

Usability Testing in Spanish, June 2011

Cancer.gov Español Evolution—Cancer types pages

Non-Hodgkin's lymphoma page



Goals: (1) Evaluate the new design for the English/Spanish language toggles (site and page level); (2) Gather users perceptions and preferences for the content organization of the page; (3) Evaluate the title and description used for the subpages links on the patients/caregivers as well as the health professional pages; and (4) Gather insight about preferences for video content and mobile website functionality

Activities: Participants were observed using the home page, and were then asked to find specific information. Their overall impressions were gathered at the end of the full session

Methodology:

See the end of this report for overall methodology and specific information for this session.

Summary of Results

Overall, the *NCI Linfoma no Hodgkin (Español)* cancer types page was well received by the participants.

- Patients / Caregivers as well as Health Professionals were positively surprised that there is a cancer website in Spanish.

The one-on-one usability study identified 43 opportunities for improvement with the top priority in the following areas:

- Language toggles – current design is confusing.
- Content organization and information architecture – Single column and avoid too many layers.
- Subpages content and cancer terminology – Appropriate for health professionals but too technical for patients and caregivers.

All participants expressed that they would use videos and a mobile site if available

- Helpful insight on preferences for video and mobile web content was gathered

Recommendations:

The top 6 recommendations corresponding to the 3 main areas that were included in testing are described below. Additional recommendations can be found in the detailed findings section:

- Language toggles – current design is confusing
 - Recommendation 1: For the site level toggles, suggest renaming as "*Página principal en Español*" and "Home Page in English" as well as consider making the link another color as currently the red color makes it difficult to notice.
 - Recommendation 2: For the page level toggles, ungroup from dissimilar elements such as the email and print links. Also, consider placing closer to the page title.
- Content organization and information architecture – Single column and avoid too many layers.
 - Recommendation 3: Flatten the information architecture to be 2 levels deep, so that users don't have to dig to get the desired information.
 - Recommendation 4: Most participants preferred the single column layout.
- Subpages content and terminology – Appropriate for health professionals but too technical for patients and caregivers
 - Recommendation 5: Consider simplifying the language so that patients are not overwhelmed by the terminology.
 - Recommendation 6: For Health Care Professionals, consider providing more specific information in a user-friendly format. For example present the information in a list format with very specific and concise information rather than in long paragraphs.

Detailed Findings

Non-Hodgkin's lymphoma (NHL) cancer type page – First Impressions

After participants were asked a series of questions to understand their relationship to cancer, they were shown the semi-functional prototype of the NHL cancer type page and asked to explore. The goal was to gather first impressions about whom the site is for and what type of information is provided.

- The patients and caregivers all concentrated on the main area of the page, reading the Non-Hodgkin Lymphoma definition first and then exploring the left navigation pane. Most scrolled down and looked at the subcategories description. One patient scrolled all the way to the bottom of the page and noticed the video.
- Health care professionals also focused on the main area of the page, reading the Non-Hodgkin Lymphoma definition first and then exploring the left navigation pane. Overall, they spent more time reading the description for each subcategory.

Table: First use of the home page

What elements of the home page attracted their attention	
P1	Video and text font size change
P2	Left menu - Symptoms subcategory and the terms in the description (bottom)
P3	Left menu - How to cope subcategory and the description (bottom)
P4	Related pages links - Right
P5	Diagram and middle content
HCP1	Left menu
HCP2	Diagram and middle content
HCP3	Left menu – scrolling to the bottom and losing the left menu
HCP4	Left menu

In general, there were three areas of the screen used for initial orientation:

- **Upper center of the page:** The title, diagram and definition were used to identify the content and theme of the page. This is where all the subjects started their review. However, only one patient and one health care professional reported this area as the one that attracted their attention.
- **The left column:** The left navigation pane was used to identify the information categories. This was the element that attracted the most attention on the homepage. In total 5 out of 9 (2 patients and 3 HCPs) reported the left navigation pane as the element that attracted their attention. Two patients specified two categories in particular that were more attractive (1) *Síntomas* (symptoms)– hoping to find information about symptoms of his cancer type (2) *Vida después del tratamiento/Supervivencia* (Life after cancer treatment/Survivorship)– hoping to find psychological support.
- **Lower center of the page:** The Categories/Subcategories descriptions were reviewed by most of the subjects. However, the health care professionals conducted a more detailed review. Overall, HCPs paid more attention to the subcategories (links) within each category.

Language toggle confusion was high.



Only 1/3 of the participants asked to change the language from Spanish to English and back was successful. There was an even split between participants selecting the site level toggle and the page level toggle. In comparison with previous testing of this function, higher numbers of participants experienced difficulties.

Success in finding toggle		
ID	Site language	Page language
P1	X	
P2		X
P3		X
P4	X	
P5		
Hp1	X	
HP2		
HP3		
HP4		X

Site Toggle

Cancer.gov in English

Page Toggle

 English |  Enviar & compartir  Imprimir

When asked to change the language of the entire site,

- Some participants felt the link was not distinct enough.
 - “Everything around here is the same color [red]. It is too confusing. No idea what the word next to it means.” HP4*
 - “Right hand corner is typical. Didn't find it.” HP1*
 - “Couldn't find page toggle. Site toggle (didn't think to look there). It is too small.” P5*
- Several participants expected the top link (cancer.gov) keep them on the page they were viewing rather than take them back to the home page.
 - “Site toggle should say what it is. Página principal.” P1*
 - “Didn't expect to see that. Why is there another page?” P4*
 - “I don't understand why click in one place [site toggle] gives me a different page than clicking here [page toggle].” HP3*
- Additionally, a few participants were confused with the label “cancer.gov”. Mostly patients and caregivers:
 - “What does cancer.gov have to do with NCI?” P4*
 - “Not sure how to go to the main page in Spanish. I thought this was taking me to government [site]. The .gov threw me off.” P3*
 - “Change the site toggle word. Cancer.gov doesn't make sense.” P2*
 - “I was expecting cancer.gov and went to National Cancer Institute. I didn't know they were the same.” P5*

When asked to change only the page level, many participants were unsuccessful in finding the page level toggle, and mentioned that they couldn't find it. When they did find it a few commented that they didn't expect to find it there, it was grouped with the links to email, sharing and printing.

- “Icon doesn't say anything to me. Can't see what the “N” is for next to the link [page toggle].”HP4*

- *"I associated that place, next to the email and print that it had to do with social media and not language." P4*
- *"Too clustered with the other things that [I would] look for something else...sharing, email, print, etc." P5*

On a positive note, all participants understood and approve of the "(en inglés)" next to links with no content available in Spanish.

- *"I like that it tells me that the content is only available in English." P1*
- *"Great if we have it in Spanish but better English than nothing?" HP1*

Content Organization: The preferred layout is a single column.

While the home page design versions (single vs. double columns) were counterbalanced to gather insight on preference for information organization, the preferred layout was the single column. Participants found the 2-column design distracting and difficult to navigate [confusing].

Organization preference		
ID	Single Column	Double Columns
P1	X	
P2	X	
P3	X	
P4		X
P5		X
HP1	X	
HP2		X
HP3	X	
HP4	X	

Single Column:	2-Column Variation:						
<p>Para empezar:</p> <ul style="list-style-type: none"> Lo que usted necesita saber sobre el linfoma no Hodgkin Síntomas Pronóstico e índices de supervivencia <p>Causas</p> <ul style="list-style-type: none"> Factores de riesgo del linfoma no Hodgkin <p>Síntomas y diagnóstico</p> <ul style="list-style-type: none"> Síntomas Pruebas para diagnosticar el linfoma no Hodgkin Pronóstico e índices de supervivencia Estadificación Preguntas para el médico Planificación del tratamiento <p>Tratamiento</p> <ul style="list-style-type: none"> Opciones de tratamiento y estudios clínicos Nutrición Cómo encontrar a un doctor o un establecimiento de tratamiento si usted tiene cáncer Obtención de una segunda opinión Preguntas para el médico <p>Efectos secundarios</p> <ul style="list-style-type: none"> Control de los efectos secundarios más comunes 	<p>Para empezar:</p> <ul style="list-style-type: none"> Lo que usted necesita saber sobre el linfoma no Hodgkin Síntomas Pronóstico e índices de supervivencia <table border="1"> <tr> <td> <p>Causas »</p> <ul style="list-style-type: none"> Factores de riesgo del linfoma no Hodgkin </td><td> <p>Síntomas y diagnóstico »</p> <ul style="list-style-type: none"> Síntomas Pruebas para diagnosticar el linfoma no Hodgkin Pronóstico e índices de supervivencia Estadificación Preguntas para el médico Planificación del tratamiento </td></tr> <tr> <td> <p>Tratamiento »</p> <ul style="list-style-type: none"> Opciones de tratamiento y estudios clínicos Nutrición Cómo encontrar a un doctor o un establecimiento de tratamiento si usted tiene cáncer Obtención de una segunda opinión Preguntas para el médico </td><td> <p>Efectos secundarios »</p> <ul style="list-style-type: none"> Control de los efectos secundarios más comunes Nutrición La medicina complementaria y alternativa </td></tr> <tr> <td> <p>La vida después del tratamiento/Supervivencia »</p> </td><td> <p>Cáncer avanzado »</p> <ul style="list-style-type: none"> Planificación del cuidado de </td></tr> </table>	<p>Causas »</p> <ul style="list-style-type: none"> Factores de riesgo del linfoma no Hodgkin 	<p>Síntomas y diagnóstico »</p> <ul style="list-style-type: none"> Síntomas Pruebas para diagnosticar el linfoma no Hodgkin Pronóstico e índices de supervivencia Estadificación Preguntas para el médico Planificación del tratamiento 	<p>Tratamiento »</p> <ul style="list-style-type: none"> Opciones de tratamiento y estudios clínicos Nutrición Cómo encontrar a un doctor o un establecimiento de tratamiento si usted tiene cáncer Obtención de una segunda opinión Preguntas para el médico 	<p>Efectos secundarios »</p> <ul style="list-style-type: none"> Control de los efectos secundarios más comunes Nutrición La medicina complementaria y alternativa 	<p>La vida después del tratamiento/Supervivencia »</p>	<p>Cáncer avanzado »</p> <ul style="list-style-type: none"> Planificación del cuidado de
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<p>La vida después del tratamiento/Supervivencia »</p>	<p>Cáncer avanzado »</p> <ul style="list-style-type: none"> Planificación del cuidado de 						
<p>“Liked the one column better. The 2 columns are too distracting.” HP4</p> <p>“Liked the single column better because the other one is too crowded.” P1</p>	<p>“I get lost looking between the columns.” HP1</p> <p>“Links for the subpages are not clear.” P2</p>						

Additionally, although the single-column was the preferred design, participants expressed that the amount of links on the main page were overwhelming and too wordy.

- “Like the information [organized] like this but didn’t notice these were all links.” P1
- “Both are too wordy...all the information in the bottom and the middle is too much. One column is better.” HP3

Content Organization: Information Architecture is too deep, too many layers.

All participants expressed frustration regarding the number of clicks to get to the desired information. They preferred to have the content more readily available within 2 clicks, with at least summary level information of the content. As a result some felt that the nested menus were overwhelming and they expressed that a description in the main page would be better than all the links.

- ☞ *"Same thing...I have to click again!" P5*
- ☞ *"More links? Just give it to me!" "I hope I don't get another 20 links to look for." P4*
- ☞ *"Don't feel that it is comfortable. Don't know where the navigation is." HP3*

Additionally, participants that navigated deeply and reached the pages with the content were expected to find the information

In a way that it was easy to read or straight forward. Rather it was in long paragraphs that gave them the impression that they would need to concentrate and set aside time to read.

- ☞ *"Again...we have to go deeper to find the answer. I want to find the answer right away. Otherwise I feel I will get lost reading all this." P5*
- ☞ *"Thought there would be more. When I click on the link [supervivencia-survivorship] it gave me prefacio (preface). I don't need to know all the story of NCI. I need specific...info that talks to me." P4*

Sub-pages: Patients and caregivers made various recommendations on how to change the language to meet expectations.

The screenshot shows the website of the Instituto Nacional del Cáncer (National Cancer Institute). The main header includes the organization's name and a search bar. Below the header is a navigation menu with links to 'Página principal', 'El cáncer', 'Tipos de cáncer', 'Apoyo y recursos', 'Noticias', and 'Nuestro trabajo'. A sidebar on the left lists 'Lista por tipos de cáncer' with an alphabetical index. The main content area is titled 'Linfoma no Hodgkin: Para pacientes y quienes cuidan de ellos'. It includes a sub-header '¿Qué es el linfoma no Hodgkin?' and a definition: 'Definición del linfoma no Hodgkin. Cualquiera de un grupo grande de cánceres de linfocitos (glóbulos blancos). Los linfomas no Hodgkin se pueden presentar a cualquier edad y a menudo se caracterizan por ganglios linfáticos más grandes de lo normal, fiebre y pérdida de peso. Hay muchos tipos diferentes de linfomas no Hodgkin. Estos tipos se pueden dividir en dinámicos (de crecimiento rápido) e indolentes (de crecimiento lento) y pueden estar formados por células B o células T. Los linfomas no Hodgkin de células B incluyen el linfoma de Burkitt, la leucemia linfocítica crónica o el linfoma linfocítico pequeño (LLC o LLP), el...'. There is also a diagram of the human lymphatic system.

Overall, the wording of the links is appropriate but the content did not meet all the expectations of the patients and caregivers. In part, this ties back to the information architecture, as most

participants expressed the reason to be that they expected to see the most important information related to each subtopic as soon as they click the navigation link.

In addition, there was sensitivity to some of the selection language and content. In particular, patients were most shaken with the content under “*Cáncer avanzado*” (*advanced cancer*). Most expected or wanted the content related to the different stages, rather than sensitive information related to end of life. Because of the cancer stigma and the perception of cancer diagnosis as a death sentence in the Latino community, this area needs to be softened to keep the message the same, but not factual and direct information.

The complete list of recommendations on the page titles is as follows:

- *Causas (Causes)* – List of risk factors
- *Síntomas y diagnóstico (Symptoms and diagnosis)*– List of symptoms that patients can identify
- *Tratamiento (Treatment)* – Treatments available for the specific cancer
- *Efectos Secundarios (Side Effects)* – List of side effects expected and how to treat them
- *Supervivencia (Survivorship)* –What to do after treatment and in remission (difference was not clear)
- *Cáncer Avanzado (Advanced Cancer)* – Cancer Stages “*Etapas del cáncer*”
- *Cómo hacer frente al cáncer (Coping and support)* – Title was not easy to understand. Consider changing to “*apoyo*” (support)

Representative quotes from Patients and Caregivers included:

- ☞ *Causas (Causes)* – “[Expect to see] Information about causes to see why there are so many cases [of cancer] and now more than before.” P3
- ☞ *Síntomas y diagnóstico (Symptoms and diagnosis)* – “Wanted to see my symptoms and the key things to look for. Pain at night. More of a physical diagnosis. Questions for self diagnosis.” P2
- ☞ *Tratamiento (Treatment)* – “I was expecting to see what kind of chemo I could expect during treatment.” P2
- ☞ *Efectos Secundarios (Side Effects)* – “Specific information. List of possibilities. What to expect? I was surprised to see what happened to me [during treatment]. Some warning would have been good.” P2
- ☞ *Supervivencia (Survivorship)* – “Expected to see more psychological support.” P1
- ☞ *Cáncer Avanzado (Advanced Cancer)* – “[Expected to see] Description of cancer stages and information about them.” P3
- ☞ *Cómo hacer frente al cáncer (Coping and support)* – “Not how prevent but how to deal with it...title not clear.” P4

Sub-pages: HCPs wanted more specific information and more distinction between content.

Instituto Nacional del Cáncer
de los Institutos Nacionales de la Salud de EE. UU.

Página principal | El cáncer | Tipos de cáncer | Apoyo y recursos | Noticias

Lista por tipos de cáncer
A B C D E F G H I J K L M
N O P Q R S T U V X Y Z

Linfoma no Hodgkin: Para pacientes y quienes cuidan de ellos

» **Linfoma no Hodgkin: Para profesionales de salud**

- Diagnóstico y tratamiento
- Cuidados paliativos y de apoyo
- Atención médica de seguimiento
- Investigación sobre el linfoma no Hodgkin
- Estudios clínicos
- Recursos para sus pacientes

Linfoma no Hodgkin: Para profesionales de salud

Cáncer en español > Tipos de cáncer > Linfoma no Hodgkin: Para profesionales de salud

Información general sobre la enfermedad

English | Enviar & compartir | Imprimir

Definición del linfoma no Hodgkin:
Cualquiera de un grupo grande de cánceres de linfocitos (glóbulos blancos). Los linfomas no Hodgkin se pueden presentar a cualquier edad a menudo se caracterizan por ganglios linfático más grandes de lo normal, fiebre y pérdida de peso. Hay muchos tipos diferentes de linfomas no Hodgkin. Estos tipos se pueden dividir en dinámicos (de crecimiento rápido) e indolentes (de crecimiento lento) y pueden estar formados por células B o células T. Los linfomas no Hodgkin de células B incluyen el linfoma de Burkitt, la leucemia linfocítica crónica o el linfoma linfocítico pequeño (LLC o LLP), el linfoma difuso de células B grandes, el linfoma folicular, el linfoma inmunoblástico de células grandes, el linfoma linfoblástico de células B precursoras y el linfoma de células de manto. Los linfomas no Hodgkin de células T incluyen la micosis fungoides, el linfoma anaplásico de células grandes y el linfoma linfoblástico de células T precursoras. Los linfomas que se presentan después de un trasplante de médula ósea o un trasplante de células madre son habitualmente linfomas no Hodgkin de células B. El diagnóstico y el tratamiento dependen del estadio, el tipo de la



Enlarge (+)
Medical illustration caption

Overall, the wording of the links is appropriate and the content was better received by the Health Care Professionals in comparison with the consumers. However, HCPs asked for more specific information such as:

- Diagnóstico y tratamiento (Diagnosis and treatment) – List of specific treatments and diagnosis including symptoms
- Cuidado paliativos y de apoyo (Palliative care and support) – List of options when other treatments fail (supportive care)
- Atención médica de seguimiento (Follow up care) – Medical attention required by cancer stages
- Investigaciones sobre NHL (NHL Research) – Medical advances currently in process for NHL
- Estudios Clínicos (Clinical Trials) – Completed studies. The difference between the two is not clear. Consider grouping this by completion stage:
 - Actualmente en proceso (Recruiting patients)
 - Completadas (Completed) – show findings / results of completed trials
- Recursos para sus pacientes (Materials for your patients) – Provide tools for HCP's for use with their patients – Information on services available, facilities that they could go to and information on how they could get financial help.

Representative quotes from HCPs included:

- Diagnóstico y tratamiento (Diagnosis and treatment) - *"I would expect symptoms info here."* HP1
- Cuidado paliativos y de apoyo (Palliative care and support) – *"[I expect to see] Comfort care...not drugs but the general care (supportive care)."*

- ☞ Atención médica de seguimiento (Follow up care) – *“Medical attention not sure if it [the content] is during therapy or after remission.” HP2*
- ☞ Investigaciones sobre NHL (NHL Research) – *“I expect to see current research.” HP1*
- ☞ Estudios Clínicos (Clinical Trials) – *“[Expect to see] More research that they have done, medical. Drugs that have worked.” HP4*
- ☞ Recursos para sus pacientes (Materials for your patients) – *“Info on clinic, doctors, hospitals, etc. Places for patients but not clear if the information is for me or for them.” HP1*

Content was difficult to understand for patients/caregivers, while HCPs felt that the content was more appropriate to be used as a resource for patients rather than education material for themselves because (1) the content is not approved material by management within their medical facility and (2) the content is not as indepth as the medical resources they typically use. However, they didn’t expect this website to provide the kind of content they get for their personal educaiton and were satisfied with the possibility of using it as a tool.

Patients thought that the site was a bit too technical and was more oriented for health care professionals, as they could not find a quick way to look up the medical terms presented in the text.

- ☞ *“Language in NCI is a bit technical but not as bad as I've seen it in other websites. Dumb it down.” P4*
- ☞ *“Some terms I don't understand. I would write down. Go to a dictionary and find what they mean.” P1*
- ☞ *“I don't know what some of these words mean. I don't understand these words. The doctor used those big words and I didn't know what these words mean. That's what I asked my sister-in-law to look it up...those are medical words.” P2*

Healthcare professionals mentioned that they would not use the site to keep them informed, as it was too elementary or not the approved materials they are currently instructed to follow by their hospital / practice management. However, they thought that it was a good tool, if kept in a non-technical language to use to educate their patients.

- ☞ *“I don't expect to learn from a website. I went to med school for that. I would use to show patients.” HP1*
- ☞ *“[I would use] to educate patients. For my education I need approved sources...needs to be approved by the supervisor.” HP3*

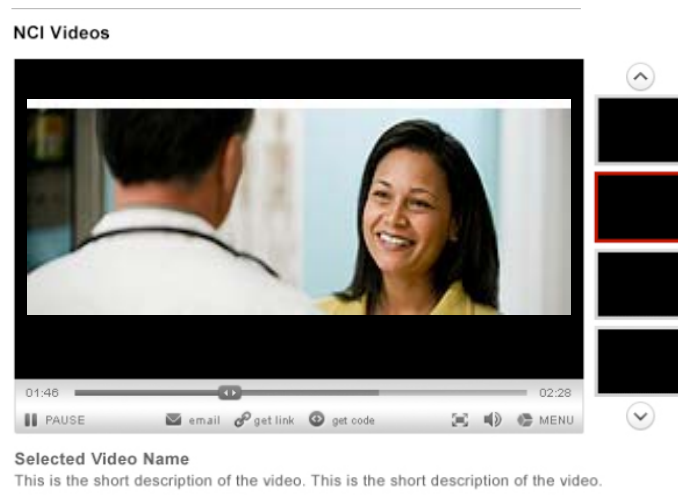
Text color and size not optimal.

Several consumers expressed that the font was too small and light in color. Both consumers and HCPs understood what the text size change link was for. However, several consumers

expressed that the default for all text should be a larger size. Also, some consumers expressed that black colored font should be used as much as possible.

- 💬 *"Letters should be bigger/darker...looks too crowded. Start with bigger size and have option to reduce." P1*
- 💬 *"Couldn't see it. Make it bigger [page toggle text]." P2*

All participants expressed that having videos available on the site would be very helpful.



Patients and caregivers expressed that they would find the following most helpful:

- Motivational videos – “psychosocial” help
- Survival stories – told by other patients
- Positive reinforcement
- What to expect from the disease and the treatments
- Suggestions on what to do to overcome discomfort and pain

Related comments from patients and caregivers included:

- 💬 *"I would use it to understand what the doctor is talking about. I needed in a way I can understand." P4*
- 💬 *"Doctor explaining, other patients [talking], family support. Guidance on how to look information. Maybe a demo on how to use the website." P1*

Most health professionals stated they would use the videos more to educate their patients than for themselves. They said that the video content should include the following:

- Specific cancer info – Doctor talking
- Treatments / procedures - animations
- Resources available (services, facilities, financial aid)

- Content should be “gentle” and not technical

Related comments from healthcare professionals included:

- 💬 *“I would use more as a tool for my patients [to show my patients]. I went to school to educate myself.” HP2*
- 💬 *“It may show the patient what the disease may look like. Showing the patient a visual is good.” HP4*
- 💬 *“[Use] soft [language] with cancer. It has to be gentle for the patient. Type of drugs. Not about the decease but good things.” HP3*

A mobile website targeted for patients/caregivers would be most beneficial.



Although the idea of a mobile website was well received by all participants, health professionals found it particularly useful as a tool to use with patients as they typically use their mobile device more (for web) than consumers. One HCP uses iPads as part of patient education in their clinical practice.

Patients specifically would be most interested in the following:

- A concise version of the website
- Specific information
- Include all main topics - Subpages
- Option to share, email and save

Health care professionals added that they thought that NCI should concentrate on a consumer site rather than a HCP site with the following content:

- Concise version of the website
- Videos
- Include most educational topics

Quotes related to the mobile site included:

- ☞ *“Need to have information like this for everybody on the go.” HP2*
- ☞ *“A lot of information for the smart phone. Needs to be condensed. Bullet points.” HP4*

Discussion and recommendations

The *NCI* should continue to provide a website in Spanish (*Español*) as this was very well received by ALL participants and currently the options on the web are very limited. The ideas of adding both video content and a mobile site were well received.

While there were over 40 tweaks identified, the top pain point centered on the number of levels to get to the desired information. Key Lime Interactive recommends that additional testing should focus on testing the information architecture using a tree test or card sort methodology.

Additionally, selection of labels needs to be simplified so that it does not overwhelm participants.

Last, additional designs should be tested for the language toggle as the current design is not easy to find and misleading.

About This Session

Materials for this session included semi-functional prototypes. Nine (9) participants included patients, caregivers, and HCPs. They all participated in person in Downtown Chicago at the Marriott Courtyard.

❖ There were 5 Consumers.

- Cancer Patients (2 Non-Hodgkin Lymphoma and 1 Colon)
- Caregivers (mix of cancer types)
- Speak and read Spanish without difficulties
- Latino but has lived in US for at least 2 years
- Ages 29 – 51

❖ There were 4 Health Care professionals:

- 2 general practitioners, 1 nurse and 1 physician's assistant
- Ability to read and speak in Spanish
- Focused on cancer patients
- Ages 27 – 53

All sessions lasted one hour.

Detailed Listing of All Findings by Priority:

High Priority:

List of Findings for NHL Cancer Page en Español					
Item ID:	Priority	Element Reviewed	Element Description	Consumer or HP	Findings / Suggestions
G4	High	General	Technical Language	Consumers	Consider reviewing the language used on the main page and the links (inside the subpages) as patients and caregivers found it too technical
LT1	High	Language Toggles	Site Toggle	Both	Suggest to change link name to "Pagina principal in Español" and "Home Page in English"
LT3	High	Language Toggles	Site Toggle	Both	Suggest to remove some of the competing elements around it. It is not prominent as it is because of the distractors.
LT4	High	Language Toggles	Page Toggle	Both	Suggest to move it higher and away from the email and print link. Consider moving next to the title.
CO2	High	Content Organization	Main Page	Both	Preference of more descriptions
CO5	High	Content Organization	Subpages	Both	Information architecture is too deep. Too many layers
SP2	High	Subpages Content	Diagnostico y tratamiento	HP	Preferred content: List of specific treatment and diagnosis. Include symptoms.
SP3	High	Subpages Content	Cuidado paliativo y de apoyo	HP	Preferred content: List of options when other treatments fail (supportive care). Suggest adding definition to paliativo or "alivio"
SP9	High	Subpages Content	Causas	Consumer	Preferred content: List of risk factors
SP10	High	Subpages Content	Sintomas y Diagnosticos	Consumer	Preferred content: List of symptoms that patients can identify
SP11	High	Subpages Content	Tratamiento	Consumer	Preferred content: What is available for the specific cancer
SP16	High	Subpages Content	Cancer Avanzado	Consumer	Suggest to re-word the title "Temas sobre la etapa final de la vida" or move its content. Users were "shocked to read this in the 2 nd "

Medium Priority:

List of Findings for NHL Cancer Page en Español					
Item ID:	Priority	Element Reviewed	Element Description	Consumer or HP	Findings / Suggestions
G1	Medium	General	Text size/color	Both	Suggest to increase the text font size and make it darker.
G2	Medium	General	Text Size change	Both	Users understood the text size change feature. Keep it.
G3	Medium	General	English Only Content	Both	(en ingles) for content available online in English is working. Keep it.
LT5	Medium	Language toggle	Page toggle	Both	Suggest to make it bigger, darker and more prominent
CO1	Medium	Content Organization	Main page	Both	Users preferred single column
CO3	Medium	Content Organization	Main page	Both	Preference of less wordy links
SP1	Medium	Subpages Content	General	Consumer	Links are good but content needs to be straight forward
SP4	Medium	Subpages Content	Atencion medica de seguimiento	HP	Preferred content: medical attention required by cancer stages
SP8	Medium	Subpages Content	Recursos para pacientes	HP	Preferred content: Provide tools for them to use the patients. i.s. services, facilities, and \$ aid
SP12	Medium	Subpages Content	Efectos Secundarios	Consumer	Preferred content: What to expect and how to treat them
SP13	Medium	Subpages Content	La vida despues	Consumer	Not clear if this is after each treatment or after remission. Both are helpful but need to be more specific
SP14	Medium	Subpages Content	Cancer Avanzado	Consumer	Preferred content: Cancer Stages
SP15	Medium	Subpages Content	Como hacer frente el cancer	Consumer	Title was not easy to understand. Users associate with "Apoyo"
V1	Medium	Video Content	Motivational	Consumer	Add motivational videos of hope and positive testimonials
V3	Medium	Video Content	Side effects – remedies	Consumer	Add videos with recommendations of what to do to cope with side effects
V4	Medium	Video Content	General	HP	Content should be gentle and not too technical
V5	Medium	Video Content	General definition	HP	Doctor explaining the disease
V7	Medium	Video Content	Resources	HP	Services, facilities, financial assistance, ect.

Low Priority:

List of Findings for NHL Cancer Page en Español					
Item ID:	Priority	Element Reviewed	Element Description	Consumer or HP	Findings / Suggestions
LT2	Low	Language Toggles	Site Toggle	Both	Suggest to change color
LT6	Low	Language Toggles	Page Toggle	Both	Suggest to remove the letter icon next to the link. They don't mean anything
CO4	Low	Content Organization	Main Page	Both	Suggest reduce number of links
SP5	Low	Subpages Content	Investigaciones sobre NHL	HP	Preferred content: medical advances currently in process for NHL
SP6	Low	Subpages Content	Estudios Clinicos	HP	Preferred content: Completed Studies
SP7	Low	Subpages Content	Investigacions y Estudios	HP	Preferred content: Consider grouping by Completed vs. Ongoing (by dates)
V2	Low	Video Content	Cancer Stages	Consumer	Add videos that explain what to expect and what to do at the different stages the cancer and treatment
V6	Low	Video Content	Treatment	HP	Animations of the procedures
M1	Low	Mobile	Content	Both	Suggest to be a concise version of the website
M2	Low	Mobile	Content	Both	Suggest to provide very specific information. Limit to topics on the
M3	Low	Mobile	Sharing	Both	Include option to share via social media and email
M4	Low	Mobile	Storing	Both	Include option to save searches/material
M5	Low	Mobile	Media	Both	Include videos

Cumulative Summary of Participants

ID	Age	Gender	Country of origin	# of years in US	Personal experience with cancer	Type of Cancer	Year of diagnosis	Year cancer treatment ended	Education	HH Income
P1	29	M	Mexico	10+	Close family member (Mother)	Breast	2006	Currently	Some college	<35k
P2	43	F	Mexico	10+	Self	Non-Hodgkin Lymphoma	2010	2010	HSG	<35k
P3	51	M	Puerto Rico	10+	Self	Colon Cancer	2010	Currently	HSG	<35k
P4	35	M	Mexico	Born	Closer Family Member (Dad)	Bone/Hip Masthesis	2011	Currently	HSG	50-75k
P5	49	M	Mexico	10+	Self	Non-Hodgkin Lymphoma	2010	Currently	HSG	50-70k

ID#	Current Occupation	Patient population	Type of facility	Specific Cancer Topic	Country of Origin	# of years in US	Speak English	Age	Gender
HP1	General Practitioner	80+	Community Health Center	Lung, Melanoma	Columbia	7	Yes	34	M
HP2	General Practitioner	50-80	Hospital with Cancer Center	Lukemia	Columbia	23	Yes	41	F
HP3	Physician Assistant	50-80	Community Health Center	All	Mexico	10+	Yes	27	M
HP4	Nurse	20-50	Community Clinic	All	Mexico	Born in US	Yes	53	F

About the Usability Testing Sessions

Methodology

These sessions are qualitative research. They aim to produce immediate, actionable insights that can be put to use in creating or updating a project, using a small number of participants.

Sessions begin with an opening interview about use of health information, technology use and experiences with cancer, to set the context for the observations.

Specific activities focus on observing the behavior of participants as they interact with the material being tested. Participants completed both self-defined and specific tasks, compared different versions, answered questions about the material, and answer questions about their preferences and context of use.

Participants

Participants were professionally recruited. There were three sets of users: patients, caregivers, and health care professionals. In addition, participants are selected for a mix of demographics including: age, gender, income-education, Latino heritage, and technology use.

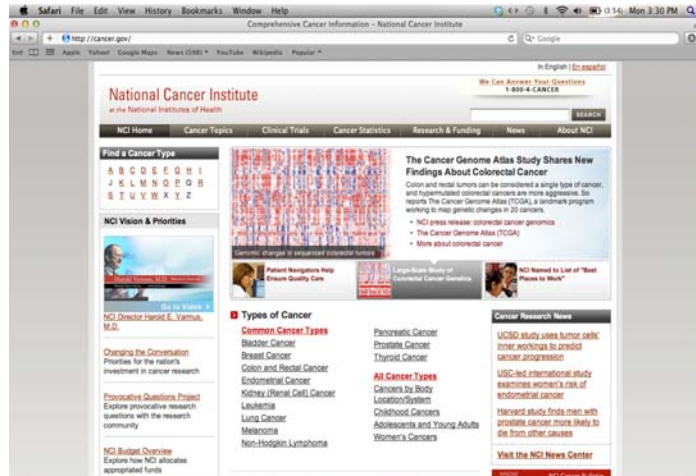
Contact

For more information contact Silvia Inéz Salazar, Office of Market Research and Evaluation.

Focus Group

Cancer.gov en Español in Seattle, WA on July 24th and July 25th

English:



Goal:

Gather user feedback from employees who operate the Cancer.gov en Español website on a daily basis in regards to site usability and efficiency.

Activities:

Two focus groups, each with 6-10 employees from NCI, were asked to share feedback regarding using the cancer.gov site in Español while assisting callers. During the sessions the participants discussed frustrations, features they enjoyed on the site, areas of improvement and different styles each use to find desired information when assisting callers.

Spanish:



Methodology:

See the end of this report for overall methodology and the appendix specific information for this session.

Summary of Results:

Opportunities for Improvement

Many observations were made about cultural and linguistic differences amongst English and Spanish speaking users of the site.

Cultural and linguistic differences:

- English inquiries involve more direct questions & Spanish inquiries are ambiguous. Some examples:
- Spanish : not knowing what to ask, what services are available, or even where to begin after diagnosis, low health literacy.
- English: Specific questions about diagnosis and treatment
- Spanish: Necessary to conduct an assessment to determine need, provide next steps, and model behavior
 - *"The majority is a spouse or relative, calling (with) 'I know somebody and I need help' (they do not ask) no specific question. Just reaching out for help."*
- Spanish callers are much more open with emotions. They share the full details of their experiences or how it has affected their families or personal life. English callers are much more procedural. Just want the information they seek and end the call once they've received it.
- More need for psychosocial support among Spanish speakers
 - Experience difficulty dealing with fear and anxiety
 - *"English callers lead the conversation. Spanish callers are led; the employee is the driver (of the conversation). If you don't ask, they won't tell. Not sure of what they want vs. English (caller) is very specific of what they want. "*

Communication gap amongst Spanish callers and their doctors:

- Spanish: Lack of communication between patients and doctors
- Spanish: Lack of knowledge in the availability of services, lack of understanding about cancer diagnosis such as type of cancer, stage, and location of the cancer in the body
 - *"In emails the staff doesn't get enough information to answer Spanish inquiries. 'Need to go back and ask the doctor'"*
 - *"Depending on where you are, availability and services. If you are in a major city, LA, San Francisco, or Seattle, there are resources that are not available*

Cancer.gov en Español

July 31, 2012

in other places. Compound that with no car, gas to drive 100 miles to nearest hospital, it adds another layer on top of immigration issue, language and knowledge issues. In talking to clients, ask if they speak English NO, doctor speak Spanish NO, translator in room NO. How is communication happening? Factor in someone in small town in Texas, complicates things more. "

- Spanish callers call not knowing what to ask, what they are entitled to, or even where to begin. As a result Spanish calls are much more general and the employee finds themselves having to piece together what it is the caller needs/is looking for out of the conversation
 - *"Part of the challenge in working with the Hispanic population, entitlements, part of the challenge is simply understanding the health care process and walking with individuals through that process. That there is a sequence of events that need to take place before surgery, chemo, and radiation. One of the roles is to help people put things in perspective precisely because of language barriers. People call and not sure why they did call. Not sure what NCI can do for them. Clarify their role and what they can do to help. Went to local free clinic and ultrasound says they have cancer. Start to pick it apart and try to piece together the situation. "*

Many of the participants noted the same frustrations with day-to-day use of the website. Amongst those frustrations most indicated specific issues with the search feature, the way that it populates search results and dealing with accents

- **Accents on Spanish words effecting search results**
 - Participants noted that when attempting to search on the site a misplaced or missing accent can cause the results to be skewed or not yield the desired information
- **Search function on Cancer.gov en Español**
 - Issues when searching the site for resources
 - Most mentioned the site not recognizing words typed without accents
 - Search results not as precise as the English site
- **Limited resources for Spanish site vs. English site**

- Most participants stated that they have to search in English and translate the search results to Spanish while on the call with the patient over the phone.
- Resources for assisting Spanish callers are being removed as opposed to being expanded upon
 - *“There is a fact sheet that I would use frequently when assisting callers and now it has been removed from the site without a replacement having the same information.*
 - *“Harder to find Spanish resources than English. Resources are limited. Hard as an employee to find in Spanish, so how much harder is it for the caller?? Other languages is much more limited.”*
- **Layout of Spanish site vs. English site**
 - Spanish site does not have the same flow as the English site
 - *“Laid out nicer in English for landing pages. Cancer type home pages.”*
 - Although both sites have most of the same information, the navigation on the Spanish site differs significantly as opposed to the English site
 - Resources are not in the same place on page
 - Spanish links take you to articles different than what the initial link indicates

What the site does well:

- **The site does have all the information the participants need to assist callers**
- **Information about financial services has been improved**
 - *“Financial service is an improvement (from the previous format)”*
- **Quick access between the two sites with the language toggle switch**
 - This is a very important feature since many of the participants mentioned that they often search for resources on the English site and once it is found they toggle over to the Spanish site.
- **The layout for the English site is more favorable when responding to inquiries**

Improvements for Future Designs:

- **More use of plain language**
 - The current language was described as “clinical” and not very easy for visitors to understand.
 - While many medical terms can’t be changed so that it is easier to understand
 - *“It would be good to have less formal language on both sites. Make it feel like the site is geared towards people and not people going there for work”*
- **Cancer Statistics tab should be more prominent on the Spanish site like it is on English site**
 - Follows along the previous comment of the Spanish layout being more similar to that of the English site
- **Add more specific information and links, such as those found on the English site, to Spanish site**
 - *“Any time we can give info to someone in a way that’s field directed towards them is helpful “Fact sheet may not apply to you but look at the 3rd question down”*
- **Incorporate videos into the site**
 - A video tutorial about how to navigate the healthcare system after cancer diagnosis or how to navigate the site
 - Possible content for the video could come from one of the What You Need to Know publications
- **Participants noted a difference in written tone, felt the English tagline was more inviting to call**
 - The Spanish tagline asks “Do you have questions? While the English site asks, “Can we help you?”
 - Make the Spanish tagline more welcoming

Differences Between Groups:

- **By study design, the groups were created based on differences in experience:**
 - Average experience of Group 1:
 - 3.6 years
 - Average experience of Group 2:

- 1.5 years
- **Terminology preferences differed**
 - Group 1: Preferred clinical terminology that was explained in easy to understand terms
 - Group 2: Preferred the use plain language and use of more color to enhance site navigation
- **Video content preferences differed**
 - Group 1 was not at all interested in adding in video content
 - Group 2 was 100% for adding a video content
- **Suggested to make the tagline more welcoming**
 - Ask more along the lines of “Como podemos ayudarle?” (How can we help you?)
 - The new suggested tagline is shorter than both current English and Spanish taglines
 - It is also an improvement from the current Spanish tagline, it is more welcoming
 - “ ‘Comos podemos ayudarle’. Touches on both. Getting people to call the center and shows willingness to help”

Interesting Findings:

- Both groups mentioned the need to incorporate help links for international inquiries
 - Given the high number of inquiries from other countries, prominently feature information to manage expectations among visitors
- A suggestion to add role-based portals on the Spanish site
 - Patient
 - Doctor
 - Caregiver

**Portal redirects the visitor to the area of the website that corresponds with their role

Methodology:

The study session was conducted as a Focus Group. An open discussion was held, led by the moderator, in which participants were guided through a variety of topics. The conversation flow was as follows:

1. Warm up: How long have participants worked at CIS & enjoyable work aspects of their job
2. Background: Determination of differences between Spanish and English language inquiries, and caregiver-related inquiries
3. Current Website: Identification of Cancer.gov Spanish and English workarounds, top frustrations and best practices
4. Future website: Discussion about website suggestions and improvements, CIS taglines, and adding video
5. Final Questionnaire: Suggestions and observations for site developers and content managers from the participants

Throughout the discussion themes were defined and used to make recommendations and tell the story of what employees are experiencing on a daily basis with the current site.

Participants:

- Study consisted of two groups of CIS Spanish-speaking Call Center staff
 - Group 1 consisted of more experienced (average of 3.6 years experience)
 - Group 2 consisted of more less experienced (average of 1.5 years experience)
- 16 total participants
- Average number of years working for CIS/NCI was 2.66 years
- All of staff spoke about enjoyable work-related aspects including:
 - No time limit on calls. Can stay on the phone with callers and offer guidance, help and support
 - Helping callers by bridging the gap in service between doctor's visit and patients understanding of cancer
 - Learning something new everyday

APPENDIX A: Discussion Guide

Warm Up (5-10 minutes)

Introductions – Have participants state their names, job title, how long they've been employed by NCI, any previous positions held, what they like best about their job.

“Thank you for agreeing to participate in this study. Observing today's session will be members from The National Cancer Institute and Key Lime Interactive, a marketing research partner.

My name is Silvia Salazar and I work at the OCI Office of Market Research and Evaluation. I will be moderating today's session. We will be participating in an open discussion in which we will request your input on a variety of topics concerning the NCI's Spanish and English language sites and how they relate to Spanish language inquiries. I ask that you be as honest with your responses as possible, since this is the only way that we can improve the site to meet your needs and expectations.

Language: Let's do our best to speak English. However, there will be instances during which we will refer to items in Spanish. When we do say something in Spanish, let's also say it in English.

Background (20 minutes)

- What differences are there, in your opinion, when responding to Spanish language inquiries? [Note to moderator: Probe for cultural differences? Acculturation differences?]
- When responding to Spanish language inquiries, do you find yourself responding to people other than the person diagnosed with cancer? (i.e. – family members, caregivers, etc.)

Current Website (30 minutes)

Identifying workarounds

Next we are going to talk about your experience using the current website to respond to callers and email inquiries.

The most common inquiries are:

- **Need a free or low-cost mammogram**
 - **Need financial assistance for treatment**
 - **Experiencing symptoms/concerned about risk factors**
 - **Need to find a hospital or doctor for a second opinion (this sometimes involves how to bring a loved one to the US for treatment, oftentimes with a financial need component)**
 - **Treatment options**
- How would you use Cancer.gov or Cancer.gov en Español to answer the inquiries we previously mentioned?
 - Describe an instance where a colleague showed you a technique to find information.
 - Was it effective?
 - Do you still use it today when assisting callers?
 - Does anyone else in the group have any suggestions on another way to answer the inquiry question?

*****Moderator use Flip Chart***** to take note of top two frustrations of each participant

- What would you say are your top two frustrations with the current website when responding to inquiries?

*****Then***** ask each participant to pick one of the frustrations mentioned and accumulate a list of the top three or four that are mentioned

- What are two functions of the website that you feel it does really well?
- Based on your experience, on average, what percent of Spanish language inquiries include requests for videos, images or illustrations related to cancer? [Note:

Participants should say between 0-100%, write down and calculate an average for the room]

- Based on your experience, on average, what percent of Spanish language inquiries ask for ways to prevent cancer? [Note: Participants should say between 0-100%, write down and calculate an average for the room]

Project the español homepage screen

- What is one word or phrase you would use to describe the current Español homepage?

We have limited resources to translate and create new Spanish language content.

- Do you have any suggestions about how we can repurpose or use Spanish language content in different parts of the site? Some examples may include:
 - The cancer bulletin
 - Social media
 - Homepage banner

Future Website (30 minutes)

*****Moderator use Flip Chart***** to take note of top two features of each participant

- What are one to two features or improvements you would like to see incorporated in a future design for the Spanish website?
 - If video content is not a feature: Do you feel that having videos available to the Spanish website would make it easier to convey cancer information about prevention, screening, treatment, survivorship, prognosis, or palliative care?
- If you only had funding for one video, what would the video be about?
- Where would you put the video? Are there particular sections or tabs where videos would work best?

- What are your thoughts about creating a video competition as a way to generate Spanish language videos? For example, video competition about how to prevent cancer (exercise, nutrition).

*****Then***** ask the participants to pick their top new potential features from those mentioned by the peers

- How do you feel these added features would improve usability on the website from both a staff perspective, as well as, from a public viewing perspective?

*****Moderator use Flip Chart***** to take note of top two features of each participant

Cultural and linguistic site considerations

*****Moderator use Flip Chart***** to take note about how to make the site more culturally and linguistically appropriate.

Explain how the Spanish site is culturally and linguistically appropriate. Then ask:

- What suggestions do you have about how to make the site more culturally and linguistically appropriate?

*****Then***** ask the participants to pick their top ways to make the site more culturally and linguistically appropriate from those mentioned by the peers

CIS Tagline

*****Moderator use Flip Chart***** to take note about feedback for the CIS Spanish language tagline.

The objective and purpose of the tagline is to share that there are trained CIS staff that can answer specific information about cancer. The current tagline in Spanish is “Preguntas sobre el cáncer” (Questions about cancer?)

- What do you think about the current tagline? What do you like the most and least? Why?
- Is it important that the wording in the Spanish tagline be identical to the English version of the tile? Why or why not?

Present the different English language options for the tagline:

- We can answer your Cancer Questions (Translation does not work in Spanish)
- Call us with your cancer questions

The language in English was tested, but we learned after the fact that some of the versions we tested were too long.

There are space limitations for the tagline to be considered and it is not possible to include images or mention the CIS. The focus is also to convey the personal or human aspect the CIS provides.

- Do you have any suggestions about wording options for the tagline?

*****Then***** ask the participants to pick their preferred wording option from those mentioned by their peers

- Is there anything that the English site does particularly well that you would like to see the Spanish site do?
 - Any content you use from the English cancer.gov site that you'd like to have access to in Spanish?
 - Why do you feel that this would be helpful on the Spanish site?

Final Questions: (5-10 minutes)

- What piece of advice would you give to the people in charge of creating content or designing the Spanish website? Think about you, personally. What would you want to tell them?
- Was there anything that you want to add that you feel we didn't get a chance to cover during our discussion?

APPENDIX B: Study Schedule

Day 1:

July 24th, 2012

2:30 pm – 5:00 pm

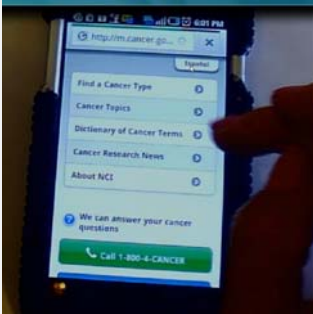
Day 2:

July 25th, 2012

2:30 pm – 5:00 pm

Evolution Español Cancer.gov Mobile & Language Toggle Usability Study in Los Angeles, CA on May 21 & 22, 2012

Mobile:



Goal:

- Test the functionality and navigation of the Español mobile site.
- Validate revised toggle design for desktop website.
- Explore preferences between the mobile and desktop sites among Spanish-speaking cancer patients and caregivers.

Desktop



Activities:

- Participants wrote their top cancer related questions.
- Option of using their own smartphone device (Android or iPhone) or desktop computer to answer their own cancer question.
- Complete task using the toggle interaction.

Methodology:

Please refer to end of this report for an overview of the methodology and specific information related to this session.

Table of Contents

Evolution Español Cancer.gov Mobile and Language Toggle Usability Study in Los Angeles, CA on May 21 and 22, 2012	1
I. Summary of Results	3
II. Recommendations based on this research:.....	4
III. Detailed Findings:	4
IV. Discussion and recommendations	12
V. About This Usability Session	14
VI. About the User Research.....	16
VII. APPENDIX A – DISCUSSION GUIDE.....	17

I. Summary of Results

A. Many participants shared that having both a Spanish mobile and desktop website helps build trust among Spanish-speaking site visitors.

- For cancer related health information, participants preferred Spanish over English, especially when they wanted to:
 - share something with someone else
 - look up a term in Spanish or English immediately after a doctor's visit
 - get a sense of comfort reading content in their native language
- Some said that they trusted the information because the English/Spanish content is similar and matches other sources related to cancer information online[P4,P7,P8] as noted in the details section of this report
- One participant kindly pointed out that differences in images between sites creates mistrust (e.g. black and white image for breast cancer in Spanish and color in English mobile site)

B. More than half of participants thought the mobile site was easier to use than the desktop site

- Feedback about the desktop website focused on the amount of text on the page as compared to “simplicity” of the mobile site
- While most started by searching on the desktop website, most used the in-page navigation on the mobile site
- The mobile site is preferred when something comes to mind at home, at doctor's office, in the car, and while waiting at other activities (e.g., kid's soccer practice).
- The desktop website is used primarily at home. In some cases, some preferred the website because it is easier to read content on a bigger screen and better for sharing with co-browsers.

C. All understood the new page level toggle using the button

- Previous usability testing findings indicated that using multiple language toggles on one desktop site created confusion. The goal of the new toggle design was to propose a single toggle approach.
- All expected to the language toggle on top right of the desktop site page; users had to be prompted to find other options on page for changing language

- Toggle confusion occurred for left "Español" link on website; all expected to have it stay on the same page
- Toggle confusion occurred for bottom "Español" link on website; 6 of 9 thought it was the mobile site in Spanish.
- All participants used the language toggle on the mobile site.

II. Recommendations based on this research:

Overall

- Add content related to complementary and alternative medicine (herbs, food, activities) as this was top of mind to about half of the participants (4 of 9)
- One participants noted: Consider content that is for different audiences (e.g. kids: how to tell your children that one has cancer)

Website recommendations:

- Implement the proposed one page toggle design that was used during testing.
- Change left side navigation "Español" to say "Página principal en Español"
- Change/Add to footer "Español" link a "house" icon to note that it's the home page and potentially space it out a bit more to make it not seem like it's mobile
- Change text color of the button from gray to red (preference was red from mobile site)
- Allow to share a Dictionary Term via email easily by clicking a button or link that allows the term to be sent to a friend or family member similar to how one shares an article on a news site[P3]
- Increase Text size

Mobile recommendations:

- Because top of mind questions were related to complementary and alternative medicine, few users who used search function found a successful result – add content related to these topics and make accessible via top level navigation on the mobile site
- Visual appeal on mobile site - add color as currently perceived as bland and generic
- When site is slow, having too many levels (deep information architecture) can be frustrating

III. Detailed Findings:

A. Initial Interview

Most participants look for information at home unless they encounter situations when away from home. Examples when mobile is preferred is at doctor's office, in the car, and while waiting at other activities (e.g. kid's soccer practice).

- Desktop web is used when they are home and preferred by some because it's easier to read on a bigger screen or better when sharing
 - 💬 P4: "I would prefer to share it at home as the screen is bigger and if I were sharing it with my mom it would be more private at home, especially if I were showing her a picture of a breast"
 - 💬 P5: "For me I always like to pick the bigger screen"
- A few shared that right after receiving a cancer diagnosis, they quickly started researching about cancer on their phone
 - 💬 P2: "When we found out that my dad had stomach cancer, I searched on my phone all the way home."
 - 💬 P3: "I like the cell because I have information in my hands. Mobile is very practical when you are going through this."
 - 💬 P6: "When I'm in the medical waiting room or if the doctor gives me new information, I search for it on the phone."

While most (8 of 9) participants prefer to speak in Spanish, they prefer English on the Desktop Website or Mobile site as noted in these findings:

- 5 of 9 prefer reading content on websites in English, 2 have no preference and 2 prefer content in Spanish only.
 - 💬 P4: "Most of the time I look for information in English...I went to Google and I put what he has right now. I don't trust that the Spanish translation is good."
 - 💬 P7: "English more detailed than Spanish"
 - 💬 P6: "Reading content in Spanish for me is more comforting as it's my native language."
- Similarly for mobile, 5 of 9 preferred content in English, 2 in Spanish, and 2 did not state their preference.
 - 💬 P6: "It depends if I'm with my mom while doing the search...if I am I like to see the information in Spanish as she only speaks Spanish."

Some had visited the site in the past

- Some were satisfied with their prior experience using the site
- A few heard of NCI but had not visited the site:
 - 💬 P9: “No, I have not [been on the NCI site]”
- A few were dissatisfied with their prior experience using the site
 - 💬 P1 “I looked up information on how to inform my kids. More than everything I was trying to find information related how to tell my kids.”
 - 💬 P8: “I tried to find information on the NCI [when my wife was alive] but in reality I did not like my experience. They did not guide me to additional information.”

While some noted that they had previously visited the NCI site, other sites were also cited as sources. These included:

- Web and mobile sites included Wikipedia, American Cancer Society, City of Hope, WebMD, Univision.com, American Cancer Society, Yahoo, and Google
 - 💬 P3: “When my father was diagnosed [with Colon Cancer] I looked up Polyps on Wikipedia because I didn’t know anything about this”
 - 💬 P6: “I search on Yahoo, or I go to Cancer Society, and City of Hope is another that I often go to...I go to learn more about uterine cancer...Because my mother and grandmother also had uterine cancer, if they [mom or grandmother] have a question, I’ll use my phone and give it a zoom and show it to my mom.”
- Mobile sites were the same as the website with only 1 addition - Medicine.org

B. Common Questions

The top of mind themes were:

- Questions related to complementary and alternative medicine (herbs, food, activities, etc.); participants who tried to answer this were not completely successful
 - “What can I do to prevent cancer?”
 - “What alternative treatments exist?”
 - “What's new with cancer treatment?”
 - “Aside of prevention, what alternative medicines are being explored?”

- Have you heard of protons? How good is proton treatment?
- Questions related to how cancer is hereditary and the effects of their family
 - “How many [family] generations can inherit cancer?”
 - “When was the first case of prostate cancer discovered?”
 - “Until when [how many generations] is cancer hereditary?”
 - “When is cancer going to end?”
 - Survival Rates?
- Questions related to what is cancer and care options:
 - What is the difference between a benign tumor and a malignant tumor?
 - If I have breast cancer, can I get it in my bones too?
 - Where are the best doctors or hospitals focused on Cancer?
- A few questions were specific to the caregiver role:
 - How will the patient feel?
 - How can I support my loved one?

C. Usability Results

Below is the summary of the metrics captured, where results of 4 or 5 on a 5-point Likert scale are shown. Note: Results show that Mobile User Ratings are higher than Website

Attribute	Website	Mobile
Preferred Medium	8 of 9 picked to use Desktop first	Desktop wins, except when on the go
Search vs. Browse	5 of 9 used Search	7 of 9 used Browse
Average number of clicks:	5	3
Success	Self-reported: 6 Observed: 4	Self-reported: 7 Observed: 7
Self-Reported Ease of Use	5 of 6* 3 were not asked	8 of 9
Ease of finding information:	5 of 6* 3 were not asked	8 of 9
Right amount of information	2 said it was too much, 4 was just right , 2 were not asked	8 said it was just right 1 said it was too much

- Most participants used the search field mainly on the desktop website and then browsed on the mobile site.
 - 8 of 9 participants started using the desktop website first when asked to pick between using the laptop to find the answer to their question or their mobile phone
 - 4 of 9 used the homepage in-page links to answer their question and the remainder typed their question into the search box when using the desktop website



P6: “Using search is quicker than looking for it on the page.”
It should be noted that this participant didn’t even look at the

page and typed in “What is uterine cancer” in English on the Spanish homepage.

☞ P8: Typed in “tratamiento” in Spanish into the search box when looking to answer related to the history of cancer rather than typing in something like “cancer history” or “what is the first case of cancer”

- On average, participants clicked 5 times until they self-reported that they found the page that matched what they were looking to find on the desktop website
- Many self-reported that they were “mostly” successful on the desktop website, however, a few noted why they were not sure:

☞ P4: After clicking “Apoyos y Recursos” participant said “In the beginning I got confused because it kept saying “Folleto”? For me a “folleto” is a brochure, so I kept trying to find it. In English there is no reference to a ‘brochure’.”

- 5 of the 9 found it easy to find the information that they were looking for on the desktop website, those that didn’t had comments such as these:

☞ P4: “Amount of content on website is too much
...overwhelming...mobile is just right.”

- 5 of 9 were satisfied with the amount of time it took to find what they were looking for on the desktop website, but for the others the sentiment was that it was taking too long:

☞ P1: “I expected to find it quicker”

☞ P6: “I would like it to be easier to find.”

- Sample quotes of what users liked best about the desktop website included:

☞ P3: “I liked the scrolling pictures on the main area of the homepage, but I would like to see videos here too.”

☞ P6: “It was easy because it had a search engine on the top.”

☞ P9: “I like that there was a lot of information.”

- Sample quotes of what users liked least about the desktop site included:

☞ P1: “Expected to find information [e.g. how to tell children] quicker.”

☞ P4: “Website is not organized...it’s overwhelming...much easier on phone.”

☞ P8: “I was looking for alternatives for chemotherapy...When you search, there is not much on alternative treatments. It’s not telling me anything.”

- On the other hand, for **mobile** most participants used the in-page links, only 2 used search
 - It took on average 3 clicks to reach success:
 - ☞ P4: “Mobile is so clear, easy to find.”
 - While many first said that they found it easy to find the information that they were looking for:
 - ☞ P3: “It was very fast. I like the buttons on the main page. I like the topics – it’s easy to tell what I want...When you are going through this, the first thing you want is answers. I like that you can find it fast. ”
 - ☞ P6: “I like that it had all the buttons here. I can do a quick [tap] here and find the information quickly”
 - A few participants explained that they would need to spend more time to be sure they found the information they were looking for:
 - ☞ P5: “I did have to look around a little bit, and I had to get used to it.”
 - ☞ P7: “ The page is different that I’m used to...the design is a bit complex. The design is too limited... The exact answer is not there, but it’s near enough. I would need to look more.”
 - Visual Appeal was a factor of dissatisfaction:
 - ☞ P7: “If I already have the bad news [cancer diagnosis] the homepage of the mobile site is saddening. The gray is sad....I would pick blue or green or something...make it stand out a bit more.”
 - When asked to describe the mobile in a few words or phrase, 4 of 9 used Informative. Others used positive key words including Practical, Easy, Simple, and Cancer Information.

Practical
Cancer
SimpleEasy
Informative

- Sample quotes of what users like best included:
 - ☞ P3: “I liked the scrolling pictures on the main area of the homepage, but I would like to see videos here too.”

- ☞ P6: "It was easy because it had a search engine on the top."
- ☞ P9: "I like that there was a lot of information."
- Sample quotes of what users liked least included:
 - ☞ P1: "Expected to find information [e.g. how to tell children] quicker."
 - ☞ P4: "Website is not organized...it's overwhelming...much easier on phone [mobile]."
 - ☞ P8: "I was looking for alternatives for chemotherapy...When you search, there is not much on alternative treatments. It's not telling me anything."

D. Language toggle was easy to find and use

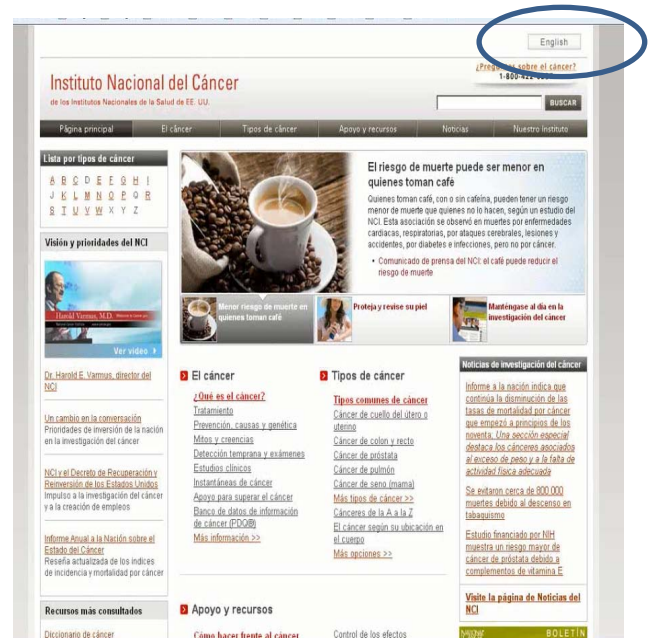
- Toggle confusion was reduced from previous studies. However, there is still some confusion with the home page links on the left side link and the footer.

- All understood the new page level toggle button design for the desktop site.
- All expected to find the change language action on top right of the desktop site home page; users had to be prompted to find other options on page for changing language:

- ☞ P1: "I didn't see those other links. I expect it to be on the top of the page like you have it here."
- ☞ P6: "It was as I expected it, I like that it's on top and big. Some sites have it at the bottom and I dislike that because I have to scroll down. This is easier."
- ☞ P7: "I'm used to seeing it there on other sites."
- ☞ P8: "Good it's in the right place."

Confusion occurred with the "Español" language link on left navigation of the

- desktop site; all expected for content to stay but translated in Spanish rather than taking them to the home page
 - ☞ P3: "I expected the page to stay the same, same colors, pictures, everything...This is frustrating."



☞ P9: “I thought that the page was supposed to stay on the same page [user was surprised that it took them back to the site homepage]...it should say return to the homepage (página principal).”

- Toggle confusion occurred with the footer "Español" link on the desktop website; 6 of 9 thought it was the mobile site in Spanish:

☞ P1: “I expected when I click this [footer link] that it would stay in the same page, but after now knowing what it does, I would keep away from clicking that link.”

☞ P6: “Add ‘house’ icon to make it obvious that it’s taking you to the home page of the Spanish site, like the mobile icon has one next to it to indicate that it takes you to the mobile site.”

☞ P9: “Add visual space between or change the font...or I prefer if there was a “house” icon there.”

- If not corrected, toggle confusion was noted as a reason to abandon site:

☞ P7: “I would have aborted completely”

- Button was preferred over two links because it is larger (all users either complained about font size on site or literally moved close to computer to see it better):

☞ P6: “Visually I like the big button... it more obvious.”

☞ P7: “I would add a mouse over to tell user what the button does”

- On the mobile site, the red text color of button was seen as helpful:

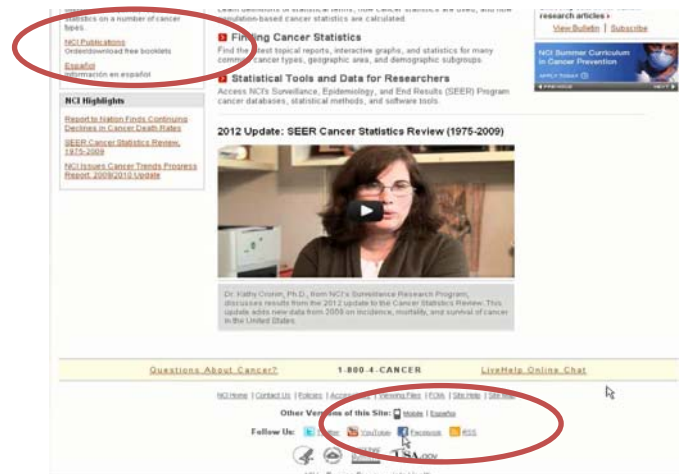
• P5: “I like the button...otherwise blends.”

• P6: “Red button on mobile is good.”

- Participants learned to look for it on top and when not shown, they understood that the page was not available in Spanish:

• P1: “I see that this page is not translated.”

• P4: “That means that information is not available in Spanish, right?”



IV. Discussion and recommendations

The team discussion/debriefing after the sessions also brought attention to three additional points:

- On mobile site – When you reach a page on the mobile site that has not been translated to Spanish (e.g. Cancer Research News), currently there is no way to find your way back

to the Spanish site like there is on the website This should be explored in future research

- Audience - Taking into consideration special needs (e.g. patient 1 who had small children and was looking for a section on how to best tell her children about her cancer). Special content should be discussed so that these types of needs are met for cancer patients with children
- Top of Mind Questions vs. Audience - The common top of mind questions related to complementary and alternative medicine and treatment were consistently requested by participants. Consider including content that supports complementary and alternative medicine.

V. About This Usability Session

Materials for this Usability Test included live pages, mobile pages, preview pages and semi-functional prototypes.

The 9 participants included patients and closely involved family members. They all participated in person at in Los Angeles at a conference room facility in the city of ElSegundo.

	Relation to Cancer	Age/ Gender	Education/ Income	Technology Use	Ethnicity/ Race
P1	Patient Lymphoma Dx 2010	32 – F	Some College \$35-50	Android 6 months Home computer (2-5 hours)	Costa Rica 15 years in US
P2	Son Father died of stomach Dx 2006 RIP 2011	26 - M	Some College Under \$35K	Android 3 years Home Computer (more than 5 hours)	Hispanic / Mexico in US 6 years
P3	Daughter Father Colon Cancer Dx 2009	28 – F	College Under \$35K	Android 4 months Home Computer (more than 5 hours)	Hispanic / Mexico in US 9 years
P4	Daughter Father Stomach Cancer Dx 2012	37-F	Some College Under \$35K	Android 5 months Home Computer (more than 5 hours)	Hispanic / Chile in US 10 years
P5	Patient Salivary Glands Dx 2010	53-M	Some College \$50-75K	iPhone 2 years Home Computer (more than 5 hours)	Hispanic / Ecuador in US 20 years
P6	Patient Uterus Cancer Dx 2007	30-F	Some College \$35-50K	Android 1 year Home Computer (more than 5 hours)	Hispanic / Mexican in US 20 years
P7	Patient Prostate Cancer Dx 2009	35-M	Some College \$35-50K	Android 5 years Home Computer (more than 5 hours)	Hispanic / Cuban 15 years in US
P8	Husband Wife died of Stomach Dx 2006 RIP 2011	54-M	Some College \$50 – 75K	iPhone 2 months Home Computer (2-5 hours)	Hispanic / Mexican 40 years in US

	Relation to Cancer	Age/ Gender	Education/ Income	Technology Use	Ethnicity/ Race
P9	Daughter-In-Law Mother-In-Law (lives with her) Breast Dx 2007/2011	36-F	Some College Under 35K	Android Home Computer (2- 5 hours)	Hispanic / Mexico 10 years

VI. About the User Research

The NCI Office of Market Research and Evaluation runs usability testing sessions with users of the Spanish site on an annual basis.

Methodology

These sessions are qualitative research. They aim to produce immediate, actionable insights that can be put to use in creating or updating a project, using a small number of participants.

Sessions begin with an opening interview about use of health information, technology use and experiences with cancer, to set the context for the observations.

Specific activities for each project in the session focus on observing the behavior of participants as they interact with the material being tested. Participants may complete specific or self-defined tasks, compare different versions, answer questions about the material, or answer questions about their preferences and context of use.

These sessions include mobile user research. Testing was observed remotely.

Participants

Participants are professionally recruited. The primary user group is the general public: Patients or caregivers, friends and family, and those interested in cancer. Each session includes participants from each group. In addition, participants are selected for a mix of demographics including: age, gender, income-education, race/ethnicity, and technology use.

Reports

Reports of the observations and recommendations are delivered at a meeting, usually scheduled within a week after the usability sessions.

Contact

For more information contact Silvia Inéz Salazar, Office of Market Research and Evaluation.

VII. APPENDIX A – DISCUSSION GUIDE

Cancer.gov en Español mobile and desktop site usability testing

Participants: Cancer Patient/Survivor/Caregiver

Date / time: May 22 and 23 – As per schedule

Tasks		Time allocation	
1	Pre-Tasks	10 minutes	Initial interview on cancer experience and use of web/new media for health information
Task 2 and 3 order will be selected by participant	Mobile	15-20 minutes	Open task plus 1 toggle directed task
	Desktop	15-20 minutes	Short open task plus 4 toggle directed tasks
4	Final	10 minutes	Wrap Up

[Introduction preparation for the session]

Hola. Gracias por tomar de su tiempo para estar aquí hoy. Permítame compartir con usted lo que estaremos haciendo aquí hoy día. Como usted quizá ya sabe, somos parte del Instituto Nacional del Cáncer.

Trabajamos con los grupos dentro del Instituto que están encargados de las comunicaciones. Les ayudamos con sus páginas de Internet para las comunidades de habla hispana.

Hi. Thanks so much for making the time to come in today. Let me share you what we will be doing here. As you may know, we are part of the National Cancer Institute. We work with communications groups within the institute to help them with their web sites for the Latino community.

[Make sure participants have their smartphone with them. They don't need to turn it off.]

Cuando se hacen nuevas páginas de Internet, le pedimos a las personas que usan estas páginas que nos den sus consejos sobre cómo podemos mejorarlas.

(When we create new web sites, we ask people to use the websites and ask them to give us suggestions on how we can make websites better.)

No hay ninguna respuesta correcta o incorrecta. Como mejor nos ayuda es siendo completamente sincero/a; dejándonos saber si le gusta algo, si no le gusta algo, si lo encuentra fácil de usar o difícil de usar.

(There are no right or wrong answers. The way you can help us the most is to be completely honest: if you like something, don't like it, find it easy or find it hard and so on.)

Usted y yo estaremos trabajando aquí juntos como por una hora. Mi compañera [Ania/Silvia] estará tomado apuntes.

Además hay otras personas en la costa Este del país que nos están escuchando por teléfono y mirando remotamente a través de la computadora. Estas son las personas que trabajan en las páginas web de las cuales estaremos hablando hoy.

No tiene que contestar ninguna de mis preguntas; si prefiere no hablar de algo tan solo dígamelo. Y usted puede dejar de participar en cualquier momento.

(You and I will be working together for about an hour. Ania/Silvia will be helping me take notes. There are also some people watching and listening remotely on the East Coast, via the phone. These are the people who work on the web pages we will be talking about today. You don't have to answer any of my questions: if you'd rather not talk about something, just say so. And, of course you can stop at any time.)

Creo que le explicaron que estaremos grabando esta sesión, ¿no?

La grabación es más bien para ayudarnos a tomar apuntes, pero puede que mostremos pequeñas porciones de la grabación, sin incluir su nombre, a personas que están trabajando en estas páginas de Internet.

Tan sólo estaremos grabando su voz y lo que hace en la computadora; no grabaremos su rostro. ¿Está bien con usted?

I think they told you that we will record this session? The recording is primarily to help us take notes, but we might show anonymous clips to people working on these web sites. We will only be recording your voice and what you do on the computer; we will not be recording your face. Is that all right with you?

[Start Recording]

Intro: Web/mobile and health information use (10 minutes)

Review answers to use of Web/Mobile and Health Information on pre-session questionnaires, and use in this interview. Take time to get to know the participants a little bit.

Initial Interview

Antes de empezar, me gustaría saber un poco más sobre usted.

(Before we start, I'd like to get to know you a little bit more about you).

Usted usa el Internet desde (la casa/el trabajo/otro lugar) ¿por medio de (teléfono, computadora, iPad, o tableta)?

(You use the web from (home / work / both) using which device (phone, desktop, iPad, or tablet?)

¿Prefiere los sitios web en español o inglés? Cuénteme sobre cómo decide qué sitios visita para obtener información sobre salud en inglés y español para usted o un ser querido o amigo.

¿Me puede dar algunos ejemplos sobre cuando buscaría información en español y en inglés?

(Do you prefer sites that are in English or Spanish? Tell me about how you choose which sites you visit for health information in English and Spanish for yourself or a loved one.

Additional Probe: Are there times when you look for health information in Spanish or English? Can you give me some examples of when you might look for information in Spanish? ... in English?)

[Review the answers to the questions about web use. Ask about anything unusual.]

Usted dice que le gusta usar.....Cuando está buscando información sobre la salud ¿cómo comienza a buscar?

(“comience por sitios web que usted conoce, tales como estos” or “busque primero,” if you need to)

(You say that you like to use When you are looking for health information, how do you get started [add “start from sites you know, like these” or “search first”, if you need to]).

Hablenos un poco sobre su experiencia buscando información de salud con su teléfono. ¿Qué sitio movil visita usted cuando quiere buscar informacion sobre la salud?

(Lets talk about your experience searching for health information using your smartphone. What mobile sites do you visit when looking for health information?)

¿Ha escuchado usted alguna vez sobre el Instituto Nacional del Cáncer?

Sí ____ No ____ No está seguro ____

(Have you ever heard of the National Cancer Institute?

__ Yes __ No __ Not sure)

Patients: Entiendo que usted ha tenido cáncer. Se que eso es algo muy personal y que puede ser difícil hablar sobre eso.

Así que no tiene que compartir nada conmigo de lo cual no se sienta cómodo/a hablando.

Si me permite preguntarle... ¿Hace cuánto tiempo fue diagnosticado/a con cáncer? ¿Cómo se siente hoy en día?

(I understand that you have had cancer. I know that is something very personal and that it can be hard to talk about it, so you don't have to share anything with me that you don't feel comfortable talking about. If I may ask, how long ago were you diagnosed with cancer? How are you feeling these days?)

Others: ¿Alguna vez ha tenido que ayudar a un amigo o ser querido con cáncer? ¿Quién era? ¿Le(s) ayudó usted a encontrar información o a tomar decisiones sobre el tratamiento?

(Have you ever had to help a friend or family member who had cancer? Who was it... Did you help them with finding information or making decisions about treatment?)

[End appropriately, based on situation.]

Task-based testing: Open Tasks

In the pre-study survey the participant was asked to write down two questions about cancer.

Please take the pre-study survey and look at those two questions [the desktop and mobile testing stations are setup side-by-side so the participant can pick their preferred device].

If the participant did not write any questions, pick one [or two if needed] of the following:

- **MOBILE>>** ¿Cuales son los síntomas generales del cáncer del pulmón [o seno o próstata]? (What are general symptoms of lung cancer [breast or prostate])
- **MOBILE>>** ¿Cuales son los tratamientos más comunes utilizados contra el cáncer de seno [o pulmón o próstata]? (What are common treatment options used for breast cancer? [or breast or prostate])
- **DESKTOP>>** ¿Qué recursos/ayuda financiera existe para los pacientes y cuidadores de pacientes de cáncer? (What financial resources and help are available for patients and caregivers?)
- **DESKTOP>>** ¿Qué apoyo emocional esta disponible para los pacientes y cuidadores de pacientes de cáncer? (What emotional support is available for patients and caregivers o?)

Task 1: Open Tasks 1. Take the first “cancer question” the participant wrote down and ask the participant:

¿Qué prefiere usar (computadora o su teléfono) para buscar la respuesta a la pregunta sobre cáncer que usted anoto en el cuestionario?

¿Por qué?

Ahora, por favor utilice [lo que usted escogió] para buscar la respuesta a su pregunta visitando el sitio de NCI [comparta la dirección del sitio web/móvil al participante escrita en un papel].

Start URL: <http://www.cancer.gov/espanol> (Desktop)

Start URL: m.cancer.gov/es (Mobile)

Déjeme saber cuando encuentre la información que esta buscando. Si no encuentra lo que busca, por favor déjeme saber.

- *What device would you prefer to use to find the answer to this question?*
- *Why this device?*
- *Now, please use that device to find the answer to your “cancer question” using the NCI website or mobile site [give participant the address]. Let me know when you find the information you are looking for. Also, if you don’t find what you are looking for, please let me know.*

Note: Let participant use the device of choice [mobile or desktop] and let them do what they naturally would do to find the answer to the question (search or browse).

Observe/measure:

- Device used
- Search method used – search box or browsing
- Time on task
- Were they successful (based on your observation)?
- # of Errors
- # of clicks / paths
- Which links they selected to find the information

A. MOBILE - Ask participants after they complete their task ONLY WHEN USING MOBILE otherwise skip to B:

- ¿Encontró la información que buscaba, si o no? (Perception of success)
 - Si la respuesta es no, pregunte: ¿Por qué?
(Did you find the information you were looking for, yes or no? If the answer is no, ask why?)
- ¿Qué fácil o difícil fue encontrar la información que buscaba, en una escala del 1 al 5 donde 5 es muy fácil y 1 es muy difícil? (Ease of use)
 - ¿Qué le parece que es difícil o fácil [dependiendo de la respuesta] en este sitio móvil?

(How easy or difficult was to find the information you were looking for? On a scale from 1-5 where 5 is very easy and 1 is very difficult. What makes this mobile site easy or difficult? (depending on their answer)

- **¿Qué satisfecho esta con la información que encontró, en una escala del 1 al 5 donde 5 es muy satisfecho y 1 es muy insatisfecho? (Satisfaction with information)**
 - **¿Por qué?**
(How satisfied are you with the information you found? On a scale from 1-5 where 5 is very satisfied and 1 is very dissatisfied. Why?)
- **¿Qué satisfecho esta con el tiempo que le tomo encontrar la información, en una escala del 1 al 5 donde 5 es muy satisfecho y 1 es muy insatisfecho? (Satisfaction with amount of time)**
 - **¿Por qué?**
(How satisfied are you with the amount of time it took you to find the information? On a scale from 1-5 where 5 is very satisfied and 1 is very dissatisfied. Why?)
- **¿Encontró la información donde esperaba?**
 - **¿Por qué si o no? Si no pregunte: ¿Dónde esperaba encontrarla? Muéstreme.**
(Did you find the information where you expected? Why yes or no? If no, where did you expect to find it? Please show me.)
- **¿Por qué utilizo ese método de búsqueda en específico _____ [search box or browsing]? (PROBE to understand how they looked for information by using the search function or following links).**
 - **¿Es ese el método de búsqueda que utiliza más a menudo cuando visita sitios móviles _____ o hay alguna razón en particular por lo que decidió usar ese método en este sitio?**
(Why did you pick that specific search method _____ [search box or browsing]? Is this the method you typically use when looking for information on _____ mobile sites or is there a particular reason why you decided to use that search method in this site?)

Goals: We want participants to use the mobile site, navigate, and provide feedback about their experience.

MOBILE TASK A.1 TOGGLE – Make sure the information found earlier is still showing on the screen and that it has a language toggle. Otherwise, switch the page to one that has the language toggle (lung, breast, or prostate).

Lung: m.cancer.gov/es/tipos/pulmon

Breast: m.cancer.gov/es/tipos/seno

Prostate: m.cancer.gov/es/tipos/prostate

- ¿Cuando está leyendo una página móvil ¿ha habido momentos en que cambia usted entre un idioma y otro [entre inglés y español]?
(When you are reading a mobile page do you ever go back and forth between languages [Spanish/English])?
- ¿Cómo haría usted para cambiar el idioma de esta información al inglés?
(How would you change the language of this page to English?)

Let them naturally find the language toggle, if they can't find it then point it out to them.

- ¿Cree que es difícil o fácil ver esta página en inglés/español? ¿Por qué?
Do you think it is difficult or easy to see this page in English?
 - ¿Esto es lo que usted esperaba? Me puede explicar.
(Is that what you expected to happen? Please explain.)
- Ahora que usted ha visto como funciona este link, ¿le parece que el nombre/lugar corresponde? ¿Es claro?
(Now that you have seen what that link does, is the wording/location of the link clear? Appropriate?)
 - ¿Le falta algo? ¿Cómo lo podemos cambiar para que se entienda para qué es?
(What is missing? What changes do we need to make in order to convey what this is for?)

Goals: We want to know how they respond when content is not available in Spanish.

Show them hair dye page (should have no option to change to Spanish).

m.cancer.gov/topics/factsheets/hair-dyes

- Su tía Juana le pregunto si los tintes de pelo pueden causar cáncer. Usted quiere saber más. Solamente ha encontrado información en inglés.
(Your auntie Juana asked you if hair dyes cause cancer. You want to learn more. But you only find information in English. What do you think about this?)

- **¿Cómo haría usted para cambiar el idioma de esta información al español?**
(How would you change the language of this page to English?)
- **¿Ya que no encontró la información en español, cuál es su reacción?**
(Since you were not able to find the information in Spanish, what is your reaction?)

Goal: Opinions about the mobile site

- **Ya acabamos de ver las páginas de en el sitio móvil. Ahora solo quiero hacer unas preguntas generales. ¿Qué es lo más que le gusto de este sitio móvil?**
 - **¿Por qué?**
(We have finished looking at these Internet pages. Now I just have a few general questions. What did you like best about this site? Why?)
- **¿Qué es lo menos que le gusto de este sitio?**
 - **¿Por qué?**
(What did you like least about this site? Why?)
- **¿Qué piensa de la cantidad de información en el sitio: mucha información, cantidad adecuada o muy poca información?**
 - **¿Por qué?**
(What did you think about the amount of information on this site: too much, just right or too little? Why?)
- **¿Qué piensa de la manera que la información esta organizada en este sitio [layout]: muy organizada, normal o muy desorganizada?**
 - **¿Por qué?**
(What did you think about layout on this site: very organized, normal, or too disorganized? Why?)
- **¿Qué piensa de la navegación de este sitio:**
muy fácil de seguir
podría ser más fácil pero se puede seguir
muy difícil de seguir?
 - **¿Por qué?**
(What did you think about navigation of this site: very easy to follow, could be easier but I was able to follow, or very difficult to follow? Why?)
- **¿Por favor describa este sitio en una palabra u frase corta?**
(Please describe this site in one word or short phrase?)

- ¿Qué piensa del vocabulario que se necesita para entender este sitio: muy fácil, adecuado, o muy difícil?
 - ¿Por qué? ¿Ay alguna palabra, enlace, termino o enlace que le pareció confuso o difícil de entender?
(Do you find the level of Spanish proficiency needed to understand this site – too easy, just right, or too advanced? Are there any particular words that stand out as confusing or in contrast with your understanding?)
- ¿Qué mejoras recomienda para que este sitio sea más fácil de usar? ¿Navegar? ¿Más atractivo?
(What recommendations you have to improve this site to make it easier to use, easier to navigate and more attractive?)

B. DESKTOP - Ask participants after their task has been completed. ONLY WHEN USING DESKTOP otherwise follow A:

- ¿Encontró la información que buscaba, si o no? (success)
 - Si la respuesta es no pregunte: ¿Por qué?
(Did you find the information you were looking for, yes or no? If the answer is no ask “why”)
- ¿Qué fácil o difícil fue encontrar la información que buscaba, en una escala del 1 al 5 donde 5 es muy fácil y 1 es muy difícil? (Ease of use)
 - ¿Qué encuentra difícil o fácil [dependiendo de la respuesta] en este sitio web?
(How easy or difficult was to find the information you were looking for? On a scale from 1-5 where 5 is very easy and 1 is very difficult. What makes this web site easy or difficult (depending on their answer)
- ¿Por qué utilizo ese método para buscar la información? _____ [buscar o seguir los links]? (PROBE to understand how they looked for information by using the search function or following links).
 - a. ¿Es ese el método de búsqueda que utiliza más a menudo cuando visita sitios de web o hay alguna razón porque decidió usar ese método en este sitio?
(Why did you pick that specific search method _____ [search box or browsing]? Is this the method you typically use when looking for information on web sites or is there a particular reason why you decided to use that search method in this site?)

Goals: We want participants to familiarize themselves with the cancer.gov español site and gather general feedback on findability.

DESKTOP: TASK B.1 TOGGLE – THE NEXT DIRECTED TASKS WILL BE PERFORMED ON THE DESKTOP USING THE PROTOTYPE PAGES.

a. HOME PAGE – START ON THE HOME PAGE OF THE PROTOTYPE WITH THE LANGUAGE IN ENGLISH AND ASK:

- ¿Cuando está leyendo una página web ¿Ha habido momentos en que cambia usted entre un lenguaje y otro [entre inglés y español]?
(When you are reading a web page do you ever go back and forth between languages [Spanish/English])?
- ¿Cómo haría usted para cambiar el lenguaje de esta página a español?
(How would you change the language of this page to Spanish?)

Let them naturally find the language toggle, if they can't find it then point it out to them.

- ¿Cree que es difícil o fácil ver esta página en español? ¿Por qué?
(Do you think it is difficult or easy to see this page in Spanish? Why?)
 - ¿Esto es lo que usted esperaba? Me puede explicar.
(Is that what you expected to happen? Please explain.)
- Ahora que usted ha visto como funciona este link, ¿le parece que el nombre/lugar corresponde? ¿Es claro?
(Now that you have seen what that link does, is the wording/location of the link clear? Appropriate?)
 - ¿Le falta algo? ¿Cómo lo podemos cambiar para que se entienda para qué es?
(What is missing? How can it be improved to make it clear of what it is for?)

Goal: We want to know how participants respond to the prototype with no toggle.

b. PAGE WITH NO TOGGLE – START ON THE HOME PAGE OF THE PROTOTYPE WITH THE LANGUAGE IN ENGLISH AND ASK:

htmldev.cancer.gov/toggle/home-en.html

- Pretendamos que usted esta interesado en obtener información sobre estadísticas de cáncer “Cancer Statistics” en inglés. ¿Donde iría desde esta página?

(Let's pretend that you are interested in finding information about cancer statistics in English. Where would you go from here to get that information?)

Let them naturally find the cancer statistics tab towards the top of the page. If they can't find it, then point it out.

Once they arrive at the page, or the moderator directs them to the page ask:

- **¿Cómo haría usted para cambiar el idioma de esta página al español?**
(How would you change the language of this page to Spanish?)
 - **¿Qué significa cuando no hay un link para ver la versión en español?**
(What does it mean when there is no link to the Spanish version of the page?)
 - **¿Falta algo? ¿Cómo lo podemos cambiar para que se entienda para qué es?**
(What is missing? How can it be improved to make it clear of what it is for?)

Goal: We want to know if participants can find the home page Spanish links in the footer and left navigation.

Take them back to the homepage in English and ask:

- **¿Hay otra manera de regresar a la página principal en español (footer or left nav)?**
(Is there another way to change the language of this page to Spanish?)

Let them naturally find the side or footer language links. If they can't find either the side or footer links point out the left nav link. Then ask:

- **¿Cree que es difícil o fácil regresar a la página principal en español utilizando este link? ¿Por qué?**
(Do you think it is difficult or easy to see this page in Spanish using this link?)
- **Ahora que usted ha visto como funciona este link, ¿le parece que el nombre/lugar corresponde? ¿Es claro?**
(Now that you have seen what that link does, is the wording/location of the link clear? Appropriate?)
 - **¿Le falta algo? ¿Cómo lo podemos cambiar para que se entienda para qué es o se pueda encontrar fácilmente?**
(What is missing? How can it be improved to make it clear of what it is for or to make it easier to find?)

Take them back to the homepage in English and ask:

- **¿Hay otra manera de regresar a la página principal en español?**
(Is there another way to change the language of this page to Spanish?)

Let them naturally find the left nav or footer links [which ever they didn't find in the previous attempt], if they can't find either the side or footer links point out the footer link. Then ask:

- **¿Cree que es difícil o fácil *regresar a la página principal en español* utilizando este link? ¿Por qué?**
(Do you think it is difficult or easy to see this page in Spanish using this link?)
- **Ahora que usted ha visto como funciona este link, ¿le parece que el nombre/lugar corresponde? ¿Es claro?**
(Now that you have seen what that link does, is the wording/location of the link clear? Appropriate?)
 - **¿Le falta algo? ¿Cómo lo podemos cambiar para que se entienda para qué es o se pueda encontrar fácilmente?**
(What is missing? How can it be improved to make it clear of what it is for or to make it easier to find?)

c. PDQ – MULTIPLE PAGES – START ON THE PDQ PATIENT TREATMENT SUMMARY: NON-SMALL CELL LUNG CANCER (PROTOTYPE) IN ENGLISH AND ASK:

htmldev.cancer.gov/toggle/pdq-en.html

- **¿Cómo haría usted para cambiar el idioma de esta página al español?**
(How would you change the language of this page to Spanish?)

Let them naturally find the language toggle, if they can't find it then point it out to them.

- **¿Cree que es difícil o fácil ver esta página en español? ¿Por qué?**
(Do you think it is difficult or easy to see this page in Spanish? Why?)
 - **¿Esto es lo que usted esperaba? Me puede explicar.**
(Is that what you expected to happen? Please explain.)
- **Ahora que usted ha visto como funciona este link, ¿le parece que el nombre/lugar corresponde? ¿Es claro?**
(Now that you have seen what that link does, is the wording/location of the link clear? Appropriate?)
 - **¿Le falta algo? ¿Cómo lo podemos cambiar para que se entienda para qué es?**
(What is missing? How can it be improved to make it clear of what it is for?)

Goals: We want to understand what they think about changing the language on the page (use of top language toggle) that takes them to Spanish or English versions of the dictionary.

d. DICTIONARY – START ON THE MAIN DICTIONARY PAGE (PROTOTYPE) IN ENGLISH AND ASK:

htmldev.cancer.gov/toggle/dictionary-en.html

Goals: We want to know if they can find the language toggle to change the dictionary definitions into Spanish/English.

- **¿Cómo haría usted para cambiar el idioma de esta página a español?**
(How would you change the language of this page to Spanish?)

Let them naturally find the language toggle. If they can't find it, point it out for them.

- **¿Cree que es difícil o fácil ver esta página en español? ¿Por qué?**
(Do you think it is difficult or easy to see this page in Spanish? Why?)
- **Ahora pretendamos que usted quiere buscar la definición del término DIAGNÓSTICO. Por favor use esta página para buscar esa definición.**
(Now, let's pretend that you want to find the definition for the term "diagnosis". Please use this page to find that definition.)

Let them naturally type the term "DIAGNÓSTICO" (diagnosis) in the search box, if they can't figure it out assist them and note the reason for confusion. An image of a page with the definition of "DIAGNÓSTICO" will appear.

htmldev.cancer.gov/toggle/term-en.html

- **¿Cómo haría usted para cambiar el idioma de esta definición a Ingles?**
(How would you change the language of this definition to English?)
- **¿Cree que es difícil o fácil cambiar el idioma de esta definición? ¿Por qué?**
(Do you think it is difficult or easy to change the language of this definition? Why?)
 - **¿Esto es lo que usted esperaba? Me puede explicar.**
(Is that what you expected to happen? Please explain.)
- **Ahora que usted ha visto como funciona este link, ¿le parece que el nombre/lugar corresponde? ¿Es claro?**
(Now that you have seen what that link does, is the wording/location of the link clear? Appropriate?)
 - **¿Le falta algo? ¿Cómo lo podemos cambiar para que se entienda para qué es?**
(What is missing? How can it be improved to make it clear of what it is for?)

Task 2: Open Task 2. Repeat Open Task but use the device and task questions (A or B) that was NOT used/used during open task 1

Final overall questions about mobile site

Ya casi hemos completado esta entrevista. Ahora solamente tengo unas preguntas.

(We are almost done with the interview. I just have a few final questions.)

1. ¿Qué busca en los sitios en español para poder tener más confianza? Internet y móvil

(What kinds of things do you look for in Spanish-language sites that make you trust them more? Internet and mobile)

2. Basado en su experiencia hoy, ¿cual es la probabilidad que usted utilice este sitio de Internet por medio de la computadora:

- ☐ **Muy improbable**
- ☐ **Improbable**
- ☐ **Neutral**
- ☐ **Algo probable**
- ☐ **Muy probable**

(Based on your experience today, what is the likelihood that you would use this website: Not likely, neutral, somewhat likely, likely, or extremely likely.)

3. Basado en su experiencia de hoy, ¿cual es la probabilidad que usted utilice este sitio móvil?

- ☐ **Muy improbable**
- ☐ **Improbable**
- ☐ **Neutral**
- ☐ **Algo probable**
- ☐ **Muy probable**

(Based on your experience today, what is the likelihood that you would use this mobile site: Not likely, neutral, somewhat likely, likely, or extremely likely.)

- **¿Como lo usaría? ¿Para su uso personal? ¿Para buscar información para un amigo o familiar?**

(How would you use it? For your personal use, to find information for a friend or family member, etc.)

4. Basado en su experiencia hoy, ¿cual es la probabilidad que usted recomiende este sitio móvil a sus colegas, amigos y/o familiares?

- *Muy improbable*
- *Improbable*
- *Neutral*
- *Algo probable*
- *Muy probable*

(Based on your experience today, what is the likelihood that you would recommend this mobile site to colleagues, friends and/or family?: Not likely, neutral, somewhat likely, likely, or extremely likely.)

- **Por favor denos un ejemplo de cómo usted recomendaría el uso de esta página. ¿Computadora, teléfono, iPad, o tableta? ¿Para que uso?**

Please give us an example of whom would you recommend this to? What device, desktop or mobile and for what use?)

5. Si tuviera que escoger una cosa en general para arreglar en este sitio móvil ¿qué sería y porqué?

(If you could only pick one thing to fix on the overall mobile site, what would that be and why.)

¡Gracias! Ya no tengo más preguntas para usted. ¿Desea añadir algo?

(Thank you! I don't have more questions for you. Would you like to add something else?)

Let them speak naturally (time permitted) and then thank and dismiss the participant.