PUBLIC REPORTING OF OUTCOMES STANDARD 1.12 LLUMC 2017

In 2017, Loma Linda University Medical Center continued to move forward with the expansion of the Loma Linda University Cancer Center (LLUCC) to provide whole person care for cancer patients in the Inland Empire. We have expertise in all areas of cancer surgery, including robotics, minimally invasive surgery, organ-preserving surgery, neurosurgical oncology, urologic oncology, orthopedic oncology, head/neck oncology, gynecologic oncology, thoracic oncology, and complex surgical oncology (HIPEC, hepatectomy, multivisceral organ resection, etc). We are also a leader in radiation oncology, offering all important radiation modalities, including the most experience of any center in the world in proton therapy for cancer. We also provide world class medical oncology services, including targeted therapies, immunotherapy, both pediatric and adult bone marrow transplantation, integrated palliative care, and subspecialty expertise in all areas of cancer. We also provide state of the art non-invasive diagnostic and therapeutic cancer techniques, including all interventional pulmonology, interventional gastroenterology, and interventional radiology services. In addition, we also make available the latest in cancer imaging and molecular diagnostics to complement our targeted approach to cancer treatment. Perhaps most important is the way that the Cancer Center ties all of this expertise together and provides navigators to guide patients through it.

In addition to our expertise in diagnosing and treating cancer, we also provide a wide array of important cancer support services. These include the Cancer Resource Center, cancer nutrition services, oncology financial counseling, psycho-oncology services, lymphedema services, and the new Neuropathic Therapy Center. These survivorship programs help patients to not only survive cancer, but to thrive beyond it.

As important as cancer treatment and support are, early detection and cancer prevention are truly the hallmarks for reducing and eliminating the scourge of cancer. Loma Linda University has long been a world leader in understanding how lifestyle changes can prevent cancer through the NCI-funded Adventist Health Studies. We also offer sophisticated and mature genetic risk assessment and counseling programs for specific cancers. In addition, we sponsor a formal screening program for lung cancer that has been shown to save the lives of high risk patients.

On the educational front, the Cancer Center is training the next generation of cancer professionals for our region. Research shows that most cancer professionals stay and work near where they were trained rather than moving here after training elsewhere. This is why we are so passionate about training in the Cancer Center. We have mature accredited fellowships in each of the "Big 3" oncology specialties: Medical Oncology, Radiation Oncology, and Surgical Oncology. To put this in perspective, we are only one of two Cancer Centers West of the Mississippi River that has accredited fellowships in all three of these specialties. In addition, we also have accredited training programs in oncology nursing, oncology pharmacy, psycho-oncology, and radiation technology, and are developing fellowship programs in Gynecologic Oncology and Palliative Medicine.

We are also developing and supporting Shared Core Facilities. Some examples include the newly-created Institute for Genetics and Translational Genomics, the Biospecimen Repository, the Bioinformatics Core, the Center for Imaging Research, the Flow Cytometry Core, the Advanced Imaging and Microscopy Core, the Particle Therapy Core, the Animal Care Facility Core, and a Patient-derived Xenograft Core. All of these Shared Core Facilities support cancer research and its translation into the clinic.

Lastly, Clinical Research is a critical part of all strategies for translation of scientific findings into new treatments for cancer. There are more than 75 active clinical trials in the Cancer Center, and more than 1000 patients are enrolled in these trials each year. We are particularly focused on the development of more early-phase and investigator-initiated trials in order to translate exciting scientific discoveries into the clinic more quickly.

Standard 4.2 Screening Programs: Colorectal screening kits (FIT) were handed out at the Celebration of Life program on June 4, 2017. LLUCC offered colorectal screening for free during the event which correlates with the Cancer Committee's identifying colorectal screening as a need for our community. The American Cancer Society and the CDC recommend colorectal screening and both have evidenced-based national and intervention guidelines.

Dr. Magi Senthil attended the Celebration of Life event to hand out the FIT test and to counsel each individual taking the test. The following process was used: 1) Individual choses to use the FIT test, 2) Dr. Senthil gave each person instructions on how to use the test, 3) Each person was given a letter to send back to LLUCC regarding their results, 4) Each person was asked to write down their name and contact information for follow-up, 5) LLUCC received the letters and contacted Dr. Senthil to follow-up with anyone with a positive result, 5) Phone calls were made to each individual given a FIT test.

Data showed that 36 FIT tests were given out at the Celebration of Life event on June 4, 2017 and each individual was given instructions how to use the kit and how to report their result via letter. Dr. Senthil received 0 responses back by letter. All 36 individuals received follow-up calls.

Standard 4.4 Accountability Measures: LLUMC Cancer Committee reviews the Cancer Program Practice Profile Reports (CP³R) for compliance to nationally accepted measures for the quality of patient care for breast, colon and rectal cancer. The National Cancer Database released 2015 data in October 2017. Colon and Rectal Cancer Measure include: 1) preoperative chemo and RT are administered for clinical AJCC T3N0, T4N0, or stage III – CoC Standard 85% - LLUCC 100%, 2) At least 12 regional lymph nodes are removed and pathologically examined for resected colon cancer – CoC standard 85% - LLUCC 100%. Breast measures 1) Radiation is considered or administered following mastectomy within 1 year of diagnosis – CoC Standard 90% - LLUCC 66.7% (reason for non-compliance – only 6 cases qualified for this measure, 4 cases were concordant but 2 cases has RT started more than 365 days following diagnosis. 2) Radiation is administered within 1 year of diagnosis for women under the age of 70 receiving breast conservation surgery – CoC standard 90% - LLUCC 90%. 3) Tamoxifen or aromatase inhibitor is considered or administered within 1 year for women under 70 with AJCC stage T1c or stage IB-III hormone receptor positive – CoC standard 90% - LLUCC 73.8% (reason for non-compliance – out of 66 cases, 50 were concordant, 5 cases HT started was started more than 365 days of diagnosis and 11 cases have letters sent out to receive more information.