Gynecologic Oncology 140 (2016) 114–119

Contents lists available at ScienceDirect

Gynecologic Oncology

journal homepage: www.elsevier.com/locate/ygyno

Fighting cancer together: Development and implementation of shared medical appointments to standardize and improve chemotherapy education

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HIGHLIGHTS

- We utilized quality improvement methodology to develop an innovative approach to chemotherapy education.
- Shared medical appointments are a novel concept among oncology provides and patients.
- Shared medical appointments for oncology patients initiating chemotherapy are both feasible and well accepted.

ARTICLE INFO

Article history:
Received 19 October 2015
Received in revised form 3 November 2015
Accepted 4 November 2015
Available online 5 November 2015

Keywords:
Quality improvement
chemotherapy
Education
shared medical appointment

ABSTRACT

Objective. Shared medical appointments offer a novel approach to improve efficiency and quality of care consistent with the goals of the Institute of Medicine. Our objective was to develop and implement a shared medical appointment for gynecologic cancer patients initiating chemotherapy.

Methods. We first assessed the level of interest in shared medical appointments among our patients and providers through qualitative interviews. Both patients and providers identified pre-chemotherapy as an optimal area to pilot shared medical appointments. We subsequently created a multidisciplinary team comprised of physicians, advanced practice providers, nurses, pharmacists, administrators, health education specialists and members of the Quality Improvement Department to establish a Shared Medical Appointment and Readiness Teaching (SMART) program for all gynecologic oncology patients initiating chemotherapy with platinum- and/or taxane-based regimens. We developed a standardized chemotherapy education presentation and provided patients with a tool kit that consisted of chemotherapy drug education, a guide to managing side effects, advance directives, and center contact information.

Results. From May 9, 2014 to June 26, 2015, 144 patients participated in 51 SMART visits. The majority of patients had ovarian cancer and were treated with carboplatin/paclitaxel. Surveyed patients reported being highly satisfied with the group visit and would recommend shared medical appointments to other patients.

Conclusions. This model of care provides patient education within a framework of social support that empowers patients. Shared medical appointments for oncology patients initiating chemotherapy are both feasible and well accepted.

1. Background

Receiving a diagnosis of cancer can be incredibly overwhelming, in part because of the substantial amount of information that must be conveyed to the patient before she begins treatment. For many women

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http://dx.doi.org/10.1016/j.ygyno.2015.11.006
0090-8258/

with gynecologic malignancies, standard therapy includes surgery, chemotherapy, and/or radiation therapy. Therefore, within a very short period of time, a patient will receive information about her disease process, and each modality of treatment which has its own risks and side effects. In a survey published by Jenkins et al., women with advanced ovarian cancer reported feeling underprepared to manage treatment-related adverse effects such as fatigue, neuropathy, and constipation [1]. Unfortunately, increasing clinical and financial demands on providers make it challenging to address the complex needs of cancer patients in the brief amount of time allocated to outpatient visits [2]. The ability of a woman to cope with her diagnosis and treatment also depends on numerous personal factors that may not be optimized in our current health care environment because the infrastructure underestimates the importance of psychosocial support. Research in cancer survivorship has shown social support to be a positive prognostic indicator of oncology outcomes [3–5]. Integrating social networks into cancer treatment delivery is essential to improving patient care and quality of life [3].

Shared medical appointments offer a novel approach to health care delivery that improves the efficiency and quality of care in a supportive, patient-centered approach. In lieu of the traditional visit between a single healthcare provider and patient, a provider engages a group of patients with similar healthcare needs in an extended visit that allows more time for patient-centered education and discussion [6]. Although shared medical appointments were initially piloted in the primary care setting, this model has now been applied to more specific diagnoses and conditions such as diabetes [7–11], heart failure [12], and pregnancy [13]. It has also been utilized in various surgical subspecialties including urology [14,15], bariatric surgery [16], and cardiac surgery [17]. Published studies comparing traditional models of care to shared medical appointments have shown improved clinical outcomes such as lower hemoglobin A1c [7], increased exercise [18], improved blood pressure control [18], decreased preterm birth [19], improved access to care and decreased costs [20]. Despite the potential benefits of shared medical appointments for both patients and providers, there have been few attempts to utilize this model in oncology [21–24]. Our aim was to develop and conduct a pilot study to determine whether shared medical appointments would be feasible for gynecologic oncology patients at the initiation of chemotherapy. The purpose of this paper is to describe the development and implementation of a shared medical appointment for chemotherapy education and clearance in a tertiary academic medical center and provide our initial results from this ongoing program.

2. Methods

2.1. Needs assessment

This study was approved by the Quality Improvement Assessment Board at The University of Texas MD Anderson Cancer Center. After obtaining approval, the primary investigator (LSP) used a semi-structured script to conduct face-to-face interviews with 24 gynecologic oncology patients and 26 health care providers to assess their level of interest in shared medical appointments. Patients were approached in the waiting room prior to their scheduled appointments. The median age of patients interviewed was 60 years (range, 34–85 years). The majority of patients (75%) were white and had ovarian cancer (63%). All patients reported a history of surgery, chemotherapy or both, and 36% were actively receiving treatment. The majority of providers interviewed were physicians (65%). The remainder of the providers included clinical pharmacists, mid-level providers, nurses, and a psychologist. Thirty-five percent of providers, but no patients, had previous knowledge of shared medical appointments. After a brief description of the model, 92% of providers and 58% of patients stated that they would be interested in learning more about or would consider participating in a shared medical appointment. Providers and patients rated both chemotherapy initiation and survivorship as optimal settings to initiate a shared medical appointment.

2.2. Clinical setting

Prior to initiation of this project, there was no standardized chemotherapy education component at our institution. We therefore felt that chemotherapy initiation was a high yield area for improvement and we chose to investigate the feasibility of developing a new clinic for patients initiating chemotherapy utilizing the shared medical appointment methodology. The following briefly explains the process of chemotherapy education used in the Gynecology Center prior to the implementation of shared medical appointments. The Department of Gynecologic Oncology has 15 faculty, 18 advanced practice providers, and 25,000 clinic appointments annually. Each week, 2 to 14 patients are seen for chemotherapy initiation, the majority of whom are initiating treatment with a platinum- and/or taxane-based regimen. The first chemotherapy visit includes evaluation by an advanced practice provider and gynecologic oncologist, as well as chemotherapy education provided by a clinical pharmacist or advanced practice provider. Education typically includes information regarding chemotherapy and its administration, as well as review of relevant side effects and their management. This conversation is documented by written consent.

Despite similarities in the choice of chemotherapy drugs to treat gynecologic cancers, we observed significant variation in scheduling appointments, chemotherapy counseling, and materials provided to patients. We performed baseline time studies to document our perceptions. We monitored 20 patients who initiated chemotherapy in nine different physician clinics. The median total visit time, including patient wait time, was 114 min (range, 28–236 min). Patients spent an average of 45 min (range, 19–85 min) face-to-face with a provider, of which only 13 min was spent with the attending physician (range, 2–34 min). These time studies demonstrated that chemotherapy initiation required much more time than anticipated, resulting in long patient wait times, decreased patient satisfaction and inefficient use of clinic rooms. Thus, in response to our patients' needs and baseline time studies, we identified chemotherapy initiation as a high yield pilot clinic for shared medical appointments in the Gynecology Center.

We secured administrative support from the conception of the project. The departmental operations team championed the project with full support from the executive leadership including the department Chair, and the medical and fellowship directors. Consensus was reached among the gynecologic oncology physicians at a staff retreat to pilot the program.

2.3. Program development and standardization of chemotherapy education

Although several group visit models have been described in the literature, very few have been adopted in the oncology setting and none have been used in patients receiving active treatment [21,23]. Therefore, we chose to create our own model using aspects of the shared medical appointments program pioneered by Edward Noffsinger, as well as the group visit model described by the Centering Healthcare Institute [6,25]. We assembled a multidisciplinary team that comprised physicians, advanced practice providers, nurses, pharmacists, administrators, health education specialists, and members of the Office of Performance Improvement to develop a comprehensive shared medical appointment for gynecologic cancer patients initiating chemotherapy. Our group opted to include patients who were receiving platinum- and/or taxane-based chemotherapy for the first time, as these agents are the cornerstone of systemic treatment for most gynecologic cancers. Using input from patients in ovarian and endometrial cancer support groups, we developed the Shared Medical Appointment and Readiness Teaching (SMART) program incorporating the six Institute of Medicine aims: safety, effectiveness, equitability, patient-