Published in final edited form as:
Cancer. 2009 July 15; 115(14): 3283–3292. doi:10.1002/cncr.24377.

Medical Interpreter Knowledge of Cancer and Cancer Clinical Trials

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Abstract

Background: Cancer patients with limited English proficiency (LEP) may need specialized assistance to communicate with health professionals about cancer and clinical trials.

Methods: Medical interpreters working in several Boston-area hospitals were invited to participate in training sessions about cancer and cancer clinical trials. We did a pre and post survey-based assessment of knowledge of basic concepts in cancer and clinical trials, and post-assessment of satisfaction, among 97 interpreters in cancer training and education sessions and 79 participants in clinical trial training and education sessions.

Results: Participants had a range of prior experience with interpretation in the context of cancer and clinical trials. Training increased mean accuracy from 49% to 72% in knowledge items about cancer, and from 72% to 78% in knowledge about clinical trials. Interpreters reported several areas of concern with respect to standards of practice.

Conclusion: Pretest surveys of medical interpreters revealed several areas of important knowledge gaps about cancer and clinical trials. Post-test assessment showed that training can be useful to improving short term accuracy, but that more work is needed to develop curricula and testing measures to address these knowledge gaps.

Background

Providing care to patients with cancer is a complex, multidisciplinary effort involving patient contact with many physicians, nurses, technicians and other healthcare professionals. Patients and family members who have limited English proficiency (LEP) face additional hurdles and challenges in their efforts to establish rapport with clinicians and gain access to high quality cancer care.

The U.S. Department of Justice defines as having LEP those “Individuals who do not speak English as their primary language and who have a limited ability to read, speak, write, or understand English”. Federal laws particularly applicable to language access include Title VI of the Civil Rights Act of 1964 (1), and the Title VI regulations prohibiting discrimination based on national origin (2), and Executive Order 13166 issued in 2000 (3). The LEP Executive Order (Executive Order 13166) mandates that people who have LEP

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must have meaningful access to federally conducted and federally funded programs and activities. Many individual federal programs and localities also have provisions requiring language services for individuals with LEP in medical settings (4-7).

While codes of ethics and professional standards of practice for medical interpretation exist in published documents from various interpreter associations and advocacy groups (8-10), there is no mechanism to formalize these into practice due to a lack of uniform certification, licensure or training processes for medical interpreters (11). These factors lead to great variability, both locally and nationally, in the way that interpretation services are structured and delivered. In practice, health institutions provide these services utilizing both professional, paid, employee interpreters as well as untrained volunteers, bilingual staff and health professionals in dual roles (persons employed in another capacity called on to interpret as needed), family members, and others (11-20).

In the clinical context, assuring meaningful access to clinical services requires professional interpretation services delivered in-person, or remotely by telephone or video. In this article, we define a professional interpreter as “an individual with appropriate training and experience who is able to interpret with consistency and accuracy and who adheres to a code of professional ethics” (21). Appropriate training, then, is necessary to assure that professional interpreters in medical settings have sufficient language fluency, interpretation skills, an understanding of the standards of practice, as well as knowledge of medical context and applicable terminology. Professional medical interpreters should ideally receive training in all of these areas, but many do not, and therefore may have considerable knowledge gaps in the complex terminology and concepts of subspecialty medicine (22-24). In most health care settings, medical interpreters serve all clinical departments and are responsible for interpretation across a wide range of disciplines and specialties (22-25).

In 2003, under the auspices of an NCI funded program grant, the Massachusetts General Hospital Cancer Center (MGHCC), in collaboration with partners in the Dana-Farber/ Harvard Cancer Center (DF/HCC) and with the Cambridge Health Alliance launched a new initiative to facilitate access to early phase clinical trial enrollment for a community-based oncology practice in Cambridge, MA. In this practice, approximately half of all patients had LEP. In order to provide a better service to these patients, we examined the ability of available interpreters to assist clinicians and patients in conversations pertaining to possible participation in treatment trials. In this paper, we report pre- and posttest results from interpreter participants in a series of training workshops designed specifically to meet the educational needs of medical interpreters regarding cancer clinical trials. Included are participants' knowledge of cancer and clinical trials and experiences in interpreting in these contexts. We also report data from a series of semi-structured interviews with senior interpreters at other comprehensive cancer centers regarding their training programs for interpreters, and make recommendations for future program development in other health care organizations.

Pilot Training Model

Training workshops in clinical trials for pilot medical interpreters were developed in collaboration with the Translation Specialist/interpreter trainer of the MGH Medical Interpreter Services and clinicians from the Hematology-Oncology division. Two separate educational programs were designed with the goal of increasing the knowledge base in the area of cancer medicine and to familiarize medical interpreters with the process and language of clinical trials.

The objectives of the training sessions were four-fold: 1) to increase knowledge of the basic terminology used in cancer medicine and clinical trials, 2) to increase accuracy of

interpretation, 3) to narrow the gap between daily practice and professional standards of practice, and 4) to assess impact on practice through evaluation during the trainings and by post-training assessment. Training sessions had three core components: clinical content (including all key concepts to be tested in knowledge assessment), standards of practice, and interpreting skills. The clinical content component was taught by research nurses and oncology research fellows and was modeled after the basic curriculum published by the NCI (26). The curriculum encompassed methods in clinical research, phases of clinical trials, safeguards for patients, and informed consent. The segment on standards of interpreter clinical practice was led by an experienced interpreter trainer and was designed to review standards of practice and link them to the specific contexts discussed in the clinical component. This segment included an interactive presentation by an interpreter trainer and senior interpreters with peer group discussion. The interpreting skills segment was designed to integrate the skills and clinical content by letting interpreters practice in pairs with observation and coaching by training staff.

Six workshops (four on cancer and two on clinical trials) were offered at the MGH Cancer Center between December 2004 and May 2005. Each session lasted 5 hours. Interpreters were compensated at their usual hourly rate for their participation. The majority of sessions were scheduled on Saturdays in order to minimize interference with usual work hours.

Interpreters from area hospitals were invited to attend. Staff, per diem, or contract interpreters were eligible from DF/HCC participating institutions (Massachusetts General Hospital, Brigham and Women's Hospital, Dana Farber Cancer Institute, Children's Hospital), Cambridge Health Alliance hospitals, and other Boston area hospitals. Many interpreters in our region work at multiple institutions on a per diem or contract basis, so there was overlap in lists of eligible interpreters.

Methods

Data reported here come from participants in interpreter training sessions. In total, 97 interpreters attended the cancer basics session and 79 interpreters attended the clinical trials session. Participants completed a pretest, measuring knowledge of core concepts in cancer and clinical trials. Pretest material was drawn from the curriculum and from key concepts covered in public domain materials provided at the NCI website (26). The cancer basics pretest consisted of 15 knowledge-matching questions about cancer terms, the clinical trials pretest consisted of 10 true/false questions about clinical trials. The question items are shown in Table 2 and Table 3. The posttest administered upon completion of each training session included the same knowledge questions from the pretest as well as a general evaluation of and satisfaction with the workshop. There were minor differences in the evaluative component designed for each workshop.

Participants from both groups who completed baseline and post-training assessments for the sessions were eligible for inclusion in these analyses. Data reported here are aggregated for attendees of each thematic workshop. Attendance was tracked for individuals, and procedures assured completion of pretest and posttest by all consenting attendees. A few participants refused to complete the evaluations. No individual identifiers were used to link respondent identities to survey responses, thus individual responses are not matched for pre and posttest comparison. Rather, we focus on the pre-training knowledge base of the total cohort as compared with the post-training knowledge base of the total cohort.

As part of the development and assessment of interpreter training for this project, we conducted semi-structured qualitative interviews with personnel from 39 comprehensive cancer centers (27) throughout the United States during August and September 2006. We

also searched the respective websites in order to find information on the availability of interpreter services and the professional qualifications of medical interpreters. We requested interviews and information from directors of interpreter services or from personnel to whom we were referred as most knowledgeable about cancer center interpreter practice. Questions included information on hiring, testing and training processes, training content, and employment vs. outsourcing of professional medical interpretation.

Analysis

Descriptive analyses are shown for cancer basics and clinical trials pre and post test knowledge. A 15-item matching quiz was used to test knowledge of cancer concepts pre and post training. We report item by item accuracy for all participants, and a population average correct score out of 15 items. A 10-item true/false quiz was used to test knowledge of clinical trials pre and post training. We report item by item accuracy for participants as well as a population average correct score out of 10 items. T-tests assess the differences in population responses in the pre- and posttest samples. The semi-structured interview data were coded to capture information on interpreter training and pre-employment testing. Analyses here are descriptive. SPSS version 15 was used for all analyses.

Results

Participant Characteristics

The characteristics of participating interpreters are shown in Table 1. Overall, 73% of interpreters who attended cancer basics and 62% who attended clinical trials training had completed college or postgraduate education. 97% of interpreters who attended cancer basics and 95% who attended clinical trials reported having had one or more types of training in medical interpreting and the majority (71% in cancer basics group and 72% in the clinical trials group) had more than two years of work experience as an interpreter. Participants reported a range of experience with cancer and clinical trials interpreting, although more interpreters were familiar with interpreting for cancer patients than for patients in any clinical trial, more specifically cancer clinical trials. 88% of cancer training participants have experience interpreting for cancer patients. 44% of clinical trials training participants have interpreted for a patient in the context of clinical trials. Only 35% of clinical trials training participants have interpreted for a patient in the context of cancer clinical trials. Some of the interpreters have extensive experience interpreting in these three areas, as 54% had interpreter for cancer patients more than 10 times, 6% had interpreted for a patient in the context of clinical trials more than 10 times, and 4% had interpreted for a patient in the context of a cancer clinical trial more than 10 times.

Interpreter Experiences in Interpreting for Cancer Patients or Clinical Trials

We asked participants a series of questions about their experiences as an interpreter (Table 4). Questions probed interpreter comfort with communication, terminology, and practices in their professional experience as interpreters. 53% of interpreters in cancer basics training sessions and 60% in clinical trials sessions reported some level of discomfort with the technical terms used by health professionals during interpretation. 64% of interpreters in cancer basics and 65% in clinical trials sessions said that they were uncomfortable with the patient's general understanding of treatment and evaluation for cancer ‘sometimes’, ‘most of the time’, or ‘always’. Reported experiences with understanding of terminology are reflected in the findings and results of the tests of basic cancer and clinical trials concepts.

Interpreters in both the cancer basics and clinical trials sessions reported being asked to perform tasks that are out of scope of the recognized standards for medical interpreting practice, such as explaining a consent document or treatment to a patient without a provider

present and sight-translating consent documents (see Table 4). The majority of interpreters in both sessions report being asked to sight-translate consent documents during interpretation (69% in cancer basics group and 76% in the clinical trials, sometimes, most of the time, and always). Sight translation is a different task than interpretation and requires a high level of mastery and thorough knowledge of subject matter to achieve an accurate and understandable rendition of a text document into another language. The standards of medical interpreter practice instruct interpreters to refrain from performing tasks for which they do not have the skills, including sight translation, which is specifically mentioned (8). A majority of the participants (56% in cancer basics group and 47% in the clinical trials) report never sight translating consent documents.

Knowledge of Cancer Basics

Prior to the start of the cancer basics training sessions, we asked participants to take a brief matching quiz about cancer terms that would be covered in the training material. Terms were shown in one column and definitions in a second column. These items were drawn from materials at the NCI website (26). Items are shown in Table 2. Overall, the pretest average number of correct answers was 7.4 out of 15 items (49%). Participants were most familiar with the terms ‘metastasis’, ‘chemotherapy’ and ‘tumor’, and least familiar with the concepts of ‘grade’, ‘radiotherapy’ and ‘adjuvant’. Following the training session, participants took the quiz again. Individual pretest and posttest scores are not matched as the test was administered anonymously to the group. The posttest average score increased significantly to 10.9 correct out of 15 items (72%) ($p<.05$ for comparison of mean scores). Concepts of grade and stage were still not well understood by interpreters either before or after attending these trainings.

Knowledge of Clinical Trials Basics

Pretests were distributed at the start of the clinical trials training session to measure baseline knowledge of clinical trials concepts. This test was a true/false test with 10 items. The items were based on NCI informational materials (26). The average score for the clinical trials pretest was higher (72% accuracy) than the pretest scores for cancer basics (49%). This finding may reflect the change in question/response format, but is particularly interesting since interpreters attending these sessions did not have a great deal of experience in interpreting about clinical trials. For all participants, the average pretest score was 7.2 out of 10 items (72%). Items are shown in Table 3. Most participants understood that patients are not enrolled into a clinical trial without their knowledge, that in general the quality of treatment is no better for those on trials, that a trial will be stopped if there are safety concerns, and the overall purpose of clinical trials is to acquire new knowledge. The interpreters were least familiar with whether or not people in clinical trials may receive a placebo without their knowledge and about phases of research. In the basic cancer training, the group accuracy improved between pre-test and posttest for every item. We did not find a similar training effect for the clinical trials workshop, as four of the items trended down from the pre-test to the posttest. The unadjusted post-test group score was 78%.

The item “patients in clinical trials get better care than those who do not participate” was correctly thought to be false by 93% of participants in the pretest. Only 53% of posttest respondents answered this item accurately, perhaps reflecting on deficiencies of the content in the training. Overall, the group average score increased from 7.2 to 7.8 (72% to 78%) for all 10 items. If the item about better care is excluded, the scores range from 5.9 on pretest to 7.1 on posttest (65% to 79%). In either case, including or excluding the better care item, overall scores for all 10 questions of the clinical trials test increased after training, though these increases are not significant.

Participant Satisfaction with Training

Participants expressed a high degree of satisfaction with the training. 95% of participants who attended cancer basics and 86% who attended clinical trials training said the sessions met their expectations. 100% of participants in each session reported that they felt they learned something new in the session, and 98% who went to cancer basics and 93% who attended the clinical trials session reported that having attended the sessions would be helpful to them the next time they were called to interpret for cancer/clinical trials patients. Areas where participating interpreters expressed interest for further training include interpreting skills, medical interviews, and informed consent.

Interpreter Training in Comprehensive Cancer Centers

In order to understand training practices at similar NCI-designated comprehensive cancer centers, we conducted semi-structured qualitative interviews with representatives of all 39 comprehensive cancer centers in the U.S. All centers provided medical interpreters for LEP patients, albeit only one center reported having an only volunteer force of bilingual dual-role staff members (persons employed in another capacity called on to interpret as needed) to assist patients as needed. Sixty-seven percent (26/39) centers have interpreters who are paid employees of their centers, while others use per diem help or outsource services to other agencies, using both telephonic and contract help. Among those who employ interpreters, 81% (21/26) of centers require written and oral tests of interpreters at the time of hire. Fifty-four percent (14/26) require prior training or certificate of instruction prior to employment. Most centers do provide training for interpreters at the time of hire, generally a combination of training from managers, other staff or interpreter peers. Cancer-specific content is covered by 52% (13/25) of centers who answered this question; clinical trials-specific content is covered by only 32% (8/25).

Discussion

Health care professionals and comprehensive cancer centers have a responsibility to ensure that cancer patients with LEP have access to professional medical interpretation services of high quality when considering treatment options, including cancer clinical trials. The inclusion of a more diverse population of patients in clinical research may require additional efforts to educate and inform interpreters who are assisting LEP patients in these complex and important discussions.

These data from our comprehensive cancer center and the surrounding Boston area suggest that experienced professional medical interpreters may have knowledge gaps about cancer and clinical trials. While our training programs were newly implemented pilot programs, they do demonstrate that a focused effort can improve group knowledge. This type of topic specific training may be helpful to increase accuracy of interpretation of medical and scientific terms that are critical to the patients' understanding of disease and treatment.

The study has several limitations

First, we recognize that matching exercises and true/false statements may seem an oversimplification of complex concepts. We did rely upon definitions and terms that appear frequently in patient education materials about cancer and clinical trials, but our findings suggest that further modifications should be made in test items and curriculum to improve interpreter comprehension. While certain items may not provide a precise assessment of the level of participants' understanding of cancer treatment or clinical trials, they do indicate the need for providers to fully explain very basic terms to assure accurate understanding by interpreters and, thereby, patients. Second, we do not know if these interpreters are representative of all interpreters. We endeavored to include interpreters from several area

hospitals but cannot know if the knowledge or experience of the group is typical. Given the level of experience of these interpreters, it does raise our awareness of the importance of ongoing assessment and professional development activities. Third, for reasons of participant confidentiality, we did not capture individual pre and post test scores, but rather, rely on summary scores for the group. This limits our analysis. Finally, we did not track these interpreters back to clinical settings and do any assessment of actual impact on patient care. Research to connect interpreter practice to patient outcomes would be an important addition to work in this field.

The experience reported by this cohort is also instructive in other dimensions. Although some participants report receiving requests for tasks that fall outside established standards of practice (sight translation, communication of consent or clinical information and explanations without providers present), the majority also report seldom or never doing this type of task (Table 4). This suggests efforts by medical interpreters to appropriately apply standards to guide their interpreting practice, or at the very least an awareness of the expectations set forth in the standards. Clinicians may likewise incorporate several related key concepts into their practices to assure effective collaboration with professional medical interpreters and thus meaningful access to clinical services for LEP patients.

1) Clinicians can ease communication and understanding by addressing patients in plain language, avoiding jargon, acronyms, editorializing, and technical terms. Using plain language, physicians can likely improve the interpreters' understanding of the material and may thereby also positively impact the quality of interpretation.

2) Clinicians should encourage patients and interpreters to interrupt when lack of knowledge or poor understanding of terms and explanations is impeding accurate interpretation and effective communication. Medical interpreters are instructed by their Standards of practice to promote direct communication between physician and patients, to disclose skill limitations, cultural and linguistic constraints, and to seek clarification as necessary to preserve accuracy (21). Ultimately, it is the clinician who should tailor the explanation to the patient's understanding, taking responsibility for “breaking down” concepts, “simplifying” technical terms and substituting word pictures or descriptions.

3) Clinicians should recognize that if experienced, professional interpreters often lack basic knowledge in cancer and clinical trials, then untrained volunteers, staff in dual roles (employed in another capacity but called on to interpret as needed), family members, and others may be even less well informed. Furthermore, clinicians should recognize that untrained individuals engaged to interpret ad hoc would likely not be acquainted with the ethical principles and standards of interpreting practice. Asking adult family members to step in to interpret should be a last resort, done only when appropriate professional interpretation services cannot be obtained. Of course, minors should not, under any circumstances, be asked to interpret.

4) Clinicians should recognize the role of the medical interpreter and refrain from asking interpreters to perform tasks that have the potential for confusing patients about the respective roles of interpreters and clinicians. Asking interpreters to independently explain documents, treatments or procedures or asking them to accompany or contact patients outside of the clinical encounter, without a provider present can impede professionalism in the delivery of interpreter services. Maintaining role boundaries with appropriate empathy and professional distance is important to avoid conflicts of interest, to protect patient and interpreter privacy and, ultimately, to support the goal of having each party's intended message conveyed accurately and completely by the interpreter.

5) Clinicians should recognize that sight translation of written materials, such as consent forms, protocols or disease information requires a different order of skills and

should not be routinely expected of interpreters. This applies especially to lengthy and complex documents like clinical trial consent forms. Investigators must make arrangements for two services: 1) medical interpreters for interpretation of the clinician's oral presentation of clinical study information and of patient's questions and responses and for 2) advance preparation of written translation by a team of professional translators of the full consent form or of the approved short form.

Conclusion

This research was a collaborative effort among clinicians, medical interpreters and evaluation researchers. We believe that a strong partnership between medical interpreters and cancer clinicians will help raise the overall quality of cancer care and help in recruitment of patients with limited English proficiency into clinical trials. Appropriate training for medical interpreters should include not only interpreting skills, orientation to standards of practice and institutional policies, but also core content for specialty practice for clinical trials. Few US cancer centers offer clinical trials or cancer content training of this kind. This work is time-consuming and challenging, but important. Filling the knowledge gaps that currently exist regarding the basic terminology of cancer treatment and trials is an important step in defining and improving the quality of interpretation for patients with LEP. Precise interpretation and greater accuracy is essential to allow patients to understand their options as well as the possible risks and benefits of participating in a cancer clinical trial.

Acknowledgments

Funding for interpreter participation in training sessions was provided by the National Cancer Institute award to Massachusetts General Hospital, 5 R21 CA101712-02 (Bruce A Chabner, Principal Investigator). As an evaluation of a training program, this research was exempt from Human Subjects Review.

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Table 1

Participant Characteristics

	Cancer Basics Trainees % (n=97)	Clinical Trials Trainees % (n=79)
Education		
High school	4%	9%
Some college	21	27
College	47	34
Graduate school	26	28
No response	1	2
Have you had any medical interpreter training? (%Yes)	97%	95%
On the job	59	52
One day or half day workshop	45	51
College affiliated certification program	37	39
Program by a training company	31	28
Other	22	15
Experience as interpreter		
Less than 1 year	5%	11%
1-2 years	14	17
More than 2 – 5 years	28	26
More than 5 years	43	46
Experience interpreting for cancer patients		Not asked
Never	12%	
One time	4	
3-5 times	19	
6-10 times	11	
More than 10 times	54	
	Not asked	
Experience interpreting in clinical trials		
Never		56%
One time		20
3-5 times		13
6-10 times		5
More than 10 times		6
Experience interpreting for cancer clinical trials	Not asked	
Never interpreted for *any* clinical trial		56%
Never interpreted for *cancer* clinical trial		9
One time		17
3-5 times		10

	Cancer Basics Trainees % (n=97)	Clinical Trials Trainees % (n=79)
6-10 times		4
More than 10 times		4
No response		1

* No significant differences were found between cancer basics and clinical trials trainees

Table 2

Results of Matching Exercise in Cancer Basics, percent of interpreters who correctly matched term to definition

Cancer Basics Item (*correct answer*)	**Pretest**	**Posttest**	**P-values**
1. A mass of excess tissue that results from abnormal cell division. *(Tumor)*	67%	82%	.02*
2. Cancer that involves only the cells in which it began and that has not spread to nearby tissues. *(Carcinoma in situ)*	52%	77%	.00*
3. Cells or tissues that do not have specialized (“mature”) structures or functions. *(Undifferentiated)*	37%	70%	.00*
4. The process of division of somatic cells in which each daughter cell receives the same amount of DNA as the parent cell. *(Mitosis)*	43%	55%	.10
5. Tumors that can invade and destroy nearby tissue and spread to other parts of the body. *(Malignant)*	55%	72%	.02*
6. The spread of cancer from one part of the body to another. *(Metastasis)*	70%	87%	.00*
7. Classification of tumors by how the cells look under a microscope and how quickly the tumor is likely to grow and spread. *(Grade)*	34%	60%	.00*
8. Any substance that causes cancer. *(Carcinogens)*	66%	79%	.05*
9. The body's normal way of getting rid of unneeded or abnormal cells. *(Apoptosis)*	22%	70%	.00*
10. Any change in the DNA of a cell. *(Mutation)*	54%	69%	.04*
11. Classification of cancer by the extent to which it has spread from the original site to other parts of the body. *(Stage)*	41%	60%	.01*
12. Diseases in which abnormal cells divide without control *(Cancer)*	48%	65%	.02*
13. Tumors that do not spread to tissues around them or to other parts of the body. *(Benign)*	55%	76%	.00*
14. Treatment with anticancer drugs. *(Chemotherapy)*	69%	82%	.04*
15. Treatment given after the primary treatment to increase the chances of a cure. *(Adjuvant)*	29%	84%	.00*
OVERALL SCORE	**49%**	**72%**	**.0014***

*Significant difference, $p < .05$

Table 3

Clinical Trials Items, percent of interpreters who correctly identified each item as true or false

Clinical Trials Item (*correct answer*)	**Pretest**	**Posttest**	**P-values**
1. Cancer clinical trials are only for those with the most advanced disease *(False)*	89%	82%	.22
2. Anyone with cancer is eligible to go on a cancer clinical trial *(False)*	56%	76%	.01*
3. Phase I trials are the first time a treatment is used in people *(True)*	44%	78%	.00*
4. The purpose of cancer clinical trials is to find better ways to prevent, diagnose, and treat cancer *(True)*	93%	91%	.65
5. Many people who join cancer treatment clinical trials get a placebo or sugar pill *(False)*	49%	62%	.11
6. Once a patient consents to trial and starts participating, they have to remain in it until the end *(False)*	78%	97%	.00*
7. Patients in clinical trials get better care than those who don't participate *(False)*	93%	53%	.00*
8. A trial will be stopped if the investigators or review board have concerns for the participants' safety *(True)*	95%	100%	.05*
9. All research for treatments begins with a Phase I clinical trial *(False)*	24%	51%	.00*
10. Persons are never put into clinical trials without their knowledge *(True)*	96%	94%	.57
Overall Score (all items)	**72%**	**78%**	**.39**
Overall Score (exclude item 7)	**65%**	**79%**	**.06**

*Significant difference, $p < .05$

Table 4

Experiences of Interpreters

	% responding Always/ Most of the time	% responding Sometimes	% responding Seldom/ Never
Uncomfortable with your understanding of the process			
Cancer Basics	8%	50%	42%
Clinical Trials	14	43	37
Uncomfortable with your understanding of the physician's explanations			
Cancer Basics	2	35	63
Clinical Trials	6	54	34
Uncomfortable with your understanding of the technical terms			
Cancer Basics	5	48	46
Clinical Trials	11	49	31
Uncomfortable with patients' understanding of the process			
Cancer Basics	16	48	35
Clinical Trials	15	50	29
Had to ask provider to reword, explain or clarify something they have just explained			
Cancer Basics	0	60	38
Clinical Trials	5	64	23
Told a provider that you don't know or understand a term			
Cancer Basics	1	36	60
Clinical Trials	1	55	36
Asked by a doctor or nurse to read the English consent document to the patient (sight translate)			
Cancer Basics	25	44	30
Clinical Trials	38	38	18
Asked to explain a consent document or treatment to a patient without a provider present			
Cancer Basics	2	26	71
Clinical Trials	3	41	50
Read the English consent document to the patient (sight translated)			
Cancer Basics	8	33	56
Clinical Trials	15	29	47
Had to explain a consent document or treatment to a patient without a provider present			
Cancer Basics	4	13	81

	% responding Always/ Most of the time	% responding Sometimes	% responding Seldom/ Never
Clinical Trials	4	19	69
Had to take the initiative to summarize a provider's explanation because it is too long to remember entirely			
Cancer Basics	1	22	73
Clinical Trials	10	37	45