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Chronically Ill but Chronically Fabulous: An Overview of Crohn's Disease

An Explanation and Analysis of the Event Planning Process

Claire Wilcox Grand Valley State University

HNR 499 Dr. J. Chamberlain Prof. Nelson Van Elderen April 25, 2014

Dedications

I would like to thank, first and foremost, my Holy Father in Heaven. Without His constant guidance, provision, and healing I would not be where I am. It is through his power that I have been able to study abroad and succeed academically and socially in college. He walked with me through my physical and mental pain, lifted me up when it seemed impossible to go on, caught my tears in his cradled hands, and cheered me on through it all – simply fighting for his beloved child.

Both of my parents, Steve and Robin Wilcox, have been a constant support and encouragement throughout college – especially during my senior year. You have tolerated my mumblings and frustrations, and celebrated my successes and opportunities. Thank you for dedicating yourselves to prayer and wisdom to raise my sisters and I, and guiding us as we mature. Your spiritual leadership is a model that I hope to follow into my adult life. I love you very much. Words cannot fully express how thankful I am that you are my parents.

Amy Hinman, you are a firecracker. You hold a special place in my heart. Your passion for healthy foods and service to others is such an inspiration. I have seen you walk through challenges in the past year that I would not wish on anyone, but you have held your head high and looked toward the future with hope. Thank you for being such a *querida amiga mía*. Thank you for processing and fleshing out ideas for our senior projects together during junior year. I appreciate your encouragment to live out my dream.

Fourth, I would like to thank Nelson Van Elderen for being my academic advisor and mentor for this senior project. Your advice, support, and guidance have been invaluable. Thank you for being there when I needed your insight, even for impromptu chats in the Faculty Lounge. I always enjoy our conversations. Keep strumming that guitar!

One of the most important groups of people I would like to thank is the individuals who spent their time and energy preparing for and speaking at the seminar: Jan Huffman (R.Ph.), Dr. Kelly Hassberger (N.D.), Dr. Gordon Alderink (P.T. Professor & Honors faculty), and Crohn's patient, Scott Salik. Your expertise and testimonies are what made the seminar a success. It pleased me so much that each of you were able to participate and share your knowledge with the Grand Valley health sciences students.

The Frederik Meijer Honors College has been integral in the success of the Chronically Ill but Chronically Fabulous seminar. Their financial and educational support made this project the success that it was. Thank you to both Robyn Toth and Dr. Jeffrey Chamberlain for their assistance in working

out all of the details! Additionally, thank you to the all of the Honors faculty under whom I have had the wonderful opportunity to study during my four years at GVSU. Their creative and provocative teaching has been a memorable part of my college career.

To all of the various Grand Valley students and faculty, and other individuals who helped with aspects of the project whether data analysis, logistics, research, insight, or other materials. This includes, but is not limited to, Dr. Chris Hinsch, Dr. Karen Amisi, Dr. Carol Sánchez, Erin Grogan, Leah Wilcox, and Nathan Bair. Thank you for spending even a few minutes of your time to assist in the completion of this project. I would especially like to thank Jessica Naftaly, the student president of the Crohn's & Colitis Student Initiative at GVSU, for her positive attitude and passion for raising awareness about Crohn's disease! To Rachel Overkamp and Andy Deschaine of the Student Nurses' Association at GVSU for communicating the event to their student members! And to Erin Grogan, for her time spent creating the event flier!

Finally, I would like to highlight the local business in Grand Rapids whose sponsorship contributed to the seminar. These include the Green Restaurant on the East Beltline, the Bitter End Coffee Shop on Fulton, and the Electric Cheetah on Wealthy Street. Each is committed to supporting healthy, organic alternatives, and/or fair trade foods in today's food services market and I am happy to promote their businesses.

Introduction and Purpose

I received my diagnosis of Crohn's Disease – or regional ileitis – during my last semester of high school – a month before my 18th birthday. After four months of excruciating and debilitating pain, I was relieved to finally have an answer. This was only the second flare-up I had experienced, but it had taken a tole on my body and mind. Between the two flare-ups I suffered constant fatigue and abdominal pain, diarrhea and vomiting, extreme weight loss, pneumonia, arthritis, and anemia. Although it was a struggle, the diagnosis did not come as a complete surprise to my parents and me. Two of my mother's family members – her elder brother and young niece – had previously been diagnosed with Crohn's.

Psychological ramifications accompanied the intense physical effects of my flare-ups. The stress of wondering whether I would have an accident before making it to the restroom was constant. I also could not eat without fear of constant abdominal cramping. However, once I knew what I was dealing with, I was determined to not let the disease limit me. I began to take steps to control both the physical and mental effects of the disease by exercising regularly, taking medication, and changing my diet. I am fortunate to say that in college I have studied abroad, succeeded academically, actively participated in student life, and run several competitive distance races. Living beyond Crohn's has also taught me to be open about my struggles. My diagnosis is often one of the first things people learn about me. I frequently find that people I talk to have some connection with the disease; either they are patients themselves or know someone with Crohn's. I have listened to multiple stories over the years – each one distinct. As a result, I have learned to appreciate how others handle their own disease progression.

Driven by my own experience and inspired by others, I decided to work on raising awareness of Crohn's Disease among the health sciences student body at Grand Valley State University for my senior project. To accomplish this, I organized, marketed, and hosted an informative seminar about the disease and its management. With this seminar, I intended to give students a greater understanding of how the disease affects a patient's quality of life and how to prescribe a holistic approach to treatment if, and when, encountered during their professional career. With over 700,000 Americans currently suffering from Crohn's, I believe it is important that our future healthcare workers are aware of the disease so they are better able to provide comprehensive and beneficial healthcare to this select population.

The major tasks associated with completing the project were scheduling the event and venue,

advertising and marketing the seminar, and analyzing the seminar's effectiveness through surveys. My personal objectives in completing this project were (1) to acquire personal knowledge about Crohn's disease in order to apply it in my own life and (2) gain skills that supplement my marketing and business majors. My main (and personal) success metric used for the seminar was to have at least 30 people in attendance. This report provides a short overview of Crohn's disease, chronicles the planning process, and presents the outcomes of awareness change and lessons learned.

What is Crohn's disease?

This section will provide an overview of Crohn's disease (CD), its symptoms, and multiple management techniques: medication, surgeries, dietary management and exercise prescriptions. To find out more details about CD, please check out the video coverage of the Chronically Fabulous: An Overview of Crohn's Disease.

History

Dr. Burrill Bernard Crohn, a twentieth century physician, discovered regional ileitis and identified it as an inflammatory bowel disease (IBD) in conjunction with his colleauges, Dr. Leon Ginsburg and Gordon D. Oppenheimer, in 1932. They all worked at and researched from the Mount Sinai Hospital in New York City. It was their publication in the *Journal of the American Medical Association*, titled "Regional Ileitis: A New Clinical Entity," that led doctors to discontinue misdiagnosing patients with chronic appendicitis or tuberculosis and to start appropriately addressing patients' symptoms (Ellis, 2012; *Crohn's Advocate*, 2012). However, "The first description of [the] condition [was] made by Italian physician Giovanni B. Morgani" (*Crohn's Advocate*, 2012). Successive descriptions of the disease over the next two centuries can be found among several European physicians (Ellis, 2012; *Crohn's Advocate*, 2012).

Leading up to the doctors' collaboration, each had done research individually (*Crohn's Advocate*, 2012). Crohn – a physician, himself – pursued his interest in the digestive system early on (beginning during school in the early 1900s) despite the dissuasion expressed by his colleagues and superiors (*Crohn's Advocate*, 2012). It was a common belief among physicians at the time that tuberculosis was the only disease that affected the small intestine. Yet his tenacity and passion for learning, along with his expertise, eventually led to a revolution in the medical field and helped prepare the field for the identification of regional ileitis. His passion led to the development of clinical gastroenterological programs within various institutions by the 1930s (*Crohn's Advocate*, 2012). In 1940, gastroenterology was officially recognized as a medical specialty as a result of Crohn's efforts

(Crohn's Advocate, 2012).

According to Crohn, nearly 25% of patients were preliminarily diagnosed with chronic appendicitis. Due to his research and decisive actions, the symptoms of Crohn's are now more appropriately attributed to the IBD rather than tuberculosis (*Crohn's Advocate*, 2012). In 1930, Crohn encountered a 17-year-old boy suffering from "fever, diarrhea and a tender mass palpable in the abdomen" (*Crohn's Advocate*, 2012) who had received the typical diagnosis of tuberculosis (TB). Rather than simply assume this to be true, Crohn conducted various TB tests. They all proved negative. After performing several additional tests – all negative – Crohn argued with the surgeon that operation was necessary to abate the symptoms. Eventually, the primary physician agreed to the operation – during which he extracted 12 to 16 inches of inflamed ilieum, or small bowel (*Crohn's Advocate*, 2012). Final tests revealed that the mass was not tuberculosis, but another unknown condition.

Crohn originally supposed the condition to be rare, but encountered 14 cases within a year. Surgical removal of inflammation relieved patients' symptoms. As he worked on a paper to expose his findings he joined forces with Drs. Leon Ginsberg and Gordon D. Oppenheimer, as they were conducting similar research. It should be noted that the doctors names were listed in alphabetical order in the publication. Regional ileitis only acquired the popular name of "Crohn's disease" when surgeon Brian Brooke used the physician's name to refer to the disease in his publications for the medical journal *Lancet (Crohn's Advocate*, 2012).

Etiology and Symptoms

Crohn's disease is one of two chronic (life-long) inflammatory bowel diseases (IBD) that affect an individual's gastrointestinal tract. Crohn's affects the entirety of the gastrointestinal tract (GI tract) – unlike ulcerative colitis which only affects the colon – from the mouth to the anus. There is no specific cause of the disease, but the risk factors for diagnosis include environmental factors, genetic predisposition, and a disregulated immune system (AnimatedIBDPatient, 2013b). Environmental factors include infections, smoking and taking Non-steroidal anti-inflammatory drugs. A disregulated immune system determines whether or not a body responds appropriately to infections (AnimatedIBDPatient, 2013b). Studies have shown a greater likelihood of diagnosis in individuals who have IBD patients as relatives. Inflammation is essentially the body's reaction to infection, but in Crohn's patients the body overreacts and does not automatically shut off the production of protective cells once the infection has disappeared. This is what leads to the uncomfortable symptoms of CD

(AnimatedIBDPatient, 2013b).

The most common locations of inflammation for Crohn's patients are the ilium (the small intestine) and the beginning of the colon, also known as the large intestine (CCFA, 2013; Crohn's & Me, 2014). Crohn's is a disease that causes the "body's immune system [to begin] attacking healthy cells in [the] GI tract, causing inflammation." (Crohn's & Me, 2014). Skip lesions (spotty inflammation) characterize Crohn's disease when the intestines are inflamed and can affect all levels of the mucosal wall. On the other hand, ulcerative colitis affects only a patient's large colon; is treated somewhat differently than CD; and is characterized by continual inflammation on the surface levels of the mucosal wall (CCFA, 2013; Crohn's & Me, 2014).

The majority of people affected by CD are Caucasians, although an in increased in the number of African American patients has been recently observed (CCFA, 2013). Those most commonly diagnosed are of Eastern European descent, especially individuals of Jewish European descent. (CCFA, 2013). Interestingly, men and women are affected equally (CCFA, 2014; Crohn's & Me, 2014c). Yet, people who have close relatives with Crohn's Disease have a higher risk of diagnosis. Studies have shown that five to 20% of Crohn's patients have an immediate (first-degree) family member with the IBD as well (CCFA, 2013). Crohn's can affect patients of any age, but the disease typically manifests itself between the ages of 15 and 25 (Crohn's & Me, 2014c). The Crohn's & Colitis Foundation of America extends that range to 35 years of age (CCFA, 2013). Additionally, Crohn's disease is more common in developed rather than underdeveloped countries, and in the northern versus southern regions of the globe. (Hempstreet & DiPiro, 2008).

The symptoms of Crohn's disease typically reflect inflammation in the gut. When a patient is experiencing heavy inflammation for different lengths of times, this is called a flare-up. "Symptoms can range from mild to severe and even life-threatening" (CCFA, 2014b). Table 1 lists the general symptoms of Crohn's indicative of gastrointestinal inflammation. Crohn's, as a chronic illness, has the potential to affect other parts of the body including the mouth, joints, liver, and eyes, which are also listed in Table 1 (Crohn's & Me, 2014b; AnimatedIBDPatient, 2013b). These symptoms are often treated and prevented with multiple drug therapies. However, a proper diagnosis must be made before administering treatment. The typical diagnostic process begins with blood and stool tests which measure biomarkers and other indicators of inflammation (CCFA, 2011). The more thorough and definitive tests include a colonoscopy, a barium x-ray, and CT scans, among others (CCFA, 2011; Crohn's & Colitis Info, 2013).

General Symptoms	Additional Symptoms
 Diarrhea Abdominal pain Rectal bleeding Fever Weight losss Abscesses (a local infection) Fistulas (abnormal tube connecting 2 hollow organs, for instance the vagina and colon) Intestinal obstructions 	 Joint inflammation Skin inflammation Eye inflammation (uveitis, iritis) Liver inflammation Anemia (AnimatedIBDPatient, 2013b; Crohn's & Me, 2014b)

Table 1: Crohn's Symptoms

Drug Therapy

The goals of drug therapy for Crohn's disease, as defined by the CCFA, are achieving remission, maintaining remission, and improving quality of life. Doctors may recommend over-the-counter (OTC) prescriptions to help alleviate symptoms, but they will not be effective for long-term management (CCFA, 2013). Prescription medications have proven most effective in reaching all three of the management goals, individually and simultaneously. There most common medications include aminosalicylates, corticosteroids, immunomodulators, biologic therapies, and antibiotics. Aminosalicylates decrease inflammation of the inner wall of the intestine and are commonly used to incite remission of symptoms for mild to moderate diseases (CCFA, 2013). Corticosteroids are administered as a short-term solution to inflammation by blocking the body's inflammatory process. They are not recommended for long-term use due to their debilitating side effects (CCFA, 2013). Immunomodulators are used by patients whom have not responded to the two previous categories of drugs. They prevent the body from maintaining ongoing inflammation and promote remission. Biologic therapies "target very specific molecules involved in the inflammatory process (CCFA, 2013, p. 7). These are the fourth tier of drug treatment that are adept at preventing fistulae (CCFA, 2013). Antibiotics are used in instances of infection "and for post-operative prevention of recurrent Crohn's disease" (CCFA, 2013, p. 8). Aside from these main categories, drug treatments are being developed and tested, one of which is a TNF-inhibitors which prevents inflammation at the molecular level (Crohn's & Me, 2014a). This is a more advanced form of treatment which precedes surgery.

Please refer to the <u>seminar coverage</u> or another pharmaceutical source for a more detailed explanation of the specifics of drug treatment.

Surgery

According to the CCFA, about 75 percent of Crohn's patients will require surgery at some point in their lifetime (CCFA, 2010). Surgery is often prescribed for CD in the following situations:

- 1) Intestinal obstruction or blockage scar tissue or narrowing of the intestines caused by repeated inflammation.
- 2) Excessive bleeding in the intestine a rare occasion that only requires surgery if medication cannot control the bleeding.
- 3) Perforation of the bowel holes that occur in the intestinal wall weakened by recurrent inflammation.
- 4) Fistula ulcers that push out of the intestines to connect with another organ such as the anus, bladder, or vagina.
- 5) Abscesses collections of pus in the abdomen, pelvis or near the anal area.
- 6) Toxic megacolon rapid enlargement of the colon involving extreme pain and health risks.

(CCFA, 2010).

Surgery for Crohn's disease is not curative, unlike for UC, being that the disease can affect the entire GI tract versus an individual portion (AnimatedIBDPatient, 2013a). However, it does prove to alleviate the symptoms and flare-ups for an extended period of time (CCFA, 2013). The exact surgeries prescribed for CD patients depends on the location of the affected area. For example, A stricture plasty – a lengthwise incision sewed crosswise – and small bowel resection are used to treat small bowel disease. Colonic disease is treated with a large bowel resection, colectomy and proctocolectomy (CCFA, 2010). Ultimately, surgeries can greatly increase a patient's quality of life, and are often used in conjunction with continued drug treatment.

Exercise Prescription.

The research is minimal regarding the definitive link between exercise and an increased quality of life or reduction of symptoms for a Crohn's patient. Yet, the little research that has been done has concluded that two types of exercise could help regulate the body's overall health and help maintain remission to an extent.

Pérez (2009) conducted a study that investigated the positive effects of different types of physical exercise on the quality of life and physical condition of Crohn's disease patients. According to his results, different types of physical exercise have positive potential for Crohn's patients. The results

of multiple studies have been inconclusive thus far on the anti-inflammatory benefits of physical exercise, while the effects on disease symptoms and life-quality benefits are more promising (Pérez, 2009). It was concluded that muscular resistance training and various forms of aerobic exercise can both be beneficial. Aerobic exercise was observed to decrease pain, bone mineral loss, fatigue, intestinal problems, sleep disturbances and anaemia (Pérez, 2009). Muscular resistance training positively addressed bone mineral loss, fatigue, and body composition (i.e. total body weight) (Pérez, 2009).

The quality of life benefits are separated into three aspects: emotional state, physical and functional state, and social state. Regular, moderate exercise, says Pérez, can act as an anti-depressant for a patient (2009). This hormonal change of mood is especially critical to combat the psychological stress that accompanies both the physical pain and the disease's unpredictability (Pérez, 2009). Moreover, physical activity breaks the cycle of physical deterioration that occurs as a result of fatigue. Listlessness often leads to inactivity, which does not stimulate the body, etc. Stimulating the body through exercise prepares the patient to handle daily life (Pérez, 2009). Finally, physical exercise encourages a positive attitude towards social activities, family, and self-image. Often, Crohn's patients are plagued by multiple insecurities and other stresses which lead them to avoid social gatherings. Pérez (2009) recommends encouraging patients to engage in low-key physical activities with friends, such as walking, to avoid isolation during such a desperate time of disease activity.

Pérez (2009) concludes positively, but cautions that more research must be undertaken for more conclusive results. He recommends that a Crohn's patient undertake some sort of physical activity, but not without consulting his or her doctor first. The unpredictability and uniqueness of the disease among patients demonstrates that considerable care must be taken to ensure the most beneficial results are obtained.

Nutritional and Dietary Management

The inflammation of Crohn's disease can lead to several complications. Malabsorption of nutrients occurs when the intestines are routinely inflamed, the degree of which differs according to the severity of the disease (CCFA, Nov 2013). Patients experience chronic fatigue and anaemia as a result of nutritional deficiencies. Malabsorption can also lead to growth delays in children with CD because their bodies are receiving poor nutrition (CCFA, Nov 2013). Similarly, patients of all ages are prone to experience decreased bone mineral density (osteoporosis) and an increased risk of bone fractures as a result of mineral and nutritional deficiencies (CCFA, Nov 2013). Strictures – the narrowing of the

intestinal passage by scar tissue and inflammation – are a fourth complication that require dietary modification in order to decrease inflammation and subsequently widen the intestinal passage (CCFA, Nov 2013). Each of these complications have the potential to decrease a patient's quality of life to differing degrees. Dietary and nutritional management seek to reverse malabsorption by culturing the presence of healthy bacteria in the gut which also heals the mucosal lining and reduces inflammation (CCFA, Nov 2013).

There is no particular evidence to suggest that a specific diet decreases the recurrence of Crohn's in patients. The fact that CD manifests itself differently for each patient also makes it difficult to formulate a single, all-encompassing diet and restorative diet. However, numerous professionals and the Chron's & Colitis Foundation of America provide several general guidelines and principles for nutritional and dietary management. The CCFA recommends avoiding trigger foods, typically the most common food allergens, such as dairy, "eggs, peanus, treenus, wheat soy, fish and shellfish" (Nov 2013, 11). While fiber is a necessary component to a healthy diet – it encourages digestion, it is rough on the intestinal walls and often difficult to digest for Crohn's patients experiencing flare-ups (CCFA, Nov 2013). Many patients are advised to avoid a high fiber diet as a result. High-fat foods and non-absorbably sugars (sorbitol, mannitol) should be avoided or consumed in small amounts because they cause diarrhea, bloating and gas, respectively. "FODMAPs (Fermentable Oligo-Di-Monossacharids & Polyols) are sugars found in certain carbohydrates and sugar alcohols" (CCFA, Nov 2013, 14). These also cause extreme gas, diarrhea, cramping and bloating among patients intolerant to FODMAPs and should be avoided (CCFA, Nov 2013).

To appropriately manage their diseases, the *Diet, Nutrition, and Inflammatory Bowel Disease* distributed by the CCFA patients are encourage to engage in several activities. These activities include drinking large amounts of fluids (water, low-sugar drinks), avoiding trigger foods, eating smaller meals, and taking mineral and vitamin supplements as needed (CCFA, Nov 2013). Ultimately, highly recommends that patients develop a personal diet that caters to the nature of their disease, their intolerances, previous surgeries, and known nutritional deficiencies in order to regain a balanced lifestyle.

Designing the Seminar

Several major tasks needed to be completed in order to successfully host the seminar. These included deciding and obtaining a location, date and time; obtaining sponsorship for the event expenditures; designing the promotional materials and marketing the event; contacting and finding several professionals to speak at the event; and writing and analyzing the survey (results) to gauge awareness. In order to accomplish all of the major and minor tasks on time, I first compiled a Schedule for Completion. I worked with Professor Van Elderen to adjust and finalize and referred to this Schedule over the course of semester. The next few sections will go into more detail regarding my processes of implementation and the respective results.

Scheduling: Location and Date

The choice of location for the seminar was of paramount importance for attendance. In order to have a sizable attendance, I wanted to choose the most appropriate location. The location of targeted students (nursing, pre-PT, pre-med, radiology, etc.) and their schedules were the main factors guiding my choice. I had a choice between the Kirkhof Center in Allendale and the Cook-DeVos College of Health Sciences (CHS) in downtown Grand Rapids. Originally, in late January/early February, I reserved a room in Kirkhof for Wednseday, April 2nd as a placeholder until the other details were finalized. This way I would be able to have a date of reference as I contacted professionals for the event. However, I retracted this registration once I spoke with a number of health science professors and several student organizations. I exchanged e-mails extensively with Rachel Overkamp, student president of the Student Nurses' Association (SNA), and several faculty members before concluding that hosting the seminar in CHS in Grand Rapids would be the best location. This was due to the majority of health students having classes downtown in a single building – CHS – and their tight schedules. For several weeks I tried to see if it would be possible to host the seminar during a regularly scheduled meeting of the SNA on a Monday afternoon, but the organization's full schedule would not permit this (R. Overkamp, personal communication, February, 2014). Eventually, it was decided to host the Crohn's event on a Monday afternoon on the off-week of the SNA meetings. By working with Robyn Toth, the location and date of the event was secured: the Hager Auditorium at the Cook-DeVos College of Health Sciences (CHS 119) in Grand Rapids, MI on Monday April 7th from 12PM-1PM.

Budgetary Considerations

Next, I interacted with the Honors College director and coordinator, Dr. Jeffrey Chamberlain and Robyn Toth, respectively. Both mentioned that the Honors College would be able to sponsor a

limited amount of the expenditures for the project. On February 13th, I submitted an initial budget proposal with an approximate proposed expenditure of nearly \$850. The costs associated with this proposal included:

- Gift cards as thank-you's to the speakers
- Room registration in the College of Health Sciences
- A cancellation fee for the Kirkhof Center room registration
- A fee for the recording of the event and video production by

the GV Video Promotions Team

• Printing and promotional package from the Promotions Office for marketing

The overall budget was denied. However, portions of the expenditures could be paid for by the Honors College. Both Dr. Chamberlain and Professor Nelson Van Elderen suggested that I look for alternative ways to defray expenses, such as local restaurants and on-campus organizations. I could not obtain on-campus sponsorship by the Crohn's & Colitis Student Initiative (CCSI) due to budgetary cuts to the GVSU Advocacy Board's funds, and I did not ask the SNA for money because I was not a student member.

Sponsorship. In the meantime, I drafted a Sponsorship Proposal to submit to a number of local businesses that I would visit before and during spring break (March 3-8). Included in the Proposal were an introduction to my project and its purpose and a request for several gift cards approximately valued at \$20-25. In exchange for the donation of gift-cards, I promised to highlight each specific company as a sponsor on the promotional material, and at the event to those in attendance. An example of the Sponsorship Proposal can be found in the Appendix 1.

The first round of visits I made were partially successful. A manager at the Green Restaurant gave me a gift card right away. I also received positive feedback from the BitterEnd Coffee House and the Electric Cheetah, but had to return several times before the donations were prepared. A request for a W-4 form from Grand Valley State University (the University) by the manager at the Electric Cheetah for a tax write-off was an unexpected turn of events which elicited a second visit to the dining establishment. The documentation was easily acquired from Robyn Toth and delivered by myself. The results of my sponsorship search can be viewed in Table 2 below. Closer to the event, I realized that an additional gift card was needed in order to cater to each of the speakers preferences and respective locations. I personally resolved this issue.

Company	Sponsorship	Multiple Visits	Gifts	Logos	Tax Credit Form
The BitterEnd Coffee House	Yes	Yes	Two (2) gift cards for 10 complimentary drinks each	Yes	No
The Electric Cheetah	Yes	Yes	Two (2) \$12 Cheetah Bucks (\$24 total)	Yes	Yes
The Green Restaurant	Yes	No	One (1) \$20 gift certificate	Yes	No
Bartertown Diner	No	Yes (& phone calls)	N/A	No	No
The One Trick Pony	No	No (1 visit & multiple phone calls)	N/A	No	No

Table 2: Sponsorship

Video Recording. Another way that I was able to reduce the original budget was by leveraging my participation in the Honors College for the event location. I partnered with the department to gain a University discount of 100% on the cost of room registration and IT support. Robyn Toth registered the Hager Auditorium in CHS at no cost to myself or the Honors College. The department was also able to cover the \$150-cost of a Video Project. I delivered and finished filling out a Video Service Request form (Promotions, 2013) to the Promotions Office in Allendale several weeks before the event (B. Nielsen, personal communication, March 18, 2014). The official video recording can be viewed *here*.

Printed Materials. Originally, I had planned to print one set of materials: the event flier. This changed over the course of the semester as the event approached and additional materials were needed. First, I planned to market the event by posting physical fliers around the buildings on both the Allendale and Grand Rapids campuses. I submitted a second Budget Proposal to the Honors College after addressing the sponsorship and room registration issues (Appendix 2). Yet, due to finalizing the flier fairly late with a student volunteer in March there was not enough lead time to get the fliers printed and posted. Instead, I used several virtual distribution channels to reach the targeted students and save on costs. These channels are discussed in the Marketing Communications section below.

Two weeks before the event, I decided it would be beneficial to put together and print a pamphlet for the event and the follow-up surveys. I finished designing the pamphlet on Wednesday, April 2. The finished pamphlet included the event schedule and the speaker profiles. I investigated whether or not a rush job could be performed – which it could not. To my pleasure the Management Department at the Seidman College of Business let me use its materials to print the fliers in color. Otherwise, I would have settled to print them in black and white from the student printers available around campus. It was from these resources that I printed the 140 follow-up surveys for the seminar. Ultimately, expenditures were greatly minimized through collaboration with various campus departments and sponsorship by local dining establishments.

Topics and Speakers

In designing the seminar, I operated according to the belief that it would be best to obtain the participation of professionals in the various fields necessary to address the aspects of Crohn's and its management: etiology and diagnosis, surgeries, medication, physical activity, and nutrition.

Additionally, I thought it would be insightful to provide a patient's perspective on living with Crohn's for the students as empirical evidence. I determined that I would need five (5) speakers total.

Optimally, I wanted to obtain the participation of a gastroenterologist, a pharmacist, another medical professional related to physical activity (i.e. exercise science, physical therapy), a Crohn's patient, and a nutritional expert. I began researching local professionals whom I could request to participate; I also leveraged several personal contacts. I did not have much trouble finding any of the experts except the gastroenterologist.

Etiology, Diagnosis, and Surgeries – Gastroenterologist. During February and March, I contacted gastroenterology units around West Michigan including Mercy Health in Muskegon, Spectrum Health in Grand Rapids, and Digestive Disease Specialists P.C. of Grand Rapids. Despite multiple calls and communication with office managers, I was unable to find a volunteer. No gastoenterologist was able or willing to help out due to it being spring break for the local public school during the week of April 7th, as well as vacation plans and the increased workload on the remaining professionals. Alternatively, I inquired with several primary care physicians to see whether or not they could speak on the etiology, surgeries, and/or diagnosis of Crohn's disease. The results were similar; patient appointments and vacation plans interfered with the date of the event. It became apparent that I would need to find an alternative source to highlight these topics.

To resolve this issue I performed online research on YouTube and multiple IBD resource

websites for the necessary information. Since the beginning of the semester, I had planned to emcee the event and personally did not want to speak. Moreover, I wanted to provide an interesting and varied seminar for the students – so I searched for and reviewed various IBD videos to play. In late March I finalized the videos to be used after obtaining the input of my advisor (N. Van Elderen, personal communication, March 23, 2014).

Three videos were used at the seminar to address the etiology, symptoms, diagnosis and surgeries associated with Crohn's disease. The main criteria I used in selecting the videos were (1) length and (2) content. In the research process, I found several videos that dealt with important aspects of the disease, but had to decide between them according to which information about CD was most important for the students to learn. Time was also a major constraint, as the seminar was only scheduled for an hour and I wanted to wrap up within about 50 minutes. Eventually, I found several IBD YouTube channels that proved very useful as well as another website that had similar videos about the diagnosis, etiology, and symptoms.

Two of the videos I selected are posted on the AnimatedIBDPatient YouTube channel. The information from these videos is sponsored by Mechanisms in Medication, Inc. The first video, "What is Crohn's Disease?", defines the disease, reviews the multiple risk factors of CD, and explains how a flare-up (chronic gastrointestinal inflammation) results in a variety of symptoms for different patients. It also highlights that the goal of a healthcare provider is help the patient control the disease and not the disease manage the patient (AnimatedIBDPatient, 2013b). This video was chosen over others for its summary of Crohn's in a condensed format; although, it does not highlight the different "types" of Crohn's disease characterized by the existence or absence of fistulae (Crohn's & Colitis Info, 2013).

The second video played at the seminar covered the various procedures used to diagnose Crohn's disease. Multiple procedures are used because of the different manifestations that occur with CD (Crohn's & Colitis Info, 2013). These procedures include blood work, barium x-ray, colonoscopy, biopsy, CAT scans, CT enterography, and video capusle endoscopy (Crohn's & Colitis Info, 2013). I chose this video because, once again, it presented the necessary information quickly and concisely, as well as its reputable sourcing from an IBD website.

The third video, "Small Bowel and Large Bowel Surgery", is from the same YouTube channel as the "What is Crohn's Disease?" video. It actually covers surgeries associated with both ulcerative colitis (a lower grade IBD) and Crohn's. To save time and avoid extraneous information, I skipped the portion of the video that touched on the surgeries for UC by manually forwarding the video from 1:00-

minutes to 2:30-minutes on the YouTube video (AnimatedIBDPatient, 2013). The total time allotted to videos during the seminar was about 11 minutes. Fluidity was key when transitioning between the sections and topics of the seminar in order to finish on-time.

Pharmacist – Medication Therapies. Jan Huffman is a registered pharmacist from the Greater Grand Rapids area. She graduated from Ferris State University in 1981 with a Bachelor of Science in Pharmacy, with high honors. She immediately began practicing as a partial owner of Modern Pharmacy in Grand Rapids, where she remained through the year 2000. Jan then went on to practice as CVS/Pharmacy, occupying several positions, including Pharmacy Manager, Pharmacy Supervisor, and District Sales Manager. While at CVS, she developed and implemented a variety of training programs for the pharmacists and pharmacy technicians. She also serves as a featured speaker for Pharmacist Continuing Education courses. Jan now words as a Pharmacy Manager at a local Family Fare. When not working, Jan enjoys camping and traveling, playing the flute, and spending time with her family.

Finding a pharmacist to speak at the event was not difficult in the least. Both of my aunts on my father's side, Jan Huffman and Julie Morales, and my cousin, Mark Huffman, are registered pharmacists by trade. Early in February, I contacted all three to see who might be available and willing to offer his or her expertise. Each was willing and able, but eventually it was narrowed down Jan because of Mark and Julie's lack of availability. Upon request, I provided Jan with pharmaceutical information for Crohn's management from which she studied and prepared slides and a short speech for the seminar.

Nutritional & Dietary Management – Naturopathic Doctor. Kelly Hassberger graduated with a Doctorate in Naturopathic Medicine, with highest honors, from Southwest College of Naturopathic Medicine in July 2011. She then went on to complete a 1-year general medicine residency in Naturopathic Medicine at the Southwest College of Naturopathic Medicine Medical Center. She has always had a passion for medicine. Through growing up in a household that opened her up to the power of a healthy, loving, fulfilling life, she found her passion in Naturopathy. She utilizes various tools including, but not limited to, homeopathy, nutritional supplementation, lifstyle counseling, and botanicals (Hassberger, 2012). She currently works as a Naturopathic Health Consultant at Grand Rapids Natural Health.

In February, I was able to obtain the participation of Dr. Hassberger through the recommendation of a close friend, Amy Hinman, who had recently been diagnosed with clcerative colitis in December 2013. She, like myself, is passionate about healthy living, and organic and non-

GMO foods. She and I hold the belief that the food that we put in our bodies has a direct effect on how well our bodies and minds function on a daily/regular basis. With Amy's recommendation that "Kelly, the ND, is super great" and a review of the Grand Rapids Natural Health webpage, I contacted Kelly (A. Hinman, personal communication, February 1, 2014). She was more than willing to speak at the event upon contact. At the seminar, Dr. Hassberger spoke about the dietary needs of Crohn's patients during the different stages of the disease, and additional naturopathic management techniques to minimize the harmful effects of Crohn's disease.

Physical Therapist – Prescription of Exercise. Gordon Alderink, fondly called "Gordy" by his students, has been an associate professor of Physical Therapy for the Cook-DeVos College of Health Sciences, and a Faculty-in-Residence for the Frederik Meijer Honors College at Grand Valley State since 1984. Following the receipt of his Bachelor of Arts and Biology from Hope College in 1976, Gordy obtained his Certificate of Physical Therapy from the Mayo Foundation in 1978. He has a Master's of Science in Education from the University of Michigan, and a Doctorate in Philosophy, Engineering, and Mechanics from Michigan State University. In the past, he has also coached the Grand Valley Lakers Women's Softball team. Outside of work, Gordy enjoys spending time with his family, reading, and classical music. He lives out his passion for an active lifestyle by golfing and road bicycling (G. Alderink, personal communication, February 28, 2014).

Gordy shared his professional and personal expertise regarding the role of physical exercise for the health of Crohn's patients. Being that there is limited research on the relationship between Crohn's and a patient's habit of exercise, he offered cautionary advice when prescribing exercise. He recommended that on average 2-3 times per week at at least 30minutes of continuous exercise, not including warm-up or cool-down. I was very pleased with his participation and the insight he offered the students.

A Patient's Perspective. Scott Salik is a local Crohn's patient, living in Rockford, Michigan. He is currently married with four children, who are now grown. He graduated from Cornerstone University with a Bible degree. Scott has held a variety of positions throughout his adult life: ski instructor, manufacturer technician representative, and United States Postal Service rural carrier. However, his longest held position has been that of privately educating his four children – which has been a very rewarding career. When not being a husband and father, Scott can often be found cross-country skiing and enjoying a number of other outdoor self-powered sports (S. Salik, personal communication, March 27, 2014).

I had originally planned to have at least two patients speak at the event, both male and female, which I searched for in my social and academic circles. Not only do I have several family members with Crohn's, but I am acquainted with several other Crohn's patients, who are students at Grand Valley like myself, through the Crohn's & Colitis Student Initiative. I also hoped that one of the students might be willing to help out. I posted on the group's Facebook wall, but the few who were interested and willing were unable to make the date of the event due to academic conflicts. In the process of selecting a patient, I did, however, interview a female student who had been diagnosed with CD at the age of 9. Liz Fredericks, gave me her patient's testimony in late February in order for me to screen her testimony in case she was able to speak at the event (E. Fredericks, personal communication, February 25, 2014). Unfortunately, on March 5, she notified me that she would be unable to do so. In light of this sequence of events and the limited event schedule of 1-hour, I realized that highlighting only one patient would be feasible.

Initially, I had contacted my uncle, Scott Salik, to see whether or not would give his testimony at the event. Albeit with slow communication, he confirmed that he would gladly speak. As the official date of the event neared (Monday, April 7), I realized that selecting Mr. Salik as the featured Crohn's patient was the best decision I could make. His unique and prolonged (and yes, tumultuous) history with Crohn's would provide an insightful portrayal of the all-encompassing effects of CD on a patient's quality of life.

Marketing Communications. As mentioned above, the original plan was to have the campus Promotions Office, design, print, and distribute a promotional flier around both Grand Valley campuses. The steps for this required submitting written copy and potential designs ideas to the Promotions team. My plan included paying for a design package and distribution by the Promotions Office (GVSU Promotions Office, 2013a), but I had to search for alternative sources in order to decrease the budget described earlier.

In mid-February, I spoke with my friend, Amy Hinman, who is the student president of the Organization for Professional Writers at GVSU, about the trouble I was having in figuring out how to accomplish the marketing and design task. She offered to email the student members of her group offering them an opportunity to utilize their graphic design skills (those with the experience). I readily accepted her offer. No one contacted me right away, but I did finally receive one email by a female student, Erin Grogan, on February 28. I readily accepted her offer, but then had to backtrack and screen her previous graphic design work in order to gauge whether or not it was a wise idea to partner

with her. I was satisfied with what she sent me, including a brochure for the Grand Valley Fencing Club and a menu for The Joint restaurant (E. Grogan, personal communication, March 3, 2014). The stipulations for the flier design are included in the "Original Promotional Flier Information for HNR499" in Appendix 3 Erin later sent me several drafts to which I replied with the "Promotional Flier Revision" (Appendix 4) asking for orientation and copy changes (E. Grogan, personal communication, March 14, 2014). Throughout our communication I provided Ms. Grogan with the necessary logos for the on-campus and off-campus sponsors (The Electric Cheetah, the SNA, the Honors College etc.). The flier was finalized on March 19. Due to the budgetary constraints and the late date, I deemed it most appropriate to pass on the physical printing and promotion of the flier in exchange for several virtual channels.

Upon finalizing the flier design, I promptly distributed the flier through several online channels. I posted the flier on two Grand Valley groups on Facebook: the Grand Valley State University Class of 2014, the CCSI group, and my own personal wall (Appendix 7). I submitted the event information and flier to the official GVSU Calendar of Events on the University webpage (GVSU, 2014). (The submission can is in Appendix 5). I also sent the flier and an informational blurb to the student presidents of health science-related student organizations. A list of the organizations is provided below in Table 3. I only received feedback from the Health Professionals Graduate Student Alliance. However, I do know that the SNA executive board was actively promoting the event. Andy Deschaine, the e-board member in charge of communications for the SNA, set up an event on Grand Valley's OrgSync platform to which students could indicate whether or not they would be attending. I monitored this over the several weeks prior to the event. The numbers steadily climbed to over 130 until Sunday, April 6 – the day before the event. An additional marketing pull strategy was implemented in March, when I spoke with several friends who are nursing students. They suggested that I obtain Learning Initiative Credit (LIC) approval for the Crohn's seminar so that more students would be apt to attend (Y. Choi & S. Nelson, personal communication, March 4, 2014). The LIC approval is a point-based system for the nursing students, and each individual student needs to acquire a certain amount each semester to maintain good standing with the Student Nurses' Association. The LIC approval stamp was included on the promotional flier as well.

Student Organizations							
Student Nurses' Association	Coalition of Health Communications						
Pre-Med/Pre-PhD Org.	Public Health Society						
Crohn's & Colitis Student Initiative	Healthcare Professionals Graduate Student Alliance						
Pre-Radiologic & Imaging Sciences Student Organization	Pre-PA Club						
Pre-Chiropractic Club	Pre-PT Club						
Pre-Med Club	Pre-Pharmacy Association						
Pre-SOMA	Pre-Optometry						
Pre-Nursing Association	Pre-Podiatry Club						

Table 3: Promotional Distribution

Additional Considerations and Materials. There were several other details to consider regarding the carrying out of the seminar and providing a well-rounded presentation. First, I contacted a local representative for the Crohn's & Colitis Foundation of America who provided me with an informational packet request form. I sent this to the CCFA in late February and received sets of four (4) pamphlets by early March: Surgery for Crohn's Disease and Ulcerative Colitis; Diagnosis and Managing IBD; Diet, Nutrition, and Inflammatory Bowel Disease; and Understanding IBD Medications and Side Effects.

These would be set out at the event for students to take with them at the end of the event for additional information if they so desired. I also put together a PowerPoint presentation based upon information & slides requested from the speakers.

Another consideration was the amount of volunteers needed to help set up and/or man the doors of the auditorium. Depending on the location, the set up time could vary, and the number of helping hands. In preparation, I visited CHS on Thursday, March 27. Seeing the auditorium and speaking with the Conference & Event Planning representative, Susan Host, gave me a better idea of how the schedule would run.

Being that the room has permanent seating, there would be minimal to no set up. My mother and my younger sister were the only volunteers who were needed. Also, a class was scheduled to end in the same room at 11:50AM (10 minutes before the event) – so time would be extremely limited. Both my mother and sister set out the pamphlets and handed out programs at the door. My younger sister also took photos during the event. Additionally, I uploaded the PowerPoint (video links included) onto my University drive and cloud account before the event so that it could be quickly easily accessed.

Lastly, I finished the event schedule and time limits for each topic and wrote up an email for the speakers with all the necessary logistical information. Everyone was asked to arrive a half-hour (11:30AM) before the event so that we could swiftly enter and prepare ourselves. They were also given a GVSU certified visitor parking pass for the CHS parking lots to help with arrival. In retrospect, things were well prepared for the day of the seminar.

Awareness Survey

A pre- and post-event survey was conducted to investigate the change in awareness levels among the targeted student body as a result of attending the seminar. My purpose in conducting this survey was to address the following question: How effective was the seminar in raising awareness among the target market about Crohn's disease and its implications for patients? Questions regarded general awareness of CD and aspects of its management. A copy of the post-survey (identical to the pre-event survey) can be viewed in Appendix 8. The nine questions requested an respondent's amount of knowledge regarding the disease, the effect of CD on a patient's quality of life, and the effects of exercise and medication on a patient's disease, and dietary prescriptions. In addition, the respondent's confidence level for each of these variables was measured on a numerical scale.

Design Process

The design process was quite collaborative. I composed a rough draft of the survey first. Then I spoke with several professors and my advisor, Nelson Van Elderen, for feedback. Dr. Chris Hinsch (Marketing, Seidman College of Business) worked with me to modify the survey language to obtain the variables I wanted to measure C. Hinsch, personal communication, March 25, 2014). He also advised me on how to analyze the data with descriptive statistics. Dr. Carol Sánchez (Management & International Business, Seidman College of Business) advised me on type of distribution methods that would garner the greatest number of survey responses (C. Sánchez, pesonal communication, March 26, 2014). We decided to distribute the pre-event survey the pre-event survey virtually via Qualtrics the afternoon before the event on Sunday, April 6. The post-survey would be included in the informational pamphlet at the end of the seminar. It was to be filled out by attendees before dismissal and handed in. After working alongside both of these professors, I sought the advise and approval of the survey and distribution plan from my advisor before implementation.

Data Gathering

The selected distribution methods proved successful. The total responses to the pre-event survey are 99, while the post-survey had and total of 99 responses. Due to incomplete surveys – which

were removed from the two data sets, the valid number of surveys for both are 80 and 114, respectively. Removing those incomplete surveys raised the "Valid N", or sample size, to total 80 responses. This large sample size (n>30) means that the results are statistically significant. However, due to the distinct distribution method (virtual and physical) the responses could not be matched (ie. With an an IP address) or a confidence level obtained. But this lack of validity was minimized because of the large sample size.

Data Analysis

The two data sets were combined in SPSS in order to analyze the change in awareness and confidence levels of respondents. My hypothesis was that they would increase as a result of attending the seminar. The results did not disappoint. Each variable was labeled according to the question's content and differentiated by Time 1 (pre) and Time 2 (post). The responses at T1 and T2 are compared to see which if awareness and confidence increased among the sample.

The first question asks how much the respondent knows about Crohn's disease. Answers were provided on a 5-point qualitative scale: None, Very Little, Some, Quite a Bit, and Very Much. The mean answer increased from 2.93 (T1) to 3.67 (T2). In other words, respondents felt that their knowledge increased from almost "Some" knowledge to nearly "Quite a Bit". Illustration 1 provides the statistical analysis for this variable.

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation	Variance
how_much	80	1	4	2.93	.591	.349
how_much2	114	2.00	5.00	3.6667	.68701	.472
Valid N (listwise)	80					

Illustration 1: Knowledge of Crohn's Disease

The second set of questions sought to measure the knowledge and confidence of the effect of CD on a patient's quality of life. For this and the subsequent sets the answers were provide were "Yes, No," and "I don't know". Respondents then provided the confidence they felt in their answer on a 100-point scale. At T1, the mean response is 1.04. At T2, the mean response is 1.00. Mean confidence levels increased from 81.85 to 92.59. As a result of the seminar, there was a small shift away towards a "Yes" response, and a significant increase in the confidence of that answer. These numbers for this set are provided in Illustration 2.

Descri		C4-4	-4:
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	Z	Minimum	Maximum	Mean	Std. Deviation	Variance
general_qualityoflife	80	1	2	1.04	.191	.037
confidence_qualityoflife	80	.00	100.00	81.8500	22.89884	524.357
general_qualityoflife2	114	1.00	1.00	1.0000	.00000	.000
confidence_generalqualit y2	114	50.00	100.00	92.5877	10.87403	118.244
Valid N (listwise)	80					

Illustration 2: Crohn's disease & Quality of life

The belief of medication's importance in managing Crohn's disease is the subject of the second set of questions. The responses gravitated toward a "No" at T1 but strongly reflected "Yes" at T2. The actual numbers are 1.61 (T1) and 1.02 (T2). Mean confidence levels increased from 58.98 to 91.49. This is a significant jump in agreement and confidence among the sample. Illustration 3 provides these variables results.

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation	Variance
medication	80	1	3	1.61	.819	.671
confidence_medication	80	.00	100.00	58.9875	26.97091	727.430
medication2	114	1.00	3.00	1.0175	.18732	.035
confidence_medication2	114	40.00	100.00	91.4912	13.06772	170.765
Valid N (listwise)	80					

Illustration 3: The effect of medication

Next, respondents' knowledge and confidence for the effect of exercise were measured. The average knowledge levels were recorded at 1.90 and 1.05 for Time 1 and Time 2, respectively. Attendance to the seminar caused respondent to agree more (answer "Yes" versus "No") with the statement that exercise may help decrease Crohn's activity in patients. Analysis also reveals that confidence increased 31.7 points to a confidence level of approximately 88. As a result of the seminar, there was a large shift towards a "Yes" response, and a significant increase in the confidence of that answer. These numbers for this set are provided in Illustration 4.

Descri	ntisza	Static	etice
Descii	uuve	Statis	sucs

	Z	Minimum	Maximum	Mean	Std. Deviation	Variance
exercise_Crohnsactivity	80	1	3	1.90	.949	.901
confidence_exercise	80	.00	100.00	56.5875	30.64814	939.309
exercise_Crohnsactivity2	114	1.00	3.00	1.0526	.29275	.086
confidence_exercise2	114	20.00	100.00	88.2895	16.81272	282.668
Valid N (listwise)	80					

Illustration 4: The effect of exercise

Illustration 5 provides the statistics for the dietary management prescriptions for Crohn's disease. The mean response only moved by less than two-hundredths of a point, from 1.09 (T1) to 1.078 (T2). Mean confidence levels increased approximately 12 points. As a result of the seminar, there was a small shift away towards a "Yes" response, and a decent increase in the confidence of that answer.

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation	Variance
nutrition_effect	80	1	3	1.09	.363	.131
confidence_nutrition	80	.00	100.00	76.1500	21.68246	470.129
nutrition_effect2	114	1.00	3.00	1.0789	.35561	.126
confidence_nutrition2	114	40.00	100.00	88.2456	14.32836	205.302
Valid N (listwise)	80					

Illustration 5: The effect of nutritional management

The statistical analysis proved my hypothesis. The seminar did, in fact, contribute to an increased awareness about Crohn's disease and its management techniques among the students in attendance. Although changes in individuals' knowledge could not be measured because the test was not conducted twice virtually, there was still a large enough sample size to provide statistically significant results.

Personal Evaluation

I am extremely pleased with how the event and the survey analysis turned out. While there were a couple issues to handle in the planning process, they were overcome with a collaboration, creative thinking, gumption, and dedication. The collaboration between myself and multiple organizations, university departments and individuals greatly contributed to the success of the seminar.

Problems and Resolutions

The primary issue I encountered was obtaining the participation of a certain professional. I

could not find a gastroenterologist (or related surgeon) to speak at the event. I made multiple phone calls over the course of a month-and-a-half to find someone. Unfortunately, the scheduled date of the event conflicted with many of the professionals' plans for spring break. This caused me to be think creatively to find another solution. Considering that I had four speakers scheduled already in a short time period, I believe that showing several videos was the best option. This was a benefit in two ways. First, I was able to fully control the amount of time spent on the specific topics of etiology, diagnosis, and surgeries. Second, as a different medium of communication, the videos broke the monotony of a slideshow presentation.

A second problem was communication. Many people I contacted were slow to responding. So, I learned to communicate clearly and directly for what I needed, event if it was a lot of information at one time (i.e. Appendix ## - Flyer Design Proposal & Appendix ## - Presenter E-mail). I did my best to communicate gently and firmly at the same time in order to avoid offense but obtain the information and materials necessary by the date I needed it. For example, the promotional flyer was not finalized until three (3) weeks before the event, which caused me to eliminate the physical distribution in favor of only the virtual. Yet, this was not a major problem, and everything was accomplished in a timely manner.

The day of the event itself, there could have been multiple problems with logistics, media, printed materials, etc. However, in retrospect, I am extremely pleased with how the event unfolded. All speakers arrived on time with one cutting it extremely close, but not in order to slow things down. The response rate for the survey was phenomenal. I also received positive feedback from several attendees. There was not really any major issues with the videos or technology. Most importantly, every speaker covered their topic beautifully and we finished on time!

Conclusion

As previously stated, my personal objectives were (1) to acquire personal knowledge about Crohn's disease in order to apply it in my own life and (2) gain skills that supplement my marketing and business majors. My main (and personal) success metric/ used for the seminar was to have at least 30 people in attendance. The survey was just an additional interest of mine, but also confirmed my goal to raise CD awareness among the health science students at Grand Valley.

Not only were my expectations for attendance met, but they were astoundingly exceeded. There were over 150 people in attendance! I could not believe the full house, and am very grateful for the support I received throughout the semester.

The knowledge I gained by researching for this senior project has will be put to good use. Reviewing the symptoms and complications of the disease has made me more aware of the dangerous potential of CD if one does not take care of oneself. The dietary and nutritional information have also given me specific sources to investigate as I develop my own dietary plan. I am inspired to understand my own body in pursuit of a higher quality of life and avoid the negative impact of an unhealthy gastrointestinal track. I look forward to the process of taking care of myself to a greater degree.

I also believe that I have accomplished my second objective. skills have improved throughout the completion of this senior project. Time management, comprehensive planning, coordination of multiple peoples, chains of communication, and overall preparedness are all areas of event planning and management in general that have been illustrated to me as a result of organizing the Chronically Ill but Chronically Fabulous seminar. These skills will accompany me as I begin my professional career in the next few months. I anticipate putting them to good use.

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Appendix 1 - Sponsorship Proposal Example

Date: Tuesday, February 25, 2014

To: COMPANY NAME

Re: Sponsorship for a Crohn's Seminar at GVSU

Proposed by: Claire Wilcox, Grand Valley State University – Grand Rapids, MI

Background:

My name is Claire Wilcox and I am a a senior-level student at Grand Valley State University, studying International Business and Marketing at the Seidman College of Business in downtown Grand Rapids. I am also a Frederik Meijer Honors College participant. As part of the Honors curriculum, each student is required to carry out a project of their own design during their last year at Grand Valley. For my project, I am organizing a short seminar for health science students at GVSU to raise their awareness of Crohn's Disease before their enter the workforce. The hour-long seminar will take place in early April (Monday, April 7th) during which local area professionals and several patients will highlight aspects of the disease including the etiology, pharmaceutical and surgical management, and the effects of diet and exercise on patients' quality of life.

Crohn's disease is an inflammatory bowel disease (IBD) that currently affects at least 700,000 Americans and is a growing concern. Patients with symptoms experience highly acute abdominal cramps and pain, an urgent need to move the bowels, anemia, extreme weight loss, chronic fatigue, persistent diarrhea, loss of appetite, and fever, among a number of others. When these symptoms are present, it can greatly decrease the quality of life of a patient by limiting mobility during daily life and restfulness, while increasing stress and discomfort. By increasing awareness of this disease among current students at Grand Valley, I desire to lead them to consider the disease an important factor regarding a patient's well being no matter which health complication is encountered or in which discipline they pursue a career.

Proposition:

There are a number of expenses required for this project, including on-campus promotion and thank-you gifts for the presenters. I am looking to give each of the presenters a gift card from a Grand Rapids community business. The total need for gift cards is seven (7). I would appreciate your consideration of donating 1-3 gift cards of a \$20-\$25 value as part of the thank-you gifts for the professionals and students who are volunteering their time on a busy Monday afternoon.

Exchange:

In exchange for the donation of gift-cards, I will highlight THE COMPANY as a sponsor of the event on April 7th to those in attendance. I will place the company's trademark or logo on the presentation slides and specifically mention the company's generous sponsorship of the event. In order to accomplish this, I will need a digital copy of the logo in JPEG or PNG format.

Thank you for your time and consideration. I look forward to discussing this opportunity with you further.

Contact Information:

Please feel free to contact me by phone or email.

Cell #: 616.843.6002 E-mail: wilcoxcl@mail.gvsu.edu

Appendix 2 - Budget Proposal for the Frederik Meijer Honors College

Prepared for: Dr. Jeff Chamberlain & Robyn Toth, Frederik Meijer Honors College

Prepared by: Claire Wilcox, Grand Valley State University – senior student

Re: Senior Project (HNR 499) Budget Proposal - Chronically III but Chronically Fabulous: An Overview of

Crohn's Disease

Date: Monday, March 3, 2014

Budget/Sponsorship Proposal:

Please consider the following budget for sponsorship of the Crohn's seminar to take place on Monday, April 7th, 2014 at Noon.

Purpose	Expense Amount	Notes
Video Production (@GV Promotions Office)	\$150.00	
Copies (@GV Copy Center)	\$60.00	\$.25=color, \$.03=BW copies
Total	\$210.00	

Notes:

- \$60 is a flexible amount but the highest amount being requested. This includes a \$10 on-campus posting fee by the Promotions Office on the Allendale Campus.
- The fee for the Video Production is fixed.

Additional:

I would like to recognize the Frederik Meijer Honors College and staff for all of their support in making this seminar possible. In order to do this, I would appreciate the provision of a JPEG, JPG, or PNG version of the Honors College standard GVSU logo which I will use at the event and associated materials. Thank you!!

Contact Information:

Email: wilcoxcl@mail.gvsu.edu

Cell: 616.843.6002

Appendix 3 - Promotional Flier Information for HNR499

Prepared by: Claire Wilcox

To: Erin Grogan

Date of Preparation: Tuesday, March 4, 2014

Event Title: Chronically Ill but Chronically Fabulous: An Overview of Crohn's Disease

Date: Monday April 7th, 2014

Time: 12:00 – 1:00 PM

Location: CHS 119 – Hager Auditorium

General Info:

This seminar will provide GVSU health science students with an overview of Crohn's Disease which currently affects over 700,000 Americans and is a growing concern. Local professionals, GVSU faculty, and several Crohn's patients will highlight the aspects of the disease including the etiology, pharmaceutical and surgical treatment, and the effects of diet and exercise on patients' quality of life. An active disease can greatly decrease patients' quality of life, but intentional management of the disease by physicians and patients together has the potential to increase quality of life. By attending this seminar, students will have a greater understanding how important it is to consider the disease in a patient's life when encountered during their professional career and how to prescribe a holistic approach to treatment.

(The general info is for your own reference.)

Specifics:

- What kind of promo material would you like, exactly? A flier? A brochure? What size do you want it? I would like a 8.5x11-inch flier, copies of which will be posted around campus. Either horizontal or vertical. Can we try both layouts? Also, I would like a small plugger size too. This can either be a shrunk version of the 8.5x11 or a less detailed version without all of the logos. This would be a quarter of an 8.5x11-inch page. I hope to send this to faculty to hand out in class, or at least post on Blackboard.
- Is there a specific color scheme you have in mind? Jewel tones (brighter) either warm or cold combinations. An idea, purple is the color for the Crohn's awareness ribbon, so it might be cool to have different shades of purple for the background of the flier (i.e. royal purple & then lavender).
- Do you know the names of the other companies/organizations sponsoring the event, or how many are sponsoring?
 - The Green Restaurant
 - The Bitter End Coffee House
 - The Electric Cheetah
 - Bartertown Diner (unconfirmed)
 - Schuler Books & Music (unconfirmed)

- Marie Catrib's (unconfirmed)
- The One Trick Pony (unconfirmed)
- Ferris Nut & Coffee Company (maybe)
- The Student Nurses Association (GVSU student organization)
- Frederik Meijer Honors College (GVSU department)
- The Crohn's & Colitis Student Initiative (GVSU student organization)
- The businesses are providing gift cards whilst the student organizations and university departments are helping w/ distribution of information and have subsidized a lot of my project's expenses.

If you need any other details please do not hesitate to let me know.

Contact Information:

E-mail: wilcoxcl@mail.gvsu.edu

Cell: 616.843.6002

Appendix 4 - Promotional Flier Revision

Prepared by: Claire Wilcox

To: Erin Grogan

Date of Preparation: Friday, March 14, 2014

Overall: I like the draft design that you sent me. The ribbon is a nice touch. There are a number of alterations I would like to make to the design.

- **Orientation:** Let's keep the horizontal document.
- **Color:** Is it possible to deepen/brighten the background colors slightly?
- **Title:** Please capitalize it as follows Chronically Ill but Chronically Fabulous: An Overview of Crohn's Disease. Make sure that "Chronically Fabulous" is on the second line of copy.
- ALSO: Please try moving all of the text up a little on the page to see what it looks like.
- **Details:** Please use the format from the vertical version on the horizontal version.
 - It looks complete, and very professional with the colons for the date, time, location.
 - o Change "where" to "location".
 - Change the date to say "Monday, April 7"
 - Change "CHS" to "Center for Health Sciences (CHS) 119, Hager Auditorium"
 - Change Topics heading to "Health professionals, and Crohn's Disease patients discuss:"
 - Eliminate the "Holistic approach" bullet point.
 - Add "LIC Approved" to the document. Set on a creative angle either above or below the title on the right side of the page.

• Logos:

- Add the Electric Cheetah logo attached in the email.
- Add the Bitter End photo (choose which one). Also, if those don't work, just type the name.
- Add "GVSU Crohn's & Colitis Student Initiative" as a sponsor. They do not have a logo, so text will suffice (Or the attached JPEG).

If we can have this by Monday, March 17, that would be wonderful.

Appendix 5 - Event Submission for GVSU Calendar of Events

Event Submission on GVSU Calendar of Events

Submitted: March 19, 2014

Approved:

Title: Chronically Ill but Chronically Fabulous: An Overview of Crohn's Disease

Details:

Chronically Ill but Chronically Fabulous: An Overview of Crohn's Disease

Date: Monday April 7th, 2014

Time: 12:00 - 1:00 PM

Location: CHS 119 - Hager Auditorium

Leadership Initiative Credit (LIC) Approved

This seminar will provide GVSU health science students with an overview of Crohn's Disease which currently affects over 700,000 Americans and is a growing concern. (Although designed for health sciences students, the seminar is open to all who desire to attend.) Local professionals, GVSU faculty, and several Crohn's patients will highlight the aspects of the disease including the etiology, pharmaceutical and surgical treatment, and the effects of diet and exercise on patients' quality of life. An active disease can greatly decrease patients' quality of life, but intentional management of the disease by physicians and patients together has the potential to increase quality of life. By attending this seminar, students will have a greater understanding how important it is to consider the disease in a patient's life when encountered during their professional career and how to prescribe a holistic approach to treatment.

Contact:

If you have any questions please contact Claire Wilcox at wilcoxcl@mail.gvsu.edu.

Search Keywords:

Crohn's Disease, Claire Wilcox, SNA, Student Nurses' Association, CCSI, Crohn's & Colitis Student Initiative, LIC, Leadership Initiative Credit, Nursing, Honors Department, Frederik Meijer Honors College, Senior Project, CHS, Hager Auditorium

Location:

CHS 19 – Hager Auditorium

Categories:

Academic – Academic Calendar Campus Life – Student Organization Meetings Campus Recreation – Wellness Student Life – Academic Organizations

Appendix 7 – Event Flyer



Appendix 8 - Crohn's Event – Post Survey

Chronically Ill but Chronically Fabulous: An Overview of Crohn's Disease

Follow-up Survey - Monday, April 7, 2014

This is the same survey you filled out this weekend. The purpose of this survey is to determine the level of awareness among attendees regarding aspects of Crohn's Disease management following the seminar. It will take approximately 2 minutes. You must be 18 years of age or older to participate.

		There unders		_	wrong	answer;	circle	your ai	nswer b	oased up	oon you	current
1.	How much do you know about Crohn's Disease?											
	None		Very 1	Little		Some	e	Quit	te a Bit		Very	Much
2.	Crohn's Disease can greatly affect a patient's quality of life.											
	a. Yes			b. N	b. No			don't kr	now			
3.	How confident are you regarding your answer to the previous question?											
	Not C	onfiden 0	nt at All 1	2	3	4	5	6	7	8	Very 9	Confident
4. quality	Medic of life	-	lays an	impor	tant rol	le in mar	naging	Crohn's	s Disea	se symp	otoms an	nd a patient's
	a. Yes			b. N	b. No			c. I don't know				
5.	How confident are you regarding your answer to the previous question?											
	Not C	onfiden 0	nt at All 1	2	3	4	5	6	7	8	Very 9	Confident 10
6. the dis		ise may	help d	ecrease	e the lil	kelihood	l of Cro	ohn's Di	isease A	Activity	depend	ing on the state of
	a.	Yes			b. N	0		c. I c	don't kn	ow		
7.	How o	confide	nt are y	ou rega	arding	your ans	swer to	the pre	vious q	uestion	?	
	Not C	onfiden 0	nt at All 1	2	3	4	5	6	7	8	Very 9	Confident 10
8.	Diet a	nd nutr	ition pr	escript	ions fo	or patient	ts varv	depend	ling on	the state	e of the	disease (i.e.

remission or	flare-up activity)
i Cillissioni oi	marc-up activity)

a. Yes b. No c. I don't know

9. How confident are you regarding your answer to the previous question?

Not Confident at All 0 1 2 3 4 5 6 7 8 9 10 Very Confident

Thank you very much for your time! Your response will greatly help in the analysis of the seminar's effectiveness and the completion of my senior project.