers attended events on campus in order to affirm the black, gay, and Latino communities respectively. The effort was met positively and reflects evidence for communication and common ground in satisfying health care.

Students as patients and consumers. The patients of college campus health centers make these clinics unique for several reasons, some more obvious than others. First and foremost, the vast majority are between 16 and 26 years of age. Knowing that age tends to be a predictor of satisfaction, we might expect patterns of low satisfaction with a younger demographic (Like & Zyzanski 1987). An important point related to the youth of these patients is their newfound independence on a college campus; navigating healthcare for presumably the first time without parents, their expectations and knowledge of the system are unique to their lifestage. Additionally, students on campuses like Bates and Stanford are assumedly well supported by parents in areas of life other than healthcare, which brings into question Lareau's (2003) concept of concerted cultivation when considering that student health centers are poorly reviewed. In her book *Unequal Childhoods*, Lareau theorizes that children raised in middle and upper class households are often taught to use language and interact with social institutions advantageously; one example that she observes occurs in a doctor's office in which a child patient redirects

conversation toward his medical concern, shifting the balance of power toward himself. He clearly expects respect and equality in interaction with the physician, believing himself worthy of adult interest. This behavior is less likely in lower socioeconomic classes; perhaps college campuses represent a concentrated area of upper class students who have learned from parents how to interact with the structure of healthcare, how to address problems, and privileged expectations from doctors they have known their whole lives. Another unique characteristic of the college student patient demographic is that they tend to be genuinely healthy when compared with non-students of their same age; they are reportedly better vaccinated, 50 percent less likely to die from suicide, and have a far lower rate of mortality from alcohol-related injuries, although they are more likely to binge drink (Skorton & Altschuler 2013).

A final consideration of the unique patient population that utilizes campus clinics is the research done in satisfaction patterns. Many studies in consumer satisfaction identify that a large percentage of users tend to be uncritical of services, meaning that care can be very poor quality before consumers are apt to express dissatisfaction (Williams 1994). This transfers to the college campus in the case of at least one study, which found that there tends to be clustering of students by satisfaction with student services in general (Adwere-Boamah 2011). Using a latent class model, Adwere-Boamah (2011) found that the majority of surveyed students were ambiguous about student services, while just 8 percent were very dissatisfied with services (p. 52). While that included health services, it is important to note that these students were unhappy with every college service, suggesting that student dissatisfaction with campus healthcare does not have to do with care quality specifically.

Some research has found no significant differences based on race, gender or age in school for students in their rating of quality or satisfaction of school services (Ilias, Hasan, & Rahman 2009; Nabors et al. 1999), and one South African study identified positive correlation between students' overall ratings of quality and satisfaction (Nell & Cant 2014). This is pertinent because it means that students might tend to link quality with satisfaction and that student demographics don't tend to affect those perceptions. Still, plenty of other studies have found conflicting evidence of significantly differing effects of year in school, gender, and race of students on their satisfaction with school services (Corts, Lounsbury, Saudargas, & Tatum 2000; Nell & Cant 2014; Oldfield & Baron 2000; Terenzini et al. 1994). However, little research has been done on student opinion of campus health centers specifically. While previous research is important to universities hoping to remain marketable to students, research into healthcare satisfaction is crucial in understanding students as patients and supporting healthier campuses.

Boettcher Health: A Case Study

The student health center at Colorado College, Boettcher Health, is a college clinic that has a poor reputation among students. It is not uncommon to hear vague stories of misdiagnoses and over prescribing as part of normal student banter. According to a 2010 survey administered by the college, the clinic then had a "bad reputation" (Johnson 2010:1), which alumni from the 1980s confirm. In the 2010 survey, 54 percent of respondents felt positive regarding Boettcher as a walk-in clinic, while 24 percent reported a negative opinion (p. 1). The campus clinic has never been investigated in the context of understanding reputation; rather it has been studied to increase student and parent satisfaction as it has undergone administrative changes over the years.

Knowing that many factors can affect patient satisfaction with the healthcare experience, and acknowledging the unique patient demographic at Colorado College, to what degree is student satisfaction with Boettcher explained by the medical encounter versus the characteristics of the actors? Furthermore, does self-reported satisfaction on a survey confirm the poor reputation of the clinic expressed in the student culture? Given that the rhetoric surrounding Boettcher Health on campus is overwhelmingly negative, a survey of the student body might be expected to reveal overwhelmingly negative satisfaction regarding the clinic. In that case, the quality of Boettcher's care may be called into question, or sociological theory of satisfaction development may be employed to explain why an entire student demographic might feel dissatisfied due to any number of reasons discussed above. If, however, student satisfaction is not overwhelmingly low, those students who are dissatisfied may highlight certain demographics predisposed to health care dissatisfaction or, sadly, a failing on the part of the clinic to serve certain populations in the Colorado College community. This study seeks to add to the literature surrounding healthcare quality and the variables affecting patient satisfaction, considering Colorado College's Boettcher Health Center as a representative case.

METHODS

This study was conducted among the student body of Colorado College during the winter of 2016. All collected data was self-reported from an online survey (see Appendix A) distributed via campus email. There are three general sections in the survey, including: 1) previous utilization and satisfaction with Boettcher Health Center, 2) perceptions of student opinion of Boettcher, and 3) demographics and previous experience with healthcare.

Participants were chosen via a stratified random sampling of the 2,382-student body, categorized as first-year, sophomore, junior, or senior class. A sample size of 700 was utilized to obtain a confidence level of 95 percent with a margin of error of three percent. Two hundred from each upper class (seniors, juniors and sophomores) and one hundred first-years were chosen to participate. First-years were underrepresented because they have had less than one semester at the college, so they are less likely to have visited Boettcher Health or to have heard the campus lore. A total of 243 responses were recorded - a response rate of 35 percent. The survey response rate warrants caution when generalizing to the student body, but a member of Institutional Research at Colorado College confirmed that 35 percent return rate is substantially higher than most other student surveys. Therefore, this data surely represent a starting point for investigating Boettcher Health, especially given the following demographic distribution analysis.

The independent variables in this study are broadly categorized as student demographics because the literature implies a significant effect of race, gender, age and class of patients on their healthcare satisfaction. These variables were dichotomized as follows: white vs. non-white, male vs. female, high vs. middle-to-low income, upper vs. underclassmen, and science vs. non-science major. Academic major was considered because natural science majors are hypothesized to be educated in body systems or have medical education experience, affecting their analysis of the medical encounter.

The dependent variables measured were: 1) quality of six discrete services offered by Boettcher - outpatient care, physicals, women's health, immunizations, mental health and labwork - ranked on a scale of 0 to 10, and 2) satisfaction with regards to six discrete clinical healthcare goals - affordability, accessibility, confidentiality, cleanliness, health

outcomes and provider mannerisms - on a four-point scale from “very dissatisfied” to “very satisfied.” An overall quality score was calculated for each Boettcher patient by taking the average score of those services that had been utilized by the student. An overall satisfaction measure was created by dichotomizing satisfaction for each clinical goal and then combining them additively; students satisfied with four or more aspects were “overall satisfied” and those satisfied with less than four were “overall unsatisfied.”

T-tests for difference of mean quality rankings between demographics were analyzed in conjunction with effect size using Cohen’s d. Although measurements of overall quality, quality of outpatient care and quality of immunizations were not normally distributed (see Appendix B), nonparametric Wilcoxon rank sum tests conformed to t-tests in all cases and were not reported. Chi-square tests with phi coefficients analyzed demographic effect on likelihood of satisfaction.

Qualitative responses revealed themes that were organized and reported as a supplement to quantitative analysis. All comments were read and coded as overall negative, positive, neither or hearsay given tone and language. Specifically, any comment that referred to poor quality care (misdiagnosis, stigmatization, provider impatience, inability to make appointments) or negative personal feelings (frustration, disrespect, shame, tears) were negative. These complaints were further sorted into the three main categories as reported in the following section. Positive comments either specifically complimented some aspect of care received or noted the comforting reliability of Boettcher. Neutral comments were those that commented on the survey’s construction or had both negative and positive themes. Comments referring to experiences that the respondent had heard about, rumors, or “horror stories” were coded as lore.

DATA AND ANALYSIS

Table 1 demonstrates that respondent demographics were fairly representative of the student demographic at Colorado College.

Table 1. *Percent(n)s of Survey Respondents (N = 243) and Colorado College Population*

	Survey Respondents	**CC Population**
Gender		
Male	27.6(67)	46.6(949)
Female	55.1(134)	53.4(1087)
Queer/Trans	3.3(8)	unknown
(Total *n*)	(209)	(2,036[1])
Race/ethnicity		
White	60.1(146)	66.3(1349)
Black	2.5(6)	2.8(59)
Hispanic	2.9(7)	9.0(182)
Asian	4.5(11)	4.6(93)
Native	0.1(2)	< 0.5(7)
International	6.9(14)	6.4(129)
Two or more	12.3(30)	8.4(170)
(Total *n*)	(216)	(1,989[1])
Undergraduate class		
First year	12.3(30)	23.8(567)
Sophomore	22.6(55)	27.5(655)
Junior	20.2(49)	25.0(596)
Senior	29.2(71)	23.7(564)
(Total *n*)	(205)	(2,382[2])
Income		
0-$50,000	11.5(28)	unknown
$51-100,000	18.1(44)	
$101-250,000	23.0(56)	
$251-500,000	9.1(22)	
Over $500,000	6.1(15)	
(Total *n*)	(165)	
Insurance Type		
CC provided	14.4(35)	unknown
Parent plan	64.2(156)	
(Total *n*)	(191)	
Major		
Natural Sciences	35.4(86)	unknown
Non-natural sciences/arts	43.6(106)	
(Total *n*)	(192)	
Boettcher Patient	88.0(214)	unknown
(Total *n*)	(239)	

[1] *Colorado College, 2014.*
[2] *Student roster obtained from Colorado College Office of Student Life.*

As intended by the stratified sample, first-year students were underrepresented compared to other students at the college by almost two-fold. Compared to the demographic makeup of Colorado College, these gender, racial, and income distributions are roughly representative, although men are clearly underrepresented. This is unsurprising, given that women's response rates typically surpass men's in survey research (Curtin, Presser, & Singer 2000; Moore & Tarnai 2002; Singer, Hoewyk, & Maher 2000). Just over 88 percent of respondents were past or current patients at Boettcher. Of those not having visited the clinic, the majority (58%) reported never having had a health problem while at Colorado College.

Quality Ratings and Satisfaction

The major health services utilized by respondents were outpatient services for acute illness and injury (65%), counseling and mental health (44%), lab work (33%), immunizations (29%), women's health (24%) and routine or athletic physicals (16%). Overall, each of the aforementioned service categories received at or above average ratings for quality from respondents on a scale from 0 to 10 (see Table 2), with immunizations receiving the highest average and outpatient services receiving the lowest. The overall average rating of Boettcher Health's quality of six services was 6.54. Individually, students reported an average quality rating of 5.45 for the services they had received personally. Difference of means by gender, which is well-known for influencing healthcare satisfaction, is also shown in Table 2. Oddly, men do not rank quality significantly lower than their female counterparts nor are satisfaction levels among men significantly lower, contrary to expectations from the literature (Like & Zyzanski 1987;

Pascoe 1983). In other words, by almost any measure on a scale from 0 to 10, Boettcher's medical service quality in the eyes of patients sits at or above the scale's mean.

Table 2. *Descriptive Statistics of Mean Quality and Satisfaction Measures for All Respondents with Tests for Difference by Gender*

	N	Mean	SD	Male	Female	t	χ^2
Quality							
Immunizations	61	7.95	2.03	8.03	8.00	0.04	
Women's Health	52	6.85	2.64	-	6.85	-	
Physicals	37	6.54	2.49	6.25	6.65	0.45	
Average Service Quality		*6.54*		*6.19*	*6.16*	*-0.07*	
Labwork	73	6.45	2.70	6.81	6.39	-0.54	
Mental Health	94	5.98	2.62	6.29	5.90	-0.65	
Outpatient care	140	5.48	2.34	5.38	5.56	0.41	
Satisfaction							
Appearance	187	94.11	23.59	90.91	95.93		1.81
Confidentiality	187	86.10	34.69	83.64	86.18		0.20
Provider manner	187	78.61	41.11	69.09	81.30		3.25
Accessibility	187	74.33	43.80	69.09	76.42		1.07
Affordability	184	70.65	45.66	64.81	72.73		1.12
Health outcomes	187	60.43	49.03	61.82	57.72		0.26
Overall Satisfied (4+)	*184*	*81.52*	*39.00*	*75.93*	*84.30*		*1.75*

*$p \leq .05$. **$p \leq .01$. ***$p \leq .001$.

Knowing that social demographics tend to make a difference in patient ratings of quality and satisfaction as discussed above, statistical tests analyzed differences in mean quality ratings between respondents of differing races, incomes and academic class (see Table 3) as well as for insurance type and parental involvement (see Table 4). Race resulted in a statistically significant difference (see Figure 1) - nonwhite respondents reported higher overall quality ratings ($M = 6.82$, $SD = 2.15$) than whites ($M = 5.87$, $SD = 2.16$); ($t_{(180)} = 2.65$, $p < 0.01$), and higher immunization ratings ($M = 8.82$, $SD = 1.24$) than whites ($M = 7.64$, $SD = 2.13$); ($t_{(57)} = 2.14$, $p < 0.05$), with a medium effect size for both.

Patterns emerged for gender and income as well (see Figure 2). In addition to nonwhites, women and middle-to-lower income respondents tended to report higher quality ratings for services across the board. No noticeable tendencies were visible

between upper and underclassmen or academic majors (the latter was not reported). Insurance type, dichotomized as either parent's plan or other, seemed to have the greatest measurable effect. Student overall quality ratings were significantly higher for those with other or no insurance ($M = 7.07$, $SD = 1.90$) versus those on a parent's plan ($M = 5.87$, $SD = 2.21$); ($t_{(179)} = 3.12$, $p < 0.01$). Quality ratings were also higher for those without parental insurance for immunization ratings ($M = 8.88$, $SD = 1.26$) than their counterparts ($M = 7.65$, $SD = 2.10$); ($t_{(57)} = 2.18$, $p < 0.05$) and for outpatient services, with those lacking parental insurance again giving higher quality ratings ($M = 6.41$, $SD = 2.26$) than those on their parents' plan ($M = 5.25$, $SD = 2.34$); ($t_{(135)} = 2.31$, $p < 0.05$).

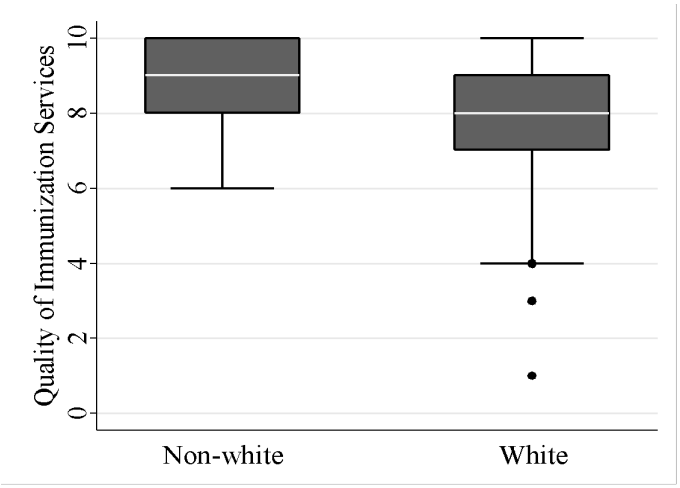

Figure 1. *Variation by Race/Ethnicity in Quality Ratings for Immunizations*

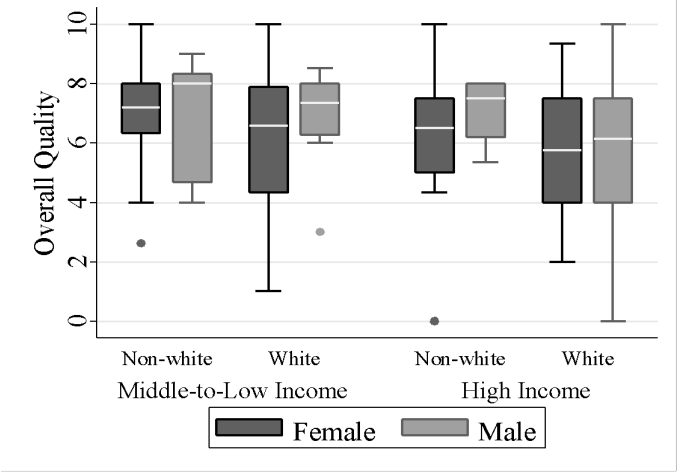

Figure 2. *Variation in Rankings for Overall Service Quality by Demographic*

Table 3. *Mean Rankings (with t-tests and Cohen's d) for Quality, and Percent Satisfied (with chi-square and phi) by Demographic*

	White	Non-white	*t(d)*	$\chi^2(\varphi)$	High Income	Middle-to-Low	*t(d)*	$\chi^2(\varphi)$	Senior/Junior	First year/ Sophomore	*t(d)*	$\chi^2(\varphi)$
Quality												
Outpatient care	5.31	6.00	1.46		5.51	5.70	0.43		5.40	5.59	-0.46	
Physicals	6.73	5.89	-0.88		6.38	7.18	0.81		6.68	5.25	1.10	
Women's Health	6.51	7.67	1.44		6.89	6.22	-0.79		7.21	5.58	1.90	
Immunizations	7.64	8.82	2.14*(0.6)		7.68	8.15	0.81		7.92	8.38	-0.60	
Mental Health	5.79	6.38	0.98		5.92	6.22	0.51		5.75	6.34	-1.03	
Labwork	6.20	7.19	1.42		6.15	6.70	0.77		6.25	7.16	-1.26	
Overall	5.87	6.82	2.65**(0.4)		5.82	6.47	1.79		6.04	6.26	-0.65	
Satisfaction												
Affordability	68.18	77.08		1.34	77.22	70.31		0.88	73.45	65.15		1.38
Accessibility	73.48	76.47		0.17	74.68	77.61		0.17	75.44	72.06		0.25
Appearance	94.70	94.12		0.02	96.20	92.54		0.94	95.61	92.65		0.72
Confidentiality	84.85	88.24		0.35	78.48	94.03		7.12**(-0.22)	84.21	88.24		0.56
Health outcomes	56.82	66.67		1.48	53.16	68.66		3.63	58.77	60.29		0.04
Provider manner	76.52	82.35		0.73	78.48	85.07		1.05	72.81	86.76		4.84*(0.16)
Overall	80.30	85.42		0.61	84.81	84.38		0.01	79.65	84.85		0.75

*$p \leq .05$. **$p \leq .01$. ***$p \leq .001$.

In terms of satisfaction, the majority of respondents reported being satisfied for all six aspects of Boettcher healthcare: affordability, accessibility, appearance, confidentiality, health outcomes, and provider mannerisms (see Table 2). The vast majority (94%) of patient respondents were satisfied with the appearance and cleanliness of Boettcher, 86 percent were satisfied with its practices in confidentiality, 79 percent appreciated provider manners, and 74 and 71 percent were satisfied with accessibility and affordability, respectively. Satisfaction with health outcomes was the smallest majority, with 60 percent of respondents reporting "satisfied" or "very satisfied" with the success of treatment recommendations. Unlike the strictly medical considerations of the quality measurement, the satisfaction variable takes into account further consumer expectations like aesthetics of the medical space and social expectations of the interaction. For this reason, it is especially notable that 82 percent of respondents were satisfied with four or more aspects of the Boettcher Health experience in combination with the fact that each service was ranked above average for quality, given the claim that the clinic has a bad reputation. Satisfied patients of Boettcher Health also reported significantly higher overall quality ($M = 6.50$, $SD = 1.91$) than dissatisfied patients ($M = 4.17$, $SD = 2.30$); ($t_{(181)} = -6.10$, $p < 0.01$). This suggests that reported patient satisfaction at the college may in fact be related to the quality of the medical encounter to a degree, and that Boettcher's care may not be problematic, in and of itself. Quality and satisfaction appear to coincide for the students of Colorado College.

That said, satisfaction is a variable that can be affected by social demographics independent of service quality; therefore, two-way chi-square tests were performed to assess the distribution of satisfaction over social and academic demographics (see Tables

2 and 3). Statistically significant results revealed that middle-to-lower income respondents were disproportionately likely to be satisfied with confidentiality compared to high income respondents ($\chi^2 = 7.12$, df = 1, $p < 0.01$) and underclassmen were disproportionately likely to be satisfied with provider mannerisms versus upperclassmen ($\chi^2 = 4.84$, df = 1, $p < 0.05$), although with small effect sizes. Insurance (see Table 4) did not make a significant difference for satisfaction levels, but historic parental involvement in healthcare did. Students who said their parents had previously been "uninvolved" in their healthcare (30% of respondents) were disproportionately likely to be satisfied with provider mannerisms ($\chi^2 = 6.83$, df = 1, $p < 0.01$).

Table 4. *Mean Rankings (with t-tests and Cohen's d) for Quality, and Percent Satisfied (with chi-square and phi) by Insurance Type and Historic Parental Involvement*

	Parent Insurance	**Other Insurance**	***t(d)***	***X²(φ)***	**Involved Parents**	**Uninvolved Parents**	***t(d)***	***X²(φ)***
Quality								
Outpatient care	5.25	6.41	2.31*(0.40)		5.39	5.63	0.57	
Physicals	6.41	7.00	0.53		5.78	7.38	1.98	
Women's Health	6.33	7.74	1.89		6.68	7.10	0.56	
Immunizations	7.65	8.88	2.18*(0.58)		8.25	7.57	1.30	
Mental Health	6.00	5.82	-0.28		5.98	5.92	0.11	
Labwork	6.30	6.84	0.80		6.68	6.26	0.64	
Overall	5.87	7.07	3.12**(0.47)		6.02	6.31	0.87	
Satisfaction								
Affordability	69.29	74.36		0.38	75.22	62.69		3.18
Accessibility	73.94	75.00		0.02	74.56	73.91		0.01
Appearance	94.37	95.00		0.02	94.74	94.20		0.02
Confidentiality	84.51	90.00		0.77	89.47	79.71		3.36
Health outcomes	55.63	72.50		3.68	57.89	62.32		0.35
Provider manner	75.35	87.50		2.69	71.93	88.41		6.83**(-0.19)
Overall	79.29	89.74		2.22	81.42	82.09		0.01

*$p \leq .05$. **$p \leq .01$. ***$p \leq .001$.

Although a higher response rate could very well have produced more statistically significant test results, the patterns identified amidst these data provide some insight to the social facts that affect expectations and reflections on the clinical encounter, supporting some of the claims of the literature. Specifically, higher income white patients

tend to be less satisfied on average than their counterparts (Like & Zyzanski 1987; Pascoe 1983) which is supported for some variables by the student response at Colorado College. Social expectations surrounding professionality and luxury may be heightened for white, wealthy students of socially privileged backgrounds and the aggressive, dominating behavior typical of males may work in conjunction with social privilege to explain this difference. In other words, a white, wealthy male in Boettcher Health may be more likely to report poor quality and dissatisfaction because he feels it is socially acceptable to do so and because the services genuinely do not meet his expectations, which are high. Coupled with the fact that 76 percent of respondents use their parents' private insurance plan and 64 percent report that their parents were very involved in helping them navigate healthcare in the past, and that those respondents on average report lower quality ratings and are disproportionately less satisfied, it stands to reason that the Colorado College patient population might be a hard one to please.

Homogeneous age, however, may play an overriding role that explains the overall lack of racial, gendered or income effect. The homogenous age of traditional college students may represent a niche of patients that feel similarly regarding healthcare quality and satisfaction, regardless of race, gender and income. The age factor may even be exaggerated by the campus itself; these are not only all young people, but they are all young people living and learning together in the college atmosphere. It is probable that this demographic - young people seeking healthcare without parental guidance for the first time - is unique. Although the data of the present study seem to contradict the theory that younger people tend to be less satisfied with their healthcare (Like & Zyzanski 1987; Pascoe 1983), this is simply because there is no other age demographic at the school.

Comparatively, 82 percent of American adults rate both general and hospital care as good or excellent according to an international comparison study of healthcare satisfaction (Crow et al. 2002:76). By that measure, Colorado College student ratings of the health clinic are comparable to satisfaction levels around the country. Because these ratings suggest that the student body is content with Boettcher, how can its bad reputation be explained?

Evidence for Dissatisfaction

Given the seemingly positive quantitative response regarding both quality and satisfaction for patients at Boettcher Health, regardless of gender, race and income, qualitative survey responses are an important resource for understanding how students feel about Boettcher Health and providing evidence for the clinic's poor reputation. A full 68 percent of survey comments were considered critical or negative of the clinic, and just 15 percent were genuinely positive regarding past experiences and opinions of Boettcher. While it is very likely that respondents who added their own comments represent the most polarized of the group, it does seem notable that comments were overwhelmingly negative. Similarly, in 2010, Colorado College conducted a survey to investigate student and parent concerns with the campus health clinic as it began the process of hiring a new provider. The committee administering the survey knew of and confirmed the negative lore on campus through respondent comments, even then (Johnson 2010). The lore may be hard to measure or define, but Colorado College community members tend to agree on the existence of a "bad reputation" (Johnson 2010:1).

In the present study, many students acknowledged the presence of rumors, "horror stories," and Boettcher "stereotypes" on campus. A characteristic of these comments was

to avoid questioning the reality of these horror stories as they happened to unnamed friends, and they tended not to consider the greater healthcare system as part of the problem. For example: “I’ll say that I personally don’t have ‘horror stories’ about Boettcher. . . but I have heard plenty from friends; that they went in with a stomach flu and were asked to take a pregnancy test, misdiagnoses of common illnesses like strep. . .” A similar comment demonstrates a congruent sentiment:

> I have heard several Boettcher related horror stories from friends. One friend was bitten by a brown recluse spider and Boettcher told her she was fine. . . Another friend was given a false diagnosis of chlamydia. . . Both of these incidents occurred a couple years ago so maybe things have improved.

As demonstrated above, students’ actual satisfaction with campus care is at odds with the negative perception relayed when given the opportunity to tell stories or give personal opinions. An important connection to the quantitative analysis of this survey is that respondents’ own reports of satisfaction are markedly different from what they perceive of the student body; 87 percent of respondents believe that the student body is either dissatisfied or very dissatisfied with Boettcher Health. Stated differently, 82 percent of respondents are personally satisfied with the clinic but only 13 percent believe that the larger student body is satisfied. There exists a tangible difference between what students hear about Boettcher and how they experience its services.

If we are to believe that these horror stories are factual, one must consider the lifespan of such stories over the course of years. Most clinics make mistakes - rates of misdiagnosis in doctors’ offices around the U.S. are currently estimated between 10 and 15 percent (Graber 2013:i22). Do Colorado College students hold the campus clinic to a higher standard than is realistic? Are clinic mistakes magnified? Several students

acknowledged, in fact, the perpetration of such stories as an unfair burden upon the reputation of Boettcher Health Center:

> I think a large part as to why students (in general) have very negative perceptions of Boettcher is due to the perpetuation of rumors. Regardless of whether or not they're true - "I went into Boettcher because I wasn't feeling well. They did tests and told me I was pregnant. I'm a dude" Or "Boettcher said I have tonsillitis. I had my tonsils removed eight years ago" - these stories seem to be passed down from class to class, causing distrust and maybe even an underutilization of services. I've had nothing but positive and reliable experiences with the provider.

What Matters to Boettcher Patients

This identification of a disconnect between student satisfaction and student lore should not invalidate the claims and frustrations that students have regarding the failings of Boettcher. While some horror stories must be rumors, others may very well be faults of the clinic that can be addressed by staff and doctors to provide improved services to patients at Colorado College. Several very concrete themes arise when analyzing the comments as a whole. Firstly, and most prominently, respondents comment upon frustrations with misdiagnosis or lack of diagnosis. They seem to require definitive answers in order to consider their experience successful, but often do not receive definitive answers. Relatedly, respondents are frustrated by insensitivity on the part of the healthcare providers surrounding the issues of pregnancy and sexual health. Students feel diminished trust when providers require a pregnancy test as precautionary measure, despite the patient's insistence that pregnancy is not a viable cause of symptoms. They also report feeling shamed for substance and sexual behavior when receiving testing for sexually transmitted diseases. The following are excerpts from six respondents:

- The nurse openly commented on my relationship and my partner's faithfulness.
- The provider told me I "very likely had chlamydia" even though I told her I used protection.
- She made me feel terrible about going to get an STD check as a result of an abusive relationship. I left in tears without getting the exam done.

- She specifically became frustrated when I told her that I got a concussion while I was drunk.
- I've been told things like, "we only offer one free STI test a year because we don't want to encourage promiscuity."
- She was pretty judgmental and lectured me on promiscuity.

The claims that providers don't trust patients and that shaming takes place in the doctor's office on campus is unsettling, and could be addressed in the future.

Secondly, respondents had genuine issues with the administrative practices of Boettcher Health Center. Billing is unclear and untimely, prescriptions are lost or late, and callbacks for labwork are unreliable. Ensuring that patients receive the proper dose of the proper medication is crucial to ethical and appropriate healthcare; student reports of the health center's inability to reliably process appointments and follow up on treatment options are unsettling, to say the least.

Thirdly, access is a recurring theme in the concerns of patient respondents. An appointment with the psychiatrist specifically can be weeks out and walk-in appointments at the clinic are rarely possible even though Boettcher is advertised as a walk-in clinic.

When asked to rank the importance of the six satisfaction aims of healthcare, several patterns arose that confirm the concerns discussed above. The highest concern to students was health outcomes; 48.3 percent of students ranked that as first priority and 26.4 percent ranked it second. Ranked least important to respondents was confidentiality and appearance of the facility. Importantly, the top four concerns coincide with the comments above. Students take issue with what they see as misdiagnosis, judgmental providers, confusing bills, unreliable tests, and difficulty in making appointments.

CONCLUSIONS

The common "horror stories" of Boettcher seem distant from this study's quantitative results of quality and satisfaction measures. The reason for this disconnect

may be best explained as an intersection of three factors. Firstly, and most simply, there may be legitimate concerns regarding poor care at Boettcher Health in the arenas of misdiagnosis, approach to sexual health, administrative reliability, and appointment access.

Secondly, different types of students are satisfied by differing qualities of care. The data supports theories of the effects of certain sociodemographic qualities, including cases of lower opinions of quality for white students and students on a parental insurance plan, and lower rates of satisfaction for high income students, upperclassmen and students with a history of parental guidance in navigating healthcare. The fact that socially differing expectations for care at Colorado College exist means that certain flaws of the health clinic may be magnified, including the banter surrounding mannerisms and professionality that is typical of the Boettcher "horror story." It also means that the expectations that students have of their health center may evolve if the student demographic evolves in the future.

Thirdly, the outlandish stories about the clinic may be an example of the other-attributed emotions of suspicion and frustration, which tend to predict dissatisfaction with health services, functioning as a demographic characteristic (Dubé, Bélanger, & Trudeau 1996). The student body typical of liberal arts colleges may be predisposed to these other-attributed emotions because those students are disproportionately from the upper class (Aisch, Buchanan, Cox, & Quealy 2017). As part of the concerted cultivation-type childhood typical of their upper class families, qualities of independence, critical thought, suspicion and confidence have been long-instilled in the way that they approach the world (Lareau 2003). Hearing stories of impossible diagnoses and blatant incompetency

may prompt students to expect the worst when receiving services from Boettcher. When those rumors are unfounded, students are perhaps pleasantly surprised and report relatively higher levels of quality and satisfaction on an individual level. In other words, there may be a concentration of suspicious young people at Colorado College that perpetuate the poor reputation of Boettcher as a community, but the relatively high quality of service that they receive at Boettcher serves to increase patient satisfaction when things go well individually, contrary to expectations of the literature (Dubé**,** Bélanger, & Trudeau 1996). This paradox would result in the high reports of quality and satisfaction that seem contradictory to the comments rich in negative lore found in the present study.

Having a quality campus clinic is an important part of the well-being of the modern student population. Students able to seek care that diagnoses and treats them effectively are less likely to spread disease to others or miss classes - crucial to academic success. Given that patients are less likely to seek care that they find unsatisfactory (Pascoe 1983), it is important that efforts be made to close the gap between quantitative measurements of satisfaction and the negative lore on the Colorado College campus. It is hard to say whether students on campus have abstained from seeking Boettcher's care due to its poor reputation, but 66 percent of respondents said they would at least hesitate before recommending Boettcher Health Center to a friend. The lore matters.

The lore that surrounds Boettcher is not merely rumor. It is in fact rumors that have persisted into the popular culture of Colorado College, becoming legend (Mullen 1972). This legend connects students, serving as a talking point and is ultimately important to the student body for that reason. One of the most striking findings of this

research is the failure of respondents to accurately perceive the student body's opinion of Boettcher Health. The majority of respondents assumed that the student body is dissatisfied and yet the majority of respondents were themselves satisfied. Boettcher's lore is therefore not to be interpreted as evidence that the student body is dissatisfied with the clinic, but rather illuminate the unique culture that has propagated on campus.

Legends are born from unique or unusual events or places, and when those events and places remain unchanged, "chances are greater that a traditional legend will survive" (Mullen 1972:105). As new students enter the college campus every year, the experience of seeking care for the first time without parental guidance and in a clinic designed to serve the specific needs of young people is again refreshed, and the space for cultural lore is recreated for another year. Many other legends are born from the unique college experience of living away from home with more freedom and responsibility than ever before. Legends of "hookup culture," specific dormitories that are notorious for rowdiness, the distastefulness of Colorado Springs and the inadequate campus internet might just as easily be classified as "horror stories" that are passed down through generations. While there are little to no data that offer evidence for these claims, and even data such as the present study that dispute them, the legends live on. What takes place at Colorado College is a "collective transaction" (Mullen 1972) that continually constructs and revives legends through discussion and mutual experience. It's not that Boettcher Health Center is fatally flawed, and it may not even be that students are unhappy with their medical care. Boettcher is simply one example of many legends that define the Colorado College experience.

This study ultimately opens the door to more questions than it answers. Further research should be conducted in the areas of student clinics in order to formulate clear theories on the effects of gender, race, income and family involvement on student satisfaction with the clinical encounter. Specific questions, such as the finding that students of color are significantly more satisfied with immunizations than white students, warrant investigation as a way to understand the American healthcare system at large. Students enter the campus community from very different walks of life, and those differences must have effects on their medical experiences both on and off campus. Additionally, the demographics that lack statistical significance, such as gender, may be clues as to the importance of age in satisfaction research. Further studies might explore the possibility that the young adult lifestage of college students is a generational factor that masks effects of gender in healthcare satisfaction. Finally, research into the power of campus legends and their connection to group mentality will be necessary to understand how students connect as a body and mitigate damages that legends can cause.

Recommendations to Colorado College

Moving forward, Colorado College has two aspects of Boettcher Health's reputation to consider. First of all, it must work to address the legitimate concerns of students made evident by the comments of this study's survey. For example, the clinic should consider making providers aware of the insensitivity students feel regarding pregnancy and sexually transmitted disease (STD) tests. These patients should be informed that pregnancy tests are part of protocol for diagnosing and prescribing and should not be shamed for receiving more than one STD test per year. Also, difficult diagnoses should be explained more thoroughly so that students are able to understand

why clear answers and definitive treatments are not provided in some cases. Although budget implications may be unmanageable, the college should also consider the gender and racial diversity of staff and providers and the addition of a psychiatrist as part of an expansion plan in order to increase cultural competency and accessibility for all students.

The second aspect of Boettcher's reputation that must be considered is in working to dispel the campus' false lore. Working with New Student Orientation (NSO) leaders and Residential Advisors (RAs) to communicate campus health services to incoming students without perpetuating legends will be a crucial part of that. Training these campus leaders to fully consider data such as the present study can be a starting point for informing students of their misgivings regarding Boettcher Health, make the transition to college easier for future classes and change the rhetoric from horror to support.

Boettcher Health Center has room for improvement, but the student body at Colorado College also has an opportunity to evolve its culture to meet the facts of its community. The fact is, students may not be wholly dissatisfied with the clinic. Many students benefit from the health services offered, and the poor reputation that the student body perpetuates should not be a hindrance upon the good that the providers at Boettcher Health Center are able to do for this institution's community. Due consideration of the facts and mindfulness regarding the cultural legends that are allowed to survive is the challenge that Colorado College students now face.

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APPENDIX A

Survey: CC Student Perceptions/Opinions of Boettcher Health Center

Consent: Thank you for taking the CC Student Perceptions Survey of Boettcher Health Center. This survey asks questions regarding your perceptions of the quality of Colorado College's Boettcher Health Center and your satisfaction with its services. It should take around 15 minutes to complete. Your participation is voluntary and your responses will be anonymous. If you wish, you may stop taking the survey at any time. You may also opt to leave questions unanswered, or change your responses. Some of the questions will ask you about your utilization of Boettcher Health. Please know that your responses cannot be tied to medical records and that your health information will remain undisclosed to the researcher. Should you wish to anonymously expand on an experience at Boettcher, there is space at the end of the survey to do so. The information you provide will be used to better understand student perceptions of Boettcher at Colorado College and will not be used to investigate specific individuals or events. The administrator of this survey is Cora Lubchenco. For questions, please contact: cora.lubchenco@coloradocollege.edu. Following completion of this survey, you will have the option to enter to win one of three $10 Visa gift cards. By clicking on the ">>" button below, you indicate that you have considered the above information, are at least 18 years of age and agree to participate in the survey.

Q1: Have you ever visited Boettcher Health Center for physical or mental health services?

- Yes (1)
- No (2)

→ *Display This Question:*

If Have you ever visited Boettcher Health Center?; No Is Selected

Q1a: Why have you never visited Boettcher Health?

- I've never had a health problem while at CC. (1)
- I see my doctor at home instead, while on breaks from school etc. (2)
- I have a different provider in Colorado Springs. (3)
- Other (4) _____

→ *Then Skip To Q8*

→ *Display This Question:*

If Have you ever visited Boettcher Health Center?; No Is Not Selected

Q2: What services have you utilized at Boettcher Health Center (select all that apply)?

- Outpatient: evaluation/treatment for injury/illness/condition (1)
- Physicals: athletic or routine (2)
- Women's health (3)
- Immunizations (4)
- Mental health/counseling services (5)
- Lab work: blood or urine testing for pregnancy, STI, drug, infection (6)

→ *Carry Forward Selected Choices*

Q3: How would you rate the overall quality of the services you received? (Scale 0 → 10)

Q4: How would you rate your satisfaction with Boettcher Health's services regarding your most recent visit?

	Very Dissatisfied (1)	Dissatisfied (2)	Satisfied (3)	Very Satisfied (4)
Affordability: labs, immunizations, physicals, treatments (OTC and Rx)	•	• •	•	•
Accessibility/Convenience: appointment-making, clinic timeliness, hours of operation	•	• •	•	•
Appearance/cleanliness: facility building, including waiting room, bathrooms and patient rooms	•	• •	•	•
Confidentiality: feeling of privacy and confidence in clinic to protect records	•	• •	•	•
Health outcomes: success of treatment recommendations	•	• •	•	•
Manner of providers: physician, nurse and staff demeanor, time spent with you, attitude toward you	•	• •	•	•

Q5: If you are "Very Dissatisfied" or "Very Satisfied" with any of the above, or if you have any experiences with Boettcher Health that you would like to share, please elaborate below: _____

_____

____

Q6: How does your experience at Boettcher Health compare to your perception of others' experiences?

- Much better (1)
- Slightly better (2)
- About the same (3)
- Slightly worse (4)
- Much worse (5)

Q7: Would you recommend Boettcher Health to a friend?

- Certainly (1)
- Probably (2)
- Doubtful (3)
- Definitely not (4)

Q8: What is your perception of the Colorado College student body's overall satisfaction with Boettcher Health? The student body is:

- Very Dissatisfied (1)
- Dissatisfied (2)
- Satisfied (3)
- Very Satisfied (4)

Q9: Do you have anything else you'd like to share? Experiences, stories, perceptions and satisfaction are all important in understanding how students feel about Boettcher Health:

_____

_____

____

This last section consists of some basic demographic questions, as well as questions regarding your previous experience with healthcare. Please answer to the best of your ability.

Q10: What is your expected year of graduation?

- 2017 (1)
- 2018 (2)
- 2019 (3)
- 2020 (4)

Q11: What is your major/intended major?

Anthropology (1)
Art History (2)
Art Studio (3)
Biology (4)
Biochemistry (5)
Chemistry (6)
Classics (7)
Comparative Literature (8)
Computer Science (9)
Dance (10)
Economics (11)
Education (12)
English (13)
Environmental Science (14)
Environmental Policy (15)
Feminist and Gender Studies (16)
French, Italian, and Arabic (17)
Romance Languages (18)
Geology (19)
German (20)
History (21)
independently Designed Major (22)

International Political Economy (23)
Mathematics (24)
Mathematical Economics (25)
Music (26)
Neuroscience (27)
Philosophy (28)
Physics (29)
Political Science (30)
Psychology (31)
Religion (32)
Russian and Eurasian Studies (33)
Sociology (34)
Southwest Studies (35)
Spanish (36)
Theatre (37)
Undeclared (38)

Q12: What is your family's income bracket?
- 0-$50,000 (1)
- $51-100,000 (2)
- $101-250,000 (3)
- $251-500,000 (4)
- above $500,000 (5)
- I don't know (6)

Q13: What is your race/ethnicity (select all that apply)?
- African American (1)
- Asian/Pacific Islander (2)
- Hispanic/Latino (3)
- Native American/American Indian (4)
- White (5)
- Other (6) _____

Q14: What is your gender (select all that apply)?
- Male (1)
- Female (2)
- Trans (3)
- Queer (4)

Q15: Where do you call home?

Non-U.S. (1)
Alabama (2)
Alaska (3)
Arizona (4)
Arkansas (5)
California (6)

Colorado (7)
Connecticut (8)
Delaware (9)
Florida (10)
Georgia (11)
Hawaii (12)
Idaho (13)
Illinois (14)
Indiana (15)
Iowa (16)
Kansas (17)
Kentucky (18)
Louisiana (19)
Maine (20)
Maryland (21)
Massachusetts (22)
Michigan (23)
Minnesota (24)
Mississippi (25)
Missouri (26)
Montana (27)
Nebraska (28)
Nevada (29)
New Hampshire (30)
New Jersey (31)
New Mexico (32)
New York (33)
North Carolina (34)
North Dakota (35)
Ohio (36)
Oklahoma (37)
Oregon (38)
Pennsylvania (39)
Rhode Island (40)
South Carolina (41)
South Dakota (42)
Tennessee (43)
Texas (44)
Utah (45)
Vermont (46)
Virginia (47)
Washington (48)
West Virginia (49)
Wisconsin (50)
Wyoming (51)

Q16: How would you classify your previous experience with healthcare?
- I go for regular checkups to my family doctor and rarely need treatment. (1)
- I go to a doctor when I have a problem; I don't have a specific physician that I see. (2)
- I have health complications and have been seeing specialists for most of my life. (3)
- I am familiar with one doctor but rarely see him/her. (4)
- Other (5) _____

Q15: How involved were your parents/family in helping you navigate healthcare (i.e. making and attending appointments, filing insurance, paying bills) prior to college?
- Not at all (1)
- Somewhat (2)
- Very involved (3)

Q16: What insurance plan do you use?
- CC's provided insurance (1)
- Parent's private plan (2)
- I don't have health insurance (3)
- Other (4) _____

Q17: Please rank the following aspects of healthcare as they are most important TO YOU (drag and drop, placing the most important at the top):

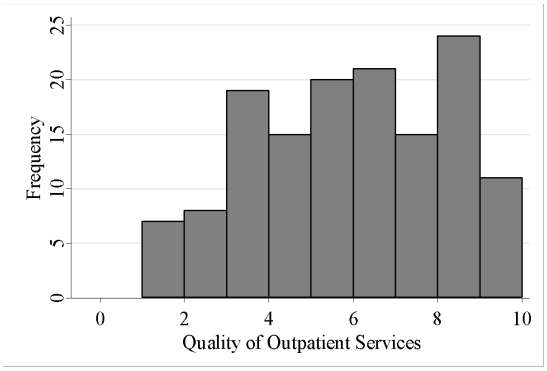
_____ Affordability (1)
_____ Accessibility/convenience (2)
_____ Appearance/cleanliness of facility (3)
_____ Confidentiality (4)
_____ Health outcomes (5)
_____ Manner of providers (6)

Thank you for taking this survey. If you have any questions regarding this survey, or you have more information regarding your opinions and perceptions of Boettcher Health Center, please don't hesitate to share:

_____

APPENDIX B

Figures 3 - 8. Distribution of Quality of Service Ratings.



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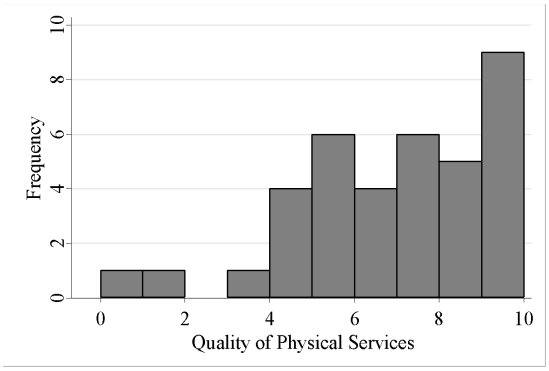

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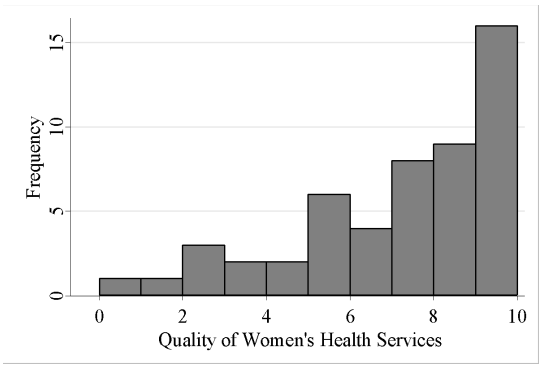

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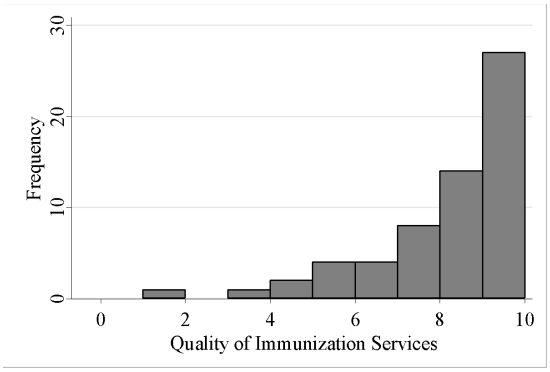

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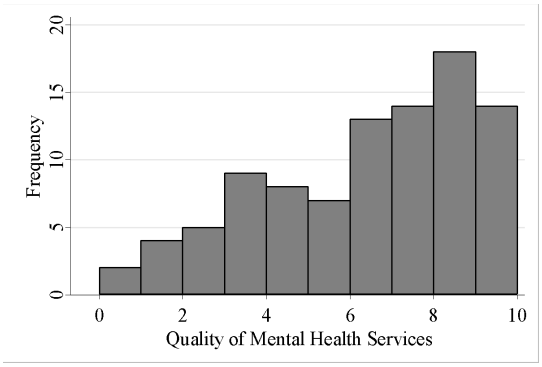

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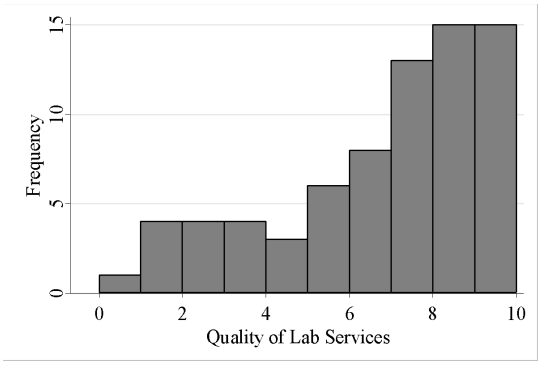

8.