Preparing for Hemodialysis:
What is a Vascular Access?
What is Vein Mapping? Why do I need it?

Your kidney doctor has decided that you have advanced kidney disease and will need dialysis at some point in the future. In order to start on hemodialysis (on the kidney machine at a dialysis center or at home), you will need an ***access*** or a way for the dialysis treatments to be delivered. For hemodialysis, an access to your bloodstream will need to be created in order to "filter" or clean your blood of waste products or toxins during dialysis treatments. It is called a **vascular access** since it involves blood. "Vascular" means "blood."

The ***first step*** in getting a vascular access is having a special study that is called **Vein mapping** or **Vessel mapping**. You will receive an ultrasound study (that uses sound waves and no dye) to measure the blood flow in your blood vessels (arteries and veins) in your arms. No needles are involved in this test.

You will then be scheduled to see a surgeon at UNC to discuss the results of this study and to plan for your vascular access surgery. The first visit with the surgeon is to talk about the plan for surgery and then, the surgery will be scheduled in the near future.

The surgeon will try to put the vascular access (fistula or graft) in your non-dominant arm or the arm that you don't write with. If you are right-handed, he will try to put it in your left arm. If you are left-handed, he will try to put it in your right arm.
***Your non-dominant arm should NOT be used for IVs or blood drawing** at this point. It needs to be "saved" for your access placement or surgery.

There are 2 main types of permanent vascular access called **fistula** and **graft**. Both require an operation or surgery, usually done as an outpatient. A vascular access for hemodialysis should be placed several weeks (about 4 to 6 weeks) before it is time to start on hemodialysis to allow plenty of time for healing and to set up the right amount of blood flow for the dialysis machine. A temporary catheter (like an IV tube) can be placed in your upper chest for hemodialysis if needed until a permanent vascular access (fistula or graft) can be placed and is ready to use.