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# A COMPREHENSIVE BUSINESS PLAN AND SUSTAINABILITY MODEL FOR A STUDENT-LED PRO-BONO CLINIC ENRICHING STUDENTS AND COMMUNITY WELL-BEING

by

Kelsey Days

A Capstone Project Presented to the FACULTY OF OCCUPATIONAL THERAPY GEORGIA STATE UNIVERSITY

In Partial Fulfillment of the Requirements for the OCCUPATIONAL THERAPY DOCTORATE

April 2024

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#### CAPSTONE FINAL PAPER APPROVAL FORM

The Capstone Final Paper is the final product that the OTD students need to complete to report his/her Capstone Project and his/her Capstone Experience.

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We, the undersigned, recommend that the Capstone Final Paper completed by the student listed above, in partial fulfillment of the degree requirements, be accepted by the Georgia State University.

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#### Acknowledgment

I extend my sincere gratitude to my site mentors, whose invaluable guidance, support, and encouragement have shaped the direction and quality of this capstone project. I also appreciate the mentorship and insights provided by the faculty members of the Occupational Therapy Department at Georgia State University, whose expertise has enriched my academic journey. My sincere thanks go to my family and friends for their unwavering love, support, and understanding throughout this endeavor. This capstone project represents a significant milestone in my academic and personal growth, and I am deeply appreciative of everyone who has been a part of this journey.

#### Abstract

Student-led pro-bono clinics are often established to address the growing concerns of access to healthcare services, especially in underserved areas. Additionally, student-led pro-bono clinics are initiated to guide student learning and prepare students for future clinical experiences. However, many pro-bono clinics face issues with sustainability and funding, which could impact service delivery. It is important to establish a solid foundation during the development phase of a pro-bono clinic. This includes development of a comprehensive business plan and sustainability model to ensure the longevity of the clinic and a method of verifying success towards goals and objectives. Despite issues affecting sustainability, community members report a positive impact on quality of life when using clinic services (Stickler et al., 2019). Additionally, the literature supports improvement in student clinical competencies, such as assessment and intervention skills (Smith et al., 2019; Paparella-Pitzel et al., 2019). This project has combined the results of the literature, as well as expert opinions to craft a comprehensive business plan and sustainability model for any institution wishing to begin a student-led pro-bono clinic. Additionally, this project provides specific details that may apply to the proposed student-led pro-bono clinic within Byrdine F. Lewis College of Nursing and Health Professions at Georgia State University. In the creation of this business plan and sustainability model, the intent is to provide institutions with an informative design to guide the operations and sustainability of a student-led pro-bono

Keywords: pro-bono clinic, student-led clinic, occupational therapy, underserved community

clinic.

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#### CHAPTER 1

#### **Literature Review**

#### Introduction

Challenges to access and affordability of healthcare highlight the opportunity to generate solutions to address the population of uninsured or underinsured individuals. According to a report from the United States Census Bureau, nearly 8% of Americans were uninsured for an entire calendar year in 2022. Furthermore, the state of Georgia exceeds the national uninsured rate, with nearly 13% of Georgians being uninsured in 2021, falling within the top 5 states of underinsured Americans. The aging population within the U.S. is accompanied by an increase in the prevalence of chronic conditions such as stroke, diabetes, and Alzheimer's disease, which are among the top leading causes of death in Georgia (Centers for Disease Control and Prevention [CDC], 2018). According to Ansah & Chiu(2023), the number of adults aged 50 and older in the U.S. will increase by more than 60% by 2050, and of this population, those with at least one chronic disease are expected to rise nearly 100%. Furthermore, there are roughly 2,000 people who are unhoused in Fulton County (Atlanta Mission, 2020). People who are unhoused are less likely to have health insurance and more likely to have reduced access to care and poorer health outcomes than those who are housed (CDC, 2023; NCH, 2023). Due to the varying health challenges, a significant portion of uninsured Georgians may be faced with potential strains to their overall health and well-being. The consequences of this challenge are profound. One of many solutions to address this extensive challenge is the expansion of access to healthcare services via pro-bono clinics.

In education and healthcare lies the opportunity to promote student learning while addressing important needs of the community. Student-led pro-bono clinics not only allow

students to gain diverse, hands-on experience but also serve as an opportunity to improve community access to healthcare (Palombaro et al., 2011). Currently, there are a few university-based pro-bono clinics in Georgia, served by a variety of professionals such as occupational therapists, physicians, nurses, and physical therapists (Pro Bono Network, n.d.). However, no student-led pro-bono clinics are offering occupational therapy services in the Atlanta area. Georgia State University lies in the heart of downtown Atlanta and The Graduate School (n.d.) lists more than 150 graduate programs, including physical and occupational therapy programs. A university with many graduate programs offers a wealth of expertise and resources, which can largely enrich the establishment of a student-led pro-bono clinic. The impact of a student-led pro-bono clinic will be highlighted in the subsequent sections. Additionally, the following sections will emphasize the specific challenges faced by the community, and how the establishment of a pro-bono clinic can play a pivotal role in changing the narrative of healthcare accessibility in a community.

#### **Student Impact**

Student participation in student-led pro-bono clinics offers students an opportunity to gain hands-on clinical experience with diverse patient populations under the expertise of clinical instructors and faculty. Many clinically meaningful results, such as improved cultural humility have been investigated within many established student-led pro-bono clinics (Morris et al., 2021). Additionally, research shows that students perceive participation in student-led clinics as a means for personal growth, academic growth, and improvement in clinical reasoning, including improved assessment and intervention skills (Paparella-Pitzel et al., 2021). Through gaining hands-on experience with patients, students can apply theoretical knowledge learned in the classroom, allowing for knowledge translation into clinical practice. Furthermore, research

shows that participation in student-led clinics promotes leadership development and community involvement (Black et al., 2013). Improved leadership skills, as well as increased community involvement potentially create future clinicians who could be advocates for equality for healthcare access.

#### Fieldwork Experience

Students can take part in a valuable fieldwork experience by participating in a student-led pro-bono clinic. Healthcare is a dynamic field, where advancements in technology, interventions, and protocols constantly emerge. Despite extensive schooling, on-the-job training is continuously proving to be the most beneficial method to support the development of clinical competency (Yardley et al., 2012). Clinical placement in a student-led clinic allows students to partake in experimental learning by translating their knowledge into practice and enhancing their skills under the guidance of faculty. Due to the complexity of patient care, interactions cannot always be replicated in a classroom setting. Practical experience allows students to develop and improve problem-solving skills (Bernik & Žnidaršič, 2012). Working in a clinical environment can expose students and professionals to diverse patient populations, which offers opportunities to develop cultural humility and improve communication skills. To facilitate effective learning, students, and faculty are responsible for creating a learning environment that supports student growth and development. According to the Department of Health in Victoria (2016), the best practice clinical learning environment is composed of six elements: "an organizational culture that values learning, best-practice clinical practice, a positive learning environment, an effective health service-education provider relationship, effective communication process, and appropriate resources and facilities." A supportive setting can promote student confidence, competence, and professional growth, ensuring students become effective entry-level practitioners.

#### **Community Impact**

A student-led pro-bono clinic offering allied health services can transform the community it serves. The clinic serves as an opportunity for individuals to receive care that they may not otherwise receive due to being uninsured or underinsured. According to McWilliams (2009), adults with certain chronic conditions are at an increased risk for poor health outcomes due to being uninsured. Additionally, loss of insurance coverage is a rising concern for many Americans, particularly those with Medicaid coverage as compared to those with employer coverage (Einav & Finkelstein, 2023). A student-led pro-bono clinic could alleviate some of the challenges to accessing quality care for those who are uninsured or underinsured by reducing financial concerns.

In addition to improving access to healthcare, student-led pro-bono clinics can offer health benefits to a community and potentially improve community well-being. According to Roy et al.(2019), community well-being is associated with hospitalization rates, and increased hospitalizations result in lower rates of well-being. This was based on the Well-Being Index with domains of life evaluation, emotional health, work environment, physical health, healthy behaviors, and basic access. The literature supports a reduction in hospital readmission after receiving occupational therapy interventions, particularly when those interventions focus on community reintegration (Lockwood & Porter, 2022). During a study conducted in a pro-bono clinic offering physical therapy services, responses on the SF-8 demonstrated significant changes in the physical health section as a result of receiving care (Stickler et al., 2016). Not only would the clinic offer rehabilitative interventions, but the clinic can educate the community through educational and preventative initiatives. The clinic can offer community education about

preventive measures and risk factors for stroke; educational topics can also include, physical activity recommendations, pain management, sleep management, stress management, and coping strategies (AOTA, 2022). By providing these services, the clinic identifies and addresses factors that may largely impact an individual's quality of life.

Furthermore, student-led pro-bono clinics build a bridge between universities and communities. While students get to practice their skills with patients, patients also feel that they are contributing to the student's learning and growth (Hewson & Friel, 2004). This relationship builds trust in the community, an important aspect of sustainability, as well as opens the door to community partnerships and collaborations. Patient-student interaction lays the foundation for trust on a larger scale. To develop trust within the community, the clinic can partner with local healthcare providers and nonprofit organizations to expand its reach and address additional community health needs. Through these collaborative efforts, universities and communities come together to address healthcare disparities and promote community well-being.

#### **Development and Sustainability**

There is an abundance of literature dedicated to the business plan process, the importance of a solid business plan, and the components of a business plan. Each component is detailed, and specific requirements of a solid business plan are included throughout the literature, as well as research supporting factors influencing the success of each component. The literature includes questions that readers can consider to generate ideas for a business plan (Haag, 2013). Medical and healthcare-focused business plan writing is also available in the literature, as many extensive business-related courses are not offered during schooling (Cohn, 2002). However, healthcare providers wishing to enter into private practice or become leaders in their field may benefit from evidence to guide business plan writing in their area of practice. Furthermore, sustainability is

one of the most important topics to explore when developing a pro-bono clinic. Inconsistencies in scheduling and excessively high or low patient volumes are cited as common issues that challenge the sustainability of pro-bono clinics (Smith et al., 2019). In recognizing these commonly cited reasons for business failure, a thorough business plan and sustainability model can be designed to protect the business from these common challenges. can be created based on the research included in these articles highlighting common failures of new businesses that can be addressed through a thorough plan.

#### Conclusion

In conclusion, this literature review spotlights the variety of benefits of student-led probono clinics to both students and the community. Through investigation of existing research and scholarly articles, it becomes evident that pro-bono clinics can play an essential role in addressing challenges to healthcare access, expanding student learning experiences, and fostering community engagement. Through the provision of essential care to underserved populations while also offering students hands-on training, these clinics represent a crucial element of education, service, and social impact. Moving forward, continued research and evaluation will be essential to further understand and optimize the effectiveness of student-led pro-bono clinics, ensuring they continue to serve as invaluable resources for both students and the communities they serve.

#### **CHAPTER 2**

#### **Needs Assessment**

#### **Community Needs Assessment:**

#### Introduction

The establishment of a student-led pro-bono clinic in Atlanta, GA would serve as a means of improvement for community healthcare. To understand the needs of the community, and ensure they are being met, it is important to conduct a comprehensive needs assessment. This needs assessment includes various components that contribute to helping readers understand the requirements of the target population. Additionally, this needs assessment is composed of an analysis of demographics, community health needs, legal & regulatory requirements, infrastructure, potential collaborative opportunities, and projected methods of sustainability.

#### **Demographic Analysis**

A demographic analysis is important for identifying a target population as well as developing a rationale for the development of a student-led pro-bono clinic. Understanding diversity within a population, including race, age, socioeconomic status, and other factors is important for understanding needs and preferences within a particular community. According to the United States Census Bureau (n.d.), Atlanta, GA has a population of 498,715 in 2024, with adults making up 82% of this number (average age: 34). Large contributors to health disparities and uninsurance rates include race and socioeconomic status (Willaims, 2010). According to the CDC (2023), "data show that racial and ethnic minority groups, throughout the United States, experience higher rates of illness and death across a wide range of health conditions." *Figure 1* depicts the demographic breakdown in Atlanta, highlighting the large percentage of minorities.

Furthermore, "the uninsured are significant and include use of fewer preventive services, poorer health outcomes, higher mortality and disability rates, lower annual earnings because of sickness and disease, and the advanced stage of illness (Riley, 2012)." *Figure 2* depicts the uninsurance rate in Atlanta, GA. These figures help readers understand the demographic breakdown of the target market, as well as support the need for the development of a pro-bono clinic.

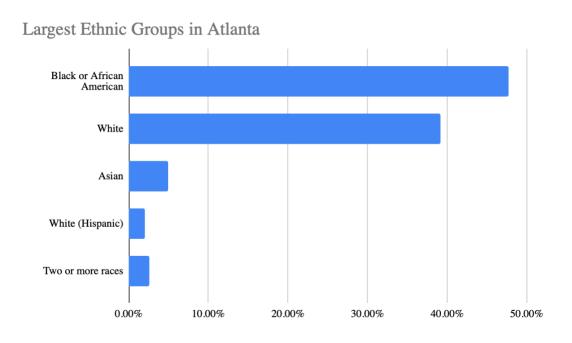


Figure 1. Largest Ethnic Groups in Atlanta, GA.

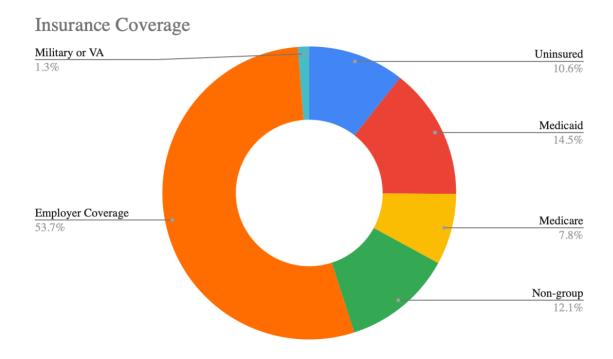


Figure 2. Insurance Coverage in Atlanta, GA.

#### **Community Health Trends**

Identifying community health trends assists with pinpointing priority areas for intervention and resource allocation. Georgia is a state without Medicaid expansion, meaning that not only does Georgia have one of the highest uninsured rates, but uninsured Georgia citizens who are low-income may remain uninsured (Lyon et al., 2014). A 2022 community needs assessment conducted by Kaiser Permanente lists no insurance or loss of insurance, undocumented status, homelessness, lack of access to technology, lack of access to culturally sound care, limited service providers, and limited preventative services as community concerns regarding access to care (Kaiser Permanente of Georgia, 2022). Barriers to access to healthcare services can result in unmet healthcare needs and poor subjective health status for individuals with disabilities (Lee et al., 2024).

In Atlanta, 12.9% of residents live with a disability. *Figure 3* represents a breakdown in types of disability that can be a result of either orthopedic or neurologic injuries. According to the CDC (2023), there are an average of 586 traumatic brain injury hospitalizations per day. The effects of brain injuries and other neurologic disorders can result in physical complications, emotional and personality changes, functional limitations, cognitive changes and more. Furthermore, 1.7 billion people live with musculoskeletal impairments globally. Additionally, musculoskeletal conditions significantly impact quality of life and are a large contributor to disability (World Health Organization [WHO], 2022). Barriers to access to healthcare services can result in unmet healthcare needs and poor subjective health status for individuals with disabilities (Lee et al., 2024).

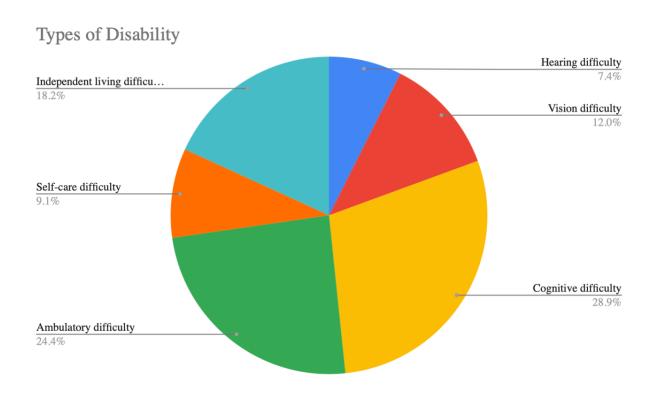


Figure 3. Types of Disability in Atlanta, GA.

#### **Infrastructure and Facilities**

#### Healthcare Facilities

There are many large hospital networks in the Atlanta area like Grady, Emory, and Piedmont.

Each of these networks has local hospitals near public transportation. Grady Memorial Hospital is within walking distance of Georgia State University. Patients who are discharged from these hospitals, who also meet the criteria for treatment in the student-led pro-bono clinic, can leverage the proximity to receive access to services.

#### **Transportation**

The Metro Atlanta Rapid Transit Authority (MARTA) is the primary public transportation system in the Metro Atlanta area. MARTA offers bus, train, and streetcar transportation options, each with stops near Georgia State University. MARTA has 4 train lines, running east-to-west and north-to-south, servicing almost exclusively Fulton, Clayton, and Dekalb counties.

Additionally, MARTA can carry passengers to 38 bus stops and 12 streetcar stops throughout the metro Atlanta area. MARTA prides itself on offering accessible services and abides by ADA-compliant procedures. Additionally, MARTA offers MARTA mobility, where passengers with disabilities can reserve a shared ride to assist with accessing or riding fixed route services.

Standard MARTA fares are \$2.50, streetcar fares are \$1, and passengers who are 65 and older with a Medicare card or have a medical or mental disability are permitted to pay a reduced fare of \$1 (MARTA, n.d.). MARTA is an excellent transportation option for accessing a student-led pro-bono clinic at Georgia State University when considering the financial constraints of other transportation services.

#### Conclusion

The community needs assessment contributes to the informed decision-making process for developing a necessary resource in the community. This needs assessment looks at the people, healthcare, laws, buildings, and culture, which helps guide resources to the right place.

#### **Student Needs Assessment:**

#### Introduction

Understanding the needs of students who will be actively involved in the pro bono clinic is vital to ensure a positive and enriching experience. This student needs assessment aims to identify key requirements, preferences, and challenges that may impact their participation and contributions to the clinic.

#### **Clinical Experience**

Participation in a student-led clinic offers occupational therapy students a clinical experience with many benefits. Under faculty supervision, students can apply their theoretical knowledge in the clinic through a hands-on approach. Students can practice patient evaluations, treatment planning, and providing client-centered interventions. According to (Vuuren, 2016), students participating in a clinical skills unit perceived it as a great way to improve clinical skills before level-two fieldwork. The proposed pro-bono clinic will initially serve adults with orthopedic and neurologic injuries. Students with a particular interest in this population may benefit from participation in the student-led clinic. Through improving clinical skills, adapting interventions to individual cases, and working under the supervision of experienced clinicians, students gain valuable insights and professional connections, preparing them to be clinicians in occupational therapy.

#### **Interprofessional Collaboration**

Interprofessional collaboration is important for students in healthcare as it promotes comprehensive patient care, professional development, and improved patient outcomes (Zechariah et al., 2019). By combining perspectives and expertise from various healthcare disciplines, collaboration promotes holistic patient care by addressing physical, psychosocial, and functional features of care. Nursing and medical students participating in interprofessional education classes note an "exchange of discipline-specific knowledge, general knowledge about each other's responsibilities, reduction of hierarchy, and improvement in patient care" after participating in interprofessional education classes (Teuwen et al., 2022). Through a combined effort, communication, and mutual respect and understanding among students, interprofessional collaboration improves their ability to provide high-quality patient care. Overall, interprofessional collaboration prepares students to meet the complex needs of patients and contributes effectively to the delivery of client-centered care across healthcare settings.

#### Conclusion

The student needs assessment is a fundamental step in designing the student-led clinic experience to meet the clinical needs and aspirations of the students involved. By understanding their goals and preferences, the clinic can create an environment that addresses the needs of the community and fosters the professional and personal growth of the students participating in this valuable initiative.

#### **CHAPTER 3**

#### **Methods**

#### Introduction

The purpose of this capstone project is to create a business plan & sustainability model to guide the operations of a multidisciplinary, student-led pro-bono clinic that aligns with the values of allied health professions. The business plan and sustainability model are intended to serve as a guide for any institution interested in establishing a student-led pro-bono clinic, particularly one offering allied health services. Because there is little to no literature on occupational therapyspecific pro-bono clinics, the background and reasoning for engaging in this project are designed to emphasize the importance of rehabilitative services and how a student-led pro-bono clinic providing these services can fill a need for access to healthcare services. The mission of the proposed pro-bono clinic is to promote community well-being by improving access to health services within marginalized communities. By offering rehabilitative services such as occupational and physical therapy, the goal is to address health challenges impacting the quality of life for those facing barriers to care. Moreover, the mission is to address these barriers through educational initiatives where students gain hands-on clinical experience, while also fostering cultural humility through interaction with diverse patient populations. The goal of this project is to help institutions fulfill this mission by providing a comprehensive business plan to guide operations. The development of this project aims to serve both students and the communities of underserved and/or underfunded individuals by capitalizing on educational opportunities through service.

### **Participants**

This project was conducted via a combination of virtual and in-person meetings with site mentors and key informants including healthcare professionals, educational institutions, and community organizations, as well as a thorough review of the literature, current legislation, and national databases. Site mentors and key informants included faculty and staff at Georgia State University, faculty and staff of established student-led and/or pro-bono clinics, and individuals with a business background. Interviews were conducted to gather expertise to craft a comprehensive business plan and sustainability model for any institution wishing to start a student-led pro-bono clinic. Portions of this project include specific elements relative to Georgia State University's Lewis College that can be used at their discretion, as well as generalizable information for any parent organization. Additionally, interviews with key informants provided information to complete the investigation of best practices, including which elements of a student-led pro-bono clinic should be considered for the best student and community impact.

#### **Setting**

This project was completed at various locations, including on-site at Emory Rehabilitation

Hospital, Georgia State University, University of North Georgia, and virtually. Georgia State University

previously offered a faculty-led pro-bono clinic within Lewis College of Nursing, offering physical
therapy services. The university currently has plans to re-open this clinic with plans of providing
occupational therapy & physical therapy services via a student-led pro-bono model.

#### **Development**

The development of this project occurred in three phases. The goal of phase one was to establish a solid foundation for the project by building a comprehensive understanding of the existing knowledge base, legal framework, demographic data, and the needs of the intended beneficiaries. This phase sets the stage for informed decision-making and strategic planning in subsequent project phases. Phase two consisted of key informant interviews that were used to

develop sustainability and best practices for a student-led clinic. The interview questions were curated to elicit in-depth responses from key informants that would later be used to craft a thoughtful plan and model that considers the limitations of past and current pro-bono clinics based on the literature. Phase three was a dynamic stage where collaboration, strategic planning, and forward-thinking converge. Through meaningful consultations, a robust business plan is crafted to guide the project's execution, and a sustainability model is formulated to ensure its endurance. This phase sets the stage for effective implementation and the realization of long-term project goals.

#### **Implementation**

This project serves as the groundwork for the development of a student-led pro-bono clinic.

Although the business plan will not be used to implement the start of the proposed clinic this semester, it will serve as a means of explanation of the steps to open the clinic, financial and resources needed for operation and maintenance, market analysis, and operational planning.

#### **Evaluation**

Upon startup of a student-led pro-bono clinic, the business plan can be used as a reference for program evaluation. First, the goals and objectives of the pro-bono clinic outlined in the business plan should be reviewed to ensure the clinic is operating in alignment with the objectives. Next, financial projections should be reviewed. This evaluates how well the pro-bono clinic operated within its budget and what changes should be implemented. Finally, feedback from stakeholders should be gathered to understand the effectiveness and impact of the pro-bono clinic. These three important steps of the evaluation process contribute to the clinic's improvements.

#### Framework

The completion of this project included adopting principles from the Framework of Occupational Justice (FOJ). The FOJ explores the justices or injustices impacting performance in daily activities or occupations. It focuses on the importance of inclusion of each person in an

occupationally just world. This includes a person's unique environment, or wherever they complete their occupations that are meaningful to themselves. The FOJ highlights structural and contextual factors serving as facilitators or barriers to occupational performance and justice (Towsend, 2012).

"Structural factors include underlying occupational determinants (i.e., type of economy, regional/national/international policies) and occupational instruments or programs (i.e., health and community support, income support, education, employment)." Furthermore, "contextual factors include age, gender, sexual orientation, ability/disability, etc. The structural factors, affected by contextual factors, contribute to conditions of occupational justice and lead to occupational outcomes (i.e., justice or injustice) (Towsend, 2012)." The interaction of these structural and contextual factors contributes to conditions of occupational justice, ultimately influencing occupational outcomes.

Occupational outcomes of justice encompass rights related to meaning, participation, choice, and balance. The framework identifies four cases of occupational injustice: occupational alienation, occupational deprivation, occupational imbalance, and occupational marginalization (Towsend, 2012). It posits that adopting a critical occupational perspective provides new insights into social issues related to occupational justice, particularly the injustice of excluding individuals with mental illness from everyday occupations.

There are three means of advocating for justice highlighted in the FOJ. First, it is our responsibility as a society to be inclusive of everyone in daily occupation without injustice.

Second, societies should implement new practices to promote justice in housing, employment, community recreation, etc. Third, justice is prevalent when all people are supported in their

occupations despite the presence of an illness. Ultimately, the overarching theme of the FOJ is to be inclusive of each individual in their desired occupations.

In developing a business plan for a student-led pro-bono clinic, the principles of the FOJ can be regarded as a means of tying inclusivity and advocacy together to promote justice while addressing occupational injustices in healthcare. The FOJ emphasizes the importance of each individual actively participating in meaningful occupations. The development of a student-led pro-bono clinic would provide a community with access to rehabilitative services that can assist with participation or return to participation in daily activities. Most importantly, the pro-bono clinic will increase access to individuals, regardless of race, sexual orientation, religion, socioeconomic status, etc, which ties into the FOJ's principle of inclusion of all.

#### **Timeline**

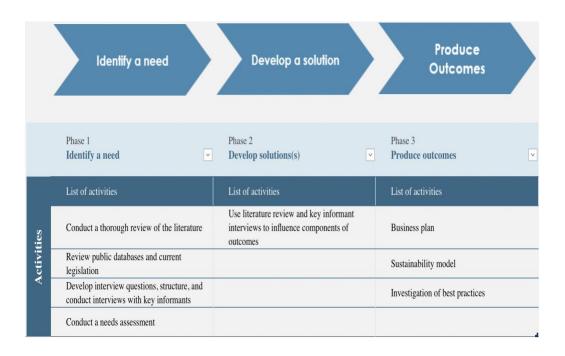


Figure 4. Timeline of Capstone Project.

#### **CHAPTER 4**

#### **Results**

#### Introduction

The purpose of this capstone project was to create a business plan & sustainability model to guide the operations of a multidisciplinary, student-led pro-bono clinic that aligns with allied health professions. The project outcomes include a business plan that can serve as a guide to ensure operations meet the clinic's goals, mission, vision, and procedures to facilitate the delivery of care to the target market. Additionally, the outcomes include an investigation of best practices for operating and sustaining a pro-bono clinic. This project aims to improve access to rehabilitation services, promote health equity, and spread the occupational therapy profession's identity of improving quality of life and participation in daily activities for individuals across the community.

#### **Business Plan**

The business plan process entailed a comprehensive approach to promote efficacy and sustainability. A community needs assessment through a literature review and key informant feedback identified concerns and needs for the target population, as well as an assessment of the available resources and infrastructure. The outline of the business plan was created through a literature search and review of developed business plans. Interviews with key informants ensured key points were highlighted in the business plan. It begins with the proposed clinic's mission & goals and services provided. The plan also outlines the roles of students and faculty advisors in the organizational structure and establishes procedures for patient intake and scheduling. The financial projections outline projected expenses, revenue streams, and fundraising plans to ensure the clinic's sustainability. Finally, the business plan

includes the market analysis, policy & procedures, quality assurance, and marketing for an all-inclusive plan.

#### **Investigation of Best Practices**

Throughout the business plan process, an investigation of best practices for clinic operations and maintenance was also developed based on feedback from key informants. Interviews were conducted with diverse stakeholders, including healthcare professionals, business professionals, educational institutions, and community organizations. The interviews with key informants were conducted via phone call, Webex, and in person. Interviews were conducted in a semi-formal manner with questions developed by the student. The interview questions were designed to elicit thoughtful responses based on the area of expertise of each key informant. Each key informant offered diverse information based on their experience, which supports the sustainability challenges found in the literature. The investigation of best practices allows parent organizations to note successful methods, improving performance and planning for potential errors.

#### Student Involvement

Student involvement in the clinic was emphasized during interviews with faculty in other student-led clinics. Students not only had clinical roles but also administrative and foundational roles. Students are responsible for providing care to patients, scheduling appointments, and participating in community events alongside faculty. In a study completed by (Palombaro et al., 2011), physical therapy students were able to apply and be appointed to the Student Board for the student-led clinic. The Student Board was responsible for duties such as furnishing the clinic space, creating the policy & procedures manual, creating intake documents, creating marketing flyers, hosting community events, and creating websites. Student involvement is a great way to

expose students to leadership roles in healthcare and mimics the collaborative nature of the healthcare field. Additionally, student involvement reduces some of the costs associated with the role, reserving funds for the sustainability of the clinic.

#### Clinic Location

When considering the location for a student-led pro-bono clinic. It is important to consider how much clinic space will be needed to house equipment and treat the desired number of patients. Labs or classrooms on university campuses typically offer the space requirements needed for operations. Additionally, when operating within a university, utilities, maintenance, and other operating costs are potentially covered by the university. Pro-bono clinics with campus locations provide a convenient location for students and faculty that does not impose additional transportation barriers. A university may also offer more visibility to the community in comparison to a smaller outpatient clinic. If operating in a university-owned space is feasible, some of the overhead financial barriers to starting a clinic may be reduced.

#### **Funding**

Pro-bono clinics can be sourced through donations and grants received during fundraising initiatives. Pro-bono clinics offer free services, so there is difficulty generating revenue, making loan repayment with interest difficult. Funds from donations and grants allow the clinic to allocate its resources toward delivering quality care instead of loan repayment. Income that is sourced through donations and grants can improve the clinic's financial stability and allow for reduced financial burden.

#### Faculty Involvement

An important requirement for a student-led pro-bono clinic is faculty supervision since students are required to be supervised when treating patients. Based on key informant interviews,

it was determined in the business plan that faculty involvement in the clinic will be on a volunteer basis. An issue that other established student-led clinics have faced is not enough faculty volunteers due to the workload they already have. A solution to this problem is the use of university affiliates in the clinic. University affiliates are licensed and registered clinical professionals who have the credentials to supervise students.

#### **Sustainability Planning**

A comprehensive business plan is an important first step for sustainability as it provides a guide for the organization's mission & vision, resource allocation, and organizational structure. The outlined mission & vision ensure that the clinic's efforts are aligned with the long-term goals of the clinic for sustainability. The financial projections detailed in the business plan assist with resource allocation to support the operation, maintenance, and sustainability of the clinic. The business plan serves as the first communication mechanism for stakeholders, expressing the structure and direction the clinic needs for long-term success. Additionally, the business plan articulates what the clinic needs to sustain, ensuring that efforts are focused on the elements that the clinic requires to operate.

The purpose of sustainability planning is to provide direction for what stakeholders need to develop and implement sustainability initiatives. Sustainability planning assists with identifying what should ideally be sustained, important personnel for implementation, and methods for sustainability. Based on responses from key informants, finances, consistency in scheduling, role delegation, and volunteer retention are some of the biggest challenges for the sustainability of pro-bono clinics.

For pro-bono clinics to provide quality services, it is important to consider financial sustainability. Operational and maintenance expenses and expenses to support fundraising and

educational initiatives all fall under financial sustainability. Furthermore, many pro-bono clinics face challenges with managing a caseload. According to (Smith et al., 2019), patients report wishing for more consistent & frequent scheduling, with inconsistencies due to high patient volume and limited time slots. Inconsistent scheduling can limit the patient's access to services and impact volunteer retention. This can ultimately lead to threats to the clinic's long-term sustainability. Furthermore, pro-bono clinics often depend solely on volunteers for operation. Efforts to recruit and retain volunteers must be timely and ongoing. As suggested in the business plan, students are encouraged to apply, and faculty are encouraged to sign up the semester before participation. Other student volunteers are encouraged to volunteer on an as-needed basis. Retaining volunteers ensures continuity in service delivery, while expanding their commitment to the organization. To expand upon volunteer retention, role delegation is important to ensure all goals and initiatives are being met. Volunteers, along with stakeholders having roles in sustainability promote collaboration, pushing toward sustainability. Overall, the methods identified in the sustainability model reflect the results of the literature and expert opinion. The identified methods provide steps to achieve the sustainability goals that were developed based on common sustainability issues noted in the literature.

#### **CHAPTER 5**

#### **Discussion and Impact**

#### **Discussion and Impact**

The literature overwhelmingly supports the establishment of student-led and/or pro-bono clinics as it fulfills many needs. However, the challenge of organizing and sustaining pro-bono clinics is heavily discussed. This project aims to address these challenges through the research question, "What are the key components and strategic considerations involved in developing a comprehensive business plan for a student-led pro-bono clinic, and how can such a plan effectively balance sustainability, community impact, and educational objectives?" The outcomes of this project answer this question and provide a layout that can be used by parent organizations to guide operations and develop a lasting clinic that can benefit the community and students long-term (Blausey & Valdes, 2021).

The organization of a student-led pro bono clinic offering physical and occupational therapy services would intensely affect the community it serves and the occupational therapy profession. A student-led pro-bono clinic fills an essential gap in occupational therapy by providing rehabilitation services that do not impose financial hardship on underserved clients. It represents a means of change in the occupational therapy profession by promoting equal access to care and full participation in daily activities. For the community, the clinic serves as a key resource, especially for underserved communities with limited access to healthcare services. Through the provision of pro-bono rehabilitative services, student therapists can address disparities in access to healthcare and improve health outcomes within the community. Adults experiencing orthopedic or neurologic insult, particularly those who are uninsured or underinsured will gain access to client-centered rehabilitative care. The literature supports

clinically meaningful outcomes for individuals receiving therapy services in pro-bono clinics such as increased functional independence and/or self-perceived quality of life (Smith et al., 2019). Apart from financial complications, transportation barriers and other non-financial issues have a significant impact on access to healthcare services (Kamimura et al. 2018). Simply establishing a clinic offering free services is not enough for marginalized communities. When planning for a student-led pro-bono clinic, consideration for how the target population will gain access should be heavily considered. Beginning a clinic in a large city, like Atlanta, GA presents many transportation options that can alleviate transportation barriers that the community may experience.

Regarding the occupational therapy profession, the clinic is a means for encouraging advocacy, innovation, and service. It emphasizes the profession's dedication to client-centered care, social justice, and the right to participate in personally meaningful daily activities.

Additionally, the clinic will allow occupational therapy students to provide pro-bono services, advance their clinical skills, and develop cultural humility through interaction with diverse patient populations. According to (Vuuren, 2016), first-year occupational therapy students report being overall pleased with their simulated learning experience in the Clinical Skills Unit in preparation for fieldwork. Students reported this experience helped them gain practical experience and translate theory into practice. Furthermore, according to (CDC, 2023), more than 8% of Americans, or 27.6 million are uninsured. Although this number has decreased by roughly 2% since 2019, this is still a large proportion of individuals needing access to healthcare services. The establishment of student-led pro-bono clinics speaks to the altruistic nature of the profession and contributes to addressing the needs of the community and improving health outcomes for the percentage of uninsured Americans.

When considering the impact of this project, it is important to note the conducive nature for encouraging collaborative research and clinical data collection. As aforementioned, the literature for occupational-therapy-specific pro-bono clinics is limited, as is the literature for pro-bono clinics in general. In the future, it is expected that a parent organization will adopt the outcomes of this project to establish a student-led pro-bono clinic. As more pro-bono clinics are established, a gap in the literature may be filled through quality improvement initiatives, case studies, university collaboration, and interdisciplinary research. By utilizing the clinic's resources researchers can answer vital research questions thus helping in evidence-based practice to expand the field and improve quality of care for the target market.

#### Limitations

This project was partially conducted via an in-depth literature search. Methodological limitations such as limited quantity and diversity of the data impact the outcomes of the project. Best practices were gathered through a combination of synthesizing expert opinion and analyzing the literature. According to (Spencer et al., 2013), best practices should be developed through a process of careful and continuous peer review and should include a range of quality of evidence. The first learning objective of this project was "the student will develop skills in engaging and collaborating with diverse stakeholders, including healthcare professionals, educational institutions, and community organizations, to inform the development of a business plan and probono clinic." When crafting this project, the student conducted interviews with key informants from one other university with an established student-led pro-bono clinic. Although responses from other key informants influenced the content of the project, a larger sample of key informants from other institutions would have been useful. Coupled with the literature, this

would allow the student to compare the operations of multiple clinics to further investigate best practices.

This project was created around a proposed clinic that has not yet been established. Although the partial purpose of this project is to support the developmental phase of a pro-bono clinic, hypothetical values had to be used in the business plan. Additionally, the needs assessment, business plan, and sustainability plan include some geographic-specific data that may not be generalizable to rural areas. Examples include environmental sustainability and demographic data. A study completed by (Blausey & Valdes, 2021) examined the benefits and barriers of occupational therapy student-led clinics and listed faculty and student time constraints, cost, space limitations, recruitment of clients, and lack of accessible transportation options for clients as barriers. Although these barriers are addressed in the outcomes, the location, size, and resources of each university vary and may limit sustainability.

Finally, the scope of this project and the timeline limit the depth of analysis and detail that can be included in the outcomes. This project was completed in 14 weeks by a single student. Since this project is limited to the development phase, additional time would be needed for the implementation phase. The implementation plan estimates resource allocation and timeline.

# **Implementation Plan**

Impleme	Implementation Plan			
Phase		Description		
1	Preparation	<ul> <li>Appoint organization boards and teams according to the organizational structure outlined in the business plan.</li> <li>Conduct a needs assessment to identify the target population, healthcare gaps, and community resources, especially if the target population is different from that of the proposed pro-bono clinic.</li> <li>Develop a specific mission statement, vision, and goals for the clinic in collaboration with stakeholders. The business plan includes a general mission and vision statement that can be altered to fit the unique needs of the parent organization.</li> <li>Secure necessary approvals and permissions from the university, regulatory bodies, and state boards.</li> </ul>		
2	Clinic Set-Up	<ul> <li>Identify an appropriate space for the clinic with adequate space, accessibility, and amenities as outlined in the business plan.</li> <li>Review the proposed equipment list in the business plan and make revisions according to the clinic space and needs of the client population.</li> <li>Begin administrative processes, including patient intake, scheduling appointments, and electronic medical record-keeping training.</li> <li>Recruit and train volunteers, including student therapists, student ambassadors, and university affiliates.</li> </ul>		
3	Community Outreach	<ul> <li>Start community outreach campaigns to raise awareness about the clinic, its services, and eligibility criteria.</li> <li>Establish partnerships with community organizations, schools, and healthcare facilities to reach underserved populations.</li> <li>Implement marketing strategies such as creating a website/social media pages, printing and distributing brochures, and networking.</li> <li>Host community outreach and education events to engage with community members.</li> </ul>		
4	Training and	Interview and place student therapists, including		

	Staffing	<ul> <li>occupational therapy and physical therapy students, as well as administrative student volunteers.</li> <li>Begin extensive training on clinic policies, procedures, and protocols to ensure consistency and quality of care.</li> <li>Recruit faculty and university affiliates.</li> <li>Offer continuing education opportunities to faculty and university affiliate volunteers to expand their clinical skills and professional development.</li> </ul>
5	Operational Preparation	<ul> <li>Conduct trial runs and simulations to test clinic workflows, procedures, and equipment functionality.</li> <li>Review contingency plans and protocols for managing emergencies, adverse events, and patient safety incidents.</li> <li>Ensure compliance with regulatory requirements, including licensure, accreditation, and infection control standards.</li> </ul>
6	Soft Launch and Evaluation	<ul> <li>Launch the clinic with a limited number of patients to evaluate clinic operations and service delivery processes.</li> <li>Encourage patients, volunteers, and stakeholders to leave feedback to identify strengths, weaknesses, and areas for improvement.</li> <li>Implement imperative changes and adjustments based on feedback to optimize clinic performance and patient satisfaction.</li> </ul>
7	Full Operation	<ul> <li>Operate the clinic within planned capacity.</li> <li>Expand according to the 5-year plan.</li> <li>Plan future outreach initiatives based on community needs and feedback from stakeholders.</li> </ul>
8	Sustainability and Improvement	<ul> <li>Implement the sustainability plan to secure ongoing funding, resources, and support for clinic operations.</li> <li>Initiate partnerships with community organizations.</li> <li>Explore and encourage opportunities for research collaborations.</li> <li>Foster a culture of continuous improvement by soliciting feedback, conducting regular evaluations, and implementing quality improvement initiatives.</li> <li>Continue to implement best practices and regulatory changes to adapt.</li> </ul>

Table 1. Implementation Plan.

#### **Conclusion**

The completion of this project symbolizes an effort to improve healthcare access for all individuals. This project provides a roadmap for any institution to create a sustainable student-led pro-bono clinic. This project was developed in conjunction with key informants who possess expertise in a variety of areas, including healthcare and business. While this project does include many elements relative to the start-up and maintenance of a pro-bono clinic, the parent institution will have to create a unique needs assessment, goals, and any other element of the business plan that requires additional consideration. Furthermore, this capstone paper highlights the impact a student-led pro-bono clinic can have on the community it serves, as well as the students participating in the clinic. This body of work is expected to impact the planning process for future student-led pro-bono clinics.

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# Appendix A

# **Learning Objectives**

Learning Objectives (LTGs)		Short-term objectives (STGs)	Learning activities	Outcome measures	Timeline for completion
	(L103)	(5103)			completion
1.	The student will	Identify 1-2 student-led	Spend 3-4 weeks	Provide a summary of	Weeks 1-3
	develop skills in	clinics in the southeastern	interacting with	gathered information, and	
	develop skilis ili	United States to interact	various student-led	input into the business	
	engaging and	with & conduct interviews.	clinics.	plan and sustainability	
		Create specific questions to	Review literature	model.	
	collaborating	be studied to apply to the	and websites of	Needs assessment	
	with diverse	business plan for Georgia	existing clinics to		
	with diverse	State University's proposed	gather ideas of	Background/rationale for	
	stakeholders,	clinic.	questions that need	the project	
		Identify additional	to be studied.	Questions and interview	
	including	Identify additional keyholders to inform the	Conduct a SWOT	format	
	healthcare	development of a business	analysis of the		
	neuricure	plan/sustainability model.	previous GSU		
	professionals,	pian/sustamaomity moder.	clinic.		
	educational				
	institutions, and				
	community				
	organizations, to				
	inform the				
	development of				
	a business plan				

and pro-bono				
clinic.				
2. The student will improve critical thinking and decision-making skills through the analysis of data, feedback, and information relevant to the development of the business	Review literature regarding community and educational benefits of a student-led pro-bono clinic  Review available data for Fulton County to determine average healthcare coverage, income, and other factors relative to ability and need to cover services.  Review coverage and need for services for participants currently participating in existing student-led clinics.	Consult point(s) of contact to gather information.  Review public databases to gather information.  Conduct a needs assessment of the community.  Interview the FW coordinator to understand the educational impact	Provide demographics of insurance coverage for individuals in the Atlanta area.  Provide incidence & prevalence relative to the need for therapy services in the Atlanta area.  Analyze information to contribute to background/rationale  Clinic services/goals, mission/vision  Needs assessment	Weeks 1-6

	sustainability				
	model.				
3.	The student will	Review literature and	Analyze case	Sustainability plan	Weeks 4-7
	acquire the	sustainability plans	studies of existing pro-bono clinics	comprised of gathered information	
	ability to design	Interview stakeholders probono clinics to identify	Use interviews		
	a sustainable	major limitations	from key informants		
	business model		Review results		
	for the student-		from SWOT analysis and needs		
	led pro-bono		assessment		
	clinic,				
	incorporating				
	current				
	resources,				

	community				
	initiatives, and				
	funding				
	strategies to				
	ensure long-				
	term viability.				
	771 . 1 . 111		D : 4		XX 1 7 14
4.	The student will	Identify the format for the business plan.	Review other business plans for	Comprehensive business plan following the outline	Weeks 7-14
	successfully		reference.	of a traditional business	
	create a	Apply gathered information to a business plan.	Organize	plan	
	generalizable	Consult individuals with a	information to be added to the plan.		
	business plan	business background for guidance.			
	for any	Sit in on business meetings			
	institution				
	wishing to				
	develop a				
	student-led pro-				
	bono clinic,				
	with a				
	sustainability				

plan for Georgia		
State		
University's		
proposed		
student-led pro-		
bono clinic.		

# Appendix B

# Weekly Plan and Deliverables

Week 1	- Schedule meetings/interviews
WCCK 1	beginning January 2 <sup>nd</sup> with site
	mentors and key informants
	·
	- Continue to expand the literature review
	- Organize interview setup
	- Review public data for the city of
	Atlanta as part of the literature review
	- Research and analyze sustainable
	business models for student-led pro-
	bono clinics
Week 2	- Interview Redacted
	- Interview Redacted
	- Conduct Needs Assessment
	- Review current plans for the pro
	bono clinic
Week 3	- Interview Redacted
	- Review available resources of
	departments involved in the pro-bono
	clinic and review the space to be used
	to inform the development of the
	sustainability plan
Week 4	- Interview at UNG Star Clinic
	- Review components and structure
	of a business plan
	- Review components and structure
	of a sustainability model
Week 5	
	- Begin developing a sustainability
	model
	- Explore potential grant
	opportunities
	- Develop clear mission and vision
	statements
	- Draft background/rationale for the
	project

Weeks 6-7	- Begin drafting the business plan  a) Executive Summary  b) Description  c) Market Analysis  - Finalize sustainability plan and review with site mentor to make necessary changes
Weeks 7-8	- Continue drafting the business plan a) Organization and management b) Services/products
Weeks 9-10	- Continue drafting the business plan a) Marketing b) Funding and finances
Weeks 10-11	- Finalize business plan
Week 12	- Review the final business plan with the site mentor - Make necessary changes based on feedback
Week 13	- Review the project and ensure all requirements are met
Week 14	- Submit and present the final project

Supervision Plan	
Scheduled Meetings	Redacted (main site mentor)- ongoing meetings to be scheduled Redacted- January '24 Redacted- January '24 Redacted- TBA Redacted- TBA

Communication Methods	A combination of virtual and in-person communication will be used.  - UNG STAR Clinic- in person - Stakeholder interviews- virtual and in-person - Site mentorship- virtual & in person
Specific Requirements	<ul> <li>Needs assessment</li> <li>Mission &amp; Vision</li> <li>Investigation of best practices</li> <li>SWOT analysis</li> <li>Sustainability Plan</li> <li>Business Plan</li> <li>Identification of Leadership</li> <li>Stakeholder interviews</li> </ul>
Timeline of Deliverables	- See chart above
Resolution of Possible Disputes	- Conflict resolution strategies: don't ignore conflicts, listen, brainstorm solutions
Types of Expertise Desired	- Business expertise (knowledge of community healthcare needs, producing a business plan, planning for sustainability) - Experience operating pro-bono clinics (knowledge of how to start and/or maintain pro-bono clinics)

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Roles & Responsibilities	<ul> <li>Mentorship on the production of business plan/sustainability model, facilitation of interaction with-Redacted</li> <li>Interview of faculty, interview of students- Redacted</li> <li>Interview of previous GSU clinic faculty- Redacted</li> <li>Interview of FW coordinator-Redacted</li> </ul>

## Appendix C

#### 1.

## Introduction

1. *Question*: What are the key components and strategic considerations involved in developing a comprehensive business plan for a student-led pro-bono clinic, and how can such a plan effectively balance sustainability, community impact, and educational objectives?

#### b. Literature Review

- 1. Literature Review Summary: The studies I found primarily explore the experiences of students and the community through participation in a probono clinic, the impact on underserved communities, and issues impacting sustainability. Many studies highlight the valuable experiences gained by students participating in pro-bono clinics. These experiences often include hands-on practice, exposure to diverse patient populations, and opportunities for leadership and collaboration. Students often report increased confidence in patient interaction post-participation in student-led clinics (Paparella-Pitzel et al., 2021). Research emphasizes the positive impact of student-led pro-bono clinics on underserved communities. These clinics often play a crucial role in addressing healthcare disparities by providing accessible and culturally sensitive care to populations with limited resources. Specifically, financial and transportation barriers significantly impact access to health-related services. Research highlights feelings of poorer self-rated health as a result of these barriers (Kamimura et al., 2018). Finally, when considering the development of a business plan, it is important to review articles discussing the business plan process, highlighting specific components that should be included. Sustainability challenges are also commonly discussed in the literature. Issues of sustainability often include financial limitations and patient retention because of inconsistency in scheduling (Smith et al., 2019).
- c. *Purpose Statement*: The purpose of this project is to create a business plan & sustainability model to guide the operations of a multidisciplinary, student-led pro-bono clinic that aligns with allied health professions.

## 2. Methods

The following methods will be combined to complete this project:

- a. Interviews with key informants
- b. Review of business-related materials and sit-ins on business meetings
- c. Analysis of data and reports regarding socioeconomic status, demographics, insurance coverage, common health issues, etc. for the local area to relate to services offered
- d. Literature review
- e. Collaboration with local agencies
- f. SWOT analysis

## 3. Output

The expected output from this project is a comprehensive business plan and sustainability model that can be used by Georgia State University and other institutions wishing to start a student-led pro-bono clinic. This business plan will include detailed sections regarding organizational structure & management, financials, market analysis, sustainability, and other elements of a business plan. The sustainability model will be included to account for common errors seen with pro-bono clinics that impact longevity. Overall, the output of this project will serve as a means for establishing and operating a pro-bono clinic that will meet the needs of students and the community.

#### 4. Outcome

The outcome of this project is intended to provide institutions with a framework that allows for the development of a student-led pro-bono clinic. When considering how funding significantly impacts the sustainability of a pro-bono clinic, it is important to explore means of financial support. This business plan will encompass many of the important factors for start-up and sustainability, including a budget, sample funding/grant request, and potential grants that pro-bono clinics may qualify for. Through the development of this business plan and sustainability model, the hopeful outcome is for institutions to adopt this plan and utilize it to develop pro-bono clinics servicing students and the community. A comprehensive business plan is an important tool for guiding the direction of the start-up and maintenance of a pro-bono clinic. Additionally, a thorough sustainability plan can mitigate many issues experienced during the first-year operation of a pro-bono clinic by developing solutions for common issues reported in the literature.

## 5. Learning Objectives

- a. The student will develop skills in engaging and collaborating with diverse stakeholders, including healthcare professionals, educational institutions, and community organizations, to inform the development of a business plan and pro-bono clinic.
- b. The student will improve critical thinking and decision-making skills through the analysis of data, feedback, and information relevant to the development of the business plan and sustainability model.
- c. The student will acquire the ability to design a sustainable business model for the student-led pro-bono clinic, incorporating current resources, community initiatives, and funding strategies to ensure long-term viability.
- d. The student will successfully create a generalizable business plan for any institution wishing to develop a student-led pro-bono clinic, with a sustainability plan for Georgia State University's proposed student-led pro-bono clinic.