



New Technology Aids Physicians in Detecting Lung Cancer Earlier

New technology and offering the latest advancements in diagnosis and treatment are very important in delivering the highest level of quality care. At McLeod, physicians and staff often approach the McLeod Foundation to fund a project or piece of equipment that will make a critical difference in the

care provided to patients.

Two physicians recently presented a request to the Foundation for a new form of technology in the diagnosis and treatment of lung cancer. The tool was approved and funded by the Foundation's Board of Trustees.

The physicians, Dr. Bill Hazelwood, a lung cancer survivor and

McLeod Hospitalist, and Dr. Vinod Jona, a Pulmonologist with Carolina Health Care, are excited about this new capability to detect lung cancer in its earliest and most treatable stage.

The new technology allows physicians to make a diagnosis sooner in patients with hard to reach lung lesions.

The inReach System software provides a three-dimensional virtual "roadmap" of the lungs for Dr. Jona as he guides catheters with standard bronchoscopes to reach the targeted lesion.

The inReach™ System by superDimension provides electromagnetic navigation and guidance to distant regions of the lungs in a minimally-invasive manner, enabling physicians such as Dr. Jona to locate, test and plan treatment for lung lesions and lymph nodes that are difficult to access with traditional bronchoscopy.

McLeod Regional Medical Center is one of only three hospitals in South Carolina, and the only hospital in the 12-county region McLeod serves, to provide this important new advancement in the early detection of lung cancer.

Drs. Jona and Hazelwood worked closely with the McLeod Foundation to help raise the \$148,000 needed to cover the cost of this technology. During the Ninth Annual Cancer Benefit Dinner, An Evening of Hope, held in October, Dr. Hazelwood shared information on the inReach System™ by superDimension and its importance to early detection of lung cancer. He also told his personal story of being diagnosed with lung cancer a couple of years ago and how this new technology could have made a difference in his diagnosis by preventing a trip to a hospital away from home.

"With the assistance of the McLeod Foundation, we are pleased to offer our patients this technology that allows us to biopsy suspicious areas in the lungs that were previously hard to reach and potentially offer patients more conclusive diagnoses," said Dr. Jona.



Similar to Global Positioning System (GPS) technology, the inReach System provides a three-dimensional virtual "roadmap" of the lungs, generated from CT images. Once the patient's lungs have been mapped, Dr. Jona uses inReach guiding catheters with standard bronchoscopes to reach the targeted lesion.

"Because the system is minimally-invasive, it enables us to safely diagnose patients whose medical conditions don't allow us to perform higher-risk surgical procedures," added Dr. Jona.

Prior to the purchase of this new technology, patients experiencing symptoms of lung disease or those who had suspected lesions were examined and treated with standard bronchoscopes, needle aspiration, or surgery. By providing electromagnetic navigation, the inReach System increases the chances that a patient will safely receive a diagnosis and begin treatment. In addition, inReach allows access to lesions that the bronchoscope could not reach and enables cancer staging in the lymph nodes.

Lung cancer is the most common cancer-related death in American men and the second most common in women, claiming more lives than

breast cancer, prostate cancer and colorectal cancer combined. Early detection of cancer is documented to be critical. According to the American Cancer Society, the five-year survival rate for those whose lung cancer is found when it is localized is nearly 50%.

In addition, the inReach System has the potential to help reduce the mortality rate for lung cancer by helping physicians diagnose and recommend treatment for the disease in its early stages.

"This new technology is very important to me and the patients I treat," explained Dr. Jona. "It directly impacts our ability to save lives in this region of South Carolina through early detection of lung cancer. The diagnosis of lung cancer, which is often not caught until the disease has progressed significantly, can have a devastating affect on patients and their families. Finding the cancer in its earliest phase significantly increases chances of survival.

"And, for me, that is the ultimate goal. I want to either rule out lung cancer or diagnosis it at the earliest stage possible so my patients can go on with their lives."



Dr. Vinod Jona and Dr. Bill Hazelwood presented a request to the McLeod Foundation for the inReach System by superDimension, a new form of technology in the diagnosis of lung cancer.