# Portrait of the clinical trial participant 

What motivates clinical trial volunteers to take part?
antidote I/f

## In collaboration with:


(l) American Kidney Fund ${ }^{\circ}$

## healthline

Melan $\odot$ ma<br>Research Alliance



## Introduction

## Every time we use blood pressure medication, get an allergy shot, or take many other treatments that improve our daily lives, we have clinical trial volunteers to thank.

But considering how many approved drugs many of us rely on every day, most people haven't ever participated in research - and may not even personally know anyone who has. For example, only 8\% of cancer patients participate in research, and clinical trials often languish without enough volunteers. ${ }^{1}$ In some ways, volunteers are a rare breed. They're also critical to bringing us closer to more and better treatment options. That's why we asked one more favor of former volunteers: To help us understand their motivations so we can find better ways to engage patients in research.

In 2018, Antidote worked with eight leading health organizations - American Kidney Fund, Allergy \& Asthma Network, Healthline, JDRF,

Lung Cancer Alliance (now $\mathrm{GO}_{2}$ Foundation for Lung Cancer), Lupus Research Alliance, Melanoma Research Alliance, and Multiple Sclerosis Association of America - to survey nearly 4,000 patients and caregivers about their attitudes towards clinical research. The initial survey work and analysis were conducted in partnership with SCORR Marketing.

Of the patients we surveyed, 1,033 had participated in research. Based on our findings, we're able to paint a portrait of the clinical trial participant: What matters most in their decision-making process, what demographic factors they might have in common, and what factors set them apart from those who have never participated.

Highlights of our findings (see table 1) include:

- In our prior survey-based whitepapers, we shared that patients prefer to hear about research opportunities from their doctors. But for patients who have already participated in research, we found that taking their doctor's recommendation was not the reason most patients participated. This held true across conditions, with one exception: 83.5\% of oncology patients say that their doctor's recommendation was the reason they took part.
- "I joined to extend my own life" is a major reason oncology patients participate in research: 55\% said this was "the major reason" for participating, compared with just $8.8 \%$ of chronic/acute patients and $11.1 \%$ of chronic disease patients.
- In total, 33\% of respondents said that "I want to improve my quality of life" was the major reason they chose to participate in research, and $34 \%$ of
those surveyed said that wanting to help patients who come after them was the major reason they participated in research.
- Our findings suggest that improving quality of life is one of the key reasons patients participate in research, and should be included as an endpoint in clinical trials.

While the percentage of people who have participated in clinical research may be small, there's plenty to glean from their experiences - both as a whole and on the individual condition level. In this whitepaper, we'll share details on the factors that motivate patients to join trials, and the aspects of decision-making that matter less. In our previous whitepapers, we've offered insights into how patients think about clinical trials, regardless of whether they've ever participated in clinical trials themselves. The patients in this whitepaper took that significant step and signed up for research - we'll help you understand why.

Table 1: Overall responses re: motivations for participating:

|  | No, this wasn't the reason |  | Yes, but this wasn't really why/it was a small factor |  | This was one of the major reasons |  | This was the major reason |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Race | Count | Freq. | Count | Freq. | Count | Freq. | Count | Freq. |
| I joined to extend my own life | 393 | 38.0\% | 220 | 21.3\% | 211 | 20.4\% | 209 | 20.2\% |
| I was following my doctor's recommendation | 502 | 48.6\% | 198 | 19.2\% | 195 | 18.9\% | 138 | 13.4\% |
| I wanted to help future patients who come after me | 58 | 5.6\% | 202 | 19.6\% | 424 | 41.1\% | 349 | 33.8\% |
| I wanted to improve my quality of life | 124 | 12.0\% | 194 | 18.8\% | 374 | 36.2\% | 341 | 33.0\% |
| I wanted to receive the best care possible | 154 | 14.9\% | 234 | 22.7\% | 328 | 31.8\% | 317 | 30.7\% |
| I wanted to receive the most up-to-date therapies without the high expense | 247 | 23.9\% | 245 | 23.7\% | 285 | 27.6\% | 256 | 24.8\% |



## Methods and respondent profile

Nearly 4,000 individuals ( $n=3,942$ ) responded to an online survey between June 18, 2018, and August 21, 2018. The survey sample included individuals living with various conditions in the U.S. Survey participants were recruited through leading patient advocacy organizations.

Overall, the sample we collected was predominantly female and non-Hispanic white, though multiple races were represented. We compared answers from white versus non-white (including multi-racial) respondents. In addition, we collapsed the categories of conditions into (1) oncology, (2) chronic with acute onset of symptoms, and (3) chronic (see table 2).

We did this after noticing trends in responses by condition type and to better assess the relationship between condition and demographic characteristics on patients' willingness to participate in different types of trials.

We chose to ask the question of sex assigned at birth rather than gender as this is frequently the sex/gender assessment used to screen individuals for trial eligibility. Differences in education level or income level among groups were not statistically significant. As mentioned above, around a quarter of respondents ( $n=1,033$ ) had participated in a clinical trial.


Relative to those in our survey who have not participated in research, trial participants had higher levels of education, were of higher incomes, and were more likely to be male (see table 3). Oncology patients were also more represented among participants than non-participants.

Age, race, and income are also significantly associated with condition - another detail critical to our analysis. Oncology respondents were nearly twice as likely to report earning more than \$100,000 compared with those with chronic conditions. Those answering for oncology were also more likely to be white, and older.

While our sample is relatively small, our findings are consistent with other research conducted on what factors make patients more likely to participate in clinical trials. For example, a study published in JAMA in 2016 found that cancer patients earning less than \$50,000 were $32 \%$ less likely to participate in a clinical trial compared with those who earn more. ${ }^{2}$

It's also important to note that a layer of selection bias exists in this survey: respondents answered a 60-minute largely un-incentivized survey (some partners entered respondents into a gift card raffle). Both those who have and those who haven't taken part in research are particularly engaged in the topic of research participation.

## Table 2: Re-categorized condition areas

| Oncology | Chronic with Acute Onset | Chronic |
| :--- | :--- | :--- |
| Lung cancer <br> Melanoma | Asthma/allergy <br> Gastro | Lupus <br> Kidney disease <br> Multiple sclerosis <br> Type 1 diabetes |

Table 3: Counts and frequencies of demographic categories of the sample ( $n=1033$ )

|  | Clinical trial participants |  | Non-participants |  |
| :---: | :---: | :---: | :---: | :---: |
| Condition | Count | Freq. | Count | Freq. |
| Oncology | 224 | 21.7\% | 471 | 16.2\%** |
| Chronic/Acute | 215 | 20.8\% | 598 | 20.6\%** |
| Chronic | 594 | 57.5\% | 1836 | 63.2\%** |
| Age |  |  |  |  |
| 54 or under | 473 | 45.8\% | 1480 | 51.0\%** |
| 55+ | 551 | 53.3\% | 1413 | 48.6\%** |
| Prefer not to answer | 9 | 0.9\% | 12 | 0.4\% |
| Education |  |  |  |  |
| Some high school/high school diploma | 96 | 9.3\% | 383 | 13.2\%** |
| Some college | 262 | 25.4\% | 857 | 29.5\%** |
| College degree | 328 | 31.8\% | 917 | 31.6\% |
| More than college | 340 | 32.9\% | 694 | 23.9\%** |
| Prefer not to answer | 7 | 0.7\% | 54 | 1.9\%** |

[^0]Table 3: Continued

|  | Clinical trial participants |  | Non-participants |  |
| :---: | :---: | :---: | :---: | :---: |
| Race/Ethnicity | Count | Freq. | Count | Freq. |
| Non-white | 142 | 13.8\% | 453 | 15.2\% |
| White | 891 | 86.3\% | 2452 | 84.4\% |
| Hispanic | 42 | 4.0\% | 144 | 5.0\% |
| Non-Hispanic | 969 | 93.8\% | 2700 | 92.9\% |
| Sex |  |  |  |  |
| Male | 235 | 22.8\% | 554 | 19.1\%** |
| Female | 794 | 76.9\% | 2337 | 80.5\%** |
| Prefer not to answer | 4 | 0.4\% | 14 | 0.5\% |
| Income |  |  |  |  |
| Less than \$50,000 | 334 | 32.3\% | 1127 | 38.8\%** |
| \$50,000-\$99,999 | 290 | 28.1\% | 795 | 27.4\%** |
| \$100,000+ | 227 | 22.0\% | 516 | 17.8\%** |
| Prefer not to answer | 182 | 17.6\% | 467 | 16.1\%** |

*p<. 05 ** $\mathrm{p}<.01$

## "I was following my doctor's recommendation"

In previous whitepapers, we've noted that patients prefer to hear about clinical trials from their doctors. But we also know that most doctors, particularly primary care physicians, don't have time to talk with their patients about clinical research. Close to $70 \%$ of the public has never or rarely considered clinical trials as an option when discussing treatment or medication options with their doctor, according to a 2017 survey conducted by CISCRP. ${ }^{3}$

This trend also played out in our findings: Only 13.4\% of respondents across condition areas said that following their doctor's recommendation was the major reason they took part (see table 4 in the appendix). In total, $48.6 \%$ of respondents said "no, this wasn't the reason" regarding their doctor's recommendation.

Though not statistically significant in our sample, nonwhite respondents were least likely to say that following their doctor's recommendation was a major factor in their trial participation. This trend makes sense in light of prior research that has found that non-white patients are just as interested, if not more so, in taking part in trials, but are less likely to be invited to participate. ${ }^{4}$

This trend held true across condition areas, with one exception: Those living with cancer. Oncology patients were more likely to report that following their doctor's recommendation was "the major reason" or "one of the major reasons" they participated in research - by a wide margin. Only $16.5 \%$ of oncology patients said that their doctor's recommendation was not the reason they took part.

Clearly, a doctor's recommendation can make a significant impact on an oncology patient's willingness to participate in research. At the same time, the fact that only $8 \%$ of cancer patients take part in clinical trials each year is a sign that not enough of these doctor-patient conversations are taking place. ${ }^{5}$

When researchers asked primary care physicians and oncologists about factors that prevent them from discussing research opportunities with patients, a few trends emerged: Lack of staff to support patient referrals to clinical trials was the most-cited structural barrier, and lack of awareness of clinical trials was the most common perceived barrier. ${ }^{6}$

Providing support for busy practices, along with information about available trials, could help facilitate these important conversations between patients and doctors regarding research. And while a doctor's opinion may be particularly important for oncology patients, our prior research has found that patients across condition areas are interested in having these conversations.


## "I joined to extend my own life"

In our survey, we asked whether the reason "I joined to extend my own life" rang true for survey takers. We found that this was the most important to oncology patients - $55 \%$ said this was "the major reason" for participating, compared with just $8.8 \%$ of chronic/acute patients and $11.1 \%$ of chronic disease patients (see table 5 in the appendix). Of course, cancer is more likely to be life threatening than many other conditions, and overall survival is a standard endpoint in cancer clinical trials. ${ }^{7}$

Other findings in regards to this question were perhaps more surprising. Women were much less likely to say they joined a trial to extend their own life - 40\% reported "this was not the reason," compared with $29.4 \%$ of men.

People earning more than \$100,000 were also more likely to say that extending their own life was a major reason for participating. Neither of these findings were statistically significant in sub-analyses, but both warrant further research.

While there is debate around whether survival is the only valuable endpoint, and if quality-of-life measures should also be included more often, it's clear that extending life is a top priority for cancer patients. Our findings suggest that it is rarely the main motivator for those living with other conditions, however, and may also be less of an incentive for women considering participation, and more of one for those in higher income brackets.

55\% of oncology patients said this was "the major reason" for participating compared with just 8.8\% of chronic/acute patients

## "I want to improve my quality of life" and other measures of care

In our survey, we asked how much three different measures of care mattered to patients: Improving quality of life, receiving the best care, and receiving quality care at an affordable cost.

Across condition areas and demographics, survey respondents said that the desire to improve their quality of life was a significant reason for participating. In total, $33 \%$ of respondents said that "I want to improve my quality of life" was the major reason they chose to participate in research (see table 6 in the appendix). Only $12 \%$ of respondents responded "No, this wasn't the reason" in regards to quality of life, underlining its importance.

Quality-of-life measures are subjective, and can be difficult to capture. Our findings suggest that improving quality of life is one of the key reasons patients participate in research, and should be included as an endpoint in clinical trials.

The growth of electronic patient-reported outcomes (ePRO) gives researchers the opportunity to capture measures like mood and pain level in the moment. For example, two main therapies, pazopanib and sunitinib, are used to treat metastatic renal cell carcinoma (mRCC). ${ }^{8}$ They're equally effective in terms of survival, but have frequent adverse events, making healthrelated quality of life the deciding factor for clinicians when selecting a treatment option. Researchers explored whether ePRO instruments could improve the patient-doctor conversation and lead to better quality-of-life outcomes for patients diagnosed with mRCC.

Patients may be interested in participating in this kind of research, and certainly benefit from its outcomes.

In our survey, when asked why they participated in a clinical trial, cancer patients were also the most likely to say "I wanted to receive the best care possible" (see table 7 in the appendix). This response may encapsulate both a desire for improved quality of life and a longer life. For cancer patients in particular, clinical trials are seen as one of the best places to receive the highestquality care available. Those 55 and older were also more likely to say this option was important to them.

As for receiving quality care at an affordable cost, while this was less of a priority than other reasons for most survey participants, around $25 \%$ of respondents said this was the major reason for participating (see table 8 in the appendix). Those earning less than \$50,000 were slightly more likely to say this was the major reason for participating, though those earning more than \$100,000 were slightly more likely to say it was "a major reason" to participate. Overall, receiving high-quality care at a low cost in a clinical trial appeals rather equally to those across the socioeconomic spectrum.

> For cancer patients in particular, clinical trials are seen as one of the best places to receive the highest-quality care available

## "I wanted to help future patients who came after me"

As prior research has found, altruism is the top driver of clinical trial participation. In our survey, as well, helping future patients was the most popular reason for participation: 34\% of those surveyed chose it (see table 9 in the appendix). ${ }^{9}$ Those living with chronic conditions in particular were the most likely to choose this option as the major reason they participated.

As we learn more about the genetic factors behind various conditions, patients may also be more interested in moving research forward for their families.

Patrick Gee, a patient advocate for Antidote's partner the American Kidney Fund, is participating in an observational trial seeking to learn more about how an APOL1 gene mutation functions in people of African descent. Those with two copies of the gene are at an increased risk of developing chronic kidney disease. The gene has also been connected with lupus, which his daughter has.

"I know that whatever I find out, I just want to help the next generation," Gee told Antidote.

Clinical trial recruitment campaigns may focus on altruism in outreach materials to connect with patients. In terms of trial design, it's also critical to reward and respect patients who participate out of a sense of altruism. Patients are very interested in seeing the results of the studies they participate in: For example, $91 \%$ of the public considers it very important to receive a study summary after participation, but only $53 \%$ of those who participated received one. ${ }^{10}$

Following up with patients after a trial, whether it's with a thank-you note, information on the published study results, or details on the next phase of the trial, helps close the loop with patients and can help them feel positive about the study - and encourage others to participate. As it stands, $91 \%$ of clinical trial participants would "probably" or "definitely" recommend participation to friends or family members, according to CISCRP research. ${ }^{11}$ Paying it forward to patients can help amplify the value of research participation through word of mouth, and shows appreciation for the critical role clinical trial participants play.

## Conclusion

As we work toward engaging more diverse participants in research, there's much to learn from those who have already taken part in research.

While we noticed some demographic trends and themes, these are only broad brushstrokes. Regardless of demographic backgrounds, participants in our survey were most motivated by the impulse to make the world better for those who come next. Those who participate in research understand the risks involved - they know the trial won't necessarily be successful, though they hope
it will improve their quality of life. But they also know that regardless of the outcome, their participation helps move research forward for everyone living with their condition.

As barriers to participation are reduced or eliminated, it's still important to drive home the core reason participants choose to take part. By keeping this noble purpose in mind, we can create clinical trial experiences that are comfortable and engaging for patients, and respectful of the priceless commitment they make.

## To learn more about Antidote and our work, please get in touch

[^1]Appendix

Table 4: Demographic breakdown to responses: I was following my doctor's recommendation

|  | No, this wasn't the reason |  | Yes, but this wasn't really why/it was a small factor |  | This was one of the major reasons |  | This was the major reason |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Count | Freq. | Count | Freq. | Count | Freq. | Count | Freq. |
| Overall sample: | 502 | 48.6\% | 198 | 19.2\% | 195 | 18.9\% | 138 | 13.4\% |
| Condition |  |  |  |  |  |  |  |  |
| Oncology | 37 | 16.5\%** | 36 | 16.1\%** | 87 | 38.8\%** | 64 | 28.6\%** |
| Chronic/Acute | 147 | 68.4\%** | 25 | 11.6\%** | 28 | 13.0\%** | 15 | 7.0\%** |
| Chronic | 318 | 53.5\%** | 137 | 23.1\%** | 80 | 13.5\%** | 59 | 9.9\%** |
| Age |  |  |  |  |  |  |  |  |
| 54 or under | 237 | 50.1\% | 105 | 22.2\% | 78 | 16.5\% | 53 | 11.2\% |
| 55+ | 260 | 47.2\% | 91 | 16.5\% | 115 | 20.9\% | 85 | 15.4\% |
| Prefer not to answer | 5 | 55.6\% | 2 | 22.2\% | 2 | 22.2\% | 0 | 0.0\% |
| Education |  |  |  |  |  |  |  |  |
| Some high school/high school diploma | 45 | 46.9\%* | 15 | 15.6\%* | 19 | 19.8\%* | 17 | 17.7\%* |
| Some college | 116 | 44.3\%* | 54 | 20.6\%* | 47 | 17.9\%* | 45 | 17.2\%* |
| College degree | 172 | 52.4\%* | 67 | 20.4\%* | 48 | 14.6\%* | 41 | 12.5\%* |
| More than college | 167 | 49.1\%* | 59 | 17.4\%* | 79 | 23.2\%* | 35 | 10.3\%* |
| Prefer not to answer | 2 | 28.6\%* | 3 | 42.9\%* | 2 | 28.6\%* | 0 | 0.0\%* |
| Race/Ethnicity |  |  |  |  |  |  |  |  |
| Non-white | 74 | 52.1\% | 32 | 22.5\% | 21 | 14.8\% | 15 | 10.6\% |
| White | 428 | 48.0\% | 166 | 18.6\% | 174 | 19.5\% | 123 | 13.8\% |
| Hispanic | 23 | 54.8\% | 3 | 7.1\% | 10 | 23.8\% | 6 | 14.3\% |
| Non-Hispanic | 468 | 48.3\% | 191 | 19.7\% | 182 | 18.8\% | 128 | 13.2\% |

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\text { *p<.05 ** } p<.01
$$

Table 4: Continued

|  | No, this wasn't the reason |  | Yes, but this wasn't really why/it was a small factor |  | This was one of the major reasons |  | This was the major reason |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Sex |  |  |  |  |  |  |  |  |
| Male | 104 | 44.3\% | 46 | 19.6\% | 47 | 20.0\% | 38 | 16.2\% |
| Female | 398 | 50.1\% | 151 | 19.0\% | 146 | 18.4\% | 99 | 12.5\% |
| Prefer not to answer | 0 | 0.0\% | 1 | 25.0\% | 2 | 50.0\% | 1 | 25.0\% |
| Income |  |  |  |  |  |  |  |  |
| Less than \$50,000 | 165 | 49.4\% | 74 | 22.2\% | 47 | 14.1\% | 48 | 14.4\% |
| \$50,000-\$99,999 | 152 | 52.4\% | 50 | 17.2\% | 55 | 19.0\% | 33 | 11.4\% |
| \$100,000+ | 104 | 45.8\% | 39 | 17.2\% | 57 | 25.1\% | 27 | 11.9\% |
| Prefer not to answer | 81 | 44.5\% | 35 | 19.2\% | 36 | 19.8\% | 30 | 16.5\% |

[^2]Table 5: Demographic breakdown to responses: I joined to extend my own life.

|  | No, this wasn't the reason |  | Yes, but this wasn't really why/it was a small factor |  | This was one of the major reasons |  | This was the major reason |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Count | Freq. | Count | Freq. | Count | Freq. | Count | Freq. |
| Overall sample: | 393 | 38.0\% | 230 | 21.3\% | 211 | 20.4\% | 209 | 20.2\% |
| Condition |  |  |  |  |  |  |  |  |
| Oncology | 25 | 11.2\%** | 16 | 7.1\%** | 59 | 26.3\%** | 124 | 55.4\%** |
| Chronic/Acute | 118 | 54.9\%** | 37 | 17.2\%** | 41 | 19.1\%** | 19 | 8.8\%** |
| Chronic | 250 | 42.1\%** | 167 | 28.1\%** | 111 | 18.7\%** | 66 | 11.1\%** |
| Age |  |  |  |  |  |  |  |  |
| 54 or under | 205 | 32.4\%* | 101 | 21.4\%* | 88 | 18.6\%* | 79 | 16.7\%* |
| 55+ | 184 | 33.4\%* | 118 | 21.4\%* | 122 | 22.1\%* | 79 | 16.7\%* |
| Prefer not to answer | 4 | 44.4\%* | 1 | 11.1\%* | 1 | 11.1\%* | 3 | 33.3\%* |
| Education |  |  |  |  |  |  |  |  |
| Some high school/high school diploma | 34 | 35.4\% | 19 | 19.8\% | 22 | 22.9\% | 21 | 21.9\% |
| Some college | 92 | 35.1\% | 55 | 21.0\% | 51 | 19.5\% | 64 | 24.4\% |
| College degree | 138 | 42.1\% | 79 | 24.1\% | 55 | 16.8\% | 56 | 17.1\% |
| More than college | 127 | 37.4\% | 66 | 19.4\% | 82 | 24.1\% | 65 | 19.1\% |
| Prefer not to answer | 2 | 28.6\% | 1 | 14.3\% | 1 | 14.3\% | 3 | 42.9\% |
| Race/Ethnicity |  |  |  |  |  |  |  |  |
| Non-white | 50 | 35.2\% | 28 | 19.7\% | 37 | 26.1\% | 27 | 19.0\% |
| White | 343 | 38.5\% | 192 | 21.6\% | 174 | 19.5\% | 182 | 20.4\% |
| Hispanic | 12 | 28.6\% | 5 | 11.9\% | 14 | 33.3\% | 11 | 26.2\% |
| Non-Hispanic | 376 | 38.8\% | 210 | 21.7\% | 193 | 19.9\% | 190 | 19.6\% |

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* p<.05 \text { ** } p<.01
$$

Table 5: Continued

|  | No, this wasn't the reason |  | Yes, but this wasn't really why/it was a small factor |  | This was one of the major reasons |  | This was the major reason |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Sex |  |  |  |  |  |  |  |  |
| Male | 69 | 29.4\% | 45 | 19.2\% | 57 | 24.3\% | 64 | 27.2\% |
| Female | 324 | 40.8\% | 173 | 21.8\% | 154 | 19.4\% | 143 | 18.0\% |
| Prefer not to answer | 0 | 0.0\% | 2 | 50.0\% | 0 | 0.0\% | 2 | 50.0\% |
| Income |  |  |  |  |  |  |  |  |
| Less than \$50,000 | 120 | 35.9\% | 82 | 24.6\% | 80 | 24.0\% | 52 | 15.6\% |
| \$50,000-\$99,999 | 122 | 42.1\% | 58 | 20.0\% | 51 | 17.6\% | 59 | 20.3\% |
| \$100,000+ | 83 | 26.6\% | 42 | 18.5\% | 45 | 19.8\% | 57 | 25.1\% |
| Prefer not to answer | 68 | 37.4\% | 38 | 20.9\% | 35 | 19.2\% | 41 | 22.5\% |

[^3]Table 6: Demographic breakdown to responses: I wanted to improve my quality of life.

|  | No, this wasn't the reason |  | Yes, but this wasn't really why/it was a small factor |  | This was one of the major reasons |  | This was the major reason |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Count | Freq. | Count | Freq. | Count | Freq. | Count | Freq. |
| Overall sample: | 124 | 12.0\% | 194 | 18.8\% | 374 | 36.2\% | 341 | 33\% |
| Condition |  |  |  |  |  |  |  |  |
| Oncology | 24 | 10.7\%* | 29 | 13.0\%* | 93 | 41.5\%* | 78 | 34.8\%* |
| Chronic/Acute | 25 | 11.6\%* | 32 | 14.9\%* | 81 | 37.7\%* | 77 | 35.8\%* |
| Chronic | 75 | 12.6\%* | 194 | 18.8\%* | 374 | 36.2\%* | 341 | 33.0\%* |
| Age |  |  |  |  |  |  |  |  |
| 54 or under | 64 | 13.5\% | 100 | 21.1\% | 159 | 33.6\% | 150 | 31.7\% |
| 55+ | 57 | 10.3\% | 94 | 17.1\% | 213 | 38.7\% | 187 | 33.9\% |
| Prefer not to answer | 3 | 33.3\% | 0 | 0.0\% | 2 | 22.2\% | 4 | 44.4\% |
| Education |  |  |  |  |  |  |  |  |
| Some high school/high school diploma | 11 | 11.5\%* | 15 | 15.6\%* | 28 | 29.2\%* | 42 | 43.8\%* |
| Some college | 27 | 10.3\%* | 39 | 14.9\%* | 101 | 38.6\%* | 95 | 36.3\%* |
| College degree | 39 | 11.9\%* | 76 | 23.2\%* | 105 | 32.0\%* | 108 | 33.0\%* |
| More than college | 45 | 13.2\%* | 63 | 18.5\%* | 139 | 40.9\%* | 93 | 27.4\%* |
| Prefer not to answer | 2 | 28.6\%* | 1 | 14.3\%* | 1 | 14.3\%* | 3 | 42.9\%* |
| Race/Ethnicity |  |  |  |  |  |  |  |  |
| Non-white | 19 | 13.4\% | 19 | 13.4\% | 54 | 38.0\% | 50 | 35.2\% |
| White | 105 | 11.8\% | 175 | 19.6\% | 320 | 35.9\% | 291 | 32.7\% |
| Hispanic | 4 | 9.5\% | 8 | 19.1\% | 13 | 31.0\% | 17 | 40.5\% |
| Non-Hispanic | 118 | 12.2\% | 183 | 18.9\% | 351 | 36.2\% | 317 | 32.7\% |

$$
\text { *p<.05 ** } p<.01
$$

Table 6: Continued

|  | No, this wasn't the reason |  | Yes, but this wasn't really why/it was a small factor |  | This was one of the major reasons |  | This was the major reason |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Sex |  |  |  |  |  |  |  |  |
| Male | 26 | 11.1\% | 43 | 18.3\% | 92 | 39.2\% | 74 | 31.5\% |
| Female | 97 | 12.2\% | 151 | 19.0\% | 281 | 35.4\% | 265 | 33.4\% |
| Prefer not to answer | 1 | 25.0\% | 0 | 0.0\% | 1 | 25.0\% | 2 | 50.0\% |
| Income |  |  |  |  |  |  |  |  |
| Less than \$50,000 | 35 | 10.5\%* | 58 | 17.4\%* | 116 | 34.7\%* | 125 | 37.4\%* |
| \$50,000-\$99,999 | 40 | 13.8\%* | 52 | 17.9\%* | 111 | 38.3\%* | 87 | 30.0\%* |
| \$100,000+ | 20 | 8.8\%* | 58 | 25.6\%* | 80 | 35.2\%* | 69 | 30.4\%* |
| Prefer not to answer | 29 | 15.9\%* | 26 | 14.3\%* | 67 | 36.8\%* | 60 | 33.0\%* |

[^4]Table 7: Breakdown of responses to the statement: I wanted to receive the best care possible.

|  | No, this wasn't the reason |  | Yes, but this wasn't really why/it was a small factor |  | This was one of the major reasons |  | This was the major reason |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Count | Freq. | Count | Freq. | Count | Freq. | Count | Freq. |
| Overall sample: | 154 | 14.9\% | 234 | 22.7\% | 328 | 31.8\% | 317 | 30.7\% |
| Condition |  |  |  |  |  |  |  |  |
| Oncology | 15 | 6.7\%** | 22 | 9.8\%** | 84 | 37.5\%** | 103 | 46.0\%** |
| Chronic/Acute | 46 | 21.4\%** | 52 | 24.2\%** | 62 | 28.8\%** | 55 | 25.6\%** |
| Chronic | 93 | 15.7\%** | 160 | 26.9\%** | 182 | 30.6\%** | 159 | 26.8\%** |
| Age |  |  |  |  |  |  |  |  |
| 54 or under | 83 | 17.6\%* | 120 | 25.4\%* | 148 | 31.3\%* | 122 | 25.8\%* |
| 55+ | 69 | 12.5\%* | 114 | 20.7\%* | 177 | 32.1\%* | 191 | 34.7\%* |
| Prefer not to answer | 2 | 22.2\%* | 0 | 0.0\%* | 3 | 33.3\%* | 4 | 44.4\%* |
| Education |  |  |  |  |  |  |  |  |
| Some high school/high school diploma | 9 | 9.4\% | 24 | 25.0\% | 28 | 29.2\% | 35 | 36.5\% |
| Some college | 41 | 15.7\% | 48 | 18.3\% | 80 | 30.5\% | 93 | 35.5\% |
| College degree | 60 | 18.3\% | 83 | 25.3\% | 97 | 29.6\% | 88 | 26.8\% |
| More than college | 44 | 12.9\% | 77 | 22.7\% | 119 | 35.0\% | 100 | 29.4\% |
| Prefer not to answer | 0 | 0.0\% | 2 | 28.6\% | 4 | 57.1\% | 1 | 14.3\% |
| Race/Ethnicity |  |  |  |  |  |  |  |  |
| Non-white | 24 | 16.9\% | 23 | 16.2\% | 50 | 35.2\% | 45 | 31.7\% |
| White | 130 | 14.6\% | 211 | 23.7\% | 278 | 31.2\% | 272 | 30.5\% |
| Hispanic | 6 | 14.3\% | 9 | 21.4\% | 16 | 38.1\% | 11 | 26.2\% |
| Non-Hispanic | 144 | 14.9\% | 221 | 22.8\% | 304 | 31.4\% | 300 | 31.0\% |

$$
\text { *p<. } 05 \text { ** } p<.01
$$

Table 7: Continued

|  | No, this wasn't the reason |  | Yes, but this wasn't really why/it was a small factor |  | This was one of the major reasons |  | This was the major reason |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Sex |  |  |  |  |  |  |  |  |
| Male | 25 | 10.6\% | 42 | 17.9\% | 90 | 38.3\% | 78 | 33.2\% |
| Female | 129 | 16.3\% | 192 | 24.2\% | 235 | 29.6\% | 238 | 30.0\% |
| Prefer not to answer | 0 | 0.0\% | 0 | 0.0\% | 3 | 75.0\% | 1 | 25.0\% |
| Income |  |  |  |  |  |  |  |  |
| Less than \$50,000 | 51 | 15.3\% | 75 | 22.5\% | 96 | 28.7\% | 112 | 33.5\% |
| \$50,000-\$99,999 | 51 | 17.6\% | 65 | 22.4\% | 98 | 33.8\% | 76 | 26.2\% |
| \$100,000+ | 25 | 11.0\% | 51 | 22.5\% | 77 | 33.9\% | 74 | 32.6\% |
| Prefer not to answer | 27 | 14.8\% | 43 | 23.6\% | 57 | 31.3\% | 55 | 30.2\% |

[^5]Table 8: Breakdown of responses to the statement: I wanted to receive the most up-to-date therapies without the high expense.

|  | No, this wasn't the reason |  | Yes, but this wasn't really why/it was a small factor |  | This was one of the major reasons |  | This was the major reason |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Count | Freq. | Count | Freq. | Count | Freq. | Count | Freq. |
| Overall sample: | 247 | 23.9\% | 245 | 23.7\% | 285 | 27.6\% | 256 | 24.8\% |
| Condition |  |  |  |  |  |  |  |  |
| Oncology | 41 | 18.3\% | 55 | 24.6\% | 69 | 30.8\% | 59 | 26.3\% |
| Chronic/Acute | 51 | 23.7\% | 46 | 21.4\% | 61 | 28.4\% | 57 | 26.5\% |
| Chronic | 155 | 26.1\% | 144 | 24.2\% | 155 | 26.1\% | 140 | 23.6\% |
| Age |  |  |  |  |  |  |  |  |
| 54 or under | 120 | 25.4\% | 116 | 24.5\% | 127 | 26.9\% | 110 | 23.3\% |
| 55+ | 123 | 22.3\% | 128 | 23.2\% | 155 | 28.1\% | 145 | 26.3\% |
| Prefer not to answer | 4 | 44.4\% | 1 | 11.1\% | 3 | 33.3\% | 1 | 11.1\% |
| Education |  |  |  |  |  |  |  |  |
| Some high school/high school diploma | 19 | 19.8\% | 21 | 21.9\% | 29 | 30.2\% | 27 | 28.1\% |
| Some college | 58 | 22.1\% | 62 | 23.7\% | 73 | 27.9\% | 69 | 26.3\% |
| College degree | 87 | 26.5\% | 71 | 21.7\% | 84 | 25.6\% | 86 | 26.2\% |
| More than college | 83 | 24.4\% | 87 | 25.6\% | 96 | 28.2\% | 74 | 21.8\% |
| Prefer not to answer | 0 | 0.0\% | 4 | 57.1\% | 3 | 42.9\% | 0 | 0.0\% |
| Race/Ethnicity |  |  |  |  |  |  |  |  |
| Non-white | 36 | 25.4\% | 29 | 20.4\% | 45 | 31.7\% | 32 | 22.5\% |
| White | 211 | 23.7\% | 216 | 24.2\% | 240 | 26.9\% | 224 | 25.1\% |
| Hispanic | 10 | 23.8\% | 14 | 33.3\% | 13 | 31.0\% | 5 | 11.9\% |
| Non-Hispanic | 234 | 24.2\% | 224 | 23.1\% | 264 | 27.2\% | 247 | 25.5\% |

$$
* p<.05 * * p<.01
$$

Table 8: Continued

|  | No, this wasn't the reason |  | Yes, but this wasn't really why/it was a small factor |  | This was one of the major reasons |  | This was the major reason |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Sex |  |  |  |  |  |  |  |  |
| Male | 41 | 17.5\% | 57 | 24.3\% | 69 | 29.4\% | 68 | 28.9\% |
| Female | 206 | 25.9\% | 187 | 23.6\% | 214 | 27.0\% | 187 | 23.6\% |
| Prefer not to answer | 0 | 0.0\% | 1 | 25.0\% | 2 | 50.0\% | 1 | 25.0\% |
| Income |  |  |  |  |  |  |  |  |
| Less than \$50,000 | 71 | 21.3\% | 87 | 26.1\% | 88 | 26.4\% | 88 | 26.4\% |
| \$50,000-\$99,999 | 67 | 23.1\% | 74 | 25.5\% | 80 | 27.6\% | 69 | 23.8\% |
| \$100,000+ | 60 | 26.4\% | 44 | 19.4\% | 71 | 31.3\% | 52 | 22.9\% |
| Prefer not to answer | 49 | 26.9\% | 40 | 22.0\% | 46 | 25.3\% | 47 | 25.8\% |

[^6]Table 9: Demographic breakdown to responses: I wanted to help future patients who come after me.

|  | No, this wasn't the reason |  | Yes, but this wasn't really why/it was a small factor |  | This was one of the major reasons |  | This was the major reason |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Count | Freq. | Count | Freq. | Count | Freq. | Count | Freq. |
| Overall sample: | 58 | 5.6\% | 202 | 19.6\% | 424 | 41.1\% | 349 | 33.8\% |
| Condition |  |  |  |  |  |  |  |  |
| Oncology | 8 | 3.6\%* | 54 | 24.1\%* | 96 | 42.9\%* | 66 | 29.5\%* |
| Chronic/Acute | 18 | 8.4\%* | 46 | 21.4\%* | 87 | 40.5\%* | 64 | 29.8\%* |
| Chronic | 32 | 5.4\%* | 102 | 17.2\%* | 241 | 40.6\%* | 219 | 36.9\%* |
| Age |  |  |  |  |  |  |  |  |
| 54 or under | 22 | 4.7\% | 96 | 20.3\% | 193 | 40.8\% | 162 | 34.3\% |
| 55+ | 35 | 6.4\% | 103 | 18.7\% | 227 | 41.2\% | 186 | 33.8\% |
| Prefer not to answer | 1 | 11.1\% | 3 | 33.3\% | 4 | 44.4\% | 1 | 1.1\% |
| Education |  |  |  |  |  |  |  |  |
| Some high school/high school diploma | 7 | 7.3\% | 20 | 20.8\% | 40 | 41.7\% | 29 | 30.2\% |
| Some college | 8 | 3.1\% | 47 | 17.9\% | 118 | 45.0\% | 89 | 34.0\% |
| College degree | 24 | 7.3\% | 60 | 18.3\% | 121 | 36.9\% | 123 | 37.5\% |
| More than college | 19 | 5.6\% | 73 | 21.5\% | 141 | 41.5\% | 107 | 31.5\% |
| Prefer not to answer | 0 | 0.0\% | 2 | 28.6\% | 4 | 57.1\% | 1 | 14.3\% |
| Race/Ethnicity |  |  |  |  |  |  |  |  |
| Non-white | 7 | 4.9\% | 23 | 16.2\% | 61 | 43.0\% | 51 | 35.9\% |
| White | 51 | 5.7\% | 179 | 20.1\% | 363 | 40.7\% | 298 | 33.5\% |
| Hispanic | 3 | 7.1\% | 7 | 16.7\% | 17 | 40.5\% | 15 | 35.7\% |
| Non-Hispanic | 55 | 5.7\% | 190 | 19.6\% | 394 | 40.7\% | 330 | 34.1\% |

$$
\text { *p<.05 ** } p<.01
$$

Table 9: Continued

|  | No, this wasn't the reason |  | Yes, but this wasn't really why/it was a small factor |  | This was one of the major reasons |  | This was the major reason |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Sex |  |  |  |  |  |  |  |  |
| Male | 12 | 5.1\% | 48 | 20.4\% | 105 | 44.7\% | 70 | 29.8\% |
| Female | 46 | 5.8\% | 153 | 19.3\% | 317 | 39.9\% | 278 | 35.0\% |
| Prefer not to answer | 0 | 0.0\% | 1 | 25.0\% | 2 | 50.0\% | 1 | 25.0\% |
| Income |  |  |  |  |  |  |  |  |
| Less than \$50,000 | 21 | 6.3\%* | 46 | 13.8\%* | 146 | 43.7\%* | 121 | 36.2\%* |
| \$50,000-\$99,999 | 18 | 6.2\%* | 61 | 21.0\%* | 111 | 38.3\%* | 100 | 34.5\%* |
| \$100,000+ | 7 | 3.1\%* | 56 | 24.7\%* | 102 | 44.9\%* | 62 | 27.3\%* |
| Prefer not to answer | 12 | 6.6\%* | 39 | 21.4\%* | 65 | 35.7\%* | 66 | 36.3\%* |

[^7]
[^0]:    *p<. 05 ** $\mathrm{p}<.01$

[^1]:    1 https://www.forbes.com/sites/victoriaforster/2019/02/19/why-do-only-eight-percent-of-cancer-patients-in-the-u-s-participate-in-clinical-trials/\#6b3df7ae77e9
    ${ }^{2}$ https://jamanetwork.com/journals/jamaoncology/fullarticle/2457394
    ${ }^{3}$ https://www.ciscrp.org/wp-content/uploads/2019/06/2017-CISCRP-Perceptions-and-Insights-Study-Decision-Making-Process.pdf
    ${ }^{4}$ https://www.ciscrp.org/wp-content/uploads/2019/06/2017-CISCRP-Perceptions-and-Insights-Study-Decision-Making-Process.pdf
    ${ }^{5}$ https://www.forbes.com/sites/victoriaforster/2019/02/19/why-do-only-eight-percent-of-cancer-patients-in-the-u-s-participate-in-clinical-trials/\#18f0dd177e9d
    ${ }^{6}$ https://pdfs.semanticscholar.org/287e/569e8546250d17872dba8 12cd70f3aa73d74.pdf?.ga=2.243146626.1016768126.15708056881476850538.1570805688
    'https://www.cancertodaymag.org/Pages/cancer-talk/What-Do-Clinical-Trial-Endpoints-Really-Measure.aspx
    ${ }^{8}$ https://www.cancertodaymag.org/Pages/cancer-talk/What-Do-Clinical-Trial-Endpoints-Really-Measure.aspx
    ${ }^{9}$ https://www.ciscrp.org/wp-content/uploads/2019/06/2017-CISCRP-Perceptions-and-Insights-Study-Participation-Experience.pdf
    ${ }^{10}$ https://www.ciscrp.org/wp-content/uploads/2019/06/2017-CISCRP-Perceptions-and-Insights-Study-Participation-Experience.pdf
    ${ }^{11}$ https://www.ciscrp.org/wp-content/uploads/2019/06/2017-CISCRP-Perceptions-and-Insights-Study-Participation-Experience.pdf

[^2]:    *p<. 05 ** $\mathrm{p}<.01$

[^3]:    *p<. 05 ** $\mathrm{p}<.01$

[^4]:    *p<. 05 ** $\mathrm{p}<.01$

[^5]:    *p<. 05 ** $\mathrm{p}<.01$

[^6]:    *p<. 05 ** $\mathrm{p}<.01$

[^7]:    *p<. 05 ** $\mathrm{p}<.01$

