General Guidance

CDC and the American College of Radiology® (ACR®) recommendations and state/local government requirements caused most imaging facilities to delay non-urgent and elective imaging studies during the initial phase of the COVID-19 pandemic. Now, during reopening phases, governments, hospitals, and health centers are planning for and resuming necessary medical care. Although your practice or department plans may vary due to government mandates, COVID-19 disease patterns, and institutional policies, most radiology practices are taking a tiered approach to returning to routine imaging care.

The ACR has published a recommended four-tiered plan, in which lung cancer screening (LCS) falls into Tier 3 — Elective Care and Screening. A recent consensus article temporarily delayed LCS with case-specific follow-up during heightened phases of the pandemic. However, delays in lung cancer diagnosis and treatment result in worsened overall patient outcomes, and the National Comprehensive Cancer Network (NCCN) has emphasized that patients with Clinical Stage IA2 to IIB lung cancer should be considered “urgent” for surgical planning purposes. It may be reasonable to consider LCS and recommended follow-up as Tier 2 — “Time-sensitive” Care that should resume earlier during care reactivation.

Although LCS resumption may vary based on available local resources, institutional policies and government mandates, there are two essential and common themes:

1 Patient and Staff Safety

Patients at high risk for lung cancer may also be at risk for, and fearful of, complications from COVID-19 infection. You should consider individual factors such as age, gender, race or associated comorbidities when planning care resumption. Care reactivation should occur in accordance with local policies and procedures designed to ensure the welfare and safety of all patients and staff. Before resuming an LCS program, you should address patient concerns about re-entering the healthcare system and fully communicate your safety protocols. Patient inclusion in the development of protocols and communication methods are considered best practice in patient- and family-centered care.

2 Patient Prioritization Using Lung Cancer Risk

LCS programs restarting services should begin with patients known to be at highest risk for lung cancer. You may include the following in prioritizing patient return:

- **Priority 1:** Patients with previous Lung-RADS® Category 3 or 4 results overdue for their recommended interval CT follow-up exams.
- **Priority 2:** Patients with previous Lung-RADS® Category 1 or 2 results overdue for their recommended annual LCS.
- **Priority 3:** Patients with previous Lung-RADS® Category 1 or 2 results currently due for their recommended annual LCS.
- **Priority 4:** New patients in the LCS program.
Local Scenario Recommendations

To illustrate the potential for local variation, smaller practices or those in rural settings with low-volume, LCS programs may not need explicit patient prioritization. Similarly, larger LCS programs or those with extensive resources may use priority groups 1, 2, and 3 and some combination of delay time, a nodule risk calculator (such as the PanCan model), or a lung cancer risk prediction model (such as PLCoM2012 models) to prioritize high-risk patients. Risk prediction models can also be used to identify new patients at high risk (group 4) that may be at higher risk than those in group 3. For all practices, the newly expanded availability and reimbursement of telehealth shared decision-making visits may ease the referral of new patients to lung cancer screening.

Scenario 1: Small/Rural Lung Cancer Screening Programs

The COVID-19 pandemic creates challenges for small and rural practices that are not unique to LCS. Institutional requirements and government mandates may exacerbate already difficult LCS scheduling due to limited equipment and personnel. With a small LCS population to service, however, a prioritized reactivation strategy may not be necessary. Your LCS program revitalization and renewed messaging should ensure the safety of returning personnel and patients. Consider default scanning of outpatients on dedicated equipment not currently used by inpatients. Alternative strategies such as clustered scheduling of LCS patients early or late in the day (after appropriate disinfection protocols) may minimize the potential for COVID-19 transmission. Dedicated LCS scan periods during extended night or weekend hours may also minimize the potential for COVID-19 transmission, as well as reduce patient fears regarding re-entry into the healthcare system.

Scenario 2: Medium-sized Lung Cancer Screening Programs

Medium-sized LCS programs may be able to segregate outpatients from inpatients, with default referral of LCS patients to ambulatory-only settings. Emphasizing the return of patients overdue for recommended follow-up and then patients overdue for annual screens (priority groups 1 and 2 above) could minimize the effects of COVID-19-related delays. Dedicated LCS scanning sessions with clustered appointments or appointments during extended night or weekend hours could minimize the potential for COVID-19 transmission further reducing patient and staff concerns.

Scenario 3: Large Lung Cancer Screening Programs

Most large LCS programs can segregate outpatients from inpatients, with default referral of LCS patients to ambulatory-only settings. Based on the size of the patient population and the resources available to serve them, prioritizing patient return based on some variation of the priority groups and nodule and lung cancer risk stratification strategies listed above is recommended to minimize the effects of COVID-19-related delays on patients. It may be possible to dedicate specific scanners and personnel for LCS only. Dedicated LCS scan periods that may include appointments during extended night or weekend hours could minimize the potential for COVID-19 transmission, further reducing patient and staff concerns.

References