# PATIENT EXPECTATIONS AT THE OPTOMETRIST'S OFFICE

by

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March 13, 2015

#### ABSTRACT

*Background:* Patients assess their health service experience a number of ways. We seek to uncover what aspects of the optometric practice patients value, what aspects they may ignore, and what aspects are detrimental. With the advent of electronic health records, we are also interested in how patients would like to see technology used in doctor-patient communication. *Methods:* Obtaining patient perception of the optometric experience will be conducted via survey. Patients will receive this survey among other paperwork when they check-in to the University Eye Center. Results: Survey forms were filled out by participants in February 2015. Twenty-four patients responded, ranging in age from five to sixty-three, with over half coming from the 18-34 year old demographic. Our data highlights patient preference in some aspects of optometric care while leaving other aspects more ambiguous. *Conclusions:* The results showed a few trends for patient preference based on age group. Younger adults (ages 18-34) showed more interest than older adults (ages 35-65) in utilizing technology to communicate with their eye doctor and to browse frame selection. Younger adults also preferred wireless internet as their convenience of choice to have in the waiting area. Patients expressed preference of exam time ranging from 30-60 minutes.

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#### CHAPTER ONE

#### INTRODUCTION TO PATIENT EXPECTATIONS AT THE OPTOMETRIST'S OFFICE

The goal of the optometrist is to maximize the well-being of their patients by attending to their visual and ocular needs. This should always be the first priority. A secondary priority should be to make sure that every patient has the best possible experience at the optometrist's office. This should always be important, but certain modes of practice rely more on positive patient experience than others. For example, in a private practice setting, the doctor is attempting to maintain his current patients as well as gain new ones, therefore maximizing the patient's experience will help in this area. On the other hand, a doctor in a hospital has less incentive and control over the patient's overall experience due to the setting.

Research has been conducted in the past as to how the doctor-patient relationship affects patient care<sup>1,2</sup>, but the entire staff of a practice has a hand in the patient's experience at the office. With the advent of electronic medical records, the patient's experience expands past the doors of the clinic as well. Communication with patients does not need to be confined to a telephone call any longer. Email and text are also being utilized to inform patients of appointments, relay treatment plans, and gather information from patients prior to being seen.

This survey is directed towards patients of an optometry practice. We seek to discover what patient value when going to the eye doctor, how to most effectively give patients the best experience possible, and in what ways patients are interested in using electronic medical records to communicate with the optometrist's office.

#### CHAPTER TWO

#### METHODS

An eight question survey was given to patients at the Michigan College of Optometry's University Eye Center. Questions focused on several areas of patient care and their experience at an optometric environment. Two questions focused on technology, four questions focused on pre-examination atmosphere, one question focused on the eye examination, and one question enquired about perception following the eye exam. Survey questions were selected for inclusion from a pool of thirty-five questions contributed by the authors.

Question One: *Would a regularly-updated Facebook page make you feel more confident about your decision to visit an optometrist's office?* Social media allows for practices to reach out to a broad audience with minimal to no cost. In terms of active users, Facebook averaged 157 million active daily users in North America during December 2014<sup>3</sup>. Americans using Twitter produced 115 million tweets per day<sup>4</sup>. Lastly Tumblr averages about 39 million blog posts each day from the United States<sup>5</sup>. With widespread popularity, the authors were interested if patients seek social media when making decisions about eye care.

Question Two: *Would you have any concern using a sign-in sheet upon arrival?* Privacy is a crucial aspect of patient care. While certain information is not included on

entry sign-in sheets, name and time of visit are minimal details included on sign-in sheets to allow for more efficient patient care. Health and human services states that sign-in sheets are covered under Health Insurance Portability and Accountability Act (HIPAA) Privacy Rules. This includes calling out patients verbally from the sign-in sheet as well as requesting they physically sign said sheet. An unreasonable example of information to request would include the patient to list the nature of their visit, or diagnoses<sup>6</sup>. The authors wanted to investigate if patients felt sign-in sheets violated any degree of patient privacy.

Question Three: What's the longest amount of time (in minutes) you would wait if the optometrist was running late? While productive practices strive to see patients in a timely fashion, unexpected events arise in which doctors see patients later than their scheduled time. The authors were interested to see how long a waiting period prior to being seen a typical patient would find acceptable, should the optometrist get behind schedule.

Question Four: *How important is having a separate kid-oriented space apart from the main waiting area?* Kid-oriented waiting rooms help children more easily pass time while waiting for exams. While parents can still watch their children, not having possibly anxious children may afford a less-stressed general waiting area. The authors attempted to understand how important a dedicated kid-oriented waiting area was to general patients.

Question Five: In your opinion, how much time (in minutes) is necessary for a comprehensive eye exam (vision and ocular health evaluation)? A comprehensive eye

examination includes evaluation of refractive and binocular status of patients as well as evaluation of ocular health. Dilation allows for a more thorough posterior segment view; however, the dilating eye drops do not work instantaneously. With these details in mind, the authors seek to discover patient perception of how long an eye examination "should" take.

Question Six: How likely would you browse for frames on an office's website that displayed their specific brands and styles of eyewear? Online frame retailers attract patient business from the variety of frames they can offer. Without the physical limitation of frameboards and display cases online retailers greater ability to display a vast selection of frames. The authors intend to see if patient interest would exist if traditional optometric practices offered their selection online, possibly including more frames than could fit on their frameboards alone.

Question Seven: *How long do you wear your primary set of spectacles?* Patients seek to update eyewear based on fashion as well as improved function. Patient insurance coverage for materials versus paying out of pocket likely influences purchasing decisions. While ocular examinations are recommended every 1-2 years for the majority of patients, the authors seek to see how long patients typically desire new eyewear<sup>7</sup>.

Question Eight: What waiting room convenience would you be most likely to use? A well-run waiting room ideally allows for patient comfort and ways to best pass time. The authors seek to understand what amenities patients value the most.

### CHAPTER THREE

#### RESULTS

A total of 24 surveys were completed with participants ranging in age from five to sixty-three years old. Certain aspects of our survey were expected to mean different things to different age groups. For example, young adults have had more exposure to technology than older people, in general, and therefore their preferences regarding the use of social media and wireless internet will influence their response to certain questions. We therefore chose to analyze the data separating the results into four groups based on age in 15 year increments: ages 5-17, 18-34, 35-49, and 50-65. As our clinic is located on a university, there is no surprise that the majority of responses (13) were in the 18-34 age group.





Question One: While the sample patient population overall responded with

mixed results to the importance of social media, the 18-34 demographic responded the

most positively with nine participants choosing either "Likely" or "Very Likely".



Table 1: A histogram displaying results of Question One, "Would a regularly-updated Facebook page make you feel more confident about your decision to visit an optometrist's office?" with survey choices broken down by age group.

Question Two: All but three responses were either very unlikely or unlikely, indicating that using a sign in sheet would not bother most patients.



Table 2: A plot representing patient response to Question Two, "Would you have any concern using a sign-in sheet upon arrival?"

Question Three: Most patients thought between 10-20 minutes was an appropriate

length of time to wait for the optometrist if he/she was running late, but longer periods,

up to 45 minutes and beyond, were acceptable to half of our participants. There was no



significant trend between age and acceptable wait time.

# Table 3: A plot showing patient response to Question Three, "What's the longest amount of time (in minutes) you would wait if the optometrist was running late?"

Question Four: Regarding having a separate pediatric waiting area, more patients responded with "Somewhat Important" and "Important" (12) versus "Somewhat Unimportant" and "Not Important" (8).



Table 4: A histogram depicting responses to Question Four, "How important is having a separate kid-oriented space apart from the main waiting area?" split amongst various age groups.

Question Five: Overall patients believe between 30-60 minutes is necessary for a

comprehensive eye exam, with 60 minutes garnering more votes than 30. Only one

patient responded that 90 minutes is adequate time for a comprehensive eye

examination and no patients chose 120 minutes or greater.



Table 5: A plot showing overall patient response to Question Five, "In your opinion, how much time (in minutes) is necessary for a comprehensive eye exam (vision and ocular health evaluation)?"

Question Six: Patients 18-34 years old would be most likely to browse for an office's



frames online, while the 50-65 year old demographic would be less likely.

Table 6: A histogram illustrating patient response to Question Six, "How likely would you browse for frames on an office's website that displayed their specific brands and styles of eyewear?" with survey choices broken down by age group.

Question Seven: Out of the 24 participants, five did not currently wear glasses. Of those that did, responses varied with the most common being 1-2 years and five or more years.



# Table 7: A histogram showing patient response to Question Seven, "How long do you wear your primary set of spectacles?" with survey choices broken down by age group.

Question Eight: Wireless internet mattered most to patients 18-34 years old. The availability of the bathroom was valued by all patients 50-65 years old. Light snacks were the least popular. Many participants chose multiple responses, with three choosing all the options. This question experienced the most variability regarding how many options patients decided to select.



Table 8: A histogram showing patient response to Question Eight "What waiting room convenience would you be most likely to use?" with survey choices broken down by age group.

#### CHAPTER FOUR

#### DISCUSSION

Due to a limited sample size and uneven age distribution of the participants, we are cautious on putting too much weight into the responses. However, certain trends emerge from the data while other trends were harder to identify.

In regards to social media, nine of the participants indicated interest in using a social media website in choosing an eye doctor. All of these were in the 18-34 age group. All participants in the 35-49 and 50-65 age groups responded negatively or inconclusively to this question. The same age group (18-34 year olds) responded emphatically to wanting wireless internet in the waiting room. While this age group was across the board when it came to looking at frames online, four out of five participants in the 50-65 age range responded strongly that they would not be interested in choosing frames in this way.

Another major trend seen was that patients were not opposed to a practice utilizing a sign-in sheet to keep track of patients in the waiting room. Only one person responded negatively to this question. HIPAA regulation prohibits requesting certain personal information on sign-in sheets (such as the reason for visit); we believe this contributed to patient non-concern for the majority of participants.

The majority of responses indicate that 10-20 minutes is an acceptable amount of time to wait for their eye doctor. This is fortunate, as some patient examinations take longer than initially anticipated. Coincidentally, this is also the average time given to patients after their appointment time before they are denied care and labelled a "noshow" at many practices. Patients and doctors should ideally have mutual respect of one another regarding punctuality. Lastly, participants agreed that comprehensive eye exams should take one hour or less to complete.

There was no consensus in regards to having a separate pediatric waiting area. This is likely due to the nature of the matter being a personal preference, no one age group or population expressing clear concern being in proximity to children. As our clinic did have a dedicated pediatric waiting area, we would be curious to see if the results would differ in an environment without a designed area for children.

There was no overwhelming trend seen in the amount of time a patient has worn their current pair of spectacles as well. Again, there are many different factors that influence this, including accessibility to an eye doctor, insurance, quality of vision, etc. These factors can come into play at any age.

Again, due to the small amount of responses, we are hesitant to place too much importance on the data received. The responses do show trends in certain areas which could aid practitioners in better serving their patients if taken into consideration. An increased sample size would serve to either reinforce or refute current conclusions. Also, sampling a practice environment with a more diverse patient population, in regards to age, would better represent the population seeking eye care. We believe

that frequent consideration of a patient base and their preferences would lead to an enhancement in the eye doctor-patient relationship.

## REFERENCES

- Goold SD, Lipkin M (1999). The doctor-patient relationship. *The Journal of General Internal Medicine*. 1999; 14(Supplement 1): S26-S33. Retrieved from <u>http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1496871/</u>.
- 2. Kelley JM, et al (2014). The influence of the patient-clinician relationship on healthcare outcomes: a systematic review and meta-analysis of randomized controlled trials. *Public Library of Science One*. 2014; 9(4): 1-7. Retrieved from <a href="http://www.ncbi.nlm.nih.gov/pubmed/24718585">http://www.ncbi.nlm.nih.gov/pubmed/24718585</a>.
- 3. Company Info Facebook Newsroom (2015). Retrieved from <a href="http://newsroom.fb.com/company-info/">http://newsroom.fb.com/company-info/</a>.
- 4. About Twitter, Inc (2015). Retrieved from about.https://about.twitter.com/company.
- 5. Tumblr (Press Information) (2015). Retrieved from https://www.tumblr.com/press, accessed Feb 2, 2015.
- 6. U.S. Department of Health and Human Services (2015). May physicians' offices use patient sign-in sheets or call out the names of their patients in their waiting rooms? Retrieved from <a href="http://www.hhs.gov/ocr/privacy/hipaa/faq/safeguards/199.html">http://www.hhs.gov/ocr/privacy/hipaa/faq/safeguards/199.html</a>.
- American Optometric Association (2015). Recommended eye examination frequency for pediatric patients and adults. Retrieved from <u>http://www.aoa.org/patients-and-public/caring-for-your-vision/comprehensiveeye-and-vision-examination/recommended-examination-frequency-for-pediatricpatients-and-adults?sso=y.
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APPENDIX A

IRB APPROVAL

#### Ferris State University

Institutional Review Board (FSU - IRB) Office of Academic Research Ferris State University 1201 S. State Street-CSS 310 H Big Rapids, MI 49307 (231) 591-2553 IRB@ferris.edu

- To: Dr. David Durkee, Timothy Vorgias and Michael Finn
- From: Dr. Stephanie Thomson, IRB Chair
- Re: IRB Application #141014 (Title: Patient Expectations at the Optometrist)
- Date: December 18, 2014

The Ferris State University Institutional Review Board (IRB) has reviewed your application for using human subjects in the study, "*Patient Expectations at the Optometrist*" (#141014) and determined that it meets Federal Regulations <u>Exempt-category 1C</u>. This approval has an expiration date of three years from the date of this letter. As such, you may collect data according to the procedures outlined in your application until December 18, 2017. It is your obligation to inform the IRB of any changes in your research protocol that would substantially alter the methods and procedures reviewed and approved by the IRB in this application. Your protocol has been assigned a project number (#141014), which you should refer to in future correspondence involving this same research procedure.

We also wish to inform researchers that the IRB requires annual follow-up reports for all research protocols as mandated by Title 45 Code of Federal Regulations, Part 46 (45 CFR 46) for using human subjects in research. We will send a one-year reminder to note the continuation of this project or to complete the final report. The final-report form is available on the <u>IRB homepage</u>. Thank you for your compliance with these guidelines and best wishes for a successful research endeavor. Please let us know if the IRB can be of any future assistance.

Regards,

A Thomason

Ferris State University Institutional Review Board Office of Academic Research, Academic Affairs

APPENDIX B

PATIENT SURVEY FORM



#### **Patient Satisfaction Questionnaire**

By evaluating the following aspects of patient care, you voluntarily agree to anonymously participate in a survey-based research project aimed at better understanding patient expectations at the optometrist's office.

Age:

Would a regularly-updated Facebook page make you feel more confident about your decision to visit an optometrist's office?

Very unlikely	Unlikely	Unsure	Likely	Very Likely			
Would you have	e any concern using a sig	n-in sheet up	on arrival?				
Very unlikely	Unlikely	Unsure	Likely	Very Likely			
What's the long running late?	est amount of time (in mir	nutes) you w	ould wait if the optomet	rist was			
0-10 min	10-20 min	20-30 min	30-45 min	45+min			
How important is having a separate kid-oriented space apart from the main waiting area?							
Not important	Somewhat not important	Unsure	Somewhat important	Important			
In your opinion, how much time (in minutes) is necessary for a comprehensive eye exam (vision and ocular health evaluation)?							
30 min	60 min	90min	120min	120min+			
How likely would brands and style	d you browse for frames o es of eyewear?	on an office's	website that displayed	their specific			
Very unlikely	Unlikely	Unsure	Likely	Very Likely			
How long do yo	u wear your primary set o	f spectacles	?				
Less than 1 year	r 1-2 years	2-3 years	3-5 years	5+ years			
What waiting ro	om convenience would yo	ou be most li	kely to use?				
Wireless interne	et Reading materials	Restroom	Light snacks	Television			