Published in final edited form as:
J Psychosoc Oncol. 2021 ; 39(2): 143–160. doi:10.1080/07347332.2020.1857897.

Oncology social work intervention index (OSWii): An instrument to measure oncology social work interventions to advance research

Julianne S. Oktay, PhD, MSW[a], **Elizabeth A. Rohan, PhD, MSW**[b], **Karen Burruss, MSW**[a], **Christine Callahan, PhD, MSW**[a], **Tara J. Schapmire, PhD, MSSW**[c], **Brad Zebrack, PhD, MSW, MPH**[d]

[a]University of Maryland School of Social Work, Baltimore, MD, USA

[b]Centers for Disease Control and Prevention, Division of Cancer Prevention and Control, Atlanta, GA, USA

[c]University of Louisville Schools of Medicine and Social Work, Louisville, KY, USA

[d]University of Michigan School of Social Work, Ann Arbor, MI, USA

Abstract

Background/Purpose: There is much interest in screening for and treating psychosocial distress in cancer patients; however, little is known about if and how psychosocial services are provided for patients demonstrating significant levels of distress. Oncology social workers (OSWs) are the primary providers of psychosocial care for cancer patients and their families, yet there is no widely-used and empirically-validated instrument that captures the range of interventions provided by OSWs. The purpose of this paper is to describe the development of the Oncology Social Work Intervention Index (OSWii), designed to measure interventions provided by OSWs, and the results of testing the instrument.

Methods: We conducted a content analysis of data collected by the Association of Oncology Social Work's Project to Assure Quality Cancer Care (APAQCC). We analyzed 3,194 responses from an open-ended question that described social work interventions following a distress screen. Five investigators coded the data in an iterative process to enhance instrument validity. The resulting instrument measuring OSWii was piloted with 38 oncology social workers across 156 individual cases.

Results: OSWs who piloted the OSWii spent a majority of time (72%) engaging in clinical interventions. The user assessment revealed that data entry was rapid, the instrument was easy to use, and the content was relevant to the cancer treatment setting.

Conclusions and Implications: Using a standardized instrument that reflects OSWs' clinical interventions is critical for researchers to examine the impact of psychosocial interventions on

---

CONTACT Julianne S. Oktay, PhD, MSW joktay@ssw.umaryland.edu University of Maryland School of Social Work, Baltimore, MD, USA.

patient outcomes. This index may also advance the translation of scientific findings into patient-centered psychosocial cancer care. This pilot test suggests that the OSWii is both scalable and useful.

Keywords

distress screening; index; interventions; oncology social work; psychosocial services; research

Introduction

Psychosocial care is increasingly recognized as a critical component of quality cancer care.[1–3] In a groundbreaking report, the Institute of Medicine (now called the National Academies of Science, Engineering, and Medicine [NASEM]) defined psychosocial care as “the psychological and social services and interventions that enable patients, their families, and health care providers to optimize biomedical health care and to manage the psychological/behavioral and social aspects of illness and its consequences so as to promote better health.”[4] The positive effects of psychosocial care for cancer patients and their families include enhanced patient outcomes,[5–10] medical cost-offsets,[11,12] and improved survival.[13,14]

In recognition of the importance of psychosocial services, the National Comprehensive Cancer Network (NCCN) developed the Distress Thermometer (DT), a tool to screen for psychosocial distress.[3] In 1997, NCCN also developed guidelines for distress management for many professions, including social work.[15,16] In response, many cancer programs introduced distress screening into their practices. In 2012, the American College of Surgeons’ Commission on Cancer (CoC) established standards, effective in 2015 and updated for 2020, for cancer centers that included mandated screening of all patients for psychosocial needs and distress as a condition for CoC cancer center accreditation.[17,18] Since the CoC is the primary accrediting body for more than 1,500 cancer-treating programs serving approximately 70% of all cancer patients in the United States, this requirement provided further impetus for distress screening implementation in cancer care facilities.

These developments led to a rapid increase not only in the use of distress screening in cancer centers but also in psychosocial research in this area.[19] It is well-understood, however, that screening alone does not improve psychosocial care or outcomes.[2] To be effective, distress screening has to lead to the provision of effective psychosocial services that are responsive to the needs of cancer patients and families. The NCCN and NASEM have developed comprehensive models of quality psychosocial care[4,15] that recommend patterns of care from identification of distress to referral and use of psychosocial services to outcome assessment.

Professionals such as psychiatrists, psychologists, social workers, nurses and others can provide components of psychosocial care. In the United States, oncology social workers (OSWs) serve as the primary providers of psychosocial care for cancer patients and their families;[20–22] however, few studies have examined the impact of social work’s contribution to quality cancer care.[19]

There is no widely used and empirically validated instrument that captures the range of interventions provided by OSWs, hindering research on the efficacy of social work interventions in oncology settings. The use of a validated instrument could provide data on whether and how social work intervention addresses the psychosocial needs of patients and has the potential to demonstrate the value of oncology social work practice. The purpose of this paper is to describe the development of the Oncology Social Work Intervention Index (OSWii), designed to measure interventions provided by OSWs and the results of a pilot test of the instrument.

Methods

Instrument development

In 2014, the Association of Oncology Social Work (AOSW) conducted *A Project to Assure Quality Cancer Care (APAQCC)* to study the clinical implementation of distress screening, assess adherence and responsiveness to prescribed psychosocial screening protocols, and examine rates of medical service utilization associated with adherence to protocols.[23] Participants were OSWs recruited from the membership of AOSW, a professional group of over 1,100 members. Participants represented 55 Commission on Cancer (CoC)-accredited cancer programs across the US (and two in Canada).[24] Each of the APAQCC participants conducted a two-month retrospective review of electronic medical records for patients seen in their cancer programs, yielding a database of over 9,000 cases. To capture information related to the support services provided by social workers in response to each patient's distress screen, the data-gathering form included an open question: "*What did the social worker do?*" This question provided the raw data that were used to develop the Oncology Social Work Intervention Index (OSWii). Raw data were captured in a worksheet developed for APAQCC and aggregated in an Excel spreadsheet. The raw data contained no patient identifiers and the APAQCC primary investigator [BZ] removed any hospital identifiers prior to transmittal to investigators of this study. The University of Maryland Human Subjects Protection Program granted an exemption for this research due to the secondary nature of this data analysis and the lack of sensitive or identifiable information on patients or participants.

The first step in the data analysis process was reviewing the entire dataset of 9,780 cases to assess whether any social work intervention was recorded. This resulted in a preliminary dataset of 3,194 analytic cases. Because the open-ended question did not provide any instructions or categories, there was wide variation in the responses. Some cases contained detailed lists of services provided by the social worker, while others contained only a single word like "resources" or "support." Cases were further excluded if the entry did not actually describe interventions provided by the social worker, e.g., those that contained only information about the patient, resulting in a final analytic dataset of 2,660 cases.

The research team was composed of four members of the AOSW Research Committee, one additional PhD-level faculty member with many years of experience as an oncology social worker, and a doctoral student with expertise in data management and analysis. Together, the team had over 50 years of experience in oncology social work practice in addition to extensive research experience.

To begin creating the index, we used NVivo10 qualitative software (https://www.qsrinternational.com/nvivo/home) to identify the most frequently used words in the raw data.[24] The word "support" was the most frequently used word (n = 1454), followed by "emotional support" (n = 329). We examined the word list carefully and then reviewed the context in which the words were used to further refine our initial categories. For example, the word "education" was used frequently, and we initially considered creating an intervention category for education. However, when we examined the responses in context, we found that most of the interventions mentioning education occurred around a resource, such as Social Security Disability Insurance (SSDI) that the social worker was helping the patient/family to access. We decided to code this type of education as a component of *education about a resource*, and not as an independent education-based intervention. Likewise, if education was provided to a patient or family member regarding making a treatment choice, it would be coded as *decision-making counseling*.

After initial category development, one author [JO] reviewed the raw data and developed broad categories and subcategories. Then, each researcher in the team coded the same 20 cases, identifying problems experienced mapping the data to the categories and discussing any differences among team members. In a series of team meetings, we modified the index and added additional subcategories to clarify and refine the index. When we were comfortable that there was a good fit between the data and the index, each team members coded 200 different cases. Through team discussion, we resolved remaining problems by consensus, altering the index to further refine the categories. This iterative process continued (about six rounds) until we developed consensus on each of the categories and subcategories of the OSWii. The team members then each used the emergent index to code 200 different cases. Team meetings were held to resolve any problems encountered and make further revisions. When we were satisfied, we created a codebook, and one of the authors [KB] coded the remaining cases. We held team meetings throughout the final coding process to discuss any coding questions and issues that came up and to further modify the instrument if necessary. This process is illustrated in Figure 1.

Pretesting and revising the clinical intervention categories of the instrument

Because the non-clinical interventions (e.g. interventions where there was no direct contact, or where the contact involved an assessment without further intervention) were fairly straight-forward, we focused our pretest on the clin ical interventions of the OSWii. After developing an online version of the clinical intervention categories of OSWii using Google Forms, we recruited a convenience sample of AOSW members for the pretest. Fourteen (14) OSWs agreed to test the OSWii with five cases each and participate in a follow-up phone interview to discuss the instrument. Of the 14 social workers, 11 completed the pretest, providing data on 56 cases.[25] The follow-up phone interviews showed that the online version of the index was easy to use and generally fit well with the interventions OSWs provided. The exception was the subcategory we called "specific counseling techniques." The original instrument had identified two techniques, cognitive behavioral therapy (CBT) and pain management. The pretest participants felt that these did not capture the nature of much of their counseling work. However, each expressed preference for their own counseling model (e.g., "meaning-making," behavioral, strengthening coping skills). Since there was no consensus, we added the broad subcategory "Psychotherapy/CBT," suggested by the NASEM report,[26] a term that can be used to encompass most common counseling techniques. We also modified the instrument to add an "other" category throughout the instrument to allow OSWs to record textual responses to accommodate those who provide specialized services, work in unique settings (e.g., Veterans Administration), and/or use resources that are not widely used in the broader OSW community.

Description of the oncology social work intervention index OSWii

The OSWii groups oncology social work interventions into five broad categories (Table 1; see Appendix A for full instrument). Category 1 includes cases in which the social worker had no direct contact with the patient/family (either contact attempts were unsuccessful or general information was provided about available oncology social work services). Category 2 consists of cases where there was direct contact, but the social worker did not provide a clinical intervention (a psychosocial assessment may have occurred but did not lead to further clinical service because services were not necessary, the patient/family declined, or psychosocial services were already being received elsewhere). This category also includes ongoing monitoring of needs by the OSW. Categories 3, 4 and 5 describe clinical interventions. The clinical interventions in Category 3 involve resources. That is, the oncology social workers educate patients or families about needed resources, connect them to these resources, or advocate for resources. Clinical interventions in Category 4 are comprised of supportive or counseling interventions that aim to facilitate coping with the diagnosis and/or treatment in patients/families. We created an additional category (Category 5) to identify cases in which clinical interventions of both types (Category 3 and Category 4) were provided. The addition of Category 5 makes the five categories mutually exclusive, to allow researchers to have a single metric for assessing the type of oncology social work interventions provided. This is not the case for the subcategories, which are not mutually exclusive (respondents are able to check multiple subcategories). This is appropriate because it is common for multiple interventions to be provided for a single case. The OSWii also includes items about the recipient(s) of the services (patient and/or family) and the number of sessions provided.

Developing a pilot test

To conduct an initial or pilot test, our first step was the development and testing of a manual to provide detailed descriptions of the categories and subcategories of the OSWii and general instructions for using the index for pilot testing. After seeking feedback from a group of volunteer oncology social workers, we revised the manual and set up an online version. We also created a Qualtrics[27] version of the instrument, and integrated the manual with the questionnaire, so that participants could view the appropriate section of the manual while they were recording data. The manual also described the process for providing informed consent, which was required of each participating social worker before the OSWii could be accessed. Instructions for creating a random sample of cases were also included in the manual. Participants were asked to select a day to begin creating a sampling frame and to then list their cases until they reached 30 cases. They were instructed how to use their birth month to create a random starting point to select five cases from the sampling frame for use in the study. Several questions were added to the pilot test on the usability of the instrument itself. To ensure privacy of patients and social workers, all data collected pertained only to social work interventions provided.

A recruitment announcement for this initial (pilot) testing was posted to the AOSW listserv in mid-May 2018. We also provided flyers at the AOSW conference (May 30–June 1, 2018) and posted a reminder to the AOSW listserv early in June. The study was open until June 15, 2018. Both the OSWii and the manual were accessible online. While the study was anonymous, participants were instructed to contact the Primary Investigator by email if they experienced problems. In total, 38 OSWs participated in the pilot test, reporting on a combined total of 156 cases (not all participants submitted the requested five cases each.)

Findings

Frequencies of types of OSW interventions in the OSWii pilot test

In approximately 13% of cases OSWs had no direct contact with the patient/family (category 1). In another 13% of cases OSWs had contact with patients/families but did not provide clinical interventions (category 2). Thus OSWs did not provide a clinical intervention in approximately 26% of cases (Categories 1 and 2). For a majority (73%; n = 114) of the 156 patients in the pilot test, OSWs provided a clinical intervention (Categories 3, 4, and 5). Thirteen percent of oncology social workers provided solely the clinical interventions related to educating patients/families about needed resources, connecting them with these resources, and/or advocating for these resources (category 3). In 10% of cases, OSWs provided patients/families with support or counseling (category 4) only. The most frequent category (Category 5) was a combination of both types of clinical interventions. That is, in most (50%) of the patient/family cases, oncology social workers provided interventions involving both resources and emotional support and/or counseling interventions (Figure 2).

Figure 3 provides details on cases in which social work respondents provided interventions that involved educating patients about, connecting patients with, and advocating for patients to receive resources (category 3). A total of 98 patients (63% of the total number of cases) received interventions that involved resources. The most commonly reported subcategories were services to facilitate treatment (n = 73, or 74% of those who received interventions involving resources), providing information about financial resources available (n = 72, or 73%), community support services (n = 59, or 60%) and in-house, i.e., provided within the facility, services provided by a professional other than the OSW (n = 44, or 45%).

Figure 4 provides details on cases where social work respondents provided interventions that provide support or counseling (category 4) to facilitate coping or adaptation to diagnosis or treatment. A total of 94 cases, or 60% of the total, received an intervention involving support or counseling. In 93 cases (99%) OSWs provided support/emotional support, such as validation, normalization, and empathic listening. In 73 cases (78%) OSWs provided counseling/support around making difficult decisions about treatment, or end-of-life, including advance directives and palliative care. In 60 cases (64%), OSWs identified using specific counseling techniques, such as psychotherapy/CBT, couples or family counseling, and end-of-life or bereavement counseling.

The pilot test showed that of the cases for which social workers provided clinical interventions (n = 114), 57% (n = 65) were interventions with the patient only; 33% (n 38) were some combination of patient, family, and/or other, and 10% (n = 11) were with the family or family and other, excluding the patient (Table 2).

Finally, the instrument asked OSWs to estimate the number of sessions that they had provided in each case, up to and including the intervention on the day they completed the OSWii. The most frequent response was 2–3 sessions (38%; n = 43), followed by 6 or more sessions (27%; n = 30). In 22% of cases (n = 25) only a single session was involved, and 13% (n = 15) of cases were intermediate, with 4–5 sessions (Table 3).

User assessment of the OSWii

Usability questions were asked at the end of data entry for each case. Overall, respondents reported that entering data into the OSWii for each case was quick, with over one third of cases (37%; n 55) taking less than a minute and a similar percentage (38%; n = 57) of cases taking 1–2 minutes to complete. In 21%; (n = 31) of cases, respondents took 3–4 minutes to complete data entry, and 4% (n = 7) of cases required 5 or more minutes for data entry. Social workers reported that in a majority (75%; n = 112) of cases the OSWii was "very easy to use," and in another 19% (n 28) of cases, it was "somewhat easy to use." In cases where the manual was used (n 101), in 77% (n = 78) of cases, respondents rated it "very helpful," and 22% (n = 22) of respondents rated it "somewhat helpful." Only one respondent rated the manual not helpful (Table 4).

Discussion/implications

Implications for research

The initial pilot test of the OSWii reported here suggests that it is both scalable and useful. Data entry was rapid and oncology social workers found the instrument easy to use. Because the OSWii was developed from qualitative data describing OSW services provided, it contains content relevant to OSWs' clinical experiences. Results from both the pretest and initial pilot tests of the OSWii suggest that OSWs found the categories and subcategories fit well with the services they provided for patients and families, establishing face validity.

The content areas contained in the OSWii are also comparable to well-respected models and descriptions of the oncology social work role (Figure 5). The NCCN model[15] describes social work roles in distress management patient problems as divided into two broad categories: practical problems and psychological problems. Many of the interventions that make up the social work interventions in the NCCN model are, in fact, included in the OSWii. The model developed by NASEM for psychosocial health services[26] while not limited to the social work profession, also shows a model that is very similar to the OSWii in its content. For example, the NASEM model contains activities involving connecting to resources, enhancing communication, and coordinating care. NASEM also lists support for patients, identifying strategies to address needs, providing emotional support, and helping patients manage their illness and health.

Given the novelty of this tool, more research could serve to further establish the validity and reliability of the OSWii and its value in research in clinical care settings. We look forward to learning how the OSWii performs in large research studies and in varied settings. An important question for future research relates to whether the OSWii has predictive validity; that is, whether it can be used to predict significant patient outcomes.

Implications for practice

The results of the pilot test of the OSWii have important implications for oncology social work practitioners. They show that OSWs provide a wide variety of interventions and that most patients and families receive clinical interventions typically receiving a combination of both types of clinical interventions (that is, both services related to education, connection and advocacy and counseling services). These are rarely simple, one-time interventions; they usually involved multiple sessions. The range and complexity of services suggests that OSWs are able to assess and meet a wide variety of psychosocial needs of oncology patients and families. Social workers have a unique preparation in an ecological, evidence-based framework to address psychosocial problems at the individual, family, community, economic, and cultural levels, making them especially well-suited to attend to the multifaceted needs of cancer patients and families.

While the OSWii was developed as an instrument to advance research, it can be easily adapted to the needs of a practice setting.* For example, OSWs may want to use the OSWii categories to demonstrate what services they provide, to assess their own practice, or to demonstrate to administrators and/or professional colleagues the amount and range of services provided. They may also use the results of the OSWii to communicate with patients and families the wide range of OSW services available to them.

Limitations

The OSWii was based on data from a study not designed for the specific purpose of creating this instrument and thus may not reflect the full range of oncology social work interventions. Also, the population contributing the original data for this secondary analysis was made up of members of the AOSW. Since AOSW members may not be representative of all OSWs, it is possible that the OSWii categories do not reflect the experience of OSWs who are not AOSW members. While the original study was geographically and organizationally diverse, we do not know the characteristics of the social workers who participated in the pre and pilot tests. Another limitation is that data about the number of sessions accounts for the sessions up to and including date of data entry, as opposed to through the completion of working with that patient. Therefore, it is not an accurate measure of total number of sessions, nor can it be easily translated into the amount of time spent in providing the services.

We note that the OSWii is a measure of oncology social work interventions, but it does not cover many activities that are part of the professional role but are not interventions, such as administrative work, supervision, education, work with staff, and community outreach, among others. Nor does it describe how the interventions are provided (e.g. what

---

[*] "Please contact the first author for information about a practice version of the OSWii."

processes and skills are employed to ensure the interventions are actually used by the patients/families).* For these reasons, it would not be appropriate to use the OSWii as a measure of oncology social work productivity, acuity or cost.[28]

Conclusion

The goal of the OSWii is to facilitate research in oncology social work. It has the potential to benefit the field in future studies that describe the interventions of OSWs, patterns of care, and variations in these services by population served (e.g., demographic characteristics, cancer type, treatment), setting type, region of the country, and, perhaps, internationally. The OSWii may be used to facilitate research on social work staffing levels and in training OSWs to assure that they are prepared for the range of interventions needed. Most important, the OSWii has the potential to be used in studies that explore the relationship between oncology social work services (and types of service) and patient health outcomes.

Acknowledgments

The authors would like to express our thanks to the many AOSW members who contributed to the development of the OSWii, including those who participated in the pretest and the pilot test, those who provided feedback on the instrument and on the manual. Also, we acknowledge the support of the AOSW (Association of Oncology Social Work), the University of Maryland School of Social Work and the University of Michigan School of Social Work.

APPENDIX A.: ONCOLOGY SOCIAL WORK INTERVENTION INDEX (OSWii)

A. Social work role (Select one category)

Which of these categories best describes your (social worker) role with this case? If you (social worker) did not provide a clinical intervention, either Category 1 or Category 2 should be completed. If you (social worker) provided clinical intervention(s), Category 3, Category 4, or Category 5 (both) should be completed.

<u>Category 1</u>. You (social worker) contacted the patient but had no direct (face to face or phone) contact with patient or family.

1A. You (Social worker) provided contact information via letter or phone message. Patient did not respond.

1B. You (Social Worker) introduced social work services/role by sending information to the patient’s residence.

- **1B1.** You (social worker or department) sent the patient information on s.w. services
- **1B2.** You (social worker or department) sent the patient a list of community resources
- **1B3.** Other material sent

---

[*] The authors thank the JPO reviewer who brought this issue to our attention.

Category 2. You (social worker) met with patient (face to face or telephone) but did not provide a clinical intervention

- **2A.** You (Social worker) assessed psychosocial needs but did not provide further clinical intervention. Which of the following best describes the case? (check one)
    - **2A1.** No needs were identified
    - **2A2.** Patient declined social work service
    - **2A3.** Patient was referred for psychosocial assessment only
- **2B.** You (Social worker) monitored patient progress but did not provide a clinical intervention
- **2C.** You (Social worker) ensured that psychosocial support was being provided through other resource.
- **2D.** You (Social worker) met with the patient/family (face to face or telephone) but patient/family declined social work service.

Category 3. You (social worker) educated/connected &/or advocated for the patient/family to obtain needed resources.

- **3A.** Financial Resources
    - **3Al.** Financial Services
    - **3A2** Social Security Assistance/SSI
    - **3A3.** Disability/SSDI
    - **3A4.** Employment
    - **3A5.** Household expenses
    - **3A6.** Other
- **3B.** Facilitate treatment
    - **3B1.** Transportation
    - **3B2.** Housing
    - **3B3.** Insurance
    - **3B4.** Medication/pharmacy access
    - **3B5.** FMLA
    - **3B6.** Coordinates care
    - **3B7.** Other
- **3C.** In-House Health Professional Services
    - **3C1.** Dietician/nutrition

    - **3C2.** Psychology/psychiatry
    - **3C3.** Navigator
    - **3C4.** Other
  - **3D.** Community Support Service
    - **3D1.** Support group in community
    - **3D2.** Hospice/palliative
    - **3D3.** Home Health/rehabilitation
    - **3D4.** Counseling
    - **3D5.** Substance abuse
    - **3D6.** Physical appearance (Wig, etc)
    - **3D7.** Other

Category 4. You (Social Worker) provided support or counseling with patient and/or family to facilitate coping/adjustment with diagnosis and/or treatment

  - **4A.** Support/emotional support (check all that apply)
    - **4A1.** Validated
    - **4A2.** Normalized
    - **4A3.** Empathic listening
    - **4A4.** Other
  - **4B.** Counseling/support on decision-making (Check all that apply)
    - **4B1.** Treatment
    - **4B2.** End of life planning
    - **4B3.** Advance directives/power of attorney
    - **4B4.** Other
  - **4C.** Specific counseling interventions (Check all that apply)
    - **4C1.** Psychotherapy/CBT
    - **4C2.** Family/couples counseling
    - **4C3.** Support group
    - **4C4.** End of life or bereavement counseling
    - **4C5.** Other

Category 5. You (social worker) educated/connected &/or advocated for the patient/family to obtain needed resources AND YOU (SOCIAL WORKER) ALSO provided support or counseling with patient and/or family to facilitate coping/adjustment with diagnosis and/or treatment.

Please complete the subcategories provided in Categories 3 and 4 above.

B. (Skip this question if you chose Category 1) Who did you (social worker) work with on this case? (Check all that apply)

  1. Patient

  2. Family member(s)

  3. Other

C. (Skip this question if you chose Category 1) How many sessions did you (social worker) have with the patient/family?

  1. One

  2. Two-three

  3. Four-five

  4. Six and above

Contact Julianne S. Oktay (joktay@ssw.umaryland.edu) for questions or permission to use. Funding for the development was provided by Association of Oncology Social Work, The University of Michigan and The University of Maryland.

Reference List

1. Association of Oncology Social Work, and Oncology Nursing Society. Implementing screening for distress: the joint position statement from the American Psychosocial Oncology Society. Oncology Nursing Forum 2013;40(5):423–424. [PubMed: 23989013]
2. Smith SK, Loscalzo M, Mayer C, Rosenstein DL. Best practices in oncology distress management: beyond the screen. Am Society Clin Oncol Educational Book Am Society Clin Oncol Annual Meeting 2018;(38):813–821. doi:10.1200/EDBK_201307
3. National Comprehensive Cancer Network. NCCN Guidelines for Distress Management https://www.Nccn.Org/Professionals.
4. Institute of Medicine. Cancer Care for the Whole Patient: Meeting Psychosocial Health Needs Washington, DC: National Academies Press; 2008:9.
5. Cwikel J, Behar L, Rabson-Hare J. A comparison of a vote count and a meta-analysis review of intervention research with adult cancer patients. Res Social Work Practice 2000;10(1):139–158. doi:10.1177/15527581-00010001-02
6. Faller H, Schuler M, Richard M, Heckl U, Weis J, Küffner R. Effects of psycho-oncologic interventions on emotional distress and quality of life in adult patients with cancer: systematic review and meta-analysis. J Clin Oncol 2013;31(6):782–793. doi:10.1200/JCO.2011.40.8922 [PubMed: 23319686]
7. Graves KD. Social cognitive theory and cancer patients' quality of life: a meta-analysis of psychosocial intervention components. Health Psychol 1999;22(2):210–219. doi:10.1037/0278-6133.22.2.210
8. McQuellon RP, Danhauer SC. Psychosocial rehabilitation in cancer care. In: Ganz PA, ed. Cancer Survivorship: Today and Tomorrow New York, NY: Springer Science + Business Media;2007:238–250. doi:10.1007/978-0-387-68265-5_18
9. Meyer TJ, Mark MM. Effects of psychosocial interventions with adult cancer patients: a meta-analysis of randomized experiments. Health Psychol 1995;14(2):101–108. doi: 10.1037/0278-6133.14.2.101 [PubMed: 7789344]

10. Schneider S, Moyer A, Knapp-Oliver S, Sohl S, Cannella D, Targhetta V. Pre-intervention distress moderates the efficacy of psychosocial treatment for cancer patients: a meta-analysis. J Behav Med 2010;33(1):1–14. doi:10.1007/s10865-009-9227-2 [PubMed: 19784868]
11. Carlson LE, Bultz BD. Efficacy and medical cost offset of psychosocial interventions in cancer care: making the case for economic analyses. Psychooncology 2004;13(12): 837–849. doi:10.1002/pon.832 [PubMed: 15578622]
12. Bultz Barry D, Carlson Linda E. Benefits of psychosocial oncology care: improved quality of life and medical cost offset. Health Qual Life Outcomes 2003;1(1):8. doi:10.1186/1477-7525-1-8 [PubMed: 12756059]
13. Fu WW, Popovic M, Agarwal A, et al. The impact of psychosocial intervention on survival in cancer: a meta-analysis. Ann Palliat Med 2016;5(2):93–106. doi:10.21037/apm.2016.03.06 [PubMed: 27121737]
14. Mirosevic S, Jo B, Kraemer HC, Ershadi M, Neri E, Spiegel D. “Not just another meta-analysis”: sources of heterogeneity in psychosocial treatment effect on cancer survival. Cancer Med 2019;8(1):363–373. doi:10.1002/cam4.1895 [PubMed: 30600642]
15. National Comprehensive Cancer Network. NCCN Guidelines for Distress Management https://www.Nccn.Org/Professionals/Socialwork/Pdf/Distress.Pdf.
16. Holland JC. Update. NCCN practice guidelines for the management of psychosocial distress. Oncology 13(Supplement):459–507.
17. Commission on Cancer. Cancer Program Standards: Ensuring Patient-Centered Care https://www.Facs.Org/Quality-Programs/Cancer/Coc/Standards.
18. Zebrack B, Kayser K, Padgett L, Sundstrom L, Jobin C, Nelson K, Fineberg I. Institutional capacity to provide psychosocial oncology support services: a report from the Association of Oncology Social Work 2016;122(12):1937–1945. doi:10.1002/cncr.30016
19. Oktay J, Rohan E, Schapmire T, Callahan C, Burruss K. 2018. Oncology Social Work Research in (Ed) Franklin C. Encyclopedia of Social Work Published online Jun 2018 doi:10.1093/acrefore/9780199975839.013.1268.
20. Association of Oncology Social Work www.Aosw.Org.
21. Cancer Care for the Whole Patient: Meeting Psychosocial Health Needs. Preparing the Workforce Washington, DC: National Academies Press 2008:283–328.
22. Kennedy V, Smolinski KM, Colón Y. Training professional social workers in psycho-oncology. In: Holland JC, Breitbart WS, Jacobsen PB, Lederberg MS, Loscalzo MJ, McCorkle R, eds. Psycho-Oncology 2nd ed. New York, NY: Oxford University Press; 2010:588–593. doi:10.1093/med/9780195367430.003.0084
23. Zebrack B, Kayser K, Oktay J, Sundstrom L, Mayer Sachs A. The Association of Oncology Social Work’s project to Assure Quality Cancer Care (APAQCC)). J Psychosoc Oncol 2018;36(1):19–30. doi:10.1080/07347332.2017.1397832 [PubMed: 29199904]
24. NVivo Qualitative Data Analysis Software; QSR International Pty Ltd. Version 10, 2012.
25. Oktay J, Schapmire T, Rohan E, Callahan C, Burruss K, Zebrack B. The development and testing of an instrument to describe oncology social work interventions. Psycho-Oncology 2018;27:39.
26. Adler NE, Page A. Cancer Care for the Whole Patient : Meeting Psychosocial Health Needs Washington, D.C. : National Academies Press; 2008. http://survey.hshsl.umaryland.edu/?url=http://search.ebscohost.com/login.aspx?direct=true&db=cat01362a&AN=hshs.003577474&site=eds-live.
27. Qualtrics, Version 2018. Provo, UT.
28. Klett S, Firn J, Abney N, Battles A, Harrington J, Vantine A. Developing a reliable and valid scale to measure psychosocial acuity. Soc Work Health Care 2014;53(5): 503–517. doi:10.1080/00981389.2014.898726 [PubMed: 24835092]

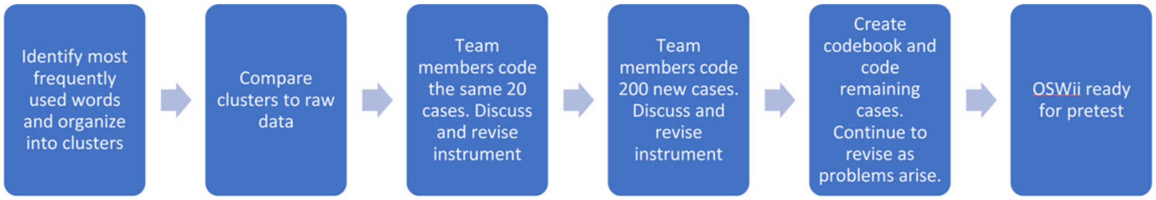
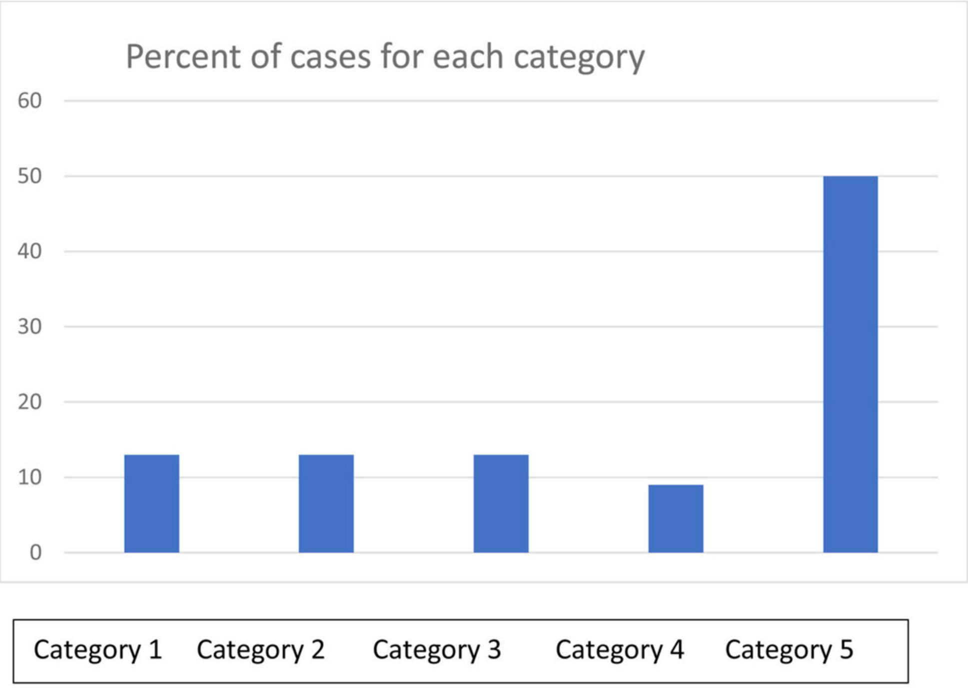


Figure 1.

Steps to develop the categories and subcategories of OSWii.



Category 1: No clinical intervention/no direct contact with patient/family
Category 2: No clinical intervention, but SW did have direct contact with patient/family
Category 3: Clinical interventions involving educating, connecting, advocating re: resources only
Category 4: Clinical interventions involving emotional support, counseling only
Category 5: Clinical interventions involving both category 3 and category 4

Figure 2.

Comparison of types of interventions provided to patients/families by oncology social workers.

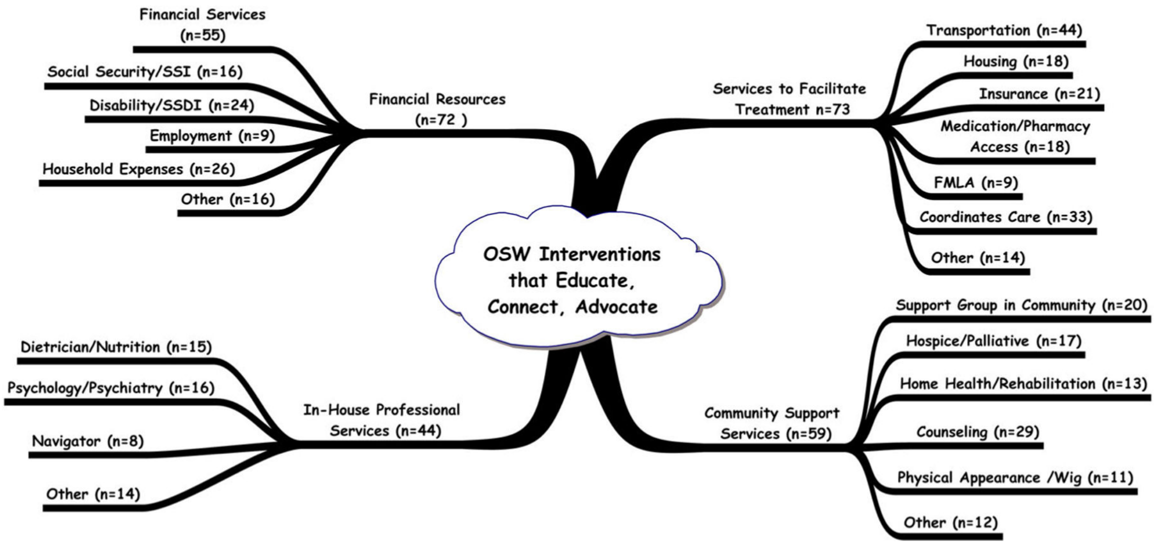


Figure 3.

Breakdown of cases where OSWs provided interventions that educate, connect and advocate (number of cases).[a][AQ]

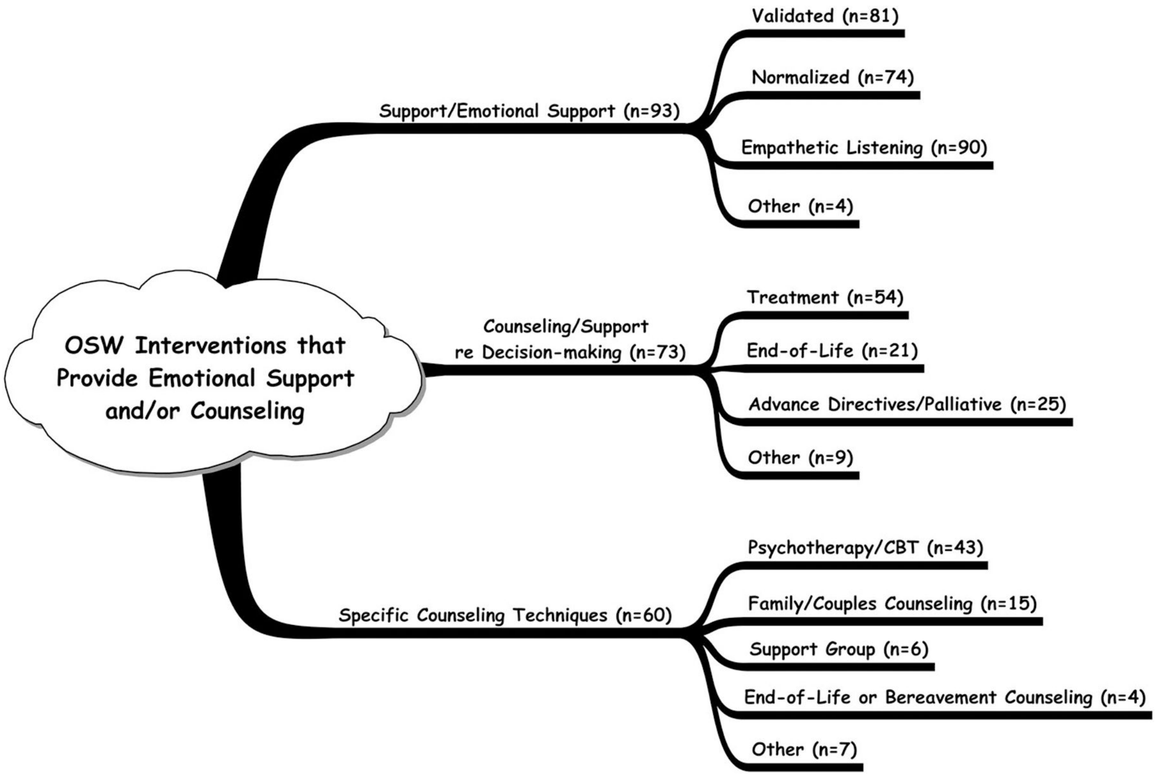
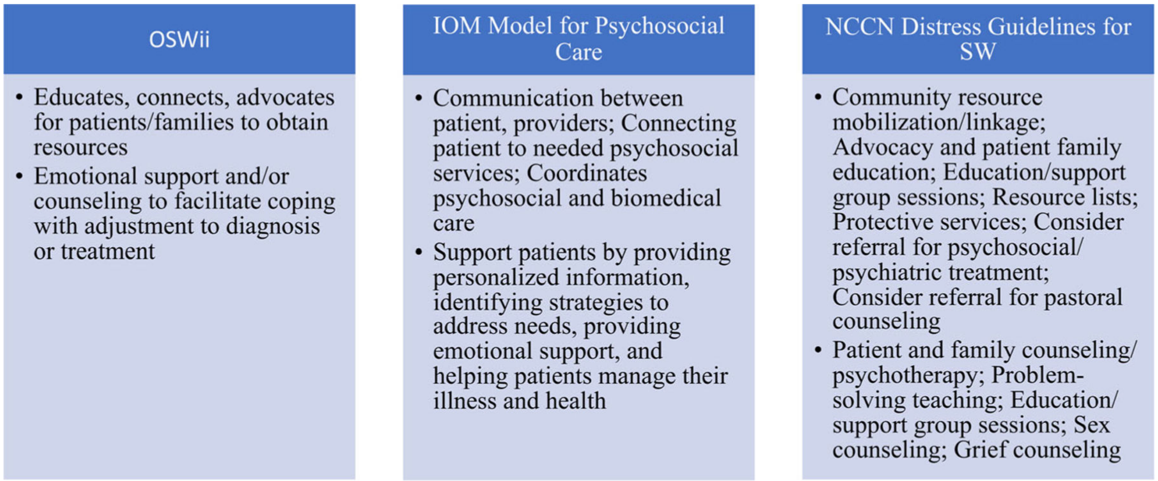


Figure 4.

Breakdown of cases where OSWs provided interventions that provide emotional support and/or counseling (numbers of cases).[a]



OSWii	IOM Model for Psychosocial Care	NCCN Distress Guidelines for SW
• Educates, connects, advocates for patients/families to obtain resources • Emotional support and/or counseling to facilitate coping with adjustment to diagnosis or treatment	• Communication between patient, providers; Connecting patient to needed psychosocial services; Coordinates psychosocial and biomedical care • Support patients by providing personalized information, identifying strategies to address needs, providing emotional support, and helping patients manage their illness and health	• Community resource mobilization/linkage; Advocacy and patient family education; Education/support group sessions; Resource lists; Protective services; Consider referral for psychosocial/ psychiatric treatment; Consider referral for pastoral counseling • Patient and family counseling/ psychotherapy; Problem-solving teaching; Education/ support group sessions; Sex counseling; Grief counseling

Figure 5.

Comparison of OSWii, National Academies of Science, Engineering, and Medicine (NASEM) Model for Psychosocial Care and National Comprehensive Cancer Network (NCCN) distress guidelines for social work.

Table 1.

OSWii overall categories.

Categories	**Details**
1. Social worker contacted the patient but had no direct (face to face or phone) contact with patient or family	a. Social worker provided contact information via letter or phone message. Patient did not respond.
	b. Social worker introduced social work services/role by sending information to the patient's residence.
2. Social worker met with patient (face to face or telephone) but did not provide a clinical intervention	a. Social worker assessed psychosocial needs but did not provide further clinical intervention. Which of the following best describes the case? (check one).
	b. Social worker monitored patient progress but did not provide a clinical intervention.
	c. Social worker ensured that psychosocial support was being provided through other resource.
3. Social worker educated/connected &/or advocated for the patient/family to obtain needed resources. (This category describes cases where interventions involving support or counseling were **not** provided.)	a. Financial Resources
	b. Facilitate treatment
	c. In-House Health Professional Services
	d. Community Support Service
4. Social worker provided support or counseling with patient and/or family to facilitate coping/ adjustment with diagnosis and/or treatment. (This category describes cases where interventions involving resources were **not** provided.)	a. Support/emotional support
	b. Counseling/support on decision-making
	c. Specific counseling interventions
5. Social worker provided interventions from **both** category 3 and category 4	Subcategories of both interventions involving needed resources **and** interventions involving support or counseling

Table 2.

Recipient of clinical interventions by oncology social workers (n = 114).

	n (%)
Patient only	65 (57%)
Patient and family/others	38 (33%)
Family/others only	11 (10%)

This question was not asked in cases where no clinical intervention took place.

Table 3.

Number of sessions with oncology social worker (n = 113).

	n (%)
One session	25 (22%)
2–3 sessions	43 (38%)
4–5 sessions	15 (13%)
6 or more sessions	30 (27%)

This question was not asked in cases where no clinical intervention took place.

There was no response to this question for one case where clinical intervention took place.

Table 4.

User Assessment of OSWii.

Feature	Assessment	n (%)
Time needed by social worker to complete OSWii per case (n=150)	Less than 1 minute	55 (37%)
	1–2 minutes	57 (38%)
	3–4 minutes	31 (21%)
	5 or more minutes	7 (4%)
Ease of use of OSWii (n=149)	Very easy to use	112 (75%)
	Somewhat easy to use	28 (19%)
	Neither easy nor difficult	6 (4%)
	Somewhat difficult	3 (2%)
	Very difficult	0 (0%)
Helpfulness of OSWii manual (n=101)*		
	Very helpful	78 (77%)
	Somewhat helpful	22 (22%)
	Not helpful	1 (1%)

*In 48 cases, participants reported they did not use the manual.