The physicians and staff work hard to ensure safe, quality care is delivered for all patients seen at Rutherford Regional Medical Center as well as the outpatient programs and physician practices that make up Rutherford Regional Health System. This is accomplished in many ways including: focus groups such as the Falls Team with the goal of reducing inpatient falls, and standing committees such as the Patient Safety and Clinical Quality Committee that reviews quality indicators on an ongoing basis and makes changes needed to make sure excellent care is given to every patient every time.

Another way we make sure we provide quality care is to perform studies to ensure our practice follows established national guidelines for treatments. In 2016, we performed a study to see if we were following the National Comprehensive Cancer Network (NCCN) and American College of Chest Physicians (ACCP) guidelines for appropriate staging of Stage IV non small cell lung cancer patients. The NCCN is a not for profit alliance of leading cancer centers that works to standardize the treatment of various cancers with a rigorous review of literature and experts. By establishing treatment guidelines, it allows all hospitals and physicians the ability to provide up to date cancer care and treatment. These results were presented and presented to Cancer Committee, a group of physicians, nurses, and support staff that all work together to provide the best cancer care for the patients of Rutherford County.

Stage IV non-small cell lung cancer patients are those diagnosed with lung cancer that has spread beyond the lungs into other areas of the body. When cancer has spread to other parts of the body, it becomes more difficult to treat.

When patients are diagnosed with cancer, they often undergo staging studies. These studies often include CT scans, MRI, and PET scans. In an effort to standardize the reporting of findings on these exams, the NCCN makes specific recommendations. One recommendation to help with the appropriate staging of stage IV lung cancer, is that the radiology report discusses the presence or absence of disease in the liver and adrenal glands on the initial lung CT. Non small cell lung cancer is the most common type of cancer involving the lungs. I underwent a review of all stage IV lung cancer imaged at RRHS during 2014 and 2015 with attention to two things: 1) if there was evidence that the lung cancer had spread to the liver or adrenals gland, did the radiologist see that disease and 2) if there was no evidence of disease, did the radiologist specifically report the absence of disease in the liver and adrenal glands. In addition to the initial lung CT, I also evaluated any other staging studies including PET scans and abdomen/pelvis CT scans. We had a total of 39 cases with 60 exams reviewed.

During the review, there were no cases in which disease was evident in the liver or adrenal glands and not discussed (no "missed cases"). This of course is the most important factor. However, there were many cases where the report failed to specifically address the liver and adrenal glands. For example, if the report read "The upper abdomen is free from abnormality", this was considered a failure. One could argue that since the liver and adrenal glands are in the upper abdomen, by default, they have no abnormality. The NCCN and ACCP guidelines however state that the liver and adrenal glands need to be reported on individually. An appropriate statement may read "The visualized portions of the liver and adrenal glands are free from abnormality". Our reports now comment on the liver and adrenal glands specifically.

This was a good study for two reasons. It validated our quality by demonstrating no missed cases of adrenal or liver disease in stage IV lung cancer patients and it helped us ensure that we are following national guidelines for the reporting of these patients.

Too many patients with non small cell lung cancer (NSCLC) present with stage IV disease. Perhaps as many as 40% of people with NSCLC have stage IV disease. When someone is diagnosed with stage IV NSCLC, their five year survival rate is less than 10%.

What can be done to decrease the amount of stage IV disease? First and foremost, reducing the number of people that smoke tobacco will dramatically reduce the number of lung cancers that occur. Although people who never smoke can develop lung cancer, the risk of getting lung cancer (and a myriad of other diseases including a stroke, abdominal aneurysm, and heart disease) is significantly increased with tobacco use. Reduce the number of smokers and we reduce the number of stage IV lung cancer. We have a wonderful smoking cessation program offered at RRHS which can assist individuals quit smoking.

Early detection is another way to reduce the number of stage IV lung cancer. This can be accomplished with lung cancer screening using a special low dose CT scan designed to detect lung cancer before it spreads to other parts of the body. If you are a smoker or quit within the last 15 years, are between the ages of 55 and 77, and have at least a 30 pack year history of tobacco use (an average of one pack a day for 30 years), talk to your doctor about obtaining a low dose lung cancer screening CT scan. Often, on the day of your CT scan, you can meet with one of our smoking cessation specialists to see what options are available to help you quit smoking. If you have questions concerning the RRHS smoking cessation program, please call 828-286-5446.

Thank You,
Dr. Luther Person
Department of Radiology
Rutherford Regional Hospital