# A Roadmap to Integrating Dermatologic Care at a Student-Run Free Health Clinic

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#### **Abstract**

Student-run free health clinics (SRFCs) play an important role in providing a safety net healthcare system for uninsured patients by offering primary healthcare or preventative medical services. Patients at free clinics may have to be referred out for medical complaints better managed with specialty care. Integrating these services at SRFCs can address barriers to accessing specialty care. Free dermatologic care offers an opportunity to provide care to patients who may otherwise ignore symptoms, which can lead to reduced quality of life and a worse prognosis in some conditions. We detail a roadmap to integrate dermatologic services at an SRFC by providing operational considerations such as assessing needs, developing a clinical workflow, engaging dermatologists and the community, and sustaining student involvement. We also discuss the potential for a dermatology clinic to foster interest in the specialty among students underrepresented in medicine, given the current call to action to increase racial and ethnic diversity in the dermatologic workforce.

#### Introduction

Dermatologic care for uninsured individuals may be poorly accessible.<sup>1-3</sup> Thus, it is important to evaluate and expand efforts to provide care to those with limited access. A survey by the American Medical Association found that the number of Association of American Medical Colleges member institutions with student-run free clinics (SRFCs) had more than doubled in the past nine years and are present in more than 75% of medical schools.4 Most SRFCs focus on primary or preventative care services and refer specialty care to other clinics or hospitals.<sup>5</sup> Financial burdens, lack of insurance, transportation, clinic location, and incomplete communication between primary and specialty providers constitute critical barriers to specialty-care access for patients.<sup>6</sup> Additionally, uninsured and lower socioeconomic status patients are less likely to receive outpatient dermatologic care than privately insured and higher-income patients.<sup>7</sup> These compounded barriers may be mitigated by implementing specialty care services at SRFCs. Here, we detail the roadmap to integrate dermatologic services in an SRFC.

## **Needs Assessment**

First, it is essential to conduct a needs assessment to build a case for change, inform targeted strategies, and prioritize resources. A geographical needs assessment can evaluate how many free clinics are staffed by dermatologists within a 15-to-30-mile radius. Among surrounding free clinics that provide dermatologic services, it is important to note their target sociodemographic patient population, i.e., homeless adults, lesbian, bisexual, intersex, asexual/agender gay, (LGBTQIA), or women and children. This can inform any potential gaps in care and outreach. Assessing needs among current and potential

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patients is a crucial step. A dermatology screening tool can be used to understand possible chief complaints, access to dermatologic care, skin cancer risks, comorbidities, and environmental exposures (Figure 1). A screening tool can also serve as a platform for community members to share their anecdotal perspectives on which dermatologic needs exist. To secure a patient base, consider administering the dermatology screening tool before, during, or after primary care visits. The screening tool can be adapted into "waiting room surveys," which are self-administered, webbased surveys linked to electronic health records.8 This tool can be an important method of practice-level data collection and monitoring for unmet dermatologic needs. The clinic's current approach to registering new patients (i.e., referrals, community outreach, screenings, and health promotion) can integrate the dermatology screening tool to gauge a patient's current skin, hair, and nail needs. Referrals may be generated by promoting dermatologic services to other primary care clinics that predominately serve uninsured or underinsured patients. Community engagement events can also be used to assess and screen for unmet dermatologic needs and promote the availability of dermatologic services.

## **Sponsorship & Support**

Once a needs assessment identifies unmet dermatologic needs in the community, one can begin to obtain sponsorship and support. Support can come in multiple forms through partnerships that offer staffing, legal protections, and funding. It is beneficial to partner with academic dermatology departments that prioritize diversity, equity, and inclusion and hope to train residents to serve underserved populations. Residency programs with a curricular focus on health equity may use service learning as an opportunity to expand experiential experiences for residents and reduce barriers to care. One study demonstrated the value of service-learning in dermatology residency for residents and patients.9

Legal protections must be established for dermatologists to serve as preceptors and provide care. The Georgia Department of Public Health offers sovereign immunity protection to licensed

Figure 1. Sample dermatologic screening tool

We are now offering a free dermatology service. Dermatologists are doctors who focus on skin, hair, and nail health issues.

Do you have any skin lesions, rashes, or warts currently bothering you?

Do you have any skin issues for which you've used creams, ointments, or homemade remedies?

Do you find yourself concerned about any skin issues that have been occurring for an extended period of time?

Do you have any chronic skin conditions such as hair loss, vitiligo, psoriasis, or eczema?

Are you concerned about your risks for skin cancer? Risks include a family history of skin cancer, a personal history of skin cancer, older age, skin that burns or reddens easily in the sun, and high U.V. light exposure.

Do you have any wounds that are difficult to heal?

Are you frequently outside or exposed to the sun?

Does your work environment expose you to lead, plastic, nickel, cobalt, and/or chrome?

Have you ever been treated by a dermatologist?

If so, have you ever had a Total Body Skin Exam by a dermatologist?

Has cost or insurance status ever been an issue for you to visit a dermatologist?

If you were not able to obtain dermatologic services at a free clinic, where would you be able to receive care (e.g., emergency room, urgent care, private office, public hospital)?

U.V.: ultraviolet.

healthcare professionals who volunteer to treat uninsured individuals at or below 200 percent of the federal poverty level. Once liability protection is established, sources of funding must be assessed, whether it is from institutional or external contributions. Nonprofit organizations such as the National Association of Free & Charitable Clinics<sup>10</sup> and federal offices such as the Rural Health Information Hub<sup>11</sup> provide grants to help establish and support free clinics. Other external funding sources include medical organizations, community stakeholders, and philanthropic foundations. The Public Health Service Act provides several funding programs for clinics that meet the definition of federally qualified health centers.<sup>12</sup> SRFCs can also apply for federal designation to receive start-up funding under Section 330 of the Public Health Service Act.<sup>12</sup>

# **Logistics & Clinical Workflow**

Costs, equipment, and personnel will dictate the services that can be provided in the clinic versus what should be referred to the community. This sets the foundation for a referral plan for patients who require advanced care concerns such as surgical procedures or biopsies. For instance, if the SRFC can provide biopsies, an equipment list (4mm skin punch, blade/scalpel, lidocaine, forceps, sutures, formalin, etc.) should be crafted. Additionally, the clinic should partner with a dermatopathologist to read and interpret biopsy specimens. Consider collaborating with dermatopathologists at an academic program or public hospital to tap into expertise. Alternatively, if laboratory testing is already provided at no cost to patients, SRFC can expand lab requisition to include dermatopathology. It is important to establish a plan for managing results - including contacting patients and planning further treatment if deemed necessary. The clinic's current standards and procedures for care continuity can be adapted for the dermatology service.

Next, a clinical workflow must be established. The clinical workflow must address social determinants of health, such as offering resources to aid the procurement of medications and facilitating access to care by providing public transportation vouchers, hosting after-hour and weekend clinics, and offering telemedicine appointments. Students and residents should also be fully integrated into the clinical workflow (Table 1). A student leadership position should be established to lead clinical correspondence and oversee

operative logistics. This individual will maintain a partnership with the clinic and the corresponding dermatology department, assess the needs of the patient population, and find community engagement opportunities to support clinic expansion.

## Sustainability

The sustainability of integrating dermatologic care in an SRFC is a continuous step. Maintaining free dermatology services requires a multifaceted approach that involves financial support, community engagement, and strategic partnerships. Clinic leadership must search for and obtain grants, donations, and institutional funding. Support may also come from dermatologic stakeholders. Pharmaceutical or personal care product companies may have patient assistance programs and funding aimed to support the clinic's initiatives. Forging partnerships could help cover the costs of medication, supplies, and equipment. It could also uphold student involvement through funding for community engagement and research projects. Sustainability requires leadership to embrace an evolving clinical model by evaluating and modifying efforts based on patient feedback, clinical needs, provider engagement and participation, and workflow challenges.

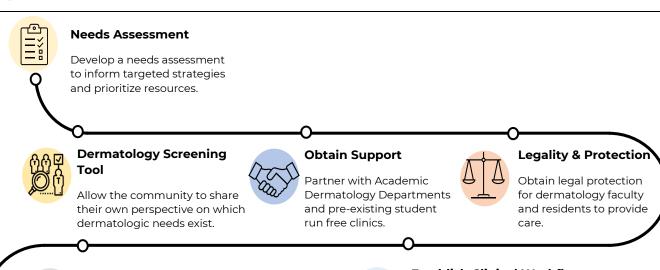
#### **Medical Student Involvement**

Integrating dermatologic care at an SRFC should also consider the potential impact on medical students. There is a striking discordance in the representation of Black, LatinX, and Native American practicing dermatologists relative to the general population, making it one of the least racial and ethnically diverse specialties in medicine.13,14 The pipeline for recruiting underrepresented in medicine (URiM) students into medicine is leaky. One study even found schools that lacked additional dermatology exposure opportunities had the greatest percentage of URiM students.14 A critical component of increasing URiM students applying and matching into dermatology is early exposure to the specialty and mentors in medical school.<sup>13</sup> Early clinical exposure can afford more time for students to conduct

Table 1. Strategies to engage students and residents at a dermatology student-run free health clinic

Theme	Engagement strategies
Clinical workflow	<ul> <li>Obtain vitals and chief complaint</li> <li>Obtain a focused history of present illness</li> <li>Perform focused and total body skin exams if medically indicated</li> <li>Obtain dermatoscopic images</li> <li>Write clinical notes</li> <li>Follow-up phone calls to assess patient satisfaction and medical adherence</li> </ul>
Medication reconciliation	<ul><li>Enroll patients in pharmaceutical patient assistance programs</li><li>Obtain resources for discounted medications</li></ul>
Education and research	<ul> <li>Case reports</li> <li>Qualitative Studies (obtaining patient feedback and satisfaction, evaluating treatment success, optimizing health service delivery, assessing the impact of patient-provider concordance)</li> <li>Quantitative Studies (evaluations of clinic flow, feasibility, patient population characteristics, quality improvement)</li> <li>Faculty and resident-led didactic sessions</li> </ul>
Community engagement	<ul> <li>Partner with community entities (churches, barbershops, community centers)</li> <li>Skin checks and sunscreen donations at community engagement events</li> <li>Visibility of research team and efforts (marketing and advertising)</li> </ul>
Social determinants of health	<ul> <li>Alleviate barriers to clinic participation: Public transportation vouchers, telemedicine visits, consolidate primary care and dermatology clinic visits</li> </ul>

Figure 2. Roadmap to integrating dermatologic care at a student-run free health clinic





# **Assess Student Impact**

Optimize ways for early exposure to dermatology among students underrepresented in medicine.



# **Establish Clinical Workflow**

Clinical workflow should address social determinants of health by offering resources to aid procurement of medications and ensuring that patients can make it to their appointments.



## **Ongoing Sustainability Efforts**

Embrace an evolving clinical model through constant evaluation, feedback, and procurement of funding.

research and foster longitudinal relationships with dermatologists. Integrating dermatology into SRFCs can pique students' interest in dermatology early in their medical school trajectory. It may also allow students to engage in case reports or health service delivery research projects focused on addressing patient barriers, assessing impact, and determining methods for growth and sustainability. A longitudinal student leadership position can serve as a unique opportunity to develop leadership skills in quality improvement and implementation science, contributing to a stronger application for residency.

#### Conclusion

In summary, our roadmap offers a guide for institutions looking to integrate dermatology in SRFCs (Figure 2). Any free clinic may use this guide to integrate any novel care service, as these steps are applicable to other subspecialties. Implementation of these efforts can fill specialty care gaps in the healthcare safety net while also fostering an environment that can increase diversity in the dermatologic workforce.

#### **Disclosures**

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#### References

- Buster KJ, Stevens EI, Elmets CA. Dermatologic health disparities. Dermatol Clin. 2012 Jan;30(1):53-9, viii. https://doi.org/10.1016/j.det.2011.08.002 LINK
- Shwe S, Kassira S, Kim DJ, Elsensohn A, Lee P. How to navigate dermatology care for the uninsured. J Am Acad Dermatol. 2019 Jun;80(6):1809-13. https://doi.org/10.1016/j. jaad.2018.06.072 LINK
- Nguyen B, Bray FN. Access to dermatologic care in Indigenous American communities. J Am Acad Dermatol. 2022 Oct;87(4):904-6. https://doi.org/10.1016/j.jaad.2022. 04.026 LINK
- 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 Dec 10;312(22):2407-10. https://doi.org/10.1001/jama.2014.16066 LINK

- Simpson SA, Long JA. Medical student-run health clinics: important contributors to patient care and medical education. J Gen Intern Med. 2007 Mar;22(3):352-6. https://doi.org/10.1007/s11606-006-0073-4 LINK
- Ezeonwu MC. Specialty-care access for community health clinic patients: processes and barriers. J Multidiscip Healthc. 2018 Feb 22;11:109-19. https://doi.org/10. 2147/JMDH.S152594 LINK
- Tripathi R, Knusel KD, Ezaldein HH, Scott JF, Bordeaux JS. Association of demographic and socioeconomic characteristics with differences in use of outpatient dermatology services in the United States. JAMA Dermatol. 2018 Nov 1;154(11):1286-91. https://doi.org/10.1001/jamadermatol.2018.3114 LINK
- Hogg W, Johnston S, Russell G, Dahrouge S, Gyorfi-Dyke E, Kristjanssonn E. Conducting waiting room surveys in practice-based primary care research: a user's guide. Can Fam Physician. 2010 Dec;56(12):1375-6. https://www.cfp. ca/content/56/12/1375.long LINK
- Humphrey VS, Patel BM, Lee JJ, James AJ. Perceptions of community service in dermatology residency training programs: a survey-based study of program directors, residents, and recent dermatology residency graduates. Cutis. 2022 Jul;110(1):E27-E31. https://doi.org/10.12788/cu-
- 10. The National Association of Free & Charitable Clinics. Funding [Internet]. Alexandria (VA): The National Association of Free & Charitable Clinics; [accessed 2023 May 7]. Available from: https://nafcclinics.org/our-impact/funding/LINK
- Rural Health Information Hub. Your First Stop for Rural Health Information [Internet]. Grand Forks (ND): Rural Health Information Hub; [accessed 2023 May 7]. Available from: https://www.ruralhealthinfo.org/ LINK
- Rosenbaum S, Sharac J, Shin P, Tolbert J. Community Health Center Financing: the Role of Medicaid and Section 330 Grant Funding Explained [Internet]. San Francisco (CA): The Kaiser Family Foundation. 2019 Mar [accessed 2023 May 7]. Available from: https://www. kff.org/medicaid/issue-brief/community-health-centerfinancing-the-role-of-medicaid-and-section-330-grantfunding-explained/LINK
- 13. Pandya AG, Alexis AF, Berger TG, Wintroub BU. Increasing racial and ethnic diversity in dermatology: a call to action. J Am Acad Dermatol. 2016 Mar;74(3):584-7. https://doi.org/10.1016/j.jaad.2015.10.044 LINK
- 14. Barnes LA, Bae GH, Nambudiri VE. Sex and racial/ethnic diversity of US medical students and their exposure to dermatology programs. JAMA Dermatol. 2019 Apr 1;155(4):490-1. https://doi.org/10.1001/jamadermatol.2018. 5025 LINK