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The Three "R"s of Research

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The Three R's of Research

INTERNSHIP PRACTICUM REPORT

Presented to the Graduate Council of the
Graduate school of Biomedical Sciences
University of North Texas
Health Science Center at Fort Worth
In partial Fulfillment of the Requirements

For the Degree of

MASTER OF SCIENCE

By

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Fort Worth, Texas

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CHAPTER 1

INTRODUCTION

The primary purpose of this practicum project is to outline the steps a Site Management Organization (SMO) must take in order to successfully reach their enrollment goal as set forth by the CRO or Sponsor. In order to conduct this practicum project, I participated in a 6 month, full-time internship at ACRC trials in Plano, Texas. ACRC Trials is a Site Management Organization (SMO) with 9 years of experience in conducting research in the Dallas area. The acronym for ACRC Trials stands for Advanced Care Research Centers Trials. ACRC Trials handles all aspects of the research process except, those duties which are the sole responsibility of the physician. The duties of the Principal Investigator (PI) include, but are not limited to, performing physical exams, assessing adverse events and laboratory values, and performing any medical procedures. At ACRC Trials, I participated in clinical research topics of regulations, recruiting, and study coordination, with the primary purpose being to outline how ACRC Trials conducts a study with a primary goal reaching their specified enrollment goal. My primary site mentor was Mrs. Heema Marwah, CCRC, who is the Research Director at ACRC Trials.

During my studies at UNTHSC in the Clinical Research Management program, a required course was *Introduction to Clinical Research and Studies*. In this course students focused primarily on the regulatory documents involved in research and also on roles of specific positions throughout clinical research. During my first few weeks at ACRC Trials, the variation from classroom education to the reality of how research was conducted at my site was evident. For example, I found that many of the operations discussed in the classroom are handled jointly by multiple positions at ACRC Trials, which is different from the rigid discussion of the role and responsibilities of research personnel presented in the classroom. For this practicum project, I

used what I observed at ACRC Trials to demonstrate how a team approach may have benefits to the conduct of clinical research compared to separating the responsibilities to individuals.

Personnel working closely together at ACRC Trials created accountability and proficiency across many studies at different sites. ACRC Trials has multiple research locations with which they contract and they must ensure that the studies' strict metrics are achieved within a specific time period at each location. ACRC Trials has a separate regulatory specialist that works with the clinical research coordinators to complete regulatory documents. There are two patient recruiters, one dedicated to recruiting from the research database as well as from marketing campaigns geared towards the community. The other recruiter is dedicated to conducting chart review of the potential subject charts within the practices associated with ACRC Trials, which recruits clinic patients. Once the subjects are screened and scheduled, the subject is seen by the clinical research coordinator. There are a total of four study coordinators that are responsible for their own studies, but they also serve as a backup coordinator for other studies within ACRC Trials. The goal of this practicum project is to 1) demonstrate how to effectively attain subject enrollment goals, 2) focus on two subtopics regarding recent changes in research, and 3) to demonstrate the importance of regulatory affairs and its department at an SMO.

CHAPTER 2

BACKGROUND AND LITERATURE

Clinical Research is rapidly growing industry. According to Moses et al the clinical research industry spent \$94.3 billion in 2003 alone to support biomedical research, which funded drugs, vaccine and medical devices. The primary contributors to this massive allocation of funds are located in the United States of America (Moses et al. 2005). Because clinical research contributes substantially to the national economy, the industry is rapidly changing and evolving. As a result, research staff responsibilities are shifting. This can be demonstrated by different companies in the research industry merging to make the process easier and more streamlined, which happens fairly regularly (Vinluan, 2013) and by the fact that new companies are able to join the industry because a new market has opened up. There are now multiple advertising companies hired by sponsors that market directly with clinical research trials because a market has opened up for sponsors of clinical research to advertise and promote their trials; this promotion been shown to help in study recruitment strategies (BBK Worldwide, 2014).

Clinical research used to be simply organized where the pharmaceutical company or sponsor would contract with a Principal Investigator (PI) in order to conduct clinical research on human subjects that were a part of the physicians practice (Woodin, 2008). The sponsor is a title to describe the pharmaceutical company who has developed the drug being used in the study. Many sponsors now contract with Clinical Research Organizations (CROs); CROs can serve many functions, including designing the clinical trial, assuring that the trial is conducted appropriately, and assuming the administrative processes for the pharmaceutical company. These functions of the CRO allow for the sponsor to cut cost and time conducting trials and focus on

pharmaceutical manufacturing. Sponsors use CROs if the sponsor does not have the appropriate staff or if they are attempting to cut cost and not hire short-term labor.

Sponsors and CROs contract with PIs or site management organizations (SMOs). An SMO is a company that assumes many of the administrative and conduct of performing research for the PI, but the SMO is still under the supervision of the PI. ACRC Trials considers themselves to be an SMO. ACRC Trials is capable of handling many aspects of research, under the supervision of a PI. ACRC Trials contracts separately with sponsors or CROs, as well as contracting with multiple PIs. The PI, when working with an SMO, delegates specific tasks to the SMO. These tasks may include contracts and budget negotiations, administrative and regulatory completion, study coordination, and recruitment. (Cindric, 2010)

In order to properly conduct a study a CRO will also contract with Institutional Review Boards (IRBs), laboratories, advertisement agencies, data collection companies and other businesses. Oversight for the clinical research field is the responsibility of the Food and Drug Administration (FDA). One of the major requirements of the FDA is that all clinical research studies must have ethical oversight by an IRB in order to maintain the rights and safety of the research subjects involved in the clinical trial. When looking at the clinical research industry from this perspective, it becomes easily understandable why not many potential subjects are aware about clinical research or are hesitant in participating in clinical research trials.

The main goal of clinical research is the safety of the patient or subject; this is a responsibility of from each person involved in the trial, ranging from the sponsor to the principal investigator. This practicum project will examine the present day activities of the sponsor, CROs, and the IRBs. The bottom line of clinical research is to create an effective treatment that is safe

or has minimal negative effects compared to benefits, i.e., beneficence, as described by the Belmont Report, in the shortest most cost effective amount of time (US Department HHS, 1979). The treatment then has to be demonstrated as effective and safe using statistical analysis. Pharmaceutical trials plan for statistical analysis by creating enrollment goals for each site that will participate in the study. Enrollment goals help the sponsors vary their subject population at different sites depending on the number of patients and the characteristics of a patient needed in varying clinical trials around the country or the world. While some CROs compile safety and drug data and analyze it, this is still primarily a job of the pharmaceutical company or sponsor. The practicum project discusses how one of the research sites at ACRC Trials safely and ethically reached its enrollment goal and how the CROs and IRBs helped accomplish this task.

CHAPTER 3

SPECIFIC OBJECTIVES

Problem 1: What are the advantages and disadvantages of having a separate regulatory department, compared to having regulatory paperwork completed by the clinical research coordinators?

Hypothesis 1: Having a regulatory affairs department at the clinical site removes the clinical research coordinators from the processes involved in the reporting to the Institutional Review Board (IRB) and the Sponsor or CRO, resulting in higher efficiency for a site management organization. Eliminating regulatory work from the research coordinators' daily task should allow them more time to care for the patient and focus on the protocol, and lead to faster completion of a clinical trial. To determine to what extent this is true, this practicum project recorded all the regulatory documents and time for completion of each of the documents in a given week at ACRC Trials. An alternate timeline was then created to determine how a study would progress if coordinators were required to complete regulatory paperwork themselves. Efficiency was determined as the time taken to complete a clinical trial without the coordinator being involved in the regulatory processes, as compared to if the coordinator were involved.

Problem 2: A slight real-world gap exists between the academic definitions of clinical research and the processes of clinical research.

Hypothesis 2: There is a slight deviation between what is taught in the classroom regarding clinical research and actually conducting a clinical trial in the real world setting. In the classroom, students were taught about specific staff positions involved in research and the task these positions are responsible for. Each clinical research site has different standard operating

procedures when conducting a clinical trial. A single site may also adjust different procedures and goals depending on who's the sponsor or the indication of the trial. Academic definitions and processes are meant to only provide a broad basis on the conduction of clinical research. A goal of this practicum report was to compare and contrast how the conduct of clinical trials is described in the classroom with how a clinical trial is actually conducted at a research site. The final goal of this problem was to identify differences in topics covered in the classroom to real world scenarios.

Problem 3: Determine how ACRC Trials successfully reached its subject enrollment goal for Primary Study.

Hypothesis 3: Enrolling enough subjects to meet the enrollment goal happens by careful planning. The sponsor or CRO began by identifying a PI and site with a specialty and patient population that related to the goals of a clinical trial. Site selection is done either by a pharmaceutical company or CRO through site selection questionnaires and site selection visits. After the site has been selected, an enrollment goal is negotiated between the site and the sponsor. Once an enrollment goal is set, the site must then recruit subjects from inside the PI's practice and from outside in the surrounding areas, cities, or counties. The patients must be screened to find those that meet specific criteria of the study, the patient must be consented to participate in research and then the conducting site must ensure the patient maintains involvement throughout the study until the final visit. Recruiting at each research site varies depending on each clinical trial's individual endpoints, subject inclusion/exclusion criteria, and patient population in the area. This practicum report describes the process of conducting a study from the beginning of site initiation at ACRC Trials until ACRC Trials continued into an open enrollment phase after successfully reaching their enrollment goal. Primary Study is presented as

an example to document the recruitment and enrollment process. The practicum described specific departments and their activities within ACRC Trials that allowed ACRC Trials to reach its designated enrollment goal.

CHAPTER 4

SIGNIFICANCE

The importance of reaching a subject enrollment goal is all centered on proving the validity of a study by providing safety and efficacy endpoints to the FDA. Design of a study is determined by calculating the number of subjects needed to participate in a study that will statistically demonstrate, with a high confidence interval, that a medication or device is safe and effective. A confidence interval is an important parameter in biostatistics, because, if a test statistic falls between the two interval limits, that interval can predict the percentage of likelihood that the statistic will occur (Daniel). Pharmaceutical companies tend to use high confidence intervals, e.g., 90% and above, to test study data. In order to attain this high confident statistics the sponsor must enroll a large number of subjects, which means a high number of research sites is required to meet this study enrollment goal (Jones 135). Although a particular site may not reach its goal, the site is still required to submit their data to the cumulative total data collected at all sites. If a study is based on having a certain number of subjects at each of a number of sites, then decreasing that number of subjects at one or more sites because they could not attain their recruitment goal would increase the statistical error and skew the results of the study. If the study's confidence interval was not statistically valid, then the sponsor or CRO might have to select more sites, thus, costing more money. The importance of reliable data lies in the fact that each site must achieve an enrollment goal, so that the cumulative total study enrollment goal is met, in order for the overall data to be statistically validated.

It was evident after starting the internship at ACRC Trials that a gap exists between what is taught in the classroom regarding the conduct and oversight of clinical trials and reality of how trials are conducted. Examination of this gap by comparing how clinical research is actually

conducted to how it was described in the classroom, as well as examining the potential effect that a separate but cooperative regulatory department will have on the conduct of a clinical trial will demonstrate how a clinical research site involved in conducting a trial can most effectively reach their subject enrollment goals. Examination of these topics should also provide insight into the processes occurring in a rapidly expanding clinical research industry. “The research industry is very dynamic” as I have been told not only by Mr. Todd Almaraz, my *Introduction to Clinical Research* professor, and by Mr. Hardeep Marwah, the Business Director at ACRC Trials (personal communication). This concept is reinforced by the fact that the clinical research field is a multi-billion dollar industry, such that \$5.8 billion is spent developing each new drug before it gets to market and approximately 31,000 studies recruiting subjects for clinical trial studies (Roy, 2012) (ClinicalTrials.gov).

By focusing on the way in which regulatory work is processed at ACRC Trials and by comparing the differences between classroom instruction and how an SMO actually reaches subject enrollment, this practicum report will attempt to demonstrate how a study is conducted properly, determine which way is most efficient, and identify complications in the dynamic field of clinical research. The second aim of the practicum project was to test the hypothesis that differences noticed between academia and reality and the division of regulatory affairs from the other responsibility of study conduct have made for a more efficient study conduct and does not affect the safety of the patient or subject in the clinical trial.

CHAPTER 5

MATERIALS AND METHODS

Problem 1/Hypothesis 1: Hypothesis 1 was assessed by tracking the type of regulatory work conducted and how long that work took during the week of January 6th, 2014. This work week at ACRC Trials was chosen by the student researcher and the regulatory specialist because it was after the holiday season: thus the majority of the Clinical Research Associates (CRA) would be back at work. CRA's from the responsible CROs are the principal line of communication when submitting and updating regulatory documentation. The week chosen was assumed that since it was after the holidays, all other departments in a CRO and Sponsor would be working at full capacity. The week chosen was also planned around and requested time off by the student researcher and the regulatory specialist. The tracking of work done by the regulatory department could have been kept by one person, if necessary, but since the student researcher did not at the time communicate with CRA's regularly, this would have created a loss of data. In addition, the researcher was completing the majority of regulatory documentation at ACRC Trials. The final reason the week of January 6th was chosen was because the regulatory department wanted to accurately reflect the capability of two people both working at the same time since that work would be compared to the current 4 study coordinators if they had to assume responsibility of regulatory work.

Taking the amount time conducting regulatory work during the week of January 6th, and multiplying that time by the average study length at ACRC Trials should allow for the determination of the percent increase in time that it would take if coordinators were responsible for the completion of regulatory documentation. Average study length from the above equation should be an average of study lengths from all completed trials conducted in the last year at

ACRC Trials. The goal of using the average length of a study at ACRC Trials will reflect a good representation between short and long term studies by using all completed trials in the last calendar year of 2013. Studies that were cancelled early before completion were not included in this average. The time taken to complete regulatory work was collected using an Excel spreadsheet with categories at ACRC Trials defining the type of document, startup documentation, updates and approvals, or closeout documents. From this data, an extended timeline was created by defining how much longer the study would take if clinical research coordinators were responsible for completing regulatory documents. This procedure involved numerical data and calculations, but no statistical analysis was conducted. The end goal of this project was to demonstrate the overall effectiveness of using a regulatory affairs department to complete regulatory documentation for the coordinators, as opposed to having regulatory documentation completed by the coordinators. The formula demonstrating efficiency was as follows:

$$\text{Total Extra Study Time} = \text{Time for Regulatory to Complete Startup} + (\text{Time for Regulatory to Complete Weekly Maintenance Activities} \times \text{the Average Study Length in 2013})$$

And

$$\text{Percent of Time Increase} = (\text{Total Extra Time}) \div (\text{The Average Study Length in 2013})$$

Due to the amount of time recorded, a conversion from hours to weeks was required to effectively demonstrate the increase in time that would be required of coordinators. Research Coordinators at ACRC Trials on average work 40 hours a week.

There are several limitations to the study design and collection of data that must be recognized and addressed. These are:

1. The experiment assumed equal time of Completion of Regulatory Documents between two Regulatory Specialists and four Research Coordinators.
2. The experiment assumed that measured time of completion of regulatory documents accurately estimated an average of time it takes to complete regulatory documents each week.
3. The experiment assumed that the average time to complete a study began at the beginning of study startup submission and ended at the closeout visit. The beginning time was changed because study startup requires a significant amount of regulatory paperwork completion before the site can even begin to enroll. Pre-enrollment site visits, as well as, archiving did not count because there are minor regulatory and coordinator activities in these procedures.
4. To compensate for errors and correction that might occur in the regulatory department, it was assumed that if the three coordinators were completing the documents that they would be just as likely, if not more likely, to make the same errors and corrections because of their inexperience and increased number of personnel.
5. When comparing one trial to the other, it was assumed that this formula could be extrapolated to relate to trials other than influenza, by taking into account the number of visits and elements in each trial.
6. It was assumed that overall the final product of this experiment would be an estimate and should not be perceived as an exact number, since the measurements were taken only over a whole business week and short completion times may have been forgotten in reporting to the regulatory completion time tracker.

Problem 2/ Hypothesis 2: The practicum project was designed to identify the differences between concepts taught in the classroom compared to how clinical trials are actually conducted at ACRC Trials. This aim was accomplished by using the classroom lecture notes and noting the differences between what was taught in the didactic class and what actually occurred at ACRC Trials. Information presented in class by the instructor was used with the permission of the course director, Patricia A. Gwartz, Ph.D. There are no observations regarding any expected numerical data that will result from this practicum project or statistical analysis of that data. The limitations that surrounded the study design for proving Hypothesis 2 are:

1. The slides from *Introduction to Clinical Research and Studies* course may not be characteristic of the entire research community the primary instructor was an employee of Medtrials, a CRO, at the time and he used many of his own experiences at Medtrials to teach the class.
2. The use of only two sites, Medtrials and ACRC Trials, to compare to the entire research industry, such as Pfizer Inc., which works with 250 different sites alone. In other words, if Pfizer contracts with up to 250 sites to conduct one clinical trial, the probability they all conduct a trial identically is remote (Pfizer). Each site will have different recruitment strategies, different research coordinators, and different PIs.
3. It is possible that because research is constantly evolving and changing that the information presented in the classroom a year ago may have become outdated.

Problem 3/ Hypothesis 3: The research for this problem was focused around a particular study at ACRC Trials. This practicum project covered the steps required to reach enrollment at a

specific site. The process of site selection will not be discussed. The clinical trial selected for the practicum project has been designated Primary Study, in order to not disclose any confidential information during the course of the practicum project and presentation. Primary Study was initiated at ACRC Trials at the end of the flu season of the previous year. Primary Study was delayed until the start of the following influenza season. Primary Study was chosen as an example for this practicum because it had already passed its regulatory start-up submission phase, and only would require minor updating at the time of Site Initiation, the time when a site may begin enrolling subjects. The trial would be concluded at the end of the influenza season thus, it would be a short-term trial that would be easy to monitor throughout a six month internship. The simple protocol provided the student researcher with capability to be involved in almost every aspect of the study visits, except for blood draws.

Normally the process at ACRC Trials for beginning a study begins with completing questionnaires for each PI they contract with. The questionnaires are for CROs and some pharmaceutical companies about site information for a specific PI. If the CROs or sponsor finds the site's answers compatible with a study they are conducting they send the site or in this case the SMO another questionnaire, that is more specific, dealing with patient population, staff and research experience, as well as a more detailed supplement on site capabilities. Multiple supplemental questionnaires can be completed but if the site is chosen to move further in the process, then the CRO or sponsor will either have a site selection visit at ACRC Trials and with the PI; or if the company conducting the study is already familiar with the site, the site will get approval and begin the regulatory submission phase. The time span for these procedures are varied as a lot of evaluation happens on the sponsor/CRO side and depending when the trial is

set to start or if it has already started at other sites. For this reason and before mentioned others is part of the reason why Primary Study was chosen as an example to be used.

At the beginning of the internship, it was the responsibility of the student researcher to update and maintain the regulatory documents for Primary Study, along with other ongoing studies. A new IRB Site Information Questionnaire was submitted to the sponsor, along with updated documents including a FDA 1572 and Financial Disclosure Forms to add the researcher and a new site research coordinator to the site. Regulatory startup documents and updates had to be submitted before the site could begin enrollment or recruiting. After receiving the updated study documents and verifying their completeness, the sponsor scheduled a Site Initiation Visit (SIV).

Before the SIV the student researcher participated in an investigator meeting, this meeting covered on different topics such as study drug information, how to properly conduct study visits along the study protocol, laboratory sampling and processing, and study recruitment. The investigator meeting was held by a new CRO that the sponsor had recently hired to conduct and monitor the study. The purpose of the investigator meeting is to have all the PIs and their research coordinators or assistants participate in a detailed presentation about how to properly conduct the study and allow for any questions that might have arisen to be answered in a group forum. The CRO and Sponsor hired a clinical study recruitment firm for Primary Study.

The role of a Clinical Trial Patient Recruitment Firm, CTPRF, is to assist in helping each individual research site effectively reach their recruitment goals. The CTPRF developed a recruitment plan based on a questionnaire answered by the Primary Study Recruiter at ACRC Trials. The recruitment plan was then presented and discussed at a meeting between the Primary

Study Recruiter and a CTPRF representative. The subject recruitment campaign for ACRC Trials consisted of an ad based campaign with local community recruitment strategies. The CTPRF representative spent a day communicating with local pharmacies and colleges, because the recruitment firm had seen the greatest overall success in recruitment from patients that patronize pharmacies for medications or college students that have little or no medical coverage and would like compensation in return for participating in clinical study. After the initial visit, the CTPRF representative only returned to the site one more time to follow up on recruitment and was primarily involved in creating and providing advertisements to be placed in the community that were specific to Primary Study's indication. CTPRF's are increasing in number and their involvement in the clinical research industry.

The recruitment for Primary Study at ACRC Trials used many methods, including social networking websites, newspaper ads, email blast to existing patient databases, traditional advertising with flyers, posters, and billboards, along with communicating and recruiting at local pharmacies, hospitals, health fairs, and colleges. ACRC Trials used the recruitment materials provided by the CTPRF, and created their own personalized advertisements as well. The goal for a study at ACRC Trials is to always recruit as many patients as possible from within the clinic and then pursue outside advertising. Both advertising options were pursued more synonymously in the case of Primary Study because of the acute nature of the indication in Primary Study. For Recruiting from outside the clinic the Patient Recruiter at ACRC Trials had to screen many possible candidates that called after seeing some type of advertisement. Patients calling ACRC Trials had to complete a scripted phone questionnaire approved by the IRB. The phone questionnaire covered the inclusion and exclusion criteria of Primary Study. If the patient made

it through the phone screening of inclusion and exclusion criteria, the patients were then brought in to be further screened and possibly enrolled in the study at the PIs office.

Recruitment in the clinic was achieved by research coordinators being vigilant for any patient that might be a good candidate for the study. ACRC Trials managers held routine meetings with the Principal Investigator and the Sub-Investigators in the practice to give study updates. Extensive chart review was done each morning to locate any possible patient that might come in during that day to the PIs office with symptoms that qualified for Primary Study. The student researcher was responsible each morning for notifying office personnel of the status of Primary Study and of any possible candidate for the study identified through chart review. The research coordinator alone, or with a provider, would then approach in-clinic patients, give a very brief summary and review eligibility criteria. If the patient was interested and met the eligibility criteria, then they were consented and enrolled in the study. All in-clinic patients were enrolled either by provider recommendation or from extensive chart review to locate possible patients and then consulting with the provider. Due to the acute nature of influenza like illness, ACRC Trials increased their coverage at the PI's office in order to be there after normal business hours and during the weekend clinics held by the PI's office.

The enrollment goal is a specific endpoint that sponsors and CROs aim to attain if a site is capable of completing a study properly and so that their results may be validated by multiple subjects. Enrollment is usually considered the number of patients that signed the informed consent and participated in the clinical trial. Research coordinators are the final step in the enrollment process. For acute indications, coordinators must screen the patient, and then properly deliver the informed consent process. The informed consent process is accomplished by explaining the study in detail to patients and having the patients sign properly and understand

what they have agreed to. ACRC Trials holds meetings at least once a month to present and educate coordinators on how to present an informed consent. This meeting is presented by the Research Director at ACRC Trials, who has 15 years of experience in the clinical research field. Everyone that could possibly communicate with potential patients attends these meetings. After a subject signs the informed consent, the goals of the site are the conduct of the study and patient retention. These goals are achieved by following the study protocol and having constant communication and follow-up with the patient. Of course, the study participant may withdraw consent and quit participating at any time, but the study is designed to have a patient complete all visits. As per the practicum project, the student researcher shadowed and conducted visits per the protocol with the supervision of a research coordinator and the PI for the study.

CHAPTER 6

RESULTS AND DISCUSSION

Problem 1: What are the advantages and disadvantages of having a separate regulatory department, compared to having regulatory paperwork completed by the clinical research coordinators? This study tested the hypothesis that having a regulatory affairs department at the clinical site removes the clinical research coordinators from the processes involved in the reporting to the Institutional Review Board (IRB) and the Sponsor or CRO, resulting in higher efficiency for a site management organization. This hypothesis was tested by determining the effectiveness or efficiency of using a regulatory affairs department to complete regulatory documentation. Regulatory Tracker Data is presented in Table 1.

Table 1 – Regulatory Tracker

Weekday	Total Time Spent
Monday 01/06/2014	7.6 Hours
0.1 hours, Filing new correspondence from Friday's mail in site regulatory binders.	
3 hours, Creating two regulatory start-up packets, which included two IRB site information questionnaires, two FDA 1572s and over forty financial disclosures forms and other minor documents	
2 hours, obtaining signatures, scanning, emailing, and saving documents to the ACRC Trials Server	
2.5 hours, responding to follow up emails, and acquiring documents for different CRAs	
Tuesday 01/07/2014	8.25 Hours
0.75 hours, Completing an IRB site information questionnaire and submitting to the CRO	
3.5 hours, Getting signatures, organizing documents, scanning documents, emailing documents, and saving documents on the server	

0.5 hours, Filing new mail correspondence in study regulatory binders	
3.5 hours, completing regulatory documents edits, sending emails to CRAs, and scanning and saving documents to ACRC server	
Wednesday 01/08/2014	8 Hours
1 hour, filing documents in study binders, scanning, organizing server docs, and sending them to CRAs	
3 hours, signatures, regulatory doc editing, scanning, emailing	
4 hours, completing regulatory correspondence with CRAs, updating docs	
Thursday 01/09/2014	5.5 Hours
1 hour, editing past regulatory submissions, rescanning, and submitting	
0.5 hours, filing a regulatory binder with startup docs.	
4 hours, editing regulatory documents, corresponding with CRAs, scanning, updating documents on ACRC server	
Friday 01/10/2014	4.25 Hours
3.5 hours, filing and sending documents to IRB, corresponding with CRA, creating financial documents	
0.75 hours, filing documents and mail correspondence in regulatory binders and study bins	
Week of 01/06/2014	33.6 Hours
Time Dedicated to Start-up per Study	10 Hours
Time Dedicated to Regulatory Updates per Study	5 Hours

Using the formula presented in the methods section, the data indicated that the amount of time it would take to complete a study could increase by as much as 13% of the average clinical trial time in 2013 (i.e., by as much as 5 hours a week per each clinical trial a study coordinator was responsible for). This means that if a research coordinator was solely responsible for managing the entire regulatory workload for their respective studies, it would add 6.61 weeks to the

average completion time of a study at ACRC Trials, just to keep up with regulatory documentation. The data indicated that more than a third of the documented regulatory work in the tracker consisted of startup regulatory submission documents.

Note that the limitation section for each problem is discussed at the end of that Specific Problem's results section. The following is the discussion on the limitations surrounding Problem 1's study design and the data collection process involved with the design of Problem 1.

1. The use of estimates is necessary for discussing Problem 1 due to examining past research trials and comparing experience regulatory officials to inexperienced research coordinators. The regulatory specialist had five years of experience completing and handling regulatory documentation for the site. The student researcher had 5 months of classroom experience where the topic of regulatory documentation was covered broadly and 5 months of in depth training from ACRC trials. Only one of the research coordinators had any experience with regulatory work, and that research coordinator had not completed regulatory documentation in the past seven years. It was assumed that it would take at least 6 months to a year before the research coordinators could conduct regulatory documentation with the proficiency of the student researcher or regulatory specialist. Each research coordinator would have to complete extensive training from ACRC Trials on regulatory affairs. This conclusion came from the fact that if the research coordinator did complete regulatory documentation and correspondence he or she would only do so for their particular study where the regulatory department handled regulatory affairs for all active studies.
2. As discussed above, the week chosen to reflect amount time dedicated to regulatory work was carefully chosen with many considerations. If the regulatory tracker was conducted

later, the regulatory tracker might have been skewed locally due to either bad weather days and to a time limitation imposed by the length of the internship. The tracking of the regulatory department could have also been skewed by CROs because the closer to the start up the new fiscal year, pharmaceutical companies and their CRO's increase workload because of new funds, which might have caused more work for the regulatory department that may not have been characteristic of an ordinary week at ACRC Trials.

3. The third limitation was how the time used when measuring study length was determined, i.e., from the beginning of site initiation, when startup regulatory documentation begins, until when study materials were archived after completion of the study. The study length time included archiving because during this time the sponsor or CRO might have many requests from the site as they are also closing out the study on their end.
4. The student researcher encountered problems when completing start-up documentation at the end of the internship. Many times not until the first submission does the research site realize the expectation of how specific study documents should be completed, even though the site has completed the same documentation many times in the past. The researcher also discovered that there is a significant variation between how each CRA reviews documentation. Some mistakes that were said to be made by the site were later allowed because it was explained appropriately that the site was correct and not the CRA.
5. The percent of increased time it would take to complete a trial is meant only as a representation of an average that the student researcher agrees may be skewed. The best way to use this formula would be to compare many trials of similar length, indication, and length of visit requirements then apply this formula to an average of said trial type.

This is limitation on study data collection is more elaborately discussed in the summary section

6. The fact that the calculated number is an estimate is still agreeable to the student researcher and staff of ACRC Trials, but was not expected to affect the results of this topic.

Problem 2:

During the Introduction to Clinical Research and Studies class at UNTHSC it was explained to the class that the IRB is responsible for reviewing and approving all aspects of clinical research for each clinical trial, with a special interest in the protection of human subjects. During the course of the internship, the before mentioned regulatory department had the most communication with IRB. The IRB made no monitoring or audit visits during the course of the internship required by the practicum project. The site explained to the student researcher that central IRBs have decreased monitoring and audit visits at ACRC Trials over the past years. The only material the IRB reviewed was specific forms submitted by the site or CRO. The responsibility of reporting to the IRB is completely in the hands of the site. The only observed requirements for the site to report to the IRB by a CRO was during a compensation change which required approval, deviations in the protocol, addition of investigative staff to a site, and investigational new drug (IND) safety reporting. The site was also required to report for an extension of continuing review by the IRB once a year.

A compensation change request usually meant providing a completed form to the IRB after already seeking approval from the sponsor. The form for compensation change had little description explaining why the site was asking for an increase in compensation to be given to the subjects. The form did not discuss any ethical concern in overcompensating. Compensation

change requests were never denied while being at the site if pre-approval had already been given by the sponsor, this includes a compensation increase for subjects apart of Primary Study.

Changes to investigative staff were reported on the same form used to request a compensation change in most instances. Primary Study had more than 20 investigators listed by the time the internship was complete. Although all these investigators were dedicated to the practice of medicine and conducting research, the IRB never asked for anything more than their qualifications and only minor details about their research history. The IRB left the responsibility for verifying that the investigative staff was conducting research appropriately in the hands of a single CRO monitor. These monitors usually met with the site an average of once a month. Over the course of the internship the student researcher had the opportunity to interview three monitors from different CROs. Out of these monitors interviewed, none had any specific medical training and only basic bachelor degrees in science. The research director indicated that CRAs tend to have more of a medical background working for sponsors, instead of CROs. All CRAs receive training on proper study conduct though.

The internship consisted of very little experience with IND Safety reports, as ACRC Trials did not have many occurrences that needed reporting. What was observed was whenever there was an occurrence, it was reported first to the sponsor, and then the sponsor would submit a formal report to the IRB, who then submitted a receipt form and after review, the IRB usually documented a paragraph summary describing if the occurrence was the result of a failure in protocol or investigational medication. The IRB in these cases never required anything more than documentation.

The following are presented IRB responsibilities from *Introduction to Clinical Research and Studies* followed by witnessed experience of the researcher included the following:

- Protection of the rights and welfare of human subjects – from the perspective of the researcher the IRB had no accountability in this responsibility. The responsibility was handled as a general oversight of the clinical study provided by the sponsor, CRO, or site.
- Appropriateness of Methods used to obtain informed consent – the IRB only provided a template form for the informed consent process to be used by all sites. The only specific site information on the form was the practice conducting the study, the PI, and contact information provided by the site and inserted by the IRB. The CRO would provide education if the site felt unqualified to conduct the informed consent process, but no review of the informed consent process was ever conducted by the IRB unless a deviation was reported by CRO or sponsor. ACRC Trials did hold regular meetings between the Research Director and the personnel conducting the informed consent to make sure the personnel were able to properly present the informed consent to patient.
- Risks of the trial are minimized and benefits maximized – the IRB would only be capable of making this assumption from the information provided from the Investigational Drug and the IND safety reporting that occurs during a clinical trial. The CRO usually conducts a presentation before the study starts at an investigator meeting when it is covered in depth the risk to benefits, and at the two investigator meetings witnessed there was no IRB representative at either meeting, even though at one meeting ethical questions were raised by an investigator.
- Compliance with laws of community – the only community laws ever discussed were those presented in the Site Information Submission form. The form is completed by the site and sent to IRB. The IRB and CRO generally have no replies about the information

contained in the Site Information Submission form as long as the answers comply with or do not interfere with the conduct of the Study. The IRB generally did not monitor any specific laws to be upheld other than national laws and state laws, excluding or ignoring any local or city laws in the conduct of research. The IRB generally did not verify any information provided by a site in the Site Information Submission form submitted. The form serves as the majority of information that the IRB will have on a particular site for the duration of the study.

- Due consideration of ethical issues – During the internship it was not possible to observe an IRB meeting. It would be assumed such issues would have been brought up at said meeting.

During the course of the practicum project and internship it became apparent that CRO's are quickly assuming an increased role of the clinical research industry. The following responsibilities of a sponsor provided by UNTHSC were compared to actual accounts seen at ACRC Trials.

- Responsible for selecting qualified investigators and providing information the investigator would need to conduct research properly – ACRC Trials does not submit investigator profiles to pharmaceutical companies anymore; they now submit profiles to CRO's. If a sponsor finds the profile compatible to the type of trial they are conducting, the CRO follows up with a questionnaire. If this questionnaire is completed with the correct responses, the CRO and sometimes the sponsor, but not always will then do a Site Selection Visit. In the case of Primary Study the pharmaceutical company did participate in the site selection visit.

- Ensuring proper monitoring of the investigation – CRO’s conduct the monitoring with their own personnel or contracted personnel that work specifically on the monitored trial only, in most cases. Sponsors or pharmaceutical companies can then review all collected data by the CRA of the CRO. In few cases is the site monitored by both the Sponsor and CRO; this is usually the response to an audit or a quality control measure. However, Primary Study did have a monitor from both the CRO and sponsor.
- Promptly notifying the FDA and all participating investigators in the clinical trial of any new significant adverse event or risk – This would be channeled through to the medical monitor who is usually an employee of the Sponsor, but sometimes is an employee of a CRO.
- Assuring compliance with regulations, policies, and protocols – After receiving the protocol, the CRO maintains the responsibility of monitoring individual site regulations and policies. Protocols are submitted to the sites by the CRO if there is an update.
- Reporting regulatory information and submitting data to the FDA or other applicable regulatory authority – All data collected by the pharmaceutical company is collected first by the CRAs of the CROs.

The limitations predicted in Research and Methodology of Problem 2 about the study design had little to no bearing on the research of Problem 2. The Results presented were witnessed examples at the internship site. The limitations will now be discussed in more detail to each specific limitation.

1. Because the instructor was an employee of a CRO, the course instructor for *Introduction to Clinical Research* had an inside view of the responsibilities of a CRO. The instructor

taught that CROs could only be delegated task by pharmaceutical companies or sponsors, with the sponsor still carrying responsibility for the trial.

2. The use of a CRO as one example and a specific site conducting research as another example provides a broad range of views to the observed problem. The data collected might be more properly presented though if the researcher also had input from an IRB and pharmaceutical company.
3. The observed eyewitness accounts by the researcher during the internship at ACRC point towards the fact that CROs are quickly becoming more involved in research and should then take on more responsibility. Also, with the amount of clinical research increasing each year IRB's may also have an altering role in clinical research.

Problem 3:

At the end of the internship, ACRC Trials had recruited 23 patients with a goal of 10 patients that had been designated from the sponsor. ACRC Trials surpassed their goal by 130% of the original goal. The site was still currently enrolling at the end of the internship and had moved in to what is called open enrollment. Open enrollment is when the site has permission to enroll as many possible subjects until the sponsor sees fit to end enrollment for ACRC Trial's site. For this problem, there was no other numerical or comparative data collected for this topic.

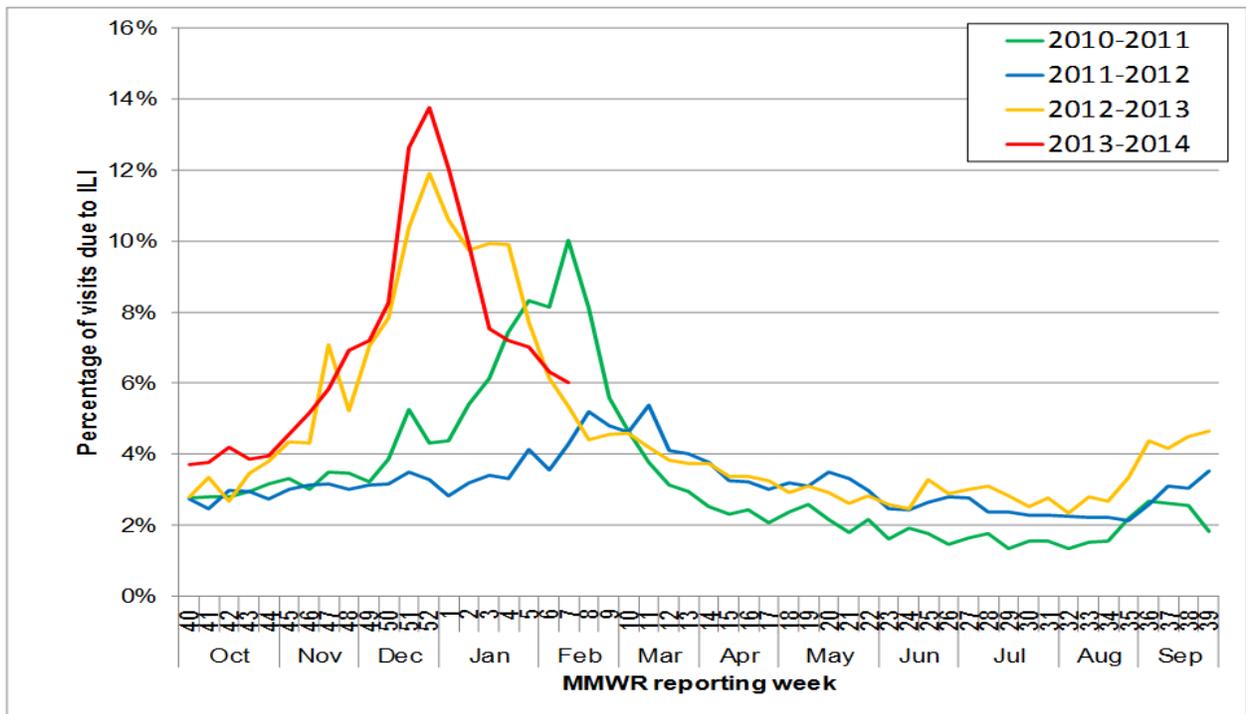
Discussion about limitations presented in Research and Methodology Problem 3 will be demonstrated below.

1. ACRC Trials had changes to its staff during the internship for the practicum project; this included the loss of one patient recruiter, the new employment of another patient recruiter, and a research coordinator that took on an increased role during the active flu

season. Since ACRC Trials met their enrollment goal for Primary Study, it is assumed that none of these situations had a negative effect on recruiting for the trial.

2. North Texas had an active flu season from early December to the beginning of February. The flu season, as documented by the Texas Department of State Health Services, had a greater percentage of influenza like illness in patients seen for illness, and the curve documented by the department steeper in slope than years past of documented influenza like illness (Texas Department of State Health Services)

Figure 1 – Influenza-Like Illness (ILI) Activity by Year



<http://www.dshs.state.tx.us/idcu/disease/influenza/surveillance/2014/>

3. Primary Study was neither cancelled nor put on hold so the limitation had no effect on recruitment for Primary Study in that sense, although the competing study for the same indication decreased possible enrollment for Primary Study.

4. While the information at ACRC Trials may not be extrapolated to other sized SMO's or physicians practices, it is assumed that ACRC Trials was an acceptable choice to document this project based on the avenues used to reach enrollment and the achievement of meeting their enrollment goal.

CHAPTER 7

SUMMARY AND CONCLUSIONS

This practicum project was designed to evaluate how a specific site reaches an enrollment goal. It is not meant as a guide on how to enroll subjects, but it is meant to give perspective into a rapidly changing industry and the amount of work and versatility that goes into enrolling for a clinical research trial. The practicum project has shown how important a designated regulatory department could be in reducing the time required to conduct a clinical trial, and how often specific roles and positions change in the clinical research field. The project has also touched upon the need for changing the representation, roles or responsibilities of positions or groups in the industry.

Data collected in the first part of this study indicate that there would be a 13% increase in the amount of time it would take to complete a study if there was no separate regulatory department and research coordinators were responsible for their own regulatory documents. It should be noted that many variables are a part of this calculation and could have possibly skewed the 5.87 week estimate. The student researcher is of the opinion that this seems to be a substantial increase in the amount of time that one would predict that it could take for a site to complete a study without the help of a regulatory department. It should be noted that the timeline presented is only an estimate and depends highly on the predicted length of a study at startup. For example, Primary Study would have a smaller increase in time if regulatory oversight was the responsibility of the study coordinators compared to the predicted increase in time if the research coordinators were responsible for completing the average ACRC Trial, but the smaller increase in time is characteristic of a short trial.

The positive outcome of research coordinators having more responsibility in regulatory affairs is that the research coordinators would become more involved in the regulatory facet of research, and become more knowledgeable about each study they conduct. The negative aspect of placing the regulatory responsibility in the hands of research coordinator is that it would increase the time it would take to complete a study at ACRC Trials, although this could be approached as increasing overall quality of the study being completed by each coordinator. However, as the research internship ended, the site was moving towards the decision that the research coordinators would complete their own regulatory paperwork and correspondence once the site had their regulatory startup documentation complete by the regulatory specialist despite the increase in time required. This would leave startup documentation, a more difficult and tedious job in the hands of the regulatory specialist; then the research coordinators would take over any subsequent regulatory request or updating during the course of conducting the trial at the site. This approach taken by ACRC Trials will optimize the experience of the regulatory specialist and decreases the burden of having research coordinators complete all the regulatory documentation. This approach also ensures that regulatory startup submission paperwork is completed promptly so that enrollment may begin sooner.

The internship site uses Central IRBs, which are corporations responsible for reviewing a clinical trial on a national or global scale. With regard to the information collected about IRBs, the student researcher views that the role of the Central IRB in ethically monitoring the rights and safety of the subjects involved in clinical trials is declining in the actual practice at this internship site. This previous statement stems from the observed increased amount of workload that central IRB's now must endure and how the Central IRB used by this internship site interacts with this site on oversight of clinical trials. It should also be noted that no local IRB was

used or observed during the conduct of this practicum project at the internship site. It may be likely that local IRBs have more involvement because they are usually responsible for only one or a small number of sites in the same area conducting research. Local IRBs also may have more routine monitoring of each individual site.

The role of CROs is expanding greatly as the clinical research industry grows. For the sponsor's perspective, it is quickly becoming more efficient for them to handle only specifically related topics to the investigational product and to have the CRO handle all other aspects of conducting research. The question posed for future years of research is: does the CRO's responsibility increase or should the responsibility still stay in the hands of the sponsor? In the case of Primary Study, the CRA changed multiple times and the CRA visited the site less often than CRA's of other studies. The study might have been more easily and efficiently conducted with a more routine and stable CRA overseeing the Primary Study. Increased responsibility and repercussion might have caused such a CRO to be more diligent with their CRAs and the conduct of research. During the internship, it was noticed that the longer a CRO has been working in the industry, the less involved the sponsor was in clinical trial activities except when discussing the investigational product.

ACRC Trials had an active influenza season for a moderate span from December to early February that provided them the patient population to reach their subject recruitment goal. It was only because of the attentiveness to recruiting by the staff at ACRC trials that allowed them to recruit so many of the patients. ACRC Trials saw many patients that were unable to be recruited because of ineligibility due to some criteria in the protocol, although many of these people were documented as having influenza like illness. Minor changes in the protocol would have allowed for substantially increased enrollment, but the protocol criteria increase the validity of the results

with the investigational product. ACRC Trials met their enrollment goal even though they were also recruiting against another study for the same indication, at the same site. The difference in inclusion/exclusion criteria and study design of the protocols allowed for both studies to be conducted simultaneously, since they would not compete with each other. Patients had to be chosen to participate in certain trials depending on the inclusion criteria they had met for either study, and the own personal needs of the subject. Compensation was an issue in recruiting and enrolling subjects at the beginning of the trial, but after the sponsor increased the patient compensation it became easier to recruit patients. Due to the sick state of the patients at their time of being seen and perceived low value of compensation compared to time commitment, ACRC Trials could have recruited several more patients if compensation had been at its current value from the beginning of enrollment. ACRC Trials also would have been able to recruit more patients into Primary Study, except for a week when the site ran out of lab supplies and the lab participating in the study was unable to send lab kits.

Overall, the process of enrollment at ACRC Trials can be summarized by three R's. The first R is regulatory: documents must be submitted properly and quickly to begin enrolling a study. Then regulatory updates are required constantly to allow a site to continue enrolling subjects. Recruitment, the second R, is vital to conducting trial and it has to have a planned approach for recruiting both in the clinic and from the local population. Recruitment strategies constantly change depending on the type of study you are conducting and with how a study is proceeding. The patient recruiter at ACRC Trials usually meets a couple times a week with the Research Director to discuss recruitment and advertising strategies. The final R is research. Research must be conducted properly and ethically. Sites are chosen based upon their past histories with conducting research, so each site needs to have a good track record and

experience. Properly conducting research will allow a site to reach enrollment and maintain the rights and safety of a subject. Conducting research properly in the case of Primary Study allowed ACRC Trials to reach their enrollment goal and have a high retention percentage, which will produce quality results for the Sponsor and FDA to review.

CHAPTER 8

INTERNSHIP EXPERIENCE

I have completed a clinical research internship that I have been participating in for the past 6 months, since August 12, 2013. The internship was an obligation for the fulfillment of a Master's of Science Degree in Clinical Research Management. ACRC Trials gave the student research the title of research assistant for the period interned at the site in Plano. I worked primarily with just one site that ACRC Trials contracts with. My duties included learning the recruiting process and assisting the patient recruiter with any necessary task. I screened many patients for multiple studies. Screening was either done over the phone before bringing a patient in or in an exam room at the time of a physician visit. I was first presented on how to screen and recruit subjects between month 2 and 3 of the internship and after that I routinely screened and recruited subjects on my own with supervision. I only actually enrolled and consented patients for Primary Study, and only on my own in the last month of the internship and all materials and consenting were reviewed by the study coordinators. I assisted the study coordinators in implementing study procedures, arranging follow-up visits, maintaining and dispensing study drugs and other supplies. As a part of the internship, the site demonstrated how to ensure subject safety, while assuring adherence to Good Clinical Practice guidelines and ICH guidelines.

Completing and ensuring the accuracy of case report forms and regulatory documents was an everyday task. I had training with two electronic data capture systems (EDC), Socrates and Ecaselinks. I was trained in the regulatory department for the first few months, and then responsible for maintenance of regulatory documentation and updating the regulatory specialist of any actions that needed to be completed by the site. I completed many startup regulatory submission packets with only the proofreading done by the regulatory specialist. I had regular

correspondence with the research study CRAs in my final month. I organized and maintained many regulatory documents on the ACRC server and maintained the site information binders for particular studies. I was responsible for filing all postal regulatory correspondence in the site information binders. I assisted the monitor's during routine monitor visits, primarily by acquiring regulatory documents, but sometimes also with the research coordinator's documents and responsibilities, if I had experience with what was requested.

I assisted study coordinators with their visits and with any study related procedures. I was instructed on how to complete case report forms and then following how to enter them into the EDC for the particular study. I filed many documents in the case report forms later. I processed many biological specimens for laboratory testing, although I did not draw any blood products from the patients. It was demonstrated to me how to perform patient vitals and I performed these for many of the study visits I assisted with. Vitals consisted of weight and height measurements, attaining digital temperature, blood pressure, and heart rate readings. I attained respiratory rates for some studies. I learned to perform spirometry and electrocardiogram testing for some studies. For the experience, with Primary Study, I was able to fully conduct study visits with the supervision of and ACRC research coordinator. I assisted in routine maintenance of the lab; this consisted of organizing newly received study supplies, maintaining study visit lab kits and investigational product for the active studies at ACRC Trials, as well as maintaining lab equipment and documenting temperature logs.

During the influenza season I did routine monitoring over three locations of a joint physicians practice. I kept an influenza tracker for ACRC Trials of all the potential candidates that were approached that couldn't participate in a study. To better work with the PIs practice for the influenza season, I learned how to use their electronic medical records (EMR) that consisted

of Centricity and EClinicalWorks. Due to the regulatory requirement for this particular practice I became a monitor and quality assurance for ACRC Trials with signatures for the site investigators and the PI. I routinely update the PI on patients seen by sub-investigators and study progress each morning. I did on occasion go to other sites when needed by ACRC Trials for study related activities.

At one point during the middle of the internship I learned about budgeting and contract negotiations that occurred between ACRC Trials and the sponsor or PI. I was instructed by the Director of Budgets and Contracts at ACRC Trials. I composed sample contracts for the Director and began a budget spreadsheet to document billable items that ACRC Trials must bill the sponsor or CRO for.

I attended all staff meetings and educational seminars that were conducted by ACRC Trials. I attended many webinars on topics in clinical research and kept summaries for particular webinars. I went to two Investigator Meetings as a representative for ACRC Trials and the PI conducting that study. I gained experience in studies with indications in allergies, asthma, nocturia, constipation, irritable bowel syndrome, gout, diabetes, and influenza. I had routine patient and provider interaction throughout the internship.

APPENDIX A – DAILY JOURNAL

Week 1
08/12/13 I completed the training required by ACRC trials. I completed OSHA training for safety in medical research, NIH training for research on human subjects, IATA training for the transport and handling of specimens for human research. Located and presented my CITI and HIPAA training. Looked through a template example of research binder to familiarize myself with the order.
08/13/13 I spent the day reading the Standard Operating Procedure binder for ACRC trials on the different phases of a study from opportunity to study closeout and archiving, and what happens in case of FDA audit and relocation of a study.
08/14/13 I began working with Raj the Regulatory Specialist at ACRC. He took me through the startup regulatory documents like 1572s, financial disclosures, and IRB submission forms. He explained importance and how to complete them, how to submit them for signatures, and proper filing and submission procedures to the sponsor or contract research organization (CRO).
08/15/13 I completed the study startup regulatory documents for a new influenza study starting soon at ACRC under the supervision of Raj. I completed forms like all IRB submission document and

questionnaires about the site, 1572s, and financial disclosures. I submitted these to the clinical research coordinators, (CRCs) for signatures from the participating investigators in the study.

08/16/13

I scanned, filed and submitted documents from the day before as well as began working on startup regulatory documents for a second influenza study. I began creating a flow chart of how we could select and place subjects for the multiple influenza studies that are coming up at ACRC. Subjects would be based on different criteria for inclusion/exclusion and study requirements.

Week 2

08/19/13

I scanned, filed and submitted documents for the second influenza study. I began working on adding a new clinical research coordinator to all past regulatory documents for all ongoing and beginning studies that had already had regulatory documents submitted. The majority of these altered documents were 1572 forms and financial disclosures.

08/20/13

I began working with clinical conductor, a CTMS, which manages all study files as well as physician information, scheduling and study protocols. I was taught how to create the elements and visit tables that CRCs use throughout the study to determine what is necessary each visit. I also participated in an office meeting on what is going on at ACRC.

08/21/13

I created two more study flowcharts on Clinical Conductor from what I had learned the day before. I finished the flowchart for selection of study subjects in our upcoming influenza trials. I began working on organizing an excel spreadsheet for information on all PIs that ACRC uses and for in office contact information at ACRC.

08/22/13

I completed updated regulatory documents that were sent to us like a new 1572, got them signed and filed. I added a new requirement to study protocols on clinical conductor for all ongoing studies. I was briefly trained on how to determine if a patient is a candidate for a study and how to set up source documents for the following day.

08/23/13

I completed the excel spreadsheet that I had begun earlier in the week after edits and suggestions from Heema. I finished adding new required information to clinical conductor. I began taking phone calls and messages as well.

Week 3

08/26/13

I began working on study closeout and archiving of Fonterra studies at ACRC. It was very trying and tedious to properly organize and store documents because I had two studies that got blended and I spent the rest of the day separating them and reorganizing. I stayed till 6 but then the majority of the work was completed.

08/27/13

I completed filing and boxing of the constipation studies in the morning. I corrected a 1572 error that was incorrectly signed by another physician. I had my site committee meeting with Dr. Gwartz and Dr. Simecka, as well as Heema where we discussed possible thesis topics. I'm leaning towards Study Conduct or possibly Maintaining Multiple Trials with the same indication. At the end of the day, I began working on sorting documents to close out a completed influenza study.

08/28/13

The early morning I completed a diary log of activities from when I began here. I performed all the requirements for closeout and preparing the completed influenza study for storage. I completed the checklist activities on Clinical Conductor for the completed constipation studies and the influenza study to move the study into the archiving phase. At the end of the day I organized regulatory documents and sent them to Raj to be forwarded to the sponsor for the influenza study.

08/29/13

I created file drawers for the three new influenza trials we have beginning and began working on study checklist on Clinical Conductor (CC). I alphabetized and filed old patient files from the recent constipation study and integrated those patient files into the main patient filing cabinets. I transcribed notes from a site selection visit that Heema participated in. I spent the remainder of the day filling in visits and elements into CC for each of the three upcoming influenza studies.

08/30/13

I completed entering information in CC for the third most recent influenza study. I scanned in multiple regulatory documents and saved them to their respective files. I filed received documents in separate regulatory binders. Raj showed me how to complete IRB approval on CC. I filled out regulatory documents for the third influenza study to be signed. Created tray, and folders for the new physician and their new sites, which will be used to get document signed, scanned and filed in their respective places. I scanned in multiple regulatory documents and saved them to their respective files. I began working on a spreadsheet that included new investigative sites and their information for Shirisha. Jani showed me how to create a CV for ACRC from a CV from a principal investigator or sub investigator.

Week 4

09/03/13

I completed a spreadsheet of new physician sites to the best of my ability with the available information provided so that we can easily find specifics about each site. We are still waiting to receive information to complete it. I completed regulatory documents which consisted of 1572s and FDFs. I was then given a site screening tool, a document we must fill out for a specified sponsor that is thinking about recruiting our site to their study. I had to complete most of it by looking up information because the old template was very outdated. I also was required to complete an excel spreadsheet to be attached to this document when sending to the sponsor that list all the providers in a practice.

09/04/13

I completed edits that were needed on the Site Screening Tool from the day before. I helped

reorganize the lab in preparation for new equipment, and cleaned out old equipment. I set up patient files and source documents for the visits tomorrow. I had to find a certain lab kit for an unscheduled visit, which included me reading the lab manual. I submitted signed copies to Raj for an IBS study that we had to add new investigators to a 1572.

09/05/13

This morning I started by entering patient visit reminders on CC. I then began to work on study startup documents which included patient visit reminder and patient payment forms. I did these for two different studies. I created a file drawer and new folders for a nocturia study we have starting soon. I created complete flowchart on CC for a nocturia study as well as made sure regulatory had been submitted. I filed various documents in regulatory binders

09/06/13

We received a shipment of laboratory supplies for our nocturia study. I had to store all contents and organize by visit date. I then had to do inventory on supplies for myocardial infarction study and label and store that. I have been continuously working all morning on uploading documents for a new site we will be using and creating documents for that site to be used in site selection like CVs and research experience addendums.

Week 5

09/09/13

I finished the final addendum for the new investigator site during the morning hours. I cleaned out and stored patient diary binders from a closed study. I corrected regulatory documents that I had made a typo on and sent them for a second round of signatures. I submitted signed forms back to Raj for sponsor submission. I helped organize the lab and get the new refrigerator in. I prepared patient charts for the next day. I complete a patient arrival reminder sheet for a nocturia

study and began working on converting sponsor source docs to our type.

09/10/13

I worked on Source documents in the morning for the nocturia study. I had more correction to make to regulatory documents and I had to submit those for submission. I was able to listen to an investigator meeting for the nocturia study where I learned about drug, pharmacokinetics, protocol, and documentation. This meeting helped me better understand what I was doing with source documentation. I kept working on source documentation for the rest of the afternoon, while handling submission of regulatory documents as they came in.

09/11/13

I arrived late because of an appointment. I finished the source documentation in the morning. I filed away papers from the study tray into the study binder we had received for a diabetes study. I went and got signatures from physicians and properly filed and submitted the regulatory documents. I began working on study start up for the diabetes study that I worked on earlier since we have a site visit on Monday. I helped Jani figure out a solution to a documentation calculation for a medication log. I got Maegan to sign off on her stuff she has done and then I filed paperwork and made sources. I finished the day off getting signatures and taking down old advertisements.

09/13/13

I complete site information forms for possible diabetes studies we will be taking on. I used a template from the same study we are doing with a different PI and just made minor changes and updates throughout the document. I finished that and then check on regulatory documents but it turned out nothing needed to be done with them. I then made new source folders for a pre-diabetes study because we just got approval to add more subjects. I made 10 of these source

documents. I finished the day by reviewing the informed consent and source documents of one of our influenza studies.

Week 6

09/16/13

I completed two site assessment questionnaires for opportunities to get constipation studies; I got information from almost every aspect of our research teams for this. Raj had me download regulatory documents directly from the IRB website, read them, filled out the ones we didn't have and stored other ones on the server. I started creating a summary of the Belmont Report for a daily learning email we will be sending out the physicians we are working with to keep them up to date on research topics and regulations. I created an excel sheet for each physicians personal email. I began reading the influenza informed consent; it is the protocol I will be using for my practicum report. I talked to Heema and we decided I will be doing my thesis on conduct of a study.

09/17/13

I picked up signed documents from the day before. I finished the daily learning email for physicians and emailed that stuff to Heema. I got feedback on my CVs and I had recently submitted. I then made a new CV for an audiologist we work with. I remade a 1572 and FDF. I went and got signatures on these and met doctors that ACRC works with. I worked with the audiologist in the afternoon to update her CV and file with information that we didn't have on her. I watched as one of the CRCs did two patient visits, they were very short and not characteristic of what I'd normally see because we were missing documentation on one of them.

09/18/13

I watched a screening visit for dust mite study. I began completing feasibility studies for Heema working from templates that we must complete in order to get a study. I completed two feasibility questionnaires. The end of the day we were given a spreadsheet of past study titles of a physician that is returning to use us as a SMO, site management organization. I had to take this spreadsheet and use clinical trials.gov to fill in specific information from the study titles.

09/19/13

I had to take the feasibility questionnaires from the day before and submit them through online questionnaires that had minor differences. I also had to complete a new questionnaire opioid induced constipation feasibility questionnaire for Heema. I saved regulatory document to server after verifying they were correct and emailed them to Raj. Aarti gave me a brief tutorial on chart review.

09/20/13

I did not come into the office but I read up on protocols from two similar diabetes studies being done by the same sponsor and refreshed myself on the influenza study I would be writing my research proposal

Week 7

09/23/13

After getting approval for a second influenza study of the same protocol, as one we already had begun creating regulatory documents for study start up. The site we are using for this influenza study is new and during creating regulatory documents I came up with questions and information that we needed to get from the site. I had to complete a new feasibility study for the opioid induced constipation online. I updated the spreadsheet with study titles for a new PI. Completed second feasibility study. I uploaded IRB documents to the IRB site website. I helped store drug

in the lab.

09/24/13

I filed a lot of mail and emails into study binders for correspondence. I finished all our regulatory documents for an influenza study with a new site. I filed stuff for our nocturia study because we received site binders in that morning and until then paperwork for that study just piled up in a bend designated for that study. I had to transfer one binder to a new binder because a clinical research organization took over the study from a sponsor. I worked with our director of operations, Hardeep, to get certain information I needed to complete documents. I had to go get signatures from a PI at the end of the day.

09/25/13

I checked regulatory documents for verification, they were all correct. I caught up on diary writing for the week. I prepared for a site initiation visit and then participated in a site initiation visit on the influenza study I will be using as the focus point for my thesis. I checked on laboratory drug and found a thermometer was not working, so I moved drug and rectified situation. During the end of the day I worked on my research proposal, Heema and I decided my topic was too broad and we narrowed it down. I then asked questions in the office to help in writing it. I also checked on postal mail from CROs to see if it was filed and it had already been sent electronically and filed.

09/26/13

I started by talking to Hardeep about what business aspects are involved in recruitment for my paper. I filed binder for a nocturia and influenza study. I filed CVs and training for diabetes. I sat in on a site initiation visit for a diabetes study we have beginning. Shirisha showed me how to know when we will begin enrolling for influenza studies. During the day I went to the practice

upstairs and got a lot of signatures signed for research documents. I ended the day by uploading regulatory documents to the server.

09/27/13

I reorganized drugs and lab kits in the lab, while disposing of old stuff, it took me about two hours. I filed a lot of documents for a diabetes study 1 that we have. I helped clean out and restock upstairs cabinet for our research stuff. I saw two patients and made a few deliveries to our CRCs upstairs. I witnessed a complete visit 1 that involves consenting the patient at the beginning then completing all study procedures for visit 1. This was the first patient I have seen become enrolled in our studies after visit 1.

Week 8

09/30/13

I completed initial regulatory documents for an influenza trial we about to have beginning, this took about two hours. I completed a Site information form for another trial, this took another hour. I uploaded documents to the server for a new physician we are working with. I reorganized my desk and filed regulatory signed documents in their respective places they should have been. I made new medical cabinet labels for the laboratory. I created a document for Heema, which physicians will answer when they start using us to give us basic information about their practice. I filled in forms for our doctors to sign tomorrow. The last hour I worked on my research proposal.

10/01/13

This morning I helped prepare the monitor room and the study binder for a monitor visit that was rescheduled for tomorrow. I cleaned off my desk and reorganized where we keep initial regulatory submission documents because until December I will be sharing my desk with another

Intern named Ross. I scanned in old regulatory documents, filed them on server, filed on CC, and emailed them to Shirisha for submission. I went upstairs to a medical practice and got regulatory document signatures. I had a brief talk with Heema and Hardeep to discuss my topics for my thesis. I updated a CV for an urologist we use as a principal investigator. I went and got more signatures from medical practice 1. I worked on completing an email blast with Jani which will help in recruitment for our diabetes and nocturia studies.

10/02/13

I arrived late because of heavy traffic. I saw a patient for a diabetes type 2 study. He was unable to complete the visit because of low HbA1C. I got a final signature for a submission packet. I continued to work on the email blast distribution list. I started working on a site information questionnaire for the IRB of an upcoming asthma study. I helped Ross complete CRO questionnaires to try to get opportunities for studies for an urologist we work with. I put minor touches on my proposal and submitted to people in the office to review. I mailed off documents to the sponsor for end of the study financial disclosures.

10/03/13

I went to a physician's site that was not onsite. I shadowed Raquel for four patient visits, two visits were visit ones that took a long time and the others were follow-ups. I learned how to do urinalysis testing for the study. At about 3pm we came back to the office and I started working on uploading and scanning documents the rest of the day for regulatory affairs.

10/04/13

I saw two diabetes patients for our recently enrolling diabetes study with Raquel. I did vitals while Raquel supervised and then Raquel showed me how to perform an ECG. I worked on creating, acquiring signatures, scanning and submitting regulatory documents for the rest of the

day. I prepared for an investigator meeting that I attended over the weekend. I drove to DFW airport where I went to a meet and greet that night for dinner for an investigator meeting

10/05/13

I attended an investigator meeting where we discussed an entire clinical trial. I acted as a representative and took notes for ACRC Trials.

Week 9

10/08/13

I filed regulatory documents that had been laid on my desk while I was gone. I wrote up my study notes from the weekend meeting. I gave updates on the study to everyone in the office about their specific departments in the study. I completed scanning in documents for sponsors that had needed to be submitted. I moved stuff from our office to our storage cabinets in a private practice upstairs. The end of the day I edited regulatory documents that had already been submitted and resubmitted them. Also learned how to complete a note to file. I also filled out a site information questionnaire for an upcoming study we have an opportunity for.

10/09/13

I completed task from Raj in the regulatory department in response to sponsor/CRO emails. It involved a lot of signatures and editing previously submitted documents. I took document to doctors in our building to get them signed. Then I went out of the office to another practice we do research at. With Raquel, I saw 4 patients. I assisted her with any duties that she needed help with like preparing samples for shipment, taking vitals and measurements.

10/10/13

I completed all regulatory tasks that had been assigned to me by Raj, which included getting a signature from upstairs and updating documents and scanning document. I filed new documents

in binders and trays. I prepared for an ICF demonstration. I began working on closeout for an overactive bladder trial where I file and prepared study documents to be put in storage. I called many laboratories and hospitals in the area to confirm influenza activity so we could move forward on our upcoming influenza trials. We had a staff meeting where I presented information from my investigator meeting and I presented an informed consent to the group and was given constructive criticism

10/11/13

I have kept working on closeout all day. I saw a patient this morning for our diabetes trial. I talked to nurses to confirm influenza activity in our clinics. I filed stuff in our study binders. I got the confirmation to begin enrolling for our first influenza study, which is also the study I will be using in my presentation. I began to box the study up that was in closeout.

Week 9

10/14/13

I completed the closeout procedure for the overactive bladder study we have finished. I saw a diabetes patient. I attached training documents to an email to send to the CRO. I updated our clinical conductor with information for each of our enrolling studies. I updated our clinical conductor site on many studies including copying over our studies that have the same protocol. I filed documents in the regulatory binders.

10/15/13

I finished creating sources for visit 1s for our upcoming influenza to be prepared for our first patient. I filed new IRB rosters in study binders for studies that use that particular IRB. I filed correspondence from the IRBs and Sponsors in their respective study binders. I began working on startup regulatory documents for a new asthma study we have going on. I helped our intern

Ross complete questionnaires to get new study for our investigators. I updated some our PI's CVs. I made visit 1 source for a nocturia study we are doing to prepare for patients tomorrow.

10/16/13

I complete a pre-study Site questionnaire to obtain new studies for a doctor we work with. I saw an informed consent process given by our lead coordinator. I got signatures from a practice we work with as well as obtaining information about influenza testing in their office. I created an excel spreadsheet to track flu cases and testing. I filed new document correspondence and ICFs into the study binders. I completed regulatory documents that I had been waiting on a site number for. I got some of these signed and placed the rest in a bin to be signed. I talked to Shirisha about my research project to discuss a possible topic. I also got trained on how to answer calls for possible patients in our trials. I made copies of documents for patient files.

10/17/13

I went to UNTHSC and got an hour of tutoring on my research paper and spent three hours in the library working on corrections from both the tutor and Dr. Gwartz.

10/18/13

I was in late at 11AM. I worked on regulatory documents for a new study we have in submission. I completed ICF transfer from patient charts, to an ICF binder for closeout. I saw one diabetes patient. I filed documents in our study binders.

Week 10

10/21/13

I worked on regulatory documents that we had for a new study we are now doing with three different PIs, it took me the majority of the day. I saw two diabetes patients. I had to update and make changes to many of our regulatory documents since one of our sites is missing a sub-

investigator right now. I got training on how to prepare lab samples to be sent in for testing.
10/22/13 Out Sick
10/23/13 I worked on completing three different regulatory packets in the morning so that Heema can get them signed tomorrow. I filed correspondence from an IRB for our studies. I went to a family practice we work with and got their results of their rapid flu testing in the office. In the afternoon I began working on two other regulatory packets for the same trial. I brought stuff to the coordinators throughout the day that were in the clinic.
10/24/13 I created a CV for our new research coordinator. I acquired information for the intern Ross, and for the CRC Michael Patch. I completed regulatory documents. I received signed documents back from a physician practice, checked for accuracy and began scanning them into the server. I began working on a new financial project for Hardeep. I checked and filed correspondence from the central IRB.
10/25/13 I finished regulatory documents. I continued and finished the task assigned to me by Hardeep during the morning, and got more work to complete on it. I filed Sponsor and IRB correspondence in the study binders. I went to a practice we work with and got an update on influenza activity in their practice. I then relayed information from the practice to research. I scanned in a large quantity of regulatory documents we recently got signed. I began working new financial project Hardeep assigned.
Week 11

10/28/13

I finished a project given to me by Hardeep on financials. I scanned startup regulatory documents and saved them to the server for two different studies, this took about an hour. I went through three new study binders and made sure to file all loose and regulatory documents I had for these studies. I filed correspondence sent ACRC through emails and mail. I also completed IRB questionnaires for a study in startup. I moved lab kits from our lab to the private practice that will be doing the trial.

10/29/13

I added medical licenses, CVs, and other documents to the study binders I had worked on previously. I completed an entire IRB questionnaire without templates or previous versions. I archived documents that were received from a closed study. I created regulatory documents for a new coordinator at our site. I made a delivery to a private practice and met the doctors at that practice in case I need to help out there. I showed a new coordinator how to set up study drawers in the filing cabinets. I was instructed on how to perform spirometry for a study we are performing.

10/30/13

I completed edits to regulatory documents that the CRO had made mistakes on and got them signed by the coordinators in the office and labeled them to be signed by the physicians. I taught the new coordinator how to create a schedule of events on Clinical Coordinator. I participated in site initiation visit training with training for an upcoming influenza trial. I documented influenza activity in a practice we work with. I updated the protocol for two studies by scanning in the hard copy of the amended protocol and filing it on the server.

10/31/13

I spent the entire day creating regulatory documents. I made updates and corrections to IRB forms, 1572s, and FDFs, these changes were mostly requested by the sponsor or CROs. I created a new CV for the new clinical research coordinator and added it to the server. I also had to add new licenses to our server for doctors we work with.

11/01/13

I completed email request for regulatory document corrections from the sponsor. Raquel and I went to an off-site location and performed two patient visits for an IBS study. I completed regulatory documents for one site of a multiple site trial we having going. I updated my flu tracker spreadsheet with information from a private practice.

Week 12

11/04/13

I created startup regulatory documents for a large practice which took most of the day. I participated in a recruitment meeting where Heema and the Patient Recruiter, Jani, discussed possible advertising options, advertisements edits and advertising budgets. The IRB for Primary Study was contacted and updated on current staff at ACRC Trials and how to proceed on adding them to site activities. Medical licenses and training certifications were sent into an influenza study sponsor.

11/05/13

I went and had regulatory documents from the day before signed by each member in the practice and had the PI sign his specific regulatory documents. I completed a financial spreadsheet document for Hardeep. Documents were collected for a new PI to submit to CROs for future studies. I stocked newly received trials supplies in a practice upstairs, inside our cabinets. I completed the regulatory documents requested by “Primary Study’s” IRB to add new personnel

to the study.

11/06/13

The Patient Recruiter, Jani, was out sick, so I was moved to a desk with a phone so that I could help out on phones. I learned a lot about scheduling patients and screening them for studies and using Clinical Conductor for scheduling. When not on the phone I scanned in all the documents that were signed from the day before and created emails to send the regulatory documents to the sponsor. I updated an excel spreadsheet for Hardeep with financial information he requested.

11/07/13

I saw a gout patient and an influenza patient in the morning. The influenza patient was a visit two for Primary Study. I began creating a financial document for Hardeep from a hard copy where I had to type out the document and make changes that related to our practice and delete sections that didn't apply to our practice.

11/08/13

I finished typing up the financial document that ACRC will use for future negotiations and Hardeep gave me an old template to compare and contrast against the new document. I went to a physician practice and got an update on influenza activity in the practice for an influenza tracker spreadsheet I am keeping. I completed request for changes to be made to an IRB document and made other small regulatory edits and emailed them to sponsors and IRBs.

Week 13

11/11/13

I completed startup regulatory documents for startup of two studies. I handled request for regulatory edits, which required signatures from the physicians, for three different sites. I went and distributed pharmacy discount cards that we are using to recruit for "Primary Study" and

<p>called the recruiting firm for information on specific benefits and fees associated with the cards.</p>
<p>11/12/13</p> <p>I got regulatory documents signed by the two sites I was working on from the day before. I completed site training for a study. ACRC also had their annual OSHA Training which I participated in to learn laboratory safety and basic office safety. I discussed a financial project I've been working on and got advice on how to proceed forward with it. I also updated a document I've been working on for the Director.</p>
<p>11/13/13</p> <p>I saw a visit 3 influenza patient of "Primary Study" with Shirisha. I participated in a site monitor visit for "Primary Study." I went and got influenza testing records from a medical practice participating in our influenza studies. I completed startup regulatory documents for a third site participating in the same study as the documents I created Monday.</p>
<p>11/14/13</p> <p>I traveled to Florida for an investigator meeting, for a study of opioid induced constipation study. I participated in a reception dinner where I met the medical monitor and ACRC's site monitor from the CRO.</p>
<p>11/15/13</p> <p>I participated in an investigator meeting. Topics covered in the meeting were protocol, investigational product, laboratory testing, electronic data capture, electronic diary, and adverse events.</p>
<p>Week 14</p>
<p>11/18/13</p> <p>I created startup regulatory documents, which included FDA 1572s, financial disclosures, and</p>

protocol signature pages, for two different sites. I made edits and completed regulatory request that happened while I was gone to the investigator meeting, this involved going back and forth with the CRO and getting physician signatures, scanning these documents in to our server and submitting.

11/19/13

I went and got the regulatory documents signed for one practice from the day before. I saw a visit 1 from “Primary Study” and processed labs for this study. I worked with the EDC for “Primary Study” to enter in the visit from that day. I helped organize the office and move stuff from the lab to a practice we work with upstairs. I organized the materials in a study cabinet upstairs. I combined Shirisha and my own study notes from the meeting and uploaded them to CC for the rest of the study staff.

11/20/13

I created new site delegation logs for three of our studies which involved getting signatures from everyone involved in these studies and describing the responsibilities of each person involved. I worked with a new version from an old template to complete this. I updated my research proposal with recommendations from Heema and Shirisha. I called the lab for “Primary Study” to ask a question for ACRC Trials. I processed labs for “Primary Study.”

11/21/13

I prepared documents for a site monitor visit. I retrieved study visit materials for a patient visit upstairs. I helped complete the visit by assisting a study coordinator. I processed an IRB approval and new ICFs we received in the mail. I organized regulatory documents that have been piling up for a study we have not received a binder for yet. I worked on a financial spreadsheet to update it with budget information for particular studies to make billing easier.

11/22/13

I updated regulatory documents for sponsors. I got new startup regulatory documents that I began working on. I went upstairs and got information on influenza activity in the area. I updated my research proposal for Heema to do a final review before submission. I saw a patient with Raquel for the influenza trial we have going on right now, Primary Study. I restocked the upstairs medicine cabinets and reorganized it.

Week15

11/25/13

I completed regulatory documents that we received on Friday, the week before, and prepared them for signatures, this took most of the day because the documents were for one of the biggest practices we work with. I talked to a nurse practitioner upstairs about criteria for the study and relayed information about a potential patient. I scanned and emailed documents to the sponsor, which had been delayed by off-site signatures. I updated other regulatory documents at the request of the sponsor through email.

11/26/13

I got the signatures from the regulatory documents from the day before. I scanned in regulatory documents to be submitted to the sponsor. I answered a sponsor email by pulling documents from the regulatory binder and the server to send in for submission. I took study visit supplies and copies upstairs for a patient visit, where I checked the informed consent for accuracy on signatures and source document.

11/27/13

I got signatures from a practice upstairs on regulatory documents that needed to be submitted. I checked for influenza activity in the practice with all the medical assistants, and providers. I filed

documents for multiple studies in the regulatory binders that we had received hard copies for. I called an IRB for verification on documents we received multiple copies on. After lunch I left the office early.

Week 16

12/02/13

I worked from the phones answering incoming calls and making outgoing calls trying to recruit for a current diabetes study we have, this also allowed me to get training with Clinical Conductor. I made calls for the entire morning until lunch. I scanned documents for updating regulatory documents. I went to an upstairs practice and got information about possible influenza patients to be involved in our studies, I screened them and none qualified for different reasons. I reported back to the physicians about their patients. I saw a patient visit for dust mite for a visit two with Maegan.

12/03/13

I searched a family practice database for patients incoming with influenza-like symptoms. I went and consulted with doctors on their patients to see if any of their patients qualified for our studies and reminded them about our influenza study. I took down old study recruitment materials in that physician's office. I attended a staff meeting for ACRC Trials. I scanned in an entire packet of regulatory startup document to be submitted to a sponsor. I emailed other regulatory document updates to the sponsor.

12/04/13

I updated an IRB regulatory questionnaire and submitted it back to the IRB. I looked up incoming patients with influenza like symptoms and pre-screened them based on their chart and inclusion/exclusion criteria. One failed because of chronic pulmonary disease and the other may

be a possible candidate depending on physician visit. I began working on closeout task for three different studies. I began working on documents for a new study in startup. This was for the largest practice we work with. I began getting these documents signed

12/05/13

I finished getting the documents signed for the new study in startup. I scanned the entire regulatory packet on to the server and submitted to the sponsor. I went and checked on influenza activity at practice #1. I answered questions about possible patients and if they are exclusionary. I updated an influenza tracker I've been keeping up. I submitted the results to sponsor of an influenza study. I updated other regulatory document request from clinical research monitors.

12/06/13

Out of Office for Inclement Weather

Week 17

12/09/13

Out of Office for Inclement Weather

12/10/13

I check on influenza activity while I was gone at practice 1. I screened possible patients for the influenza trial we have in enrollment, by looking at their charts. I enrolled one patient and completed their visit 1 in Primary Study, with the help of Maegan. This involved consenting the patient, doing a complete medical history, diary training and investigational product training, as well as processing labs. I completed regulatory request that happened over the week. I put together and updated two regulatory binders.

12/11/13

I helped a monitor with any request they had with either regulatory documents or coordinator

documents. I check and screened influenza patients at practice 1. I created regulatory documents for all of practice 1 and began getting their signatures. I updated documents that we had for a new physician's assistant and stored them on the server and submitted the new documents to the sponsor. I worked on financial documents for the contract and budget director. I filed new documents in the regulatory binders, as well as updated documents from the monitor visit that day.

12/12/13

I completed documents for a closeout monitor visit and got these documents signed. The documents included many financial disclosures, a clinical trial agreement, and other study documents. I got signatures for a new study in startup. I talked to medical assistants about influenza activity. I went and attempted to recruit an influenza subject, but was unable to because the patient could not come back in for the follow-up visits. I completed training on spirometry for an upcoming influenza study. I submitted influenza activity to the sponsor from practice 1. I scanned in documents and updated documents that were requested from the monitor visit the day before and from other sponsors or CROs.

12/13/13

I updated the regulatory binder from the day before with the closeout documents requested by the monitor. I got an update for the influenza tracker I've been keeping. I saw a patient for primary study at visit 1 and helped complete this visit. I screened another patient and found they didn't have time to complete the study. I update regulatory documents with edits and new information for the CROs and IRBs and scanned, saved and submitted these documents. I answered phone calls for the office.

Week 18

12/16/13

Out of Office Due to Meeting at University for Practicum Report

12/17/13

I completed an influenza patient visit 1; I processed all labs, and entered data into EDC. I got signatures for pending regulatory documents. I created new regulatory documents for a study in startup and got signatures for these. I answered queries in an influenza EDC.

12/18/13

I screened four patients for an ongoing flu study. I updated my flu tracker with information about occurrence of influenza in a physician office and who was seeing these patients. I also updated the medical assistants, and investigators about the current status of an ongoing influenza study.

12/19/13

I completed a telephone call that act to check up on patients in our studies. I recorded information from the patient and relayed it to both the lead study coordinator and the physician. I screened two patients for an influenza study, neither was recruited. I created new regulatory documents for startup of a new clinical study.

12/20/13

I screened a telephone call for a possible study participant but they did not qualify. I completed two research site submission forms for an IRB and created attachments for them documenting research experience and training. I created a flow sheet to determine when to schedule patients. I got signatures from pending regulatory documents and discussed with a principal investigator about side effects a patient was experiencing. I updated the side effects/symptoms in the patients chart as an AE and under progress notes.

Week 19

12/23/13

I got signatures on documents and labs from the PI of a study and discussed the current state of some of the trials. I created regulatory documents, got them signed, scanned, saved and emailed to the sponsor. I reviewed two study binders that had recently been reviewed by study monitors and I made the necessary corrections besides the signatures we are waiting on. I logged the temperature logs at the office. I checked CC for recruitment calls and restocked study flyers in a physician's office. I answered incoming phone calls where I took messages, screened patients and relayed request. I scanned in documents from my file folder that needed to be scanned in. I answered queries on an EDC and gathered training from the office personnel.

12/24/13

Christmas Eve Holiday, Office Closed

12/25/13

Christmas Day Holiday, Office Closed

12/26/13

Out of Office for Christmas Holiday

12/27/13

Out of Office for Christmas Holiday

Week 20

12/30/13

I completed Socrates EDC training, for a clinical trial. I created regulatory documents for a continuation study on Gout. A continuation study is where participants from a previous clinical trial are offered to continue with treatment or follow-up visits to collect more data on an investigation product. I went to a physicians practice twice to get documents signed for

regulatory and for subject and clinical trial specific documents. I update two CVs and went and reviewed one with a physician and got his signature. I filed holiday mail from the week of Christmas that was sent from IRBs. I created 10 influenza patient charts from existing source documents that had already been made. I helped organize the laboratory.

12/31/2013

New Year's Eve Holiday, Office Closed

01/01/14

New Year's Day Holiday, Office Closed

01/02/14

I went and consulted with the PI about study statuses, and acquired signatures for documents. I filed these documents in their respective places. I talked to MAs about influenza activity in a physician's office. We received new informed consent forms; I replaced the old ones with copies of the new. I took down advertisements for a diabetes study that just ended enrolling. I collect end of study documents from server and study binders and uploaded documents to CC. I corresponded with a site monitor and a clinical research associate to confirm documents were collected at a site monitor. I filed two new informed consent documents and replaced the old ones in the study binder. I recorded flu activity from that day while also keeping track of possible flu subjects.

01/03/2014

I got signatures from a PI. I took down more advertising in a physician's office. I looked up all possible flu patients in an EMR system. I went and notified nurses to keep an eye out for these patients. I screened two possible patients for our influenza studies, these patients did not have the time to come back for follow up visits. I helped to closeout and box up a study by getting the

binder together. I updated regulatory documents that were pending because of study startup, and I filed signed documents. I filed documents in the regulatory binders from the need to file bins for three different studies; these documents included sponsor, IRB, and CRO correspondence. I screened two patients at the end of the day for possible involvement in our influenza studies and I got influenza statistics for that day.

Week 21

01/06/2014

I went over the current studies with a PI and had him sign documents pertinent to the studies he is conducting. Beginning this week myself and Raj Bhatia, Regulatory Specialist, will be keeping track of our time spent on regulatory work to measure the amount done within the week, this will be kept in a separate excel spreadsheet and documented throughout the week. I filed correspondence from IRBs into multiple site regulatory binders. I updated the influenza tracker I'm keeping with Friday results. I answered incoming calls for the office since the patient recruiter was off site. I took messages and recruited patients into possible studies. I got results from Monday's influenza activity, updated tracker. I screened two patients during that day for influenza study number two, both declined because of illness and time involvement.

01/07/2014

I went over the current studies with a PI and had him sign documents pertinent to the studies he is conducting. I checked the EMR of a physician's office for possible flu patients, sent out an office email of scheduled times, and went and checked on patients periodically throughout the day to see if they qualified (chart review). I screened one patient who was a good candidate for Primary Study; he failed screening because of temperature requirement. I helped answer phones with the patient recruiter. I called many of the free clinics in the area and made them aware of

our influenza studies. I called an advertising company for the local movie theaters to talk about possibly advertising at the movies for our research studies. I participated in an office meeting and training about giving informed consent. Heema went through the dos and don'ts of presenting ICF. Raj and I continued working on regulatory documentation submissions and tracking our time spent on it. I went and got end of the day influenza activity from the practice conducting Primary Study.

01/08/2014

I went over the current studies with a PI and had him sign documents pertinent to the studies he is conducting. I checked the EMR of a physician's office for possible flu patients, sent out an office email of scheduled times, and went and checked on patients periodically throughout the day to see if they qualified for our influenza studies. I called back a free clinic, where I spoke to the office manager about their flu activity and possibly coordinating with us on our influenza studies. I spoke with a movie theater company representative about possible advertising with them. I answered incoming calls and took messages for the office while the patient recruiter was off site. When the patient recruiter returned I helped with some advertisement creation and editing. I screened two patients that afternoon for Primary Study, 1 accepted and was randomized. I helped conduct the visit 1 appointment. I got influenza statistics for a primary care office.

01/09/2014

I went over the current studies with a PI and had him sign documents pertinent to the studies he is conducting. I checked the EMR of a physician's office for possible flu patients, sent out an office email of scheduled times, and went and checked on patients periodically throughout the day to see if they qualified for our influenza studies. I recalled a few free clinics to attempt to

contact them and make them aware of our studies. I corresponded with an agent to possibly advertise with movie theaters. I filed regulatory documents in study binders and bins that came from IRBs and sponsors. I got results of influenza activity in a practice we contract with and updated the influenza tracker I was keeping.

01/10/2014

I went over the current studies with a PI and had him sign documents pertinent to the studies he is conducting. I checked the EMR of a physician's office for possible flu patients, sent out an office email of scheduled times, and went and checked on patients periodically throughout the day to see if they qualified for our influenza studies. I recalled one free clinic in an attempt to contact a free clinic with the highest rate of influenza patients. I screened a patient and recruited for Primary Study, and then Maegan took over the patient visit. I sent in documentation to update the amount of compensation for each study visit to an IRB. I got results of influenza activity in a practice we contract with.

Week 22

01/13/2014

I consulted with the PI and got signatures and notified him about his studies. I checked the EMR of a physician's office for possible flu patients, sent out an office email of scheduled times, and went and checked on patients periodically throughout the day to see if they qualified for our influenza studies. I screened a patient to be possibly enrolled in an influenza trial, who did not qualify. I created a new site information sheet for a practice we contract with to include new sites they have acquired and new availability times. I sent in documentation to update the amount of compensation for each study visit to an IRB for another influenza study. I got results of influenza activity in a practice we contract with.

<p>01/14/2014</p> <p>I created startup regulatory documents for a new hypertension study which included FDA 1572s, FDFs and protocol signature pages. I began getting signatures on these documents around lunch time. Throughout the day I screened possible influenza patients for studies. I got results of influenza activity in a practice we contract with. I updated an influenza tracker I've been keeping that records influenza test results, reasons patients didn't qualify, and referrals.</p>
<p>01/15/2014</p> <p>I met with a PI in the morning to have him sign startup documents and other newly received documents.</p> <p>I screened for the influenza studies in the morning, which involved checking flu test in a physicians practice, discussing possible candidates with physicians and screening patients in the rooms to see if they qualify for the study by inclusion or exclusion criteria. I completed IRB startup documents for the hypertension study and scanned all documents to be sent to the CRA. I got influenza occurrence results from a practice conducting an influenza study.</p>
<p>01/16/2014</p> <p>Out of Office</p>
<p>01/17/2014</p> <p>Out of Office</p>
<p>Week 23</p>
<p>01/20/2014</p> <p>Out of Office</p>
<p>01/21/2014</p> <p>Out of Office</p>

<p>01/22/2014</p> <p>Out of Office</p>
<p>01/23/2014</p> <p>I went and did routine checks to follow up on influenza patients at a practice we contract with. I screened one patient to possibly be in an influenza study, the patient was disqualified because she was going to be out of town. I filed regulatory paper work and mail in the study binders and bins. I retrieved documents for the regulatory specialist and prepared them to be mailed to sponsor. I had a PI sign documents and updated him on his studies. I went off site to another physician's office and put together a site file binder, prepared for a visit 1 for a new study, and assisted Shirisha with a site initiation over the phone. I also helped complete a site information questionnaire for an opportunity to do a migraine study. I did a check on influenza activity in the physician's office conducting primary study.</p>
<p>01/24/2014</p> <p>In the morning, I went and did routine checks to follow up on influenza patients at a practice we contract with. I went off site to screen a patient for Primary Study, who was disqualified because of length of time with symptoms. I organized two study file binders for site initiation the next week. I got signatures from the PI of a study on patient charts and lab reports. I got influenza activity results from a practice we contract with. I filed regulatory, IRB and sponsor correspondence in the site binders other than the ones I was previously working on.</p>
<p>Week 24</p>
<p>01/27/2014</p> <p>Out of Office</p>
<p>01/28/2014</p>

I prepared the monitor room for a monitor visit and filed study binders and patient charts in their respective locations. I updated two study file binders with request from the CRA of that study. I worked with the CRA during the day to coordinate her activities and to help with any documents she might need help locating. I filed IRB correspondence that arrived in the mail over the weekend. I did chart review for the patients at off-site clinics for one of the clinics we contract with to recruit influenza patients. I collect results of influenza activity with a site conducting an influenza study. I assisted a research coordinator with her visits. I organized source for Primary study. I did chart review and follow-up on patients for an influenza study.

01/29/2014

I got signatures from a PI and other sub-investigators in his office. I filed IRB correspondence in the study binders. I screened, consented and completed a visit 1 for Primary study. I entered the information for this visit 1 and another visit 1 done by another coordinator into EDC. I completed a follow-up visit 2 for Primary Study and entered into EDC. I organized source for Primary study. I collect results of influenza activity with a site conducting an influenza study. I assisted another coordinator with patient visits she was conducting. I did inventory on lab kits for Primary study and entered IP into IVRS.

01/30/2014

I got signatures from a PI and other staff involved in our studies. I had follow-up work to do on the two patients I saw the day before which required updating charts and getting the physicians responsible to review and sign off on items. I had to enter these updates into EDC as well. I handled regulatory affairs since Raj was out for the day. I completed three requests from the regulatory department that required editing, scanning, and resending documents to either the IRB or CROs. One document was an IRB site questionnaire. I helped reorganize the laboratory from

recent shipments. I collected results of influenza activity with a site conducting an influenza study. I did chart review and followed-up on the patients in the chart review. I completed a telephone follow-up call on my patient I enrolled in Primary Study the day before and reported in the source.

01/31/2014

I helped monitor with obtaining and then organizing documents for the study file binder, the documents were AE notifications that happened in the study. I created new 1572s FDFs in order to add an urologist to a Nocturia study. I monitored flu patients throughout the day at a practice conducting influenza study and then got there flu test results for the entire practice at the end of the day. I helped clean lab, and dispose of boxes. I created new patient charts for primary study to be ready when acute patients come into the clinic. I did EDC verification for a few patients in Primary study where I checked their charts and made sure everything was entered properly. I filed study binder documents, filed regulatory documents. I also located documents requested from the sponsor or IRB and mailed or emailed these documents into the corresponding party

Week 25

02/03/2014

I completed a visit 2 for Primary Study doing everything except blood draw and nasal swabs. I entered the visit into the EDC and ACRC Trials CTMS. I did chart review for influenza in the practice conducting Primary Study. I went and obtained signatures from a PI in the building and went through patients charts with him. I obtained documents requested by a CRO for mailing. I filed many IRB and Sponsor correspondences along. I filed new ICFs in their respective location and even tailored one to fit two sites performing the same studies.

02/04/2014

I went over the current studies with a PI and had him signature documents pertinent to the studies he is conducting. I did chart review for three different practices conducting influenza trials. I created new regulatory documents to add a physician to an ongoing nocturia study. I saw two follow up visits for primary study where I completed all the elements of the visit except blood draw, nasal swabs and a physical exam. I did the laboratory specimens for one of the studies. I completed two EDC entries for Primary study. I did influenza surveillance at the practice conducting primary study and updated the flu tracker I was keeping for ACRC Trials.

02/05/2014

I went over the current studies with a PI and had him signature documents pertinent to the studies he is conducting. I did chart review for three different practices conducting influenza trials. I submitted signed documents from the day before to add a physician to a current nocturia study. I helped complete an IRB closure report to end our participation with an IRB and all ongoing site activities for the study. I forwarded the IRB closure report to Raj to complete it. I did influenza surveillance at the practice conducting primary study and did continuous screening and surveillance throughout the day

02/06/2014

Due to inclement weather I was unable to come in. I worked from home updating research experience on CVs for 6 different PIs. At the same time I updated Clinical Conductor as well.

02/07/2014

I did chart review for three different practices conducting influenza trials. I file IRB correspondence in the site regulatory binders. I completed an IRB site information form, after coordinating with the regulatory specialist, director of operations, and director of research. The study is not as simple as other IRB forms because the study includes lots of telephone visits and

allows minors to participate. I created a compensation schedule attachment for the IRB form. I did routine influenza surveillance with the practice conducting primary study. I answered IRB and CRO emails with response. I submitted follow up start up documents for a chronic asthma study that added an investigator to the study. I did inventory on our diaries for Primary Study to make sure all of our diaries were the correct version. I entered patient information into EDC for two patients.

Week 26

02/10/2014

I made edits to a recently submitted IRB site information form. I created a clinical research experience attachment for the site information form. I did chart review for three different practices conducting flu studies and notified the doctors that had possible acute patients that might qualify. I did routine influenza surveillance at the practice conducting Primary Study. I organized many boxes of studies for archiving and storage. I scanned in documents and medical licenses for submission to a clinical research associate. I composed emails for the regulatory specialist to submit to sponsors and CROs. I screened two different patients for a constipation study, neither qualified. I completed flu surveillance for the practice conducting Primary Study and updated my flu tracker with the information obtained.

02/11/2014

I went over the current studies with a PI and had him signature documents pertinent to the studies he is conducting. I helped complete chart review for possible influenza patients with acute visits. I screened a patient for a constipation study and nocturia study in the clinic neither qualified. I completed an IRB submission for an asthma study that I had to make a few updates to at the sponsor request. I assisted Raj with any regulatory request from CRAs. I contacted the

lab for primary study to make corrections a patient's laboratory information. I completed flu surveillance for the practice conducting Primary Study and updated my flu tracker with the information obtained.

02/12/2014

I went over the current studies with a PI and had him signature documents pertinent to the studies he is conducting. I helped complete chart review for possible influenza patients with acute visits. I had to resubmit an IRB submission for the asthma study because there was a discrepancy from the Sponsor with the compensation schedule. I went to the off-site document storage to retrieve documents for a CRA. I located documents for a study which has already ended and created an end of the study FDA 1572 which I got signed. I forwarded the previously mentioned documents that were requested to the CRO in an email. I assisted Raj with any regulatory request from CRAs. I completed flu surveillance for the practice conducting Primary Study and updated my flu tracker with the information obtained.

02/13/2014

I went over the current studies with a PI and had him signature documents pertinent to the studies he is conducting. I helped complete chart review for possible influenza patients with acute visits. I updated and acquired documents to submit to the CRO of Primary Study. After submission I had regular communication with the CRAs about updating the site information binder with documents and what originals or documents needed to be sent to the sponsor. I updated the site on the correspondence that had happened with the CRO. I began in the afternoon creating a start-up regulatory packet for a new gout study that was about to begin. When finished with the packet I began to get signatures and explain the study to the investigators who would be participating. I assisted Raj with any regulatory request from CRAs. I completed flu surveillance

for the practice conducting Primary Study and updated my flu tracker with the information obtained.

02/14/2014

I met with a group of providers and signatures for FDFs and patient charts. I helped with chart review for influenza at our sites we work with and notified the physicians of possible candidates. I completed flu surveillance for the site conducting Primary Study and made a final update to the influenza tracker I've been keeping. I filed regulatory documentation that is ongoing into study folders to make it easily accessible for the regulatory specialist. I updated a site information sheet. Participated in a meeting with Heema Marwah about the experience I received and what could have been done differently throughout the internship. I continued to organize my documents and set up things for me to end my internship.

APPENDIX B - GLOSSARY

CC – Clinical Conductor, ACRC Trial’s CTMS

CRA – Clinical Research Associate

CRO – Clinical Research Organization

CTPRF – Clinical Trial Patient Recruitment Firm

CTMS – Clinical Trial Management Software

EDC – Electronic Data Capture System

EMR – Electronic Medical Records System

FDA – Food and Drug Administration

GCP – Good Clinical Practice

ICH – International Conference on Harmonisation

ILI – Influenza-like Illness

IRB – Institutional Review Board

PI – Principal Investigator

SIV – Site Initiation Visit

SMO – Site Management Organization

APPENDIX C - BIBLIOGRAPY

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