

Second Annual Survey to Assess Health Care Professionals' Awareness and Perceptions of the National Cancer Institute's Intramural Clinical Trials

Results from Electronic Surveys with Health Care Professionals And Comparison to 2006 Survey Data

Prepared for: The National Cancer Institute's Center for Cancer Research

September 2007

Table of Contents

Ι.	Executive Summary	2
	Introduction and Background	
	Key Findings	
	Recommendations	
II.	Methodology	
	Recruitment of Participants	
	Statement of Limitations and Strengths of the Research	
Ш.	Detailed Findings	
	Respondent Demographics	
	Opinions of Clinical Trials	
	Knowledge of NCI	
	Miscellaneous	
	Comparison of 2006 Survey Data	
IV.		
V.	Appendices	



I. Executive Summary

Introduction and Background

The National Cancer Institute (NCI) Center for Cancer Research (CCR) is the largest component of the Institute's intramural (i.e., in-house) research program. One of its goals is to disseminate information about available cancer clinical trials to health care providers and to the public. Its outreach efforts focus on creating awareness of the CCR's clinical trial program within the health care professional community, with the ultimate goal of increasing physician referrals to ongoing clinical trials.

Efforts began in 2006 to assess the effectiveness of MMG's strategies aimed at increasing the awareness and understanding of the National Institutes of Health (NIH) Clinical Center among health care professionals. To assess respondents' awareness and knowledge of NCI and measure awareness of NCI clinical trials at the NIH Clinical Center in Bethesda, Md., a survey was developed in 2006 by MMG and sent electronically to respondents who treat cancer patients. The purpose of the survey is to identify ways in which the presence of NCI among health care professionals can be increased and to understand the perceptions or any misconceptions about NCI's role in clinical research.

The survey was first sent in July of 2006 to members of the American Medical Association (AMA) with a primary specialty of gastroenterology, medical oncology, radiation oncology, hematology/oncology, thoracic surgery, colon & rectal surgery, gynecological oncology, surgical oncology, or head & neck surgery. The survey was slightly revised in 2007 and then sent to members of the same AMA primary specialty categories.

The data in this report includes an in-depth analysis of the 2007 survey data, as well as a comparison to the 2006 data to identify trends in health care professionals' knowledge and awareness of NCI.

Key Findings

- 85% of respondents know NCI sponsors clinical trials
- 82% of respondents reported being either "somewhat familiar" or "very familiar" with the functions of NCI
- The South was the region with the largest percentage of respondents reporting they had ever referred a cancer patient to a clinical trial at NCI
- 80% of respondents know NCI conducts clinical trials
- 97% of respondents were aware of NCI before participating in this survey
- Respondents who treat 11 or more cancer patients per month are more likely to be "very familiar" with NCI than respondents who treat 10 or less patients per month
- As in 2006, respondents learn about clinical research opportunities mainly from colleagues, conferences/seminars, and the internet
- E-mail, conferences/seminars, and the internet continue to be respondents' *preferred* methods of learning about clinical trials
- Compared to the survey data collected in 2006:



- 3% fewer respondents reported ever referring a patient to a cancer clinical trial
- An additional 8% of respondents know NCI conducts clinical trials
- An additional 7% of respondents know NCI provides physicians and patients with access to thought leaders in cancer research
- An additional 6% of respondents know NCI conducts research for rare cancers typically not investigated by the private sector
- An additional 11% of respondents have ever referred a patient to a clinical trial on the NIH campus in Bethesda
- A slightly larger percentage (4%) of respondents reported they had *not* referred any cancer patients to a clinical trial at NCI in the past year

Recommendations

Respondents are most receptive to receiving clinical trial information by e-mail, conferences/seminars, and the internet; continue to rely heavily on these methods of communication. Limit the dissemination of information by mail, interdepartmental meetings, and Grand Rounds as those were respondents' least preferred methods of receiving clinical trial information.

Most specifically, continue to increase the amount of e-mail outreach. As in 2006, a larger percentage of respondents wanted to receive more clinical trials information via email than they currently receive. Respondents seem to welcome receiving information about clinical trials via e-mail.

Because many respondents currently learn about clinical trials from their colleagues, sending "Dear Colleague" letters from NCI telling physicians about clinical trial opportunities may be an effective way to spread information by word of mouth.

Continue to promote greater familiarity with the activities of NCI; the data shows that respondents who are very familiar with the endeavors of NCI may be more likely to refer cancer patients to an NCI clinical trial



II. Methodology

Recruitment of Participants

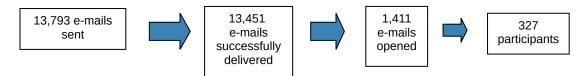
To recruit research participants, an e-mail was sent on July 24, 2007, to selected members of the AMA inviting them to participate in a survey about their knowledge and opinions of NCI. The e-mail was sent to 13,793 members representing the nine Primary Specialty categories listed in Table 1. The survey was sent to these same specialty categories in 2006. See Appendix A for the text of the e-mail invitation that was sent.

Table 1	
AMA Primary Specialty Category	Members
Gastroenterology	4,625
Medical oncology	2,346
Radiation oncology	2,210
Hematology/oncology	1,864
Thoracic surgery	1,660
Colon and rectal surgery	563
Gynecological oncology	280
Surgical oncology	152
Head and neck surgery	93

Of the 13,793 e-mails sent, 13,451 were successfully delivered. Ten percent (1,411) of those emails were opened. The e-mail was opened a total of 1,710 times, indicating that some of the messages were opened multiple times by the same recipient. Of those who received the e-mail, 327 individuals (2.4%) participated in the survey.

Figure 1 displays the metrics related to the survey invitation e-mails.

Figure 1



Statement of Limitations and Strengths of the Research

The data represent a self-selected group of health care providers with access to the internet and e-mail; this selection bias may have an impact on the survey findings. Because the same AMA specialty categories as last year were used, it can be assumed that some respondents participated in the 2006 and 2007 surveys. Also, people who were already familiar with NCI or clinical trials may have opted to participate while those not as familiar may have deferred because they were not confident in the subject matter. Respondents were allowed to skip questions, resulting in varying sample size from question to question as indicated in the tables. Findings should be considered valid from the respondents' points of view; however, findings cannot be generalized to represent the opinions of other health care professionals.



III. Detailed Findings

Respondent Demographics

Survey questions 12–16 gather demographic information about the respondents. Respondents were most likely to select the following categories:

- Professional status of "MD" (92%)
- Specialize in oncology (40%)
- Sees 31 or more cancer patients per month (45%)
- In private practice (47%)
- Primary practice located in the South (33%)
- Have been working with cancer patients more than 20 years (44%)

The complete data set is listed in Tables 2–5. Figures 2 and 3 show the regional and occupational specialty breakdowns of all respondents.

Figure 2: Primary Practice Regions

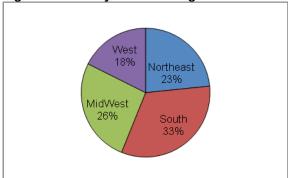
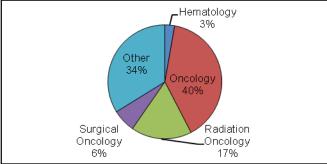


Figure 3: Occupational Specialty





Opinions of Clinical Trials

Methods of Disseminating Clinical Trial Information

When respondents were asked how they learn about clinical research opportunities for their patients, the largest percentage (54%) said "conferences/seminars," followed closely by "colleagues" (51%) and internet (45%) (Table 6). The top responses changed slightly when respondents were asked how they *prefer* to learn about clinical research opportunities for their patients (Table 7). The largest percentage (51%) preferred "e-mail" followed closely by "conferences/seminars" and "internet" (both 40%).

Respondents referring to NIH clinical trials in the past year are more inclined than those who have not referred in the past year to learn about clinical trials from colleagues, conferences/seminars, and the internet. They *prefer* to learn about clinical trial opportunities via e-mail and the internet (Table 8).

Respondents referring more than 20 patients to clinical research studies in the past year are more inclined than respondents who refer less patients to learn about opportunities via colleagues, conferences/seminars, interdepartmental meetings, mail, and patients. Sixty one percent *prefer* to learn about clinical trial opportunities via e-mail (Table 9).

Forty percent of the respondents who preferred to learn about clinical trial opportunities by e-mail did not list e-mail as a method for which they are currently receiving this information (Table 10). This indicated that a large group of respondents are not receiving information via e-mail even though they would prefer it. This offers an opportunity for NCI to increase e-mail outreach efforts.

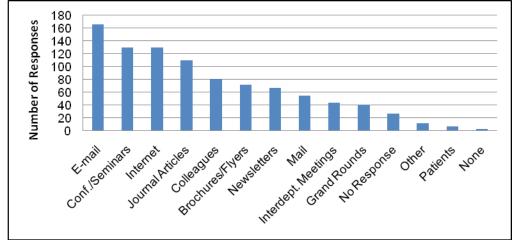


Figure 4: Preferred Method of Learning About Clinical Trials (All Respondents)



Referrals to General Clinical Trials

Seventy five percent of respondents reported ever referring a patient to a cancer clinical trial. While many respondents have referred a cancer patient in the past, the general trend seems to be that most respondents refer only a few patients per year. The largest percentage (56%) of respondents reported referring 1–10 patients to a clinical trial in the past year (Table 11).

Profile of Respondents Referring to General Clinical Trials:

- Refers a few patients per year
- Sees many cancer patients per month
- Knows NCI distributes cancer information to patients and physicians
- University setting

The length of time that respondents have worked with cancer patients does not impact the number of referrals made to clinical trials (Table 12). However, respondents who referred the most cancer patients to clinical research trials in the past year tend to see more cancer patients than those who referred less (Table 13). They are also more likely to know that NCI distributes cancer information to patients and physicians (Table 14).

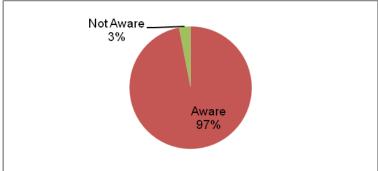
Respondents in the university setting refer more patients to clinical trials than any other practice setting. See Table 15 for supporting data.

Knowledge of NCI

Awareness of NCI

Awareness of NCI is high among all respondents, regardless of frequency of referrals to clinical trials (Table 16). Figure 6 shows that 97% of respondents were aware of NCI before participating in this survey. Of the 10 respondents who were not aware of NCI, all were MDs; seven of them had referred a patient to a clinical trial before. This may mean that MDs referring patients to general clinical trials would be willing to also refer patients to NCI trials if they were made aware of opportunities at NCI.

Figure 5: Awareness of NCI





Knowledge of NCI's Functions

Eighty two percent of respondents reported being either "somewhat familiar" or "very familiar" with the functions of NCI (Table 17).

It was found that the majority of respondents (85%) know that NCI sponsors clinical trials. Eighty

two percent know that NCI provides information about ongoing clinical trials. See Table 18 for the entire breakdown of responses to the survey question "What activities do you think NCI conducts or provides?"

The data showed a relationship between familiarity with NCI and knowing that NCI sponsors and conducts clinical trials. The percentage of respondents correctly reporting that NCI conducts and sponsors clinical trials decreased as respondents' reported knowledge of NCI decreased. For the complete counts, see Tables 19 and 20.

80% of respondents know NCI conducts clinical trials

Respondents who are "somewhat familiar" or "very familiar" with NCI are more likely than those "not familiar" or "not very familiar" to know that NCI conducts and sponsors clinical trials. Respondents more familiar with NCI were 72% more likely to know NCI conducts clinical trials and 70% more likely to know NCI sponsors clinical trials. However, some respondents who said they were "very familiar" with NCI did incorrectly identify some of its functions. For example, 42% of the respondents who thought that NCI maintains regulatory oversight over pharmaceutical and biotechnology companies also said they were "very familiar" with the functions of NCI. Thirty five percent of respondents who said NCI defines standards of care for cancer patients also said they were "very familiar" with NCI. See Tables 21 and 22 for the complete counts.

Factors Related to Knowledge of NCI's Functions:

The survey data showed a link between familiarity with NCI and the number of cancer patients treated per month. Table 23 shows that respondents who treat 11 or more cancer patients per month are more likely to be "very familiar" with NCI than respondents who treat 10 or less. Respondents who see a large amount of cancer patients per month are more likely to report a high familiarity with NCI.

Respondents who refer more patients to clinical trials (both general and NCI) are more familiar with the endeavors of NCI and give NCI credit for providing more services (Tables 14 and 23). When respondents were asked how many cancer patients they had referred to an NCI clinical

Characteristics of Respondents "Very Familiar" With the Functions of NCI:

- Treats 11+ cancer patients per month
- More than 20 years experience treating cancer patients
- Primarily practice in the West
- Refers more patients to clinical trials

trial on the Bethesda campus *in the past year*, 57% said "none". In comparison, 52% of those who were "very familiar" with NCI also said they had not referred any patients to NCI in the past year. The 5% difference may mean that increasing healthcare providers' familiarity with NCI could increase the numbers of referrals to NCI trials.

Respondents who were "very familiar" with NCI were 53% more likely than respondents who were "not familiar" or "not very familiar" to have referred a patient to an NCI-sponsored trial at a



site other than NCI in Bethesda. This may indicate that referrals to NCI trials at institutions increase as respondents' familiarity with NCI increases.

Respondents who have ever referred a patient to a cancer clinical trial were more likely than those who have never referred to a cancer clinical trial to know that NCI conducts and sponsors clinical trials. Eighty-eight percent of respondents who have ever referred to a cancer clinical trial also correctly reported that NCI conducts clinical trials and 94% of these respondents correctly reported that NCI sponsors clinical trials (Tables 24 and 25).

Experience with treating cancer patients is also related to increased familiarity with NCI. Fifty-five percent of respondents who reported being "very familiar" with NCI also reported "more than 20 years" of experience with treating cancer patients (Table 26).

Patient Referrals to NCI

Forty percent of respondents had *never* referred a cancer patient to an NCI clinical trial on the NIH campus (Table 27). More respondents, however, are making referrals to NCI-sponsored trials conducted elsewhere: Only 17% had *never* referred a patient to an NCI-sponsored clinical trial that was conducted at an institution other than NCI in Bethesda (Table 28).

Forty two percent of respondents who have ever referred a patient to a clinical trial at NCI in Bethesda had done so in the past year (Table 29).

Those referring to NCI trials in the past year have been working with cancer patients longer than those who have not referred patients to NCI trials in the last year (Table 30).

Those respondents who have referred more patients to clinical trials in general also referred more patients to NCI trials. Of the respondents who have ever referred a patient to a cancer clinical trial, 43% have also referred to an NCI clinical trial in Bethesda. A larger percentage (65%) had referred to an NCI-sponsored trial conducted at an institution other than Bethesda. The larger percentage of referrals to an institution other than Bethesda can most likely be explained by considering proximity; respondents seem to be referring patients to the closest facility.

Regional Referral Habits and Perceptions of NCI

Awareness of NCI does not vary by location of the respondent; however, the Northeast had the lowest percentage of respondents reporting they were "very familiar" or "somewhat familiar" with NCI (Table 32).

As shown in Table 34, respondents in the South and Midwest are more likely than respondents in the West to know NCI conducts clinical trials.

Analyses of the respondents' geographical location revealed that the South had the highest percentage of respondents who had ever referred a cancer patient to a clinical trial at NCI in Bethesda (38%) (Table 31). Respondents from the South are more likely to refer patients to NCI clinical trials than respondents from the Northeast or West. However, respondents in the West who do refer to general clinical trials seem to do so in large numbers. The West had the largest proportion of respondents referring "16 or more" patients to a cancer clinical trial in the past year (Table 33). Respondents in the other regions were more likely to refer a smaller number of patients per respondent.



Profile of Respondents with High Referral Rates to NCI Clinical Trials

Those referring to NCI trials have been working with cancer patients longer than those who do not refer. Sixty six percent of all respondents who had referred to an NCI trial had been working with cancer patients more than 20 years (Table 35).

Table 36 shows that respondents who have referred "16 or more" patients to a clinical trial in the past year are more likely to have referred a patient to an NCI trial at Bethesda than respondents who referred fewer patients. Respondents referring 6 or more patients to a clinical trial in the past year were more likely than those referring fewer patients to have referred a patient to a trial conducted at an institution other than Bethesda (Table 37). This may indicate that respondents who refer a smaller number of cancer patients per year are more likely to refer their patients to NCI trials close to their practice rather than a clinical trial being conducted at NIH in Bethesda.

Profile of Highest Referring Respondents to NCI

- Primary practice located in the South
- Long history of working with cancer patients
- Treats 21 or more cancer patients per month
- Learn about clinical trials through colleagues, conferences/seminars, and the internet
- Also refer more patients to clinical trials in general
- Familiar with the endeavors of NCI

Miscellaneous

The final question of the survey asked whether the respondent would like to receive the *Bethesda Trials News* e-newsletter. Table 38 shows that the e-mail survey successfully placed 60% of respondents onto the *Bethesda Trials News* e-newsletter mailing list. Eleven percent of the respondents were already receiving the e-newsletter.

Comparison of 2006 Survey Data

Below are highlights of differences between the 2006 and 2007 survey data.

Methods of Disseminating Clinical Trial Information

Respondents continue to learn about clinical trial opportunities via conferences/seminars, colleagues, and the internet. They continue to *prefer* to learn about opportunities via e-mail, conferences/seminars, and the internet. In particular, a greater percentage of respondents now prefer email as their source of receiving information about clinical trials (51% in 2007 compared to 44% in 2006) (Table 41).



Referrals to Clinical Trials (General)

Three percent fewer respondents reported ever referring a patient to a cancer clinical trial (78% in 2006 versus 75% in 2007).

The total number of patients respondents have referred to a cancer clinical trial in the past year has gotten smaller. Eleven percent fewer respondents referred "11 or more" patients in the past year, and 10% more respondents report referring 1–10 patients in the past year.

Respondents in the university setting continue to refer more patients to clinical trials than any other practice setting.

Awareness and Knowledge of NCI's Functions

Just as in 2006, this year's respondents reported a high awareness and familiarity with NCI. The percentage of respondents reporting being "somewhat familiar" or "very familiar" with NCI has remained steady (83% in 2006 compared to 82% in 2007). See Figure 6 for the both years' percentages.

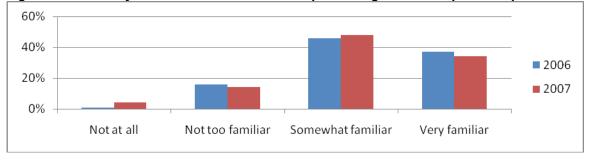


Figure 6: Familiarity With NCI 2006 Versus 2007 (Percentage of All Respondents)

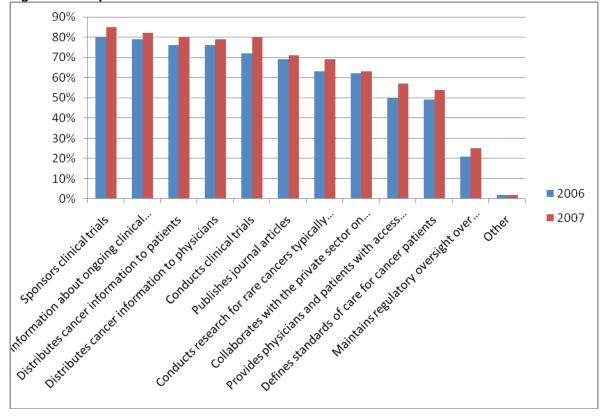
For the question "What activities do you think NCI conducts or provides?" every activity received a higher percentage than in 2006—even for those activities that are not actually a function of NCI.

Compared to 2006, an additional 8% of respondents know NCI conducts clinical trials. That was the largest increase of any NCI activity included in the survey (Table 39). The second largest increase (of 7%) was seen in respondents who said NCI provides physicians and patients with access to thought leaders in cancer research. An additional 6% of respondents said NCI conducts research for rare cancers typically not investigated by the private sector. Figure 7 contains percentages of all functions from both years' surveys.

Eight percent more respondents know NCI conducts clinical trials (compared to 2006)

Of those respondents who were "very familiar" with NCI, 2% more respondents know NCI conducts and sponsors clinical trials (Table 40).







Patient Referrals to NCI

Fewer respondents reported *never* referring a patient to a clinical trial on the NIH campus in Bethesda (51% in 2006 compared to 40% in 2007). However, referrals to NCI in the past year are slightly lower: 4% more respondents reported not referring any cancer patients to a clinical trial at NCI in Bethesda in the past year (53% in 2006 versus 57% in 2007).

Regional Referral Habits and Perceptions of NCI

The region with the largest percentage of respondents who have ever referred to NCI is now the South. In 2006, the Northeast had the largest percentage of respondents who have ever referred a cancer patient to NIH in Bethesda, but that percentage dropped by 25% in 2007 (Table 42), making the South the region with the largest percentage of respondents making NCI referrals.



IV. Tables

Table 2: Respondents' Professional Status

Survey Options	Number of Respondents	Percentage of Respondents
MD	269	92%
Other	14	5%
RN	6	2%
NP	3	1%
RPh	0	0%
PharmD	0	0%
RD	0	0%
Total	292	89%

Table 3: Respondents' Current Practice Setting

Survey Options (check all that apply)	Number of Respondents	Percentage of Respondents
Private practice	138	47%
University	58	20%
Hospital-based outpatient	32	11%
Hospital-based clinic	25	8%
Hospital inpatient	21	7%
Other	21	7%
Total	295	90%

Table 4: Number of Years Spent Working With Cancer Patients

Survey Options	Number of Respondents	Percentage of Respondents
More than 20 years	127	44%
11-20 years	74	26%
6-10 years	43	15%
3-5 years	33	12%
1-2 years	7	2%
Less than 1 year	2	1%
Total	286	87%

Table 5: Number of Cancer Patients Treated per Month

Survey Options	Number of Respondents	Percentage of Respondents
31 or more	131	45%
1-5	43	15%
6-10	38	13%
21-30	34	12%
11-20	29	10%
None	19	6%
Total	294	90%



Table 6: Ways in Which Respondents Learn About Clinical Research Opportunities for Their Patients

Survey Options (check all that apply)	Number of Respondents	Percentage of Respondents
Conferences/seminars	177	54%
Colleagues	166	51%
Internet	147	45%
Journal articles	140	43%
E-mail	130	40%
Brochures/flyers	104	32%
Newsletters	75	23%
Mail	74	23%
Interdepartmental meetings	69	21%
Grand rounds	58	18%
Patients	42	13%
Other	29	9%
None/don't learn about clinical trials	8	2%

Table 7: Ways in Which Respondents Prefer to Learn About ClinicalResearch Opportunities for Their Patients

Survey Options	Number of Respondents	Percentage of
(check all that apply)		Respondents
E-mail	166	51%
Conferences/seminars	130	40%
Internet	130	40%
Journal articles	110	34%
Colleagues	81	25%
Brochures/flyers	72	22%
Newsletters	67	21%
Mail	55	17%
Interdepartmental meetings	44	14%
Grand rounds	41	13%
Other	12	4%
Patients	7	2%
None/don't learn about clinical trials	3	1%



Table 8: Statistical Significance

Table 6: Statistical Significance					
	Past y	Past year referred patient to NCI/NIH trial?			
	Q10 - How do you learn about clinical research opportunities for your patients? (Check all that apply.)			learn abo research opp	you prefer to ut clinical ortunities for s? (Check all pply.)
	1+	None		1+	None
	A	В		Α	В
Brochures/Flyers	38%	42 %		30%	26 %
Colleagues	60%	62 %		28%	30 %
Conferences/Semina	65%	57 %		43%	51 %
E-mail	48%	57 %		53%	59 %
Grand Rounds	20%	26 %		13%	15 %
Interdepartmental	20%	30 %		15%	17 %
Internet	63%	53 %		55%	47 %
Journal articles	35%	51 %		35%	38 %
Mail	38%	32 %		25%	15 %
Newsletters	25%	32 %		25%	25 %
Patients	38%	19 %		0%	4 %
None	0%	0 %		0%	2 %
Other	13%	13 %		3%	11 %
Sample	40	53		40	53

Table 9: Statistical Significance

	# of Patients Referred to a Cancer Clinical Trial (past year)					
	Q10 - How do you learn about clinical research opportunities for your patients? (Check all that apply.)		about opportunit	do you pref clinical res ies for your k all that ap	earch [•] patients?	
	5 or Less	6-20	21 or more	5 or Less	6-20	21 or more
	A	В	С	Α	В	С
Brochures/Flyers	42% B	24%	41% B	28% C	21%	15%
Colleagues	50%	60%	67% A	27%	27%	30%
Conferences/Seminars	61%	61%	70% A	43%	51%	44%
E-mail	50%	47%	57%	56%	50%	61%
Grand Rounds	17%	26%	22%	10%	16%	17%
Interdepartmental meetings	18%	27%	39% A	13%	20%	20%
Internet	51%	56%	52%	41%	51%	46%
Journal articles	50%	49%	37%	43% BC	31%	28%
Mail	25%	21%	37% AB	21% B	7%	15%
Newsletters	28%	20%	30%	27%	17%	22%
Patients	14%	13%	26% AB	1%	3%	2%
None	1%	0%	0%	1%	1%	0%
Other	9%	16%	11%	4%	7%	4%
Sample	109	70	46	109	70	46
Signicant at 90%						



Table 10: Respondents who Learn About Clinical Research Opportunities for Their Patients by E-Mail / Respondents who *Prefer* to Learn About Clinical Research Opportunities for Their Patients by E-Mail

		Prefer-		
		No	Yes	Total
Learn-	No	131	66	197
E-mail	Yes	30	100	130
Total		161	166	327

Table 11: Number of Patients Respondents Have Referred to a CancerClinical Trial in the Past Year

Survey Options	Options Number of	
	Respondents	Respondents
None	28	12%
1-5	81	36%
6-10	46	20%
11-15	14	6%
16-20	10	4%
21 or more	46	20%
Total	225	69%

Table 12: Statistical Significance

Q15 - How many years have you been working with cancer patients?						
	# of Patients Referred to a Cancer Clinical Trial (past year)					
	5 or Less6-2021 or moreABC					
Less than 1 year	0%	0%	0%			
1-2 years	0%	5%	0%			
3-5 years	10%	10%	16%			
6-10 years	10%	18%	18%			
11-20 years	32% 21% 219					
More than 20 years	48% 46% 46					
Sample	104 67 44					
Signicant at 90%						



Table 13: Statistical Significance

Q4 - Approximately how many cancer patients do you treat each month?						
		ients Refer er Clinical				
	(past year) 5 or Less 6-20 21 or more					
	A B C					
5 or Less	21% BC	3%	2%			
6-20	27% C	26% C	2%			
21+ (net)	52% 71% A 96% AB					
Sample	107 70 46					
Signicant at 90%						

Table 14: Statistical Significance

Q3 - What activities do you think	NCI conducts	or	
provides? (Check all that apply.)	# of Pati	ents Refer	red to a
	Cancer Clinical Trial (past year)		
	5 or Less	6-20	21 or more
	A	В	С
Defines standards of care for cancer patients	59%	50%	47%
Distributes cancer information to patients	83%	93% A	98% A
Distributes cancer information to physicians	82%	90%	93% A
Sponsors clinical trials	94%	97% C	87%
Conducts clinical trials	88%	96% A	87%
Provides information about ongoing clinical trials	91%	93%	96%
Provides physicians and patients with access to thought leaders in cancer research	62%	63%	62%
Publishes journal articles	76%	83%	82%
Maintains regulatory oversight over pharmaceutical and biotechnology companies	21%	27%	29%
Collaborates with the private sector on cancer-related clinical research	68%	73%	73%
Conducts research for rare cancers typically not investigated by the private sector	80%	74%	84%
Other	3%	1%	2%
Sample	108	70	45
Signicant at 90%			

Table 15: Statistical Significance



	Canc	# of Patients Referred to a Cancer Clinical Trial (past year)					
	5 or Less	6-20	21 or more				
	А	A B C					
Hospital inpatient	7%	3%	2%				
Hospital-based outpatient	11%	17% C	4%				
Hospital-based clinic	13%	7%	7%				
University	14%	26% A	38% A				
Private practice	49%	38%	38%				
Other	6%	9%	11%				
Sample	106 69						
Signicant at 90%							

Table 16:

Q1 - Before beginning this survey, were you aware of the National Cancer Institute (NCI)?					
# of Patients Referred to a Cancer Clinical Trial (past year)					
	5 or Less	6-20	21 or more		
	А В С				
Yes	99% 100% 98%				
Sample	109	70	46		

Table 17: Respondents' Familiarity with NCI

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not Familiar at All	11	3.4	3.5	3.5
	Not too Familiar	44	13.5	14.1	17.7
	Somewhat Familiar	150	45.9	48.2	65.9
	Very Familiar	106	32.4	34.1	100.0
	Total	311	95.1	100.0	
Missing	System	16	4.9		
Total		327	100.0		

Table 18: Activities Respondents Think NCI Conducts or Provides



Survey Options (check all that apply)	Number of Respondents	Percentage of Respondents
Sponsors clinical trials	278	85%
Provides information about ongoing clinical trials	267	82%
Distributes cancer information to patients	261	80%
Conducts clinical trials	260	80%
Distributes cancer information to physicians	258	79%
Publishes journal articles	231	71%
Conducts research for rare cancers typically not investigated by the private sector	227	69%
Collaborates with the private sector on cancer- related research	206	63%
Provides physicians and patients with access to thought leaders in cancer research	186	57%
Defines standards of care for cancer patients	175	54%
Maintains regulatory oversight over pharmaceutical and biotechnology companies	81	25%
Other	6	2%

Table 19: Count: Respondents' Familiarity with NCI / Activities of NCI:"Conducts Clinical Trials"

		Conducts C	linical Trials	
		No	Yes	Total
How familiar	Not Familiar at All	6	5	11
were you with Not too Familiar	13	31	44	
the endeavors	Somewhat Familiar	23	127	150
of NCI?	Very Familiar	10	96	106
Total		52	259	311

Table 20: Count: Respondents' Familiarity with NCI / Activities of NCI:"Sponsors Clinical Trials"

		Sponsors Cl		
		No	Yes	Total
How familiar	Not Familiar at All	4	7	11
were you with	Not too Familiar	9	35	44
the endeavors of NCI?	Somewhat Familiar	18	132	150
Very	Very Familiar	3	103	106
Total		34	277	311



Table 21: Count: Respondents' Familiarity with NCI / Activity of NCI:"Maintains Regulatory Oversight Over Pharmaceutical and BiotechnologyCompanies"

			s Regulatory ersight	
		No	Yes	Total
How familiar	Not Familiar at All	10	1	11
were you with	Not too Familiar	34	10	44
the endeavors of NCI?	Somewhat Familiar	114	36	150
Very Familiar	Very Familiar	72	34	106
Total		230	81	311

Table 22: Count: Respondents' Familiarity with NCI / Activities of NCI:"Defines Standards of Care for Cancer Patients"

		Defines Stand		
		No	Yes	Total
How familiar	Not Familiar at All	5	6	11
	Not too Familiar	19	25	44
the endeavors	Somewhat Familiar	68	82	150
of NCI?	Very Familiar	45	61	106
Total		137	174	311



		How familia	How familiar were you with the endeavors of NCI?			
		Not Familiar at All	Not too Familiar	Somewhat Familiar	Verv Familiar	Total
Approximately	None	2	6	6	4	18
how many	1-5	6	9	16	8	39
cancer patients do you treat	6-10	0	9	24	3	36
each month?	11-20	1	1	13	14	29
	21-30	0	7	17	9	33
	31 or more	1	7	58	63	129
	Null	1	4	8	3	16
	No response	0	1	8	2	11
Total		11	44	150	106	311

Table 23: Count: Respondents' Familiarity with NCI / Number of CancerPatients Treated per Month

Table 23: Statistical Significance

Q2 - How familiar are you with the endeavors of NCI?						
	# of Pati	# of Patients Referred to a				
	Canc	er Clinical	Trial			
		(past year)				
	5 or Less	6-20	21 or more			
	A	В	С			
Very/Somewhat Familiar (net)	86%	94% A	98% A			
Very familiar	37%	38%	58% AB			
Somewhat familiar	49%	56% C	40%			
Not too familiar	13% C	6%	2%			
Not familiar at all	1%	0%	0%			
Sample	107 70 4					
Signicant at 90%						

Table 24: Count: Number of Respondents Who Have Ever Referred a Patient to a Cancer Clinical Trial / Activities of NCI: "Conducts Clinical Trials"

		Conducts c		
		No	Yes	Total
Have you ever referred	Yes	26	200	226
a patient to a cancer	No	21	53	74
clinical trial?	Null	20	2	22
Total		67	255	322



Table 25: Count: Number of Respondents Who Have Ever Referred a Patient to a Cancer Clinical Trial / Activities of NCI: "Sponsors Clinical Trials"

		Sponsors of		
		No	Yes	Total
Have you ever referred	Yes	13	213	226
a patient to a cancer	No	15	59	74
clinical trial?	Null	21	1	22
Total		49	273	322

Table 26: Count: Years Working With Cancer Patients/Familiarity With NCI

		How familia	Total			
		Not Familiar at All	Not too Familiar	Somewhat Familiar	Very Familiar	
How many years have you been working with cancer patients?	Less than 1 year	0	0	2	0	2
l'.	1-2 years	1	3	3	0	7
	3-5 years	3	5	20	4	32
	6-10 years	0	9	20	10	39
	11-20 years	3	8	37	25	73
	More than 20 years	3	11	53	58	125
	Null	1	7	11	6	25
	No response	0	1	4	3	8
Total		11	44	150	106	311

Table 27: Respondents Who Have Ever Referred a Cancer Patient to an NCI Clinical Trial on the National Institutes of Health (NIH) Campus in Bethesda, MD (Regardless of Whether the Patient was Eligible and/or Participated)

Survey	Number of	Percentage of
Options	Respondents	Respondents
Yes	98	30%
No	130	40%
Don't Know	96	30%
Total	324	70%



Table 28: Respondents Who Have Ever Referred a Patient to an NCI-Sponsored Clinical Trial that was Conducted at an Institution Other than NCI in Bethesda, MD (Regardless of Whether the Patient was Eligible and/or Participated)?

Survey Options	Number of	Percentage of
	Respondents	Respondents
Yes	147	65%
No	38	17%
Don't know	42	19%
Total	227	69%

Table 29: Count: Number of Respondents who have Ever Referred a Cancer Patient to an NCI Clinical Trial in Bethesda/Number of Cancer Patients Respondents Have Referred to a Clinical Trial at NCI in Bethesda, MD in the Past Year

		In the pa have y	In the past year, approximately how many cancer patients have you referred to a clinical trial at NCI in Bethesda, MD?						
		None	1-2	3-5	11 or more	Null	No response	Total	
Have you	Yes	53	34	4	1	0	6	98	
ever referred a cancer	No	0	0	0	0	0	127	127	
patient to an	Don't Know	0	0	0	0	96	0	96	
NCI clinical trial on the	No response								
NIH campus in Bethesda, MD?		0	1	0	0	0	2	3	
Total		53	35	4	1	96	135	324	



		How n			you bee		g with c			
		Less than 1 year	1-2 years	3-5 years	6-10 years	11-20 years	More than 20 years	Null	No respon se	Total
In the past	None	0	0	0	3	6	41	1	2	53
year,	1-2	1	0	1	6	10	15	0	2	35
approximat ely how	3-5	0	0	0	1	1	2	0	0	4
many	11 or more	0	0	0	0	1	0	0	0	1
cancer patients have you referred to	Null No response	1	4	9	12	15	25	27	3	96
a clinical trial at NCI in Bethesda, MD?		0	3	22	21	40	43	3	3	135
Total		2	7	32	43	73	126	31	10	324

Table 30: Count: In the Past Year, How Many Cancer Patients Have you Referred to a Clinical Trial at NCI in Bethesda?/How Many Years Have You Been Working With Cancer Patients?

Table 31: Statistical Significance

Q7 - Have you ever referred a cancer patient to an NCI clinical trial on the National Institutes of Health (NIH) campus in Bethesda, Md.							
	Northeast South Midwest West						
	Α	В	С	D			
Yes	33%	54% AD	47%	33%			
Sample	48	65	60	39			
Signicant at 90%							

Table 32: Statistical Significance

Q2 - How familiar are you with the endeavors of NCI?							
	Northeast	South	Midwest	West			
	A	В	С	D			
Very/Somewhat Familiar (net)	72.1 %	83.9% A	88.9% A	93.9% AB			
Very familiar	32.8 %	36.8 %	37.5 %	30.6 %			
Somewhat familiar	39.3 %	47.1 %	51.4 %	63.3% AB			
Not too familiar	21.3% CD	13.8 %	8.3 %	6.1 %			
Not familiar at all	6.6% D	2.3 %	2.8 %	0.0 %			
Sample	61	87	72	49			
Signicant at 90%							

Table 33: Statistical Significance



Q6 - In the past year, approximately how many patients have you referred to a cancer clinical trial?								
	Northeast South Midwest West							
	A	В	С	D				
5 or less (net)	54%	55% D	52% D	30%				
6-15 (net)	31%	19%	26%	32%				
16+	15%	26%	22%	38% AC				
Sample	48	65	60	37				
Signicant at 90%								

Table 34: Statistical Significance

Q3 - What activities do you think NCI conducts or provides? (Check all that apply.) Northeast Midwest South West Α В С D 84% 84% 90% Distributes cancer information to 94% 89% 83% 86% 94% Distributes cancer information to 95% 91% 96% 96% Sponsors clinical trials **Conducts clinical trials** 85% 91% D 74% 93% D 100% ABC Provides information about 84% 90% 88% ongoing clinical trials Provides physicians and patients 69% 57% 66% 62% with access to thought leaders in cancer research Publishes journal articles 72% 77% 81% 78% 25% 25% 29% 25% Maintains regulatory oversight over pharmaceutical and biotechnology companies Collaborates with the private 67% 71% 67% 71% sector on cancer-related clinical 81% 74% Conducts research for rare 77% 74% cancers typically not investigated Sample 87 73 49 61 Signicant at 90%



		Have you e clinical tria				
		Yes	No	Don't Know	No response	Total
How many years	Less than 1 year	1	0	1	0	2
have you been	1-2 years	0	3	4	0	7
working with cancer patients?	3-5 years	1	23	9	0	33
	6-10 years	12	19	12	0	43
	11-20 years	18	39	15	2	74
	More than 20 years	61	41	25	0	127
	Null	1	3	27	0	31
	No response	4	2	3	1	10
Total		98	130	96	3	327

Table 35: Count: Years Working with Cancer Patients / Ever Referred a Cancer Patient to an NCI Clinical Trial on the NIH Campus in Bethesda

Table 36: Statistical Significance

Q7 - Have you ever referred a cancer patient to an NCI clinical trial on the National Institutes of Health (NIH) campus in Bethesda, Md. *#* of Patients Referred to a cancer clinical trial (past year) 5 or Less 6-15 16+ В Α С Yes 38% 40% 57% AB Total 108 70 46 Signicant at 90%

Table 37: Statistical Significance

Q9 - Have you ever referred a cancer patient to an NCI-sponsored clinical trial that was conducted at an institution or site other than NCI in Bethesda, Md. (regardless of whether the patient eligible and/or participated)?			
	# of Patients Referred to a Cancer Clinical Trial (past year)		
	5 or Less	6-20	21 or more
	А	В	С
Yes	54%	69% A	83% AB
Sample	107	70	46
Signicant at 90%			



Table 38: Respondents Wishing to Receive the Bethesda Trials News E-Newsletter

Survey Options	Number of	Percentage of
	Respondents	Respondents
Yes	175	60%
No	86	29%
I currently receive this e-newsletter	33	11%
Total	294	90%

Table 39: Statistical Significance: Comparison of 2006 and 2007

Q3 - What activities do you think NCI conducts or provides? (Check all that apply.)		
	2006	2007
	Α	В
Conducts clinical trials	72%	80% A
Sample	411	327
Signicant at 90%		

Table 40: Statistical Significance: Comparison of 2006 and 2007

Q3 - What activities do you think NCI conducts or provides? (Check all that apply.)		
Among those who were "Very Familiar"	2006	2007
with NCI	Α	В
Conducts clinical trials	89%	91 %
Sponsors clinical trials	95%	97 %
Sample	136	106
Signicant at 90%		

Table 41: Statistical Significance: Comparison of 2006 and 2007

Q11 - How do you prefer to learn about clinical research opportunities for your patients? (Check all that apply.)		
	2006	2007
	Α	В
E-mail	44%	51% A
Sample	182	166
Signicant at 90%		



 Table 42: Statistical Significance: Comparison of 2006 and 2007

 Q7 - Have you ever referred a cancer patient to an NCI clinical trial on the National Institutes of Health (NIH)

 campus in Bethesda, Md.

	Northeast	
	2006	2007
	Α	В
Yes	58% B	33%
Sample	83	48
Signicant at 90%		



V. Appendices

Appendix A: Survey Invitation E-mail Content

Appendix B: Survey Format





DEPARTMENT OF HEALTH & HUMAN SERVICES

Public Health Service

National Institutes of Health National Cancer Institute Bethesda, Maryland 20892

Dear Health Professional:

The National Cancer Institute's (NCI) Center for Cancer Research (CCR) is conducting a survey to gain a deeper understanding of the perception that health professionals who work with cancer patients have of NCI and the services the institute provides.

We would like to invite you to participate in a brief survey about your knowledge and awareness of NCI and would greatly value any information you could provide.

This survey should take approximately 5 minutes to complete. Please be assured that your responses will be kept confidential and will not be disclosed to anyone outside of NCI or its contractor, Matthews Media Group, Inc. (MMG), except as otherwise required by law. Data will be provided to NCI in aggregate form only, with any potentially identifying information removed.

To participate, please click on the following link: http://www.matthewsgroup.com/nci-aware/

Thanks for your consideration. If you have any questions or would like to know the results of the survey, please contact Marita Lynott at mlynott@mmgct.com or 301-348-1639.

Warm Regards,

Susan McMullen Outreach Coordinator National Cancer Institute Center for Cancer Research



Appendix B: Survey Format

NCI Center for Cancer Research Survey to Assess Health Care Professionals' Awareness of NCI Intramural Clinical Trials

The National Cancer Institute's (NCI) Center for Cancer Research (CCR) is conducting this survey with physicians and nurses in order to gain a deeper understanding of the perception that health professionals have of NCI and the services the institute provides. The results from this survey will be used to evaluate the level of awareness and understanding of NCI's Center for Cancer Research and to develop new programs to educate and inform healthcare professionals of their activities.

Your participation in this survey is completely voluntary. Please be assured that your responses will be kept confidential and will not be disclosed to anyone outside NCI or its contractor, Matthews Media Group (MMG), except as otherwise required by law. Data will be provided to the NCI in aggregate form only, with any potentially identifying information removed. You may skip any questions that you prefer not to answer. This survey should take approximately 5 minutes to complete.

If you have any questions or would like to know the results of the survey, please contact Marita Lynott at mlynott@mmgct.com or 301-348-1639.

1.	Before beginning this survey, were you aware of the National Cancer Institute (NCI)? Yes INO	If yes, continue; if no, skip to #4
2.	How familiar are you with the endeavors of NCI? Very Familiar Somewhat familiar Not too familiar Not familiar at all	Record and proceed to #3
3.	 What activities do you think NCI conducts or provides? (Check all that apply.) Defines standards of care for cancer patients Distributes cancer information to patients Distributes cancer information to physicians Sponsors clinical trials Conducts clinical trials Provides information about ongoing clinical trials Provides physicians and patients with access to thought leaders in cancer research Publishes journal articles Maintains regulatory oversight over pharmaceutical and biotechnology companies Conducts research for rare cancers typically not investigated by the private sector Other 	Record and proceed to #4
		Record and



4.	Approximately how many cancer patients do you treat each month?	proceed to #5		
	□ None □ 1-5 □ 6-10 □ 11-20 □ 21-30 □ 31 or more			
5.	Have you ever referred a patient to a cancer clinical trial? ☐ Yes ☐ No	If yes, continue; if no, skip to #10		
6.	 6. <u>In the past year</u>, approximately how many patients have you referred to a cancer clinical trial? None 1-5 6-10 11-15 16-20 21 or more 			
7.	Have you ever referred a cancer patient to an NCI clinical trial on the National Institutes of Health (NIH) campus in Bethesda, Md. (regardless of whether the patient eligible and/or participated)?	If yes continue; if no, skip to #8		
8.	In the past year, approximately how many cancer patients have you referred to a clinical trial at NCI in Bethesda, Md.?	Record and proceed to #9		
9.	Record and proceed to #10			
10.	 How do you learn about clinical research opportunities for your patients? (Check all that apply.) Brochures/Flyers Colleagues Conferences/Seminars E-mail Grand Rounds Interdepartmental meetings Internet Journal articles Mail Newsletters Patients Other 	Record and proceed to #11		
11.	 How do you prefer to learn about clinical research opportunities for your patients? (Check all that apply.) Brochures/Flyers Colleagues Conferences/Seminars Interdepartmental meetings Internet Journal articles Mail Newsletters Patients 	Record and proceed to #12		
PI	Please tell us about yourself.			
12.	What is your professional status?			
	RN RD NP PharmD RPh MD Other	Record and proceed to #13		



 13. What is your area of specialization? (Check the one that most applies.) □ Hematology □ Oncology □ Radiation Oncology □ Surgical Oncology □ Other 	Record and proceed to #14
14. Where do you primarily practice? City: State: Outside the United States	Record and proceed to #15
 15. How many years have you been working with cancer patients? □ Less than 1 year □ 1-2 years □ 3-5 years □ 6-10 years □ 11-20 years □ More than 20 years 	Record and proceed to #16
16. What is your current practice setting? (Check the one that most applies.) □ Hospital inpatient □ Hospital-based outpatient □ Hospital-based clinic □ University □ Private practice □ Other	Record and proceed to #17
 Thank you for taking the time to complete the survey. Your answers have been submitted. If you have any questions or would like to know the results of this survey, please contact Marita Lynott at 301-348-1639 or mlynott@mmgct.com. The National Cancer Institute's Center for Cancer Research distributes a free quarterly enewsletter, <i>BethesdaTrials News</i>, which helps community physicians stay informed of investigational approaches to treating, diagnosing, and preventing cancer. Each issue features one or more clinical trials in process at NCI on the NIH campus in Bethesda, Md. 17. Would you like to receive this e-newsletter? Yes No (<i>Check only one.</i>) Yes No 	If yes, continue; if no or I currently receive, skip to closing
To sign up for <i>BethesdaTrials News</i> , please click on the link below, which will redirect you to The National Cancer Institute's Center for Cancer Research. The contact information you provide will not be linked to this questionnaire. Note that the National Cancer Institute's Center for Cancer Research does not sell or share its mailing list http://bethesdatrials.cancer.gov/professionals/mailinglist.asp Thank you again for completing this survey.	

Γ