

NCI Exhibit Program Evaluation: Feasibility Study

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SUMMARY OF RECOMMENDATIONS

AED conducted a feasibility study to design a comprehensive, timely, and meaningful outcome evaluation proposal of the NCI Exhibit Program, which was established more than 20 years ago. Based on the findings from the feasibility study, several items are implicated for a Program Evaluation, including:

- Periodic assessment and evaluation is necessary to inform the program's management and adjust program activities, whenever necessary and appropriate. The NCI Exhibit Program's Strategic Plan has been in place since 2005. Assuming that the evaluation would be performed in 2009, a full-scale assessment of a more than 20-year-old program is warranted.
- Findings from this feasibility research indicated that no evaluation of a program similar to the NCI Exhibit Program has ever been conducted, and no published literature describing evaluation goals, variables or methods for an exhibit similar to NCI's Exhibit Program exists. It is therefore expected that this evaluation effort will make an important contribution to the evaluation literature, providing an example of how to design and implement evaluations of similar programs.
- The NCI Exhibit Program is both very broad and deep, with diverse activities, and resulting from them varied outcomes. Such a complexity specifically calls for a full-scale evaluation that will go beyond the initial analysis of Post-show Reports, Conference Summaries, and Exhibit on Loan Tracking Data performed for this Feasibility Study, and will assess various aspects of this program.
- Based on the literature review, interviews with the program stakeholders, and review of the program documentation, a number of indicator variables and outcome measures have been proposed. Additional review of the literature may generate more suggestions for outcome measures that could be considered. In particular, it is suggested that additional literature is reviewed on best practices in exhibit design and program branding in order to discern what criteria can be used to assess the quality of exhibits, as related to elements such as branding, education, or recruitment. Potential sources of this information include the Exhibit Designers & Producers Association or the Association for Exhibit & Events Professionals. Additionally, it is suggested that inquiry is performed to discern what criteria are used by various associations for awards that are given to exhibitors for the quality of their exhibits.
- Further delineation by the program staff of the program objectives and refinement of the logic model will be helpful in identifying additional outcome measures.
- Existing Post-show Reports, Conference Summaries and Exhibit on Loan Tracking Data can be used as a primary data source to a certain degree, but

several adjustments to the scope and character of the collected information will need to be made. The existing forms don't facilitate systematic collection of information. Also, additional data collection methods will need to be used to complement the existing data sources in order to provide an in-depth understanding of the program's process.

- The diverse activities of the NCI Exhibit Program, and the resulting range of expected outcomes and impacts, call for involvement of multiple methods of evaluation, including a mixed-method design, with both qualitative and quantitative, in-depth assessment of program process and outcomes. Using multiple methods will increase the cost of the evaluation effort. Some of the methods will be more expensive than others. Careful decisions will have to be made regarding economic feasibility of using each of the research methodologies.
- Careful consideration needs to be made of each data collection method's burden on respondents and on the NCI team. Some methods, although highly desirable in their ability to yield useful information, might pose too much of a burden and therefore might be deemed not feasible for this evaluation effort. Therefore, we propose methods that balance evaluators' ability to collect useful information with an acceptable level of burden on respondents.
- The evaluation templates that have been developed for the NCI Exhibit program include possible research methods that can be used for the proposed outcomes measures. The scenarios presented at the end of this report present research methods that are recommended for this effort, taking into consideration three potential budgetary assumptions.

AED proposes that this evaluation effort should be based on a non-experimental, crosssectional design, which would aim at producing a "snap shot" of the Program in its third decade of existence.¹ The cross-sectional design will be most appropriate to document the activities performed by the NCI Exhibit Program and their outcomes, as well as link them to outcomes, with a mixed methods approach involving a combination of quantitative and qualitative data collections. This evaluation effort will allow the project team to address most of the research questions that will be generated and make use of the existing sources of data – as discussed later in this report, addressing some of the research questions might not be feasible due to the lack of data available, an excessive cost for data collection, or excessive burden on respondents. Multiple sources of evidence are recommended to strengthen the proposed evaluation design. This cross-sectional evaluation component should be followed by an on-going monitoring effort to observe further changes in the program and its outcomes over time.

¹ A cross-sectional design involves research that collects data on relevant variables one time only, as opposed to a longitudinal design, where data are collected over two or more distinct periods. The data in cross-sectional studies are collected within a relatively short time frame.

1. INTRODUCTION

1.1. Overview of the NCI Exhibit Program

The National Cancer Institute's (NCI) Exhibit Program, housed in the Office of Communications and Education (OCE), supports NCI's mission by providing the means for the Institute to have a visible presence at a variety of conferences and professional meetings via its National and Exhibit Loaner Programs.

NCI exhibits are designed to provide a cohesive forum for informing basic and clinical cancer researchers and health professionals about NCI programs, products, and services as well as to receive feedback from targeted groups.

The Exhibit Program targets a wide variety of audiences through both the National and Loaner Exhibit Programs. The National Program provides large, custom exhibits ranging from the 30 foot x 40 foot NCI Island to a 10 foot x 10 foot booth designed to promote multiple NCI branches and programs and/or display and store a wide variety of printed materials. The Loaner Program provides portable exhibits to NCI divisions, offices, and programs and consists of tabletop and 10-foot portable exhibit structures covering a variety of topics.

The goals of the program are as follows:

- Create a centralized Exhibit Program to efficiently and effectively support the Institute in its communications and outreach activities.
- Increase participation of the NCI divisions, centers, and offices in the Exhibit Program.
- Represent the NCI as an accessible, trustworthy, and credible source of cancer information.
- Demonstrate NCI's commitment to and role in advancing science for the public.

In order to achieve the above outlined goals, the program performs the following National Program and Loaner Program activities:

National Program Activities

Through the National Program, NCI exhibits and provides staff at approximately 12 large professional meetings each year. These meetings are selected by their applicability to the overall NCI mission and program needs and applicability to any current Institute priorities.

In general, large custom exhibit structures are sent to these meetings. These exhibits are designed to store and display large quantities of printed materials as well as demonstrate online products and resources. These exhibits may also feature NCI experts who will be asked to be at the booth during certain periods to promote and answer questions about their specific programs.

Meetings are selected for exhibit attendance at least 6-12 months in advance. Generally, NCI sponsors exhibits at national meetings of the following organizations each year:

- American Association of Cancer Research (AACR)
- American Society of Clinical Oncology (ASCO)
- Oncology Nursing Society (ONS)
- American Society for Therapeutics Radiology and Oncology (ASTRO)
- American Public Health Association (APHA)
- American Society of Hematology (ASH)

The remaining schedule is generated from recommendations from NCI staff. The criteria for selection include general NCI interest and relevance, current Institute priorities, logistical and geographic demands, and fiscal and staffing considerations.

For the national meetings, exhibit program staff are responsible for purchasing booth space, selecting the booth and graphics, ordering show services, set-up and dismantling of the booth; material selection and shipping, shipping booth to and from meeting; and scheduling staff, experts and demos.

Loaner Program Activities

The Exhibit Program, through the Loaner Program, also offers logistical support to individual NCI programs and Cancer Information Service (CIS) Offices that want to exhibit at smaller, regional, or topic-specific meetings. This support includes the design of program-specific exhibit graphics; loans of portable exhibits; and some logistical support.

Generally, these meetings attended by the NCI programs and CIS Offices are not appropriate or cost-effective for attendance by the National Program. An existing "library" of portable exhibit graphics with a variety of messages is currently available for loan to the NCI programs and CIS Offices. Most of these are tabletop exhibits, but larger 10-foot exhibits are also available.

Additionally, an incentive system was developed in 2007 in order to provide repeated users with rewards for their use of the Loaner Program and was designed to allow occasional users to benefit from increasing their use of the Loaner Program:

- Level 1 Reached upon second registration for the use of the Loaner Program in one calendar year: 100 giveaway items are provided for free by the Exhibit Program for the Loaner Program users to give away to attendees at the exhibit.
- Level 2 Reached upon fourth registration for the use of the Loaner Program in one calendar year: 200 giveaway items are provided for free.
- Level 3 Reached upon fifth registration for the use of the Loaner Program in one calendar year: Any exhibit/show related service with a value up to \$300 is provided at no cost. (Examples of services include roundtrip shipping, electrical, Internet service, PC rental, furniture rental, floral/plant, installation/dismantle labor, booth cleaning, catering, or photography.)

This incentive program was never implemented due to the budgetary cuts. In lieu of receiving the above incentives, Loaner Program users from the Cancer Information Service's Partnership Program used to receive shipping costs covered at the Loaner Program's expense. It is expected that the program evaluation will determine if the incentive program should be implemented to help grow the Loaner Program.

1.2. Overview of the Feasibility Study

AED conducted a feasibility study to design a comprehensive, timely, and meaningful outcome evaluation proposal of the Exhibit Booth Program, in operation for more than 20 years, and five years since the implementation of the Strategic Plan. The following questions guided the feasibility study:

- 1. What evaluation designs(s) and approaches are recommended? What are the strengths and weaknesses of those designs? What variables do these include?
- 2. What study questions and corresponding key variables could be used to evaluate the NCI exhibit program? What specific evaluation questions should guide the study? Will these questions provide key indicators that will specifically correspond to program goals?
- 3. What performance measures should be considered to help support the assessment of program outcomes? What appropriate outcome measures will reveal whether or not the Exhibit Program goals can be achieved?
- 4. Are there existing data that can be used to evaluate the NCI Exhibit Program? If so, what data and how should this be presented to make it appropriate for measurement?
- 5. What data collection efforts might be required to evaluate the NCI Exhibit Program? What are the interrelationships between these data collection efforts (i.e., do they stand alone, work together, etc.)? Will these efforts vary by audience type? If so, how will they vary? (i.e., what type(s) of research methods can be used to collect and analyze the Exhibit Program data? How will these methods(s) be implemented? What are the limitations of these method(s)? Given the type(s) of research methods employed and the availability of data, how long will it take to collect and analyze the exhibit Program data?)
- 6. What is the estimated cost and timeline of each of the data collection efforts? Is this reasonable, given the budget of the Exhibit Program?
- 7. Overall, is there adequate justification and is it practical to conduct an outcome evaluation?

1.2.1. Activities and Methods of the Feasibility Study

In order to assess whether an evaluation of the NCI Exhibit Program was warranted, and if so, what components of evaluation were feasible (i.e., process, outcome, and possibly impact), AED performed the following activities:

- Review of literature and existing Exhibit Program documentation to determine potential objectives, variables, or methods that could be used in an evaluation of the Exhibit Program;
- Review of other federal Exhibit Programs;
- In-depth interviews with 14 stakeholders (four Loaner Exhibit users, four national Exhibit Staffers, and six Division representatives) to elicit opinions on how the program could be evaluated, including what information about the program should be gathered and in what ways staff might use that information;
- Review and analysis of Post-show Reports, Conference Summaries, and Exhibit on Loan Tracking data;
- Development of a logic model;
- Development of process, outcome, and impact evaluation templates;
- Development of recommendations for the process, outcome and impact evaluation study design.

The results of these activities are presented in the next section of the report.

1.3. Is the NCI Exhibit Program Evaluation Warranted and Feasible?

Our in-depth interviews with NIH stakeholders, reviews of the existing literature and similar programs, as well as our review of the program documentation suggest that a full scale evaluation of the NCI Exhibit Program, including both process and outcome evaluation, is warranted for the following reasons:

- <u>Periodic assessment and evaluation is necessary to inform the program's</u> <u>management and adjust program activities, whenever necessary and appropriate</u>. The NCI Exhibit Program has been in place for more than 20 years and the Strategic Plan was developed in 2005. Assuming that the evaluation would be performed in 2009, a full-scale assessment of a more than 20-year old program and 5-year old Strategic Plan is warranted.
- <u>Most NCI stakeholders interviewed in this Feasibility Study believed that the</u> <u>program should be evaluated and were willing to assist with the evaluation</u>. They pointed out that results from this evaluation would be helpful in determining where and when to exhibit; the level of involvement needed to exhibit; and funding and staff resources needed.

- Findings from the discussed above research activities indicated that <u>no evaluation</u> of a program similar to the NCI Exhibit Program has ever been conducted, and no published literature describing evaluation goals, variables, or methods for an <u>exhibit similar to NCI's Exhibit Program exists</u>. It is therefore expected that this evaluation effort will make an important contribution to the evaluation literature, providing an example of how to design and implement evaluations of similar programs.
- <u>None of the 16 NIH institutes spoken to under the Feasibility Study had</u> <u>conducted any formal, outcome evaluation of their exhibit programs</u>. However, with creation of the Office of Portfolio Analysis and Strategic Initiatives (OPASI) and making the Evaluation Set-Aside Program available to its institutes, NIH has acknowledged the importance of improving program efficiency, effectiveness and goal attainment through program evaluations. A full-scale evaluation of the NCI Exhibit Program would be in line with the above NIH-wide policy to strengthen programs through systematic evaluation activities.
- <u>The NCI Exhibit Program is both very broad and deep, with diverse activities and varied outcomes</u>. Such a complexity calls for a full-scale evaluation that will go beyond the initial analysis of Post-show Reports, Conference Summaries and Exhibit on Loan Tracking Data performed for this Feasibility Study.

Our review of the existing Program Documentation and analysis of the preliminary logic model developed for the NCI Exhibit Program suggests that both process and outcome evaluation of the program is feasible, but several factors will have to be considered when developing an appropriate evaluation design:

- Existing Post-show Reports, Conference Summaries, and Exhibit on Loan <u>Tracking Data can be used as a primary data source to a certain degree, but</u> <u>several adjustments to the scope and character of the collected information will</u> <u>need to be made</u>. The currently existing forms don't facilitate systematic collection of information. Also, <u>additional data collection methods will need to be</u> <u>used to complement the existing data sources in order to provide an in-depth</u> <u>understanding of the program's process</u>. The following sections of this report outline the suggested adjustments and changes to the existing data collection methods as well as the new data collection methods that will proposed, including the rationale for their application and feasibility of their implementation.
- As discussed above, the NCI Exhibit Program is both very broad and deep in its scope, with diverse activities and diverse expected outcomes and impacts. Such diversity calls for involvement of multiple methods of evaluation, including a mixed-method design, with both qualitative and quantitative, in-depth assessment of program outputs and outcomes. Using multiple methods will increase the cost of the evaluation effort. Some of the methods will be more expensive than others. Careful decisions will have to be made regarding economic feasibility of using each of research methodologies.

• Additionally, when evaluating feasibility for this evaluation effort, careful consideration needs to be made of each data collection method's burden on respondents and on the NCI team. Some methods, although highly desirable in their ability to yield useful information, might pose too much of a burden and therefore might be deemed not feasible for this evaluation effort. For example, exit interviews with booth visitors would require involvement of an external group of evaluators, since conducting such interviews by the NCI staff hosting the booths at conferences would pose too much of a burden on those staff members. A detailed discussion is provided in the following sections of this report.

2. FINDINGS FROM THE LITERATURE, STAKEHOLDER INTERVIEWS REVIEW OF SIMILAR PROGRAMS, AND PROGRAM DOCUMENTATION

2.1. Summary of Research Findings

In order to gain insight into how the NCI Exhibit Program could be evaluated, what measures should be of interest to the evaluating team, and what methods should be employed in this effort, AED performed the following research activities:

- a review of literature,
- examination of other federal Exhibit Programs,
- in-depth interviews with 14 stakeholders.

The full literature review and report from examination of other federal Programs can be found in Appendix A. Reports from the in-depth interviews with the stakeholders can be found in Appendix B.

2.1.1. Literature Review

A review was conducted of the existing literature and existing Exhibit Program documentation that would help determine potential objectives, variables or methods to be used in an evaluation of the NCI Exhibit Program. Unfortunately, no published literature that specifically describes evaluation goals, variables or methods for an exhibit similar to NCI's Exhibit Program was located. As a result, literature from two related fields was examined: museum exhibitions and tradeshow exhibitions.

Museum evaluations utilize both qualitative (observational studies/ethnography; discourse analysis; focus groups) and quantitative (surveys; visitors counts; experimental studies) methods. Informal methods of data collection include feedback forms, visitor comment books, consultations, informal conversations, and unsolicited letters or emails. More formal methods include surveys, discussion groups and workshops, in-depth interviews, tracking and observations, and experimental studies. Surveys often take the form of pre-post evaluations. Experimental testing involves exhibit visitors being "cued" to engage in all parts of the exhibit (e.g., read each label, look at each display, interact with each hands-on component) in order to document the "maximum effectiveness" of an exhibit. This testing is not necessarily predictive, however, of how effective the exhibit will be with actual visitors. Longitudinal studies assess long-term effects of a museum visit, by seeking to determine how a museum visit can influence visitors' "meaning making" over time.

Museum evaluations largely focus on measuring visitor characteristics such as:

- Demographics (age, gender, race, education level, etc.).
- Behaviors, including time spent at an exhibit, use of or engagement with interactive components, reading of displays or texts, number of exhibits visited, etc.

- Knowledge/learning, including exhibit recall or retention, verbal ability, associative memory, or knowledge gain.
- Pre-existing attitudes, perceptions regarding opportunities for learning, perceptions regarding exhibit characteristics, reasons for visiting; affective capacities.

The tradeshow literature emphasizes the importance of benchmarking – setting goals and objectives for an exhibit against which actual results will be compared. Such a process helps in assessing what did and what did not work, and lends itself to providing recommendations for next steps.

Methods of exhibit evaluation mentioned in the tradeshow exhibit literature include preand post-show surveys and in-depths interviews and booth traffic analysis. The measurements/key variables mentioned in the literature include average traffic density (i.e., the number of attendees per 100 square feet of exhibit space); exhibit efficiency (i.e., the percentage of the audience that had a meaningful interaction with the booth); and exhibit attractions (i.e., the percentage of a desired audience that comes to a booth). Audience activity, audience quality, and the number of leads generated are other points of measurement.

Although no published literature was located that described evaluation goals, variables, or methods for an exhibit program similar to NCI's program, the literature from related fields provide some important implications for evaluating the NCI Exhibit Program. Exhibit evaluation in the museum and trade show fields is well developed and offers insights into successful evaluations, including suggestions for appropriate methodologies and important variables to measure. In addition, review of the NCI post-show and conference reports indicates which measurements and variables could be included in an evaluation of the Exhibit Program.

Based on the findings from this review, several things are implicated for the NCI Exhibit Program evaluation, including the potential need for:

I. Clearly delineating the evaluation goals/objectives and identifying whether these are relevant to NCI, OCE, and other offices or divisions.

II. Using indicators to capture:

- *Visitor characteristics/demographics:* To better describe the audiences coming to the exhibits, including not only demographic characteristics such as age, gender, race, and education level, but also their "quality" such as professional affiliation and the role in the organization (student, researcher, grantee, other).
- *Visitor goals:* What are their reasons for visiting the kiosk? What do visitors hope to learn or achieve when visiting the exhibit? What are their pre-existing attitudes and perceptions regarding opportunities for learning? How well does the exhibit meet their goals?
- *Visitor behaviors:* How do visitors use kiosks, review and collect publications, spend time in the exhibit, etc? What services available at the kiosk do they use?

• *Long-term effects:* How well does visiting the booth increase overall knowledge and awareness of NCI and affect the use of NCI resources after a meeting or conference?

III. Utilizing a mixed-methods approach to evaluate the Exhibit Program, so that various division and visitor goals can be assessed.

IV. Modifying post-show and conference reports so that narrative information is captured more consistently.

Further review of the literature is recommended on exhibit development and program branding in order to discern what criteria can be used to assess the quality of exhibits, as for example related to branding, education or recruitment. Potential sources of this information include the Exhibit Designers & Producers Association or the Association for Exhibit & Events Professionals.

2.1.2. Review of other Federal Exhibit Programs

AED contacted other federal agencies to inquire about existing exhibit programs, determine if evaluations of the programs had been conducted, and if so, what methods or approaches were utilized in the process. AED reached out to a total of 23 agencies and held discussions with exhibit program staff at 16 agencies, including 15 institutes at the National Institutes of Health and the National Aeronautics and Space Administration's (NASA) Johnson Space Center. For the full report from the review of other federal exhibit programs, see Appendix A.

None of the 16 NIH institutes who responded had conducted any formal, outcome evaluation of their exhibit programs. However, most institutes do prepare post-conference reports similar to the NCI conference summaries and post-show reports. These reports, completed by exhibit staff after the conference, typically detail such topics as meeting attendance, reactions and inquiries of exhibit visitors, materials distribution, and whether or not a particular conference is worth attending in the future. These reports reveal information about the exhibit as it relates to particular conferences attended but do not evaluate whether or not the overall goals of the exhibit programs are being achieved. Many of the agencies contacted expressed interest in NCI's objective of developing an outcome evaluation of the Exhibit Program, possibly to use as a model for their programs. The discussions with the 16 federal agencies suggest that conducting formal, outcome evaluation of exhibit programs is not a common practice.

Further review is recommended to discern what criteria are used by various associations for awards that are given to exhibitors for the quality of their exhibits. This may be useful in developing additional outcome measures that would tap into the "quality" of the NCI Exhibit Program and how it could be defined.

2.1.3. Stakeholder Interviews

In order to gather more insight into the NCI Exhibit Program and exhibit evaluation in general, AED conducted semi-structured in-depth interviews with 14 stakeholders (employers of NCI who have utilized and/or staffed the Exhibit Program) who were selected based on their familiarity with and usage of the Program. Background discussions with NCI stakeholders who have utilized and/or staffed the Exhibit Program were held to determine information needs of the staffers and elicit potential evaluation measures and variables. Background discussions with exhibit experts, including federal government and cancer organization exhibit managers, as well as museum exhibit evaluation and tradeshow exhibit evaluation experts were conducted. These discussions were focused on determining best practices for exhibit evaluation and to access feasibility of potential evaluation options for the NCI Exhibit Program. The topline report from the interviews and the interview guide are shown in Appendix B.

Most NCI stakeholders believed the program should be evaluated and, as users of the program, would be willing to assist with an evaluation should one be conducted. They pointed out that results from this evaluation would be helpful in determining where and when to exhibit; the level of involvement needed to exhibit; and funding and staff resources needed. Respondents were also interested in being able to find out where and when the National and Loaner exhibits would be and which division/staff to contact regarding attendance. Among the methods suggested for this evaluation were: focus groups, interviews, feedback surveys, materials tracking, booth traffic tracking, and tracking the number and type of questions fielded by NCI staff at the exhibits.

Exhibit experts pointed out the importance of front-end evaluation in order to learn about and understand the exhibit audience. Existing data (psychographics) and surveying were mentioned as tools that could help establish a baseline of audience perceptions, knowledge, misconceptions, information needs, etc. Among the evaluation methods that were suggested were unobtrusive observation, surveying, cued questionnaires, interviewing, post-show reporting, etc. It was pointed out that the data that should be sought in the evaluation of the Exhibit Program may include both qualitative and quantitative measures. The proposed measures included: the number and type of shows exhibited at, booth attendance, materials distribution, attitudes towards and perceptions of NCI, behavioral intentions, and perceived changes in knowledge.

2.2. Review and Analysis of Program Documentation (including Exhibit on Loan Tracking Data, Post-show Reports, and Conference Summaries)

NCI provided AED a sample of conference summary reports and post-show reports from meetings and conferences where the National Exhibit was displayed since 2004. For the Loaner Program, NCI provided AED two documents that tracked where the various loaner exhibits were displayed since 2000.

These documents were reviewed to determine what outcome measures were currently being tracked and could be included in an evaluation of the Exhibit Program. The analysis is based on the information available in this sample.

Through this analysis, it was determined that:

- The information collected through these conference reports is valuable and could inform certain aspects of the process evaluation.
- However, the post-show reporting does not cover all elements of the multifaceted Exhibit Program and only presents a partial picture of all that the program involves.
- Additional methods of data collection would be necessary to evaluate other elements of the program.

The **Loaner Program tracking charts** record detailed information about the exhibits on loan, including which NCI programs and offices request exhibits and what conferences the exhibits are sent. The following information is detailed in the charts:

- Requester (including program or office)
- Exhibit Type (which specific exhibit was requested)
- Event & Venue (including address)
- Exhibit Date(s)
- Arrival Date and Time
- Set-Up Date and Time
- Dismantle Date and Time
- Pick-Up Date and Time
- Exhibit Request Form (Yes/No)
- Out/In Order Form (Yes/No)
- I&D Labor (Yes/No)
- Job #
- Estimated Exhibit Return (Yes/No)

The data tracked in these charts, particularly the requester and program/office, the exhibit type requested, and event attended, could support the process evaluation and provide an improved understanding of the Loaner Program:

- This data could be helpful in assessing the number of conferences attended with the Loaner Program per year and whether utilization of the Loaner Program has increased or remained stable over time.
- The data could also indicate the utilization of the Loaner Program across Divisions as well as the demand for particular exhibit types and for specific conferences and meetings.

For the National Program, **the conference summary reports and post-show reports** were written by NCI vendors who staffed the booth during the conferences. The two types of reports were written by separate vendors. Twelve conference summary reports from 2004-2005 were reviewed. The conference summary reports from this period

summarized the purpose of the meeting or conference and the exhibit logistics including any logistical issues during booth set-up and dismantle. Comments were made on booth materials and publications, including most popular items and requests for additional publications. The summary reports also included recommendations for exhibiting at future conferences, including solutions to logistical issues and suggestions and recommendations for materials. After 2005, no conference summary reports were available.

In addition to the conference summary reports, a total of 28 post-show reports from conferences where the National Exhibit was displayed were reviewed. In the existing format, the post-show reports systematically track and record information in the following set categories:

- Meeting details: meeting site, exhibit dates
- Staff: core booth staff, program experts staff, and kiosk staff
- Meeting attendance: audiences and total number of attendees
- Exhibit structure: any computer equipment; web access
- Messages and visuals: panels and signs used
- Booth location: area of exhibit hall and traffic to booth
- Materials: distribution and popularity

In addition to the specific categories that are tracked, the post-show reports also included two open-ended narrative sections, comments, and recommendations. The content in the narrative sections varies considerably between reports in terms of the type and amount of information that is provided. Some reports contain in-depth observations and remarks covering a wide variety of topics while others only include brief, general comments.

In reviewing the reports, particular attention was paid to these sections to identify common topics or themes. After reviewing and analyzing the reports, it is clear that the content can be grouped into four major categories: Booth Logistics, Materials Distribution, Staffing, and Conference Logistics (see Table 1). Booth Logistics includes information on booth location and traffic, booth size, and booth set-up; Materials Distribution includes information on the amount of materials distributed, popular resources, and new resources to develop; Staffing includes staff attendance, staff behavior, and ideas for additional staff training; and Conference Logistics includes information on number of conference attendees, topics of interest to booth visitors, recommendations about exhibiting at future conference, and other topics.

Table 1: Galegones of 1 ost onow Report Narrative Gomments				
Booth Logistics	Materials Distribution	Staffing	Conference Logistics	
- Exhibit structure	- Amount and type of	- Staff attendance	- Meeting attendance	
- Messages/visuals	materials distributed	- Staff behavior	 Number of people at 	
- Booth location	 Most popular 	- Number of staff	the conference	
Amount of traffic at	resources	needed	 Affiliation of people 	
booth	Least popular	- Staff who should be	at the conference	
 Placement near 	resources	invited back	- Topics of interest to	
other organizations	Requests for	- Ideas for additional	booth visitors	
with similar focus	foreign language	staff training	- Comments about	
- Appropriateness of	publications	_	registration/payment	
booth size	Requests for CDs		- Future registration –	
- Booth set-up	vs. paper		deadlines/costs	
Labor	publications		- Recommendations for	
Supplies needed	- Amount and type of		whether NCI should	
 Technology needed 	resources to send		exhibit again	
- Availability of internet	Send more/less of			
for access to	specific			
cancer.gov	publications			
-	- New resources to			
	develop for a			
	particular audience			

 Table 1: Categories of Post-Show Report Narrative Comments

A systematic review of the above four themes should be an important part of the ongoing program monitoring, but won't replace the overall impact evaluation. Many of these topics are already tracked in the set categories of the reports. But they are tracked not to the same level of detail as the recommendations and comments sections. In addition, the information is not tracked systematically, and the level of detail in the recommendations and comments sections varies greatly between reports. Some reports are more comprehensive and contain more detailed content as well as analyses of activities and issues encountered during the conference while others only reiterate what has already been recorded in the set sections. These conference reports could be an even more valuable tool to collect data for the overall process evaluation if they were modified to track data more systematically and reflect additional outcome measures. If these reports were enhanced, more complete and detailed data could be collected through these reports (please see discussion in section 4.1.3).

3. LOGIC MODEL

As a prerequisite to developing an evaluation strategy, it is essential to describe the program to be evaluated. This is why one of the activities of the Feasibility Study was the development of a logic model for the NCI Exhibit Program (see Figure 1). Indicator variables that will be suggested to determine whether program goals are being achieved as well as outcome measures have been incorporated into this preliminary logic model.

The term logic model is frequently used interchangeable with the term program theory. A logic model is a visual display of the components of a program and connections among them – it provides an overview of the program and depicts the sequence of steps leading to program effects, ensuring a shared understanding of what is expected and why. Logic models are usually comprised of the following components: Inputs, Activities, Outputs, Outcomes, and Impact. They summarize the program's overall mechanisms of change by linking processes to eventual effect and, subsequently, impact.

The following definitions were used in the development of the logic model (Kellogg Foundation, *Logic Model Development Guide*, 2000):

- **Inputs** human, financial, organizational, and community resources that a program has available to direct toward doing the work.
- Activities processes, tools, events, technology, and actions that are an intentional part of the program implementation.
- **Outputs** direct results or products of program activities. Outputs can in some cases be viewed as an objective of an activity, but in most cases the term "objective" is used to describe changes that occur in behaviors. Outputs may include types, levels, and targets of services to be delivered by the program.
- **Outcomes** the specific changes in program participants' knowledge, skills, status and behavior. Outcomes reflect the goals and objectives of the project, and are typically specified in the short- and longer term. How to differentiate between "short" and "long" term outcomes is project specific and determined in large part by the complexity of the changes that are sought.
- **Impact** the fundamental intended changes occurring in organizations, communities, or systems as a result of program activities.

The logic model that was developed by the AED team to illustrate the underlying theory of change for the NCI Exhibit Program was based on the review of Program documents and discussions with the Program staff. This model provides a theory of change that can be modified over time, as new information emerges.

The Activities in this model refer to the variety of tasks performed by the Program, including providing training to NCI staff on how to use the Program, conducting internal promotional activities to encourage NCI staff member to use the Loaner and National components of the Program, maintenance of the Program website, selection of targeted conferences for the National component, identification and training of staff who attend

conferences, selection and shipment of materials and other resources, arrangement and set-up of exhibit booths under the National Program, including provision of interactive tools and Internet connectivity, as well as organizing "Meet the Experts" sessions at conferences.

The **Outputs** in this model were defined in terms of direct results of program activities, such as increase in staff understanding of program activities, increased staff interest in using the exhibit program, increased NCI presence at appropriate conferences, presence of trained staff at the NCI booths, provision of appropriate materials and availability of NCI experts at conferences, availability of the NCI website at conferences, as well as provision of "Meet the Expert" activities at conferences.

The Program **Outcomes** are the major focus of interest of the NCI Program team. In this model, they were conceptualized as Short- and Long-term Outcomes. Some of them will be observed on the program's internal audiences (i.e., NCI Divisions and Offices, CIS Regional, and partners and stakeholders), and some on the program's primary external audiences (i.e., researchers, public health workers, health care providers, students, and cancer advocates). The proposed **Short-term Outcomes** are:

For the National Component:

- Increased/consistent participation in the National Program
- Increased traffic at the NCI Exhibit booth
- National Program booth visitors receive services they need
- Increased visibility of NCI tools and resources

For the Loaner Component:

- Increased/consistent use of the Loaner Program
- Consistent "feel and look" presented across conferences
- Booth staff communicates consistent messages across conferences
- Divisions provide conference booth visitors with services and information they need
- Increased visibility of NCI tools and resources
- Program reaches new audiences

The Program's **Long-term Outcomes** were aligned with the new NCI Communication Objectives to show how the Program contributes to the individual Communication Objective's themes and strategies.

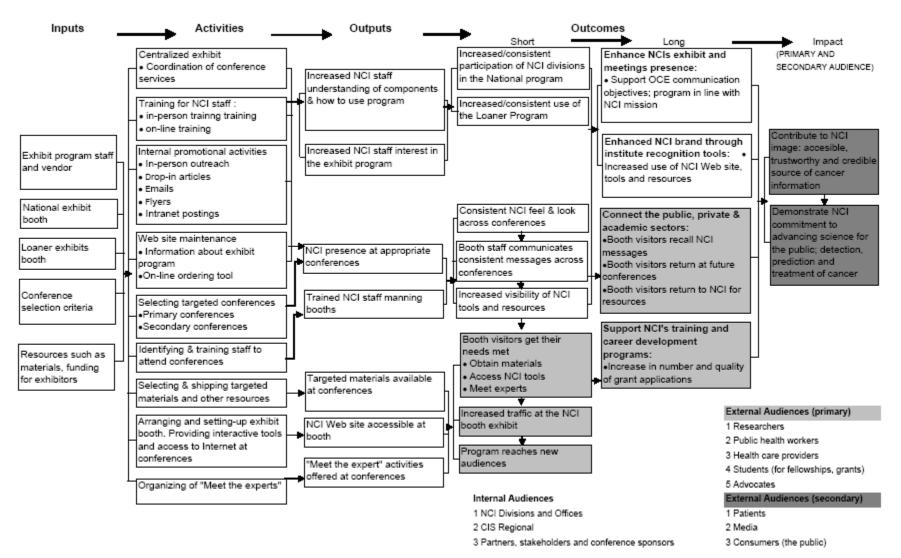
For the *internal audiences*, the Program's Long-term Outcomes include:

- Support for the OCE communication objectives and aligning the program with the NCI mission (which will contribute to the NCI Strategic Communication Theme 3, Strategy 3.2. "Enhance NCI's exhibits and meetings presence");
- Increased use of the NCI website, tools and resources (which will contribute to the NCI Strategic Communication Theme 2, "Build the right kind of NCI for the future," Strategy 2.4. "Enhance NCI brand through Institute recognition tools").

For the *external audience*, the Program's Long-term Outcomes include:

- Providing booth visitors with messages that they will recall, having booth visitors return to the NCI booth at future conferences, and having them return in the future for resources (which are expected to contribute to the NCI Strategic Communication's Theme 3 "Connecting the public, private, and academic sectors");
- Increase in the number and quality of grant applications (which will contribute to the NCI Strategic Communication's objectives, Theme 2, Strategy 2.2. "Support NCI's training and career development programs").

The **Impacts** of the program were conceptualized as the Program's contribution to promoting the NCI image among both external primary and secondary audiences as an accessible, trustworthy, and credible source of cancer information; and as demonstrating NCI's commitment to advancing science for the public in order to improve detection, prediction and treatment of cancer.



PRELIMINARY LOGIC MODEL FOR THE OCE EXHIBIT BOOTH PROGRAM

4. RECOMMENDATIONS FOR DESIGN AND EXECUTION OF THE NCI EXHIBIT PRGRAM EVALUATION

Once the logic model showing the link of activities and outputs to eventual program outcomes had been developed, and the findings from the literature and in-depth interviews reviewed, the next step was to conceptualize various components of evaluation that would be appropriate and feasible for this effort.

Evaluation can be defined as a process that will enable us to learn from experience and also judge the worth of an activity. The overall goal of evaluation is to answer questions about why something happens as well as whether it works or not. The design of outcomes evaluations needs to take into account two competing pressures: On the one hand, evaluation should be undertaken with sufficient rigor, so that relatively firm conclusions can be reached. On the other hand, practical considerations of time and money, as well as issues related to IRB and OMB clearances limit the design options and methodological procedures that are feasible to be employed. Also, the choice of the outcomes measures involves trade-offs, since evaluations need to take into account practicality and feasibility of data collection methods.

It is proposed that this evaluation effort should be based on a non-experimental, crosssectional design (data on relevant variables collected one time, over a short period of time) which would aim at producing a "snap shot" of the Program in its third decade of existence. This evaluation effort will allow the project team to address most of the research questions that will be generated (see below), and make a use of the existing already sources of data to establish a baseline. This component, however, should be followed by an on-going monitoring effort to observe further changes in the program and its outcomes over time.

Taking into consideration the diverse character of activities performed by the NCI Exhibit Program, the cross-sectional design would be most appropriate to document those activities and their outcomes, as well as link them to outcomes, with a mixed-methods approach involving a combination of quantitative and qualitative data collections. While surveys and database analysis will collect quantitative measures, the qualitative component will rely on interviews and observational techniques. Consequently, multiple sources of evidence will be recommended to strengthen the proposed evaluation design, and allow for addressing broader questions.

As discussed in first section, Summary of Recommendations (p. 6), there already exist data sources that could be used to track various components of the program's process. However, these data do not contain variables that would measure, for example, the quality of training provided to NCI staff on how to use the program, the clarity of NCI staff members on the objectives of the program, or the reasons why some divisions use the Loaner Program, while others do not. Therefore new data collections will be needed to assess those, as well as most of the outcomes indicators outlined in the section 3, above (p. 19)

Further sections discuss in detail the proposed design for both process and outcomes components of this evaluation. Process evaluation will focus on program activities and their outputs. Outcomes evaluation will focus on the short- and long-term effects of the program on its target audiences, including both external and internal audiences, and will be conducted to discern whether the objectives that the program intended are successfully achieved.

4.1. Process Evaluation

The process evaluation of the NCI Exhibit Program will assess how the program has been implemented, the extent to which it has been carried out as planned, and the extent to which program activities led to specified results or products (outputs). Process evaluation results will be used to understand what elements contribute to the effective functioning of the program, and what elements might need to be adjusted or changed. Barriers and facilitators of the effective functioning of the program will be explored. The objective will be to achieve both breath and depth of understanding of how this program operates.

In particular, the process evaluation will assess whether the program provides conference services, as planned, the extent to which services offered by the Program are promoted to the NCI staff, the extent to which the Program implements training and internal promotional activities, the extent to which the National Program is used at appropriate conferences, the extent to which appropriate materials are selected and shipped to conferences, and trained staff mans the NCI exhibit booth at those conferences, as well as the extent to which NCI's interactive tools and the cancer.gov website are made available at those conferences. It will also explore whether NCI staff members understand this program and how to use it, what are the barriers to using the program, and what are the facilitators. Of interest will be whether the training provided to NCI staff members meets their needs and expectations, and what might be changed about it, as well as whether NCI staff members are more interested in using the program as the result of various promotion activities that the program undertakes.

4.1.1. Process Evaluation Questions

The process evaluation questions should focus on program activities and their outputs with the goal to asses whether those activities have been implemented as planned. The questions will be directly linked to the specific activity. Based on the program description provided to AED by the program staff, the following research questions are proposed to guide this evaluation (see Table 2):

Table 2: Process evaluation questions

I. Maintaining a centralized exhibit service and providing coordination of conference services (i.e., provision and management of the NCI Booth Exhibit service)

1) What are the activities provided by the centralized exhibit program?

2) Do these services differ in any way from the activities planned for in the Program's Strategic Plan?

II. Providing training to NCI staff on how to use the centralized exhibit service

1) What training has been offered to the NCI staff by the Exhibit Program?

2) Did the trainings listed in the NCI Exhibit Strategic Plan take place?

3) Were the trainings held with the targeted number of NCI divisions/offices and programs?

4) Are the trainings evaluated by recipients/participants? Is the feedback collected? Are the recipients getting all the information they need?

5) Were the training objectives met?

6) Are those who were trained clear on roles and responsibilities when utilizing the Exhibit Program?

7) Did those who were trained increase their understanding of the program?

8) Did those who were trained increase their usage and/or participation in the program?

9) What has been the usage of the listserv? What benefits and challenges existed in using the listserv?

III. Conducting internal promotional activities to encourage utilization of the Exhibit Program

1) What types of promotional activities have been implemented?

2) Do these activities differ in any way from the activities planned in the Exhibit Loaner Program Promotion Plan?

3) Did those who were exposed to promotional activities increase their understanding of the program?

4) Did those who were exposed to promotional activities increase their use of the program?

IV. Maintaining program website

1) How is the Exhibit Program website utilized and promoted?

2) Does it meet the needs of the NCI staff?

V. Selection of targeted conferences

1) To what extent is the Program Conference Selection Decision Tool used to select targeted conferences?

2) Who uses the tool to select the conferences?

3) Who else selects conferences?

4) Is NCI present with its National Exhibit Program at appropriate conferences?

VI. Identifying and training staff to attend conferences

1) How are NCI staff members who attend conferences identified?

2) How are NCI staff members trained in preparation for conferences?

3) Does the training in preparation for conferences reach its objectives?

4) How are training needs of staff identified?

VII. Selection and shipment of targeted materials and other resources

1) Is the type of materials appropriate for each of the conferences attended?

2) Are the quantities of materials appropriate for each of the conferences attended?

3) What are other types of resources/materials that are needed?

VIII. Arrangement for and setting up National Exhibit Booth at conferences; Providing interactive tools, access to the Internet at conference booth

1) Are appropriate exhibit structures used for different conferences?

2) Are the messages and visuals provided at the booth consistent with the NCI mission?

3) Are the messages and visuals provided at the booth appropriate for the meetings attended?

4) Are interactive tools and other NCI resources provided at the booth appropriate and sufficient?

IX. Organizing "Meet the Experts" at conferences

1) How is the "Meet the Experts" activity implemented?

2) Is the "Meet the Expert" activity appropriate for conference?

4.1.2. Process Evaluation Approach

The proposed process evaluation approach will use the existing data sources and introduce new data collection tools. Most of the information about the program will be obtained from the program documentation, including the Loaner Tracking Database, post-show reports and conference summaries. Those data sources should be supplemented with new data collections. The proposed new data collection tools to capture the program's process data include:

- Systematic review of NCI divisions' intranets and newsletters
- Interviews with the NCI Exhibit Program staff
- Post-training evaluation survey
- Interviews with NCI staff members

4.1.3. Data Collection Methods for Process Evaluation

Data sources for this process evaluation will include archival data, reports and annual summaries, and audience feedback (post-training evaluation survey and interviews with NCI staff members).

4.1.3.1. Existing Data Collection Tools

• Exhibits on Loan Tracking Charts

Existing program documentation, including *the Exhibits on Loan Tracking Charts*, contain detailed information about the exhibits on loan, including which NCI programs and offices request exhibits and to what conferences the exhibits are sent.

• Post-show reports and Conference summaries

The set categories that are currently being tracked systematically through these reports correlate to several outcome measures and can already provide data to answer some of the research questions. However, because the information in the narrative sections is not consistently tracked, it is not possible to compare the data across conferences or over the span of the program.

These conference reports could be an even more valuable tool to collect data for the overall process evaluation if they were modified to track data more systematically and reflect additional outcome measures. If these reports were enhanced, more complete and detailed data could be collected through these reports. By tracking the content of the narrative sections of the report more systematically and adding additional outcome measures not currently tracked in the reports to the existing template, more comprehensive data would be available to further support the process evaluation and provide an improved understanding of the exhibit booth program. In particular, more systematic, and possibly a closed-ended approach is suggested to collect the following information:

- staff behavior at conferences,
- number of staff needed,

- booth set-up information, including labor and supplies needed, requests for additional materials,
- requests for CDs vs. paper publications,
- requests for new resources to develop for a particular audience,
- number and character of "Meet the Expert" sessions,
- competing exhibits, and
- overall character of the conference.

By tracking these measures, the following research questions can be addressed through the conference reporting:

Activity	Research questions
Select and ship targeted materials and other	1) Is the type of materials appropriate for each of the
resources	conferences attended?
	2) Are the quantities of materials appropriate for
	each of the conferences attended?
	3) What are other types of resources/materials that
	are needed?
Arrange for and set-up exhibit booth; Provide	1) Are appropriate exhibit structures used for
interactive tools, access to Internet at conference	different conferences?
booths	2) Are the messages and visuals provided at the
	booth consistent with the NCI mission
	3) Are the messages and visuals provided at the
	booth appropriate for the meetings attended?
	4) Are interactive tools provided at the booth
	appropriate and sufficient?
Organize "Meet the Experts"	1) How is the "Meet the Experts" activity
	implemented?

4.1.3.2. Proposed Additional Data Collection

- *Tracking of NCI divisions' intranets and newsletters* will make it possible to discern whether the NCI exhibit program is promoted in those publications as the result of the program's internal promotional activities. This data collection should be performed on an on-going basis and data stored in a searchable database. The method will pose a low burden on both the program staff, and on NCI respondents.
- **Post-training evaluation survey** will serve as a tool in process evaluation and provide information on the NCI staff satisfaction with the training provided by the NCI Exhibit team on how to use the program. The survey will identify the aspects of the currently provided training that might need to be adjusted or changed. It will also capture NCI staff interest in using the Exhibit Program in the future, and collect suggestions for the conferences where the National and Loaner exhibits should be employed. Specific survey questions will need to be developed based on the contents and components of the trainings provided, in close collaboration between the evaluation team and the project staff. This paper-and-pencil survey

will be administered on an on-going basis, after each training session is implemented (paper-and-pencil format will make distribution and collection of the survey possible immediately after the training session). The method will pose a low burden on both NCI staff respondents and the project team. An on-going analysis of survey responses will be an important tool in adjusting the training program to the NCI staff's needs.

• *Interviews with NCI staff members* will be conducted with two groups of respondents:

Representatives of NCI divisions and offices who have used the Loaner Program
 Representatives of NCI divisions and offices who have not used the Loaner
 Program

The interviews (9 in each group) will explore the extent to which the program meets NCI staff members' needs and expectations, the reasons why they have or have not used the Loaner Program, and their behavioral intention in relation to the program in the future. It also will explore the extent to which the National Program meets the expectations of the stakeholders and partners of the NCI.

The in-depth interview method will pose a moderate burden on the program staff, who will need to generate lists of potential respondents. As an in-depth method, it will pose a high burden on the respondents (up to 30 minutes). However, this method will provide a better understanding of how to improve the program so that it meets the needs of both users and non-users.

4.1.4. Clearance Requirements for Process Evaluation

The IRB exemption process will be required for all components of the process evaluation. Obtaining an exemption will require submitting an exemption package outlining the research design and identifying the reasons why the research should be exempt from the full review. OMB clearances may be required for any research conducted outside of NCI or involving surveying more than 9 respondents. The evaluation team would need to prepare and submit an OMB package in collaboration with the Office of Market Research and Evaluation (OMRE). It needs to be noted that OMB review takes approximately 6 weeks.

4.1.5. NCI Exhibit Program Process Evaluation Template

The process evaluation template contains a complete set of evaluation questions that link to the outputs, as specified in the logic model. It also indicates the measurement domains, data sources, and frequency of data collection. These templates can be found in Appendix C.

4.2. Outcomes Evaluation

Outcomes evaluation is a type of evaluation measuring the effects of the program by its target audiences, especially in terms of these audiences' awareness, knowledge, and behavior. The kinds of general evaluation questions that motivate outcome evaluation are as follows:

- Are the outcome goals and objectives being achieved?
- Do the services have beneficial effects on the recipients?
- Are some recipients affected more by the services than others?
- Is the situation the services are intended to address made better?

The outcomes of the NCI Exhibit Program have been conceptualized as short- and long-term.

4.2.1. Short-Term Outcomes

The short-term outcomes evaluation for the National Program will examine the extent to which the NCI divisions participate in the National Program, as well as the extent to which NCI's tools and resources are visible at various conferences where the National Exhibit is used. Additionally, it will explore whether the traffic at the NCI booth exhibit increases from conference to conference, whether NCI booth visitors get their needs met, and whether the program reaches new audiences.

The following research questions (Table 3) are proposed to guide this evaluation:

Table 3: National Program: Outcome evaluation questions

I. Increased/consistent participation in the National Program

1) Does the utilization of the National Program increase or remain stable over time?

II. Increased visibility of NCI tools and resources

1) Are NCI tools and resources such as Cancer Bulletin, <u>www.cancer.gov</u>, patient education materials and information on clinical trials visible at the conferences attended by the National Program?

III. Traffic at the NCI National Exhibit booth

1) What are the characteristics of the visitors to the NCI exhibits?

2) What is the traffic at the NCI National Exhibit booths?

3) What are the factors that impact traffic at the NCI booths?

4) What are the behaviors of booth visitors at the booth?

(Behaviors including time spent at an exhibit, use of or engagement with interactive components, reading of displays or texts, number of exhibits visited, etc.)

IV. National Program booth visitors receive services they need *

- 1) What are the pre-existing expectations regarding the NCI booth?
- 2) Which services offered at the booth are used most and least by booth visitors?
- 3) What are the booth visitors' perceived benefits from using those services?

4) What are the booth visitors' perceived benefits from visiting the NCI exhibit?

* Outcomes for external primary audiences (researchers, public health workers, health care providers, students, advocates)

The following measures are proposed for each of the above indicator variables:

Increased/consistent participation in the National Program

- Number of conferences attended with the National Program each year and overall
- NCI divisions that participate in the National Program
- Recommendations whether NCI should exhibit again

Increased traffic at the NCI Exhibit booth

- Number of visitors to the booth
- "Quality" and characteristics of booth visitors ("Quality" defined as whether visitors represent targeted audience. Other characteristics include professional affiliation, age, gender, race, education level, role, i.e., student, researcher, grantee, other)
- Exhibit efficiency (i.e., percentage of the audience that had a meaningful interaction with the booth)
- Exhibit attractions (i.e., percentage of a desired audience that comes to a booth)
- Time spent at the booth
- Audience activity (i.e., involved with the booth vs. passive)
- Contextual factors that impact traffic to the NCI booth

National Program booth visitors receive services they need

- Pre-existing attitudes and perceptions regarding opportunities for learning, perceptions regarding exhibit characteristics (including its layout, ease of navigation within the booth, availability of staff for in-person interactions, and availability of desired resources), reasons for visiting
- Services used
 - Number and type of materials obtained at the booth
 - Number and type of interactions with the booth staff
 - Number and type of use of interactive tools at booth
- Number and type of interactions with experts at "Meet the Expert" events
- Perceived benefits from using services at the booth
- Services that visitors would like to have available at the booth
- Perceived benefits from visiting the NCI exhibit in general

Increased visibility of NCI tools and resources

- Perceived messages across conferences
- Perceived visibility of NCI tools and resources at national conferences
- Recognition of NCI as a provider of useful tools and resources

The outcomes evaluation for the Loaner Program will assess the extent to which the divisions use the Loaner Program, the perceived consistency of NCI's "feel and look" across the conferences and of the messages promoted by the booth staff across conferences, as well as the extent to which NCI's tools and resources are visible at various conferences where the loaner exhibits are used. Of interest to this component of the outcome evaluation should also be whether divisions provide conference booth visitors with services and information they need, and whether the program reaches new audiences.

The following research questions (Table 4) are proposed to guide this evaluation:

Table 4: Loaner Program: Outcome evaluation questions

I. Increased/consistent use of the Loaner Program by NCI divisions

- 1) Does the utilization of the Loaner Program increase or remain stable over time?
- 2) Which divisions tend to use the Loaner Programs regularly?

3) Do new NCI divisions uptake the Loaner Program over time?

II. Increased visibility of NCI tools and resources

1) Are NCI tools and resources such as Cancer Bulletin, <u>www.cancer.gov</u>, patient education materials and information on clinical trials visible at the conferences attended by the Loaner Program?

III. Consistent NCI "feel and look" presented across conferences; Booth staff communicates consistent messages across conferences

1) Do the Loaner Exhibits present consistent "feel and look" across conferences attended?

2) Do staff members at the Loaner Exhibits communicate consistent messages across conferences?

IV. Divisions provide conference booth visitors with services and information they need *

1) What are the pre-existing expectations regarding the NCI Loaner booth?

2) Which services/information offered at the booth are used by booth visitors?

3) What are the booth visitors' perceived benefits from using those services/information?

4) What are the booth visitors' perceived benefits from visiting the NCI exhibit?

V. Loaner Program reaches new audiences *

1) Are new audiences represented among visitors to NCI exhibits?

2) Do booth visitors intend to share information collected at the booth with others?

* Outcomes for external primary audiences (researchers, public health workers, health care providers, students, advocates)

4.2.2. Long-Term Outcomes

In addition to short-term outcomes, several long-term outcomes are expected to result from the National and Loaner components of the program. Some of the long-term goals of the program are at this time specified in less measurable terms, and include: support of the OCE communication objectives and increase in the use of NCI web site, tools and resources.

The expected long-term outcomes of the program also include booth visitors recalling the NCI messages, returning at future conferences, as well as returning to NCI for resources. They also include an increase in number and quality of grant applications.

The logic model (Figure 1) has aligned the above long-term outcomes with the following NCI Strategic Communication goals:

- 1) To enhance NCI's exhibit and meeting presence
- 2) To enhance NCI's brand through Institute recognition tools
- 3) To connect the public, private & academic sectors
- 4) To support NCI's training and career development programs

Measuring some of those outcomes is deemed not feasible. For example, in a discussion with the program staff it was determined that no mechanisms exist at this point to track subsequent grant applications to individual booth visitors at various conferences. Consequently, no measurements could be collected on the number or quality of grant applications received from applicants who had visited NCI exhibits.

Additionally, measurement of other long-term outcomes would require on-going evaluation efforts at each of the attended conferences (e.g., to assess if previous booth visitors return at future conferences or whether they recall NCI messages), which would not be economically feasible. Instead, it is suggested that those outcomes should be measured in a proximal way during the cross-sectional component of this evaluation, by measuring intentions of booth visitors to come back to NCI for resources, or to use those resources in the future.

The following research questions (Table 5) have been developed to address the long-term outcomes of the two components of the program:

Table 5: National and Loaner Program: Long-term outcome evaluation questions

NCI Exhibit Program supports OCE communication objectives; Program in line with NCI mission

1) Is the NCI Exhibit Program consistent with the objectives of OCE?

2) Does the NCI Exhibit Program effectively contribute to promoting the NCI mission?

3) What benefits do NCI booth visitors see resulting from the Exhibit booth?

4) What is the benefit to NCI of having an EP and the "damage" or detriment of not having exhibits at certain meetings?

Increased use of NCI web site, tools and resources

Does the use of NCI website, tools and resources increase after NCI attendance in conferences?
 Do booth visitors intend to use NCI resources in the future?

Booth visitors recall NCI messages *

1) Do booth visitors recall NCI messages?

Booth visitors return at future conferences *

1) Do visitors to the NCI Exhibits return at future conferences?

2) Do booth visitors intend to return to the NCI booth at future conferences?

Booth visitors return to NCI for resources *

1) Do booth visitors return to NCI for additional resources they need?

2) Do booth visitors intend to return to NCI for additional resources that might need?

Increase in number and quality of grant applications **

1) Does the number and quality of grant applications increase as a result of NCI participating in conferences with the Exhibit Program?

** Measurement not feasible

italics – proximal measure

4.3. Impact Evaluation

Estimating the impact of the program is usually the most challenging, as measuring impact usually requires comparing program outcome from a sample of participants with an estimate of what these outcomes would have been for the same group in the absence of the program. Possible research designs fall into three categories: experimental, quasi-experimental, and nonexperimental.

The impacts of the NCI Exhibit Program are conceptualized as the Program's contribution to promoting NCI's image among both external audiences (primary and secondary) as accessible, trustworthy and credible source of cancer information, and to demonstrating NCI's commitment to advancing science for the public in order to improve detection, prediction and treatment of cancer.

The potential lack of baseline data, as well as the difficulty in appropriating any potential change in those measures to the NCI Exhibit Program (since the Program is one among many other programs that might possibly contribute to the above outcomes, and many intervening variables and inputs from other sources may play role), make such an evaluation theoretically unjustified.

Taking this into consideration, **proximal and shorter term measures** are being proposed that would assess the impact of the NCI Exhibit Program on the perceived accessibility, trustworthiness and credibility of NCI, as well as perceived role of NCI in early detection, prevention, prediction and treatment of cancer among the NCI booth visitors.

The following research questions (Table 6) are proposed to guide this evaluation of the impact of the Program:

Table 6: National and Loaner Program: Impact evaluation questions

NCI Exhibit Program contributes to NCI image as accessible, trustworthy and credible source of information

1) Do booth visitors perceive NCI as accessible, trustworthy and credible source of cancer information as a result of their visiting the Exhibit booth?

Demonstrate commitment to advancing science for the public

1) Do booth visitors perceive NCI as committed to advancing science for the public as the result of their visiting the Exhibit booth?

4.4. Outcome and Impact Evaluation Approach

The proposed evaluation approach will use the existing data sources and combine them with new data collection tools. Analysis of the information contained in the program documentation, including NCI Exhibits on loan tracking spreadsheet (for the Loaner

Program) and post-show reports and conference summaries (for the National Program) will need to be supplemented by additional methods of data collection.

The proposed methods to assess program's outcomes include:

For both the National and Loaner components:

- Debrief staff survey questionnaire at the end of each day at the booth (open- and closed-ended questions) (National and Loaner components)
- Debrief interviews with NCI staff after they attend the conferences (Loaner and National components)

For the National component only:

- Ethnographic study/Observation (Including timing and traffic observation) (National component)
- Evaluation forms from booth visitors (National component)
- Exit interviews with booth visitors (National component)

4.4.1. Data Collection Methods

4.4.1.1. Existing Data Collection Tools

- Exhibit on Loan Tracking Data will track the level of participation of divisions in the Loaner Program across time.
- Existing program documentation including Post-show reports and Conference summaries.

4.4.1.2. Proposed Additional Data Collection

• Debrief staff survey questionnaire at the end of each day at the booth (Loaner and National components).

This data collection would allow to collect staff impressions from each day of the conference, including information on the traffic at the booths, including estimated number of visitors to the booth, their "quality" and quality of interactions with the staff manning the booth, audience activity/passivity, time spent at the booth, etc.

Burden to the NCI staff:

It must be stressed that based on interviews AED conducted with conference staff that were familiar with the Exhibit Program, conducting certain data collection would be problematic while staffing exhibit booths. Staff cited some of the challenges to collecting information or interviewing booth attendees for an evaluation including:

- time constraints and lack of adequate staff to collect information;
- staff tasks, responsibilities, and priorities while staffing could interfere with collecting information;
- heavy booth traffic could interfere with collecting information.

Therefore, for the research questions below, it might be recommended that additional burden not be placed on conference staff and whenever possible, less burdensome approaches (e.g., observation by an external evaluation team, consisting of NCI or contract staff, depending on availability of resources) might be recommended for collecting this information, particularly for the National Exhibit component.

Short-term outcome	Research questions
Increased traffic at the NCI National Exhibit booth	1) What are the characteristics of the visitors to the
	NCI exhibits?
	2) What is the traffic at the NCI National Exhibit
	booths?
	3) What are the factors that impact traffic at the NCI
	booths?
	4) What are the behaviors of booth visitors at the
	booth?

• Ethnographic study (including timing and traffic observation) – National component only

Ethnographic research is contextual and reflective; it emphasizes the importance of context in understanding the program under analysis. The primary method will include participatory observation and will be combined with booth traffic and timing observation. This qualitative component of the outcome evaluation will provide information on whether a consistent "feel and look" was presented at the conferences, to assess the traffic at the NCI booth and the characteristics of the audience and their interactions with the booth. The data will be reported in the form of case studies from each of the evaluated conferences.

• Exit interviews with booth visitors and evaluation forms collected from booth visitors at the conferences attended by the National Program

In order to allow for collection of in-depth data, but also facilitate quantitative analyses of data from a larger number of respondents, a combination of two methods is proposed to asses program: exit interviews with booth visitors and evaluation forms collected from booth visitors at the conferences attended by the National Program. Exit interviews can be conducted with a limited number of visitors (every 10th visitor could be approached, with an assumption of 50% success rate), while evaluation forms could be distributed to every actively engaged booth visitor (with an assumption of 50% return rate). It is estimated that approximately 100 forms would be collected per conference (such as the American Association for Cancer Research annual conference). Both data collections will explore the type of audiences who visited the booth, whether booth visitors received services that they needed, what messages they perceived at the booth, whether NCI tools and resources were visible to them. Similar evaluation forms could be collected at conferences attended with the Loaner Program, allowing for comparisons between different types of conferences and audiences visiting the booth. Exit interviews should be planned in conjunction with the ethnographic study.

Burden to the respondents:

It is assumed that exit interviews with booth visitors would last approximately 10 minutes. Filling out the exit form (which will also contain questions related to short- and

long-term outcomes) would take approximately 5 minutes. It is assumed that both types of data collections would require an IRB and OMB approval.

Burden to the NCI team

Taking into consideration a different mandate of the NCI staff manning the booths at conferences, their possible lack of training in evaluation research, and their time limitations, it is advisable that external evaluation teams be involved in conducting inperson interviews with booth visitors. Evaluation forms could be possibly distributed to and collected from booth visitors by NCI staff members manning the booths, but this would pose an additional burden on those individuals. Therefore it is advisable that, whenever possible, an external team of evaluators (i.e., NCI staff members other than those manning the booth or contracted evaluation staff) be involved in conducting both data collection.

The above data collection should be conducted in conjunction with the on-site component of the outcome evaluation (see above).

4.4.2. Clearance Requirements

OMB and IRB clearances will be required to conduct exit interviews with booth visitors and collect exit evaluation forms from them. Both clearances will be obtained through OMRE. The IRB exemption should be sought whenever possible, and would involve submitting an IRB exemption package outlining the research to be conducted and, depending on the circumstances, identifying the reasons for why the research should be exempt from the full review. The OMB review will require at least 6 weeks and this timeframe needs to be taken into consideration when planning evaluation activities.

4.4.3. NCI Exhibit Program Outcome Evaluation Template

The outcomes evaluation template contains a complete set of evaluation questions. It also indicates the measurement domains, possible data sources, and frequency of data collection. The outcome evaluation templates focus exclusively on evaluation questions addressing program short- and long-term outcomes. The impact evaluation templates focus exclusively on evaluation questions addressing program impacts. The templates can be found in Appendix D-G.

5. THREE SCENARIOS

AED was asked to develop three scenarios presenting possible evaluation approaches with the following budgetary assumptions in mind: 1) No cost to NCI; 2) \$65,000; \$120,000. The scenarios can be found in Appendix H. The rating system is only suggestive and was developed by AED to help evaluate each of the research methods proposed for consideration.

The first scenario focuses solely on the process evaluation and was developed to identify the type of data collections that could be potentially performed by the NCI project team without incurring any additional costs. The estimated timeframe for this scenario is 3 months.

The second scenario was developed based on the assumption of a \$60,000 budget available for evaluation activities. This scenario encompasses both process evaluation and elements of outcomes evaluation focused on short-term outcomes on the NCI internal audience. This evaluation scenario would not include measures on the program's external audiences. The estimated timeframe for this scenario is 6 months.

The third scenario was developed based on an assumption of a \$120,000 budget available for evaluation activities. This scenario includes both process and outcomes evaluation, with outcome evaluation encompassing both internal and external audiences. Consequently, it would provide the fullest assessment of the program, with the most comprehensive mix of data collections. The estimated timeframe for this scenario is 12 months.

The following three evaluation scenarios are proposed:

SCENARIO 1: PROCESS EVALUATION - NO COST TO NCI

- Performed by NCI Project Staff
- Focused on the process evaluation
- Research methods include:
 - Review of program documentation
 - Review of post-show reports and conference summaries
 - Review of NCI divisions' Intranets
 - Review of NCI divisions' newsletters
 - Analysis of NCI materials ordering data (if making connection between the ordered materials and booth visitors is possible)
- Project Timeline: 3 months

SCENARIO 2: PROCESS AND SHORT TERM OUTCOMES (INTERNAL AUDIENCE) – COST: \$65,000

- Performed by Contractor
- Includes Program Evaluation and Short-term Outcomes Evaluation
- Focused on Internal Audiences
- Research methods include:
 - Review of program documentation
 - Review of post-show reports and conference summaries
 - Review of NCI divisions' Intranets
 - Review of NCI divisions' newsletters
 - Interviews with program staff
 - Post-training evaluation questionnaire
 - Interviews with NIH staff (users and non-users of the program)
 - Debrief staff survey questionnaire at the end of each day at the booth
- Project timeline: 6 months

SCENARIO 3: PROCESS AND OUTCOME EVALUATION (INTERNAL AND PRIMARY EXTERNAL AUDIENCE) – COST: \$120,000

- Performed by Contractor
- Includes Program Evaluation, Outcomes Evaluation (Short and Long-term) and Impact Evaluation (proximal measures)
- Focused on both Internal and External Audiences
- Research methods include:
 - Review of program documentation
 - Review of post-show reports and conference summaries
 - Review of NCI divisions' Intranets
 - Review of NCI divisions' newsletters
 - Interviews with program staff
 - Post-training evaluation questionnaire
 - Interviews with NIH staff (users and non-users of the program)
 - Debrief staff survey questionnaire at the end of each day at the booth
 - Exit interviews with booth visitors
 - Evaluation forms from booth visitors
 - Ethnographic study and Timing & traffic observation
- Project timeline: 12 months



Preliminary Timeline: NCI Exhibit Booth Evaluation

8/21/08

Tasks	Months											
		2	3	4	5	6	7	8	9	10	11	12
1. Kick-off meeting, finalize study design												
1. Review of program documentation												
-Review												1
-Analyze and report	_		`▲									
2. Review of Post-Show reports and Conference Summaries												
-Review				•	•	•	•	•	•	•	•	1
-Analyze and report												
3. Review of NCI divisions' Intranets	1											
-Review					•		•		•			1
-Analyze and report												
4. Review of NCI divisions' newsletters	1											
-Review					•		•		٠			1
-Analyze and report												
5. Interviews with NCI Exhibit Booth program staff	1	-										
-Design instrument												1
-Collect data												
6. Post-training evaluation forms (Design instrument; collect data; analyze)												
-Design instruments												1
-Collect data												1
-Analyze and report												1
7. Interviews with NCI staff (Users and non-users of the program)												
-Design instruments												
-Collect data												
-Analyze and report												
8. Debrief staff survey at the end of each day at the booth (Design instrument, analyze		L										
data. NCI staff collects data)												

-Design instrument							
-Collect data							
-Analyze and report							
10. Ethnographic study (6 conferences)							
-Design instrument							
-Collect data	I L						
-Analyze and report							
11. Exit interviews with booth visitors (6 conferences)							
-Design instrument	l 1					I	
-Collect data							
-Analyze and report							
12. Evaluation forms from booth visitors (6 conferences)							
-Design instrument	.						
-Collect data							
-Analyze and report	Á					À	
13. Final report, presentation of findings							

LEGEND

Ongoing or periodic activities
 Finite activities and products

Appendices

Appendix A



Exhibit Evaluation:

A Review of Literature and Program Materials

Submitted to: National Cancer Institute Office of Market Research and Evaluation Suite 400 6116 Executive Boulevard Rockville, MD 20892

Prepared by: Academy for Educational Development Center for Social Marketing and Behavior Change 1825 Connecticut Avenue, NW Washington, DC 20009

March 20, 2008

Project Background

The National Cancer Institute's (NCI) Exhibit Program, housed in the Office of Communications and Education (OCE), helps support NCI's mission by providing a mechanism for the institute to have a visible presence at a variety of conferences and professional meetings via its National and Exhibit Loaner Programs. NCI's Office of Market Research and Evaluation (OMRE) has contracted the Academy for Educational Development (AED) to conduct a feasibility study on behalf of OCE to assess how to conduct a timely, comprehensive and meaningful evaluation of the Exhibit Program.

Reported here are findings from a review of academic literature and existing Exhibit Program documentation to determine potential objectives, variables or methods that could be used in an evaluation of the exhibit program.

Findings

No published literature that specifically describes evaluation goals, variables or methods for an exhibit similar to NCI's program was located. As a result, literature from two related fields was examined: museum exhibition and tradeshow exhibition. Findings from the literature in these two areas are presented below. This is followed by findings from the review of Exhibit Program documentation.

Museum Exhibition Literature

The literature on museum exhibition and evaluation has largely been developed since the late 1960s and has undergone numerous shifts in perspective. Early evaluation efforts tended to focus on knowledge transfer or learning in which exhibit content and the knowledge gained by visitors was of paramount importance (Ansbacher, 2002). All too often, however, these studies were based on the subjective experiences of museum professionals (Shettel, 2001). Moreover, it was often assumed that the museum setting shared many of the same hallmarks of more formalized settings such as classrooms.

Today, museums and their exhibit spaces are regarded as informal learning centers (Hsi et al., 2004) that provide "direct experience with real objects, people or places" where learning is:

- Voluntary;
- Stimulated by the needs and interests of the learner;
- Often socially mediated; and
- Occurs individually or in small groups that vary in learning style and prior learning experiences (Packer & Ballantyne, 2002).

Museums are argued to be more "learner-centered" because, unlike formal educational settings, the learner/visitor is able to make their own choices about what parts of an exhibit to explore or

examine. They are also able to make personal connections to the content, develop their own way of understanding, and exert control over their learning environment (Packer & Ballantyne, 2002).

Current approaches also emphasize the experiences and perspectives of visitors. According to the "experience-based approach" learning is a journey actively engaged in by visitors: knowledge is created from "the bottom up" and begins with individual experience (Ansbacher, 2002). Knowledge is not the final goal but a way to understand and enhance experience. Exhibits using an experience-based approach attempt to enhance or extend the visitor's experience by encouraging further observation and inquiry, and relating the content to similar phenomena a visitor might have encountered or could experience (Ansbacher, 2002). This contrasts sharply with a traditional information-based approach which largely focuses on conveying information and building knowledge.

According to the constructivist (Anderson, Lucas & Ginns, 2003) or contextualist view a visitor's pre-existing knowledge or perspective will drive how and what they learn from exhibits. In this view the meaning a museum exhibit holds for a visitor "is not something 'found' or 'received' or 'communicated' in the exhibition itself. Individuals invent their own responses, juxtaposing all the elements of the exhibit—its perceived messages, its content, its design—against the background of their own lives and experience. Out of that creative, unique confrontation they establish, in some cases, a personal meaning" (Doering, Pekarik & Kindlon, 1997).

Contemporary museum evaluation also recognizes that museum visitors differ in the goals or objectives that drive their visit. As Packer and Ballantyne (2002) point out, there is little support for the notion that all visitors seek knowledge and learning when attending a museum: visitors hope to be entertained, want to "kill time", seek to satisfy their curiosity, or merely want to "people watch." This notion is supported by Packer and Ballantyne's (2002) finding that visitors to a museum, art gallery and aquarium were motivated to attend by distinctly different factors.

Goals and Objectives of Evaluation

According to the museum exhibit literature, the basic evaluation questions are:

- Do visitors attend to and interact with the exhibit?
- How do visitors interact with the exhibit?
- How effective are the exhibit cues (printed text, sound, illustrations)?
- How well do visitors understand the exhibit's message?
- How do visitors interpret the relevance of the exhibit? (McClaffery, Rennie & Groves, 1996)

Museum evaluation can be conducted throughout the exhibit lifecycle. As described by Post (2006) museum evaluation can include:

• **Front-end evaluation** conducted during the exhibit planning stage helps museums better understand visitors' current knowledge, understanding and vocabulary of the subject matter. It is especially useful in revealing misconceptions and determining effective modes of delivery.

- **Formative evaluation** is conducted while the exhibit is designed and/or constructed is used to finalize and refine messages. Similar to the message or materials testing often conducted in communication research, it uses inexpensive mock ups and prototypes so that the final product can be refined.
- **Remedial evaluation** is conducted once an exhibit is completed and open to the public. When museum staff recognize and repair or modify an obvious flaw or problem they are conducting remedial evaluation.
- Summative evaluation also occurs once an exhibit is completed and open to the public. It is conducted to assess the impact of an exhibit in terms of whether exhibit objectives are met, and what knowledge or meaning visitors take away from the exhibit.

Methods of Evaluation

Museum evaluation relies on a variety of qualitative and quantitative research methods as noted in Table 1 below.

Museum Evaluations	
Qualitative methods	Quantitative Methods
Observational studies/ethnography	Surveys
Discourse analysis	Visitor counts
Focus groups	Experimental studies

Table 1: Evaluation Methods

Informal methods of data collection include feedback forms, visitor comment books, consultations, informational conversations and unsolicited letters or emails. More formal methods include surveys, discussion groups and workshops, depth interviews, tracking and observations and experimental studies (Reussner, 2003). Surveys often take the form of pre-post evaluations of exhibit visitors and are frequently administered randomly by attempting to secure participation from randomly selected visitors.

Cued studies or experimental testing recruit individuals to use an exhibit in a highly structured fashion. Prior to entering the exhibit, respondents are "cued" to engage in all parts of the exhibit: read each label, look at each display, interact with all the hands-on components. These studies help to document the "maximum effectiveness" of an exhibit but are not necessarily predictive of how effective the exhibit will be with actual visitors (Shettel, 2001).

Longitudinal studies hope to assess the long-term effects of a museum visit. Rather than assessing the immediate post-visit effect, they seek to determine how a museum visit can influence visitors "meaning making" over time (Shettel, 2001).

Variables measured

Museum evaluation largely focuses on measuring visitor:

- Characteristics/demographics (age, race, gender, education level, etc).
- Behaviors including time spent at an exhibit, use of or engagement with interactive components, reading of displays or texts, number of exhibits visited, etc.

- Knowledge/learning can include exhibit recall or retention, verbal ability, associative memory, or knowledge gain (Koran et al., 1996).
- Attitudes can include pre-existing ones such as interest in an exhibit topic (Doering, Pekarik & Kindlon, 1997). It can also encompass need for cognition (capability beliefs), perceptions regarding opportunities for learning (context beliefs), perceptions regarding exhibit characteristics (situational incentives) or their reasons for visiting (personal goals) (Backer & Ballantyne, 2002). At times it can include affective capacities (greater confidence or stronger motivation toward learning) (Rickinson et al, 2004).

Tradeshow Exhibition Literature

Most of the tradeshow literature focuses on how to develop, manage and staff tradeshows effectively; as a result the literature specifically focused on evaluation is scant. It is important to keep in mind that tradeshows are primarily opportunities to increase leads for the sale of products and services: the larger the volume and quality of leads, the more successful an event is deemed (Booker, 2006).

The tradeshow literature emphasizes that managerial support and collaboration help to ensure the success of tradeshow exhibits and their evaluation (LoCascio, "10 reasons why"; Conley, 1995). In fact, it is argued that managers need to be involved in exhibit evaluation early on and throughout the design, implementation and analysis phases. Lack of support is thought to result in insufficient resource allocation to conduct an evaluation or to implement changes.

The tradeshow literature also emphasizes setting clear goals and objectives in an evaluation plan to guide the evaluation process. A well-defined evaluation plan is said to increase the likelihood of manager and staff support for an exhibit evaluation. An initial step is to set goals and objectives for an exhibit pre-show against which actual results will be compared. This process of benchmarking helps assess what did and did not work, and lends itself to providing recommendations for next steps.

Post-show evaluations are also regarded as valuable. Even if goals and objectives were not previously established, a post-show evaluation can occur provided it happens promptly after the show. Typically, a follow up meeting with management and staffers involved with the exhibit is suggested to happen within one week of the tradeshow and a report of findings and recommendations should be shared with management within two weeks of the tradeshow. (LoCascio, "The Importance of").

Evaluation Objectives and Goals

According to the tradeshow exhibit evaluation literature, the basic evaluation questions are:

- How did the show perform?
- What results were accomplished?
- What problems existed?
- What are recommendations to improve the next show?

Generally, an evaluation should include all aspects of the tradeshow exhibit presentation. Tradeshow evaluators want to know if visitors have a meaningful interaction with their exhibit. A first step is to attract visitors but once they are at a booth, their level of engagement with the exhibit and its staff is critical (Booker, 2006).

Tradeshow exhibitors are interested in attendee demographics and ROI to help them determine which shows to participate in. An evaluation can therefore inform how effective a tradeshow is but also assist in determining which tradeshows are worth participating in (Hughes, 2008).

Methods of Evaluation

A variety of methods and techniques are employed by the tradeshow industry to conduct an exhibit evaluation, depending on what data is being measured. To gain insight from exhibit staffers a post-show evaluation form may be administered the last day of a show (LoCascio, "The Importance of"). Other methods include questionnaires, surveys, and in-depth interviews that can be used pre or post-show.

New technologies also are being utilized within the industry. One technique is radio frequency identification-based (RFID) Booth Traffic Analytics which can help to better understand exhibit visitors. RFID is a chip embedded in an attendee's badge that can be automatically scanned once an attendee enters an exhibit thereby alerting booth staff that a customer is present. The technology can add to an exhibitor's ROI as it allows them to better track customers, understanding who they are and what they engage in while at a tradeshow (Wimberly, 2007).

Measurements and Key Variables

Some of the factors measured within the tradeshow industry include *average traffic density score*, a measurement of the number of attendees per 100 square feed of exhibit space (Conley, 1995). There is also *exhibit efficiency*, or the percentage of the audience that has a meaningful interaction in the booth. *Exhibit attraction* is the percentage of a desired audience that comes to a booth (Booker, 2006).

Audience activity, audience quality, proportion of target audience attracted to booth, proportion contacted, and the number of leads generated are other points of measurement (Dekimpe et al., 1997). Other measures include "product presentation effectiveness, level of booth duty professionalism, efficient exhibit communications, level of technical and management support provided, hotel and transportation logistics, level of customer care, sales lead management and distribution, literature support operation, press relations, pre-show meeting details, exhibit's overall operation from opening to closing" (LoCascio, "The Importance of").

Review of Conference Reports

AED reviewed post-show reports and conference summary reports from meetings and conferences where the National Exhibit was displayed since 2004 to determine what information

could be included in an evaluation of the Exhibit Program. This included 13 conference summary reports from 2004-2006 and 28 post-show reports from 2004-2007. In reviewing the reports, particular attention was paid to the open-ended narrative sections of each report as these contain in-depth observations and remarks covering a wide variety of topics. The content in the narrative sections, however, varies considerably in terms of the type and amount of information that is provided. This content could be particularly valuable in an evaluation of the Exhibit Program if provided in a more organized and consistent fashion.

After reviewing the reports, it is clear that the content can be grouped into four major categories: Booth Logistics, Materials Distribution, Staffing, and Conference Logistics (see Table 2 below). Booth Logistics includes information on booth location and traffic, booth size, and booth set-up; Materials Distribution includes information on the amount of materials distributed, popular resources, and new resources to develop; Staffing includes staff attendance, staff behavior, and ideas for additional staff training; and Conference Logistics includes information on number of conference attendees, topics of interest to booth visitors, recommendations about exhibiting at future conference, and other topics.

Federal Exhibit Programs Review

AED contacted other federal agencies to inquire about existing exhibit programs, determine if evaluations of the programs had been conducted, and if so, what methods or approaches were utilized in the process. AED reached out to a total of 23 agencies and held discussions with exhibit program staff at 16 agencies, including 15 institutes at the National Institutes of Health (see Table 3 for a list of participating NIH institutes) and the National Aeronautics and Space Administration's (NASA) Johnson Space Center.

Table 3: Participating NIH Institutes

National Eye Institute (NEI)
National Heart, Lung, and Blood Institute (NHLBI)
National Human Genome Research Institute (NHGRI)
National Institute on Aging (NIA)
National Institute of Allergy and Infectious Diseases (NIAID)
National Institute of Arthritis and Musculoskeletal and Skin Diseases (NIAMS)
National Institute of Biomedical Imaging and Bioengineering (NIBIB)
National Institute of Child Health and Human Development (NICHD)
National Institute on Deafness and Other Communication Disorders (NIDCD)
National Institute of Dental and Craniofacial Research (NIDCR)
National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK)
National Institute of Environmental Health Sciences (NIEHS)
National Institute of General Medical Sciences (NIGMS)
National Institute of Mental Health (NIMH)
National Institute of Neurological Disorders and Stroke (NINDS)

Based on the discussions with exhibit program staff at these agencies, it appears that the Exhibit Program at NCI is unique in the depth and breadth of the program. The exhibit programs at other NIH institutes are much smaller in size than the NCI program in number of meetings attended each year, number of staff involved in exhibiting, size of budget, and number of materials distributed.

Exhibit program staff—typically housed in offices of communication—from NIH institutes determine which meetings and conferences will be attended based on institute priorities, overall mission, program needs, and budget and staffing constraints. The exhibit structures at NIH institutes are similar in size to that used in the NCI Loaner Program (i.e., 10 foot floor exhibits, table-top exhibits, banners, etc.). The NIH institutes typically send exhibits, materials, and communication staff to several national professional meetings in their respective fields each year. While most attend 5-15 meetings per year, some institutes, such as NIAID, NIMH, and NIDDK attend over 20 professional meetings a year. Several institutes, including NEI, NIAID, and NIAMS, also attend smaller, focused conferences or local events such as career fairs or community health fairs.

The exhibit program at NIMH is most comparable to the NCI Exhibit Program but on a much smaller scale. Each year, attendance at national meetings is determined by NIMH's Office of Science, Policy, Planning, and Communications (OSPPC) based on institute priorities, program needs, previous meetings attended, budget, and staffing constraints. As is the case with NCI's Loaner Exhibit program, programs and offices within NIMH can also make formal requests for

an exhibit to be sent to other specific meetings. Program staff and budgets, not OSPPC, support these conference exhibits.

None of the 16 NIH institutes spoken to had conducted any formal, outcome evaluation of their exhibit programs. However, most institutes do prepare post-conference reports similar to the NCI conference summaries and post-show reports. These reports, completed by exhibit staff after the conference, typically detail such topics as meeting attendance, reactions and inquiries of exhibit visitors, materials distribution, and whether or not a particular conference is worth attending in the future. These reports reveal information about the exhibit as it relates to particular conferences attended but do not evaluate whether or not the overall goals of the exhibit programs are being achieved. Many of the agencies contacted expressed interest in NCI's objective of developing an outcome evaluation of the Exhibit Program.

In addition to holding discussions with the 15 NIH Institutes, AED was also able to reach exhibit program staff at NASA's Johnson Space Center (JSC) Exhibit Program. This exhibit program is quite different in terms of goals, objectives, and scope than the NCI Exhibit Program or any of the other NIH Institute exhibit programs. The JSC Exhibit Program is essentially a loaner program that provides various learning-focused exhibits to members of the public for local events at schools, community organizations, local governments, and others. These educational exhibits address numerous topics including space technology, spacesuits, food in space, the Apollo Program and the International Space Station.

The contractor who manages the program is required to achieve certain program metrics related to number of requests received and events supported each year. To date, the contractor has met or exceeded these metrics. The program staff at JSC believes that customer satisfaction must be high since many repeat requests are received from the same organizations each year. The program also requests that customers complete and submit an online comments form after using a traveling exhibit. The questions on this form allow the program staff to examine customer satisfaction of the exhibit, including process for scheduling the event, ease of assembly, and perceived value of the exhibit, and whether or not the exhibit contributed to the success of the event. There are no questions that directly evaluate the Johnson Space Center itself.

These discussions with the 16 federal agencies suggest that conducting formal, outcome evaluation of exhibit programs is not a common practice. Other resources need to be examined and researched to determine if there are methods or approaches for conducting a formal evaluation of a conference exhibit program.

Conclusions/Recommendations

Although no published literature was located that described evaluation goals, variables or methods for an exhibit program similar to NCI's program, the literature from related fields provide some important implications for evaluating the NCI Exhibit Program. Exhibit evaluation in the museum and trade show fields is well developed and offers insights into successful evaluations, including appropriate methodologies and important variables to measure. In addition, review of the NCI post-show and conference reports indicates which measurements and variables could be included in an evaluation of the Exhibit Program.

Based on the findings from this review, several things are implicated for the NCI Exhibit Program evaluation, including the potential need for:

- Clearly delineating the evaluation goals/objectives and identifying whether these are relevant to NCI, OCE, and other offices or divisions.
- Using indicators to capture:
 - *Visitor characteristics/demographics:* To better describe the audiences coming to the exhibits
 - *Visitor goals:* What do visitors hope to learn or achieve when visiting the exhibit? How well does the exhibit meet their goals?
 - *Visitor behaviors:* How do visitors use kiosks, review and collect publications, spend time in the exhibit, etc.
 - *Long-term effects:* How well does visiting the booth increase overall knowledge and awareness of NCI and affect the use of NCI resources after a meeting or conference?
- Utilizing of a mixed methods approach to evaluate the exhibit program, so that various division and visitor goals can be assessed.
- Modifying post-show and conference reports so that narrative information is captured more consistently.

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Appendix B



NCI Exhibit Evaluation Feasibility Study: Topline Report of Stakeholder and Exhibit Evaluation Expert Perspectives

Background and Introduction

The National Cancer Institute's (NCI) Exhibit Program, housed in the Office of Communications and Education (OCE), helps support NCI's mission by providing a mechanism for the institute to have a visible presence at a variety of conferences and professional meetings via its National and Exhibit Loaner Programs. NCI's Office of Market Research and Evaluation (OMRE) has contracted the Academy for Educational Development (AED) to conduct a feasibility study on behalf of OCE to assess how to conduct a timely, comprehensive and meaningful evaluation of the Exhibit Program.

As part of this feasibility study, AED reviewed academic literature and existing Exhibit Program documentation to determine potential objectives, variables or methods that could be used in an evaluation of the exhibit program. No published literature that specifically describes evaluation goals, variables or methods for an exhibit similar to NCI's program was located. As a result, literature from the museum exhibition and tradeshow exhibition fields were examined. Findings from the literature in these two areas were presented in a report.

To gather more insight on the NCI Exhibit Program and exhibit evaluation in general, AED conducted informal telephone discussions with NCI Stakeholders and Exhibit Experts. Background discussions with NCI stakeholders who have utilized and/or staffed the Exhibit Program were held to determine information needs of the staffers and elicit potential evaluation measures and variables. Background discussions with exhibit experts, including federal government and cancer organization exhibit managers as well as museum exhibit evaluation and tradeshow exhibit evaluation experts were conducted. These discussions were held to determine best practices for exhibit evaluation and to assess the feasibility of potential evaluation options for the NCI Exhibit Program. This report summarizes the findings of these stakeholder and exhibit evaluation expert discussions.

Method

Discussions with NCI Stakeholders

AED worked with OCE and OMRE staff to identify stakeholders who have utilized and/or staffed the Exhibit Program. AED then contacted 14 stakeholders (four Loaner Exhibit users, four National Exhibit staffers, and six Division representatives) to participate in 20 minute, one-one, semi-structured telephone interviews with AED staff members. Of these 14 invitations, six stakeholders (two Loaner Exhibit users, two National Exhibit staffers, and two Division representatives) agreed to participate.

Format of the Discussions

AED and OCE and OMRE staff developed a discussion outline to guide the short telephone discussions. General questions were designed to elicit stakeholders' opinions on how the program could be evaluated, including what information about the program should be gathered and in what ways staff might use that information.

The discussions focused on:

- How could evaluation of the Exhibit Program be conducted?
- What data would exhibit staffers be willing or able to collect?
- What data or measures would be beneficial to stakeholders?
- To what extent and how would evaluation results be utilized by stakeholders?

Discussions with Exhibit Expert

AED developed a list of exhibit experts who manage exhibit programs on behalf of federal government agencies or cancer organizations/NCI partners as well as experts in tradeshow and museum exhibit evaluation. This list of potential participants was reviewed by OCE and OMRE staff. AED invited 8 experts to participate in 45 minute, one-on-one, semi-structured telephone interviews. Of these 8, three agreed to participate in a phone interview, including one government expert and two museum evaluation experts, and one tradeshow evaluation expert agreed to respond to the questions via email.

Format of the Discussions

AED and OCE and OMRE staff developed a discussion outline to guide the short telephone discussions. General questions were designed to gather insights and best practices for exhibit evaluation in order to inform how the NCI Exhibit Program could be effectively evaluated.

The discussions focused on:

- What types of exhibit evaluations are possible?
- What data or measures should be collected?
- What best practices or lessons learned should be employed?

Key Findings

Discussions with NCI Stakeholders

Specifically highlighted during the discussions with the NCI Stakeholders were the following information and recommendations:

- Stakeholders indicated that evaluation methods and tools would vary depending on which goal was being evaluated.
- Some methods suggested for evaluation included focus groups, interviews, feedback surveys, materials tracking, booth traffic tracking, and tracking number and type of questions fielded by NCI staff.
- Some of the challenges to collecting information from booth visitors for an evaluation
 include lack of staff/volunteer experience interacting with booth visitors; lack of interest
 of booth visitors in NCI (i.e. visiting booth only for free give-aways); time constraints of
 booth visitors to participate in a survey, interview, etc.; and lack of interest of booth
 visitors in participating in a survey, interview, etc.
- Some of the challenges to staffers or volunteers collecting and providing information for an evaluation include lack of adequate staff/volunteers to collect information; staff/volunteer tasks, responsibilities, and priorities while staffing could interfere with collecting information; and also heavy booth traffic could interfere with collecting information.
- Results from an Exhibit Program evaluation would be helpful in assisting NCI Stakeholders to determine where and when to exhibit; level of involvement needed to exhibit, including funding and staff resources needed; and whether or not a particular conference is worth attending.
- Although many indicated challenges to participating in an evaluation, most believed the program should be evaluated and would be willing to assist in an evaluation.
- NCI Stakeholders indicated that it would be helpful to have more complete information
 of specifically where and when the National and Loaner exhibits will be and which
 division/staff to contact regarding the attendance. If another division plans on attending a
 conference, it might be possible to send materials and publications with that division if
 one's own division doesn't have staff/funding to attend separately.
- Stakeholders also indicated that it would be helpful to have a tracking system and a rating system. The tracking system would indicate the number of times and which conferences an exhibit has been taken. The rating system could help stakeholders determine which conferences make the most sense to participate in.

Discussions with Exhibit Experts

Specifically highlighted during the discussions with the Exhibit Experts were the following information and recommendations:

- An exhibit and exhibit staffers tie faces to the image of the organization. They present an image, character, and perceived culture of the entire organization.
- Technology is extremely important to incorporate into exhibits to attract attention and overcome time constraints of the booth attendees.
- It is important to begin with front-end evaluation to learn about and understand the exhibit audience. Existing data (psychographic) and surveying will help to establish a baseline of audience perceptions, knowledge, misconceptions, information needs, etc.
- In order to do an effective outcome evaluation, reasonable, achievable, and clear goals and objectives need to be established first. These goals and objectives should be developed in conjunction with other communication efforts. Without outcome evaluation, there is no way to determine if the goals and objectives have been successfully achieved.
- There are many different types of evaluation that are conducted at various points throughout the exhibit design process, including front-end, formative, summative/outcome, and remedial evaluations.
- Evaluation methods include unobtrusive observation, surveying, cued questionnaires, interviewing, post-show reporting, etc.
- Data or measures that can be collected include both quantitative and qualitative. Quantitative measures include number and type of shows exhibited at, booth attendance, materials distribution, etc. Qualitative measures include attitudes towards and perceptions of NCI, behavioral intentions, and perceived changes in knowledge.
- Formative evaluation is useful during the design/redesign phase to ensure that messages are being communicated effectively and appropriately.
- Experts indicated that it is important to a qualified staff member responsible for managing all aspects of the evaluation, including planning, logistics, implementation, and reporting.

NCI Exhibit Feasibility Study Interview Guide NCI Stakeholders

Interviewer Identification	
Name of interviewer	
Date of interview	
Interview start time	Interview end time
Interviewee Identification	
Name of interviewee	

Introduction (5 minutes)

Hi, this is ______ from AED. Also on the phone with me is ______ from AED. She will be taking notes today, so we can accurately capture your feedback.

As you know, we are talking to NCI staff who have been involved with the NCI Exhibit Program to hear their thoughts on how the program could be evaluated. This interview should take us about 30 minutes.

Please know that I do not expect you to be an expert in evaluation. We are interested in hearing your thoughts about how the program could be evaluated and how you or other staff in your division might use that information. Your responses will help us determine if the program can be effectively evaluated and how that might happen.

Your feedback will be kept confidential and will be used solely to help us determine how the program could be evaluated. Your name will not be shared with other NCI staff or included in any reports we prepare.

With your permission, we would like to audiotape today's interview: the recording would be used only to aid us at AED in writing our report of findings. We will NOT make transcripts of the tapes and no one at NCI will ever have access to these recordings. The tapes will be destroyed once the report of findings is submitted. Please let me know if you're comfortable with our recording the call. If so, I will turn on the recorder now.

[If participant agrees – and has signed a consent form – proceed with taping the interview. If participant is uncomfortable or unsure, proceed without taping.]

Do you have the list of goals for the Exhibit Program that we sent to you at hand? [If they have the goals, proceed. If not, resend via email]

Do you have any questions for me before we get started?

Warm-up / Intros (5 minutes)

- 1) Just so I have a better sense of your experience, can you tell something about your role at NCI and how you have been involved in NCI's exhibit program?
- 2) What do you or your division currently hope to achieve by being involved with the Exhibit Program?
- 3) How do you currently make a decision about being involved with the Exhibit Program? What encourages or motivates your involvement? What discourages it?

Goals of Exhibit Program (15 minutes)

To get started, let's start by talking about the goals for the Exhibit Program.

[refer respondent to list of goals]

- Create a centralized Exhibit Program to efficiently and effectively support the Institute in its communication and outreach activities;
- Increase participation of the NCI divisions, centers and offices in the Exhibit Program;
- Represent NCI as an accessible, trustworthy and credible source of cancer information; and
- Demonstrate NCI's commitment to and role in advancing science for the public.
- 4) What are your thoughts on these goals? In what ways are they reasonable?
- 5) What goals for the Exhibit Program are most appropriate?
- 6) What are your thoughts on how these goals could be evaluated?

Let's talk about evaluating the Exhibiting Program more specifically.

- 7) What information about the Exhibit Program would be useful to you or your division? What information would not be helpful?
- 8) How might you use the results from an evaluation of the Exhibit Program?

For those involved with the National Exhibit (5 minutes):

- 9) What information about the National Exhibit could be collected? What makes the most sense to collect? What does your division most want to know about the National Exhibit?
- 10) What kinds of information might it be feasible for exhibit staffers or volunteers to collect from visitors? What would make this easy to do? What would make it challenging?
- 11) What kinds of information might it be feasible for exhibit staffers or volunteers to provide themselves? What would make this easy to do? What would make it challenging?
- 12) If the National Exhibit were evaluated, in what ways would you or those in your division be willing to participate?

For those involved with the Loaner Exhibit (5 minutes):

- 13) What information about the Loaner Exhibit could be collected? What makes the most sense to collect? What does your division most want to know about the Loaner Exhibit?
- 14) What kinds of information might it be feasible for exhibit borrowers to collect from those who see the exhibit? What would make this easy to do? What would make it challenging?
- 15) What kinds of information might it be feasible for exhibit borrowers to provide themselves? What would make this easy to do? What would make it challenging?
- 16) If the Loaner Exhibit were evaluated, in what ways would you or those in your division be willing to participate?

Closing (5 minutes)

- 17) In your opinion, should NCI's Exhibit Program be evaluated?
- 18) What additional comments do you have about evaluating the Exhibit Program?
- 19) Do you have any other comments or questions for me?

Thank you for participating in this interview. Your comments were extremely helpful.

NCI Exhibit Feasibility Study Interview Guide Experts

Interviewer Identification	
Name of interviewer	
Date of interview	-
Interviewee Identification	
Name of interviewee	

Introduction (2 minutes)

Hi, this is _____ from AED.

As you know, we are talking to various individuals who have been involved with exhibit programs and their evaluation to help get some ideas on how the NCI Exhibit Program could be evaluated and to hear best practices. This interview should take us about 30 minutes. Your responses will help us determine if the program can be effectively evaluated and how that might happen.

Your feedback will be kept confidential and will be used solely to help us determine how the program could be evaluated. Your name will not be shared with other NCI staff or included in any reports we prepare.

Do you have the list of goals for the Exhibit Program that we sent to you at hand? [If they have the goals, proceed. If not, resend via email]

Do you have any questions for me before we get started?

Warm-up / Intros (3 minutes)

1) Just so I have a better sense of your experience, can you tell me about your role and how you have been involved with exhibit programs and/or their evaluation?

For organizers of exhibit program

- 2) Do you currently evaluate your exhibit program? Why or why not?
 - a. If not: Have you considered evaluating it any way? Which ways?
 - b. If yes: How do you evaluate it?
 Ask specifically about: Surveys of visitors?
 Counts of visitor attendance?
 Feedback from booth staff or volunteers?
 Show or post-exhibit reports from contractor/vendor?
 ROI analysis?
 Other methods?
- What types of information about your exhibit program do you currently track?a. How does this information get used?

Evaluation Methods (10 minutes)

4) What are the current methods for conducting exhibit evaluation that you are familiar with? Surveys of visitors? Counts of visitor attendance? Feedback from staff or volunteers? Show or post-exhibit reports from contractor/vendor? Other methods?

- 5) What are the pros and cons of each of these?
- 6) What kinds of resources do each require?
- 7) How can data be collected most effectively?

Goals of Exhibit Program (10 minutes)

Let's talk specifically about NCI's Exhibit Program.

[refer respondent to list of goals]

- Create a centralized Exhibit Program to efficiently and effectively support the Institute in its communication and outreach activities;
- Increase participation of the NCI divisions, centers and offices in the Exhibit Program;
- Represent NCI as an accessible, trustworthy and credible source of cancer information; and
- Demonstrate NCI's commitment to and role in advancing science for the public.
- 8) What are your thoughts on the goals of the Exhibit Program?

Probe:

In what ways are they reasonable?

If an exhibit organizer: How do these goals compare to the goals for your program?

9) What are your thoughts on how these goals could be evaluated?

10) With what you know of the Exhibit Program, what aspects of it would you recommend evaluating?

11) What would be essential in order for the evaluation of the Exhibit Program to be feasible?

12) What is a realistic timeframe for an evaluation?

Closing (5 minutes)

13) In your opinion, should NCI's Exhibit Program be evaluated?

14) Are there any best practices or lessons learned that you would like to share, or recommend that NCI consider?

15) Do you have any other comments or questions for me?

Thank you for participating in this interview. Your comments were extremely helpful.

Appendix C

<u>Components of process evaluation –</u> NATIONAL AND LOANER PROGRAM

ACTIVITIES	RESEARCH QUESTIONS	MEASURES	METHODS OF DATA COLLECTION *	FREQUENCY OF DATA COLLECTION
Centralized exhibit service;	1) What are the services provided by the centralized exhibit service?	Types of services provided	Review of program documentation;	Once
Coordination of conference services	2) Do these services differ in any way from the activities planned for in the Program's Strategic Plan?			
Training for NCI staff Theme 2	1) What training has been offered to the NCI staff by the Exhibit Program?	Number and type of training sessions provided	Review of program documentation;	Once
Strategy 2.2: Support NCI's training and career development	2) Did the trainings listed in the NCI Exhibit Strategic Plan take place?	Number of departments and divisions that have participated in the training	Interviews with	Once
program	3) Were the trainings held with the targeted number of NCI divisions/offices and programs?	Number and functions of NCI staff members that have participated in the training	program staff;	

		1		1
	 4) Are the trainings evaluated by recipients/participants? Is the feedback collected? Are the recipients getting all the information they need? 5) Were the training objectives met? 6) Are those who were trained clear on roles and responsibilities when utilizing the Exhibit Program? 7) Did those who were trained increase their understanding of the program? 8) Did those who were trained increase their usage and/or participation in the program? 9) What has been the usage of the listserv? What benefits and challenges existed in using the listserv? 	NCI staff's satisfaction with the trainings NCI staff increased understanding of components and how to use the program NCI staff increased interest in using the program NCI staff increased use of the program Number of trainees who used the program Which component of the Program (National or Loaner) How used /which conferences	Post-training evaluation forms;	Ongoing Ongoing
		Number of NCI staff who communicate via listserv Topics of communication Frequency How was the exchanged information used	Online survey of listserv users;	
Internal promotional activities	 What types of promotional activities have been implemented? Do these activities differ in any way from the activities planned in the Exhibit Loaner 	Number of in-person outreach sessions Where conducted Number and type of NCI staff who attended those sessions	Review of program documentation ; Review of NCI division's intranets;	Once Ongoing
	3) Did those who were exposed to promotional activities increase their	Number of drop-in "DYK stats" developed Number of divisions' newsletters that cited information	Review of divisions' newsletters;	Ongoing
	understanding of the program?	provided in drop-in "DYK-stats"; which divisions	Interviews with program staff;	Once

	4) Did those who were exposed to	Number of internal listservs		
	promotional activities increase their use of the	that cited information provided in drop-	On-line survey of NCI	Once
	program?	in "DYK-stats"; which listservs	staff	
		Number of divisions' intranets that link		
		to the Exhibit Program website Which divisions		
		which divisions		
		Number of "D-brief" emails featuring		
		Exhibit Program distributed		
		To whom distributed		
		Number of desk-to-desk flyers		
		promoting and reporting on the Exhibit		
		Program distributed		
		To whom distributed		
		Increase in NCI staff understanding of		
		the components of the centralized		
		program and how to use the program		
		Increase in use of the program among		
		NCI staff who attended the trainings		
		Number of visitors to the website		
		Number of orders along davis the		
		Number of orders placed via the program website		
		program website	Review of program	Once
		Number of orders placed via other	documentation;	
		means		
Program website			Website tracking;	Ongoing
	1) How is the Exhibit Program website utilized and promoted?	Number of other requests placed via the website	On-line survey of NCI	Once
	unized and promoted :	What type of requests	staff;	Onee
			Short survey	
	2) Does it meet the needs of the NCI staff?	Staff satisfaction with the website	questionnaire;	
			Interviews with NCI	
	1) To what extend is the Program Conference	How are primary conferences selected	staff Review of program	
	Selection Decision Tool used to select	now are primary concrences selected	documentation;	
Select targeted	targeted conferences?	How are secondary conferences	,	
conferences		selected		
	2) Who uses the tool to select the		Interviews with	

	conferences?3) Who else selects conferences?4) L NGL and the life in the lif	NCI staff members involved in conferences selection NCI staff members who use the tool	program staff;	Once
	4) Is NCI present with its National Exhibit Program at appropriate conferences?	Conferences attended with the National Exhibit		Once
Identify and train staff to attend conferences	 How are NCI staff members who attend conferences identified? How are NCI staff members trained in preparation for conferences? Does the training in preparation for conferences reach its objectives? How are training needs of staff identified? 	Number of staff needed Number and function of NCI staff members who were selected to staff National Exhibit How were they selected How were they trained Number and function of NCI staff members who were selected to staff Loaner Exhibits How were they selected How were they trained NCI staff satisfaction with the training provided Suggestions for additional staff training	Post-show reports; Conference summaries; Tracking staffing requests and lists of staffers; Interviews with program staff; Interviews with NCI staff attending	Ongoing Ongoing Once Ongoing
Select and ship targeted materials and other resources	 Is the type of materials appropriate for each of the conferences attended? Are the quantities of materials appropriate for each of the conferences attended? What are other types of resources/materials that are needed? 	Staff behavior at the conferences Amount and type of resources sent Amount and type of resources distributed Most popular resources/materials Least popular resources/materials Materials that were exhausted Requests for additional materials Requests for CDs vs. paper publications	Conferences; Post-show reports; Conference summaries; Interviews with NCI staff attending conferences;	Ongoing Ongoing
		Requests for new resources to develop for a particular audience		

Arrange for and set-up exhibit booth; Provide interactive tools, access to Internet at conference booths	 Are appropriate exhibit structures used for different conferences? Are the messages and visuals provided at the booth consistent with the NCI mission Are the messages and visuals provided at the booth appropriate for the meetings attended? Are interactive tools and other NCI resources provided at the booth appropriate and sufficient? 	Type of exhibit structures per conference Size of the NCI exhibit space per conference Booth set-up Labor Supplies needed Type of interactive tools provided at conferences Is NCI website accessible at booth	Post-show reports; Conference summaries; Interviews with NCI staff attending conferences; Ethnographic study	Ongoing Ongoing Once
Organize "Meet the Experts"	 How is the "Meet the Experts" activity implemented? Is the "Meet the Expert" activity appropriate for conference? 	Number of "Meet the Expert" sessions at individual conferences What experts Which conferences Number of conference participants who attended the "Meet the Expert" sessions Who attended the sessions At which conferences	Interviews with program staff; Post-activity evaluation forms distributed at the booth; Post-show reports; Conference summaries; Ethnographic study	Once Ongoing Ongoing Once

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Bold – Data currently available

No bold – Primary data collection *Italics – Proximal outcome measures* Yellow – Data collection not feasible Not shaded – Internal Audiences

Shaded – External Audiences

Appendix D

<u>Components of outcomes evaluation –</u> <u>NATIONAL PROGRAM</u>

SHORT TERM OUTCOMES	RESEARCH QUESTIONS	MEASURES	METHODS OF DATA COLLECTION*	FREQUENCY OF DATA COLLECTION
Increased /consistent participation in the National Program Theme 3: Connect the public, private, and academic sectors Strategy 3.2: Enhance NCI's exhibits and meetings presence	Does the utilization of the National Program increase or remain stable over time?	Number of conferences attended with the National Program per year NCI divisions that participate in the National Program Recommendations for whether NCI should exhibit again	Post-show reports; Conference summaries;	Ongoing
Consistent NCI "feel and look" presented across conferences; Booth staff communicates consistent messages across conferences	 Do the National Exhibits present consistent "feel and look" across conferences attended? Do staff members at the National Exhibits communicate consistent messages across conferences? 	"Feel and look" of NCI exhibits Type of messages presented by NCI staff at the National Exhibits	Ethnography/observation; Debrief interviews with NCI staff after the conferences	Once Ongoing
Increased traffic at the NCI National Exhibit booth	 What are the characteristics of the visitors to the NCI exhibits? What is the traffic at the NCI National Exhibit booths? What are the factors that impact traffic at the NCI booths? What are the behaviors of booth visitors at the booth? 	Number of visitors to the booth "Quality" and characteristics of booth visitors (professional affiliation, age, gender, race, education level, role, i.e., student, researcher, grantee, other) Exhibit efficiency (i.e., the percentage of the audience that had a meaningful interaction with the booth)	Post-show reports; Conference summaries; Debrief staff survey questionnaire at the end of each day at the booth (open and closed-ended questions); Debrief interviews with NCI staff after the conference	Ongoing Ongoing Ongoing

	(Behaviors including time spent at an exhibit, use of or engagement with interactive components, reading of displays or texts, number of exhibits visited, etc.)	Exhibit attractions (i.e., the percentage of a desired audience that comes to a booth) Time spent at the booth Audience activity (i.e., involved with the booth vs. passive) Number of leads generated Factors that impact traffic to the NCI booth Location of the booth Competing exhibits Character of the conference	Ethnographic study/ Timing and traffic observation;	Once
National Program booth visitors receive services they need Theme 2: Build the right kind of NCI for the future Strategy 2.2.: Support NCI's training and career development programs	 What are the pre-existing expectations regarding the NCI booth? Which services offered at the booth are used by booth visitors? What are the booth visitors' perceived benefits from using those services? What are the booth visitors' perceived benefits from visiting the NCI exhibit? 	Pre-existing attitudes and perceptions regarding opportunities for learning, perceptions regarding exhibit characteristics, reasons for visiting Services used Number and type of materials obtained at the booth Number and type of interactions with the booth staff Number and type of use of interactive tools at booth Number and type of interactions with experts at "Meet the Expert" events Perceived benefits from using services at the booth Services that would like to have available at the booth Perceived benefits from visiting the NIC exhibit in general	Exit interviews with booth visitors; Evaluation forms from booth visitors; Ethnographic study/ Observation;	Once Once Once

Increased visibility of	1) Are messages consistent among NCI	Perceived messages across conferences		
NCI tools and resources	National Exhibits across conferences?			
		Perceived visibility of NCI tools and	Ethnographic study;	Once
Theme 2	2) Are NCI tools and resources such as	resources at national conferences		
Strategy 2.4: Enhance	Cancer Bulletin, <u>www.cancer.gov</u> , patient		Exit interviews with	Once
NCI brand through	education materials and information on	Recognition of NCI as a provider of	booth visitors	
Institute recognition	clinical trials visible at the national	useful tools and resources		
tools	conferences?		Evaluation forms from	Once
			booth visitors	

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Bold – Data currently available

No bold – Primary data collection *Italics – Proximal outcome measures* Yellow – Data collection not feasible Not shaded – Internal Audiences Shaded – External Audiences Blue – NCI Institute communication strategy

Appendix E

<u>Components of outcomes evaluation –</u> <u>LOANER PROGRAM</u>

SHORT TERM OUTCOMES	RESEARCH QUESTIONS	MEASURES	METHODS OF DATA COLLECTION*	FREQUENCY OF DATA COLLECTION
Increased /consistent use of the Loaner Program	Does the utilization of the Loaner Program increase or remain stable over time?	Number of conferences attended with the Loaner Program per year	NCI Exhibits on Loan tracking spreadsheet	Ongoing
Theme 3, Strategy 3.2: Enhance NCI's exhibits and meetings presence	Are NCI Divisions' goals supported by the Loaner Program?	Increase in NCI staff use of the program Recommendations for whether Divisions should exhibit again	Debrief interviews with NCI staff after the conferences;	Ongoing
Consistent NCI "feel and look" presented across conferences; Booth staff communicates consistent messages across conferences	Do the Loaner Exhibits present consistent "feel and look" across conferences attended? Do staff members at the Loaner Exhibits communicate consistent messages across conferences?	"Feel and look" of NCI exhibits Type of messages presented by NCI staff at the Loaner Exhibits	Ethnography/observation; Debrief interviews with NCI staff after the conferences	Once Ongoing
Divisions provide conference booth visitors with services and information they need	 What are the pre-existing expectations regarding the NCI Loaner booth? Which services/information offered at the booth are used by booth visitors? What are the booth visitors' perceived benefits from using those services/information? What are the booth visitors' perceived benefits from visiting the NCI exhibit? 	 Pre-existing attitudes and perceptions regarding opportunities for learning, perceptions regarding exhibit characteristics, reasons for visiting Services used Number and type of materials obtained at the booth Number and type of interactions with the booth staff Number and type of use of interactive tools at booth Perceived benefits from using services at the booth 	Exit interviews with booth visitors; Evaluation forms from booth visitors; Ethnographic study/ Observation;	Once Once

Increased visibility of	1) Are messages consistent among NCI			
NCI tools and resources	exhibitors across conferences?	Perceived messages across	Ethnographic study;	Once
		conferences		
Theme 2,	2) Are NCI tools and resources such as		Exit interviews with	Once
Strategy 2.4:	Cancer Bulletin, <u>www.cancer.gov</u> , patient	Perceived visibility of NCI tools and	booth visitors	
Enhance NCI brand	education materials and information on	resources at local conferences		
through institute	clinical trials visible at the local conferences?		Evaluation forms from	Once
recognition tools			booth visitors	
	Are new audiences represented among visitors		Exit interviews with	Once
	to NCI exhibits?	Characteristics of booth visitors	booth visitors;	
		(professional affiliation)		
Program reaches new	Do booth visitors intend to share information		Evaluation forms from	Once
audiences	collected at the booth with others?	Intention to share information with	booth visitors	
		others		

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Bold – Data currently available

No bold – Primary data collection *Italics – Proximal outcome measures* Yellow – Data collection not feasible Not shaded – Internal Audiences Shaded – External Audiences Blue – NCI Institute communication strategy

Appendix F

Components of outcomes evaluation: NATIONAL AND LOANER PROGRAMS

LONG TERM OUTCOMES	RESEARCH QUESTIONS	MEASURES	METHODS OF DATA COLLECTION*	FREQUENCY OF DATA COLLECTION
	Is the NCI Exhibit Program consistent with			COLLECTION
Support of the OCE	the objectives of OCE?			
communication				
objectives; Program in	Does the NCI Exhibit Program effectively	Perceived consistency of the NCI		
line with NCI mission Theme 4:	contribute to promoting the NCI mission?	Exhibit Program with the objectives of OCE	Interviews with NCI staff	Ongoing
Educate the public	What is the benefit to NCI of having an EP	OFOCE	attending conferences	
about NCI, cancer and	and the "damage" or detriment of not having	Perceived consistency of the NCI	attending conferences	Once
progress in cancer	exhibits at certain meetings?	Exhibit Program with the NCI	Interviews with NCI	
research		mission	stakeholders	
Increased use of NCI				
web site, tools and				
resources			TT7 1 1 1 1 1 1 1	
Theme 2 Strategy2.4:	Does the use of NCI website, tools and	Number of visitors to cancer.gov	Website tracking	Ongoing
Enhance NCI brand	resources increase after NCI attendance in	Number and type of materials	NCI materials ordering	Ongoing
through Institute	conferences?	ordered	data	Ongoing
recognition tools				
Booth visitors recall				
NCI messages			Exit interviews with	Once
Theme 4:			booth visitors;	
Educate the public				
about NCI, cancer and progress in cancer		Knowledge/learning, including	Evaluation forms from booth visitors	Once
research	Do booth visitors recall NCI messages?	exhibit recall or retention		
Booth visitors return at				
future conferences			Exit interviews with	Once
Theme 3			booth visitors;	
Strategy 3.2:	Do visitors to the NCI Exhibits return at	Number of visitors who visited NCI		
Enhance NCI's exhibits	future conferences?	booth at previous conferences	Evaluation forms from	Once
and meetings presence			booth visitors	
Booth visitors return to	Do booth visitors return to NCI for additional	Perceived availability of resources	Exit interviews with booth	Once
NCI for resources	resources they need?	needed	visitors;	

		Visitors' intention to return to NCI for resources needed	Evaluation forms from booth visitors	Once
Increase in number and				
quality of grant applications				
Theme 2		Number of grant applications		
Strategy 2.2:		received from applicants who visited		
Support NCI's training	Does the number and quality of grant	NCI exhibits		
and career development program	Does the number and quality of grant applications increase as a result of NCI	Quality of grant applications received		
	participating in conferences with the Exhibit	form applicants who visited NCI	Data collection not	
	Program	exhibits	<mark>feasible</mark>	

*

Bold – Data currently available

No bold – Primary data collection *Italics – Proximal outcome measures* Yellow – Data collection not feasible Not shaded – Internal Audiences Shaded – External Audiences

Appendix G

<u>Components of impact evaluation:</u> <u>NATIONAL PROGRAM</u>

ІМРАСТ	RESEARCH QUESTIONS	MEASURES	METHODS OF DATA	FREQUENCY OF DATA
			COLLECTION	COLLECTION
Contribute to NCI image as accessible, trustworthy and credible source of cancer information	Do primary audiences perceive NCI as accessible, trustworthy and credible source of cancer information? Do secondary audiences perceive NCI as accessible, trustworthy and credible source of cancer information?	 Perceived accessibility, trustworthiness and credibility of NCI by researchers, public health workers, health care providers, students and advocates patients, media and consumers Perceived accessibility, trustworthiness and credibility of NCI by booth visitors	Data collection not feasible Exit interviews with booth visitors; Evaluation forms from booth visitors	Once Once
Demonstrate NCI commitment to advancing science for the public	Do primary audiences perceive NCI as committed to advancing science for the public? Do secondary audiences perceive NCI as committed to advancing science for the public?	 Perceived NCI's commitment to advancing science for the public among researchers, public health workers, health care providers, students and advocates patients, media and consumers Perceived role of NCI in early detection, prevention, prediction and treatment of cancer by booth visitors 	Data collection not feasible Exit interviews with booth visitors; Evaluation forms from booth visitors	Once Once

* Bold – Data currently available

No bold – Primary data collection

Italics – Proximal outcome measures

Yellow – Data collection not feasible Field shaded – External Audience Field not shaded – Internal Audience Blue – NCI Institute communication strategy

Appendix H

METHODS OF DATA	ACTIVITY EVALUATED	FREQUENCY	STRENGTHA			TURN AROUND	IRB	ESTIMATED
COLLECTION		1=ongoing 2=once	1=low 2=med 3=high	RESPONDENT ^B 1=high 2=med 3=low or none	1=high 2=med	TIME 1=over 6 mo 2=3-6 mo 3=less than 3 mo	1=yes 2=no	COST
Review of program	Centralized exhibit service							
documentation (Performed by NCI staff)	Coordination of conference services							
	Increased /consistent participation in the National Program							
	Increased /consistent use of the Loaner program							
	Training for NCI staff	2	2	3	1	2	2	N/A
	Internal promotional activities							
	Program website							
	Select targeted conferences							
	Identify and train staff to attend conferences							
Review of post-show reports	Identify and train staff to attend conferences							
and Conference summaries (Performed by NCI staff)	Select and ship targeted materials and other resources							
	Arrange for and set-up exhibit booth; Provide interactive tools, access to Internet at conference booths	1	2	3	1	2	2	N/A
	Organize "Meet the Experts"							
	Traffic at the NCI National Exhibit booth							
Review of NCI divisions' intranets (Performed by NCI staff)	Internal promotional activities	1	1	3	2	3	2	N/A
Review of divisions' newsletters (Performed by NCI staff)	Internal promotional activities	1	1	3	2	3	2	N/A
Analysis of NCI materials ordering data (Performed by NCI staff)	Use of NCI resources	1	2	3	2	3	2	N/A

EXHIBIT BOOTH PROGRAM EVALUATION - SCENARIO 1: NO COST TO NCI

A High - High likelihood to collect comprehensive and reliable data Med - Moderate likelihood to collect comprehensive and reliable data Low - Low likelihood to collect comprehensive and reliable data Low or none - There is no respondent or respondent does not have to do anything extra in order to contribute to the data collection Med - requires minimal new activities that relate directly to the data collection (5 - 10 minutes) High - Requires that gradient that so at aside for an evolution

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High - Requires that specific time be set aside for an evaluation activity

Low or none - No NCI staff involvement or NCI staff involvement that can be done as part of regularly assigned duties Med - requires some new activities that relate directly to the data collection and fall within the current scope of work High - Falls outside of the current scope of activities and requires accommodations in order to implement data collection

С

METHODS OF DATA COLLECTION	ACTIVITY EVALUATED	FREQUENCY	STRENGTHA	BURDEN ON	BURDEN ON NCI ^C	TURN AROUND TIME	IRB	ESTIMATED COST
COLLECTION				RESPONDENT ^B	NCI	TIME		COST
		1=ongoing	1=low	1=high	1=high	1=over 6 mo	1=yes	
		0 0	2=med	2=med	2=med	2=3-6 mo	2=no	
			3=high	3=low or none	3=low or none	3=less than 3 mo		
Review of program	Centralized exhibit service							
documentation								
(Contractor)	Coordination of conference services							
	Increased /consistent participation in the National							
	Program							
	riogram							
	Increased /consistent use of the Loaner program	2	2	3	3	2	2	
	Training for NCI staff							
	Internal promotional activities							
	Program website							
	Select targeted conferences							
Review of Post-show reports and	Select and ship targeted materials and other resources							
Conference summaries								
(Contractor)	Arrange for and set-up exhibit booth; Provide							
	interactive tools, access to Internet at conference							
	booths	1	2	3	3	2	2	
	Organize "Meet the Experts"	-	_	-	-		_	
	Organize Meet the Experts							
	Traffic at the NCI National Exhibit booth							
Review of NCI divisions'	Internal promotional activities							
intranets		1	1	3	3	3	2	
(Contractor) Review of divisions' newsletters	Internal promotional activities							
(Contractor)	internal promotional activities	1	1	3	3	3	2	
(contractor)		· ·		5				
Interviews with program staff	Training for NCI staff							
(Contractor)								
	Select targeted conferences	2	3	2	2	3	2	
	Internal promotional activities							
Post-training evaluation forms	Training for NCI staff			-			-	
(Contractor)		1	2	3	3	1	2	

EXHIBIT BOOTH PROGRAM EVALUATION - SCENARIO 2: \$65,000

A High - High likelihood to collect comprehensive and reliable data Med - Moderate likelihood to collect comprehensive and reliable data Low - Low likelihood to collect comprehensive and reliable data

B Low or none - There is no respondent or respondent does not have to do anything extra in order to contribute to the data collection Med - requires minimal new activities that relate directly to the data collection (5 - 10 minutes)
 High - Requires that specific time be set aside for an evaluation activity

C Low or none - No NCI staff involvement or NCI staff involvement that can be done as part of regularly assigned duties Med - requires some new activities that relate directly to the data collection and fall within the current scope of work High - Falls outside of the current scope of activities and requires accommodations in order to implement data collection

EXHIBIT BOOTH PROGRAM EVALUATION - SCENARIO 2: \$65,000 - Continued

METHODS OF DATA COLLECTION	ACTIVITY EVALUATED	FREQUENCY	STRENGTH ^A	BURDEN ON RESPONDENT ^B	BURDEN ON NCI ^C	TURN AROUND TIME	IRB	ESTIMATED COST
			1=low 2=med 3=high	1=high 2=med 3=low or none		1=over 6 mo 2=3-6 mo 3=less than 3 mo	1=yes 2=no	
Interviews with NCI staff (users and non-users of the program) (Contractor)	Internal promotional activities Program website Support of the OCE communication objectives; Program in line with NCI mission	2	3	1	3	2	2	
Debrief interviews with NCI staff attending conferences (Contractor)	Identify and train staff to attend conferences Select and ship targeted materials and other resources Arrange for and set-up exhibit booth; Provide interactive tools, access to Internet at conference booths Organize "Meet the Experts" Consistent NCI "feel and look" presented across conferences Booth staff communicates consistent messages across conferences Traffic at the NCI National Exhibit booth Behaviors of booth visitors at the booth Support of the OCE communication objectives; Program in line with NCI mission	1	3	2	3	1	2	
Debrief staff survey questionnaire at the end of each day at the booth (open and closed-ended questions) (Contractor)	Traffic at the NCI National Exhibit booth	1	2	2	3	1	2	

A High - High likelihood to collect comprehensive and reliable data Med - Moderate likelihood to collect comprehensive and reliable data Low - Low likelihood to collect comprehensive and reliable data

- B Low or none There is no respondent or respondent does not have to do anything extra in order to contribute to the data collection Med requires minimal new activities that relate directly to the data collection (5 10 minutes)
 High Requires that specific time be set aside for an evaluation activity
- C Low or none No NCI staff involvement or NCI staff involvement that can be done as part of regularly assigned duties Med - requires some new activities that relate directly to the data collection and fall within the current scope of work High - Falls outside of the current scope of activities and requires accommodations in order to implement data collection

METHODS OF DATA	ACTIVITY EVALUATED	FREQUENCY	STRENGTHA	BURDEN ON	BURDEN ON	TURN AROUND	IRB	ESTIMATED
COLLECTION				RESPONDENT^B	NCI ^C	TIME		COST
		1=ongoing 2=once	1=low 2=med 3=high	1=high 2=med 3=low or none	1=high 2=med 3=low or none	1=over 6 mo 2=3-6 mo 3=less than 3 mo	1=yes 2=no	
Review of program	Centralized exhibit service;							
documentation (Contractor)	Coordination of conference services							
	Increased /consistent participation in the National Program							
	Increased /consistent use of the Loaner program							
	Training for NCI staff	2	2	3	3	2	2	
	Internal promotional activities							
	Program website							
	Select targeted conferences							
	Identify and train staff to attend conferences							
Review of Post-show reports and Conference summaries	Select and ship targeted materials and other resources							
(Contractor)	Arrange for and set-up exhibit booth; Provide interactive tools, access to Internet at conference booths	1	2	3	3	2	2	
	Organize "Meet the Experts"							
Review of NCI divisions' intranets	Internal promotional activities	1	1	3	3	3	2	
(Contractor)								
Review of divisions' newsletters (Contractor)	Internal promotional activities	1	1	3	3	3	2	
Interviews with program staff (Contractor)	Training for NCI staff							
	Select targeted conferences	2	3	2	2	3	2	
	Internal promotional activities							
Post-training evaluation forms (Contractor)	Training for NCI staff	1	2	3	3	1	2	
Interviews with NCI staff (users	Internal promotional activities							
and non-users of the program) (Contractor)	Program website	2	3	1	3	2	2	
	Support of the OCE communication objectives; Program in line with NCI mission							

EXHIBIT BOOTH PROGRAM EVALUATION - SCENARIO 3: \$120,000

A High - High likelihood to collect comprehensive and reliable data Med - Moderate likelihood to collect comprehensive and reliable data Low - Low likelihood to collect comprehensive and reliable data B Low or none - There is no respondent or respondent does not have to do anything extra in order to contribute to the data collection Med - requires minimal new activities that relate directly to the data collection (5 - 10 minutes)
 High - Requires that specific time be set aside for an evaluation activity C Low or none - No NCI staff involvement or NCI staff involvement that can be done as part of regularly assigned duties
 Med - requires some new activities that relate directly to the data collection and fall within the current scope of work
 High - Falls outside of the current scope of activities and requires

accommodations in order to implement data collection

METHODS OF DATA	ACTIVITY EVALUATED	FREQUENCY	STRENGTH ^A	BURDEN ON	BURDEN ON	TURN AROUND	IRB	ESTIMATED
COLLECTION		1=ongoing 2=once	1=low 2=med 3=high	RESPONDENT ^B 1=high 2=med 3=low or none	NCI ^C 1=high 2=med 3=low or none	TIME 1=over 6 mo 2=3-6 mo 3=less than 3 mo	1=yes 2=no	COST
Debrief interviews with NCI staff attending conferences	Identify and train staff to attend conferences							
(Contractor)	Select and ship targeted materials and other resources							
	Arrange for and set-up exhibit booth; Provide interactive tools, access to Internet at conference booths							
	Organize "Meet the Experts"							
	Consistent NCI "feel and look" presented across conferences		3					
	Booth staff communicates consistent messages across conferences	1		2	3	1	2	
	Traffic at the NCI National Exhibit booth							
	Behaviors of booth visitors at the booth							
	Support of the OCE communication objectives; Program in line with NCI mission							
Debrief staff survey questionnaire at the end of each day at the booth (open and closed-ended questions)	Traffic at the NCI National Exhibit booth	1	2	2	3	1	2	
(Contractor) Exit interviews with booth	Theme 2, Strategy 2.4:							
visitors (Contractor)	Increased visibility of NCI tools and resources:							
(conductor)	Divisions provide conference booth visitors with services and information they need							
	Theme 2, Strategy 2.4: Enhance NCI brand through institute recognition tools:							
	Increased visibility of NCI tools and resources							
	Theme 3: Connect to the public, private and academic sectors Program reaches new audiences	2	3	1	3		1	
	Theme 4: Educate the public about NCI, cancer and progress in cancer research	2	5	1	2	1		
	Booth visitors recall NCI messages							
	Booth visitors return to NCI for resources							
	Contribute to NCI image as accessible, trustworthy and credible source of cancer information							
	Demonstrate NCI commitment to advancing science for the public							

EXHIBIT BOOTH PROGRAM EVALUATION - SCENARIO 3: \$120,000 – Continued

EXHIBIT BOOTH PROGRAM EVALUATION - SCENARIO 3: \$120,000 - Continued

METHODS OF DATA COLLECTION	ACTIVITY EVALUATED	FREQUENCY	STRENGTH ^A	BURDEN ON RESPONDENT ^B	BURDEN ON NCI ^C	TURN AROUND TIME	IRB	ESTIMATED COST
		1=ongoing 2=once		1=high 2=med 3=low or none	1=high 2=med 3=low or none	1=over 6 mo 2=3-6 mo 3=less than 3 mo	1=yes 2=no	
Evaluation forms from booth visitors (Contractor)	Divisions provide conference booth visitors with services and information they need Theme 2, Strategy 2.4: Enhance NCI brand through institute recognition tools: Increased visibility of NCI tools and resources Program reaches new audiences Booth visitors recall NCI messages Booth visitors return to NCI for resources Contribute to NCI image as accessible, trustworthy and credible source of cancer information Demonstrate NCI commitment to advancing science for the public	2	2	2	3	1	1	
Ethnographic study; Timing & traffic observation (Contractor)	Consistent NCI "feel and look" presented across conferences; Traffic at NCI National booth National Program booth visitors receive services and they need Increased visibility of NCI tools and resources	2	3	3	3	1	2	

A High - High likelihood to collect comprehensive and reliable data Med - Moderate likelihood to collect comprehensive and reliable data Low - Low likelihood to collect comprehensive and reliable data B Low or none - There is no respondent or respondent does not have to do anything extra in order to contribute to the data collection Med - requires minimal new activities that relate directly to the data collection (5 - 10 minutes)

High - Requires that specific time be set aside for an evaluation activity

C Low or none - No NCI staff involvement or NCI staff involvement that can be done as part of regularly assigned duties Med - requires some new activities that relate directly to the data collection and fall within the current scope of work High - Falls outside of the current scope of activities and requires accommodations in order to implement data collection