DECISION MAKING

original reports abstract

Mobile Clinical Trial Matching Technology in Medical Oncology Clinic: A Pilot Feasibility Study

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PURPOSE The internet is a common source of health information for patients and can be leveraged to provide patient-facing clinical trial information. This pilot study integrated an online prostate cancer clinical trial matching technology, called Trial Library (TL), in an academic medical oncology clinic from February 2019 to April 2021.

PATIENTS AND METHODS This is a single-arm interventional pilot study among patients with a known prostate cancer diagnosis. Participants were given access to TL before seeing a provider. The primary and secondary study end points were the overall satisfaction with TL and the proportion of participant-initiated clinical trial discussion with providers after exposure to TL, respectively. The null hypothesis or true satisfaction rate (acceptability) was tested against a one-sided alternative and was rejected if 29 or more satisfactions were observed.

RESULTS Among 272 patients approached, 66 provided informed consent to participate in the study. The mean age was 70.8 years (standard deviation = 7.9). The majority of participants were White (82%) and had metastases present at the time of enrollment (65%). The baseline clinical trial discussion rate ascertained via electronic medical record review was 28%. After accessing TL, a significantly larger proportion of participants (48.5%) discussed clinical trials during the clinic visit (P = .007), half of which were patient-initiated. The majority of participants indicated that TL increased their interest in clinical trials (68.2%); however, satisfaction/extreme satisfaction with the technology was 38%.

CONCLUSION Access to TL resulted in a significant increase in patient-initiated discussions regarding clinical trials and an increase in interest in clinical trial participation although these data do not address if this resulted in increased accrual to clinical trials. The satisfaction rate did not meet the target to reject the null hypothesis, suggesting the need for iterative design of patient-facing health information.

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INTRODUCTION

The internet is a common source of health information for patients with cancer and can be used to provide patient-centered clinical trial information.[1] Previous research evaluating YouTube content on prostate cancer (PCa) clinical trials, a commonly used and trusted source of online content in the United States,[1-3] was found to be of poor quality, containing commercial bias and lacking in racial/ethnic diversity in representation.[4] Clinician implicit bias has also been shown to contribute to inequities in which patients are offered clinical trial participation.[5,6] The underlying hypothesis of this pilot study is that access to reliable, online, and patient-facing health information regarding clinical trials will facilitate patient-initiated clinical trial discussions and contribute to promoting equity in access to clinical trials.

This pilot study integrated a mobile PCa clinical trial matching technology, called Trial Library (TL), in medical oncology clinic to promote patient-initiated clinical trial conversations. This pilot study sought to measure acceptability and preliminary estimates of efficacy of TL in eliciting patient-initiated clinical trial discussion regarding clinical trials.

PATIENTS AND METHODS

Recruitment Procedures

Participants were recruited for a single-arm interventional pilot study at an academic medical center to gain access to TL.[7] The content of TL has been previously reported.[8] TL is a clinical trial matching technology developed using human-centered design and involving feedback from a diverse population of men with advanced PCa (Figs 1A-C). TL is a bilingual

ASSOCIATED CONTENT

Appendix

Protocol

Author affiliations and support information (if applicable) appear at the end of this article.

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CONTEXT

Key Objective

To test the feasibility and efficacy of an integrated online prostate cancer clinical trial matching technology, called Trial Library (TL), in an academic medical oncology clinic on cancer clinical trial discussion.

Knowledge Generated

TL significantly influenced clinical trial discussion during the medical oncology clinic visit. The majority of participants indicated that TL increased their interest in clinical trials.

Relevance

The internet is a common source of health information for patients and can be leveraged to provide patient-facing clinical trial information.

(English and Spanish) platform that allows users to answer simple clinical questions that allow matching to PCa (therapeutic and nontherapeutic) clinical trials available at the University of California, San Francisco. TL is not integrated in the electronic health record. Eligible study participants had a known diagnosis of PCa, were English-speaking or

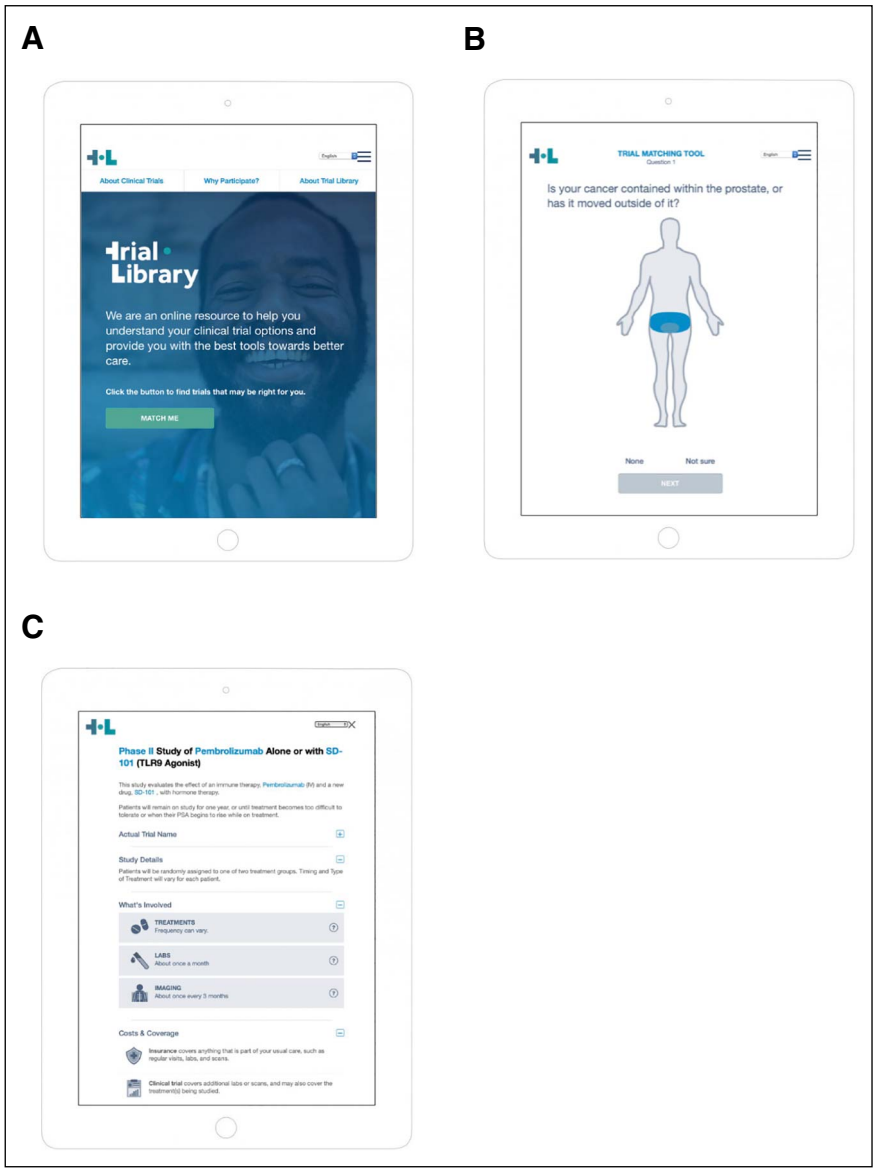

FIG 1. TL wireframes: (A) Trial Library home page, (B) clinical trial matching questions, and (C) clinical trial report. TL, Trial Library.

Spanish-speaking, and were scheduled for a new or follow-up clinical visit in genitourinary medical oncology clinic. Participants were recruited to the study from February 2019 to April 2021. Initially, all participants were recruited in-person by clinic research personnel at the time of check-in for a scheduled clinic visit. However, as a result of the COVID-19 pandemic, starting in June 2020, participants were approached and recruited virtually within 7 days before a telemedicine or an in-person clinic visit. All study procedures were approved by the University of California, San Francisco Institutional Review Board.

Access to TL

Participants who provided electronic informed consent were given access to TL with an URL and unique access code before seeing a provider, whereas participants who provided in-person informed consent were given an iPad with a unique access code to access TL while in the waiting room. Participants using TL in a face-to-face visit were given an opportunity to generate a list of matching clinical trials and a printout of the list before seeing a provider. Participants completed a single-item literacy screener[9] to identify adults in need of help with printed health material.

Follow-Up Procedures

All participants were electronically mailed a postvisit survey to measure acceptability and efficacy of TL within one hour after the clinical visit with a provider. For participants who did not complete the postvisit survey, an electronic reminder was sent weekly up to three times. All patient participants and a subset of provider participants were invited for a follow-up semistructured 15-minute interview with a clinical researcher to assess feasibility and acceptability with TL and a study investigator (Appendix 1).

Electronic Medical Record Review

Patient demographic and clinical characteristics were collected through electronic medical record review. In addition, a review was undertaken of the electronic medical record of 100 randomly selected patients with PCa seen in the same clinic, who were not already on a clinical trial or participating in this study. In June 2021, to determine the baseline percentage of patients who discuss clinical trials with providers, all data were inputted by a research assistant into Research Electronic Data Capture software (Vanderbilt University).[10,11]

Google Analytics

Google Analytics software was used to capture passive measures of engagement such as the number of unique user sessions on website, average length of session (min:sec), average number of page views, and bounce rate, or percentage of single-page sessions in which there was no interaction.

Study End Points

The primary end point of the pilot study was to measure the overall participant satisfaction rate with TL. The secondary end point was to measure the proportion of patient participants who report initiating a clinical trial discussion. Semistructured interviews with a subset of patient and provider participants were undertaken to provide contextual information about the primary end points.

Statistical Analysis

Demographic and clinical characteristics were summarized using descriptive statistics. The sample size was 66 participants,[8] with a reference satisfaction rate of 35% that was previously defined in the protocol manuscript.[8] The overall satisfaction rate reflects the proportion of participants who report some degree of satisfaction on a five-item Likert scale from extremely dissatisfied to extremely satisfied with TL. The null hypothesis or true satisfaction rate (acceptability) was tested against a one-sided alternative. The null hypothesis was rejected if 29 or more satisfactions are observed. Feasibility and acceptability were also assessed using semistructured interviews. Qualitative methods applied were previously reported in the protocol manuscript.[8]

RESULTS

Study Enrollment

As seen in the CONSORT diagram (Fig 2), 272 patients were approached to participate (n = 39, in-person; n = 233, electronic), of whom 84 (31%) participants provided informed consent. According to Google Analytics, 71 participants entered an access code to log into the TL website, of whom 66 completed the postvisit survey.

Patient Characteristics

As seen in Table 1, the mean age of participants was 70.8 (standard deviation [SD] = 7.9) years. A total of 54 (82%) participants were White, five (8%) were Asian/Pacific Islander, two (3.0%) were Black/African American, and five (8%) were others/unknown. The majority (n = 57, 86%) of participants had a bachelor's degree or higher and were Medicare-insured (n = 41, 62.1%), and only five (7.7%) had a positive single-item literacy screener. All study participants were English-speaking. The characteristics of patients included in the random baseline audit are reported in Appendix Table A1.

A substantial proportion (n = 24, 36.4%) of participants had multimorbidity (≥ 1 comorbidities). The mean time since PCa diagnosis was 3.86 years (SD = 4.87). The majority of participants had high-risk disease on the basis of the Gleason score ≥ 8 (n = 39, 59%) and metastatic disease (m = 43, 65%) at the time of study enrollment and were diagnosed in a community clinical setting (n = 47, 72%). A smaller subset of participants had metastatic androgen deprivation therapy–resistant PCa (n = 5, 7.6%). The mean prostate-specific antigen level at the time of enrollment was 14.2 ng/mL (SD = 48.4). Treatment history included radical prostatectomy (n = 30, 45.5%), definitive radiotherapy (n = 15, 22.7%), salvage/adjuvant radiation (n = 18, 27.3%), palliative radiation (n = 13, 19.7%), systemic chemotherapy (n = 3, 4.5%), radioligand therapy (n = 2, 3.0%), immunotherapy (n = 2, 3.0%), and hormone therapy (n = 49, 74.2).

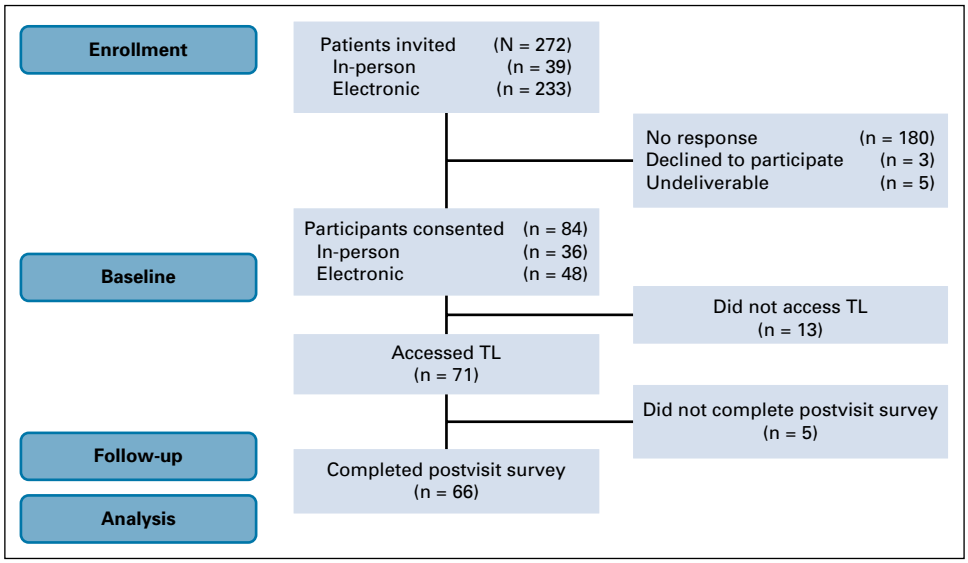

FIG 2. CONSORT diagram for TL in the in-person clinic pilot study. TL, Trial Library.

TL Efficacy and Engagement

As shown in Table 2, a total of 32 (48.5%) participants discussed clinical trials during the visit with an oncologist, compared with 28% of patients in the random sample of audited medical records ($P = .007$). Among participants who discussed clinical trials, 50% initiated the discussion. In the medical record audit of 100 usual care patients, 28 had documentation of a clinical trial discussion. The majority of participants indicated that TL increased their interest in clinical trial participation (n = 45, 68.2%) and would recommend it to a friend or family member (n = 37, 56.1%). Among respondents, 25 (37.9%) reported being satisfied/extremely satisfied with TL. A subset (n = 11, 16.7%) reported being extremely dissatisfied/dissatisfied with the technology.

TL Measures of Engagement

A total of 82 sessions on website were captured for the 66 participants. The average length of each session was 10 minutes and 7 seconds with an average number of 15.27 pages viewed per session and a 0% bounce rate or drop-off after viewing a single page.

Semistructured Interviews of Patients and Providers

A purposive sample of five patients (P) and three medical oncologists (MD) participated in semistructured interviews with a research coordinator to assess acceptability and feasibility of integration of TL in clinic. Four major themes arose from thematic analysis (Table 3): enriched patient-provider discussion, usefulness of platform, awareness of clinical trials, and suggestions for further refinement of TL. From the patient perspective, all participants reported that interacting TL introduced them to potential PCa clinical trials. One participant stated that it provided him "hope that there's other avenues, that there's other medicine or opportunities that will maybe prolong [his] life or help subside the side effects." Another participant noted that it "sparked [him] to ask a couple of questions that [he] wouldn't have otherwise asked about what these trials were on and what the drugs were being tested or the procedures." From the oncologist perspective, participants emphasized the usefulness of a patient-centered resource for clinical trials and how discussion of clinical trials may enhance the patient-provider experience. For example, one participant stated:

> "It helps me educate [patients] regarding the new trials that are available and why or why not that they could either consider the trial or not, depending on where they are in terms of their cancer therapy. It also enables the patients to have some kind of control on the cancer treatment that they're on."—MD (2003)

Participants offered several suggestions for improvement to TL including development of a provider-facing platform, additional filtering criteria to further tailor the list of clinical trials, and reconsideration of the timing of introduction to TL. Participants suggested that complexity and length of language on the clinical trial description page contributed to dissatisfaction.

DISCUSSION

This study demonstrates the utility of online patient-facing intervention to promote clinical trial discussions in an academic oncology practice. We observed that TL had a significant impact on frequency of clinical trial discussion during medical oncology visits for patients with advanced PCa and increased interest in clinical trial participation. Given the rapidly changing clinical trials environment during the COVID-19 pandemic, an analysis of the impact of use of this patient-facing tool on the number of accruals to clinical trials was not undertaken. Satisfaction rates among study participants were lower than that expected driven by difficulty of reading, or low readability, of the clinical trial report. This satisfaction rate did not meet the target to reject the null hypothesis, suggesting the need for iterative design, simplification of language, cultural tailoring, and frequent user engagement.

TABLE 1. Participant Characteristics

Characteristic	No. (%)
Age, years, mean (SD)	70.8 (7.9)
50-64	11 (16.7)
65-69	10 (15.2)
70-74	21 (31.8)
75-86	24 (36.4)
Race	
White	54 (81.8)
Asian or Pacific Islander	5 (7.6)
Black or African American	2 (3.0)
Native American or Alaska Native	0 (0.0)
Others	3 (4.5)
Unknown or declined	2 (3.0)
Ethnicity	
Hispanic or Latino	0 (0)
Not Hispanic or Latino	63 (95.5)
Unknown or declined	3 (4.5)
Education	
High school or GED	5 (7.6)
Vocational	1 (1.5)
Associate degree	3 (4.5)
Bachelor's degree	16 (24.2)
Master's degree	20 (30.3)
Professional or doctoral degree	21 (31.8)
Missing	0 (0)
Insurance type	
Medicare	41 (62.1)
Private	25 (37.9)
SILS[a]	
Negative	61 (92.4)
Positive	5 (7.7)
Comorbidities	
0	5 (7.6)
1-2	37 (56.1)
≥3	24 (36.4)
Body mass index (kg/m^2)	
< 25	26 (39.4)
≥25	40 (60.6)
Years since diagnosis, mean (SD)	3.86 (4.87)
Gleason grade	
Low risk (3 + 3)	7 (10.6)
Intermediate risk (3 + 4, 4 + 3)	19 (28.8)
High risk (4 + 4, 4 + 5, 5 + 4, 5 + 5)	39 (59.0)
Unknown	1 (1.5)
Location of cancer diagnosis	
Academic Cancer Center	18 (27.7)
Community	47 (72.3)
Others	1 (1.5)
Cancer stage	
Locally advanced	9 (13.6)
Biochemical recurrent	14 (21.2)
Metastatic hormone-sensitive	38 (57.6)
Metastatic hormone-resistant	5 (7.6)
Nonmetastatic hormone-resistant	0 (0.0)
PSA (ng/mL), mean (SD)	14.2 (48.4)
Received PSMA scan	30 (45.5)
Treatment history	
Surgery	
Primary tumor	30 (45.5)
Metastasis	0 (0)
Radiation	
Definitive	15 (22.7)
Salvage	17 (25.8)
Palliative	13 (19.7)
Adjuvant (after RP)	1 (1.5)
Systemic therapy	
Chemotherapy	3 (4.5)
Radioligand therapy	2 (3.0)
Immunotherapy	2 (3.0)
Hormone therapy	49 (74.2)
History of genetic testing (somatic)	10 (15.2)
History of genetic testing (germline)	25 (37.9)

(Continued in next column)

TABLE 1. Participant Characteristics (Continued)

Abbreviations: SD, standard deviation; SILS, single-item literacy screener.

[a]SILS is a single-item question intended to identify adults in need of help with printed health material where scores > 2 were positive, indicating limited reading ability or some difficulty with reading printed health-related material.

Although patient satisfaction is a commonly used measure in health care,[12] it is seldom used to evaluate patient education materials or online health information available to the patient consumer. A previous study evaluating PCa YouTube content more generally observed high degrees of frank misinformation.[13] Another analysis examining PCa clinical trial YouTube content classified most as poor quality,[4] suggesting a need for consumer feedback on available online information. A large subset of participants (n = 25, 37.9%) indicated being satisfied/very satisfied with TL; however, this did not meet the target to reject the null hypothesis. A subset of some participants (n = 11, 16.7%) reported being extremely dissatisfied/dissatisfied with the

TABLE 2. TL Efficacy and Engagement

Measures of Efficacy and Engagement	No. (%)
Did you discuss clinical trials with your health care provider after using TL?	
Yes	32 (48.5)
No	34 (51.5)
If yes, who initiated the discussion about clinical trials?	
Your provider	15 (50.0)
You (patient)	15 (50.0)
How likely is it that you would recommend TL to a friend or family member?	
Extremely likely/somewhat likely	37 (56.1)
Neither likely nor unlikely	15 (22.7)
Somewhat unlikely/extremely unlikely	12 (18.2)
Unknown	2 (3.0)
Overall, how satisfied or dissatisfied are you with TL?	
Extremely dissatisfied/dissatisfied	11 (16.7)
Neither satisfied nor dissatisfied	28 (42.4)
Satisfied/extremely satisfied	25 (37.9)
Unknown	2 (3.0)
Did your experience with TL increase your interest in participating in a clinical trial?	
Yes	45 (68.2)
No	20 (30.3)
Unknown	1 (1.5)
Passive measures of engagement (source: Google Analytics)	
New users	66
Sessions: the total instances that users are actively engaged with the website	82
Average length of each session (min:sec)	10:07
Average number of pages viewed during a session	15.27
Bounce rate: % of single-page sessions in which there was no interaction	0.00

Abbreviation: TL, Trial Library.

technology. On the basis of the semistructured interviews and comments in the postvisit survey, dissatisfaction was primarily driven by limited usability of the matching filter for cancer staging (Fig 1B), which generated patient confusion and required troubleshooting by the user as well as difficulty in reading and understanding the generated clinical trial report. These observations highlight the need for iterative feedback that informs human-centered design of patient-facing online technologies.

Despite challenges with the user interface and low overall satisfaction rate, we observed that 56% of participants would recommend TL and 69% reported increased interest in clinical trial participation after exposure to TL. These findings suggest that the intervention was still acceptable by the study population. Consistent with this observation, participants appeared strongly engaged with the website with a long average length session, viewing almost all the available content (57 pages: 24 content pages and 33 clinical trial pages) on TL.

The observation that half of study participants discussed clinical trials with a provider after exposure to TL is consistent with observations on the effect of online content made on a national level. According to the Pew Research Center, approximately 59% of US adults use the internet to access health information in the past year,[1,14] of whom about 35% attempt to make conclusions about their medical condition from online information. Importantly, half of adults who use the internet to access health information discuss findings with a clinician. These observations on a population level validate this study's observation that about half of study participants discussed clinical trials with their provider. Given that the current COVID-19 pandemic has led to an increased use of the internet[15] and social media platforms to access health-related information, the effect of this content on clinical encounters may continue to grow.

A major finding in this study is that user satisfaction was informed by the level of complexity and length of the generated clinical trial report. With this observation in mind, we measured the readability of content across the TL using a Flesch Kincaid Grade Level Formula[16] and observed that the home page was a ninth grade reading level and matching tool was sixth grade; however, the clinical trial content was 12th grade. Given that the target reading level for content to be accessible to the general public is at or below a fifth grade level,[17] this demonstrates that user satisfaction with online health information is linked to accessibility of content. Moreover, it also demonstrates that clinical trial descriptions are the largest challenge to translate into more accessible language and this will need to be a key focus for further development.

Although this study is innovative in embedding a mobile matching technology in a clinical setting, it has a few limitations worth noting. The participant sample was primarily English-speaking White, with high health literacy and high socioeconomic status, and therefore, future studies will need to intentionally oversample minority groups to ensure satisfaction and efficacy across populations. Moreover, this study did not measure the impact of the intervention on participant accrual to therapeutic clinical trials. It is also possible that contacting participants electronically about clinical trials influenced clinical trial discussion rates, and future studies will need to control for this effect. Moreover, another significant limitation of this design was that the historical control patient characteristics differed from the study participants. Moreover, the control comparison data also relied on the assumption that physicians consistently document clinical trial discussion. Given that there are likely variable practice patterns around

TABLE 3. TL Semistructured Interview Themes and Example Quotes

Final Coding Framework	Initial Coding Framework	Examples
Enriched patient-provider discussions	MD clinical trial discussion Correlation with MD recommendation No interruptions to clinical workflow Efficiency in clinic	"It actually, the explanation of it and everything is really what helped me later when I got with the doctor, because as we talked, she recommended another trial that's going on that fits me better than this trial."—P (010) "Actually I had another visit with the patient and went over the details of the trial and why they were or were not eligible. So the patient understood where they were in terms of their cancer therapy and it led to deeper understanding and yeah definitely patients have been reaching out if they have questions. And it really helps enhance our discussion because now they're empowered with this information and then it just leads to a much more enriching experience."—MD (2003)
Usefulness of platform	Ease of use Patient-centered Simplifies clinical trials for patients Explanation of terms	"It's made out pretty clearly the various clinical trials that were offered and brief description of each of them, which was fine. And I was able to go through the options and clearly identify the ones that did not apply to me and that were a couple that I could ask the doctor when I saw her and go from there."—P (006) "I think, number one, it helps disseminate the types of trials. Because sometimes it's hard to keep track of everything so it's a really convenient way to have all that information in one central place. And then I also think that, not only are patients looking for themselves, but I feel like there's quite a few patients that will even refer people that they know onto the site and say, "Oh, UCSF might have this interesting trial for you." So having a central place where patients can look up the studies that are ongoing I think is extremely useful, especially as they ... In more layman's terms and explains what's going on and what the purpose is of the trial, I think something that's real great."—MD (2002)
Awareness of clinical trials	Increased interest in clinical trial participation New opportunities	"I just thought it was interesting that there's new studies going on and different trials that involve patients. So I guess that's my main impression that it seems like a progressive approach, which I like, because I like to try different things myself and I'm interested in alternative treatments for cancer, that medical science hasn't run a lot of trials on too that may be unfolding."—P (007) "I think it's always good [for patients to be able to easily see what trials may be available], because if anything, it will just increase clinical trial participation because people might either indicate a willingness to be on a trial or prompt the question, 'have we thought about this trial?'"—MD (2001) "Well, when you brought up the point that there's clinical trials that I could participate in based on what I have, or what will be feasible for me and then talking to my doctor, just made it even more that I wanted to participate in the clinical trial even before I ever went to the hospital. However, speaking with her came in more reason to look forward to participating in some type of clinical trial."—P (004)
Suggestions for improvement	User feedback Support for further development Timing of introduction to TL Additional filters	"Since I was a new patient, I didn't know the extent of my disease. So there was no way I could meaningfully identify on the little character of where I thought the involvement was."—P (002) "I think it's good to have a provider-facing interface and a patient-facing interface. And this [current tool] would not be adequate, because a trial matching tool, it's maybe not the granularity provider ones, but it seems perfect for a patient and the language seems great."—MD (2001) "So I wonder if there was even an option, "These are the top recommended trials,." I don't know how we would determine that. And then maybe, "Click here for more trials." I feel like because patients, a lot of them would just start with the first ones they see and maybe it's too much information."—MD (2001)

Abbreviations: MD, medical oncologist; P, patient; TL, Trial Library.

documentation of these discussions in the medical record, this is a major limitation of this study. Future studies will examine the impact of the technology on the end point of clinical trial enrollment in a multisite fashion and with a randomized trial design to address confounding. This study also encountered challenges with participant recruitment after the start of the current COVID-19 pandemic. The participation rate decreased from 92% during in-person recruitment to 21% for virtual recruitment, highlighting the limitations and costs associated with virtual means of recruitment.

In conclusion, this study observed a high rate of clinical trial discussions (48.5% intervention *v* 28% baseline, $P = .007$), half of which were patient-initiated discussions regarding clinical trials after receiving access to TL. We also observed an increased interest in clinical trial participation among study participants; however, the satisfaction rate was 38% because of user interface challenges and language accessibility. Future studies will adapt the user interface, simplify language, and evaluate the impact of TL on clinical trial accruals across more diverse populations.

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APPENDIX 1. TRIAL LIBRARY SEMISTRUCTURED INTERVIEW QUESTIONS

Trial Library Participant

1. Tell me about your experience using the Trial Library website?
   a. What do you remember about the Trial Library website?
   b. What stood out to you about the Trial Library?
   c. How useful was this resource for you?
   d. What about this resource was helpful for you?
   e. What about this resource was not helpful for you?
2. What did you learn from using the Trial Library website?
   a. Can you tell me more about that?
   b. How did the Trial Library website influence your understanding of clinical trials?
   c. How did the Trial Library website influence your willingness to participate in clinical trials?
3. How did using the Trial Library website influence your visit with your health care provider?
   a. If this patient indicated that they initiated on their postvisit survey that they asked their provider about clinical trial participation:
      i. Did you bring up the possibility of participating in a clinical trial during your visit with your provider?
      ii. How did it feel to bring this up with your provider?
      iii. Can you please tell me more about that?
   b. Did you discuss Trial Library with your provider? If so, can you please tell me more about that discussion?
   c. How did your experience using the Trial Library in the waiting room influence the discussions you had with your provider during your visit?
4. How did using the Trial Library website influence your interest in participating in clinical trials?
   a. Tell me more about this…(why or why not?)

Medical Oncologist

1. Tell me about your experience having the Trial Library pilot study take place in your clinic?
   a. How did the presence of this study influence your day in the clinic?
   b. Did the use of Trial Library in your clinic introduce any frustrations into your workflow or your patient interactions? If so, can you please elaborate?
2. What is the clinical value of that Trial Library resource?
   a. What about the Trial Library is helpful for patients?
   b. What about the Trial Library is helpful for providers?
   c. What about this resource could be improved?
3. How did using the Trial Library website influence your visit with your patients?
   a. Did you discuss Trial Library with any of your patients? If so, can you please tell me more about that discussion?
   b. If you can recall one specific time when you discussed the Trial Library with a patient, could you tell me more about that experience?
   c. How do you feel patients responded to this resource?

TABLE A1. Patient Characteristics of Randomly Audited Patient Charts (n = 100)

Characteristic	No. (%)
Primary language	
Chinese	2 (2.0)
English	95 (95.0)
Russian	3 (3.0)
Race	
White	77 (77.0)
Asian or Pacific Islander	8 (8.0)
Black or African American	8 (8.0)
Others	7 (7.0)
Ethnicity	
Hispanic or Latino	3 (3.0)
Not Hispanic or Latino	90 (90.0)
Unknown or declined	7 (7.0)
Disease stage	
Localized/locally advanced castrate-sensitive prostate cancer	8 (8.0)
Nonmetastatic castrate-sensitive prostate cancer	13 (13.0)
Biochemical recurrent castrate-resistant prostate cancer	3 (3.0)
Metastatic castrate-sensitive prostate cancer	57 (57.0)
Metastatic castrate-resistant prostate cancer	17 (17.0)
Metastatic castrate-resistant prostate cancer	2 (2.0)