Non-invasive arterial studies (Pulse Volume Recording with Segmental Pressures, PVR, ABI’s)
This test is used to detect peripheral arterial disease (PAD). The test will check for adequate arterial blood flow and can assess the location and degree of insufficiency that a patient may have. Most commonly this test is performed on the legs; however the same test can be used in a similar way to check for arterial insufficiency in the arms, fingers, or toes depending on what your doctor orders. This test uses a combination of blood pressure cuffs and ultrasound doppler signals to produce waveforms tracings of the blood flow in the arteries. If the legs are being evaluated, blood pressure cuffs are applied to both arms and usually 3 or 4 on each leg. The cuffs are connected to the arterial testing machine. The machine inflates the cuffs as controlled by the sonographer and records information that is representative of the blood flow. Pressures are also obtained for each cuff using an ultrasound doppler probe. The information obtained is interpreted by a vascular surgeon and the report is sent to the ordering physician within 48 hours of the test being performed.