

CARDIAC PET AND PET/CT

Preparing your nuclear cardiac imaging lab during uncertain times



"For laboratories with access to myocardial perfusion PET, this modality is preferred"

Link: [ASNC, IAEA, SNMMI Information Statement](#)

BENEFITS OF PET MPI

Minimizing the risk of COVID-19

Shorter study time reduces exposure time

Maintains safe distance between patients and healthcare workers

Hands-off monitoring with automatic equipment allows for distancing

Avoids exercise stress testing as exercise increases the risk of droplet exposure

PET block scheduling reduces patient-to-patient and patient-to-staff exposure

Ability to review CT attenuation correction data, when applicable, for possible COVID-19 subsequent findings

Higher diagnostic accuracy will help mitigate the need for additional testing

Preparing your practice

COVID-19, or the Coronavirus, has been the source of widespread concern across the country. This is a severe illness for those with a compromised immune system such as the elderly or those with pre-existing conditions that deplete the body's natural immunity, *putting cardiac patients at high-risk*. There are many preventative measures we can take to keep our patients and clinics healthy.

As the demand for cardiac diagnostics for emergent patients widens, clinics are focused on providing testing in the safest and most effective way possible for the benefit of patients and healthcare workers. Cardiac PET imaging offers a unique advantage over all other traditional in-office based modalities, when considering these concerns, by offering a shortened overall test time, reduced staff-to-patient interaction, procedural distancing with remote monitoring devices, and increased accuracy over traditional alternatives to mitigate additional testing.

Protecting your patients and colleagues

Cardiology facilities are adapting to updated best practices to keep their patients and clinics safe while continuing to provide exceptional healthcare to those in need. Facilities need to take steps to prepare and protect both their patients and staff by minimizing exposure doing the following:

- Add layers of protection, pre-screen your patients by phone prior to their appointment, screen patients and visitors upon arriving at your facility, and again at the front desk. Ask and check for fever, coughing, or difficulty breathing. We can slow the spread by canceling patients that have symptoms of acute respiratory illness - ***before they ever enter your healthcare facility.***
- Consider eliminating all treadmill based stress testing during this time. COVID-19 is thought to spread from person-to-person via respiratory droplets among close contacts and exercise stress testing significantly increases the likelihood of exposure. Pharmacologic stress testing, used exclusively with Rb-82 cardiac PET imaging, avoids exercise, reducing the risk of droplet exposure.

The nature of the scan minimizes the patient path through the clinic.

- Cardiac PET requires one 35-40 minute interaction to complete the entire procedure. Patients are fully imaged (rest and stress) without leaving the scan room.
- The procedure can be block-scheduled in one-hour increments to reduce patient-to-patient interaction in the waiting, common, and scan areas.
- PET scanning provides increased accuracy over other traditional in-office based modalities, typically reducing the need for additional testing.
- PET scanning allows for hands-off monitoring through the use of remote EKG and automatic blood pressure systems that allow for distancing during the procedure.
- Cardiac SPECT, although a good test, requires healthcare workers and patients to closely interact 3-5 times over the 3-4 hour procedure. Patients are routinely overlapped, making it very difficult to accommodate social distancing and disinfection requirements.
- Current best practices recommend disinfecting the work area or scan room after each patient interaction. 8 SPECT exams per day would require 32-40 area disinfections versus 8 disinfections for 8 cardiac PET exams. Each cardiac PET procedure is completed in one 35-40 minute encounter.
- SPECT imaging procedures require patients to have structured waiting periods multiple times throughout the procedure, typically 30-40 minutes each. Isolating these patients to meet social distancing requirements during these waiting periods can be difficult or near impossible for most clinics. With cardiac PET, this is not an issue. Healthcare facilities can schedule cardiac PET and PET/CT scans in one-hour time slots. Patients arrive hourly, do not interact with other patients, and the proximity to patients is minimal for healthcare workers.

1 Hour Block Scheduling = Patient Procedure Time: 35-40 Minutes | Cleaning Time: 20-25 Minutes