Why this major? Why this project?

My long-term goal is to become a pediatrician. There are many things that constitute being a good pediatrician and health care provider. In order to provide patients with quality healthcare and compassionate care one must listen to the individual and attempt understand their history and culture. I worked as an assistant medical technician in a pediatric clinic in Atlanta, Georgia. The clinic mainly saw patients of Hispanic, Bosnian, and African-American descent. Every family, even families from the same cultural background, do not share the same history, religion, or family situation. Active listening is critical when serving such a diverse population. Most importantly, practitioners must understand the healthcare system they are working within so that they are aware of the relationships between a patient’s insurance, the available treatments, and where additional resources can be found. The practitioner's job is not finished when the patient leaves the clinic. Upon completion of this major I will be better equipped to recognize and manage these interactions.

The term ‘Biomedicine’ entered my life for the first time during interim of my sophomore year while taking the Science Conversation. At first I was skeptical of the term and I really did not have any idea that it consumed our lives in the Western world. After reading Warwick Anderson’s book The Collectors of Lost souls, I had my "aha" moment. This book chronicled the work of Carleton Gajdusek and his search for the cause of the mysterious disease, kuru, that haunted the ‘primitive’ Fore
people of New Guinea in the 1940s-1950s. Western physicians and scientists came into the Fore homes and social circles with their biomedical approaches and drastically changed the landscape of the region medically and socially. This was the first instance that I was really able to step back to see the impact of biomedicine on a social system. I never wanted the book to end. It felt like a long time coming, but after reading that book, I discovered my desire to better understand the integration of biomedicine and society in the United States.

As the year drew to a close I wished to find a way to continue exploring biomedicine through the wide array of classes that St. Olaf has to offer. And so I created this major as a way to integrate the natural sciences, humanities, social sciences in order to better understand Western biomedicine and the people, history, and practice that have molded it into what it is today. The many books I read in the Science Conversation sparked my passion for biomedicine and that passion was only strengthened during my independent study with Professor Williamson called “The Culture of Biomedicine”. We read and discussed nine books each integrating the natural sciences, the humanities, and the social sciences in different ways. The Body Multiple, by Annemarie Mol, provides varying perspectives on the experience of atherosclerosis investigating how the chronic illness was “more than one, but less than many”. In Better than Well, Carl Elliott analyzes the ways in which Americans have a culture of conforming to the standards of ‘health’ that society promotes; for example, reliance on prescription drugs, body modification through plastic surgery, and the latest weight loss trends. In The Checklist Manifesto, Atul Gawande, stresses the need for order within the hospital setting. He explores the use of various
checklists within the surgical departments of hospitals nationwide drawing on the knowledge that he gains from checklists used in other disciplines like construction.

Over the summer of 2013 I had the opportunity to work at Camp Kudzu. Camp Kudzu is an organization based out of Atlanta, Georgia that provides support for children living with insulin dependent diabetes and families affected by it. This camp was an eye-opening experience and it helped formulate the question for my senior project. This experience has provided me with initial insight into the lives of children living with insulin dependent diabetes in today’s biomedical system as well as insight into the various support systems available to children and families afflicted with this life altering disease. Before becoming involved with Camp Kudzu I was unaware of the many camps dedicated to providing instruction and support to children living with various medical conditions. The campground that hosts Camp Kudzu also hosts camps for children and families living with heart defects, autism, leukemia, and many others, all sponsored by the Children’s Hospitals of Atlanta. These camps give practitioners the chance to lose the white coat and experience a day in a life of a child with a serious medical condition. These programs are an essential extension to our biomedical system.

My goal for this major is to graduate with a better understanding of health and its immense complexity so that in the future I am able to effectively put my patients and their well being first while having a better understanding of the etiology of their circumstance. The senior project that I have chosen to pursue focuses on a single patients journey to a diagnosis of type II diabetes. I will be presenting the material in the form of a case study intertwined with decisions and
life events that led to the patient’s eventual diagnosis. I have discovered that health is not merely the biological or physiological state of our bodies; it is a combination of our experiences, mental health, physical health, emotional health, socioeconomic status, family history and much more. The chart pictured below shows the immense complexity of health that I have been grappling with while conducting my research. After reading and rereading books I continue to come up with new questions and a new point of view that lead me to look at what it means to be healthy differently. As Mary Catherine Bateson states, “The landscape and I were both different at every turn of the spiral, almost decades apart; because it is impossible to step into the same river twice, one can learn from each return” (Bateson 44).

Why Chronic Illness?

The prevalence of chronic illness has been increasing drastically in the United States and the rest of the world. Let me list some facts:

- 117 million adults in the United States have one or more chronic illness as of 2012.
• In 2010, seven of the top 10 causes of death in the United States were due to chronic diseases. Most of the deaths were due to heart disease and cancer.
• Obesity is growing at an outstanding rate in children and adults leading to the development of more chronic health conditions.
• Diabetes is the leading cause of kidney failure, lower limb amputations other than those caused by injury, and new cases of blindness among adults.¹


I think the reason that I chose to study and have been interested in chronic illness is obvious from the aforementioned facts. Chronic illnesses are greatly affecting the health of our nation and the health of the developing world. A major increase in the amount of individuals and their families affected leads me to wonder if we are addressing chronic illnesses in the appropriate manner within our biomedical health care system. Now, I am not saying that I know the correct way to approach the delivery of information, treatment, and diagnoses of chronic illnesses, but I have done extensive research into how our western health care system experiences and perceives chronic disease. I strongly believe that our health as a nation is reaching a tipping point, if we have not already surpassed the point of no return. I like to be cautiously optimistic, but we need to do something about our health. The way that we lead our lives is not conducive to general physical or even mental health and as of right now we are currently spending the most money as a nation out of any other industrialized nation on health care without the return in investment. The goal of my project is to address main areas of concern influencing the prevalence of chronic illness in our biomedical health care system.
Why Diabetes?

Over the summer of 2013 I had the opportunity to work at a camp called Camp Kudzu. For the first time in my life I experienced what it was like to be an outsider. Out of nearly 300 adults and children working at the camps I was one of maybe 30 who did not have type 1 diabetes. Most of the children that I was working with were diagnosed with diabetes as infants and toddlers. It was really an interesting experience because I had never felt so out of my comfort zone while still being responsible for the lives of twenty young diabetics.

As a non-diabetic I saw first hand what it was like for children with diabetes to complete daily tasks. I saw the responsibility placed on the shoulders of these children at such a young age, many of whom had still not come to terms with the fact that this chronic condition would remain with them for the rest of their lives. Each night I was woken up being hit with a pillow by one of my campers around 3am because she felt “low,” we checked her blood sugar, ate a snack if she was low, and waited another 30 minutes to make sure that her blood sugar returned to an appropriate level before she could go back to sleep. This was something that I could not even imagine having to do for the rest of my life, but yet these 13-15 year old girls were doing it no problem.

This experience also put type 2 diabetes into perspective. Never before had I been told so many times the difference between type 1 and type 2 diabetes than I did at Camp Kudzu. It made me realize the stigma that is placed on the word “diabetes.” Type 1 diabetes is not a choice made by these children. They did not choose to eat poorly or not exercise enough; they were born with a condition in
which their bodies were literally attacking their own cells. On the other hand, type 2 diabetes is often a result of a culmination of poor choices that adults have made for themselves or for their children. This is not necessarily the case for every individual and there is evidence to suggest that genetics can play a major role in the development of type 2 diabetes, but responsibility can still be placed on the individual for his or her own health choices as an adult. The chart shown below shows the dramatic increase in diagnosed diabetics between 2002 and 2005. There is a dramatic increase in the number of diagnosed type 2 diabetics in just three years. So what leads us down the path to a diabetic state? Is it purely physiological? Biological? Or a combination of our genetics, environment, socioeconomic status, and more? Regardless of the reasons we need to change our course of health in the United States concerning type 2 diabetes and other chronic illnesses where the patient has some control over their situation.

What is health?

I have spent the past two years attempting to answer the question, “What is health?” and I still have not formulated a definition that I am comfortable with. The
WHO says that health is not merely the absence of disease, but a state of complete mental, physical and social well-being. Great, but this definition sounds like empty words when applied through the lens of our biomedical health system. Our system is pushing for a culture of risk reduction, applying advances in technology, and glorifying thinness. Bateson states, “Yet even though we regard the self as logically central to any way of experiencing the world, we are trained to look through it like a pane of glass, only noticing when it becomes blurred or cracked” (Bateson 66). In today’s biomedical health care system we are no longer focusing on our health when disease is absent or when something appears to be “broken.” In more than one way lives have become consumed with our journey to health. I often find myself coming back to the definition of health provided in Against Health, which states that health is “a desired state, a prescribed state, an ideological position. A term replete with value judgments, hierarchies, and blind assumptions that speak as much about power and privilege as they do about well being” (Metzl 2) This definition seems to encompass the biomedical systems approach to chronic illness, speaking less about the absence of disease and more about social class and perceptions.

I do believe that the definition of health changes depending on the country and culture in which it is applied. For example, while in Ollyantetambo, Peru this January the definition of health put into practice aligned well with the half of the definition provided by the WHO in 1946. The populations that I was working with in the mountain communities were not in a socioeconomic position to even consider a definition of health that did not include the eradication of disease because it was something that they faced on a daily basis. The mountain communities of Peru were a world away from populations with more cosmopolitan incomes. With an increased
socioeconomic status the definition of health was not broad enough when it only
included the eradication of disease but extended into the definition of health provided
in Against Health. Independently, the WHO and Against Health definitions do not cover
every dimension of health. I am searching for a comprehensive definition of health that
does more than just state the dimensions of health like the WHO definition, but gives us
a method to attain them.

The Global Perspective

Initially, I wanted my entire senior project to focus on the perception and
experience of chronic illness in across global cultures and ethnicities. As I began
conducting more and more research I felt as though I needed to gain a better
understanding of the perception and experience of chronic illness in the biomedical
health care system before attempting to analyze another. This past interim I had the
opportunity to travel to Peru through St. Olaf’s Peruvian Medical Experience. There
were many instances in the clinics, villages, and orphanages when I had a “Collectors
of Lost Souls moment” and thought about how we marched in with our state of the
art—last years models—equipment and approached the exams in a biomedical
manner. Having read The Collectors of Lost Souls I was able to step back and
appreciate how an understanding of culture, traditions, social structure, and family
structure were integral to understanding the health of a community. After this
experience I was reassured that I made the right decision to focus on the familiar,
but very complex biomedical health model that I have become accustomed.

Peripheral Visions, Mary Catherine Bateson finds the perfect words by stating,
“Yet everyone has traveled to wondrous places, and most of us lack the words to tell the tale or even to remember it. Other worlds contain fabulous monster. Deities. Parallel spheres of being. To understand another culture, one must include ghosts and spirits in an explanatory system, as well as the abstractions—pride, honor, sin—that appear as reasons for action. The great ideas of human history do not, after all, refer to anything visible to the eye. When we try to translate from one language to another and form one system of categories to another we discover that categories slip and slide, never matching perfectly. We make the same discovery in the encounter with children and lovers, with the living landscape and even with the layered self” (Bateson 58).

As I continue my studies in biomedicine I know that I will be drawn to better understanding global interpretations of chronic illness, but until then I will continue to strive for a better understanding of biomedicine’s approach.

**Why a narrative approach?**

Throughout my undergraduate career at St. Olaf I have read more books than I had ever anticipated. I have read biology textbooks, ethnographies, non-fiction, and fiction. What I have found from my studies is that the material that I retained the best was delivered in the form of a narrative. Narratives are often used by prescription drug companies to elicit a positive response from the viewer, for example, in 2004, the pharmaceutical company, Pfizer, launched a television ad campaign for the drug Zoloft. This ad tells the story of an individual (you) who is not feeling like you. Maybe you have been feeling especially sad or tired lately and your daily routine begins to suffer because of it. The commercial then discusses how the feelings you are having are common symptoms of depression and advises you to ask your doctor about Zoloft (Dumit 55-85). The character in this commercial is a bouncing ball, not
even a person, but the story provided resonates with the individuals who are watching.

Another example of the use of narratives is found in *Narrative vs. Evidence-Based Medicine—And, Not Or*, “The week before the US Preventive Services Task Force (USPSTF) released its recommendations against routine prostate screening for healthy men, celebrity patients including Joe Torre and Rudy Giuliani had already lined up to challenge the population-based recommendations. To promote their position that screening for prostate-specific antigen is lifesaving, these individuals relied on a powerful tool: their own personal narratives.”

The examples of narratives provided above call for action. They demand that you do something about your current situation, whether that is talking to your doctor about the “benefits” of antidepressants or a prostate cancer screening. The narrative that I have developed and will be using follows the life and health care experiences of David Stevens, a 65-year-old male citizen of the United States. Personal narratives have the power to help people see a particular situation from your point of view without actually having to go through the experience themselves. They can visualize what it would be like to have prostate cancer or a mental illness, how the situation would affect their lives directly and the lives of the people close to them. Narratives are a crucial part of how patients make sense of illness and become aware of their changing lifestyle before it happens to them. We are a society that fears the unknown and when narratives are provided that allow us to “peak into the future” of our illness our fears begin subside. The various paradigm shifts of my senior project have led me to take a narrative approach in the pursuit of
a better understanding of the experience of chronic illness in a biomedical health care system. Throughout the narrative I have interwoven non-medical events that are vital to David’s development and experience of Type II Diabetes. Surely, many who read this will have known someone, currently know someone, or are themselves experiencing by Type II diabetes. The narrative you have heard in the past might not exactly resemble the one that I have provided, but through semesters and years of research on this topic I am confident that there will be relatable elements from David’s story.

A narrative approach will also help me to avoid David’s experience through the strict diagnostic lens of a medical professional. For example, David’s chart might include diagnostic words and phrases like: Hypertensive, history of being overweight, pre-diabetic. Referred to nutritionist. Referred to endocrinologist. Where is the “Why?” in these medical descriptions of David’s state of health? How is a physician supposed to provide the best care possible when he does not understand how David obtained his current state of health? As a result of this, I have decided to weave medical descriptions into a comprehensive case study in order to provide important context to David’s condition. Psychiatrist and Anthropologist, Arthur Kleinman states in *The Illness Narratives*, “What illness means to individuals and how it affects their lives is neglected by modern medicine” (Kleinman 251). I do not want to be caught in the modern medical trap of neglecting the life that brought David to diabetes.

In *The Body Multiple*, Annemarie Mol uses the story of Mr. Trevers; an older, Caucasian man whose leg was amputated after a wound on his leg refused to heal
and increased his risk of infection astronomically. Through Mr. Travers she expresses the fear of the unknown, how it felt to be diagnosed with both atherosclerosis and diabetes, the fear experienced when someone loses a limb and is experiencing a “diseased” state. Many more narratives are used throughout Mol’s book to stress the fact that there is more to disease than its physicality; it is an individual experience as well as a community experience (Mol 7-12). Bateson wisely states, “Our species thinks in metaphors and learns through stories” (Bateson 11). By formatting David’s story into a chronic illness narrative I am attempting to create an environment that my reader can relate to as well as a thought provoking statement about some of the most pressing flaws in our biomedical health care system.

**David’s Story**

David Stevens is a **65-year-old man and a citizen of the United States of America**. David visits his primary physician one afternoon complaining of chronic fatigue and headaches. The physician does a health screening and notices that David’s blood pressure is slightly elevated. After further review of David’s charts the physician sees that David has gained 50 pounds since the last time a physician saw him two years ago. Concerned for the well being of his patient, the physician recommends David visit a nutritionist and encourages David to adopt a healthier lifestyle; one that includes less processed food and more exercise. David leaves the office dissatisfied.

Unhappy with the care and conclusions made at his primary care physician’s office, [David seeks out a doctor recommended by his friend](#). This physician
completes many of the same tests and screens that were completed in David’s visit to the physician a week earlier, but this time David is prescribed blood pressure lowering medication and precautionarily referred to an endocrinologist. David calls the endocrinologists office and they are not able to get him in for another two months.

During the two months before his appointment David tries to begin leading healthier life. He gets a gym membership and even uses it at least three times a week. After a month passes, David’s wife falls and breaks her ankle. She is unable to walk for three weeks and David must put his gym routine on hold. He continues to pay his membership fee in the hope that he will get back on track soon. After Marcy is able to go on with her daily life essentially unassisted by David a big project comes up at David’s office. He is spending extra hours at the office trying to meet the deadlines determined by his superiors.

Two months have passed and David receives a call from the endocrinologist’s office reminding him of his appointment tomorrow. Disheartened David goes to bed rethinking the past two months, his plans for leading a healthier life, and how life seemed to get in the way. At the appointment, David learns that he has begun to develop Type II diabetes and is in a prediabetic state. The nurse of the endocrinologist comes in and discusses David’s treatment options and the various ways for David to make healthier lifestyle choices. Three years later David finds himself back in his endocrinologist’s office with full-blown type 2 diabetes.

Social History
As children, we grow and learn in particular environments and then become products of those environments therefore; our social history has a big impact on our health. The habits that we develop at a young age often follow us into adulthood without much thought. For example, if David was born to parents who relied heavily on Stouffer’s premade oven meals and did not encourage him to play outside and be active he could become an adult who doesn’t make decisions that support his health as he ages. The effect that an individual’s social history has on their long-term health goes back to the complexity diagram inserted above. Factors like socioeconomic status, access to health care, access to health education as a child and adult, race, ethnicity, gender, are all major determinants of our health. Our biomedical system needs to be capable of addressing these social and very individual determinants of health so that every individual within the system can attain health. As of right now our system is very reactive; we are not putting large-scale efforts into preventative health measures that will put the children of our nation on the track to avoid chronic illnesses in their future.

Seeking Second Opinions

Why do we have a culture of seeking second opinions? An anecdote similar to David’s can be applied to various situations in a biomedical health care system. I bet at some point in all of our lives we have visited a physician and not liked what we were told. When “patients seeking care” are dissatisfied with the suggestions and prescriptions that they receive visiting their primary care physician they will often opt to seek out a physician recommended by friends or family that have had a
positive experience with a different physician. I found that this trend is not specific to chronic illness.

We live in a world where the knowledge that a physician has is almost all at our fingertips. We can go online to various websites like WebMD, the Mayo Clinic, symptomchecker.com, and in some way self diagnose ourselves before we even visit a physician. What this process can lead to is disappointment. Your symptoms line up with one disease or syndrome online and when you visit the physician the diagnoses don’t align. So what do you do? You seek a second opinion. Much of the research that I have conducted points to a trend of societal mistrust of our physicians. Technology plays a big role in this not only in terms of the Internet, but the healthcare systems reliance on technology. For example, at a recent visit to a family practice physician the exam was conducted in a manner that we only made eye contact once. The physician was sitting next to me facing me the computer screen while I was sitting in an armchair. The physical exam took seconds and afterwards I was told that everything looked good. That was it. Technology seemed to get in the way of our doctor-patient relationship and I would be comfortable saying that I did not form any sort of trusting relationship with this physician. So if there were to be something truly wrong with me, how could I trust their diagnosis? Would this physician have conducted their physical exam in a different manner as a result of my unfortunate diagnosis? I can’t be sure, but after this appointment why wouldn’t I seek a second opinion if I were uncomfortable with the outcome of the appointment?
On another note, our conversation only consisted of diagnostic and health history questions. The conversation never “strayed” to how school was, how I was feeling mentally or socially. The physician stuck to the script. After leaving the physicians office I couldn't help, but feel disappointed. But why? For all I knew she did her job and I could believe that everything in my physical probably looked good. It isn’t that hard to believe because I am in good physical health and that’s all she seemed to be screening for, but there is so much more to our health than just our physical health and often those other health dimensions can have a big impact on our physical health. Why did I feel like she was in such a rush that she could only pay mind to my physical health? To be honest it probably wasn’t because she didn’t care about the other dimensions of my health, she just didn’t have time to address them. But, why didn’t she have time?

In today’s biomedical health care system our physicians and other healthcare professionals are under a lot of pressure from external forces like administrators, pharmaceutical companies and insurance companies. Each of these sources demands proficiency and efficiency, but something’s got to give. It is not physically possible for physicians to analyze a patient’s medical history, take a new history, perform a physical exam, take detailed notes on the visit for administrative and insurance purposes, come to a diagnosis, offer a treatment, walk through the treatment with the patient in detail, prescribe what is necessary and make an emotional connection with their patient in the designated 15 minute time frame. I have found that it is often the doctor/patient relationships that suffer as a result. Dr. Atul Gawande, a world-renowned surgeon voiced his frustration of the physician’s
conundrum in his book *Better: A Surgeon’s Notes on Performance*. Not only do the physicians have to concern themselves with the expectations of the aforementioned forces, they must take extreme care addressing and living up to the expectations of their patients.

As patients we have very big expectations of our physicians. After all, they did attend at least four years of medical school and give or take three plus years of residency to earn the title of doctor. But, are our expectations of our physicians too much? What we need to remember is that physicians are the professionals, but they are also human; the human body is mysterious, and as patients with all of the research in the world available to us we still lack the experience and medical expertise that our physicians have dedicated their lives to mastering. These are our lives that we are talking about and it is very difficult to put our life in the hands of someone we see on a biannual basis, but what other choice do we have.

This situation led me to think about our current biomedical socialization process that all medical students go through during their medical education. Medical schools focus on teaching aspiring physicians about the importance of gaining your patients trust, but once these physicians are in the clinical setting this knowledge is often forced to the backburner and not necessarily by choice. As a result of this unfortunate suppression of valuable skills, I believe that there needs to be a fundamental shift in the expectations that administrators, pharmaceutical companies, and insurance companies have of our physicians so that they can get back to treating the patient as an individual and stop treating patient’s as the next person in a never-ending line of consumers.
So, why is there a culture of seeking second opinions? It is hard to pinpoint the exact cause, but research suggests that it is a combination of the increasing expectations of administrators, insurance companies, pharmaceutical companies, and patients. Our physicians are not super humans and we should not expect them to be. In the case of David Stevens, he was dissatisfied with the care that he received at his first visit to the physician so he sought a second opinion, but did he seek a second opinion because he did not want to put in the work to attain health or was it because he truly did not trust his physician. In other applicable anecdotes the answer to that question may vary, but in the case of chronic illness I have found that health is hard work and few patients in our biomedical health system are willing to put in the work that health demands. In the case of progressing chronic illness patients seeking care need to get over the fact that they are being told something that they don’t like to hear and start respecting the health care professionals who have dedicated their lives to their care.

**David is prescribed.**

At David’s first visit to his primary physician he receives a prescription to adopt a healthier lifestyle by incorporating a healthier diet and exercise as well as a suggestion to visit a nutritionist. This prescription calls for David to take responsibility for his health and to take action to improve it. David is dissatisfied after this visit. Why? Is it because David had entered his physician’s office expecting to be prescribed a pharmaceutical and was disappointed when the physician’s prescription did not live up to his expectations. Or was David disappointed in the hard work associated with the prescription of changing his lifestyle?
At the end of his visit with the second physician David receives a prescription for blood pressure lowering medication and is referred to an endocrinologist. One of the main trends that I saw in *The Logic of Care: Health and the power of patient choice* by Annemarie Mol was that in the case of chronic disease patients were a lot more receptive to a prescription of pharmaceuticals than they were to the prescription of changing habits (Mol 66-83). In many ways this is understandable. Prescription drugs are a quick fix. Minimal effort needs to be put into the temporary alleviation of symptoms. After leaving the second physician’s office with a prescription in hand David is satisfied, but what is this prescription of blood pressure lowering medication doing to slow David’s development of a chronic illness? In reality, nothing. The prescription treats one symptom of David’s unhealthy lifestyle, but it is no way a cure if David continues to lead an unhealthy life. In many cases physicians also prescribe making healthier lifestyle choices along with pharmaceuticals, but the patients do not often follow through.

Carl Elliot from the University of Minnesota has provided many interesting perspectives on the impact of pharmaceuticals and pharmaceutical companies on our biomedical health care system. In *Better than Well*, Elliot questions the potential overuse of antidepressants by western societies specifically the United States (Elliott 54-76). In order to be successful in our society we have to move at particular pace. This pace can often have adverse effects on our health. Pharmaceuticals can keep us performing at the appropriate pace without really having to change our lifestyles. This perception can make pharmaceuticals extremely dangerous. In David’s case, the hypertension medication allowed David to put his physical health
on the backburner so that he could focus on caring for his wife and maintaining his career. As a result of this focus, David’s physical health suffered. Is there something wrong with the pace of society and the health sacrifices that are made to maintain that pace? Day in and day out I find myself putting my own health on the line for the sake of societal success. For example, I stay up late, eat junk food, and guzzle caffeinated beverages. After reading Elliot’s book I couldn’t help but think that something needs to be done to change pace so that our health does not suffer the consequences, but I could never think of a fool proof way to change pace without making other sacrifices.

I have also done extensive research looking into the role that pharmaceutical companies play in our biomedical healthcare system. Joseph Dumit, author of *Drugs for Life*, analyzes the role pharmaceutical companies and after reading his book I was unpleasantly surprised by their extensive involvement in the health care system (Dumit 55-85). While looking into pharmaceutical companies there is a theme in which companies are marketing diseases to consumers of health. An example of this can be seen in the cartoon of the Zoloft ad that I inserted above. These ads call for patients seeking care to take action and ask their physician about particular drugs the next time they have an appointment. The plethora of ads that fill commercial spaces shapes diseases, especially chronic illnesses into a narrative that everyone can relate. This in turn, sets everyone who has seen the commercials or ads as a potential consumer of the marketed drug. Physicians often face an uphill battle with patients who have diagnosed themselves based on the symptoms that the commercials and ads mentioned. The physician then has a choice to make. The
physician can either make their patient happy and prescribe the prescription drug that their patient pressures them for even if the patient’s symptoms don’t match the drugs mechanism well or the patient can seek out a physician who is willing to give them what they want no questions asked. Again, external pressures on physicians often play major role in the final decision that the physician makes. For example, what if the second physician prescribes the drug because he is under pressure from his administration to prescribe more of a particular pharmaceutical because that pharmaceutical company is making a large donation to the hospital where he works. The consumerization of healthcare by pharmaceutical companies was a situation that Dumit and Elliot mention frequently in their books. I do not have a solution to this problem, but there is definitely a problem that we need to address on a national and international scale in order to keep health at the forefront of healthcare.

The choices pharmaceutical companies make also have huge global implications. For example, few resources are allocated to develop vaccines or treatments for diseases like Ebola and Malaria because they are not major concerns of the first world. Many pharmaceutical companies say that they cannot devote resources to these causes because they are not in a financial position to support the research. After seeing this trend over and over my frustration with pharmaceutical companies grew and I often found myself having to put my book down for a while. I was reading how they were devoting billions and billions of dollars to host conventions for physicians, producing primetime commercial ads, and developing multiple medications to treat symptoms of first world diseases, but yet they couldn’t spare the “change” that it would take to research global diseases. When “crisis” struck this
summer and a handful US citizens contracted Ebola after spending time in Africa the American people were baffled that there wasn’t already a treatment or cure. As a global citizen I believe that we need to devote resources to the eradication of diseases that do not only affect the first world. Pharmaceutical companies are in a financial position to make the most change, but in recent history they have chosen not to act.

What's wrong with life getting in the way? How we balance health.

A narrative like David’s can be adapted to so many different lives. If it isn’t a wife’s broken ankle and an unused gym membership it is kids activities, pressure at work, relationship issues, other health concerns that get in the way. The idea for this case study was sparked almost two years ago during my independent study. I was reading a book called Against Health, composed of essays from various authors each with a unique perspective on all of the players in the game of health. In the chapter, “What is health and how do you get it?”, by Richard Klein I began to see for the first time how life could get in the way of health (Metzl 15-25).

I have been an avid athlete my entire life. I began playing soccer at the age of four and have played every year of my life since then. So in total I have been playing soccer for 18 years. That is crazy. Soccer hasn’t been the only sport that I have played, but it has always remained at the top of my list. I played a few years of softball, basketball, and even ran a season of cross-country…yuck, but nothing really got me going like soccer did. As a freshman in high school I decided to quit all of the other sports that I was a part of and pursue only soccer. As a 14 year old I was a member of three competitive teams for the next four years. I played on my high
school’s varsity soccer team, a competitive travelling club team, and the Iowa Olympic Development Program team. There were times when I was competing with all three teams in the same season. As a senior in high school I decided that I would like to continue playing soccer for another four years and was selected to be a part of the St. Olaf women’s soccer team. As a member of this team I played four competitive seasons and was honored by being selected by my teammates as captain for my final, senior season. Yeah yeah yeah, so why is this relevant at all?

18 years of soccer accelerated the deterioration of my physical health. How is this possible, you ask? Although a high regimen of aerobic exercise has most likely done wonders for my health and overall fitness, a demanding soccer career has deteriorated my physical health in a way that cannot be seen on a blood pressure monitor or a blood test, but it can be felt. Fortunately, I never suffered any major injuries like tearing my ACL or breaking bones like many of my teammates have over the years. But, I did receive a concussion, multiple sprained ankles that made it so I it is nearly impossible to stretch my ligaments any further, a torn MCL, and I have developed plantar fasciitis in both of my feet and chronic tendonitis in my left Achilles tendon. Each and every one of these minor injuries still affect me today and my ability to run and participate in athletic activities without pain. So why did I put my body through so much for a sport? Because soccer was more than a sport to me.

Throughout my time as a soccer player I have been a member of a community of women who have grown with me, challenged me, and shaped me into the person I am today. Every experience on and off the field with my teammates has not always been positive, but I have learned how to be a member of team, I have
learned what it is like to be on a team that with minimal effort can win games, I have learned what it is like to be on a team who despite its best effort and talent could not win a game. On the soccer field I had my first taste of adversity and I have been made better because of it. Soccer was a gateway into a community of individuals with a shared goal, a community that I could escape to when the trials of attempting to “find myself” in middle school and high school were overwhelming. Therefore, it will forever hold a special place in my heart. Looking back on my experience, I wonder what my life would have been like if I had chosen a to participate in an activity that took less of a toll on my body. As I rewind through my life and attempt to picture it through a different lens I can say with the utmost confidence that I would not be who I am today without my history as a soccer player. Despite, this fact the physical pain from my 18 years as a soccer player remains constant.

My point with this anecdote is to say that in order to live the lives we choose to live and lives that we are proud of, health my need to be sacrificed. Before my sophomore year of college, I never once paid mind to the negative health effects that years of soccer have taken on my body—probably because I could not feel them yet—but now the damage is constant in my mind. So why do we do it? Is it because we are unaware of the physical damage we are submitting ourselves to or is there something else? The sense of community that I felt among other soccer players leads me to believe that there is something else that leads us to turn a blind eye on our health in order to live our lives. In against health Richard Klein advocates, and with success in my perspective, for the smokers who continue to smoke despite knowing full well the harm that could come to their health (Metzl 15). He explains the
development of community similar to that of my own communities within soccer and how those communities and raise our mental and emotional health to a level that cannot be attained simply by minding our physical health. There is a difference between living the best quality of life according to your own standards and just merely surviving by societies standards.

**Risk Reduction and Predisease States**

After attempts to get healthy life gets in David's way and he develops prediabetes. As my research has progressed over the past year or so I was introduced to and became very intrigued by pre-disease states. With a biomedical culture deeply concerned with risk reduction it would only make sense to categorize someone as prediabetic or pre- (insert chronic illness here). I began investigating pre-disease states more, specifically pre-diabetes and according to the Mayo Clinic,

“Prediabetes means that your blood sugar level is higher than normal but not yet high enough to be classified as type 2 diabetes. Without intervention, prediabetes is likely to become type 2 diabetes in 10 years or less. If you have prediabetes, the long-term damage of diabetes — especially to your heart and circulatory system — may already be starting.”

Mayo’s website goes on to state that this prediabetes condition is reversible with the correct lifestyle changes, but if no action is taken the development of diabetes is inevitable. What concerns me about being classified as “prediabetic” means that our health care system is categorizing you into a diseased state before you have even developed the disease. What does this categorization do to the patient’s physical and mental health? Their condition needs to be addressed, but by putting them in a category of disease before they even develop it put the patient in the mindset that
developing the disease is inevitable? There may also be some comfort for the patient in their categorization. Bateson states, “We can call our fate by name before we meet it. It will not retreat, but we are often relieved when doctors name our conditions (Bateson 5).

Once they are diagnosed the individual is no longer a medical mystery and they fit into a specific community of pre-diabetics with a specific treatment plan (Mol 22). The comfort of a community might make pre-diabetics less likely to address their health concerns or there might be a certain discomfort associated with becoming a part of this community and it could give the individual a necessary a reality check to start leading a healthier life because they do not feel as though they belong to the diabetic community.

Our biomedical system has begun to assess our risk factors as illnesses and addressing the absence of disease as a potential for the disease to develop. This raises the question of whether or not we are always in a prediabetic state. Ideally, we would live in a world where individuals would have the ability to make appropriate decisions that would lead to health before the situation becomes dire, but I realize that is not possible. As a result of our human shortcomings we have developed a category and plan to treat the potentially ill.

**David develops type II diabetes. Where do we go from here?**

I believe that there needs to be a fundamental shift in the way that we view health and chronic illness in order to become a nation in which less than one quarter of its total population suffers from one or another chronic
disease. As of right now, this goal seems unattainable, but it can start with providing better health education resources to children and their parents. If children are educated about their bodies and how they should treat their bodies they are put in a better position to develop healthier habits. The more healthy habits are nurtured in childhood, the more likely those same habits will be translated into adulthood.

Once in adulthood those healthy habits will allow adults to focus less on maintaining their physical health making more time available to focus on the other dimensions of health. Humans, as mortal beings, should be less consumed with prolonging our lives and more with making use of the time that we are given. I am an advocate of finding balance within individual health. A method that works for one individual may not work for another, but there is no denying that increased health education, a focus on healthy eating, and exercise will cultivate a nation of adults who are less afflicted by chronic illness. There is no limit to the amount of good that can be accomplished through the work of a healthy, in every dimension, nation.
Works Cited


