A pilot study of patient experience with an automated assessment tool for hereditary cancer risk

Lim-Harashima, J.[1], Bucheit, L.[1], Ready, K.[1], Hafen, B.[2], Bagley, H[2]
[1] Counsyl. South San Francisco, CA [2] Intermountain Healthcare. Salt Lake City, Utah

Intermountain Healthcare
Healing for life®

Counsyl
South San Francisco, California

Introduction

- Various tools exist to determine eligibility for genetic counseling and/or testing for hereditary cancer.
- Many tools are time-consuming, potentially contributing to low completion rates. Additionally, there are limited data on patient experience.
- Counsyl designed an automated patient assessment tool (APA) to efficiently collect family history, align family history to National Comprehensive Cancer Network (NCCN) guidelines, and provide basic education about hereditary cancer to facilitate the genetic counseling/testing process.
- We explored the patient experience of Counsyl's APA used in a large healthcare system.

Methods

Counsyl and Intermountain Healthcare partnered under IRB approval to pilot Counsyl's APA tool and collect patient experience data from 30 patients (Figure 1). Data analysis was completed using descriptive statistics and performed by Counsyl.

Figure 1. Study design

Patients consented by phone at time of appointment scheduling by Intermountain genetic counseling assistants

↓

Patients sent APA tool by email/text including prompts related to NCCN testing criteria

- How would you describe your ethnic background?
- Have you ever been diagnosed with cancer?
- Is there a history of cancer in your family?
- Has anyone else in your family been diagnosed with cancer?
- Have you had any colon polyps?
- Has a family member had colon polyps?
- Has anyone in your family tested positive for a cancer-related gene mutation?

↓

Patient completed short, anonymous feedback survey, received $10 Amazon gift card upon completion

- Please rate the usability of this tool? (1 = very difficult, 5 = very easy)
- How much time did you spend completing this tool? (integer)
- Did you contact family members to help you complete questions? (yes/no)
- How confident are you in the answers you provided about your family history? (1 = not confident, 5 = very confident)
- How likely are you to recommend this tool to your friends and family? (1 = not likely, 5 = very likely)

↓

Provider report sent to Intermountain Genetic Counseling Team, Survey results sent to Counsyl

↓

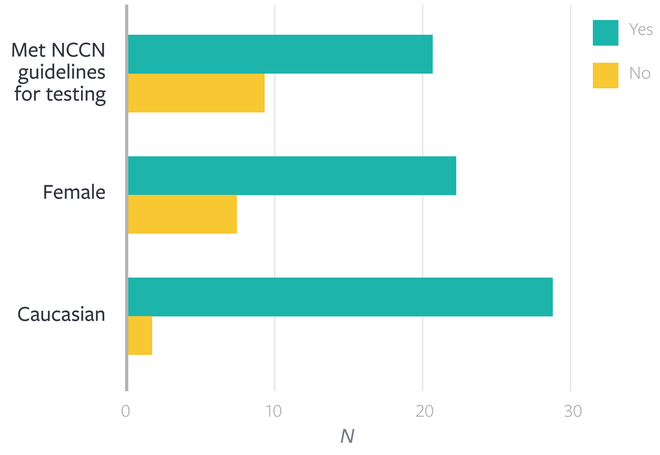
Patient attended Genetic Counseling Session

Results

Demographics

Thirty participants completed the survey with a mean age of 45 years (range 22-72) and characteristics in Figure 2.

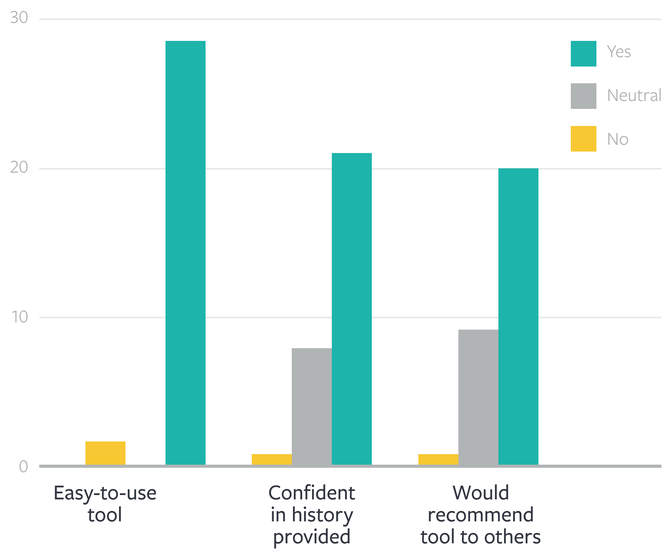
Figure 2. Participant demographics



Confidence in history, usability of tool

As indicated in Figure 3, participants reported this tool was easy to use. Additionally, they were generally confident in the answers they provided and were likely to recommend this tool to others.

Figure 3. Ease of usability, level of confidence in history reported, and likelihood to recommend tool to others



Patient experience

As indicated in Figure 3, participants reported this tool was easy to use. Additionally, they were generally confident in the answers they provided and were likely to recommend this tool to others.

73% completed the tool within 5 minutes.
The longest a participant reported completing the tool was 15-30 minutes.

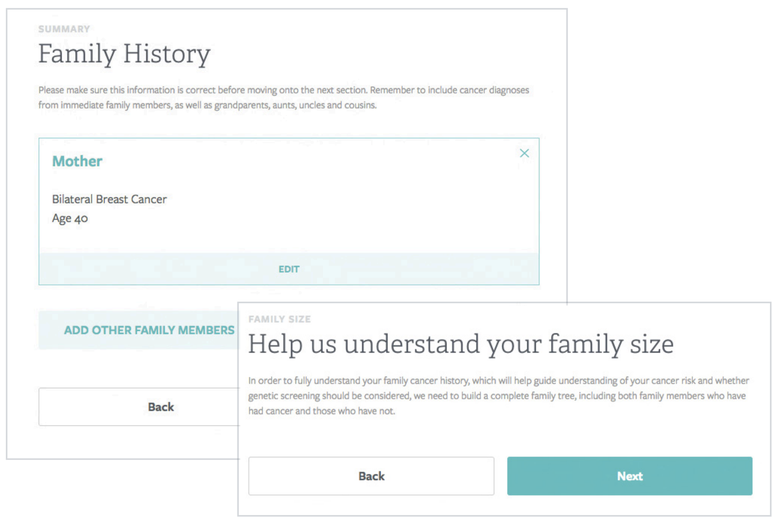
73% reported they did NOT contact family members while completing the assessment.
Of the 8 patients who took longer than 5 minutes, 5 (63%) contacted family members.

93% reported the tool was easy or very easy to use.
"I like how involved this is, it makes people feel like you care."
–Participant quote from feedback survey

Improvements from Experiences

Patient engagement and education

Participants left comments and pilot data presented here assisted the APA development team to implement updates to the tool including allowing for multiple diagnoses to be assigned to one relative, reporting of rare tumor types (neuroendocrine), reviewing family history they entered, and reporting the number of unaffected relatives in a family.



Conclusions

Patients confidently reported family history in a quick, easy-to-use manner, supporting Counsyl's APA as a patient-friendly way to collect cancer family history.

While further studies are needed, these data suggest an APA may assist with genetic service delivery and potentially facilitate the cancer genetic counseling/testing process.

View all posters and research at
research.counsyl.com