Feasibility and Acceptability of a Best Supportive Care Checklist among Clinicians

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Abstract

Context: Best supportive care (BSC) is often not standardized across sites, consistent with best evidence, or sufficiently described. We developed a consensus-based checklist to document BSC delivery, including symptom management, decision making, and care planning. We hypothesized that BSC can be feasibly documented with this checklist consistent with consolidated standards of reporting trials.

Objective: To determine feasibility/acceptability of a BSC checklist among clinicians.

Methods: To test feasibility of a BSC checklist in standard care, we enrolled a sample of clinicians treating patients with advanced cancer at four centers. Clinicians were asked to complete the checklist at eligible patient encounters. We surveyed enrollees regarding checklist use generating descriptive statistics and frequencies.

Results: We surveyed 15 clinicians and 9 advanced practice providers. Mean age was 41 (SD=7.9). Mean years since fellowship for physicians was 7.2 (SD=4.5). Represented specialties are medical oncology ($n=8$), gynecologic oncology ($n=4$), palliative care ($n=2$), and other ($n=1$). For “overall impact on your delivery of supportive/palliative care,” 40% noted improved impact with using BSC. For “overall impact on your documentation of supportive/palliative care,” 46% noted improvement. Impact on “frequency of comprehensive symptom assessment” was noted to be “increased” by 33% of providers. None noted decreased frequency or worsening impact on any measure with use of BSC. Regarding feasibility of integrating the checklist into workflow, 73% agreed/strongly agreed that checklists could be easily integrated, 73% saw value in integration, and 80% found it easy to use.

Conclusion: Clinicians viewed the BSC checklist favorably illustrating proof of concept, minor workflow impact, and potential of benefit to patients.

Keywords: communication; quality improvement; symptom management

Introduction

MANY CANCER CLINICAL TRIALS are designed to evaluate the benefits of experimental anticancer drugs against best supportive care (BSC), typically defined as treatments oriented toward palliation rather than cure, and are often provider dependent.^{1,2} As a result, certain drugs have been registered based on very modest survival advantages when compared with BSC. However, these studies present notable challenges, including (1) nonstandardized BSC control arms across sites, (2) inconsis-

tency with palliative care best practice based on the extensive evidence in the palliative care field, and (3) insufficient detail to reproduce BSC delivery in subsequent studies.³⁻⁶

Such poorly defined interventions and variation between sites are unacceptable for other aspects of a clinical trial. Furthermore, a poorly delivered BSC arm might systematically overestimate the performance of the intervention arm(s) in the study leading to poor decision making by clinicians and funders. With mounting evidence that early use of supportive and palliative care can improve patient outcomes, incomplete

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FIG. 1. Conceptual framework. BSC, best supportive care.

delivery of BSC might deprive patients of considerable benefit, potentially in the setting of far less toxicity.⁷

In line with the CONSORT statement on reporting of clinical trials,⁸ our previous work developed expert-derived consensus statements regarding components of supportive care in cancer clinical trials⁹ and compared the extent to which documentation of current supportive care delivery in trials compares to the consensus statements.¹⁰ The primary aim of this study was to test the feasibility and acceptability of thorough documentation of BSC delivery using a BSC checklist as a provider behavioral change intervention. In terms of palliative care and end-of-life research objectives, this study developed an intervention designed to mitigate adverse physical and psychological symptoms and outcomes that focus especially on the beginning of the end-of-life phase (Fig. 1).

Methods

A BSC checklist was developed in a prior stage of this study using an expert panel consensus approach.⁹ Following IRB approval at each of the four participating academic centers, we consented and enrolled a sample of clinicians treating patients with advanced cancer to test feasibility of a BSC checklist in standard care of oncology patients. Clinicians were asked to complete the checklist components (Table 1) at each eligible cancer patient encounter. We surveyed enrolled clinicians regarding use of the checklist after clinical appointments with their patients. The web-based survey was delivered to clinicians in Redcap—the same platform used for documenting the BSC checklist—following content and scale development with clinician input. The study took place for a four-month period. Data were stored centrally and securely at Duke University Medical Center. Descriptive statistics and frequencies were generated using functions in Microsoft Excel.

Results

Out of 23 enrolled clinicians, 15 completed the post-intervention survey regarding their experience using the BSC checklist. Of these 15, 9 were advanced practice providers. The mean age of the sample was 41 years (SD = 7.9) and 80% were female. Physicians' mean practice years since fellow-

ship was 7.2 years (SD = 4.5). Represented specialties were medical oncology ($n = 8$), gynecologic oncology ($n = 4$), palliative care ($n = 2$), and other ($n = 1$). Table 2 presents the frequencies for the clinician survey items. For “overall impact on your delivery of supportive/palliative care,” 40% noted improved impact. For “overall impact on your documentation of supportive/palliative care,” 46% noted improvement. Impact on “frequency of comprehensive symptom assessment” was noted to be “increased” by 33% of providers. Impact on “frequency with which you assessed for referral to support services” was noted to be “increased” by 26%. Impact on “frequency with which you educated patients regarding goals of therapy” was noted to be “increased” 20%. None noted decreased frequency or worsening impact. Regarding feasibility of integrating BSC in workflow, 73% agreed/strongly agreed that the checklist could be easily integrated, 73% saw value in integration, and 80% found it easy to use.

TABLE 1. BEST SUPPORTIVE CARE CHECKLIST DOMAINS WITH QUESTION ITEMS

Symptom management
Pain
Pulmonary (cough, dyspnea)
Fatigue or sleep disturbance
Mood (depression or anxiety)
Gastrointestinal (anorexia, weight loss, nausea/vomiting, constipation)
Financial or legal concerns
Spiritual concerns
Decision making
Inquired about preferred mode of decision making
Needs assistance in treatment decision making
Illness comprehension
Has the patient received education on the goals of his/her anticancer therapy?
Does the patient understand the illness and prognosis?
Are there coping concerns for the patient
Are there coping concerns for caregivers
Care plan
Plan for future appointments made
Referral to other care providers

TABLE 2. POSTINTERVENTION CLINICIAN SURVEY

Question	Improved/ increased (%)	No impact (%)	Worsened/ decreased (%)
How did the BSC checklist impact your delivery of supportive/palliative care, overall?	40	60	0
How did the BSC checklist impact your documentation of supportive/palliative care, overall?	46	54	0
How did the BSC checklist impact the frequency of comprehensive symptom assessment?	33	67	0
How did the BSC checklist impact the frequency with which you assessed patients for referral to support services (e.g., spiritual counselors, financial counselors, and social workers)?	26	74	0
How did the BSC checklist impact the frequency with which you educated patients regarding goals of therapy?	20	80	0

Question	Strongly agree (%)	Agree (%)	Neither (%)	Disagree (%)	Strongly disagree (%)
I can easily integrate the BSC checklist into my regular workflow.	6.6	66.6	20	6.6	0
I see value in integrating the BSC checklist into my regular workflow.	0	73.3	13.3	13.3	0
I found the BSC checklist easy to use.	6.6	73.3	13.3	6.6	0

BSC, best supportive care.

Discussion

Overall, clinicians viewed the BSC checklist favorably, which illustrated proof of concept, minor impacts on workflow, and potential benefit to patients in a future randomized trial. Although some clinicians noted that the BSC checklist had no impact on their clinical approach, no clinicians said the use of the checklist had a negative impact. The reasons for no impact need to be explored further. One explanation may be that actual, or perceived, optimal screening is occurring already. A larger, longitudinal study examining outcomes and documentation more closely would provide further information in this regard.

Exploring why we do not measure BSC delivery well is important to patients who may benefit from palliative care interventions. The reasons for why we do not measure BSC include variation by setting or provider^{2,9,11} and variations in the definition of BSC in the literature.¹² Sustaining provider behavior change using checklists or other interventions needs to involve providers in the process and include participatory components, including ongoing auditing¹³ and benchmark setting¹⁴ for desired outcomes, if they are to be successful.¹⁵

Our study has limitations. The sample size is small and our overall response rate was low. Therefore, our perception of the acceptability or positive reception by providers may be overestimated. In addition, our results are framed as perceived improvements without any concrete measures of outcomes for patients. It is a multisite study, however, and the findings speak of the BSC checklist's adaptability in multiple settings and organizations.

This line of inquiry is the first of its kind. Our study provides an initial framework upon which to build a standardized assessment for BSC in clinical practice. This study was able to show acceptability and feasibility and the perception, at least, of improved care with little burden on clinicians' workflow. The next step will be to devise a large randomized clinical trial that compares the use of this measure against standard care that

includes specific outcome measures for patients that follow the domains of *symptom management*, *decision making*, *illness comprehension*, and *care planning* as listed in Table 1. Brief patient questionnaires followed by semistructured interviews with a subset of patients to confirm and explore questionnaire responses could provide a useful mixed-methods evaluation of a more robust BSC checklist trial.

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Author Disclosure Statement

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