

ABSTRACT

The Fort Smith Wound Care Clinic at ACHE is a healthcare professional student-run organization that strives to solve the health disparities that plague the underserved communities of Fort Smith. The wound clinic will be hosted at the Good Samaritan Clinic at 615 N B St, Fort Smith, AR 72901. Despite being at a Good Samaritan Clinic, the Fort Smith Wound Care Clinic will work as a separate entity with community assistance with the goal of opening the clinic at least once per week. Its goal is to assist those who are experiencing homelessness or other financial constraints in the realm of wound care. The Fort Smith Wound Care Clinic will serve in conjunction with the Good Samaritan Clinic as it will focus on the management, education, and prevention of acute and chronic wounds.

The patient population for our clinic will be open to all individuals regardless of financial background, gender identity, or religious affiliation. We aim to address all individuals who are suffering from acute or chronic wounds, or need closer follow-up wound care post-hospitalization discharge. The Fort Smith Wound Care Clinic will also serve as an institution for continuity of care, accepting patients from other health facilities who need continued management of acute or chronic wounds.

BACKGROUND

Wound healing is a simple process if the wound is clean and free of infection. However, individuals experiencing homelessness are usually forced to endure non-ideal living conditions such as inadequate bedrest, lack of facilities for proper hygiene, or a consistent source of high-quality food. Homelessness can be extremely stressful and is made worse by the constant exposure to communicable diseases, violence, malnutrition, and harmful weather exposure. Chronic health conditions such as hypertension, diabetes, or hyperlipidemia can exacerbate the issue by slowing the progression of healing secondarily to poor management of these comorbidities. More importantly, the lack of regular wound care visits to a wound clinic could increase hospitalization rates by 20 times. Furthermore, substance abuse and mental illnesses might impede a homeless individual's ability to understand and follow a treatment plan.

The Fort Smith Wound Care Clinic aims to combat this disparity by providing free wound care services to all community members who are limited in resources in the management of wounds regardless of severity. To address that need, The Fort Smith Wound Care Clinic works to train and educate ARCOM volunteers to educate community members on proper wound management, provide basic triage and support to community medical professional volunteers, and to spread awareness and screen patients in hopes to detect wounds early. The Fort Smith Wound Care Clinic will also serve as a bridge between healthcare providers, acting as a facility dedicated to providing comprehensive wound care to current patients regardless of financial status.

OBJECTIVES

- To promote awareness of wounds and provide free healthcare services to address acute and chronic wounds to all community members in Fort Smith regardless of financial background.
- To decrease the utilization of higher levels of medical management, which in turn will decrease the financial burden in the medical community.
- Empower students at the Arkansas Colleges of Health Education with the skills to approach proper wound care management and prevention from a health care provider-patient standpoint.

METHODS

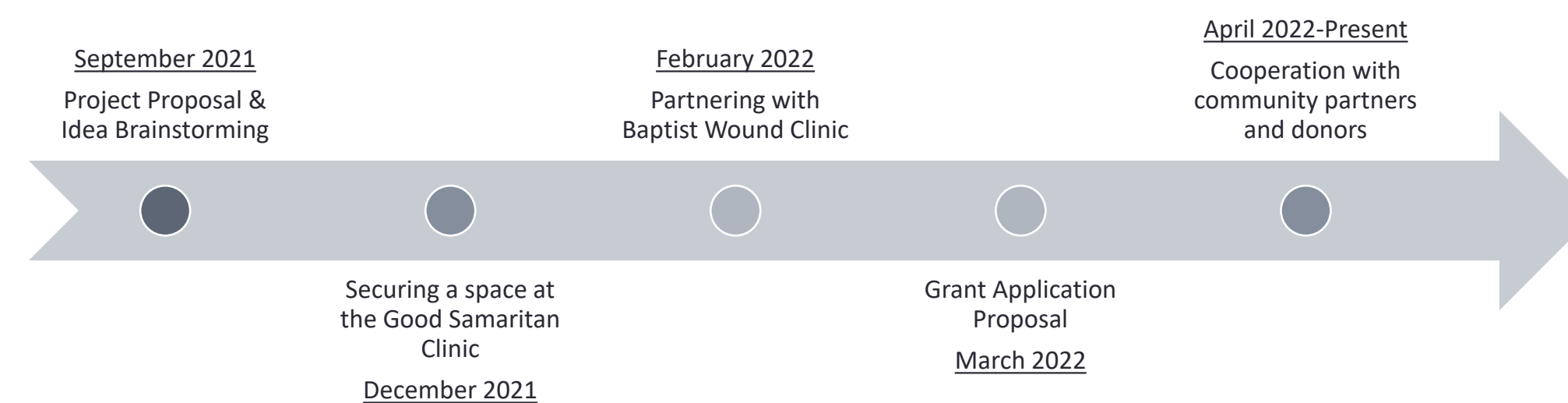


Figure 1. Project Timeline

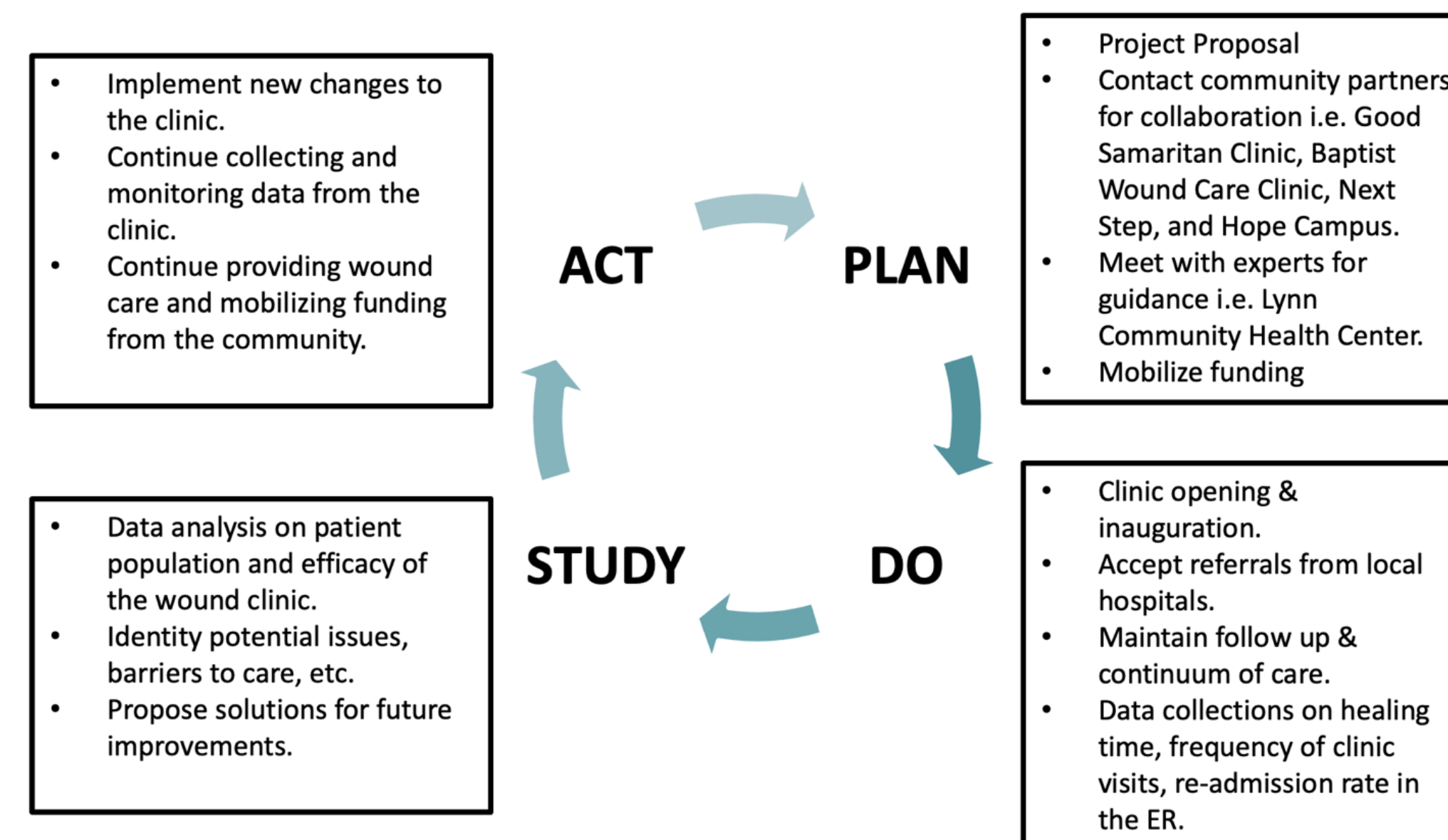


Figure 2. PDSA Cycle

RESULTS

Due to insufficient funding, the clinic has not yet opened to the public and its community members. As a result, I do not have data to provide on wound care clinic visitations, length of wound healing process, nor ER re-admission rate. I hope to continue working on the project in the next two years. My goal is to establish a strong foundation and ensure that the clinic will operate with self-sufficiency upon my graduation of medical school.

RESULTS

Despite having no statistical data from my city, my experience with the project has led to important discoveries. I learn that in 2020, there were 2,366 individuals experiencing homelessness on any given day according to the Continuums of Care Report to the U.S. Department of Housing and Urban Development. In addition, a research study conducted by the Assistant Secretary for Planning and Evaluation (ASPE) in 2021 has analyzed the impact of homelessness on a person's health. The study evaluated 54,155 individuals experiencing homelessness and 76,539 individuals in the comparison cohort, who were matched on age and gender to the population of interest without a record of homelessness. The ASPE study has found that 15.7% of homeless individuals suffer from chronic ulcers compared to 10.6% in the comparison cohort. Additionally, amputation affects the homeless population greater than twofold when compared to the comparison cohort. Knowing significant expenditure costs and financial loss with hospitals when performing amputations, early intervention in wound care is the key to preventing greater financial strains in the medical system. By providing proper wound care, we can both improve the quality of care among the homeless population and reduce the financial impact of the disease.

Condition	Homeless Cohort	Comparison Cohort	Cohen's h
Allergic condition	49.4%	59.6%	0.2*
Anemia	29.7%	22.4%	0.2*
Asthma	24.2%	16.7%	0.2*
Diabetes (mellitus)	26.2%	22.4%	0.1
Heart disease	45.5%	38.2%	0.1
Viral hepatitis	17.5%	3.4%	0.5*
High blood pressure ("essential hypertension")	49.4%	51.5%	0.0
Kidney disease	27.5%	25.0%	0.1
Chronic obstructive lung disease	23.0%	10.6%	0.3*
Neoplastic disease	28.3%	44.7%	0.3*
Malignant neoplastic disease	20.3%	19.6%	0.0
Obesity	18.5%	30.2%	0.3*
Disorder of mouth	24.1%	16.6%	0.2*
Disorder of soft tissue of head	18.8%	27.4%	0.2*
Ulcer	15.7%	10.6%	0.2*

NOTES:
* Indicates statistically significant difference.

Figure 3. Common Chronic Health Conditions Among Individuals Experiencing Homelessness

Condition	Homeless Cohort	Comparison Cohort	Cohen's h
Amputation (procedure)	3.4%	1.5%	0.1
Cerebrovascular accident (i.e. stroke)	4.3%	1.0%	0.2*
Chronic diarrhea	0.4%	0.1%	0.1
Alzheimer's disease	0.8%	0.3%	0.1
Dementia**	5.7%	1.9%	0.2*
Epilepsy	10.9%	3.3%	0.3*
Viral hepatitis	17.5%	3.4%	0.5*
Chronic hepatitis C	9.1%	1.9%	0.3*
Acute hepatitis	2.6%	0.3%	0.2*
HIV infection	5.8%	1.1%	0.3*
Injury of head	33.9%	15.2%	0.4*
Cirrhosis of liver	7.2%	1.9%	0.3*
Chronic obstructive lung disease	23.0%	10.6%	0.3*
Oral infection	9.0%	3.7%	0.2*
History of pneumonia	3.4%	1.5%	0.1
Tuberculosis	3.2%	0.8%	0.2*

NOTES:
* Indicates statistically significant difference.
** Dementia includes all dementias including Alzheimer's disease.

Figure 4. Conditions More Likely to Affect Individuals Experiencing Homeless

CONCLUSIONS

- The Fort Smith Wound Care Clinic is a student-led project started by ARCOM medical students in Fort Smith, Arkansas.
- The project was inspired by a local surgeon, who observed an increased hospital readmission rate for wound infection among individuals experiencing homelessness.
- Lack of transportation, deprivation of basic survival needs, and the lack of shelter can all contribute to low patient compliance and poor health outcomes.
- The Fort Smith Wound Care Clinic hopes to collaborate with local community projects and leaders to further increase compliance in wound prevention and management while assisting patients by further combating possible barriers to their quality of health.