Journal of Student-Run Clinics
Original Study

Creating a Women's Health Coalition at a Student-Run Free Clinic: A Model for Increasing Access and Quality of Care

Lucy Brown[1]; Annie Gensel[1]; Emily Steele[1]; Eric Aksu[1]; Samantha McCarty[1]; Kyle Baugh[1]; Jourdan Owens[1]; McKenzie Barber[1]; Maryann Chimhanda, MD[1]

[1]Indiana University School of Medicine, Indianapolis, Indiana, USA

Corresponding Author: Lucy Brown; email: lucyb812@gmail.com

Published: May 14, 2023

Abstract

Introduction: At the beginning of 2021, the Indiana University Student Outreach Clinic (IU SOC) conducted an internal audit of cervical cytology and sexually transmitted infection (STI) screening, which showed low rates of preventive screenings and inconsistent follow-up, thereby demonstrating a need to increase reproductive healthcare access to underserved women in Indianapolis.
Methods: To increase access, multiple teams were created within the Women's Health Coalition (WHC), ensuring robust education, follow-up, and other necessary coordination for patient care. Additionally, the WHC expanded to host a twice-monthly referral-based women's health clinic that provided care for patients with various chief concerns and preventive care needs. Protocols for wet-mount microscopy and sexual assault were created based on national guidelines, and annual training were provided to all members of the WHC. Community partnerships were formed to expand resources, including ultrasounds, mammograms, and contraception services.
Results: The IU SOC increased the prenatal and gynecological services offered over nine months through this initiative. Notably, a higher number of services were offered to patients who qualified for screenings in 2021 than in the prior four years combined, including cervical cytology (24.1% [Confidence Interval (CI) 18.6%, 29.7% vs. 4.2%] [CI 2.9%, 5.5%]), mammogram referrals (23.1% [CI 15.8%, 30.3%] vs. 2.3% [CI 1.0%, 3.6%]), and STI/human immunodeficiency virus (HIV)/Hepatitis testing (54.6% [CI 50.2%, 59.0%] vs 8.1% [CI 6.8%, 9.3%]).
Conclusion: Given the success of the WHC, our approach may serve as a student-run model for other patient populations.

Introduction

Creation of a Student Outreach Clinic in Indianapolis

In 2009, the Indiana University Student Outreach Clinic (IU SOC) was established with a mission to serve members of the near-eastside community of Indianapolis. Since then, the clinic has expanded to include several multidisciplinary partners, including nursing, social work, occupational therapy, physical therapy, and others. This community of residents hold many marginalized identities, including those who are immigrants, racially minoritized, and uninsured or underinsured. Volunteers strive to provide acute, non-emergent care, connect patients with primary care providers, specialists, and resources for comprehensive, long-term medical care, and to promote health via well-exams, routine screenings, and consultations.

One of the primary goals of student-run free clinics is to engage active professional student volunteerism. Prior research supports the value of student-run free clinics in medical student education, particularly for preclinical students with limited exposure. Such clinics have exhibited success as an avenue for incorporating advocacy, social justice, leadership, clinical care, and other vital educational components.[1,2] Volunteering at free clinics is associated with increased clinical

confidence among students in various specialties, including women's health.[3] Additionally, student-run free clinics serve as a vital contributor to healthcare within the community, often providing a myriad of medical services to immigrants, refugees, and other minoritized populations.[4] Most of our patients are West African and Latin American immigrants. We do not ask patients about their documentation status; however, we do inquire about insurance status, and more than half of patients present with no insurance.

Identifying Need for Women's Health Coalition

Nationally, over 106 student-run free clinics have been identified among the Association of American Medical Colleges' member institutions.[5] However, few have dedicated women's health members, let alone an established team. Ours is one of the first clinics to fill the women's healthcare gap by creating a Coalition. Two notable clinics, the Women's Clinic of Clínica Esperanza associated with the Alpert Medical School of Brown University and the East Harlem Health Outreach Partnership Women's Health Clinic, associated with the Mount Sinai School of Medicine, has published data showing marked success in expanding access to specialty women's health services and routine gynecologic care for uninsured patients.[6-7] Considering the usefulness of a separate clinic to address prenatal and gynecologic care, the natural extension for the IU SOC was to create a Coalition of students committed to providing that care.

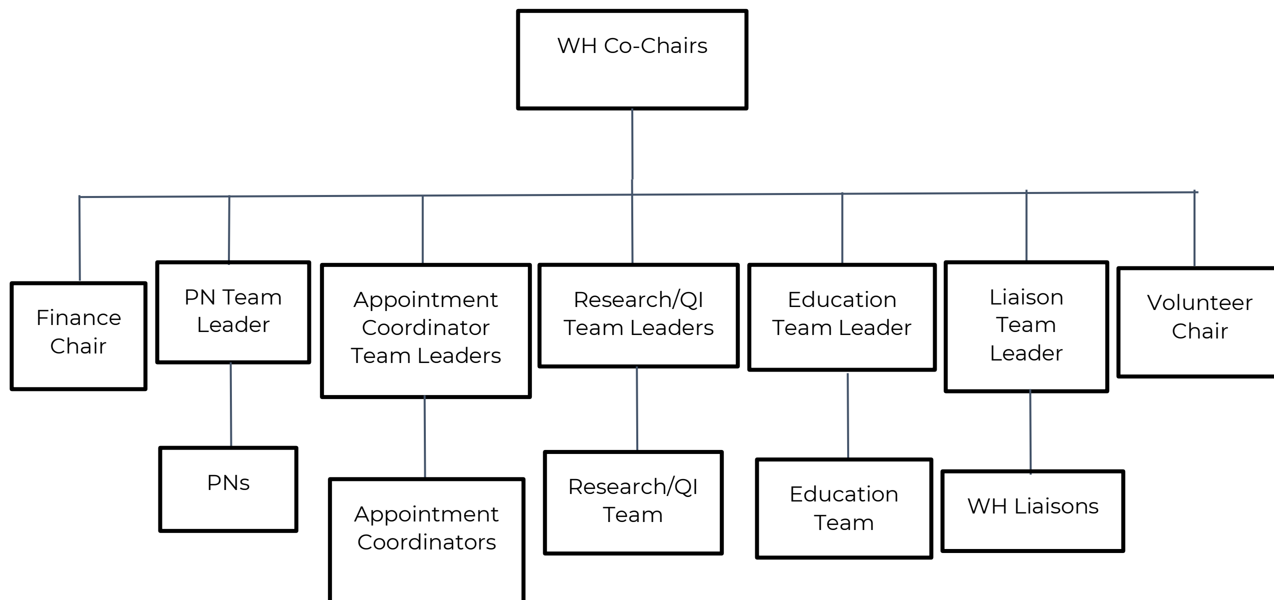
Uninsured patients in Indianapolis have a wide variety of prenatal and gynecologic needs. In 2019, 11.9% of Hoosier women were uninsured, ranking Indiana 30th nationally for the rate of uninsured women.[8] Our state faces many challenges to women's health, including obesity rate increases from 21% to 33.9% of women ages 18-44 between 2015-2019, low human papillomavirus (HPV) vaccination coverage among adolescents, and dismal and racially disparate infant and maternal mortality rates, with a maternal mortality rate of 28.2 deaths per 100,000 live births between 2018 and 2020.[8-11] These gaps in women's healthcare have not been eliminated in our state, indicating a clear need for free or low-cost services.

We recognize that the existence of our student-run free clinic will alleviate the burden on the Indianapolis healthcare infrastructure and help address the needs of uninsured and undocumented patients. The 2020-21 White Coats for Black Lives Racial Justice Report Card discouraged preclinical students from directly supplying medical care and recommends ensuring that patients, regardless of citizenship status, insurance status, or the ability to pay, have full access to healthcare care at professionally-staffed clinics and hospitals, thereby decreasing, and ultimately obviating, the need for free student-run clinics[12]. When medical students provide care to marginalized populations, including patients of color, this may reflect a sordid history of medical experimentation. Therefore, we are continuously building cultural humility via annual cultural competency training at our leadership retreats. We also ensure that preclinical students are always paired with a clinical student and have physician supervision when working with patients. An attending physician determines any final decisions regarding patient care. Access to professionally staffed medical centers for marginalized populations is hindered by insurance status hence the need for free student-run clinics.

Identifying Gaps in Screening, Treatment, and Care

Due to students' concerns that women's health issues were not receiving timely follow-up, cervical cytology sampling and sexually transmitted infection (STI) quality improvement (QI) research were conducted within the IU SOC to analyze trends in our clinic from 2016 to 2020. Extensive chart review revealed that 84% of clinic patients had not completed recommended cervical cancer screening. Also, 57% of patients had abnormal cervical cytology sampling, of which 19% did not receive appropriate referral and treatment plans or receive their results. Additionally, while not included in the internal QI audit, through patient interviews, we discovered that mammograms were not being routinely recommended to female patients over 40 years of age. In 2020, 96% of patients received STI testing and treatment as necessary. Of the patients presenting symptomatically, 83-86% received gonorrhea, chlamydia, and trichomoniasis testing, and 63% and 58% received human immunodeficiency

Figure 1. Women's Health Team Overview



Division of team leaders.
WH: Women's Health; PN: Patient Navigator; QI: Quality Improvement

virus (HIV) and syphilis testing, respectively. Only 38% of these patients received the empiric treatment recommended by practice guidelines.[13-15]

Based on an internal review of the electronic medical record, the only birth control options available at the clinic before 2021 were the combined oral contraceptives (OCPs) Vylibra® (norgestimate/Ethinyl estradiol), Previfem® (Ethinyl estradiol/norgestimate), Aubra® (ethinylestradiol/levonorgestrel), and external male condoms. Daily OCPs remain the most popular non-barrier reversible contraception method and are effective when properly used.[16] However, long-acting reversible contraception (LARC) methods, including Nexplanon® (etonogestrel) implants, intrauterine devices (IUDs) and Depo-Provera® (Medroxyprogesterone acetate) injections, are, on average, 20 times more effective than OCPs and do not require daily pills.[17] Medical, ethical, social, legal, and financial barriers prevent underinsured or uninsured patients from accessing adequate contraception. One of the most common barriers to LARC use is the high upfront cost.[17]

These findings indicated a gap in care in cervical and breast cancer detection, testing and treatment for STIs, and full-spectrum contraception counseling. The prevalence of underserved and uninsured patients seen by our student-run free clinic necessitated standardized screening and treatment protocols and a supply of full-range contraception options to promote high-quality primary care. The need for continuity and follow-up for these patients presented a chance to create a team designed to address this population's needs. In this paper, we outline a model for increasing healthcare access via the creation of a dedicated Women's Health Coalition with defined roles to fill each gap we identified.

Methods

Defining Team Roles and Growing Team Leadership

Throughout 2021, a 62-person Women's Health Coalition (WHC) was created consisting of six teams (Figure 1). Each Team had 1-2 team leaders. These team members function alongside outside IUSM student volunteers, who are not required to be on the WHC and who work directly with the patients during clinic time taking histories and performing physical exams. This model could be proportionally reduced for smaller teams

Table 1. Roles and Responsibilities

Position title	Role description	Prerequisites
	Chairs	
WHC Chair and Chair-Elect	Propose and implement yearly strategic goals. Supervise all team leaders and volunteers. Coordinate monthly meetings. Collaborate with faculty advisor.	Must be a senior member of the team. Chair-Elect gains 1 year experience prior to becoming Chair.
Finance Chair	Write grants to expand services offered and assist with conference attendance coordination.	Write grants to expand services offered and assist with conference attendance coordination.
Volunteer Chair	Assist with recruitment and retention of all volunteers	Must be a senior member of the team.
	WHC Teams	
Patient Navigator	Manage 3-5 uninsured patients with women's health concerns, facilitate insurance coverage, referrals, and transfer to higher-level of care.	Must receive training in assisting pregnant patients in navigating additional insurance options.
Appointment Coordinator	Schedule new patient referrals from weekly medicine clinics, follow up and confirm appointments, and coordinate mammogram screenings with local partners.	None
Education	Create patient handouts for relevant women's health topics. Provide additional information about specific diagnoses, preventative health, contraception counseling, and other women's health-related topics.	Must attend and lead discussion on relevant women's health topics during monthly meetings.
Research	Engage in quality improvement research, informing the funding of resources purchased for the clinic, cultivating growth of new research endeavors, and leveraging results of ethical research to ultimately improve the quality of care delivered.	Must complete Responsible Conduct of Research modules, HIPAA, CITI, and other relevant training on ethical research.
Liaison	Serve as women's health consultant for medicine clinic volunteers or serve as the primary provider in cases when the chief concern is women's health related. All cervical cytology sampling and pelvic exams are performed by the liaison with a resident or attending supervisor. Counsel patients and make referrals to outside services when necessary.	Must complete specialized training for this role and must have finished OB/GYN clerkship.

Delineates team structure and individual role descriptions with prerequisite requirements for the position
WHC: Women's Health Coalition; HIPAA: Health Insurance Portability and Accountability Act; Collaborative Institutional Training Initiative: CITI; OB/GYN: Obstetrics/Gynecology

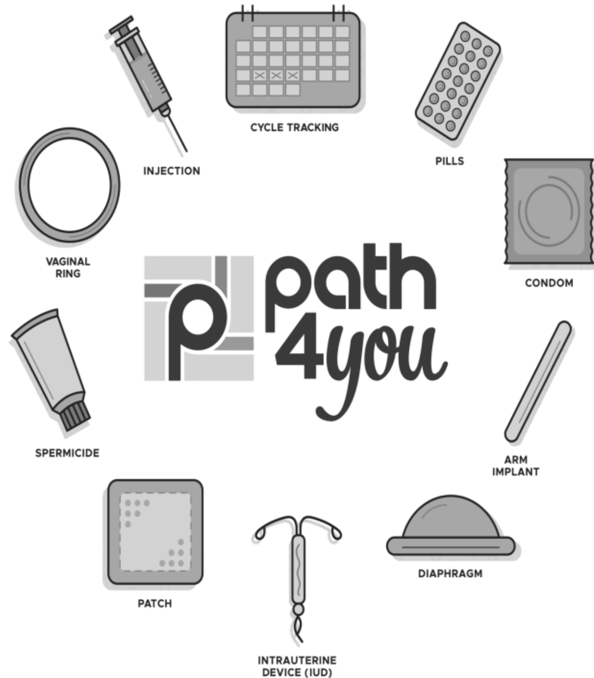
(i.e., for a team of 24, one team leader per 4-5 students on each team). Additionally, senior students may hold multiple roles.

Creating team leaders allows for delegation of responsibilities and individualized patient care (Table 1). The time commitment varies by position; Chair positions require 10-15 hours a week, while team members spend 1-2 hours a week working in the clinic, contacting patients, conducting research, and creating educational materials. This structure encourages mentorship within the Coalition and fosters the development of emerging leaders. Leadership positions enable student volunteers to increase clinic ownership and pursue more extensive responsibilities. The WHC leadership is supported by an Obstetrics and Gynecology faculty advisor and the WHC Executive Board.

Creating a Stand-Alone Women's Health Clinic

In April 2021, twice-monthly prenatal/women's health clinics were implemented for two hours on Wednesday evenings.[18] The clinic is staffed by obstetrician/gynecologists (OB/GYNs) or obstetrics-trained family medicine physicians, student volunteers, OB/GYN and family medicine residents. The clinic serves patients with prenatal or gynecologic conditions such as pregnancy, infertility, abnormal uterine bleeding, and chronic pelvic pain, as well as STI/HIV referrals for female patients. Patients are referred to the women's health clinic by the WH Liaisons, who identify patients with complex women's health concerns or high-acuity self-referral.

Figure 2. PATH4YOU Depiction of all contraception options available for free to patients referred.[17]



PATH4YOU: Pregnancy that is at a time that is happy and healthy for you.

Building Specialized Protocols and Partnerships

Protocols for wet-mount microscopy and sexual assault (SA) were written by students to standardize care at the women's health clinic.[19-20] To create the protocols, sources were found with recently published guidelines about the indications and uses for wet-mount microscopy and management of patients who have disclosed a sexual assault. The sources were used to create stepwise protocols that could be accessed during clinic days. The development and presentation of these protocols resulted in standardized methods for diagnosing specific causes of cervicitis and vaginosis and identifying and managing care for patients who screened positive for SA. These protocols were made available in an online Google Drive (version 74.0, Google, Mountain View, CA) and a binder for easy volunteer access.

Since the inception of the IU SOC, Sidney & Lois Eskenazi Hospital, a tertiary care public hospital in Indianapolis, serves as our main referral site for higher-level care. Once referred, uninsured patients would need to apply for the hospital's Health Advantage Program before being able to make an appointment. The WHC patient navigator facilitates this process especially when procedures like vaginal delivery, cesarean delivery, colposcopy, and endometrial biopsy are indicated. However, for patients who only needed routine mammograms or ultrasounds, we developed partnerships with two community clinics in Indianapolis that offered these services for free to uninsured individuals: Gennesaret Free Clinic, a free mammogram service, and Alivio Medical Center, a free ultrasound service. Neither of these clinics required that patients have insurance, and they were both welcoming to immigrant, racially minoritized, and other marginalized populations.

In 2021, the WHC developed a partnership with PATH4YOU for contraception expansion. PATH4YOU (Pregnancy that is at a time that is happy and healthy for you) is an Indiana University (IU) OB/GYN Department project designed to screen for pregnancy intention and counsel patients on comprehensive contraception options (Figure 2). Based on the screening questionnaire results, patients who wish to delay pregnancy are provided contraception services free of charge.[21] Patients who screen positive for pregnancy intention receive prenatal counseling and prenatal vitamins. Patients who screen negative (i.e., want to avoid pregnancy) are prescribed one of our available OCPs or referred to PATH4YOU for other LARCs.

Statistical Methods

To determine the difference between the provision of various prenatal and gynecologic tests and services before and after the implementation of the WHC, charts were reviewed to compute the total number of patients who qualified for screening per 2021 U.S. Preventive Services Task Force (USPSTF) guidelines (i.e., mammogram screenings for female patients aged 50-74, Pap smears for female patients aged 21-65, STI/HIV/Hepatitis screening for male/female patients aged >=18). We summed all documented mammogram referrals, cervical cytology sampling, and STI/HIV/Hepatitis testing performed

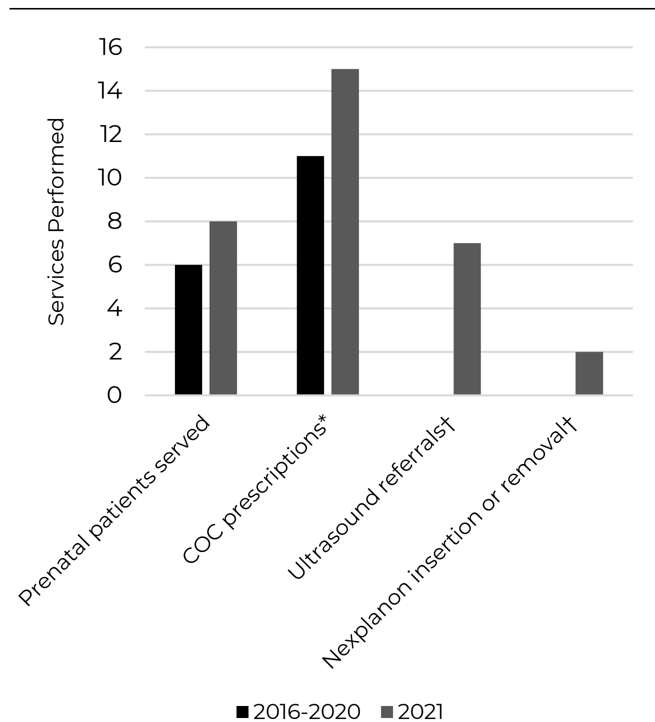
Table 2. Comparison of gynecological screenings completed over the past five years

Screening	2016-2020, n (%)/N	Confidence Intervals (%)	2021, n (%)/N	Confidence Intervals (%)
Cervical cytology	37 (4.2)/884	2.9-5.5	55 (24.1)/228	18.6-29.7
STI/HIV/Hep test	149 (8.1)/1852	6.8-9.3	269 (54.6)/493	50.2-59.0
Mammogram referrals	11 (2.3)/483	1.0-3.6	30 (23.1)/130	15.8-30.3

STI: Sexually Transmitted Infection; HIV: Human Immunodeficiency virus; Hep: Hepatitis

between 2016 and 2021, as documentation was sparse and unreliable before 2016 (Table 2). We also computed the total number of instances that a 3-month pack of contraceptive pills was prescribed, and we tallied the number of prenatal visits between 2016 and 2021 (Figure 3). Notably, the clinic was closed between March 2020 and April 2021 due to the coronavirus pandemic. The data was split into the total number of tests done for each service before and after the WHC was implemented.

Figure 3. Descriptive tally of total services performed before and after the WHC creation



WHC: Women's Health Coalition; COC: Combined Oral Contraceptives
**Count includes Vylibra®, Previfem®, and Aubra®.*
†These services were only offered after 2020.

Results

Overall, a higher number of screening services were offered to patients who qualified in 2021 than in the prior four years combined, including cervical cytology (24.1% [CI 18.6%, 29.7%] vs 4.2% [CI 2.9%, 5.5%]), mammogram referrals (23.1% [CI 15.8%, 30.3%] vs 2.3% [CI 1.0%, 3.6%]), and the highest increase, STI/HIV/Hepatitis testing (54.6% [CI 50.2%, 59.0%] vs 8.1% [CI 6.8%, 9.3%]). Two Nexplanon® implants were removed in the clinic by a certified OB/GYN member of the PATH4YOU team, and none were inserted. Additionally, seven patients were referred to Alivio Medical Center for transabdominal or transvaginal ultrasounds. Both Nexplanon® and the ultrasound referral system were introduced in 2021.

In 2021, 30 mammogram referrals were made for symptomatic causes (i.e., nipple discharge, new mass, breast skin changes) and routine prevention. Of the 55 patients receiving cervical cytology samplings, 60.0% (33/55) had never received a Pap smear before exam in the clinic. Of the 269 STI tests performed in 2021, five patients tested positive for HIV and were referred for treatment at a specialty clinic.

Since May 2021, the IU SOC medical team has worked with Alivio Medical Center to refer patients for ultrasounds. Over this time, 39.0% (7/18) of ultrasounds completed have been for WHC patients. The twice-monthly, referral-based women's health clinic provided care for 35 patients, including eight pregnant patients, for various chief concerns and preventive care needs. The SA protocol has been used twice since it was introduced.

Discussion

Impact of a Women's Health Coalition

Prior to the creation of the WHC in 2021, IU SOC

visits were dictated by chief concerns with which the patient presented (i.e., headache, muscle pain, vaginal discharge), and sexual and reproductive health screening was not routinely offered to patients. Implementation of the WHC through the IU SOC allowed patients to access standardized screening and improved patient-provider communication via follow-up by the WHC patient navigator (PN) team. The presence of a dedicated WH Liaison at the general clinic ensures that an experienced senior student is vigilantly surveying all patients and ensuring every eligible person who enters the IU SOC is screened for cervical and breast cancer, as necessary. Every WH Liaison is also required to undergo training for the SA protocol so that they are prepared if they encounter it. Additionally, the wet-mount microscope has increased diagnosis of STI and non-STI causes of vaginosis and cervicitis, and more patients were tested and treated for STIs.

The WHC also facilitated the expansion of diagnostic and screening services by providing referrals for free ultrasound and mammograms to outside clinic partners. Results were communicated to the PN and appointment coordinator (AC) Teams and patients after imaging. Overall, routine preventive women's health interventions increased due to more availability of specialists and higher-level care at the stand-alone, referral-based women's clinic.

Women's health concerns were also neglected prior to 2021 because there was no guaranteed staff member available who had the appropriate training during the general Saturday clinic. The bi-monthly Wednesday women's health clinic ensured that an OB/GYN or Family Medicine doctor trained in prenatal health would always be scheduled to staff. In this way, pregnant patients or patients with advanced gynecologic concerns would not be discounted at the general Saturday clinic and were instead referred to the Wednesday clinic.

The PATH4YOU partnership allowed for the expansion of services to include Nexplanon® with options for direct free referrals for other forms of contraception. As a result of incorporating the screening questions into patient interviews, two patients who screened positive for pregnancy intention in the PATH4YOU initial questionnaire were able to have their Nexplanon® implants removed. Since the inception of the partnership, no patient has requested the insertion of Nexplanon®; however, the clinic staff is prepared to refer to the PATH4YOU program as needed. This model for providing all-options contraceptive counseling could be replicated by implementing universal pregnancy intention screening for all people with childbearing potential as well as addressing barriers to same day all-options contraception access in the student-run free clinic setting.

Limitations and Areas of Future Expansion

The patient volume continues to increase each month at the bi-monthly Wednesday women's health clinic. The rapid expansion of the WHC and the scope of the women's health clinic is, to our knowledge, unprecedented in the IU SOC and among free student clinics. Work relying on student volunteers is subject to fluctuations in commitment and engagement depending on the academic load during the year. Most students serve less than four years, making tenability and maintenance significant priorities. Creating protocols and clear instructions/transitions of leaders is necessary to ensure organizational memory. We intend to host weekly clinics to increase overall patient access and student exposure to clinic settings. This will require an extension of the physician database for weekly staffing, recruiting more partners such as nursing and pharmacy, and maximizing our clinic resources. While we only partner with Alivio and Gennesaret, we intend to connect with other clinics in the city. By creating a larger network of free clinics, we can bolster each other's services and reach more community members in need of care.

While referral-based care to Alivio and Gennesaret increased, there were still disparate outcomes in how many patients arrived at their appointments and received the imaging. Inadequate transportation to the appointments is the most Accessed reason for this delay. We have begun referring patients to the Gennesaret mobile clinic and locating the closest options to our patients' home addresses so they can choose to walk or use the bus.

There is enormous importance in providing

low-cost, gender-affirming care in an underserved community. As of 2021, the WHC has not encountered patients seeking gender-affirming care or counseling as a chief complaint. However, all volunteers are educated in and exposed to gender and sexual minoritized issues and patient experiences during their first year at IU School of Medicine. Therefore, they are expected to treat these patients with respect and compassion.

Conclusion

Our internal QI audit of women's health care services showed unacceptable gaps in care, and therefore the WHC was assembled to meet these needs. Teams were created within the WHC to ensure appropriate education, follow-up, and essential logistical responsibilities. This team-based structure is a translatable model for the creation of robust women's health care provision improvement. The division of responsibilities amongst team leaders and members allowed us to reliably divide tasks and to create such massive improvements in care and workflow. The WHC has since developed a stand-alone, bimonthly clinic, relevant protocols, and expansion of contraception services. More women, including many prenatal patients, have received essential screenings, referrals, and interventions. The team's infrastructure ensures capacity for sustainability and growth, with ambitions to partner with existing public health organizations or hire permanent staff. This work can serve as a blueprint for expanding women's healthcare among patient populations at other student-run free clinics nationally.

Dedication

This paper is dedicated to the memory of Jim Strietelmeier, without whom the clinic would not exist.

Acknowledgements

Our group would like to thank Dr. Javier Sevilla, Neighborhood Fellowship Church, and Jim Strietelmeier for starting the Student Outreach Clinic (SOC), welcoming us into this work, and supporting this initiative. We would also like to acknowledge Dr. Mary Pell Abernathy for her efforts starting the first women's health clinic. Expansion of the Coalition would not have been possible without the leadership efforts of Women's Health Coalition Executive Board members Rebecca Nunge, Aubrey Kenefick, Stephanie Asdell, Allie McKinzie, Molly Frank, Tanvi Asthana, Rabiah Amjad, Juliet Hardesty, Raiven Owusu, Morgan Saiko-Blair, Kaitlin Wendel, and Breanne Burgess. We thank SOC Board Members Aida Haddad, Maria Khan, Eric Klipsch, Jon Class, Paul Sohn, and Mahmud Sam for their support in the integration and creation of the Coalition. Dr. Mohammad Aref supported and mentored women's health research at the clinic, demonstrating the need and inspiration for the coalition. Finally, we thank Dr. Nicole Scott and Dr. Brock McMillen, Indiana University Residency Directors of OB/GYN and Family Medicine, respectively, for instituting residents at the women's health clinic.

Disclosures

The authors have no conflicts of interest to disclose.

References

1. Nakamura M, Altshuler D, Binienda J. Clinical skills development in student-run free clinic volunteers: A multi-trait, multi-measure study. BMC Med Educ. 2014;14(1). LINK
2. Rupert DD, Alvarez GV, Burdge EJ, Nahvi RJ, Schell SM, Faustino FL. Student-Run Free Clinics Stand at a Critical Junction Between Undergraduate Medical Education, Clinical Care, and Advocacy. Acad Med. 2022;97(6):824–31. LINK
3. Fein AW, Paladine HL. Impact of a Student-Run Free Clinic's Women's Health Program on Perceived Readiness for Clinical Rotations. PRiMER. 2020;4. LINK
4. Simpson SA, Long JA. Medical Student-Run Health Clinics: Important Contributors to Patient Care and Medical Education. J. Gen. Intern. Med. 2007;22(3):352–6. LINK
5. Smith S, Thomas R, Cruz M, Griggs R, Moscato B, Ferrara A. Presence and Characteristics of Student-Run Free Clinics in Medical Schools. JAMA. 2014;312(22):2407. LINK
6. Kumar NR, DuVernois G, Almeida-Monroe V, Siegert N, De Groot AS. Evaluating the Impact of a Student-Run Women's Clinic on Access to Gynecologic Care for Uninsured Women in Rhode Island. R I Med J (2013). 2019 Dec 2;102(10):52-6. LINK
7. Wang E, Getrajdman C, Frid G, Bal J, Abraham C, Jacobs A, et al. A Three-Year Analysis of the Impact of a Student-Run Gynecology Clinic on Access to Reproductive Health Care for Uninsured Women in East Harlem. J. Community Health. 2021;46(6):1132–8. LINK
8. Explore Uninsured women in Indiana: 2021 Health of Women and Children Report [Internet]. America's Health Rankings. [Accessed 2022 Jun 16]. Available from: www.americashealthranings.org/eplore/measures/Uninsured_women/INLINK
9. National Center for Health Statistics. Maternal Mortality: Data Files and Resources [Internet]. Atlanta (GA): Center for Disease Control and Prevention; May 2022 [Accessed 2023 Feb 2]. Available from: www.cdc.gov/nchs/maternal-mortality LINK
10. Indiana State Department of Health [Internet]. Indianapolis (IN): IN.gov. [Accessed 2022 Jun 16]. Available from: www.in.gov/health/immunization/immunization-data/hpv-data/ LINK
11. Infant Mortality [Internet]. Atlanta (GA): Centers for Disease Control and Prevention. Centers for Disease Control and Prevention; 2021 [Accessed 2022 Jun 16].

Available from: www.cdc.gov/reproductivehealth/maternalinfanthealth/infantmortality.htm LINK

12. White Coats 4 Black Lives Student Chapters. Racial Justice Report Card 2020-21 [Internet]. White Coats for Black Lives. 2021 [Accessed 2022 Jul 5]. Available from: docs.google.com/document/d/e/2PACX-1vRwgKrDOqTECS5iYvQt01qUnbb-nk-pHSHKu2gxQgfcMRqzl-spqJhAmbjyoOKgvWmHYJHXZ9srYEiQ-/pub LINK
13. Final Recommendation Statement: Chlamydia and Gonorrhea: Screening [Internet]. Rockville (MD): United States Preventive Services Taskforce; 2021 Sep 14 [Accessed 2022 Jun 16]. Available from: www.uspreventiveservicestaskforce.org/uspstf/recommendation/chlamydia-and-gonorrhea-screening LINK
14. STI Screening Recommendations [Internet]. Atlanta (GA): 2022 [Accessed 2022 Jun 16]. Available from: www.cdc.gov/std/treatment-guidelines/screening-recommendations.htm LINK
15. Workowski KA, Bolan (GA); Centers for Disease Control and Prevention. Sexually Transmitted Diseases Treatment Guidelines, 2015. MMWR Recomm Rep. 2015 Jun 5;64(RR-03):1-137. LINK
16. Shulman LP. The State of Hormonal Contraception Today: Benefits and Risks of Hormonal Contraceptives: Combined Estrogen and Progestin Contraceptives. AJOG. 2011;205(4). LINK
17. Shoupe D. LARC methods: entering a new age of contraception and reproductive health. Contracept Reprod Med. 2016 Feb 23;1:4. doi: 10.1186/s40834-016-0011-8. LINK
18. Gensel A, Brown L, Asdell S. Implementing Scheduled Women's Health Clinics at Free Student Outreach Clinic. [Internet]. Indianapolis (IN): IUPUI ScholarlyWorks. 2022 [Accessed 2022 Jun 16]. Available from: scholarworks.iupui.edu/handle/ 1805/29262 LINK
19. McCarty, S. Protocol for Wet Mount Microscopy at IU [Internet]. Indianapolis (IN): -Student Outreach Clinic; 2021 [Accessed 2022 Jun 16]. Available from: hdl.handle.net/1805/29356 LINK
20. Steele EK. Indiana University Student Outreach Clinic Sexual Assault Protocol [Internet]. Indianapolis (IN): Indiana University Student Outreach Clinic; 2021 [Accessed 2022 Jun 16]. Available from: scholarworks.iupui.edu/handle/1805/ 26479 LINK
21. Callegari LS, Aiken ARA, Dehlendorf C, Cason P, Borrero S. Addressing potential pitfalls of reproductive life planning with patient-centered counseling. AJOG. 2017;216(2):129–34. LINK