

---

Department of Medicine Posters

Department of Medicine

---

4-27-2022

## Satisfaction with teledermatology in an underserved urban shelter setting

Shannon Nugent

*Thomas Jefferson University*

Michele Ly

*Thomas Jefferson University*

Khanh Bui

*Thomas Jefferson University*

Caroline Purcell

*Thomas Jefferson University*

Andrew Touati

*Thomas Jefferson University*

Below this page of additional works at <https://jdc.jefferson.edu/medposters>

**[Let us know how access to this document benefits you](#)**

---

### Recommended Citation

Nugent, Shannon; Ly, Michele; Bui, Khanh; Purcell, Caroline; Touati, Andrew; Krain, Rebecca; Bistline, Anna; Motley, Robert; Jones, Elizabeth; and Ross, Nicholas, "Satisfaction with teledermatology in an underserved urban shelter setting" (2022). *Department of Medicine Posters*. 20.

<https://jdc.jefferson.edu/medposters/20>

This Article is brought to you for free and open access by the Jefferson Digital Commons. The Jefferson Digital Commons is a service of Thomas Jefferson University's [Center for Teaching and Learning \(CTL\)](#). The Commons is a showcase for Jefferson books and journals, peer-reviewed scholarly publications, unique historical collections from the University archives, and teaching tools. The Jefferson Digital Commons allows researchers and interested readers anywhere in the world to learn about and keep up to date with Jefferson scholarship. This article has been accepted for inclusion in Department of Medicine Posters by an authorized administrator of the Jefferson Digital Commons. For more information, please contact: [JeffersonDigitalCommons@jefferson.edu](mailto:JeffersonDigitalCommons@jefferson.edu).

---

**Authors**

Shannon Nugent, Michele Ly, Khanh Bui, Caroline Purcell, Andrew Touati, Rebecca Krain, Anna Bistline, Robert Motley, Elizabeth Jones, and Nicholas Ross

Shannon Nugent, BS<sup>1</sup>; Michele Ly, MHS<sup>1</sup>; Khanh Bui, BSE<sup>1</sup>; Caroline Purcell, MPH<sup>1</sup>; Andrew Touati, MD<sup>2</sup>; Rebecca Krain, MD<sup>2</sup>; Anna Bistline, MD<sup>2</sup>; Robert Motley, MD<sup>3</sup>; Elizabeth Jones, MD<sup>2</sup> & Nicholas Ross, MD<sup>2</sup>

<sup>1</sup>Sidney Kimmel Medical College, Thomas Jefferson University; <sup>2</sup>Department of Dermatology and Cutaneous Biology, Thomas Jefferson University Hospital; <sup>3</sup>Department of Family and Community Medicine, Thomas Jefferson University Hospital

## Background

**Problem Statement:** People experiencing homelessness (PEH) face disproportionate access to dermatologic care. Tele dermatology is a platform that may improve access to medical care in underserved communities. The literature is lacking on this topic.

**Project Aim:** The purpose of this quality improvement initiative is to evaluate patient and provider satisfaction with tele dermatology in an urban shelter setting. Satisfaction surveys will be distributed over one year to provide measurable data that are determinate (designed to highlight multiple satisfaction metrics, numerically), concise (designed with functionality and efficiency in mind) and relevant (validated across multiple studies).

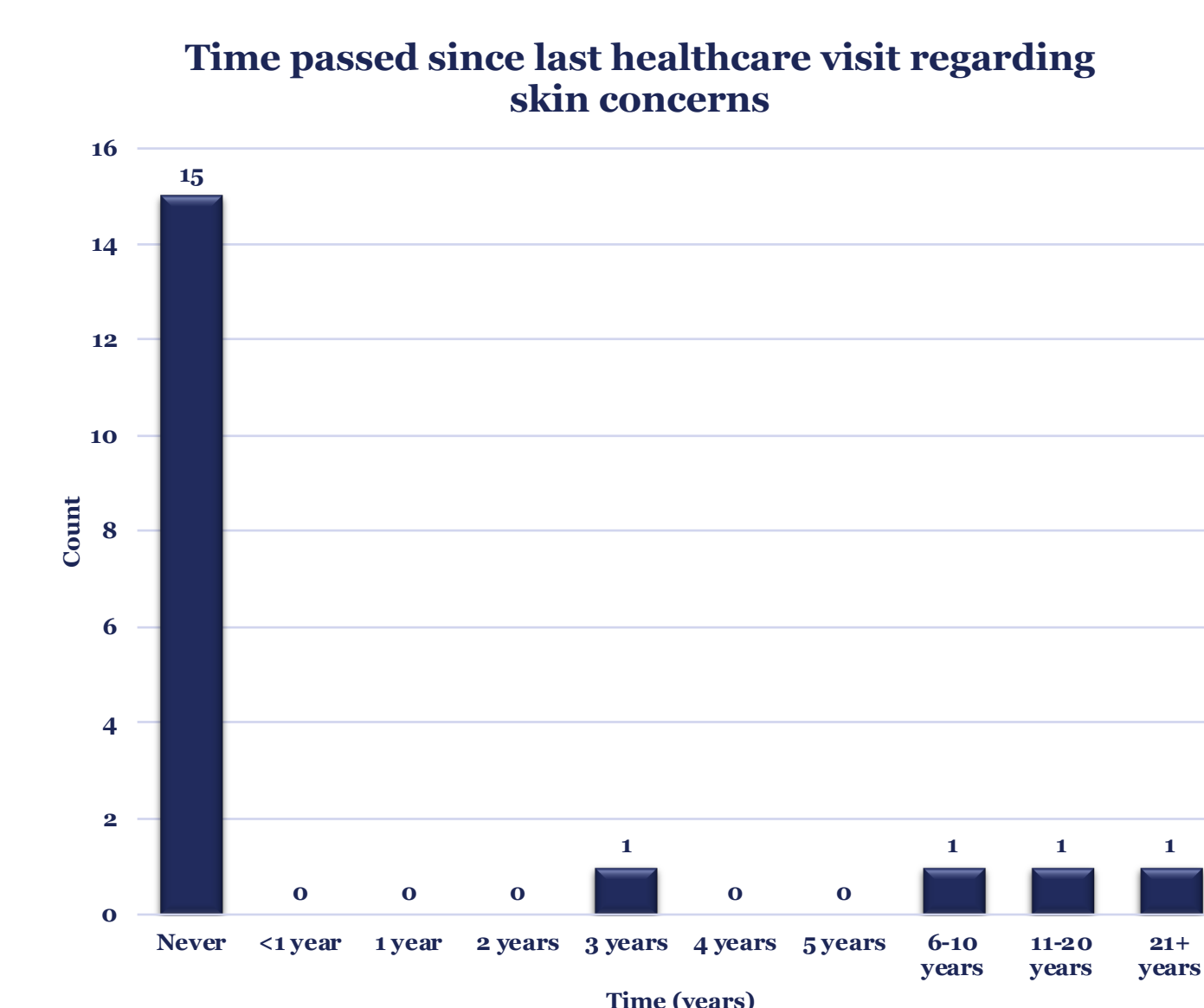
## Baseline Metrics

### Per 2019 Southeastern PA Community Health Needs Assessment:<sup>1</sup>

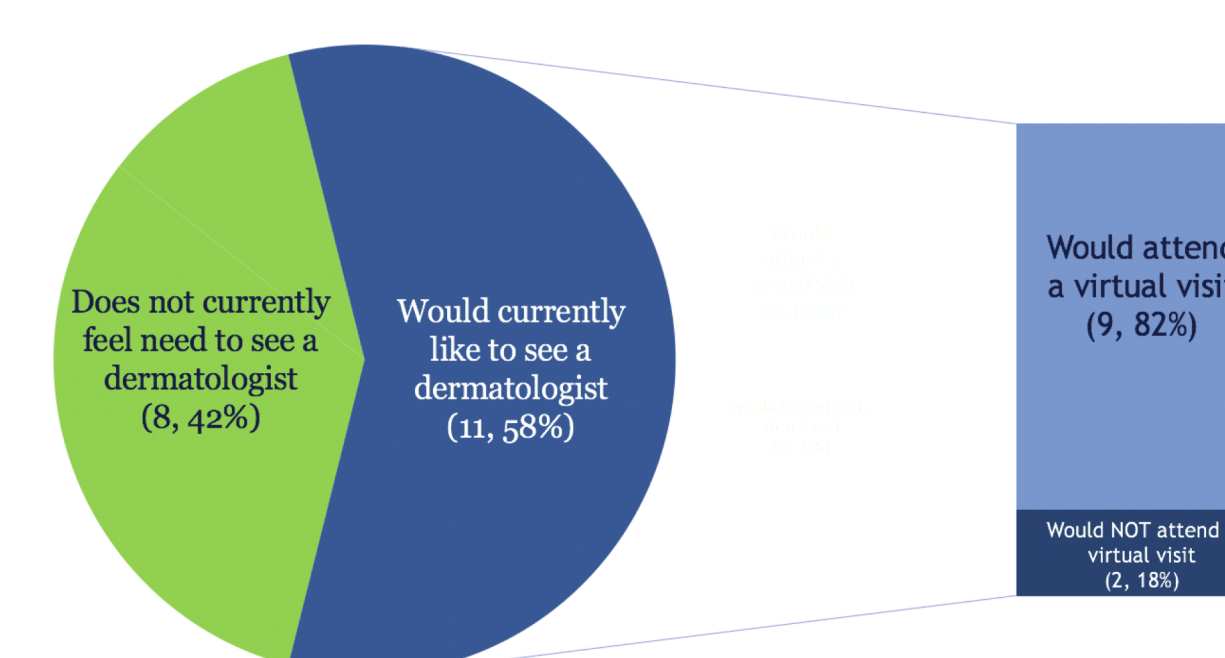
- There are over 1,100 people experiencing unsheltered homelessness in Philadelphia. Total individuals experiencing homelessness is estimated to be closer to 5,700. Data will be updated in 2022 and will likely change after the Covid-19 pandemic.
- There is evidence that skin disorders are a common acute physical need, and these conditions are often undiagnosed and untreated due to lack of access to care and medication.
- There are limited data on specific dermatological needs or ease of access for this at-risk population. Patients often lack primary care and thus, have difficulty connecting to specialist care.

### Pilot Study: Conducted in October 2021 with JeffHOPE

- Interviewed 19 patients in one clinic over 2 days
- 57.9% (11/19) of patients stated they would like to see a dermatologist
  - 81.8% (9/11) would attend a virtual visit
  - Of the 8 patients who responded they did not need to see a dermatologist, 75% (6/8) would not mind a virtual visit if needed

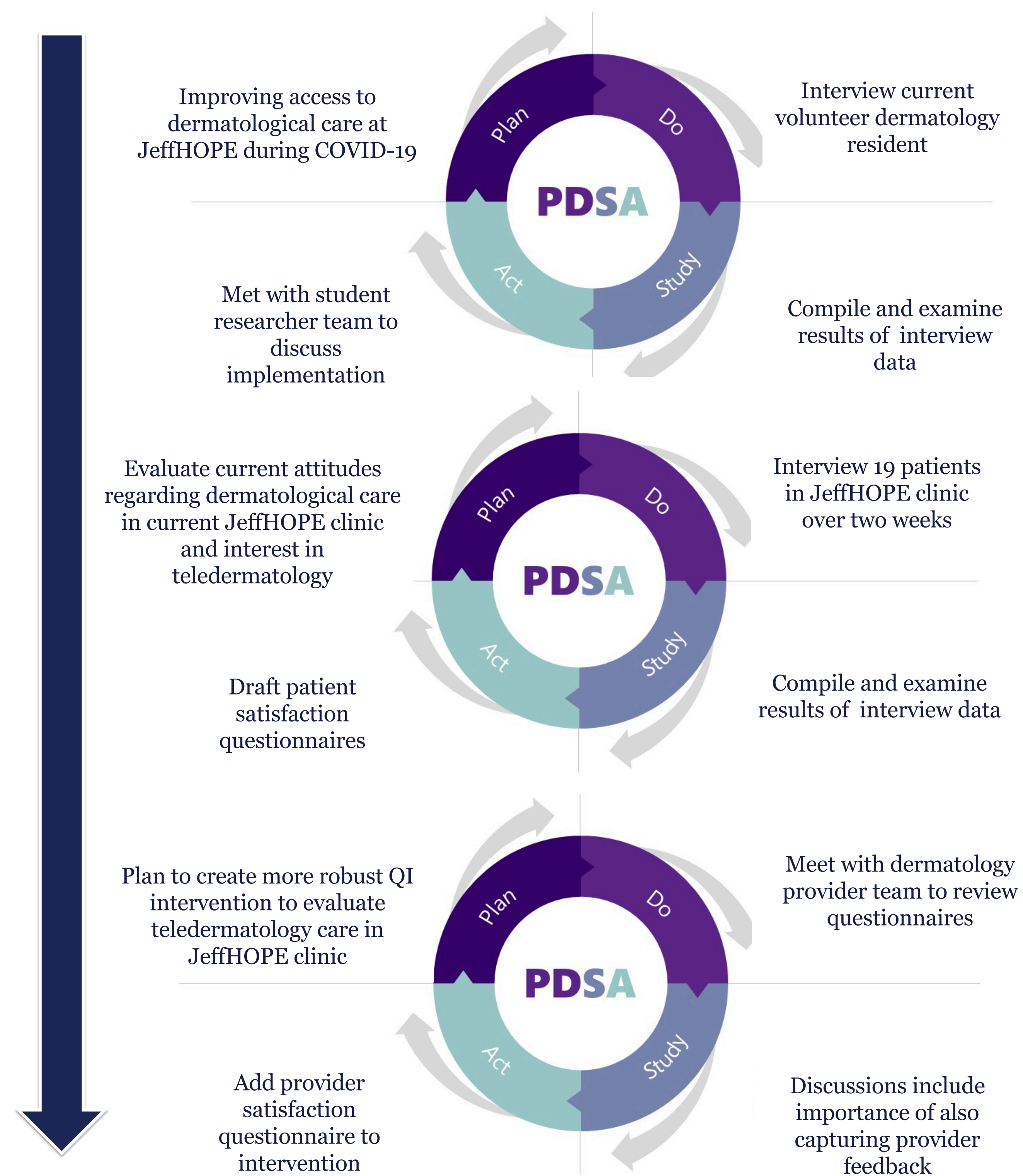


### Number of Patients Who Expressed Desire to See Dermatology Provider



## Interventions

This proposal was developed in conjunction with JeffHOPE and the Department of Family and Community Medicine.



### Current Iteration of Intervention:

- **Patients:** After receiving virtual dermatologic care, patients aged 18 years or older will be asked to participate in a study evaluating satisfaction with the telemedicine care provided. If consented, patients will complete a prospective, 24-item survey that assesses satisfaction with tele dermatology services and evaluates baseline demographics, diagnoses/treatment plans, and barriers to care.
- **Consenting providers:** Providers will be administered a similar survey assessing satisfaction with the virtual care platform.
- **Data:** Data will be compiled and paired to evaluate. Stakeholders (shelter residents, shelter staff, medical providers and student researchers) will be encouraged to participate. Results will be presented to stakeholders.
- **Further PDSA cycles:** Design interventions to increase patient and provider satisfaction beyond one cycle of change.

## Challenges and Lessons Learned

In developing the intervention, our team strives to emphasize sustainability and increase stakeholder and provider buy-in.

Expanding the survey to reflect patients and providers improved:

- Multifaceted representation of tele dermatology
- Opportunities for collaboration and communication between community members and providers
- Ability to track metrics through different cycles of interventions

## Future Directions

- This project has qualified for IRB exemption and is currently approved pending revisions.
- Upon full approval, this intervention will be implemented in one JeffHOPE clinic to evaluate patient and provider satisfaction with tele dermatology services.

## Linkage to Healthcare Disparities

- People experiencing homelessness are at increased risk for poor health outcomes such as infectious disease, chronic disease, and mental health disorders that significantly affect morbidity.<sup>2</sup> Of these, cutaneous disease are more prevalent in PEH than those with stable homes and often the main reason many seek medical attention.<sup>3,4</sup>
- Tele dermatology is a promising approach to deliver dermatologic care to underserved communities.
- Examining patient and provider satisfaction with telemedicine visits is essential to delivering quality care.
- This initiative will enhance our ability to provide tele dermatology services and improve access to care in underserved Philadelphia communities.

## References

1. Community Health Needs Assessment, Southeastern Pennsylvania, 2019. Philadelphia Department of Public Health and Health Care Improvement Foundation. April 18, 2022. <https://www.phila.gov/documents/regional-community-health-needs-assessment/>
2. Fazel S, Geddes JR, Kushel M. The health of homeless people in high-income countries: descriptive epidemiology, health consequences, and clinical and policy recommendations. *Lancet*. 2014;384(9953):1529-1540.
3. Gelberg L, Linn LS, Usatine RP, Smith MH. Health, homelessness, and poverty. A study of clinic users. *Arch Intern Med*, 150 (1990), pp. 2325-2330 <https://jamanetwork.com/journals/jamainternalmedicine/article-abstract/614142>
4. Raoult D, Foucault C, Brouqui P. Infections in the homeless. *Lancet Infect Dis*. 2001 Sep;1(2):77-84. doi: 10.1016/S1473-3099(01)00062-7. PMID: 11871479.

## Acknowledgements

We would like to thank JeffHOPE and the Department of Family & Community Medicine for their guidance and support.