The Cancer Emergency Department—The Ohio State University James Cancer Center Experience

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KEYWORDS

• Oncology emergency department • Emergency oncology • Hematology
• Administration

KEY POINTS

- Extensive prior planning is necessary to create a fully integrated cancer emergency department that interfaces seamlessly with the rest of the hospital system.
- Significant emphasis must be placed on building relationships between experts across disciplines in emergency medicine and hematology or oncology.
- Using providers who are cross-trained in hematology or oncology and emergency medicine makes the safest and most effective care team.
- Ongoing adjustments of resources are important to provide the safest and most effective model for emergency cancer care.

In 2014, there were an estimated 14.7 million people in the United States with cancer.[1] The rate of cancer diagnosis has been increasing over the last 20 years. In 2017, it is projected that 1.7 million more cases will be diagnosed with 67% surviving for at least 5 years postdiagnosis.[1,2] As this population increases, the need for continued access to quality emergency care will likewise grow.

Patients with cancer account for 4.2% of all emergency department (ED) visits in the United States with an admission rate of 59%.[3] These patients are typically seen for not only cancer-related problems (eg, infection, local mass effect, pleural effusions, ascites, side-effects of chemotherapy, and hematologic and metabolic problems), they can also present for any other noncancer-related emergency.[4–7] As such, there is a significant need for EDs that can care for this unique population.

In 2010, The University of Texas MD Anderson Cancer Center created the first cancer ED within a comprehensive cancer center. In 2015, The James Cancer Hospital's ED (JED) opened as an integrated portion of The Ohio State University Wexner

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Medical Center's ED (OSUED). This was the first cancer ED that was fully integrated into a larger and comprehensive ED.

THE DESIGN PHASE

The initial planning, which began in 2012, was multidisciplinary and studied multiple areas of patient care. This included patient simulations and provider and patient panels. The major areas to be considered were hours of operation, staff education, and work flow studies. A retrospective quantitative analysis of patients with an oncology diagnosis presenting to the ED was performed using electronic medical records to confirm the concept, as well as predict volume and acuity. The review assessed and projected trends in chief complaints, primary oncology diagnoses, arrival day of week, time of day, mode, patient acuity, and ED length of stay.

During the early design phase of The James Cancer Hospital's Cancer and Critical Care Tower, a decision was made to expand the OSUED to include a designated treatment area for oncology and hematology patients. The original plans, drafted in 2006, set forward the intention to relocate The James Cancer Hospital's ambulatory Immediate Care Center into the expanding ED. As construction of the building developed, the expected growth in the oncology population, patient acuity, and complexities related to the disease continuum were key factors that eventually drove the innovative concept of creating a fully integrated ED for hematologic and oncologic emergencies. Throughout the planning phases, patient input and system priorities were identified, and strategies were designed and tested to improve workflow, create efficiencies, improve patient throughput, and develop an elite patient experience.

Significant emphasis was placed on building relationships between experts and across disciplines in emergency medicine, hematology, and oncology. Before opening, multiple 3-day intensive planning retreats were held to ensure key stakeholders were involved in the decision-making process. A substantial amount of time was dedicated to develop and analyze how success would be measured, and what needed to be done to appropriately manage oncologic emergencies in a new environment. The time to plan and provide constant communication on progress was critical to the successful launch of the first fully integrated, ED focused on hematology and oncology in a brand new 1.1 million square foot, 306 inpatient bed, cancer hospital. Another critical aspect of the preparation involved education provided to outpatient oncology and hematology clinics. Informational presentations allowed for staff education and clinical feedback, and, ultimately, set expectations. A multidisciplinary case–based conference was developed to help with education of the staff. The monthly conference offers continued education opportunities and has been used to present interesting cases, new therapy options, and best practice paradigms.

THE PHYSICAL SPACE

Fifteen of the 106 ED treatment spaces were designated for cancer-related emergencies and carefully designed with the specialized population in mind. The rooms were designed to be flexible to accommodate both patients with cancer and patients without cancer when necessary. An internal waiting area for patients with the potential for immunosuppression was created and private restrooms were factored into the design. A room was also designated adjacent to the internal waiting room to allow for initial patient treatment in a private area if no rooms were available to place the patient. The design of the internal waiting room was also intentional, with special attention paid to create a quiet and soothing environment.