

NATIONAL CANCER OPINION SURVEY



PREPARED FOR AMERICAN SOCIETY OF CLINICAL ONCOLOGY OCTOBER 2017





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RESEARCH METHOD

Method statement (first paragraph to be included in all materials for public release)

This survey was conducted online in the U.S. by Harris Poll on behalf of ASCO between July 10-18, 2017 among 4,016 US adults aged 18+. Figures for age, sex, race/ethnicity, education, region, household income, household size, employment status and marital status were weighted where necessary to bring them into line with their actual proportions in the population. Propensity score weighting was also used to adjust for respondents' propensity to be online.

All sample surveys and polls, whether or not they use probability sampling, are subject to multiple sources of error which are most often not possible to quantify or estimate, including sampling error, coverage error, error associated with nonresponse, error associated with question wording and response options, and post-survey weighting and adjustments. Therefore, Harris Poll avoids the words "margin of error" as they are misleading. All that can be calculated are different possible sampling errors with different probabilities for pure, unweighted, random samples with 100% response rates. These are only theoretical because no published polls come close to this ideal.

Respondents for this survey were selected among those who have agreed to participate in online surveys. No estimates of theoretical sampling error can be calculated.



EXECUTIVE SUMMARY

KEY FINDINGS



HEALTH BACKGROUND AND EXPERIENCE WITH CANCER

% of Americans expressing at least moderate fear over receiving a cancer diagnosis in their lifetime

Their concerns mirror those for a heart attack or heart disease, but dwarf conditions like arthritis and high blood pressure.

Additional findings:

- Approximately one-third of Americans (32%) report having had an immediate family member (child, parent, sibling) diagnosed with cancer.
- Nearly half of these diagnoses have taken place within the past five years.
- Most Americans receive health insurance benefits today through a private insurance/payer (46%) or a public insurance (30%).

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HOPE AND FEAR

% thinking most cancers will be curable in 50 yrs.

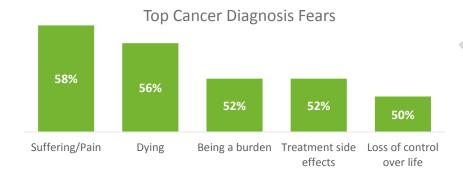


Cancer is Clearly Daunting, but Most Feel a Cure May be in Sight:

- 79% of Americans are at least somewhat optimistic that the majority of cancers will be curable within the next 50 years.
- Optimism is far higher for those who have experience with cancer, especially those who have been personally diagnosed.
- While there is long-term optimism, only 39% of Americans feel the majority of cancers will be curable within the next decade.

Additional findings:

 No one cancer stands out as being the most formidable or fatal, but pancreatic is viewed as the most menacing - and breast cancer the least.



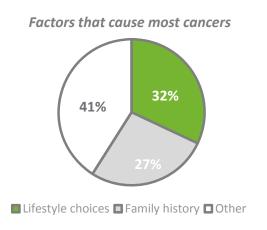
- Among all Americans, top fears materialize nearly equally.
- Among those who have known someone with a cancer diagnosis, these fears all emerge much stronger, most noticeably the toll cancer takes on loved ones (60% vs. 49% for those who do not have any personal cancer experience).

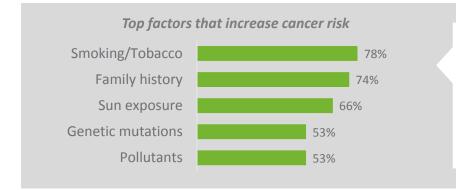


KNOWLEDGE

Nature and Nurture are both Seen as at Fault for Cancer

- There is no real consensus on what causes most cancers.
 - Nearly as many Americans cite family history as lifestyle choices. In fact, the majority of Americans identify a combination of stimuli that may be within - and out of - their control as increasing their risk of cancer (tobacco, family history and sun exposure are the top 3).
- However, regardless of their personal exposure to cancer, most Americans (80%) seem to be unaware that viruses can also exacerbate their risk.





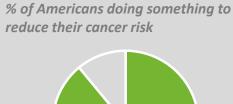
Other stimuli like lack of exercise, caffeine, alcohol, viruses, food choices and obesity are mentioned by less than half of Americans, with no difference based on being personally diagnosed with cancer.



ACTION

The vast majority of Americans are taking steps to reduce their risk of getting cancer

- Not smoking (66%) and eating lots of fruits and vegetables (50%) are the top steps taken.
- However, fewer are taking other fairly basic steps like exercising or limiting their alcohol consumption. Not surprisingly, those who have been exposed to cancer through a loved one's diagnosis are more likely to take action (than those who have not faced cancer at all).
- Those who have experienced cancer through a loved one generally take more action across the board than those who have no experience with cancer, while those who have been personally diagnosed are only more likely to reduce sun exposure and take more vitamins.





Importance of screening:

• 76% of Americans think screening for early detection of cancer is at least somewhat effective in reducing people's risk of dying of cancer, and 47% say screening is *very* effective.

Genetic testing among Americans is limited:

- Only 15% of Americans have ever had a genetic test performed to assess their risk for cancer (but doubles to 30% for those who have been personally diagnosed).
- Of those who have *not* had a test, only 42% are somewhat or very likely to do so in the future (with no increase for those who have had personal exposure to cancer through self or loved one).

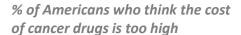
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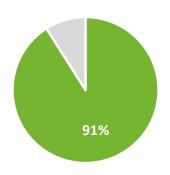


QUALITY AND COST

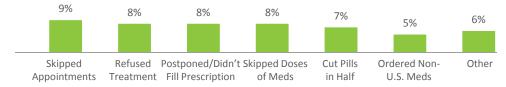
Cost Is Biggest Barrier to Care

- For those who are themselves or have a loved one going through treatment, more than two in five (44%) are concerned about the mounting cost.
- Of those who have had cancer or have a loved one with cancer, most have taken no steps to reduce the cost of cancer treatment (73%).
- However, the cost barrier leads to risky behaviors for some of those with personal cancer experience who take ill-advised (and potentially dangerous) steps to bring down the cost of treatment.





Actions Taken to Reduce Treatment Cost



Of those not currently diagnosed, about two-thirds (65%) believe they would receive best in class care:

• For those who don't have this confidence, not being able to afford quality care is by far the biggest obstacle (70%) standing in the way, although not knowing how to access best in class care (36%) is also an obstacle.

For those who have been personally diagnosed, the vast majority (87%) believe they received best in class care while two-thirds of those who have had exposure through a loved one (69%) share that confidence.

• Among those who don't think they received best in class care, the main reasons cited are they couldn't afford it (26%) and they didn't know how to access it (24%).

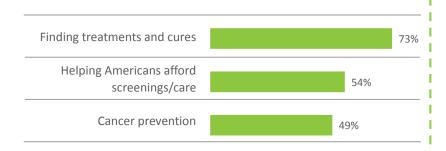
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PUBLIC POLICY

Americans Want Change in Funding

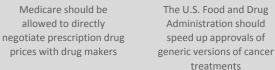
- Over 9 in 10 Americans (91% indistinguishable between those who have and have not been personally exposed to cancer) believe that it's at least somewhat important for the U.S. government to dedicate substantial funding to diagnose, prevent and treat cancer.
- Even if it means that taxes or the deficit will be negatively impacted, nearly three-quarters (73%) think the U.S. government should allocate more money to treatment/cures.



Americans Want Change in Policy

Beyond additional funding, there is nearly universal acceptance across America that certain **health policy changes need to be enacted**, presumably to decrease costs and increase access.





89%



The U.S. government should regulate the price of cancer drugs to help lower their cost



It should be legal for U.S. residents to buy cancer drugs from pharmacies in other countries

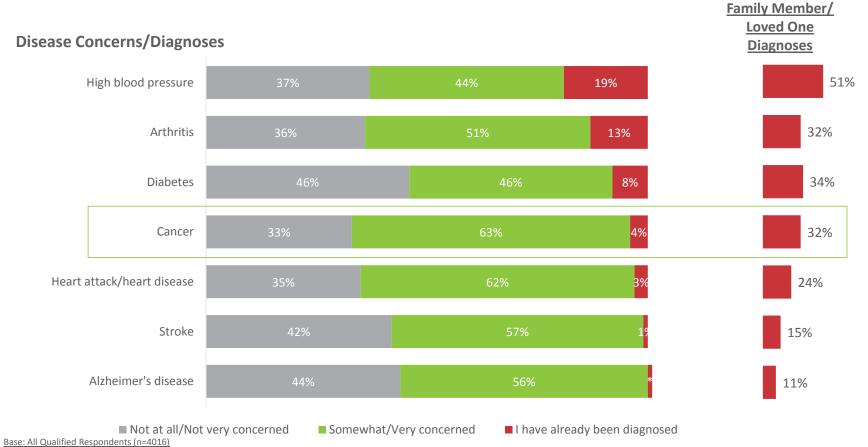


DETAILED FINDINGS

GENERAL HEALTH QUESTIONS



OVER 6 IN 10 CONCERNED ABOUT CANCER DIAGNOSIS IN THEIR LIFETIME



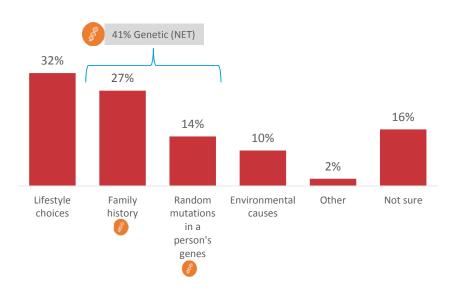
Q601. How concerned are you that you may develop the following diseases in your lifetime?

Q615. Has a doctor, nurse, or other health professional ever told an immediate family member (child, parent, sibling) or loved one that they have any of the following?

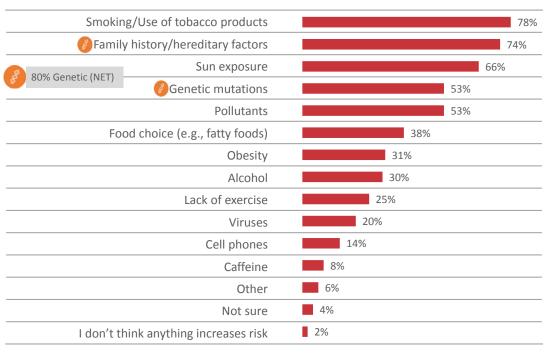


LIFESTYLE CHOICES AND FAMILY HISTORY TOP LIST OF PERCEIVED CAUSES

Beliefs about Causes of Cancer



Beliefs about Cancer Risk Factors



Base: All Qualified Respondents (n=4016)

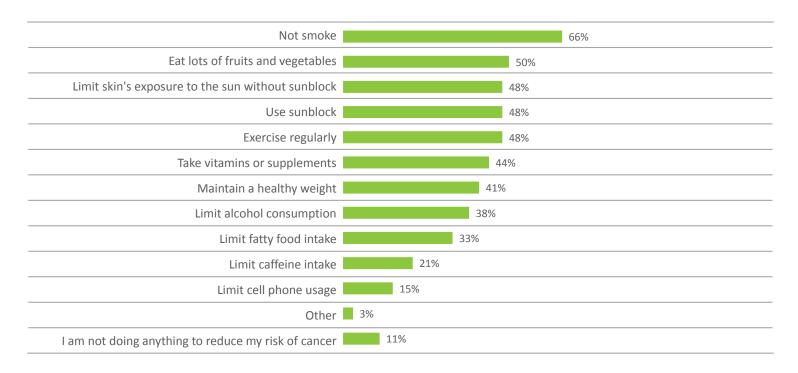
Q700. Which of the following do you think most cancers are caused by?

Q705. Which of the following do you think increases a person's risk of getting cancer?



MOST AMERICANS ARE DOING SOMETHING TO PREVENT CANCER

Cancer Risk Reduction Behaviors Practiced



Base: All Qualified Respondents (n=4016)

Q715. Which of the following describes what you currently do to reduce your risk of getting cancer?

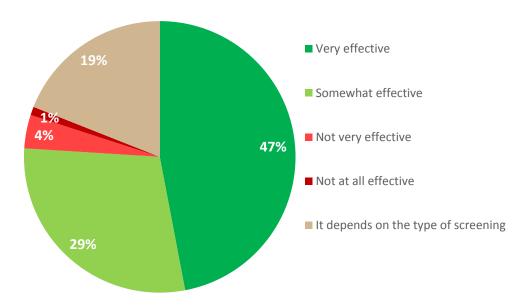
General Health Questions General Views on Cancer



SCREENING IS WIDELY SEEN AS EFFECTIVE IN REDUCING CANCER MORTALITY RISK

Screening Effectiveness

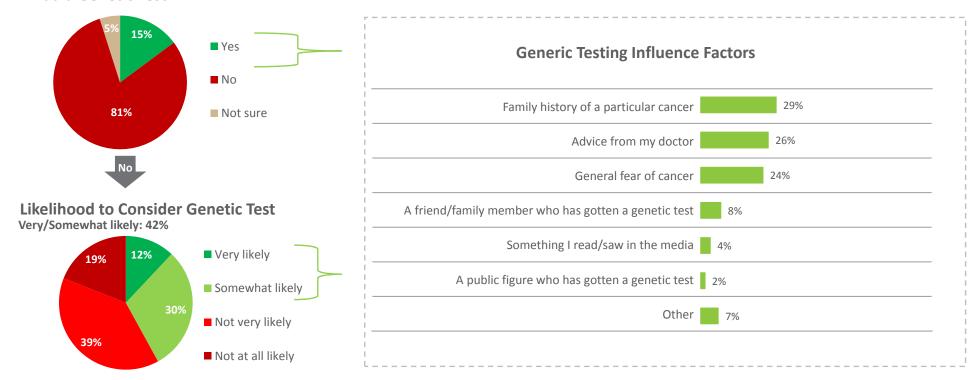
Very/Somewhat effective: 76%





MOST HAVE NOT HAD – AND ARE NOT CONSIDERING – A GENETIC TEST

Had a Genetic Test



Base: All Qualified Respondents (n=4016)

Q730. Have you ever had a genetic test performed to assess your risk for cancer (e.g., breast/ovarian, colorectal cancer)? Base: No/Not sure about having genetic testing (n=3487)

Q735. How likely are you to have a genetic test performed in the future to assess your risk for cancer (e.g., breast/ovarian, colorectal cancer)?

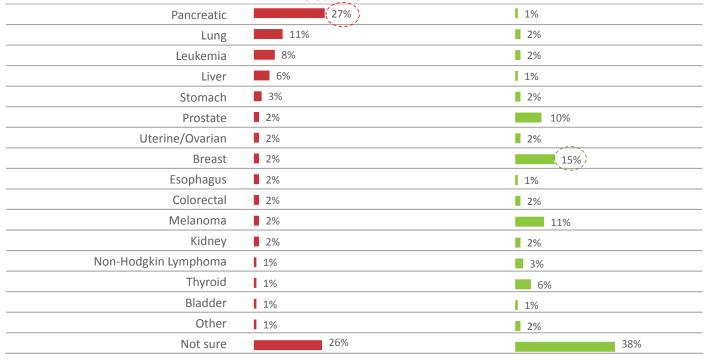
Base: Have had genetic testing or somewhat/very likely to have testing (n=1793)

Q740. Which of the following influenced your decision the most to have/be somewhat likely to have/be very likely to have a genetic test performed to assess your risk for cancer?



BREAST SEEN AS MOST "SURVIVABLE" CANCER - AND PANCREATIC LEAST

Least Likely To Survive Pancreatic Lung 11% Most Likely to Survive 1 1% 2 2%

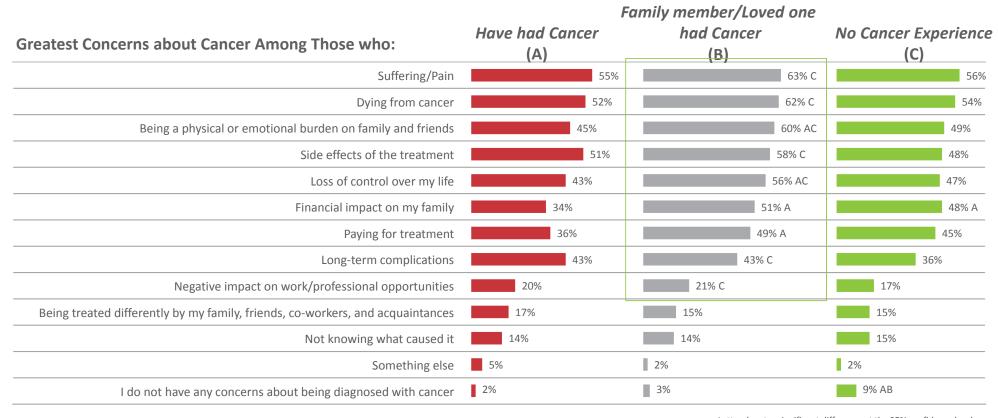


Base: All Qualified Respondents (n=4016)

Q760. If you were diagnosed with any one of these cancers, which one do you believe you would be <u>least</u> likely to survive? Q761. If you were diagnosed with any one of these cancers, which one do you believe you are most likely to survive?



INDIRECT EXPERIENCE WITH CANCER SEEMS TO AMPLIFY CANCER CONCERNS

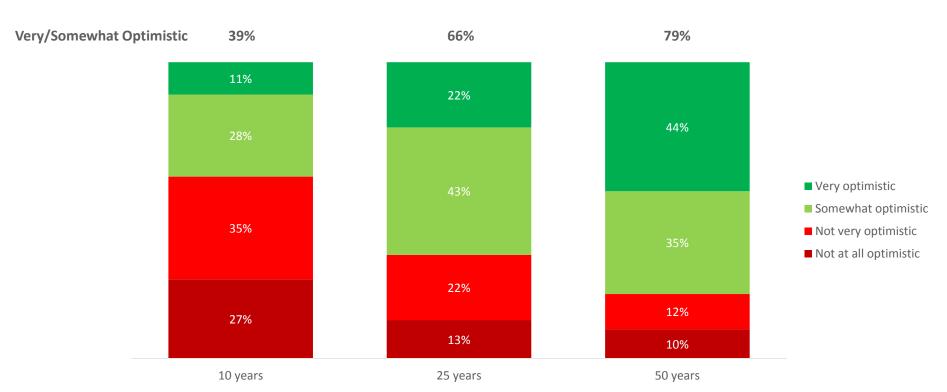


Letter denotes significant difference at the 95% confidence level



MAJORITY IS HOPEFUL THAT CANCER CURE WILL BE FOUND IN 25-50 YEARS

Curability Outlook



Base: All Qualified Respondents (n=4016)

Q785. How optimistic are you that the majority of cancers will be curable within the next...?



DETAILED FINDINGS

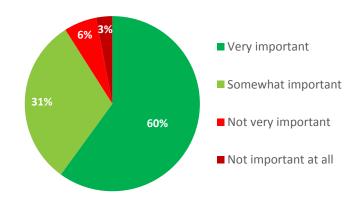
GOVERNMENT ACTION AGAINST CANCER



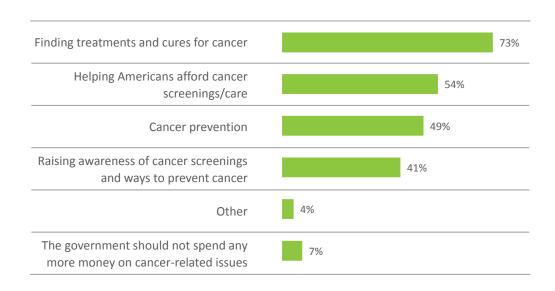
GOVERNMENT FUNDING FOR CANCER IS CONSIDERED CRUCIAL, BY MOST

Importance of Government Funding

Very/Somewhat Important: 91%



Where Government Should Spend More Money on Cancer



Base: All Qualified Respondents (n=4016)

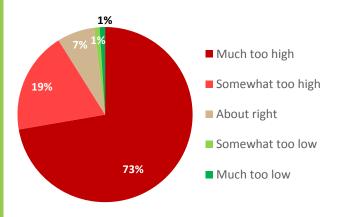
Q801. How important do you think it is that the U.S. government spend substantial funds to develop new and better ways to diagnose, prevent and treat cancer? **Q810.** On which of the following cancer-related issues do you believe the U.S. government should spend more money (even if it meant higher taxes or adding to the deficit)?



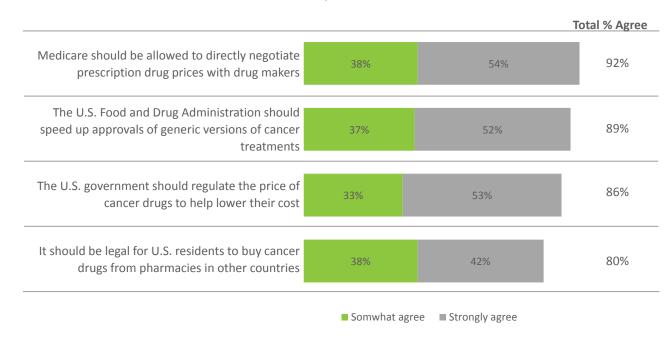
THREE-QUARTERS VIEW COST BURDEN OF CANCER AS WAY TOO HIGH

Beliefs about Cost of Cancer Drugs

Much/Somewhat Too High: 92%



Government Action on Cancer Drugs % Agree



Base: All Qualified Respondents (n=4016)

Q931. Do you believe the cost of cancer drugs is...?

Q815. How much do you agree or disagree with the following statements regarding the U.S. government's action to make cancer drugs more affordable?



DETAILED FINDINGS

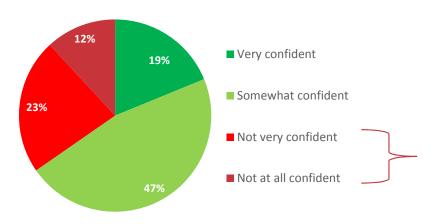
ACCESS TO HIGH-QUALITY TREATMENT/ AFFORDABILITY OF CANCER CARE Access to High-Quality Treatment First-Hand Experiences with Cancer

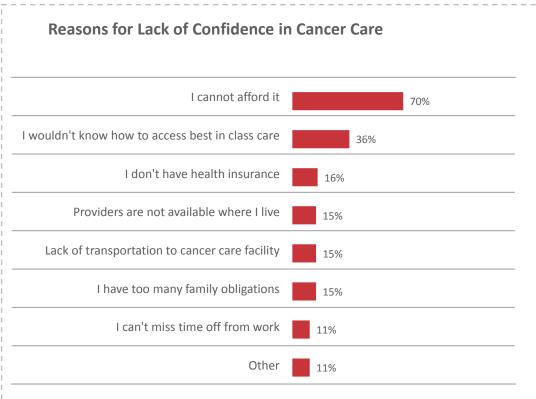


COST IS MAIN BARRIER – BY FAR – TO QUALITY, TIMELY CARE

Confidence in receiving Timely, Best in Class Cancer Care *If Diagnosed in the Future*

Not very/Not at all Confident: 35%





Base: No cancer (n=2508)

Q910. If you were to find out you have cancer, how confident are you that you could get timely, best in class cancer care? Base: Not at all or not very confident will get timely, best in class cancer care (n=852)

Q915. Why are you not at all/not very confident that you could get timely, best in class cancer care?

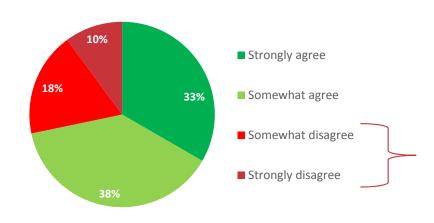
Access to High-Quality Treatment First-Hand Experiences with Cancer

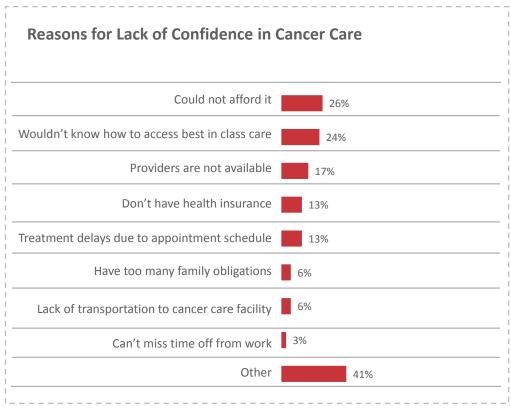


SOME – BUT NOT OVERWHELMING – SENSE THAT CARE WAS EXCELLENT

Agreement that Timely, Best in Class Cancer Care was Received By Self or Loved One

Strongly/Somewhat Disagree: 29%





Base: Have cancer/Had cancer or immediate family member has cancer/had cancer (n=1508)

Q920. How much do you agree or disagree with the following statement? I have received/My immediate family member or loved one has received timely, best in class cancer care. Base: Disagree about receiving good care (n=414)

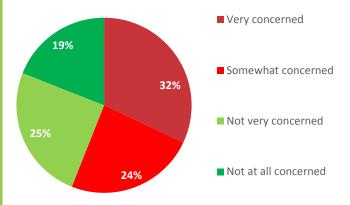
Q925. Why do you feel that you/your immediate family member or loved one has not received/did not receive timely, best in class cancer care?

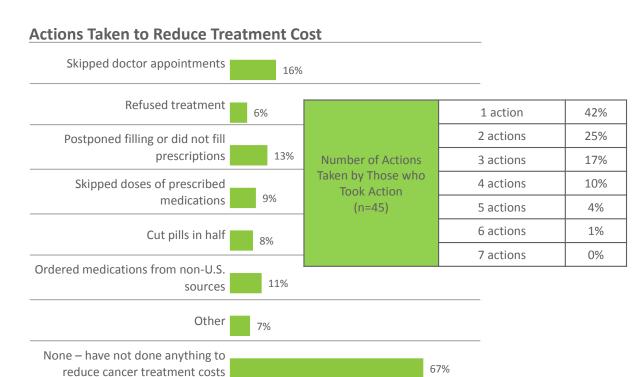


OVER HALF OF THOSE WITH CANCER ARE CONCERNED ABOUT BEING ABLE TO AFFORD TREATMENT

Concern About Treatment Affordability

Very/Somewhat Concerned: 56%





Base: Have cancer/Had cancer (n=195)

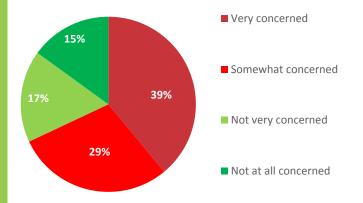
Q930. How concerned are you about being able to afford your cancer treatment? **Q935.** Which of the following have you done to reduce cancer treatment costs?

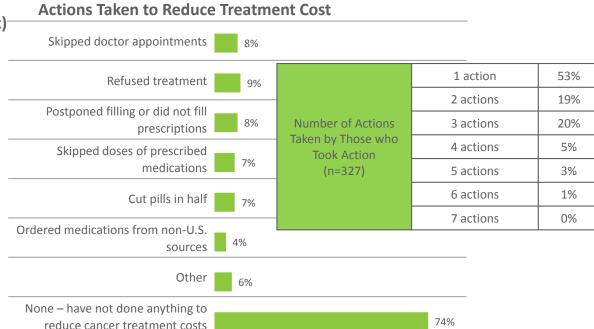


OVER TWO-THIRDS OF THOSE PAYING FOR A FAMILY MEMBER'S CANCER TREATMENT ARE CONCERNED ABOUT BEING ABLE TO AFFORD IT

Concern About Treatment Affordability (among those paying for <u>a family member's</u> treatment)

Very/Somewhat Concerned: 68%





Base: Immediate family member has cancer/had cancer AND responsible for paying for treatment (n=788)

Q930. How concerned are you/have you been about being able to afford you/your family member's cancer treatment?

Base: Immediate family member has cancer/had cancer (n=1313)

Q935. Which of the following have you/has your family member or loved one with cancer done to reduce cancer treatment costs?



DEMOGRAPHICS







Gender		Total
	n=	4016
Male		48%
Female		52%



Age		Total
	n=	4016
18-34		29%
35-49		25%
50-64		26%
65+		20%
Mean		47.1



Race/Ethnicity	n=	Total 4016
White		65%
Hispanic		14%
Black/African American		12%
Asian or Pacific Islander		6%
Native American or Alaskan nativ	e	1%
Other race		1%
Decline To Answer		1%



Income		Total
	n=	4016
Less than \$15,000		8%
\$15,000 to \$24,999		8%
\$25,000 to \$34,999		8%
\$35,000 to \$49,999		12%
\$50,000 to \$74,999		16%
\$75,000 to \$99,999		13%
\$100,000 +		29%
Decline to Answer		6%
Mean		\$79,200



Education	n=	Total 4016
High school or less		26%
Job-specific training program		4%
Some college		38%
College 4 Years		15%
Some Graduate/Graduate Degree		17%



Region		Total
	n=	4016
East		21%
Midwest		21%
South		34%
West		24%







Marital Status		Total
	n=	4016
Never married		28%
Married/Living with partner		53%
Divorced		11%
Separated		2%
Widow/Widower		5%



Employment Status		Total
	n=	4016
Employed full time		40%
Employed part time		11%
Self-employed		7%
Not employed, but looking for work		5%
Not employed and not looking for work	or	1%
Retired		20%
Not employed, unable to work d to a disability or illness	ue	5%
Student		5%
Stay-at-home spouse or partner		6%



Number of Adults in th Household 18 or Older		Total	
	n=	4016	
1		19%	
2		54%	
3		18%	
4		7%	
5+		4%	
Mean		2.3	



Number of Children in the Household under 18	Total	
	n=	4016
0		63%
1		18%
2		12%
3		5%
4		1%
5+		1%
Mean		0.7



SUB-GROUP ANALYSIS

AGE ETHNICITY GENDER



DEMOGRAPHIC DIFFERENCES: AGE*

Gen Z, while less concerned with developing cancer, tend to be more aware that lifestyle choices impact their cancer risk. Those 71+ are more optimistic about cancer care, and do more to reduce their risk of getting cancer.

General Health	• Millennials, Gen Xers and Boomers are more likely to be concerned than those over 70 about developing cancer in their lifetime (66%, 65% and 64%, respectively vs. 54%; Q601)
	• Gen Z is the generation most likely to believe that lifestyle choices (e.g., smoking, sun exposure, diet) cause most cancers (48% vs. 35% Millennials, 30% Gen X, 28% Boomers, and 30% of those over 70; Q700)
	• Gen Z far surpasses all other age groups as seeing Leukemia as the most terminal type of cancer (24% vs. 12% Millennials, 6% Gen X, 4% Boomers, and 3% of those over 70; Q760)
	• Compared to their younger counterparts, Boomers and those over 70 are more likely to consider Pancreatic cancer to be the most terminal type of cancer (39% and 44% respectively vs. 8% Gen Z, 15% Millennials and 25% Gen X; Q760)
Views on cancer, screening, and prevention	• Gen Z far surpasses all other age groups as seeing Breast Cancer as the most survivable type of cancer (29% vs. 16% Millennials, 16% Gen X, 12% Boomers, and 18% of those over 70; Q761)
	• Millennials are significantly more likely than all other generations to have had a genetic test performed (21% vs. 7% Gen Z, 15% Gen X, 11% Boomers, and 11% of those over 70; Q730)
	• Those over 70 think smoking (89% vs. 74% Gen Z, 71% Millennials, 76% Gen X, and 84% Boomers) and sun exposure (78% vs. 62% Gen Z, 56% Millennials, 67% Gen X, and 71% Boomers) increases the risk of cancer more than any other age group (Q705)
	• Those over 70 choose to not smoke (80% vs. 65% Gen Z, 56% Millennials, 63% Gen X, and 73% Boomers) and to take vitamins or supplements (56% vs. 32% Gen Z, 40% Millennials, 40% Gen X, and 49% Boomers) in order to limit the risk of cancer far more than any other age group (Q715)

^{*}Generations are defined as: Gen Z: 18-19 year olds; Millennials: 20-36 year olds; Gen X: 37-52 year olds; Baby Boomers: 53-70 year olds Gen Z is a small base size (n=86); results should be interpreted as directional in nature.



DEMOGRAPHIC DIFFERENCES: AGE (CONT.)

	• Gen Z is the least likely generation to agree that it should be legal for U.S. residents to buy cancer drugs from pharmacies in other countries (64% vs. 81% Millennials, 79% Gen X, 81% Boomers and 81% of those over 70; Q815)
Government action	 Boomers and those over 70 are more likely than younger age groups to strongly agree that Medicare should be able to negotiate prices with drug companies (62% and 72% respectively vs. 39% Gen Z, 42% Millennials and 54% Gen X; Q815)
	• Boomers are more likely than other age groups to indicate that the cost of cancer drugs is much too high (82% vs. 63% Gen Z, 61% Millennials, 75% Gen X, and 74% of those over 70; Q931)
Access to treatment / Experience with cancer	• Those over 70 are more likely than any other age group to be confident that they would get timely, best in class cancer care if they found out they had cancer (85% vs. 42% Gen Z, 62% Millennials, 67% Gen X, and 65% Boomers; Q910)



DEMOGRAPHIC DIFFERENCES: RACE/ETHNIC

Asians tend to be the most proactive in preventing cancer, which may be partially driven from their high concern with being a burden if diagnosed with cancer. Whites are least likely to have genetic testing performed.

Views on cancer, screening, and prevention	 Whites are least likely to report that they will have a genetic test performed in the future to assess cancer risk (62% vs. 48% Black/African American, 52% Hispanic and 47% Asian; Q735)
	 Among all races/ethnicities, Hispanics are most likely to believe that cancers are caused by family history (38% vs. 27% White, 20% Black/African American and 23% Asian; Q700)
	 Asians are more likely than other races/ethnicities to eat lots of fruits and vegetables (64% vs. 49% White, 48% Black/African American and 50% Hispanic) and to limit fatty food intake (47% vs. 33% White, 26% Black/African American and 30% Hispanic) in order to reduce their risk of getting cancer (Q715)
	 Asians are more likely to believe they would not survive lung cancer than are other races/ethnicities (24%, vs. 10% White, 10% Black/African American and 10% Hispanic; Q760)
	 Asians are more likely than other races/ethnicities to be concerned with being a burden on family/friends if diagnosed with cancer (66% vs. 53% White, 45% Black/African American and 50% Hispanic; Q770)



DEMOGRAPHIC DIFFERENCES: GENDER

Females are more likely to feel the U.S. government should spend additional money on helping Americans afford cancer screening and care. Males, on the other hand, seem more optimistic about cancer care.

Views on cancer, screening, and prevention	• Males are more likely than females to have had a genetic test performed (18% vs. 12%; Q730) and, those who haven't already had genetic testing, are also more likely than females to be likely to consider having the testing performed in the future (47% vs. 38%; Q735)
	• Females are much more likely than males to protect themselves from the sun by limiting skin exposure (53% vs. 42%; Q715) and by using sunblock (51% vs. 44%; Q715)
	• Females have many more concerns about being diagnosed with cancer compared to males (e.g., suffering/pain 63% vs. 53%; dying from cancer 59% vs. 53%; being a physical/emotional burden 57% vs. 47%; side effects of treatment 56% vs. 47%; loss of control over life 52% vs. 46%; the financial impact on family 52% vs. 43%; and paying for treatment 52% vs. 39%: Q770). Males are more concerned than females only about not knowing what caused the cancer (17% vs. 13%; Q770)
Government action	 Males are more likely to think that the U.S. government should spend more money on cancer prevention (53% vs. 45%; Q810) while females are more likely to think that the U.S. government should spend more money helping Americans afford cancer screenings and care (59% vs. 49%, Q810)
	 Males are more likely to strongly agree that it should be legal for U.S. residents to buy cancer drugs from pharmacies in other countries (47% vs. 38%, Q815) while females are more likely to strongly agree that the U.S. government should regulate the price of cancer drugs to lower the cost (58% vs. 48%, Q815)
	• Females are more likely than males to think the cost of cancer drugs is much/somewhat too high (95% vs. 88%; Q931)



DEMOGRAPHIC DIFFERENCES: GENDER (CONT.)

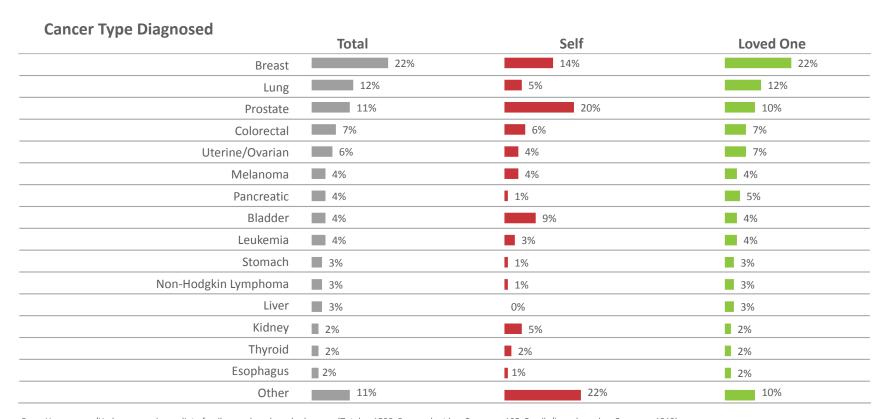
Access to treatment / Experience with cancer	 Males are more likely than females to be confident that they would get timely, best in class cancer care if they found out they had cancer (68% vs. 62%; Q910)
	 Compared to females, males who have had experience with cancer are more likely to agree that they/their loved one received timely, best in class cancer care (75% vs. 68%; Q920)
	 Among those with experience with cancer, males are more likely to be (or have been) concerned about being able to afford cancer treatment (51% vs. 38%; Q930). Perhaps consequently, males are more likely to take steps to reduce cancer treatment costs (skipped doctor appointments 12% vs. 7%; refused treatment 11% vs. 6%; skipped doses of prescribed medications 11% to 5%; cut pills in half 11% vs 4%; and ordered medications from non-U.S, pharmacies 8% vs. 2%) (Q935)



APPENDIX



BREAST, LUNG AND PROSTATE ARE MOST COMMON CANCER DIAGNOSES



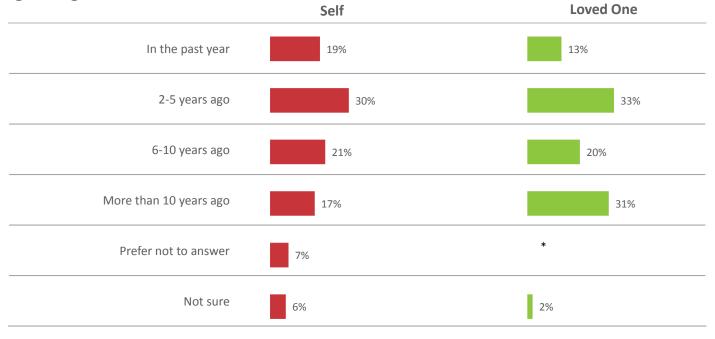
Base: Have cancer/Had cancer or immediate family members have had cancer (Total n=1508; Respondent has Cancer:n=195, Family/Loved one has Cancer:n=1313)

Q765. Now, we would like to ask you a few questions about your personal experience with cancer. What kind of cancer have you/has your immediate family member or loved one been diagnosed with? If there has been more than one kind of cancer diagnosed, please indicate the kind you were/your immediate family member or loved one was diagnosed with most recently.



ABOUT HALF OF DIAGNOSES HAVE TAKEN PLACE IN LAST FIVE YEARS

Timing of Diagnosis



*Less than 1%

Base: Have cancer/Had cancer (n=195)

Q900. When were you diagnosed with cancer?

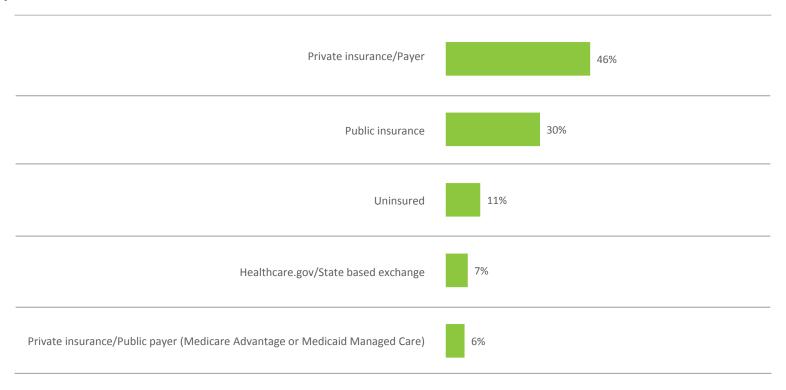
Base: Immediate family member has cancer/had cancer (n=1313)

Q901. When was your immediate family member or loved one diagnosed with cancer?



NEARLY HALF OF AMERICANS USE PRIVATE INSURANCE/PAYER

Type of Health Insurance



Base: All Qualified Respondents (n=4016)

Q940. Which of the following best describes how you receive health insurance benefits today?