spotlight

Levine Cancer Institute, Carolinas HealthCare System North and South Carolina



he care philosophy of Levine Cancer Institute as summarized by its president Derek Raghavan, MD, PhD, FACP, FRACP, is "the heavy emphasis on patient support and patient-centric care combined with a focus on early-phase clinical trials."

Connecting Through an Electronic Pathway

Levine Cancer Institute is part of the Carolinas HealthCare System, with 25 sites across North and South Carolina. From north of Charlotte. North Carolina. all the way down to Charleston, South Carolina, the cancer institute covers a vast geographic area. According to Dr. Raghavan, all locations function as a single unit through a custom electronic pathway, an interoperable IT infrastructure that integrates all services and establishes guidelines for physicians and nurses. This electronic pathway creates a standard of care and allows all sites affiliated with the Levine Cancer Institute (which include both hospital-based and smaller practices) to offer the same oncology services as the larger centers.

This seamless approach benefits patients. "We've made it much easier for people who live in rural locations and are not able to get to the main building the benefit from a comprehensive cancer program approach," said Dr. Raghavan.

The main benefit to patients is that they can receive high-quality care in their home community. For staff, the electronic pathway establishes standard of care and evidencebased approaches for treatment, and also allows providers to receive guidance from their own team at separate locations. This process works well for tumor boards; physicians in more isolated locations can use the electronic pathway and virtual tumor boards to present their case to other physicians and experts off-site to discuss the complexities of the case.

In addition to medical and/or radiation oncology services, all cancer institute locations have navigators, dietitians, and patient support services. Patients at most sites also have access to palliative care physicians. For smaller locations not built to host additional tenets of care, such as pain management or genetic counseling, telehealth technology allows Levine to conduct virtual counseling, connecting patients to the specialists or providers they need off-site.

Access to Clinical Trials

Levine offers clinical trials to patients at the majority of its locations. A systemwide bio-repository, electronic capabilities to register patients centrally, and trained data managers and research nurses make the robust clinical trials program possible. A chief pharmacist oversees the process system-wide and a chief systems nurse ensures the quality of care and standardizes all operating procedures.

A Patient-Centered Design

The facilities management team of Carolinas HealthCare have tried, wherever possible, to replicate the design and feel of the large Levine Cancer Institute building in Charlotte at the smaller locations and units. The design aesthetic features paneled wood with large glass windows to let in the maximum amount of natural light. For example, the chemotherapy suite of 80 chairs at the main location in Charlotte is located on the fourth floor of the building and has skylights installed in the roof to increase natural lighting and reduce the feeling of being in a large, institutional facility. "We spent a lot of effort trying to make our center pleasant for people, understanding how tough it is to be dealing with cancer, and we've tried to create the feeling of more a hotel space," said Dr. Raghavan.

System-wide, Levine Cancer Institute treats about 16,000 new patients per year. An influx of quaternary referrals and patients seeking second opinions has necessitated the design and construction of a new cancer care building; to go in next to the current 180,000-squarefoot facility.

In designing the new building, staff, patients, and Patient and Family Council members gave input to ensure the new facility design would reflect the highest comfort level for patients. The new 250,000-square-foot building is slated to open in July 2018.

Department of Supportive Oncology

Dr. Raghavan and his team have created a Department of Supportive Oncology led by Declan Walsh, MD, Chair of Medical Support Services, formerly head of palliative medicine at the Cleveland Clinic. This department aims to create a continuum between active treatment and palliative and/or supportive care.

"We have a large number of people who are focused on supporting families, providing symptom control...making sure that there's an integration of palliative medicine into the electronic pathway," said Dr. Raghavan. Other care services housed in this department include cancer rehabilitation, survivorship care, behavioral health, psychological support, and integrative medicine.

"For the supportive care group, part of its focus is support of advanced disease, palliative care, and integration with hospice. And part of its focus is supporting people through survivorship," said Dr. Raghavan.

Experienced oncology nurse navigators handle survivorship care, helping patients transition out of active treatment and addressing questions or concerns.

Rural Outreach: Mobile Lung Screening Unit

As a Safety Net organization, Levine Cancer Institute provides care to a significant amount of low-income, uninsured, and vulnerable patient populations. The program has created several innovative ways to reach and treat these populations.

For example, North Carolina in particular has a high smoking rate and the cancer institute has a large number of rural patients in its catchment area. Levine Cancer Institute teamed up with Samsung to build a mobile, low-dose CT scanning unit to offer free lung cancer screening. A grant from the Bristol-Myers Squibb Foundation helped pay for the cost of the van and of staffing the mobile unit.

The mobile unit allows providers to travel to geographically isolated patients and/or rural, indigent patients lacking reliable transportation. The goal, according to Dr. Raghavan, is to screen for lung cancer and treat the disease in the early stages, in the hopes of avoiding the cancer spreading through the patient's body and resulting in more expensive treatment for the community at large.

Before driving the mobile unit out to areas of need, Levine providers go in and personally meet with the primary care physicians (PCPs) and family practice



physicians in the area. This way, community PCPs are aware that the free screening is being offered locally and are educated about the benefits and drawbacks of that screening. Engaging local providers empowers them to identify appropriate patients for screening. In addition to this provider-to-provider interaction, Levine Cancer Institute promotes its mobile unit through local advertisements.

If the screening results in a suspicious finding, Levine Cancer Institute staff notify the local physician and then offer to manage the care of the patient free of charge. Nurse navigators handle all follow-up resulting from the screening. The mobile unit has the technology to send scans electronically to radiologists at the head office to perform the diagnostic work.

Planetree Designation

In January 2017, Levine Cancer Institute was named a "Planetree Designated® Patient-Centered Organization" joining only 31 healthcare providers in the U.S. and 81 world-wide to earn this designation. Additionally, Levine Cancer Institute is the only cancer network worldwide to achieve this distinction. The Planetree Designation recognizes excellence in person-centeredness across the continuum of care.

To achieve designation, Levine Cancer Institute hosted several site visits from Planetree, which included focus groups with patients, families, and staff to ensure specific patient-centered policies were in place. Planetree also evaluated Levine Cancer Institute's performance on patient satisfaction and quality of care measures.

According to Planetree, "More than 50 specific criteria address components of a patient-centered healthcare experience, including patient-provider interactions, access to information, family involvement, the physical environment, food and nutrition, spirituality, arts and entertainment, and integrative therapies. In addition, the criteria focus on how the organization is supporting its staff, opportunities for staff, patients, and families to have a voice in the way care is delivered, and the ways that the organization is reaching beyond its walls to care for its community."

Since Levine Cancer Institute was also the first time Planetree designated an outpatient center, Dr. Raghavan and his team said the experience was one of mutual learning: "we taught them about outpatients, they taught us about their approach to patient-centric care."

Select Supportive Care Services

- Dietitian
- Hospice
- Social workers
- Navigation
- Palliative Care
- Genetic Counseling