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Evaluation of an Online Training Program to Build and Sustain Cancer Navigation and Survivorship Programs: Impact on Nurses and Other Health Professional Learners

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Abstract

Objectives: To evaluate the online *Executive Training on Navigation and Survivorship* developed by the George Washington University Cancer Center, which provides guidance on building and sustaining oncology patient navigation and survivorship programs.

Sample and Setting: Volunteer sample (n=499) of U.S. healthcare professionals, including nurses, patient navigators, and others.

Methods and Variables: Learners completed questionnaires before and after each module and at the end of the training. Descriptive statistics were calculated. Paired *t*-tests were used to assess pre- to posttest learning confidence gains for each module. Sub-analyses were conducted for learners indicating a nursing profession. Qualitative learner feedback was summarized.

Results.—All groups demonstrated statistically significant ($p<0.05$) pre- to posttest improvements in confidence for all seven training modules. Confidence gains were statistically significant for 19 of 20 learning objectives ($p<0.05$). Though nurses tended to report lower baseline confidence, they enjoyed similar learning gains compared to non-nurse counterparts. Rating scores and qualitative feedback were positive overall.

Implications for Nursing.—The *Executive Training* helps prepare learners from diverse backgrounds to establish and sustain navigation and survivorship programs in cancer settings across the U.S. The training content addresses gaps in nursing education in program planning and budgeting that are important to program success.

Keywords

nurse education; cancer survivorship; patient navigation; program planning; evaluation

INTRODUCTION

There are over 15.5 million individuals who have experienced cancer living in the United States (Miller et al., 2016). This population has increased rapidly due to a growing and aging population combined with improvements in screening and treatment. The number of survivors is predicted to reach more than 20 million by 2026 (Miller et al., 2016).

Patient navigation and evidence-informed cancer survivorship care are two strategies that aim to address cancer health disparities and improve the quality of life for survivors of cancer, respectively. Patient navigators can provide culturally-affirming communication, connect patients to resources, and troubleshoot barriers to timely, coordinated cancer care (Freeman, 2012). A patient navigation process and the provision of survivorship care plans are now standards required by the Commission on Cancer for accredited cancer programs (American College of Surgeons, 2012). Survivorship care plans have been promoted as a strategy to improve care coordination and long-term follow up for survivors after transitioning out of active cancer treatment (Salz & Baxi, 2016). Since the Institute of Medicine's landmark report, *From Cancer Patient to Cancer Survivor: Lost in Transition* (2006), a variety of cancer survivorship models of care have emerged in which care is led by diverse clinicians such as oncologists, advance practice nurses, physician assistants, and primary care providers (Halpern et al., 2015; McCabe, 2012; Mead, Pratt-Chapman, Gianattasio, Cleary, & Gerstein 2017; Rosenzweig, Kota, & van Londen, 2017; Spears, Craft, & White, 2017). Clinical guidelines for survivorship care have also been established for certain tumor types and side effects (American Cancer Society, 2018; American Society for Clinical Oncology, 2014; National Comprehensive Cancer Network, 2018). However, sustainable financing of patient navigation and cancer survivorship programming remains a matter of substantial public debate.

Program leaders are still experimenting with how to design patient navigation and survivorship care programs to best meet patient and family needs while building sustainable programs (McCabe, 2012). Little exists in the literature to guide program leaders in developing or implementing patient-centered programming. Challenges of navigation programs include patient recruitment, navigator training, intensive service and patient contact, and data collection (Wells et al., 2011). Careful planning, community engagement, strong community partnerships, ongoing process monitoring and flexibility to modify the program have been cited as success factors for navigation programs (Steinberg et al., 2006). DeGross and colleagues (2014) have also offered guidance for navigation program development, suggesting key considerations such as setting program goals, identifying navigator responsibilities, training navigators, and evaluating the program. Survivorship program challenges include lack of program flexibility, patient identification and risk stratification, and sustainability and institutionalization challenges stemming from low revenue, amount of staff effort, and time needed to yield organizational change (Jefford et

al., 2015). Conversely, sustainable funding, workflow optimization, technology integration, and technical assistance have been cited as enablers for survivorship program sustainment (Kirsch, Patterson, & Lipscomb, 2014).

The George Washington University (GW) Cancer Center's *Executive Training on Navigation and Survivorship*, henceforth referred to as "the *Executive Training*," was designed to bolster the business acumen of program leaders tasked with developing patient navigation and cancer survivorship programs. Initially offered to three cohorts in-person in Washington, D.C., training content was developed around four steps: assess, plan, implement, evaluate. These steps align with common program planning frameworks, such as those proposed by Healthy People 2020 and the Centers for Disease Control and Prevention (2014), and even with the nursing process at the individual level (U.S. Department of Health and Human Services, 2019; American Nurses Association, n.d.). More than 100 program leaders across the U.S. participated in the live trainings offered from 2010–2012.

As a result of positive, longitudinal feedback from these learners, the GW Cancer Center proposed the creation of an online version of the training to reach a broader group of learners. Through a Centers for Disease Control and Prevention cooperative agreement (DP13–1315) the curriculum was refined and adapted for a self-paced, online course. Launched in December 2014, it is housed in the GW Cancer Center's Online Academy via a Learning Management System and is available to learners on-demand at: go.gwu.edu/gwconlineacademy. The overall goal of the training is to increase participants' ability to develop, implement and sustain patient-centered programs in diverse settings.

The *Executive Training* consists of seven learning modules: (1) Program Planning Overview; (2) The First Step in Program Planning: Identifying need; (3) Planning Your Program Part 1: Mission, vision, goals and program components; (4) Planning Your Program Part 2: Documenting your program through a logic model; (5) Funding and Sustaining Your Program; (6) Evaluating Your Program; and (7) Creating a Business Plan. Each module has a 20-minute interactive audiovisual presentation. Learners can download *The Guide for Program Development*, which summarizes research, guidelines, care standards, best practices, case studies, and tools in one place. A *Program Development Workbook* includes activities to help learners apply what they have learned and create their own customized program plan. The Learning Management System requires learners to complete modules in sequence, but learners can do so at their own pace across several sittings. The *Executive Training* offers three continuing education credit hours for nurses, and two hours for certified health education specialists at no cost.

OBJECTIVES

The purpose of the present study was to evaluate the effectiveness of the online *Executive Training* based on change in self-reported confidence in learning outcomes from pre- to posttest, and satisfaction ratings. A secondary purpose was to conduct a sub-analysis of nurse learners. A tertiary purpose was to report qualitative feedback from learners of the training.

SAMPLE AND SETTING

The *Executive Training* was promoted through GW Cancer Center websites and listservs, and through channels at professional organizations such as the Oncology Nursing Society and the Academy of Oncology Nurse & Patient Navigators. A convenience sample of learners (n=906) voluntarily enrolled in the training between December 2014 through January 2017. Some learners had not completed all modules at the time of this writing. Therefore, sample sizes vary across the seven modules. Learners were counted towards a training module sample if they had complete pre- and post-evaluation questions for that module. Ninety learners were excluded due to incomplete evaluation data. An additional ten learners practicing outside of the United States and affiliated jurisdictions were excluded given the diversity of oncology training and health care services at the international level that would make interpretation of learning outcomes difficult. Due to the designation of demographic questions as optional for a period of time, 307 participants had missing demographic data and were excluded from the sample, resulting in a final analytic sample of 499 individuals who completed evaluation questions for at least one learning module.

METHODS AND VARIABLES

At the start of the *Executive Training*, learners answer questions about themselves in a brief background survey. Demographic variables include age, race, ethnicity, geographic location, profession, specialty, and practice setting. To assess exposure to previous training, learners were asked, “Have you taken other courses or completed additional training in this topic area?”

Design of the *Executive Training* evaluation was informed by Kirkpatrick’s Evaluation Model (Figure 1), which proposes four levels of training assessment: participant reaction (e.g. training satisfaction), learning (e.g. increased knowledge or confidence), behavior (e.g. job performance), and results (e.g. organizational changes) (Kirkpatrick & Kirkpatrick, 2006; Reio, Rocco, Smith, & Chang, 2017). Learners enrolled in the *Executive Training* complete several questionnaires throughout the training designed to assess their reaction and learning. These questionnaires were internally developed at GW and are not part of a validated scale.

Participant learning is assessed through pre- and posttest questions specific to each module’s objectives. Each of the seven modules has 1–4 questions measuring confidence on learning objectives using a 5-point Likert scale ranging from “strongly disagree” (1) to “strongly agree” (5) (e.g. “I am confident in my ability to discuss existing measures for survivorship and patient navigation program evaluation.”) (Table 1). Questions are posed at pretest and repeated verbatim at posttest after the learner has completed the module content.

Learners who complete the seventh module are asked one last “general evaluation” questionnaire about overall training effectiveness and satisfaction, assessing their reaction and behavioral intention. To inform training improvements, learners are asked to “please provide feedback and suggestions” in open-ended comment boxes following each module and in the general evaluation upon completion of the entire training.

Learner data were imported into Stata/IC® 14.2 for cleaning and analysis. Descriptive statistics were obtained for demographic variables. Summary means were calculated for each module's pretest and posttest scores. Dependent samples *t*-tests were used to test the statistical significance ($p < 0.05$) of pre- to posttest confidence gains in learning objectives. Dependent samples *t*-tests are appropriate for comparing two related means, such as measurements conducted at two time points among the same group of people. General evaluation responses were summarized using percentages. 162 responses from open-ended feedback questions were aggregated into an Excel spreadsheet and reviewed for general tone (positive/negative) and recurring content. More rigorous qualitative analysis was not possible because of the limited number of learners who opted to provide comments and the brevity of comments given.

Learners were able to choose multiple professional roles in the demographic survey. Respondents who identified as any type of nurse were included in a nurse-specific subsample. Those who did not identify as any type of nurse were considered to be part of the "non-nurse" group of learners. Chi-square tests were conducted to examine specialty and training differences between nurse and non-nurse learners. Nurse learner module averages and confidence gains from pre- to posttest were summarized separately from the full sample. For each module, pre-to-post changes for nurses were compared to those of their non-nurse counterparts using independent samples *t*-tests. Independent samples *t*-tests are a type of parametric statistical test that compare means between two unrelated samples.

The final analytic sample size was large enough to detect at least a medium effect size with 80% power and a Type I error rate of 5%. Though there has been substantial debate around which statistical tests provide the most accurate inferences for ordinal Likert data, we chose parametric tests because they have been shown to be robust against violations of statistical assumptions without being overly conservative (Norman, 2010). We confirmed that our findings were stable by replicating analyses using equivalent non-parametric tests and obtaining similar results (results not shown).

Data were collected to evaluate and improve a learning intervention offered by one institution; the purpose was not to create generalizable knowledge. Learners voluntarily enrolled in the training and completed evaluation questionnaires in pursuit of a course certificate or continuing education credits. Therefore, per GW Institutional Review Board guidance, this study did not fall under human subjects research and learners were not asked to provide informed consent.

RESULTS

Learners were mostly female (92.0%), white (74.6%) and non-Hispanic (85.0%) (Table 2). Learners ranged in age, with the majority falling between 40–59 years old (54.8%). Roughly half ($n=263$, 52.7%) of learners identified themselves as one or more kind of nurse, including overlapping identification as registered nurse ($n=152$), nurse navigator ($n=125$) or nurse practitioner ($n=25$). Non-nurse learners included patient navigators ($n=77$), administrators ($n=54$), social workers ($n=47$), health educators ($n=28$), physicians or physician assistants ($n=12$) and others ($n=18$). Most learners indicated an oncology specialty

(70.5%), with the remainder indicating internal medicine, family medicine, or other clinical areas. Outpatient cancer care was the most common site of practice (54.3%). Learners most often practiced in urban (35.1%) or suburban (34.9%) communities. Roughly one-third (36.5%) of the sample reported having received prior training in the content area. Among the 499 learners who completed the first module, 298 completed all seven. Since learners enrolled on a rolling basis and completed modules at their own pace, the other 201 were in various stages of progress at the point that evaluation was conducted. These individuals may have completed remaining modules after the date range of the evaluation data set or dropped out of the training.

In the full sample, mean self-rated confidence in learning objectives at posttest was statistically significantly higher than at pretest ($p<0.0001$) across all seven modules (Table 3). Mean module ratings ranged from 3.1 to 3.5 at pretest and from 3.8 to 4.3 at posttest, corresponding to an average improvement from a neutral confidence (3) rating to “agree” (4). Mean pre- to posttest gains ranged from 0.6 (Module 5) to 1.0 point (Module 7). Average posttest scores were higher at a statistically significant level for 19 of 20 individual learning objectives. Only the Module 5 learning objective, “I am confident in my ability to describe potential funding sources,” was the exception.

Learners included 263 nurses, seven of whom co-identified professionally as administrators and were only counted as nurses. Nurses as a whole disproportionately reported an oncology specialty (81.4%) and no previous training in designated topic areas (69.0%) compared to their non-nurse counterparts (58.5% and 57.1%, respectively); chi-square tests revealed that these differences were statistically significant ($p<0.05$). The nurse subset tended to have lower pretest scores than the overall sample with module averages ranging from 2.9 to 3.4, and the same or slightly lower posttest scores, with module averages ranging from 3.8 to 4.2. Among the nurse subset, pre- to posttest gains in mean confidence ratings were also statistically significant across all modules ($p<0.0001$). Nurses did not differ from non-nurses in the magnitude of these gains for any module at a statistically significant level (results not shown).

In the general evaluation following completion of the full training, 92.5% of learners “agreed” (4) or “strongly agreed” (5) that training content provided the skills and resources needed to launch and sustain navigation and survivorship services. There was agreement or strong agreement among a majority of learners that the training module content enhanced their knowledge base (94.5%), provided new applicable strategies and skills (92.8%), and was useful and relevant to their professional development (92.2%). Most (87.7%) intended to implement newly learned strategies, skills, and information into program planning. However, 51.2% also reported needing more information before being able to implement knowledge gains.

Review of the qualitative responses showed outstanding learner appreciation for the training: “*This is an incredibly in-depth training, and I found it to be exceptionally helpful as I start a new oncology nurse navigation program.*” Although we did not ask learners why they enrolled in the training, a few comments mentioned new programs or initiatives spurring a need for skill development. Comments also revealed that training content addressed an

information gap: “[A]s a non-business clinician I found it extremely helpful to be able to talk the language of administrators that provide funding for programs and to be able to make a compelling case for important initiatives.” Learners especially appreciated that the training was free, “self-directed online,” and interactive with “fill in exercises.” There were several comments identifying issues with the training, such as technical challenges with the platform, broken links, and narration that was too fast. There was conflicting feedback regarding whether the training was too basic or the right level for an introductory course.

DISCUSSION

Evaluation data showed that the training has reached a geographically and professionally diverse but demographically homogenous group of learners. The sample was primarily female, white and non-Hispanic.

Our findings from the general evaluation and qualitative comments spoke to Kirkpatrick’s first evaluation level, learner reaction. High general evaluation ratings indicated that most learners found the training to be useful and relevant. Qualitative comments, such as “helpful” and “excellent,” implied that many learners had positive reactions to the training. Comments expressing appreciation for interactive components also suggested that such teaching strategies successfully engaged learners. Some learners were unhappy with technical challenges and narration speed. GW staff have already responded to this feedback by correcting noted issues in the Learning Management System to improve learner experience and reduce hindrances to learning.

Learning, the second level of Kirkpatrick’s model, was assessed by comparing pretest and posttest assessments. Our findings of statistically significantly higher posttest confidence ratings in learning objectives for all modules suggest that the *Executive Training* was effective in increasing learner confidence in program planning, evaluation, and sustainment. The training was found to be effective in increasing confidence for both the multidisciplinary sample as a whole, and among nurses, specifically, indicating wide applicability and opportunity for broad dissemination to improve practice. However, the training was not effective in increasing learner confidence in identifying funding sources for navigation and survivorship care programs. This finding is not surprising, since funding is a persistent challenge for supportive care services in diverse health care settings and the subject of an ongoing, complex economic debate regarding appropriate financing models to support cost-effective, high quality health care in the U.S.

Kirkpatrick’s third and fourth levels, behavior and results, were not directly assessed. However, the vast majority of those completing the training reported that it provided relevant skills and knowledge and expressed intentions to use the information learned. Even so, roughly half of learners felt they needed additional information prior to implementing their program suggesting the need for more advanced training or coaching. Most learners did not specify what additional information they needed, but the following requests were made in the open-response comments: study guides for patient navigator certification, information on the comparative effectiveness of different navigation models, more detail on how to create job descriptions, greater explanation on distinguishing mission and vision statements,

additional detail on logic model components, and more time dedicated to funding and program evaluation. Feedback also indicated that additional practical examples demonstrating application of lessons learned would be of value to learners. Some of these suggestions have already been addressed by GW Cancer Center in a standalone publication titled, “Advancing the Field of Cancer Patient Navigation: A Toolkit for Comprehensive Cancer Control Professionals,” which can be downloaded at bit.ly/PNPSEGuide and is now linked in the *Executive Training*. This toolkit can be used to educate and train patient navigators, provide technical assistance to coalition members, build navigation networks, and identify policy approaches to sustain patient navigation programs. Unaddressed feedback will be considered as future educational interventions are developed. Promotional efforts might benefit from more explicitly stating the level of the training as a basic, introductory program planning course so that learners with advanced skills are not left disappointed. Finally, our learner demographics suggest that targeted promotion to underrepresented professions, such as physicians and physician assistants, and learners practicing in rural settings, may be warranted.

LIMITATIONS

This evaluation has several limitations. The sample was self-selected and may represent especially motivated healthcare professional learners, those most involved in professional organizations, and those with higher comfort with computer technologies. Learner diversity was limited in terms of gender, racial, and ethnic demographics. For these reasons, generalizability cannot be assumed. The evaluation tool used to assess learning outcomes was not psychometrically validated, because it was developed exclusively to assess change in confidence based on content learning objectives. Also, though self-efficacy is an important precursor to behavior, the training evaluation was based solely on participants’ self-reported confidence without measured knowledge questions or follow-up to assess abilities and application in practice (Strecher, Devellis, Becker, & Rosenstock, 1986). Although we assessed exposure to previous trainings on the subject matter among learners, details were not collected regarding the source, depth, and content of these other trainings. Though learners were asked their profession, information about specific degrees and levels of education were not systematically collected. These omissions limit understanding of learners’ training at baseline. Also, the evaluation took a static “snapshot” of available learner data while learner enrollment and progress was ongoing. It is impossible to determine whether learners who had not completed the training at the time the evaluation was conducted intended to continue or dropped out due to barriers to participation. In the future, barriers to participation could be systematically assessed. Lastly, we did not use an experimental design and no comparison groups were used to serve as counterfactuals.

IMPLICATIONS FOR NURSING

Despite the growth of oncology patient navigation and survivorship care services, healthcare professionals tasked with spearheading program implementation, not exclusive to nurses, may lack program development skills to manage and sustain such programs. In our multidisciplinary sample, most learners denied having exposure to other trainings in *Executive Training* topic areas. Furthermore, most learners, on average, gave themselves the

equivalent of a “neutral” confidence rating in module learning objectives at pretest. Though the magnitude of difference was not large, stratified analyses revealed that nurses reported lower confidence at baseline than non-nurses in skills such as creating a mission and vision statement, developing a logic model, identifying program costs, developing program budgets, and drafting a business plan. Nurses reported statistically significant increases in confidence in all topics after exposure to training content and mirrored their non-nurse peers in learning gains. The reason for baseline differences is unclear, since the level of education for nurses and non-nurses was not systematically assessed. However, our findings suggest that there is opportunity and utility in teaching practical skills on demonstrating program value in nursing education.

Nurses are important leaders shaping the oncology navigation and cancer survivorship clinical practice. According to the American Nurses Association’s (2015) Scope and Standards of Practice, “resource utilization” is a standard of professional performance, in which “the registered nurse utilizes appropriate resources to plan, provide, and sustain evidence-based nursing services that are safe, effective, and fiscally responsible.” However, some have recognized that nurses may lack the background to “speak finance” to “have a seat at the strategic table,” resulting in marginalization of the important nursing perspective in organizational decisions (Muller & Karsten, 2012; Saxe-Braithwaite, 2003). To secure administrative buy-in for patient-centered services in a resource-scarce environment, it is important that leaders in this area have the abilities to strategically plan programs, establish metrics to rigorously demonstrate value, and communicate with financial savvy (Grant, Economou, Ferrell, & Uman, 2012; Johnston, Sein, & Strusowski, 2017; Lubejko et al, 2017; Rishel, 2014).

In qualitative comments, some learners expressed that they did not feel that the financial content in Module 5 was directly relevant to their roles. Indeed, some nurses working in navigation and survivorship may not have the direct responsibility to secure funding for their programs. However, Rishel (2014) makes a compelling argument that all nurses, not just those in senior leadership, should have an understanding and appreciation of evaluation and financial measures involved in organizational decision-making. She calls on oncology nurses at all levels to “develop business acumen” and understand bigger picture cost and vision elements in decision-making, stating that “it is no longer sufficient for oncology nurses to make an emotional plea to organizational leadership that a certain program is needed” (Rishel 2014). Nurses who document and track patient information or communicate resource needs play important roles in overall evaluation and sustainability, even if they are not directly responsible for budgetary issues.

The American Association of Colleges of Nursing (2008, 2011) includes elements of systems leadership, use of evidence, and financial awareness in its summary of essentials of baccalaureate education, but more specifically articulates expectations that Master’s-prepared nurses have “a keen understanding of healthcare policy, organization, and financing” to be nimble and effective in evolving health care systems. Nurses vary in the content of their formal education depending on their degrees, and when and where they were trained. For learners previously educated on program planning, evaluation, and sustainability, the *Executive Training* may build upon knowledge with additional “nuts and

bolts” practical details and content-specific examples. For those with no exposure, it provides an intensive practice-based introduction. The *Executive Training* serves as an important resource for those expected to learn on the job.

CONCLUSIONS

Business and evaluation skills are critical to justify continued allocation of resources to maintain navigation and survivorship services for patients in the long-term. Overall, the *Executive Training* was well-received by learners and achieved intended confidence gains in survivorship and navigation program development and evaluation. The online learning platform was effective in reaching a wide range of multidisciplinary learners across diverse geographical and practice settings. Nurses were heavily represented among learners, and content supplied information and skills that addressed a gap in nursing education. The *Executive Training* can have a greater impact through continued dissemination and targeting of more diverse health care professional learners.

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KNOWLEDGE TRANSLATION:

- The *Executive Training on Navigation and Survivorship* was well-received and increased confidence in intended learning objectives among a sample of multidisciplinary healthcare professionals.
- The online, self-paced format of the *Executive Training* demonstrated the ability to reach nurses and healthcare professionals across all geographic regions of the U.S.
- Nurses reported lower baseline confidence and past training compared to non-nurse counterparts, but enjoyed similar gains in confidence after completing training modules.

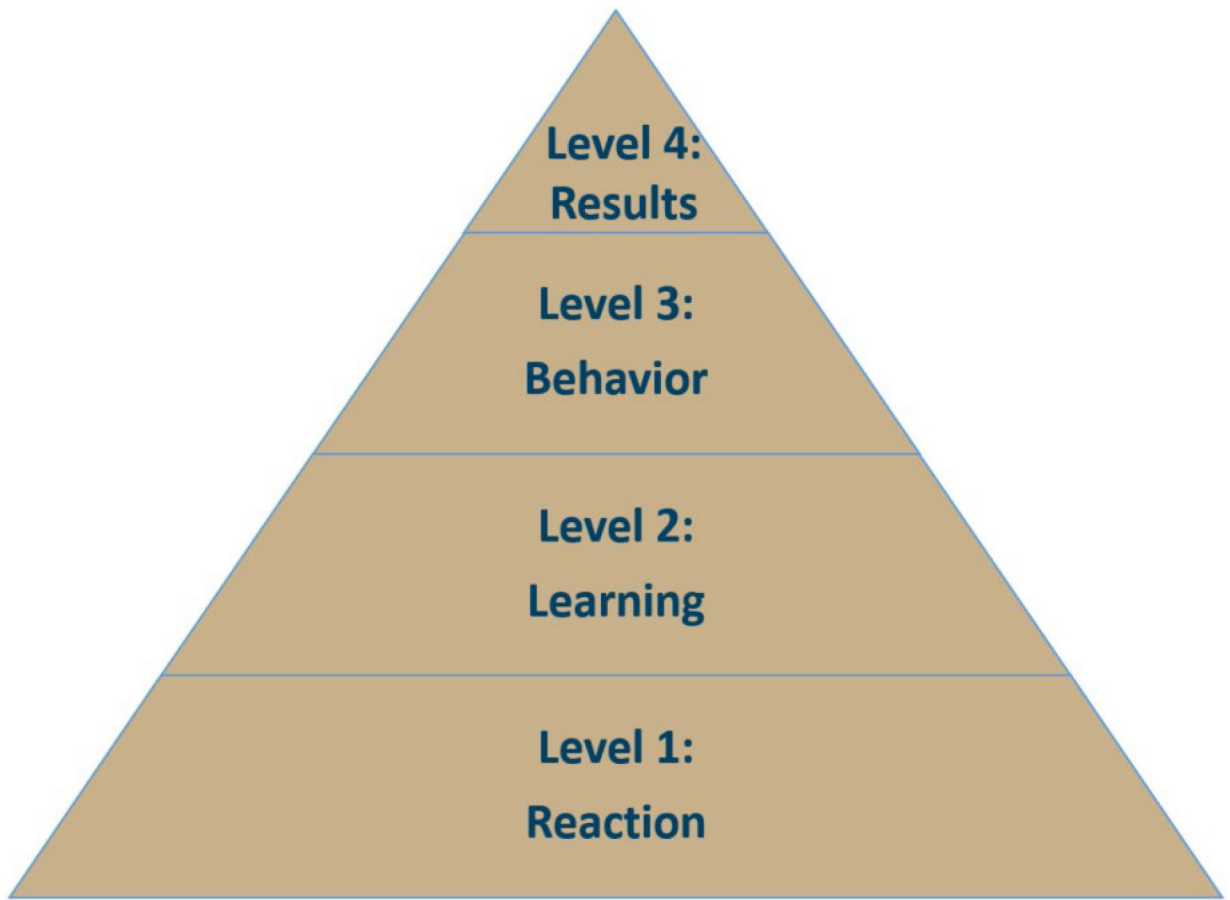


Figure 1.
Reproduction of Kirkpatrick's Four-Level Model of Training Evaluation

Table 1.*Executive Training on Navigation and Survivorship* module content and learning Objectives

Module	Module Topic	Learning Objectives
1	An Overview of Program Planning	<ol style="list-style-type: none"> 1 I am confident in my understanding of the importance of effective program planning. 2 I am confident in my ability to identify the four elements of the program development cycle for navigation and survivorship programs.
2	The First Step in Program Planning: Identifying need	<ol style="list-style-type: none"> 1 I am confident in my ability to articulate the importance of conducting a needs assessment when planning a program. 2 I am confident in my ability to identify principles or techniques for conducting a needs assessment. 3 I am confident in my ability to implement needs assessment tools to identify patient needs, assess organizational capacity and identify internal and external resources.
3	Planning Your Program Part I: Mission, vision, goals and program components	<ol style="list-style-type: none"> 1 I am confident in my ability to apply program planning principles. 2 I am confident in my ability to write a mission and vision statement for my program. 3 I am confident in my ability to create SMART goals and/objectives that are tied to outcomes. 4 I am confident in my ability to identify and answer key questions about program components.
4	Planning Your Program Part II: Documenting your program through a logic model	<ol style="list-style-type: none"> 1 I am confident in my ability to document my program using a logic model.
5	Funding and Sustaining Your Program	<ol style="list-style-type: none"> 1 I am confident in my ability to identify core program costs. 2 I am confident in my ability to develop a budget for my program. 3 I am confident in my ability to describe potential funding sources. 4 I am confident in my ability to determine key measures for demonstrating the value of my program.
6	Evaluating Your Program: Program and outcome measures	<ol style="list-style-type: none"> 1 I am confident in my ability to articulate the importance of program evaluation. 2 I am confident in my ability identify steps to designing and implementing a program evaluation. 3 I am confident in my ability to create and implement an evaluation plan for my program. 4 I am confident in my ability to discuss existing measures for survivorship and patient navigation program evaluation.
7	Creating a Business Plan	<ol style="list-style-type: none"> 1 I am confident in my ability to describe the components of a business plan. 2 I am confident in my ability to create business plan for my program.
Overall Training		<ol style="list-style-type: none"> 1 The <i>Executive Training</i> content enabled me with the skills and resources needed to launch and sustain navigation and survivorship services that improve care for people affected by cancer across the care continuum 2 My current knowledge base was enhanced as a result of the module content within the <i>Executive Training</i> 3 The <i>Executing Training</i> content was useful and relevant to my professional development 4 I gained new strategies/skills/information that I can apply into my program(s) 5 I plan to implement new strategies/skills/information into my program planning

Module	Module Topic	Learning Objectives
		6 I need more information regarding this topic before I can implement new strategies/skills/information into my program planning.”

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Table 2.Demographic characteristics of *Executive Training on Navigation and Survivorship* participants (n=499)

Characteristics	n (%)
Gender	
Female	459 (92.0)
Male	38 (7.6)
Transgender	1 (0.2)
Refused	1 (0.2)
Age	
21–29	62 (12.4)
30–39	107 (21.4)
40–49	144 (28.9)
50–59	129 (25.9)
60 or older	52 (10.4)
Refused	5 (1.0)
Ethnicity	
Not Hispanic or Latino	424 (85.0)
Hispanic or Latino	44 (8.8)
Refused	31 (6.2)
Race	
White	372 (74.6)
Black or African American	44 (8.8)
Asian	28 (5.6)
American Indian or Alaska Native	3 (0.6)
Native Hawaiian or Other Pacific Islander	2 (0.4)
Other	11 (2.2)
Multiracial	9 (1.8)
Refused	30 (6.0)
Profession	
Nurse/ Nurse Navigator/ Nurse Practitioner	263 (52.7)
Patient Navigator	77 (15.4)
Administrator	54 (10.8)
Social Worker	47 (9.4)
Health Educator	28 (5.6)
Physician or Physician Assistant	12 (2.4)
Other	18 (3.6)
Site of Practice	
Outpatient cancer care	271 (54.3)
Office practice	66 (13.2)
Hospital (in-patient)	66 (13.2)
Community health center	26 (5.2)
Non-profit organization	12 (2.4)

Characteristics	n (%)
Government agency	11 (2.2)
Other	39 (7.8)
N/A	8 (1.6)
Specialty	
Oncology	352 (70.5)
Previous Training	
Yes	173 (36.5)
U.S. Region	
Northeast	80 (16.0)
Midwest	115 (23.1)
South	192 (38.5)
West	96 (19.2)
Puerto Rico or Pacific Island	11 (2.2)
Not specified or Missing	5 (1.0)
Practice Setting	
Urban	175 (35.1)
Suburban	174 (34.9)
Rural	88 (17.6)
Not applicable	41 (8.2)

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Table 3.

Summary of learning module mean pre-scores, post-scores, and paired t-test p-values; full sample and nurse subset.

Module	Full sample				Nurse subset			
	N	Pretest Mean (SD)	Posttest Mean (SD)	p-value	N	Pretest Mean (SD)	Posttest Mean (SD)	p-value
1: Program planning overview	499	3.4 (0.8)	4.3 (0.7)	<0.0001	263	3.4 (0.8)	4.2 (0.8)	<0.0001
2: Identifying need	393	3.5 (0.8)	4.2 (0.6)	<0.0001	209	3.4 (0.8)	4.2 (0.6)	<0.0001
3: Mission, vision, goals, components	344	3.5 (0.8)	4.2 (0.6)	<0.0001	184	3.4 (0.7)	4.1 (0.6)	<0.0001
4: Logic models	322	3.2 (0.9)	4.1 (0.7)	<0.0001	169	3.1 (0.9)	4.1 (0.7)	<0.0001
5: Funding, sustainability	312	3.2 (0.8)	3.8 (0.5)	<0.0001	162	3.1 (0.8)	3.8 (0.5)	<0.0001
6: Evaluation	302	3.5 (0.8)	4.2 (0.6)	<0.0001	155	3.4 (0.7)	4.1 (0.6)	<0.0001
7: Business plan	298	3.1 (0.9)	4.1 (0.6)	<0.0001	152	2.9 (1.0)	4.0 (0.6)	<0.0001