

**Draft Proposal**

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# Community Partner Background

## Overview

The Association of American Cancer Institutes (AACI) is comprised of 98 leading cancer research centers in North America, including National Cancer Institute-designated centers and academic-based cancer research programs that receive NCI support. According to its website, the AACI’s mission statement aims to promote cancer research through its dedication to “*reducing the burden of cancer by enhancing the impact of North America’s leading academic cancer centers*”(AACI)*.* Given that the AACI is a relatively small organization with about 11-50 employees, the organization primarily shares information on its website and through annual meetings. Most recently, the AACI added a new public resource library with hopes to share its knowledge beyond current members and to grow the organization’s readership.

## Programs

Currently, the AACI is involved with five programs: The Presidential Initiative, CAR T, Clinical Research Innovation, Network Care Initiative, and the Physician Clinical Leadership Initiative.

*The Presidential Initiative*

The AACI Presidential Initiative enables the president, Roy A. Jenson, of the board of directors to formalize a special project of broad interest and value to AACI members during their two-year term. Through the AACI Presidential Initiative, Jenson formalizes special projects such as the public resource library on its website, a “one-stop shop” that AACI members can use to address and become informed about issues ranging from state funding for cancer research to HPV vaccination and tobacco regulation. The library, which still exists in its pre-established state, was in part developed by Carnegie Mellon Information Systems students in the 67-373 course last semester.

*CAR T Initiative*

In the wake of new cancer treatments that were approved by the Food and Drug Administration (FDA) in 2017, the AACI developed CAR T (chimeric antigen receptor T-cell) in order to address barriers associated with the administration of cancer therapy. The initiative, driven by a steering committee chaired by University of Kansas D.O. and professor Joseph McGuirk, facilitates collaboration between subject matter experts to help guide and implement CAR T-cell therapy programs at AACI member centers across North America. Currently, the steering committee meets through webinars, listserv discussions, calls, meetings, as well as through the annual CAR T conference to share knowledge with its members (AACI). Through their work, the steering committee has submitted comments to the Centers for Medicare & Medicaid Services (CMS) on their proposed national coverage analysis.

*Clinical Research Innovation*

Clinical research trials play an important role in the prevention, early detection, treatment, and cure for cancer. Recognizing that clinical trials in the U.S. face administrative and staffing barriers, regulatory constraints, increasing costs, and lagging patient accrual, the AACI established the Clinical Research Initiative (CRI) in 2009 as a presidential initiative dedicated to increasing member participation and for sharing best practices amongst members. Through its annual meetings, the CRI became a successful program which has drawn significant membership engagement, where annual attendance exceeded 400 with 11 exhibitors and more than 60 posters on display in its 2018 annual meeting.

*Network Care Initiative*

In 2017, the steering committee launched a survey to gather information from AACI member cancer centers on the nature of the relationships between main cancer centers and their network sites. Crafted with the assistance of the Physician Clinical Leadership Initiative Steering Committee and the AACI Board of Directors, the survey focuses on three areas of network care:

1. Improving the conduct of clinical trials at network practice sites
2. Implementing and using care paths to provide quality care and reduce drug costs
3. Determining approaches to quality assessments at the main cancer center vs. network practice sites and reporting across platforms of quality measures

*Physician Clinical Leadership Initiative*

In response to the rapid changes in health care delivery and the expectation to "do more with less" at clinical practices at AACI cancer centers, AACI created a forum for physician clinical leaders at its cancer centers to collect, evaluate, and share best practices that promote the efficient and effective operation of cancer center clinical and quality care programs (AACI). The forum aims to provide a resource for creating best practices to assist cancer center physician clinical leaders in addressing challenges like clinical services reimbursement, integrating electronic medical records with other cancer center IT services, assimilating clinical research and clinical programs to increase trial accrual, and developing performance metrics (AACI). Its steering committee, chaired by Director & Professor Division of Medical Oncology at the Ohio State University Comprehensive Cancer Center, Claire Verschraegen, serves as a resource for creating best practices as well as for comparing approaches to common problems facing clinical services leaders.

## Staff

The staff at AACI works to support North America’s cancer centers and is comprised of leadership, administration, communications & external relations, development, meetings & events, and programs. Among other programs, the entire team is involved with Clinical Research (CRI) which continues to provide a network for cancer center clinical research leaders to share best practices that promote operational efficiency and industry engagement through an annual meeting attended by over 400 clinical trials leaders and government agencies. The staff works together to support its mission of finding a cure for cancer through research and fellowship and work together at its headquarters in Pittsburgh’s “Eds & Meds” Hub. The Hub is located in Pittsburgh’s vibrant Oakland neighborhood, minutes from the UPMC and other local universities and hospitals.

Jennifer W. Pegher is the current executive director of the AACI, and she oversees all the initiatives of the research center. She was named executive director in October 2018 and joined the AACI in 2012 as a government relations manager, where she supervised the association’s legislative portfolio. Prior to her work at the AACI, Pegher was involved with the Western Pennsylvania Chapter of the National Hemophilia Foundation, as well as a constituent of former Congressman Philip S. English of Pennsylvania and the National Association of Federally-Insured Credit Unions. Currently, Pegher is focused on increasing the publication frequency of the Update newsletter and Commentary editorial series as well as improving member engagement through new meeting software.

## Technology Infrastructure

|  |  |
| --- | --- |
| **Technology** | **Description** |
| **Hardware** | Staff members at the AACI have either their own PC or have access to a working computer at their office. Make and model vary. |
| **Software** | Microsoft Office |
| **Network** | Typical, business-class internet connection at their office |
| **OS** | Windows or Mac OS |
| **Peripherals** | Projectors |

**Table 1. An overview of the technology infrastructure at the AACI.**

## Technology Management and Planning

Currently, our team is aware that while there is no structured IT department at the AACI, we do know that there is at least one employee responsible for handling technology related issues. For any technology development needs, the IT personnel will often outsource to third-party vendors. Their current website was built by a previous 67-373 group using HTML, CSS, and Javascript. All of their employees understand how the website works, although not all the employees would personally be responsible for updating any parts of the website. For this reason, while AACI generally has an online and technology presence, the organization is not specially trained to understand the technical details or converse fluently in technical jargon.

In terms of technology planning, since the board of directors oversees all the programs that the AACI is running and their committee chairs, there is communication between each program to the IT personnel. Since we do not have enough information to understand the specifics on technology planning and budgeting, our team seeks to learn more about this aspect of the organization during our next meeting. In addition, given that there will be a new president inaugurated in October, we are uncertain whether the current organization’s stance on technology budgeting and planning will change dramatically within the year or stay the same. Our team is happy to work with the AACI IT personnel to understand these specifics to the best of our ability.

## Communication

Given that our team has not yet been able to interact with other employees at the office to understand the main method of communication (e.g. via Slack, Microsoft Teams, email), we can infer that the organization primarily communicates face-to-face on a daily basis within their departments. In addition, since annual meetings seem to be a popular choice for many programs run by various steering committees, we can see that there is certainly a bias for in-person dialogue and information exchange across the AACI’s programs.

What is worth noting is the client’s proactiveness in using their corporate emails as the main method of communication to us. In addition, we have noticed that the organization provided us with a folder and some printed paper materials, which demonstrates once again the AACI’s preference for in-person exchange of information.

## Information Management and Business Systems

One of the organization’s cornerstone initiatives is the Public Policy Resource Library, which features a variety of cancer legislature curated by AACI staff. This information is critical to the organization and its members, who will be able to receive latest readings on topics such as state funding for Cancer Research, issues related to the elimination of HPV cancers, and tobacco disease control. The library is organized by featured topics which contain subcategories. Given that there is currently no database to manage the information in the library, we anticipate developing the infrastructure to enable efficient storage of information electronically that can be queried via a filtering or ordering feature. Since the Public Policy Resource exists in this pre-established state, we hope to learn more about the organization’s goals of creating an information system that allows hundreds of thousands of readers to gain access and become informed nationwide, and use this as our community partner project opportunity.

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# Community Partner Project Opportunity

## Project Opportunity

In order to ultimately support the AACI’s mission to inform its audience and expand its readership, we would like to add value and support their in-house technical department through a closer examination of the Public Policy Resource Library. Since the AACI is a smaller organization that has outsourced many of its technical work to third-party vendors, the Public Policy Resource library currently houses limited cancer resources and policies which are often in the form of fact sheets. For this reason, there are plenty of opportunities to expand the library’s current collection that showcase legislation endorsed by AACI on the state level.

In order to expand on the Public Policy Resource Library’s current collection, our team would like to add value through a project that enhances the current organization’s website through the design, development, and implementation of an additional webpage consisting of the federal legislation that AACI endorses. More specifically, we would like to integrate the page with the existing public policy resource library and thus, intend to stay consistent with the current library’s branding and theme. The web page should not only present static information on the legislation but also provide ‘interactive’ or ‘dynamic’ components such that viewers are able to monitor the progress of the legislation of their choice. By integrating the proposed web page with the AACI’s public policy resource library, the AACI can present a more comprehensive public policy library to its members that ultimately will engage its readership.

## Proposed Project Vision and Expected Outcome

Through our support of the AACI’s mission to reduce the burden of cancer by enhancing the impact of North America’s leading academic cancer centers, our team aims to ultimately enable the AACI to foster additional avenues of engagement with its members through the Public Policy Resource Library.

After listening to the needs from a meeting with the AACI, our team intends to deliver upon our project vision through a page that enables users to track the progress of federal legislation supported by the AACI and to provide users with a way to demonstrate support for initiatives via a letter-writing tool. There are relevant stakeholders involved with this project which include the AACI board and leadership, its technical staff, and members that may involve program steering committees. In addition, business managers and public policy advocates across the nation would certainly be interested in the purposes of the public policy library, which provides them with a way to discover and become involved with the work of the AACI. Since this project requires the curation and dissemination of information, our team will certainly be taking the preferences of the AACI’s current IT personnel into careful consideration, who will be responsible for updating the page and tracking progress.

In creating this dynamic page, our team is excited to contribute to this project dedicated to showcasing the current and future legislature of cancer policy, increase readership engagement via letter writing campaigns, and ultimately produce a sustainable solution that delivers upon the AACI’s mission of enhancing the impact of North America’s leading academic cancer centers through information and education.

## Expected Outcomes and Feasibility

Our expected outcomes are broken into two parts: a general timeline of team operations and a table on key steps that we will take to implement our solution. As we gain a deeper understanding of our project and specific features that we need, this timeline will be updated appropriately. With the information we currently have, we propose the following timeline, along with each item’s agenda and potential risks involved. Given that we have limited information at this time, we have outlined a general schedule from this week until the week before spring break (3/7):

|  |  |  |
| --- | --- | --- |
| **Task** | **Estimated Due Date** | **Feasibility, Risk, or General Notes** |
| Client Office Visit | **Friday 2/7/2020** | While the team is able to make the office visit, we are aware that the meeting takes place after the submission of this assignment. Team and client bonding will take place in order to establish common ground and mutual understanding.  Note: Due to the bad weather, the client informed us that they were unable to hold the meeting. This section would be rescheduled in the next week, supposedly on Monday, 2/10. |
| Team Meeting | **By Saturday 2/15/2020** | Go over team calendar and set up a routine weekly meeting time, discuss specific implementation options, develop Roles and Responsibilities |
| Client Meeting (Virtual) | **By Friday 2/14/2020** | Clarify questions, both client and team should commit to the solution and implementation method. Ask what they would like to have for the Git team lab assignment due the following week, and assess time needed accordingly. |
| Roles and Responsibilities | **Monday 2/17/2020** | As the team outlines roles and responsibilities, it is important to consider that each person’s role does not limit one from being there for his/her teammates should challenges come up. |
| Revised Proposal | Check peer feedback and clarify any points of confusion at least 24 hours in advance |
| Team Meeting | **By Wednesday 2/16** | Working on first Git team lab assignment |
| Team Meeting (optional) | **Friday 2/21/2020** | Finishing up Git team lab assignment |
| Git Team Lab | **Friday 2/21/2020** | Schedule time to work on the lab together in advance in order to avoid falling behind due to the tight timeline. |
| Team Meeting | **(!)Weekend of Feb. 21-23** | Given that two items are due the upcoming Monday, the team needs to devote time to work on the Sprint report and communicate with each other in time before peer evaluation submission. |
| Team Sprint Report | **Monday 2/24/2020** | Given that this is the first report, we need to position ourselves in a good place to show our commitment to and understanding of the client’s needs. |
| Peer Evaluations | Communicate any issues ahead of time in the weekend meeting before submission. |
| Client Meeting | **Tentative: 2/24/2020 after advisor meeting** | Review progress and sprint report as soon as possible in order to move onto the next item. Doughnuts are allowed. |
| Communicating technical concepts HW | **(!)Wednesday 2/26/2020** | Given the lack of information on this assignment, there is currently no meeting set to complete this assignment. If needed, virtual Google Hangouts is possible. |
| Code n’ Chill at Lena’s Apartment | **Tentative: Friday 2/28/2020** | Potentially last meeting before spring break; team-bonding and productive time coding would be ideal. The incentive to focus: Lena can order pizza afterwards! |
| Team Sprint report | **Monday 3/2/2020** | Consider any feedback from the previous week for improvement. |
| Client Meeting (virtual) | **Tentative: Week of 3/2 - 6** | Given that this is the last week before spring break, we will hold a shorter meeting to be sure we are in communication and staying on track. |
| Capacity building planning worksheet | **Wednesday 3/4/2020** | (!)More information needed |

**Table 2. A proposed, tentative timeline on team assignments and meetings.**

**(!) = Possible risk items**

**= Client Meeting**

**= Team Meeting**

**= Assignment Due**

|  |  |  |
| --- | --- | --- |
| **Objective** | **Outcome** | **Success Metric** |
| Understand our project scope better | List of features proposed by client | List is considered exhaustive by the client |
| Establish the timing which information should be updated on the webpage | Established routine on how information gets sent and updated on the website | Client is comfortable with ou established information curation-to-publication pipeline |
| Ascertain the sustainability of our project design and implementation strategy | Our client’s technical staff affirms that they are able to operate and maintain our page given our implementation method. For example, if we implement a page in HTML/CSS, the client’s technical staff should affirm that they can continue operating the page using HTML/CSS. | Our client is aware of the pros and cons of different methods and has confidence that our strategy is what’s best for them. |
| Rapid, possibly parallel prototyping of the web-page look and overall experience | Working Figma prototype | Client provides solid feedback and comments on the experience after running a few user tests on relevant stakeholders. At this stage, it is important that the client is communicative and responsive. |
| Second iteration on webpage | Working Figma prototype that takes first round of user testing feedback into consideration | Client positive feedback after user testing |
| Webpage implementation using intended languages and any relevant APIs/software | Working demo | Client is able to successful navigate to the web-page and have a positive user experience |
| Provide relevant documentation for IT personnel in order to continue operating the webpage and pushing information; outline relevant details on scalability in the future | A meeting with the client to present our documentation in a paper and emailed copy, along with answers to their questions about anything in the documentation during the meeting | Client is satisfied with the information written in the documentation, has a positive outlook on the future of the product, and is appreciative of our time |

**Table 3. Our approach to the project outlined with seven key steps.**

## Risk Analysis

As we gather more information on our project via our first on-site client meeting this Friday, 2/7, we will update the risk analysis accordingly.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Risk description | Likelihood of occurrence | Magnitude of potential loss | Early warning | Abatement strategy |
| Robustness of the dynamic components | High | High | Edge case testing omitted | Fuller testing |
| Reliability of the data sources | Medium | High | Unreliable data showing up | Checking the terms of the data sources |

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# User Stories

As we gather more information on our project via our first on-site client meeting this Friday, 2/7, we will add additional user stories accordingly.

|  |  |  |  |
| --- | --- | --- | --- |
| As a <type of user> | I want <some goal> | So that <some reason> | Priority |
| AACI member | To follow the progress of a legislation | I can understand the course of a legislation if I am to support similar ones. | essential |
| Government relations director | To read relevant legislation on a particular topic | I can get educated about the policies already made | nice-to-have |
| Patient advocate | To check how many sponsors there are for a particular federal legislation | I can understand if the group that I am advocating for has gained enough attention on the federal level | nice-to-have |
| Researchers | To read the legislations that AACI endorses | I can understand what AACI endorses and the benefits of partnering with AACI | essential |
| AACI staff | To update the page with the organization’s endorsed legislation | I can present AACI’s stand on the federal level | essential |