

Clinical Ethnographic Research in Dermatology

Short-term Scientists and Training Program Sarah Park BA¹, Maryam Liagat MD² ¹ David Geffen School of Medicine ² Division of Dermatology at UCLA

BACKGROUND

The Biodesign process provides a framework to observe and address the shortcomings of health care encountered in daily clinical practice. This approach is rooted in bedside-to-bench-to-bedside innovation rather than bench-to-bedside innovation. In order to engage in the Biodesign process and train as a clinical ethnographer, I looked to identify the most pressing unmet clinical needs within UCLA Division of Dermatology. I conducted an ethnographic research study within Dermatology at the Santa Monica Clinic. Opportunities to improve clinic workflow were identified through weekly clinical immersion that consisted of ethnography and interviews of health care staff. Biodesign techniques and tools such as mind map structures, root cause analyses, and interviews were used to extract, validate, and prioritize needs and generate solution concepts. This study serves as an example of how the Biodesign framework may be useful for identifying needs that impact patient care in an ambulatory clinic like dermatology.

METHODS

The ethnographic study occurred for 7 weeks from June 1, 2021 to July 13, 2021 and comprised of a hybrid of observation and interview-based insight extraction. Clinical practice was observed in multiple specialty clinics of dermatology, including the pigmented lesions clinic, skin of color clinic, medical dermatology continuity clinic and cosmetic dermatology clinic. Common dermatologic cosmetic procedures including lasers and Mohs micrographic surgery were also observed. Clinical practice was first observed and then followed by interviews with different stakeholders in the healthcare team.

Mind mapping was used to organize insights from clinical immersion, root cause analysis was used to extract needs, and iterations of clinical immersion and interviews with health care staff were used to validate needs. Solution concepts were generated by genealogy mapping, which consists of identifying underlying problems, analyzing their root causes, and then creating targeted solutions. These solutions were then brainstormed and validated through multiple interviews with key stakeholders.

RESULTS

Breadth of Clinical Interviews

A total of •56 hours of clinical immersion and ethnography were conducted •23 needs were identified

16 stakeholders were interviewed



RESULTS

#1: Autogenerated Reminder for Scheduling

Root Cause Analysis Example



Underlying Root Problems

Scheduling currently exists only for	2) Patients who do not schedule physician-
appointments occurring	recommended interval
within the next 6	appointments (i.e., I month
months. Patients who	follow-up) at the time of
come in for annual skin	checkout are not
checks need to make	automatically contacted to
their appointments 6	facilitate their next visit
months later.	appointment.

Validated Need

So

UCLA Dermatology needs an autogenerated method to contact patients before the physician-recommended interval to schedule their appointments in order to improve patient care.

#2: Quality Control Measure to Prevent Delays

Value to the Providers

Avoid difficulties with

■ prior authorization

Save time spent

revisiting chart

Validated Need

UCLA Dermatology needs a means to ensure that specific information is documented before a high-risk medication is prescribed in order to reduce automatic rejections of prior authorizations.

Value Proposition

Patient (1)



Proposed Solution Create hard stops in the system to

Proposed Solution

appointment

ensure necessary documentation

Value to the Patients:

outcomes

Improved clinical

to severe, acute, or

chronic illnesses

Send automated reminders patients

via MyChart portal, text messaging,

or phone call to facilitate interval

3) Dermatologists

are on average fully

months. Patients have

earlier appointments.

booked for I-2

difficulty making

DISCUSSION

By utilizing the Biodesign process, a total of 23 clinical needs were identified during the 56 hours of clinical immersion at Dermatology in the Santa Monica clinic. These needs reflected opportunities for technological innovation or workflow optimization. Of the 23 initial needs, two were prioritized and solution concepts for those are discussed below.

Need #I

- High risk skin cancer patients require close monitoring. However, existing scheduling protocols in UCLA can result in barriers to essential follow-up (see underlying root problems in results section).
- UCLA Dermatology needs an autogenerated method to contact patients before the physician-recommended interval to schedule their appointments in order to improve patient care.
- · Addressing this need is essential to patient care because ensuring continuity of care can lead to earlier diagnosis, earlier intervention, and better prognosis of any new development of skin cancers.
- This need was validated in the UCLA Dermatology clinic through interviews with multiple stakeholders including physicians, front desk staff, and administrative personnel.
- The proposed solution is to send autogenerated reminders to patients to schedule their appointments at least 1 month before the physicianrecommended follow-up interval via MyChart UCLA health portal, text messaging, or phone calls.

Need #2

- Insurance companies require prior authorization (PA) for high-risk dermatology medications such as biologics. To submit a PA, specific documentation, such as percent body surface area (BSA) is required.
- Delays occur when physicians do not document the BSA when prescribing biologics. The average time for approval when BSA is documented is 3-5 days, but inadequate documentation can delay this process by days or weeks.
- These delays come at a high cost and morbidity to patients and can lead to exacerbations of severe, acute, or chronic illnesses.
- UCLA Dermatology needs a means to ensure that specific information is documented before a high-risk medication is prescribed in order to reduce automatic rejections of prior authorizations.
- The proposed solution is to create hard stops in the system to ensure BSA is included.

Future Directions

Future Directions include quantifying the number of patients who are currently affected by existing protocols, implementing solutions, and quantifying subsequent improvements in care and patient outcomes.

Acknowledgements

I would like to thank Dr. Maryam Liaqat, Dr. Carolyn Goh, Dr. Li Zhou, David Zarrin and UCLA Sling Health for their continued support and mentorship.

Avoid exacerbations

