Discriminatory power of a 25-item distress screening tool: a cross-sectional survey of 251 cancer survivors

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Abstract

Objective The objective was to test the discriminatory power of a 25-item distress screening tool for use among cancer survivors. We used a measure of item discrimination to determine which items perform better than others at identifying those at greatest risk of distress.

Methods A total of 251 members (90 % female, median age 57 years) of a community-based cancer support organization completed a web-based distress screening tool. Participants were asked to rate each of 25 items according to the question "Today, how concerned are you about…?" using a five-point Likert scale (0 not at all to 4 very seriously concerned). An overall distress score was calculated as the sum of items rated at or above two for somewhat concerned. Participants were categorized as high scorers (≥ 13, $n = 59$) and low scorers (≤ 4, $n = 60$). The item discrimination index (IDI) was calculated for each item as the percentage difference in concerned (somewhat or greater) responses between high and low scorers.

Results Items with the greatest discriminatory power (IDI ≥ 0.8) were as follows: *changes or disruptions in work, school or home life; feeling sad or depressed; feeling too tired to do the things you need or want to do; worrying about the future and what lies ahead*; and *feeling nervous or afraid*. Conversely, items with the lowest IDI included *considering taking your own life; eating and nutrition; tobacco or substance use*; and *transportation to treatment and appointments*.

Conclusion The results highlight, among 25 items of a community-based distress screening tool, items with the greatest discriminatory power to identify cancer survivors with psychosocial distress. Results suggest targeted screening items to identify those most at risk for distress and priority areas for support services.

Keywords Distress · Cancer · Community-based · Screening · Oncology

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Introduction

Although psychosocial distress management has been part of quality cancer care for more than a decade [1], new research regarding the structure, process, and outcomes of distress management is experiencing a resurgence as reflected in recent articles and thematic issues dedicated to distress management among cancer patients [2–5]. There has been an international commitment to distress screening and integration of psychosocial care as professional organizations have formally recognized that screening, referral, and follow-up for psychosocial concerns are critical to ensuring quality cancer care for the whole patient [6–12].

Prevalence rates for psychosocial distress among cancer patients have been estimated to range from 35 to 60 % depending on the cancer site and stage [13–15], and elevated distress has been associated with negative patient outcomes, including poorer adherence to treatment and lower satisfaction with care and quality of life [16]. Tools to screen individuals for psychosocial distress have been developed, evaluated for their psychometric properties, and adopted to

varying degrees in clinical practice [1, 17–19]. Not every cancer patient experiencing distress requires treatment, yet a substantial subset of cases of distress requires management through direct treatment or referral [15].

While there is emerging evidence that distress screening, coupled with appropriate triage and referral, can have a positive impact on patient care [20–22], there exist real challenges in its implementation. It may not be feasible to provide comprehensive distress screening, referral, and follow-up in community cancer centers given limited resources and time available during a medical visit. Therefore, there is a need for brief, effective tools that are able to identify those individuals at greatest risk for distress while linking them to potentially beneficial referral and treatment services.

To that end, the Cancer Support Community has developed CancerSupportSource[SM] (CSS), a distress screening program designed to assist community-based cancer centers and oncology practices. It screens and links patients to resources and referrals tailored to their needs. The CSS program uses a web-based distress screening tool (CSS-25) that asks respondents to (1) rate the intensity of concern (five-point scale) and (2) indicate need for services (online, print, and/or talk with a staff member) for each of 25 problem-related distress items.

During dissemination, oncology providers have requested that we reduce the number of items in the screening tool. Keeping in mind the need for a practical and sustainable tool, we sought a systematic approach to reducing the number of items using a measure of item discrimination. Using the respondent's intensity ratings for each item, the objective of the study was to rank order items according to their discriminatory power, or ability to identify those at greatest risk for distress. We used the item discrimination index (IDI) to measure the strength of a test item to differentiate between lower and higher distressed individuals.

Methods

Design

The study design was a cross-sectional survey of cancer survivors' distress and concerns and requests for assistance. The data analyzed in the present study are part of a larger study to test the validity and reliability of CSS-25 [23, 24].

Ethics statement

An independent institutional review board, Ethical and Independent Review Services (E&I, Independence, MO), conducted an ethics review prior to the survey and approved the study. Dynamic clinical systems (DCS,

Hanover, NH) de-identified the survey data before providing it to investigators for analysis. Survey respondents provided consent through an online form. Participants were emailed a $5 coffee card upon completion of the survey.

Study population and recruitment of survey respondents

A convenience sample of patients was recruited by the Cancer Support Community, a network of over 50 non-profit community-based organizations that provides professionally led support and evidence-based educational programs to cancer patients and their families [25]. Cancer Support Community affiliate sites nationwide were invited to participate in the validation study, and ten sites were purposefully selected for the study from across the network for geographic diversity and high performance, and thus capable of meeting the additional requirements of a research study. Program staff invited cancer survivors to participate in this study via: (1) an email to their member listserv with a study explanation; (2) a verbal explanation of the project to members attending programs held at the Cancer Support Community affiliate sites; or (3) an advertisement of the project via flyers hung throughout the local affiliate facility. All invitations to participate included a request to reply if interested either directly to program staff, through email, or on a sign-up sheet at the local affiliate. Eligible participants included English-speaking cancer survivors who received treatment or follow-up care in an outpatient setting who were 18 years of age or over and had a valid email address and access to a computer. Four hundred and forty-five members who expressed interest in participating in the study were assigned a unique identification number and sent an email with instructions to log into an online system using a unique username and password. The survey was administered electronically using a web-based Integrated Survey System[TM] technology. During October and November 2011, emails were generated to 445 unique Cancer Support Community members containing an invitation to sign a consent form and complete the survey online including the CSS-25 screening tool, 31 questions about socio-demographic and clinical characteristics, and 48 items measuring quality of life. Participants were encouraged to answer every question but were not obligated to do so.

CSS-25

The CSS-25 screening items for distress are based upon recommended areas of unmet psychosocial need [6], cover three critical domains (psychosocial, practical, and physical) [11], and include a four-item depression subscale (*feeling sad or depressed; feeling lonely or isolated; feeling nervous or afraid; feeling too tired to do the things you*

need or want to do). The 25 distress items were generated from a previous validation study of a 36-item distress screener [26] and a qualitative assessment of distress screening in the community setting. We determined from patients and clinicians (oncology nurses, hospital administrators, oncologists, and social workers) that completing 36 items was too burdensome. Therefore, in December 2011 and January 2012, we conducted individual cognitive interviews ($n = 15$) and two focus groups ($n = 7$ per group) with patients at three sites across CSC's affiliate network (West Los Angeles, Quad Cities IA, and Southwest Florida) to better address their cognitive thinking about the relevancy, goal, and focus of each of the 36 questions. In the focus group and cognitive interviews, patients completed the 36 items and discussed with a member of the research team each question's intention and meaning and any confusion or lack of clarity of each item. The group and individual interviews were audiotaped. Results from the validation study and cognitive testing guided researchers to exclude eight items (e.g., joint limitations, getting medicines, finding community resources near where I live), revise 20 items, add 1 item (moving around, e.g., walking, climbing stairs, lifting), and combine 4 pairs of items. Further, we changed the question stem from using the word "problem" to "concerned," and we added "connect you with online resources" as a fourth response option to the "request for help" question. For the 25 distress screening items, patients are asked to rate each of 25 concerns according to the question "Today, how concerned are you about…?" Participants respond using a five-point scale (0 *Not at all*, 1 *Slightly*, 2 *Somewhat*, 3 *Seriously*, 4 *Very seriously*). In addition, patients are prompted for each item "Please let us know how we can help you…" and are instructed to select all that apply (Have a staff person talk with you, Connect you with online resources, Give you written information, or No action needed). In the present study, the Cronbach's alpha coefficient for the 25 screening items was 0.92 and 0.83 for the four-item depression subscale indicating strong internal reliability.

Data analysis

The IDI was computed by dividing the sample into three groups: the upper, middle, and lower groups based on an overall distress summary score [27–29]. This procedure identifies whether the item discriminates among or between high scorers and low scorers and has been used as a measure of instrument performance [30–32]. The size of these groups is arbitrary but is common to put 25 % in the upper and lower groups (UG and LG, respectively). Following this convention, a cut at 24 % was used to obtain equal sized groups in the upper group (score ≥ 13, $n = 59$)

and lower group (score <4, $n = 60$). The IDI was calculated for each item by subtracting the percentage of the lower group rating the item ≥ 2 from the percentage of the upper group rating that item ≥ 2. The maximum value of the IDI is 1.0 and occurs when all in the upper group succeed and all the lower group fail on an item. The level of endorsement of an item for the whole sample, $p(N)$, limits the maximum value of the IDI. When $0.24 < p(N) < 0.76$, i.e., when between 24 and 76 % of the sample rate an item ≥ 2, then the highest possible discrimination occurs when all the UG succeed, i.e., $p(UG) = 1.0$, and all the LG fail, i.e., $p(LG) = 0$, so that $Max(d) = 1.0$. When $p(N) < 0.24$, then the item is most discriminating when $p(LG) = 0$ and $p(UG) = p(N)/0.24$, so that $Max(d) = p(N)/0.24$. Similarly, when $p(N) > 0.76$, $Max(d) = (1 - p(N))/0.24$. An item is not discriminating when $p(LG) = p(UG) = p(N)$. An item that has a discrimination index of 0.50 or above is generally considered to be a strong item; an item that has a discrimination index of 0.30 or above but less than 0.50 is moderately strong [33]. All p values are two-sided, and a p value <0.05 is considered statistically significant. Data analysis was conducted using Stata 11.1 (College Station, TX).

The overall distress summary score, used to divide the sample according to distress level, was calculated as the total number of screening items rated ≥ 2 (somewhat to very seriously concerned) with a possible range in values of 0–25, higher values indicating greater distress. We could have used alternative approaches to calculating the summary score. For one, we could have used the sum of problem ratings (0–4) for a total range in score values of 0–100. This method yielded similar conclusions to those reported. We could have also used the count of items rated ≥ 3 (seriously or very seriously). In this latter approach, the proportion who rated the item ≥ 3 was <27 % for all but two items limiting the maximum value for IDI for those items.

Results

A total of 251 of the 445 individuals who were contacted completed the survey, resulting in a completion rate of 56 %. Respondents came from ten Cancer Support Community affiliate sites: Phoenix ($n = 4$), Central New Jersey ($n = 50$), Greater Cincinnati/Northern KY ($n = 24$), East Tennessee ($n = 15$), Greater Lehigh Valley PA ($n = 25$), Miami ($n = 7$), Pasadena ($n = 21$), Philadelphia ($n = 49$), Quad Cities IA ($n = 19$), and San Francisco Bay area ($n = 37$). Respondents reported a mix of cancer diagnoses and survivorship periods (Table 1) with a median time since diagnosis of 3.5 years. The median age among participants was 57 years; 90 % were female, 13 %

Table 1 Participant characteristics (N = 251)

	n	%
Age (range = 30–83 years)		
30–39	9	4
40–49	43	18
50–59	93	39
60–69	73	31
70–79	18	8
≥80	3	1
Sex		
Female	222	90
Male	26	10
Race and/or ethnicity		
Caucasian	204	87
African American	6	3
Hispanic or Latino	12	5
Asian or Pacific Islander	9	4
Multiple	3	1
Education		
High school or GED	7	3
Some college or vocational school	50	21
Bachelor's degree	106	45
Graduate or professional degree	72	31
Employment status		
Full time	73	31
Part time	36	15
Unemployed	29	12
Full-time homemaker or caregiver	10	4
Retired (not due to ill health)	55	23
Disability	31	13
Student	2	1
Total annual income ($)		
<40K	36	15
40–100K	92	39
100K or more	54	23
Do not wish to disclose	56	24
Most recent cancer diagnosis		
Breast	108	46
Gynecologic	20	9
Blood	17	7
Colorectal	14	6
Lung	9	4
Prostate	9	4
Other	43	18
Multiple reported	16	7
Time since cancer diagnosis		
<5 months	5	2
5 months–1 year	25	11
1–2 years	43	19
2–5 years	79	34

Table 1 continued

	n	%
5 years or greater	80	34
Stage of cancer at diagnosis		
0	10	4
I	58	25
II	57	24
III	44	19
IV	39	17
Do not know	26	11
Active treatment for cancer within past 2 years		
Yes	144	64
No	81	36
Cancer support community affiliate		
Arizona	4	2
Central New Jersey	50	20
TWC-Greater Cincinnati/Northern KY	24	10
East Tennessee	15	6
Greater Lehigh Valley	25	10
Greater Miami	7	3
Pasadena	21	8
Philadelphia	49	20
Gilda's Club Quad Cities	19	8
San Francisco Bay Area	37	15

Numbers may not total 251 due to missing data

Numbers may not total 100 % due to rounding

represented minority racial and ethnic groups, 17 % had been diagnosed with stage IV cancer, and 64 % had received active treatment for cancer within the previous 2 years.

Among our sample of 251 cancer survivors, 81 % reported that they were seriously or very seriously concerned about at least one of the 25 items related to psychosocial distress. We sorted the items in descending order according to the frequency of participants indicating concern about an item as "somewhat" concerned, "seriously" concerned, or "very seriously" concerned (≥2 on the response scale; Table 2). The majority of participants (n = 227) indicated they were at least somewhat concerned about *eating and nutrition* (90 %). The next most common concerns were *coping with your feelings* (67 %), *worry about the future and what lies ahead* (56 %), *sleep problems* (43 %), and *feeling too tired to do the things you need or want to do* (41 %). The top four concerns were the same across the three largest affiliate sites (results available upon request). Nearly one-quarter (24 %, n = 59) rated 13 or more items ≥2 (high scorers), and another quarter (24 %, n = 60) rated fewer than four items ≥2 (low scorers); the median score was eight with a range in values from 0 to 23.

Table 2 Proportion of participants ($N = 251$) who rated they were somewhat to very seriously concerned about each item

Problem-related distress item	Somewhat to very seriously concerned (%)
Eating and nutrition	90.4
Coping with your feelings	66.5
Worrying about the future and what lies ahead	56.2
Sleep problems	43.4
Feeling too tired to do the things you need or want to do	41.4
Body image and feelings about how you look	40.6
Changes or disruptions in work, school or home life	39.4
Feeling sad or depressed	37.5
Ability to exercise or be physically active	37.1
Knowing how to communicate best with your doctor	35.5
Intimacy, sexual function, and/or fertility	34.7
Health insurance or money worries	33.1
Finding reliable information about complementary or alternative practices	33.1
Worrying about family, children, and/or friends	33.1
Feeling nervous or afraid	32.3
Recent weight change (gain or loss)	31.5
Pain and/or physical discomfort	31.5
Moving around (walking, climbing stairs, lifting, etc.)	25.9
Coping with side effects of treatment (nausea, swelling, etc.)	24.3
Preparing for an upcoming treatment decision	22.3
Feeling lonely or isolated	21.1
Problems in your relationship with your spouse/partner	21.1
Tobacco or substance use-by you or someone in your household	7.2
Transportation to treatment and appointments	6.8
Considering taking your own life	1.6

Listed in descending order

Missing responses were infrequent (<2 %), so the proportion was calculated among the whole sample

Item discrimination index

The IDI for the 25 distress screening items using the intensity ratings ranged in value from 0.07 to 0.86 (Table 3), with higher values indicating greater discriminatory power. Of the 25 items, 18 showed strong item discrimination ($\geq$0.50), and three showed moderately strong (0.30–0.49) discrimination. Five items with the greatest IDI ($\geq$0.8) included *changes or disruptions in work, school or home life; feeling sad or depressed; feeling too tired to do the things you need or want to do; worrying*

about the future and what lies ahead; and *feeling nervous or afraid.* Conversely, items with the lowest IDI included *considering taking your own life; eating and nutrition; tobacco or substance use;* and *transportation to treatment and appointments.*

The five items with greatest item discrimination (*changes or disruptions in work, school or home life; feeling sad or depressed; feeling too tired to do the things you need or want to do; worrying about the future and what lies ahead;* and *feeling nervous or afraid*) showed high internal reliability consistency (Cronbach's $\alpha = 0.86$). In the UG ($n = 59$), i.e., among participants experiencing the greatest levels of distress, 100 % indicated they were somewhat to very seriously concerned about two or more of these five items. Conversely, in the LG ($n = 60$), 13 % indicated concern about one of the five items while 87 % did not endorse any of the five.

Discussion

In the present study, we calculated the IDI for each item of the CSS-25 as a measure of strength to discriminate between patients experiencing higher and lower levels of distress. By ordering items according to item discrimination, a shorter list of items with the greatest discriminatory power can be selected to maximize efficiency and the potential to quickly identify those at greatest risk for distress (with the goal to make the tool as useful as possible so that length or ease of administration does not become a barrier to patients accessing support programs). This study suggests an approach that could be part of ongoing distress screening efforts within different settings to identify problem-related distress items that are most discriminatory.

Eighteen items showed strong item discrimination ($\geq$0.50) and three moderate to strong (0.30–0.49) indicating overall excellent instrument performance [27]. According to a less conservative guideline, a positive discrimination of 0.20 or greater is desirable [32], and all but one item in the distress screener met that criterion. Further, we highlight five items within the tool that have the greatest discriminatory power. These five items have the ability to identify 100 % of participants experiencing the highest levels of distress as indicated by the CSS screening tool.

The item discrimination index can be used to inform decisions about shortening the screening tool

Implementation of a distress screening program across a variety of busy community cancer centers may require adaptations to the screening tool to meet the unique needs and resources of the various cancer care and support

Table 3 Item discrimination index for the 25 items of *CancerSupportSource*

Problem-related distress item	Item discrimination index	Maximum value for item discrimination index
Changes or disruptions in work, school, or home life	0.86	1.0
Feeling sad or depressed	0.85	1.0
Feeling too tired to do the things you need or want to do	0.85	1.0
Worrying about the future and what lies ahead	0.85	1.0
Feeling nervous or afraid	0.81	1.0
Ability to exercise or be physically active	0.76	1.0
Pain and/or physical discomfort	0.75	1.0
Worrying about family, children, and/or friends	0.71	1.0
Body image and feelings about how you look	0.71	1.0
Sleep problems	0.70	1.0
Preparing for an upcoming treatment decision	0.67	0.9
Coping with your feelings	0.67	1.0
Coping with side effects of treatment (nausea, swelling, etc.)	0.64	1.0
Health insurance or money worries	0.62	1.0
Knowing how to communicate best with your doctor	0.61	1.0
Feeling lonely or isolated	0.61	0.9
Moving around (walking, climbing stairs, lifting, etc.)	0.61	1.0
Finding reliable information about complementary or alternative practices	0.55	1.0
Recent weight change (gain or loss)	0.49	1.0
Problems in your relationship with your spouse/partner	0.47	0.9
Intimacy, sexual function, and/or fertility	0.47	1.0
Transportation to treatment and appointments	0.24	0.3
Tobacco or substance use-by you or someone in your household	0.22	0.3
Eating and nutrition	0.20	0.4
Considering taking your own life	0.07	0.1

The 25 items from the screening tool are listed in descending order of the item discrimination index

The maximum value of the item discrimination index is <1.0 if the proportion in the full sample that rated the item "somewhat to very seriously concerned" was <24 % or ≥76 %

organizations. In community care, there is no "one size fits all." Item discrimination values can guide the consideration and selection of items for a shortened screening survey. From the perspective of scale performance, the majority of CSS items performed well with strong item discrimination. However, if the need persists to shorten the screening tool, candidates for removal or revision of screening items would include those with the lowest item discrimination. Items to keep are those items that have the highest item discrimination. In the present study, there were eighteen items that had item discrimination percentages over 50 %, which suggest they perform best at discriminating between those with greater and lower levels of distress. In essence, the use of these eighteen items would provide a tool as efficient as when all 25 items are used. If an even shorter tool were preferred, we recommend the tool at least include the five items with greatest item discrimination: *changes or disruptions in work, school or home life; feeling sad or depressed; feeling too tired to do the things you need or want to do; worrying about the future and what lies ahead;* and *feeling nervous or afraid.*

Bear in mind that there are practical and often clinical issues that influence the choice of items that can vary across healthcare provider and service delivery settings. An obvious benefit of a shorter screening tool is that it requires less time, however, not necessarily less burden. For example, a shorter screener might require a longer assessment process. Some clinical contexts may want more breadth from a screening tool. For example, from the perspective of a community-based nonprofit organization that focuses on psychosocial support, items such as communicating with your doctor, information about complementary medicine, intimacy and sexuality, and problems with relationship with your spouse may be particularly relevant. To remove those items would eliminate an efficient link to services that are available to the patient. Screening is merely the first step in integrating psychosocial care and needs to be tailored based on resources available in a given environment.

Our results raise the issue whether a shorter tool maintains the functionality of the longer one. On one hand, a shorter tool reduces the false-positive rate, i.e., the rate at

which the screening tool indicates distress when a patient is not distressed and/or does not need services for psychosocial needs. This is particularly attractive in a setting where introducing routine screening risks the negative effect of withdrawing resources from existing clinical activities. On the other hand, the sensitivity of the tool decreases as items are eliminated. The trade-off depends on the efficiency of the items that are retained in the shortened tool. The IDI helps identify those items with greatest efficiency to maintain the maximum functionality of the shorter screening tool. In addition, the CSS tool also asks patients directly about their need for services for each distress item. This added tier for identifying patients with an unmet need for psychosocial services improves the overall performance (sensitivity) of the screening tool. It has been suggested that screening might be more efficient if it assessed the unmet need for services rather than distress [15]. In light of this, another way to shorten CSS-25 would be to simply ask about the need for services for each of the screening items and forgo rating the intensity of the concern. Future research should continue to clarify the optimal means of identifying unmet needs for psychosocial services.

Item discrimination can be used to inform allocation of resources for program development

Addressing patient concerns with greater item discrimination can be an efficient way to minimize distress among those cancer survivors who experience the greatest levels of distress. For example, *changes or disruptions in work, school, or home life* had the greatest item discrimination, a score of 0.86, in this sample. Therefore, connecting patients to family and caregiver education, assistance with activities of daily living, and support groups for both the patient and the caregiver can minimize distress while helping manage these work, school, and family life disruptions [34–38].

The next four items with greatest discrimination included emotional concerns, i.e., feeling sad or depressed, feeling too tired to do the things you need or want to do, worrying about the future and what lies ahead, and feeling nervous or afraid. Three of four of these items correspond to CSS's depression subscale [24]. Endorsement of these items may indicate risk for depression, and patients should be referred to the appropriate healthcare professionals. However, item discrimination is limited. Other highly or lowly endorsed items that do not have strong discriminatory power with respect to predicting overall distress can also guide allocation of resources. For example, given the nearly universal interest in eating and nutrition, but low level of item discrimination, asking about this item at the screening interview may not be necessary. Instead, print or

online resources and schedule information for programs within the organization or community could be provided to all, e.g., included in a welcome packet.

This study has significant strengths. This project was community-initiated, conducted, and implemented where the majority of cancer survivors are treated and where they are most likely to receive supportive care services [39, 40]. One limitation of this study is that the sample does not represent the full diversity of cancer survivors with a preponderance of English-speaking, Caucasian, female, highly educated, and middle class individuals, and approximately one-third into post-treatment survivorship and 68 % over 2 years post-diagnosis. Although the sample does not reflect the diversity of cancer survivors in the USA and abroad, it is reflective of the membership at local affiliates of the Cancer Support Community. Item discrimination may differ based on race, income, stage of disease and treatment, or diagnosis. For example, it is possible that the IDI for *eating and nutrition* may be higher among patients with gastrointestinal and head and neck cancers for whom nutrition is marginal. An impaired ability to eat can cause great distress, and relief from eating disruptions could have a huge impact. Future research should examine differences in the discriminatory power of items by cancer diagnosis and other demographic and clinical characteristics.

Our sample is also biased toward those experiencing higher levels of psychosocial distress compared to previous studies of unmet needs and quality of life in population-based samples of long-term cancer survivors [41]. Future research should investigate whether the rank ordering of items according to item discrimination is affected by higher baseline levels of overall distress in a sample. Another limitation of the study includes a self-selection bias given the methods of recruiting a convenience sample (email, community flyers, verbal introduction). We did not collect information among those who did not indicate interest in the study and among those who expressed interest but did not respond to the email invitation.

Conclusion

Overall, CancerSupportSource[SM] can be used to screen for distress among cancer patients. The scores for item discrimination can be used to rank order the 25 distress screening items by their ability to discriminate between individuals with greater or lesser distress. These data can help prioritize distress screening items in an efficient manner. Focusing programming on the top concerns will serve the most people. Focusing programming on the items with the greatest item discrimination will maximize efficiency of services so that they are targeted to individuals with the greatest need. These item discrimination findings

will help practices/cancer centers with limited staffing or resources prioritize those patients in greatest need and match them with programs and services in a timely manner. Nonetheless, it has been documented that psychosocial distress is common and must be appropriately managed to enhance cancer survivor's quality of life. The IDI begins to shed light on priority questions that could be easily integrated into a clinical interview and/or an abbreviated screening tool that would help link patients to appropriate referrals and resources. Patients should be directly linked to quality resources in the community for concerns that are typically neither managed nor available in a given oncology practice.

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