Oncology Urgent Care Clinics: Understanding Utilization and Best Practices

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Abstract

An oncology urgent care clinic can improve patient satisfaction, reduce emergency room visits, and lower health-care costs for patients and facilities. At a session taking place at JADPRO Live Virtual 2021, presenters on the frontlines of the development of an oncology urgent care clinic provided the audience with an inside look at metrics, logistics, and workflow used when establishing a successful advanced practitioner-led oncology urgent care clinic.

During JADPRO Live Virtual 2021, Cara Fleming, AGPCNP-BC, AOCNP®, and Deirdre Kelly, AGACNP-BC, of Memorial Sloan Kettering Cancer Center, discussed the metrics, logistics, and workflow used when establishing a successful advanced practitioner (AP)-led oncology urgent care clinic (OUCC). The presenters also reviewed a systematic approach to the triage, evaluation, and management of common acute problems seen in oncology patients.

WHY IS THERE A NEED FOR AN OUCC?

As Ms. Fleming explained, there are several important factors driving demand for an OUCC. There is a need for specialized oncology care in the community for patients to receive care closer to home and a need to decant the emergency rooms and prevent admissions. OUCCs also reduce health-care costs for patients and facilities while increasing patient satisfaction.

According to Joint Commission Standardized Core Performance Measures, reducing the time patients remain in the emergency department can improve access to treatment and increase quality of care.

“By limiting hospitalizations, we are able to provide patients with more cancer-directed therapy, which enables oncology teams to continue treatments that would otherwise be put on hold,” said Ms. Fleming. “This highlights the utilization of OUCCs as a burgeoning model for health-care delivery for patients facing a cancer diagnosis.”
METRICS
According to a large systematic review of oncology patients requiring an emergency department (ED) visit, patients with progressive or metastatic disease undergoing active treatment comprise most visits (Vandyk et al., 2012). The most common reasons for ED referrals included pain (24%), nausea and vomiting (16%), dyspnea (15%), and fever (12%).

These findings were echoed in a clinic review conducted by Memorial Sloan Kettering Cancer Center. The study of more than 17,000 patient encounters at a symptom care clinic between October 2017 and December 2019 showed the most common symptoms to be fever, nausea, vomiting, dehydration, rash, and pain (Xiao et al., 2020).

“This is a large volume of patients of whom may otherwise would have required an ED visit,” said Ms. Fleming.

A similar reduction in ED visits was observed at Smilow Cancer Center, an affiliate of Yale. An AP priority visit program, in which patients could schedule a same-day visit with an oncology-trained AP, was developed to help evaluate patients and triage care. At the end of the visit, patients were either discharged home, directly admitted to the hospital for management, or directed to the ED for additional workup. Analysis of the program showed that 81.4% of patients were discharged home after their same-day visit (Dest, 2019).

LAYING THE FOUNDATION
According to Ms. Fleming, the following operational factors need to be prioritized when planning an OUCC: guest services, radiology services, laboratory services, pharmacy services, and staff and clinic space.

“Our pharmacists are a vital part of our day-to-day operations,” Ms. Fleming emphasized. “They not only verify our medications and provide clinician guidance on drugs, but they also help develop and expand our formulary as our patient population and needs grow.”

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**Figure 1.** MSK acute care clinical inclusion/exclusion criteria. SCC = symptomatic care clinic; ILI = influenza-like illness; URI = upper respiratory infection; DVT = deep vein thrombosis. Adapted from Groeger (2019).
With respect to staffing, Ms. Fleming said that APs are highly trained and skilled health-care providers who are integral to providing team-based care in oncology. The OUCC is also staffed with registered nurses, physicians, patient technicians, and administrative support.

“We recommend having a staff with a diverse range of skills to impart to each other, including a mix of critical care and emergency triage skill as well as inpatient and outpatient oncology experiences,” said Ms. Fleming. “There should also be a range of oncology specialties, including surgical oncology, solid tumor, and hematology.”

Advanced practitioner staff training is multifaceted and includes an OUCC bootcamp, educational lectures, and frequent case studies presented at staff meetings. Specialty knowledge for APs is largely acquired through a blend of self-directed learning, practice-based training, and mentoring, said Ms. Fleming.

**LOGISTICS AND WORKFLOW**

According to Ms. Kelly, office practice nurses (OPNs) are trained to manage low acuity issues at home as indicated, but issues requiring an evaluation by an AP or MD can be referred to the symptom care clinic. These issues include upper respiratory infections, fevers, deep vein thrombosis, mucositis, urinary tract infections, headaches, and pain (Figure 1).

Conversely, medical emergencies are still referred to the ED.

The process begins with an electronic referral, followed by a verbal report from the referring team, which includes the patient’s symptoms, relevant background, and recommendations for a workup if applicable. An AP or MD then conducts a chart review, entering lab and radiology orders as needed. When the patient arrives, they are assessed by a registered nurse, who then presents the case to the assigned provider. The AP then examines the patient, orders higher-level diagnostics if they are required, and decides on appropriate treatment and disposition. Patients are either sent home, to the affiliated cancer center, or to a local hospital. The process ends with communication to the referring team and any active consultants via email or phone.

“We don’t just release patients into the ether,” said Ms. Kelly. “We make sure that they have any necessary follow-ups scheduled prior to discharge” (Figure 2).

**COMMON ACUTE PROBLEMS IN ONCOLOGY PATIENTS**

**Venous Thromboembolism**

Patients with cancer are at higher risk for VTE than the public and account for 20% of all VTE cases (Lyman et al., 2021). Between 5% and 20% of all patients with cancer develop VTE, and active cancer treatment further increases the risk.

“VTE can increase mortality in patients with cancer, worsen quality of life, interfere with or delay the ability to receive cancer-directed treatments, and increase cost of care,” said Ms. Kelly.

The initial priority is determining whether the patient requires immediate hospitalization. Pa-
tients who demonstrate hemodynamic instability, dyspnea/hypoxia, or evidence of right heart strain on CT chest or who require urgent hematology consultation likely require hospitalization prior to starting therapeutic anticoagulation.

Initiating anticoagulation is always a risk-benefit analysis, said Ms. Kelly, who noted that a history of falls, bleeding events, central nervous system metastases, and other antiplatelet therapies in place must be taken into consideration.

For those patients who meet criteria, anticoagulation including enoxaparin or a direct oral anticoagulant can be initiated by OUCC providers, saving the patient a visit to the hospital.

Nausea and Vomiting
The first step in the OUCC is assessment and treatment of acute symptoms. Patients are resuscitated appropriately with IV hydration and electrolyte repletion. Patients may be given IV antiemetics, including ondansetron, prochlorperazine, metoclopramide, or lorazepam. Patients with refractory nausea and vomiting will likely require further imaging with an abdominal x-ray or CT to evaluate for bowel obstruction. In the case of a bowel obstruction or severe electrolyte derangements, the patient would likely be admitted to the cancer center or a local hospital.

Sepsis
In a case study example of a patient presenting with fever, tachycardia, hypotension, tachypnea, and hypoxia, an initial workup involved a respiratory viral panel, a complete blood count that showed profound neutropenia, and a comprehensive metabolic panel that showed mild acute kidney injury and metabolic acidosis.

“As with any fever patient, we also did two sets of blood cultures, a urinalysis and urine culture, and a chest x-ray,” said Ms. Kelly. “We always have to consider sepsis as a possibility.”

In this case, neutropenic sepsis with a respiratory source was diagnosed, and management involved early fluid resuscitation, broad-spectrum antibiotics, and immediate referral to the ED. With each hour that elapses between a patient with sepsis arriving in the ED and receiving antibiotics, Ms. Kelly reported a 9% increase in the risk of mortality (Liu et al., 2017).

“Prompt recognition in antibiotic administration is key and it starts in the outpatient setting,” she said.

COVID-19
According to Ms. Kelly, COVID-19 has changed care delivery in the OUCC, and any patient with fever or symptom consistent with COVID is isolated on arrival and treated as positive until proven otherwise.

“In the height of COVID, our Oncology Urgent Care Clinic became a COVID testing hub, and our staff became quite familiar with institutional, local, and national guidance on COVID prevention and management,” said Ms. Kelly. “We also noticed that with telemedicine on the rise, we acted as a safety net for patients who had not been evaluated in person as frequently, and we acted as a resource to the building regarding COVID-related guidance.”

Spinal Cord Compression
Approximately 15% of patients with advanced cancer have spinal metastases (Robson, 2014). As Ms. Kelly explained, compression can be caused by tumor invading the spinal canal or by compression of a vertebral body, causing edema and demyelination, which can lead to cord necrosis and permanent damage.

“Early detection and treatment are essential in preventing permanent damage,” said Ms. Kelly. “Warning signs include back pain, limb weakness, sensory loss, and bowel or bladder dysfunction.”

Initial treatment of spinal cord compression is IV steroids followed by transfer to a local hospital for ongoing steroid support, consideration of surgery or radiation, and symptom control.

TENETS OF A SUCCESSFUL OUCC
Ms. Kelly and Ms. Fleming emphasized the following tenets of a successful OUCC:

1. Compassion and empathy: Not only for your patients but also for each other.
2. Wartime triage: APs must be able to make quick decisions and be confident in the decisions they’re making.
3. Succinct and comprehensive communication across specialties: Lasso the whole team together and know what your plan of care is.
4. Upholding a supportive workplace: Make sure that you keep taking care of yourselves, upholding patients’ safety, and looking out for each other.

Disclosure
The presenters had no conflicts of interest to disclose.

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