

### Final Product Documentation Log

Date	Time Started	Time Ended	Time Worked	Place of Work	Description	Total Time
2/8/2019	12:30:00 PM	1:00:00 PM	0.5	Affinity Neurocare	I talked to Dr. Dike about potential ideas to conduct research on. In the past, we had talked about how I could work on a research project with him in order to get more exposure to the field and learn how to correlate data. Through my research assessments I had realized that a correlation existed between stroke formation and socioeconomic status, but when I brought up the idea to Dr. Dike, he said that it would be not feasible given that we did not see patients of a varied socioeconomic status. Eventually, after talking and doing research, we realized that doing a retrospective analysis on the correlation between migraine patients obesity would be interesting.	0.5
2/8/2019	5:30:00 PM	7:30:00 PM	2	Home	I created my final product proposal so that I would have a more concrete and specific idea of what I wanted to do. I made sure that my final product idea involved all the high-level thinking skills. Because I had talked to Dr. Dike before about doing this research project, I had a general idea of what I wanted to do. I also spent this time creating a calendar so that I could use my time wisely and account for other events such as AP Testing week.	2.5
3/2/2019	10:00:00 AM	1:00:00 PM	3	House	I researched about migraines and I learned about the different risk factors that are involved with migraines. Due to Mr. Speice's comment on final product proposal, I was quite curious about whether migraines occur more in developed countries simply because they are documented there more or if there is an underlying cause. It was interesting to find out that people of lower socioeconomic status are more likely to develop migraines. Thus, my research made it apparent that socioeconomic status is a confounding variable that I will have to account for while conducting the retrospective analysis.	5.5
3/3/2019	1:00:00 PM	3:00:00 PM	2	House	I continued researching different risk factors that are associated with migraines. It become apparent that women are more likely to experience migraines. In addition, I came across an interesting report about a cross-sectional study that was done in Italy about self-medication of migraines. Many of the participants	7.5

					did not see headaches as a real health problem, and thus they did not visit doctors. Since self-medication of headaches and migraines is somewhat of a trend, this will also have to be accounted for in my retrospective analysis or else undercoverage bias may plague my results.	
3/4/2019	1:15:00 AM	2:15:00 PM	1	Reedy High School	I looked into the submission criteria for different academic journals. None of the journals had a specific deadline for when they needed the submissions by, but as I was exploring different articles, I realized that many of the articles took over 3-4 months to be published after being submitted. Thus, I don't think it would be possible to have my research published in a journal before the final product deadline. In addition, as I was exploring the different articles about migraines, I realized that a correlational study over migraines and obesity has already been done. However, they have all focused mainly on pediatric and adolescent populations, and since my analysis will focus on adults, it will be different in that respect.	8.5
3/11/2019	12:30:00 PM	4:00:00 PM	3.5	Mentor's Office (Affinity Neurocare)	During the visit, Dr. Dike and I talked about the final product project, and we decided to revamp it so that some of the confounding variables that I had discovered could be eliminated. Instead of making my final product as retrospective study, we decided that it would be best to collect actual data by taking the Mallampati scores and the neck circumference of all the patients that come in with a migraine. These two measurements are indicators of obesity, and since they are more specific than just obesity in general, this study will be more helpful for doctors.	12
3/21/2019	1:10:00 PM	1:40:00 PM	0.5	Reedy High School	I researched about Mallampati scores and how they can be used as indicators of obesity. Many of the articles talked about how there are better tests to use to measure intubation, which is what the original purpose of the Mallampati score is. However, the articles revealed a strong correlation between obesity and Mallampati scores.	12.5
4/3/2019	8:00:00 PM	10:00:00 PM	2	Home	I started writing my research paper by formatting it correctly to match APA, and I also started talking about how I was formatting the study using null hypotheses and alternative hypotheses for neck circumference and the Mallampati scores. In addition, I also started writing the introduction so that my paper had a hook.	14.5

4/7/2019	5:00:00 PM	7:00:00 PM	1	Home	I talked to Dr. Dike over the phone about my final product and due to there being some roadblocks in capturing the Mallampati scores, we decided that it would be best if I focused on something more concrete, like Patient Life quality surveys related to different types of migraine drugs. We spent some time researching for a validated survey, and we decided that I could call Dr. Dike's 22 patients that are one 3 different types of drugs and extract this information.	16.5
4/8/2019	6:00:00 PM	8:00:00 PM	2	Home	I spent time updating my final product plan and working on the final product progress assessment in order to track and document the work that I have been doing. While completing this assignment, I was able to gain ample insight about the amount of work I have left to do and how I need to budget the rest of my time in order to complete my final product.	18.5
4/12/2019	12:30:00 PM	2:30:00 PM	2	Mentor's Office (Affinity Neurocare)	I went into Dr. Dike's office and created a list of all the patients who were prescribed one of two drugs (Aimovig or Ajovy). I called the patients and I asked them 14 questions from the Migraine-Specific Quality of Life Questionnaire version 2.1 in order to see how the drug affected quality of life. I was able to acquire some data, and it made me realize that I have to spend more time than I originally thought in calling people.	20.5
4/15/2019	1:00:00 PM	5:30:00 PM	5.5	Affinity Neurocare	I spent some time going through the migraine patient data that Dr. Dike had. The three new medications that I was conducting research on had a lot of patient overlap in the system, so I had to manually go through and look through the patient notes in order to see which patient was prescribed which migraine medication. After I sorted out the data and created a spreadsheet of approximately 25 patients, I talked to Dr. Dike about the sample size, and he reassured me that having even more than 10 patients for a relatively new drug is good for a survey sample. Next, I called all the patients on the list, but only 5 picked up and answered the survey.	26
4/22/2019	10:00:00 AM	4:00:00 PM	6	Affinity Neurocare	I called all the patients on the list once again and I was able to collect data from 6 more patients, bringing up my total sample size to 12 patients. Afterwards, I spent time creating a spreadsheet and inputting the data that I had collected. Afterwards, I found the mean and standard deviation for each of the questions, since they were answered on a 1-5 scale. I also repeated this when I blocked the data by gender and by medication. However, after talking to Dr. Dike, he said it would be better to look at the effectiveness of the three different	32

					medications as a whole since they belong to the same class. Finally, I ran a matched-pairs t test on the averages and also on the data from the 14 different questions.	
5/4/2019	2:00:00 PM	8:00:00 PM	6	Home	I spent my time doing research over the three different CGRP drugs and also finding out more about how these medications work on a biological level. After conducting the research, I also looked into how the three drugs differed. In addition, I also began writing the paper. I wrote the introduction part and the background information section. I also formatted the paper so that it fit APA standards.	38
5/6/2019	7:30:00 PM	8:00:00 PM	0.5	Home	I edited my final product proposal to reflect the changes that Dr. Dike and I had made to it some time back.	38.5
5/6/2019	10:00:00 PM	1:00:00 AM	3	Home	I worked on writing the methods and participants section of my final product report. I also added additional information about how the half-life of the three different drugs tested were different and what this meant in terms of treatment. In addition to finishing the methods and participants section of the report, I also started formulating the results.	41.5
5/9/2019	10:00:00 PM	2:00:00 AM	4	Home	I spent time writing the paper and making sure that all of the supporting documents were in the folder.	45.5
5/10/2019	5:00:00 PM	7:00:00 PM	2	Home	I added citations to my paper, proofread the paper, and I also wrote my product summary.	47.5