

CU Dermatology - Aurora: Evaluating Key Components to a Successful Startup of a Community Dermatology Clinic to Improve Access for Underserved Populations

Program Background

Over the past decade, the University of Colorado School of Medicine (CUSOM) Department of Dermatology has made efforts to expand their general dermatology, patch testing, and medically indicated hair removal services beyond their Anschutz location to allow them to care for a greater number of patients and to serve a community of patients that had greater diversity. After outgrowing a space built in 2014, the Department of Dermatology sought a new, community-based space in Aurora where they could continue to expand services, including services to patients covered by Medicaid, an insurance payer not typically accepted by dermatologists.

Program Aims

This project used Supplemental Funding to support the initial startup of an Aurora community dermatology clinic. The expectation was that the practice would eventually become self-sufficient while still providing services to three underserved patient groups: Medicaid patients, patients with skins of color, and patients seeking gender affirming care.

Evaluation

Utilizing financial statements, electronic health record data, and project team member interviews, this evaluation describes the impact of Supplemental Funding in establishing this new dermatology clinic and creating sustained access to dermatological services for underserved patients. This evaluation also aims to provide insight into best practices during clinic startup based on project team member feedback.

Program Elements

The primary element of this project was the build-out of a community-based dermatology clinic in Aurora near both the Anschutz Medical Campus and a local light rail station. The location had free parking and was accessible via public transportation and walk-up, thereby providing multiple methods of access for community members. It was close to the Anschutz Medical Campus, allowing brief commutes for dermatology faculty and administrators. Leveraging a partnership with CU Medicine and Supplemental Funding, the Department of Dermatology signed a ten-year lease at the new location at a lower rent than other Department of Dermatology clinic locations.

Supplemental Funding was used to renovate the space to fit the needs of a dermatology practice, including office equipment, exam room furnishings, and furnishings for the waiting area. Supplemental Funding covered clinic staff salaries for the first three months of operation, while they built their client base. The staffing model included two full-time nurse practitioners receiving oversight from the medical director, a faculty dermatologist, and a medical assistant to provide electrolysis. The medical assistant position continued with Supplemental Funding support even after the startup phase. The new facilities provided the space and supplies to perform patch testing, though most of their positions were not covered by Supplemental Funding.

The quality of care provided by the nurse practitioners, who did not have prior dermatology training or experience, was a high priority from the beginning of the clinic operations. The Department of Dermatology developed a training program for the nurse practitioners, including how to recognize common and life-threatening skin conditions and how to perform skin biopsies. Supplemental Funding covered the cost of providing the training, which was done by Dermatology faculty members. The medical assistant performing electrolysis also received training on how to perform electrolysis hair removal, which was specifically offered to patients for gender affirming care and in preparation for gender-affirming surgery, where the proposed surgical site must meet certain standards of hair removal prior to surgery.

The clinic opened in June 2020.

FINANCIAL ANALYSIS

Startup Period

Supplemental Funding was used to support the build-out and startup of CU Dermatology - Aurora between December 2019 and November 2020. For the startup period, CU Dermatology – Aurora was allotted \$470,633 and spent \$482,695 (3% overspent). A total of \$266,732 was spent on the build-out costs (i.e., non-salary) needed to develop the clinic. As seen in Figure 1, the majority of build-out cost (73%) was for furniture, fixtures, and equipment, most of which was medical equipment.

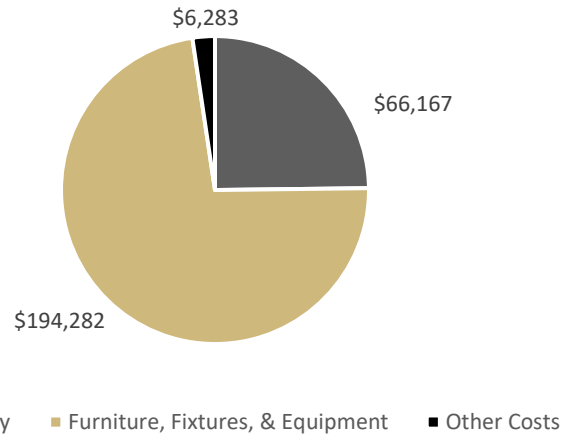


Figure 1: Breakdown of Build Out Costs for CU Dermatology – Aurora

A total of \$215,963 was spent on supporting staff salaries through the first three months of operation. This included:

- 0.2 FTE of a Clinic Medical Director
- 2.0 FTE of Advanced Practice Practitioners
- 2.0 FTE of Medical Assistants
- 1.0 FTE of Front Desk/Receptionist
- 1.0 FTE Insurance Admin
- 0.5 FTE Patch Test Licensed Practical Nurse

Sustainability

Following the one-year startup period ending in November 2020, Supplemental Funding was reduced to \$71,000 per year for subsequent fiscal years to support the medical assistant providing electrolysis. This met the expectation that CU Dermatology - Aurora would become self-sufficient outside of the cost of the electrolysis service. Beginning in Fiscal Year 2022, the first full fiscal year without Supplemental Funding supporting supplies and all salaries, CU Dermatology – Aurora was able to cover operational expenses, with the exception of electrolysis support.

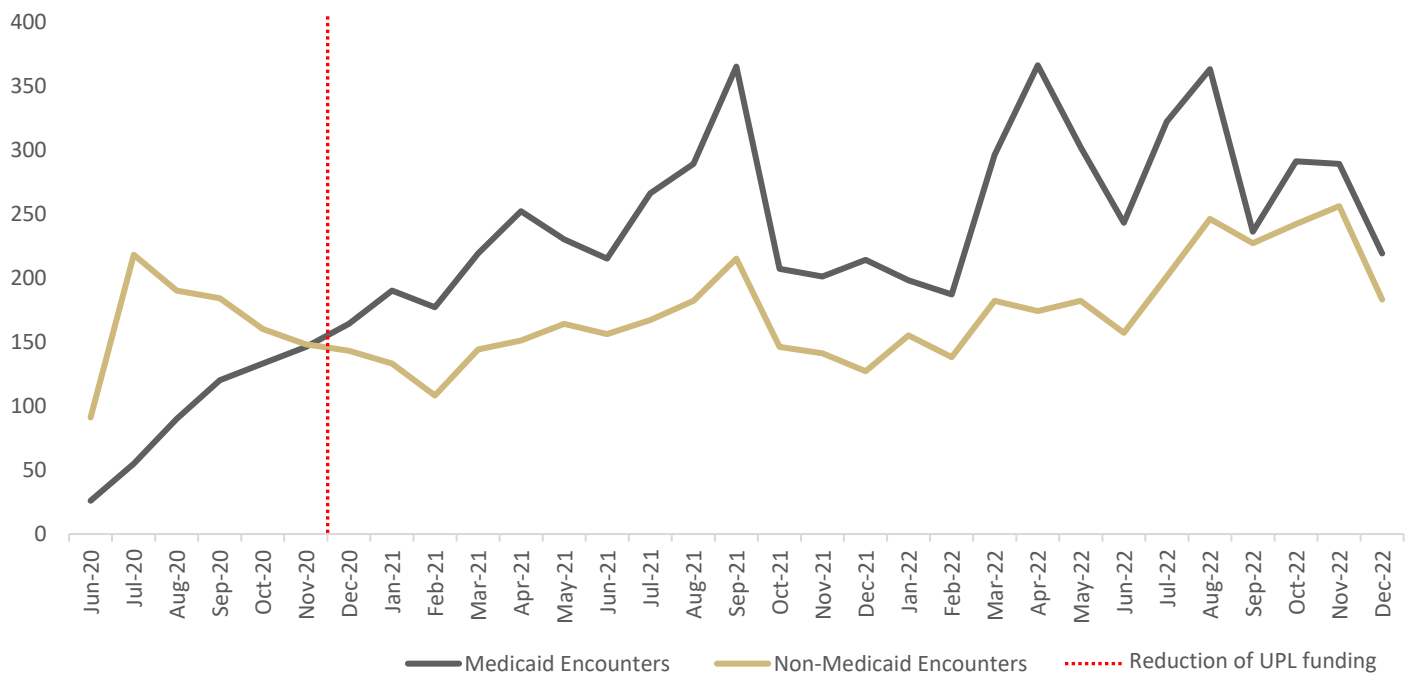
QUANTITATIVE ANALYSIS

Methods Overview

The quantitative analysis provides counts of completed patient encounters for Medicaid and non-Medicaid patients at the CU Dermatology - Aurora between June 1, 2020 and December 31, 2022.

Results

Completed patient encounters were counted for each month of the evaluation period. As demonstrated in Figure 2, the clinic had Medicaid members on their patient panel from opening in June 2020 and continued to see Medicaid members even after the reduction in Supplemental Funding in November 2020.



Note: Patients are considered Medicaid for this visual if Colorado Medicaid or Denver Health Medicaid was listed in Epic as the payer type for the encounter

Figure 2: Medicaid and Non-Medicaid Encounters at CU Dermatology – Aurora During the Evaluation Period

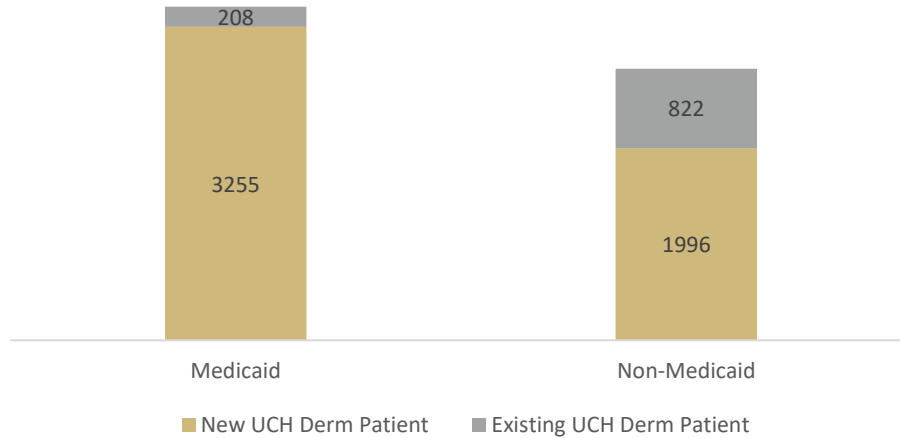
The reason for each patient’s encounter was recorded by providers in Epic. As seen in Table 1, patch testing, one of the services the Department of Dermatology was hoping to expand, was the fourth most common service. Hair removal, another high-priority service, was the sixth most common service.

Table 1: Top 10 Encounter Reasons at CU Dermatology - Aurora

Visit Reason	Count (Percentage) of Encounters by Visit Reason
FOLLOW-UP	1767 (15%)
NEW PATIENT CONSULT	1414 (12%)
SKIN EXAMINATION	1363 (11%)
PATCH TESTING*	1114 (9%)
ACNE	1092 (9%)
HAIR REMOVAL	1019 (8%)
PHOTODYNAMIC THERAPY	482 (4%)
SUSPICIOUS SKIN LESION	434 (4%)
RASH	341 (3%)
SKIN PROBLEM	221 (2%)

*Includes Patch Testing, Patch Application, Patch Removal, and Patch Follow-up

To assess the impact on dermatology access for Medicaid patients, we counted the number of patients seen at CU Dermatology - Aurora during the evaluation period (n=6281) that were considered a new dermatology patient, then stratified that by patients with Medicaid versus non-Medicaid insurance. A new patient was defined as not having a dermatology encounter ever documented in their patient chart within the UHealth Epic system. Medicaid patients seen at CU Dermatology - Aurora had a higher likelihood of being new to dermatology care within the UHealth Epic system than non-Medicaid patients.



Note: Patients are considered Medicaid for this visual if Colorado Medicaid or Denver Health Medicaid was ever listed as payer for CU Dermatology - Aurora during the evaluation period

Figure 3: Unique Medicaid and Non-Medicaid Patients by New UHealth Dermatology Patient Status

Patient self-reported race was recorded by providers in Epic. Most patients (61%) stated that they were “White or Caucasian”, suggesting that this clinic does not primarily serve patients with skins of color. However, the clinic is seeing a percentage of patients with skins of color (15%) that exceeds the goal set by the project team (12%). Additionally, a large portion of the clinic served (15%) did not have a specific recorded race; the clinic may serve more patients with skins of color than seen in this table.

Table 2: Unique CU Dermatology - Aurora Patients by Race

Race	Count (Percentage) of Patients by Race
American Indian or Alaska Native	52 (<1%)
Asian*	302 (5%)
Black or African American	680 (11%)
More Than One Race	95 (2%)
Native Hawaiian and Other Pacific Islander	16 (<1%)
Other/Unknown+	1002 (16%)
White or Caucasian	4134 (66%)
TOTAL	6281 (100%)

*Includes Asian Indian, Chinese, Filipino, Japanese, and Vietnamese; +Includes blanks and refusal to answer

Patient gender identity was recorded by providers in Epic. A small subset (1%) of patients clearly identified as transgender or non-binary. However, most patients either did not provide a response or were not asked the question; nearly half of patients (44%) seen by CU Dermatology – Aurora had “Other/Unknown” as their gender identity. This makes it difficult to accurately assess how much of the patient population seen by CU Dermatology – Aurora is gender diverse.

Table 3: Unique CU Dermatology - Aurora Patients by Gender Identity

Gender Identity	Count (Percentage) of Patients by Gender Identity
Female	2261 (36%)
Male	1181 (19%)
Non-Binary	20 (<1%)
Other/Unknown*	2765 (44%)
Transgender Female	44 (<1%)
Transgender Male	<11 (<1%)
TOTAL	6281 (100%)

*Includes blanks and refusal to answer

PROJECT TEAM MEMBER INTERVIEWS

Project Successes

Overall, project team members felt the biggest success of the CU Dermatology - Aurora clinic was the focus on Medicaid patients and providing dermatology care access to that population. Team members stressed that dermatology clinics do not typically accept Medicaid as a payer type, so this clinic was one of the only, if not the only, in the area that provides this care to the Medicaid community. One of the team members proudly shared that their patient panel was largely Medicaid.

Team members also highlighted the perks the location offered to clients. Being conveniently located in the community, providing free parking, and having close access to public transportation were seen as key factors to a successful clinic that patients wanted to visit.

The devoted clinic staff were another important and impactful element of the build discussed by project team members. The nurse practitioners were described as passionate, invested, and quick learners. The newest medical assistant came with prior experience in both receiving and providing electrolysis, which provides a context for empathetic care for the patients they see.


Furthermore, team members felt that the design of the startup and staff structure proved to be very successful. Having Supplemental Funding cover the renovation and startup costs, rather than the department going into debt, started the clinic off on a positive note. One team member shared “when we’re in debt, it’s a drain on the department and can cause morale problems. We need clinics to be affordable and self-sustaining; this clinic [design] was the way to do it.” The team members also highlighted the affordable, yet still attractive, building materials and furnishings during the renovation and utilizing lower salaries of non-doctor providers as fiscal elements that worked well.

Project Challenges and Changes to Consider

One of the main challenges discussed by project team members was the electrolysis service offered by the clinic. Team members shared that it is a labor-intensive offering for the provider and a painful, frustrating process for patients due to the lack of clear definition of being “surgery ready” for gender-affirming procedures and the number of cumulative hours that need to be done over multiple visits to meet this goal. While six sessions totaling 20 hours is the minimum recommended treatment to prepare for gender-affirming surgery¹, individual differences in hair growth cycles can often necessitate additional sessions, sometimes inflating the number of sessions needed to twelve² or more. This is tiring and frustrating for patients who are eager to complete their surgical procedures. It is also a physically tiring procedure for the medical assistant providing electrolysis. Thus, the medical assistants have a high turnover rate and patients often “no-show” at appointments. Team members’ suggestions on how to improve this experience included partnering with another clinic to offer electrolysis through more locations and providers, hiring additional medical assistants to share the burden of the service, and having a larger clinic space to accommodate more electrolysis offerings.

Team members also shared the security issue that has arisen at the current clinic location. Unforeseen at the time of the 10-year lease agreement was other businesses moving out of the building, taking their security teams with them. This occurred when a bank that had security moved locations, leaving the building without a security presence. As a result, people without business in the building began to seek shelter in the lobby, common areas, and nearby. This contributed to staff feeling unsafe. Team members suggested addressing security by finding a new clinic location that either has established security or is in a safer location. Another suggestion was coverage for a dermatology-specific security team. One team member also suggested consideration of a shorter lease agreement at the new clinic, allowing for easier transfer if unforeseen issues were to arise again or if the clinic outgrows the new space due to positive clinic performance.

Finally, some team members shared a desire for more partnership and community engagement for the clinic. Team members would suggest that, during new clinic openings, marketing folks engage the community and local clinics, ensuring that referrals to services are coming from various community-based locations, not just Anschutz Medical Campus. Additionally, one team member suggested hiring for the clinic go through one organization (e.g. all through CUSOM or all through UHealth) to provide a sense of cohesion among staff, allowing for more level expectations and feelings of partnership throughout the clinic. As of the close of this evaluation, this update has occurred, and all team members are currently CUSOM employees.



“This clinic is a benefit to the community-- many people on Medicaid are not welcome elsewhere [in dermatology], so providing this service is key.”

¹The Magic of Transition. *Genital electrolysis*. <https://2pass.clinic/en/hair-removal/procedures/genital-electrolysis> Accessed June 6, 2023.

²University of Utah Health. *Laser hair removal services*. <https://healthcare.utah.edu/transgender-health/laser-hair-reduction#:~:text=For%20those%20individuals%20seeking%20bottom,prior%20to%20your%20surgery%20date>. Accessed June 6, 2023.