Patient Education
Special Procedures
What you should know about your **Angioplasty**.

**Purpose:**
An angioplasty is a procedure where a narrow or blocked blood vessel is reopened. A balloon catheter (a catheter with a small tightly deflated balloon on the end of it) is inserted into the narrowed or blocked blood vessel. The balloon is inflated slowly and carefully to try to open the narrowing to its original size. This will increase blood flow through the artery and may decrease the symptoms you are having. This procedure is used most often in the arteries of the pelvis, kidneys and smaller arteries in the arms and legs.

**Preparation:**
- Blood work will be drawn before the exam.
- You will be asked not to eat anything for six hours before the procedure.
- Staff will inform you if there are any medications you are currently taking that will need to be held prior to your procedure. Medicines that can be taken should be taken with clear liquids.
- X-ray dye will be needed to enhance your exam. If you are allergic to the x-ray dye you may need to be pre-medicated. You will be given a prescription for these medications prior to your procedure and the prescription will need to be filled at a WellSpan Pharmacy. Premedication consists of a combination of medications such as steroids and antihistamines (Benadryl), so please inform us if you can not take either of these medicines. Taking antihistamines can cause drowsiness so you will need someone to drive you to and from your appointment.
- You may be asked to remove some or all of your clothes and to wear a gown during the exam. You may be asked to remove watches, necklaces or earrings if they interfere with the exam.

**Procedure: What to Expect**
- You will be asked to verify your name, date of birth and exam you will be having done.
- We will take a brief medical history.
- Prior to signing the consent form to allow the exam, the radiologist will talk with you and your family about the exam and answer any questions you may have.
- You will be asked to lie on a table. Heart monitor patches will be placed on your chest to check your blood pressure and heart rate. You will be given IV fluids during your procedure.
- An area on your arm or groin area will be shaved and cleaned off with sterile solution and covered with sterile drapes. The staff will be wearing gowns and masks to help keep the procedure area clean to reduce the risk of infection.
- The area where the catheter will be placed will be numbed first at the skin level then deeper into the tissue. The radiologist will then make a small nick in your skin to allow entry of the needle. You will experience pressure, but no sharp pain. Please let the technologist or nurse know if you experience pain.
Angioplasty continued

- Once inside the artery or vein, the catheter is positioned for images and possible angioplasty. An injection of dye may give you a warm feeling. You may be asked to hold your breath and to not move while the images are being taken.
- The procedure normally takes about 90 minutes. Images are taken first to determine if angioplasty is needed. The radiologist decides if the narrowing can be fixed with the balloon catheter and may talk to your referring doctor at this time.
- If the radiologist decides the narrowing can be fixed, the balloon is inflated several times, 10-20 seconds each. The balloon is then deflated to re-evaluate the blood vessel.

After the Test:

- The balloon catheter is removed from the site in the arm or leg (area of entry) and pressure will be applied for 10-15 minutes to stop the bleeding.
- If you are a hospital patient, you will return to your room. If you are an outpatient you will be taken to the Short Stay Unit for recovery.
- You will need to keep the affected arm or leg straight with limited movement for four hours.
- Your activity will be limited for 24 hours after the procedure.
- You will need to have someone drive you home and be able to stay with you for 24 hours.
- Your exam will be evaluated by a radiologist and the report will be sent to your physician.

**Note** You will be exposed to ionizing radiation as part of the procedure. Women should always inform their physician or x-ray technologist if there is any chance of pregnancy.

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<td>(717) 851-4624</td>
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What you should know about your **Arteriogram**

**Purpose:**
An arteriogram views the arteries that supply the abdomen (belly), chest, kidneys, neck, brain, arms or legs.

**Preparation:**
- Blood will be drawn before the exam.
- You will be asked not to eat anything six hours before the procedure.
- You may take medicine with clear liquids.
- X-ray dye will be needed to enhance your exam. If you are allergic to the x-ray dye you may need to be pre-medicated. You will be given a prescription for these medications prior to your procedure and the prescription will need to be filled at a WellSpan pharmacy. Premedication consists of a combination of medications such as steroids and antihistamines (Benadryl), so please inform us if you can not take either of these medicines. Taking antihistamines can cause drowsiness so you will need someone to drive you to and from your appointment.
- You may be asked to remove some or all of your clothes and to wear a gown during the exam. You may be asked to remove watches, necklaces, or earrings if they interfere with the exam.

**Procedure: What to Expect:**
- You will be asked to verify your name, date of birth and exam you will be having done.
- We will take a brief medical history.
- Prior to signing the consent form to allow the exam, the radiologist will talk with you and your family about the exam and answer any questions you may have.
- You will be asked to lie on a table. Heart monitor patches will be placed on your chest to check your blood pressure and heart rate. You will be given IV fluids during your procedure.
- An area on your arm or groin area will be shaved and cleaned off with sterile solution and covered with sterile drapes. The staff will be wearing gowns and masks to help keep the procedure area clean to reduce the risk of infection.
- The area where the catheter will be placed will be numbed first at the skin level then deeper into the tissue. The radiologist will then make a small nick in your skin to allow entry of the needle. You will experience pressure, but no sharp pain. Please let the technologist or nurse know if you experience pain.
- Once inside the artery or vein, the catheter is positioned for images. An injection of dye may give you a warm feeling. The dye allows the radiologist to evaluate the vessels. You may be asked to hold your breath and to not move while the images are being taken.
Arteriogram continued

**After the Test:**

- The catheter will be removed from the artery in the arm or leg and pressure will be applied for 15-20 minutes to stop the bleeding.
- If you are a hospital patient, you will return to your room. If you are an outpatient you will be taken to the Short Stay Unit for recovery.
- You will need to keep the affected arm or leg straight with limited movement for four hours.
- Your activity will be limited for 24 hours after the procedure.
- You will need to have someone drive you home and be able to stay with you for 24 hours.
- Your exam will be evaluated by a radiologist and the report will be sent to your physician.

**Note** You will be exposed to ionizing radiation as part of the procedure. Women should always inform their physician or x-ray technologists if there is any chance of pregnancy.

**Imaging Department Phone Number:**
(717) 851-4624
What you should know about your **Biliary Tube Placement**.

**Purpose:**
A biliary catheter is a tube that goes through your skin and liver into your bile ducts. In some cases the bile drains out of your body into a drainage bag. In other cases the catheter drains the bile into the bowel and you do not need a bag outside. You may need a biliary tube for reasons such as blockage of the bile ducts, a hole in the bile ducts or preparation for surgery on the ducts.

**Preparation:**
- Blood work will be drawn before the exam.
- You will be asked not to eat anything for six hours prior to the procedure.
- You can take medicines with clear liquids.
- Antibiotics will be given through an intravenous (IV) catheter either in your hospital room or in the X-ray department before the procedure.
- X-ray dye will be needed to enhance your exam. If you are allergic to the x-ray dye you may need to be premedicated. You will be given a prescription prior to your procedure and the prescription will need to be filled at a WellSpan Pharmacy. Premedication consists of a combination of medications such as steroids and antihistamines (Benadryl), so please inform us if you can not take either of these medicines. Taking antihistamines can cause drowsiness so you will need someone to drive you to and from your appointment.
- You may be asked to remove some or all of your clothes and to wear a gown during the exam. You may be asked to remove watches, necklaces or earrings if they interfere with the exam.

**Procedure: What to Expect**
- You will be asked to verify your name, date of birth and the exam you will be having done.
- We will take a brief medical history.
- Prior to signing the consent form to allow the exam, the radiologist will talk with you and your family about the exam and answer any questions you may have.
- The exam will start with you either in the CT scanner or a specialized x-ray room. If started in the CT scanner you will eventually be moved to the x-ray room.
- Heart monitor patches will be placed on your chest to check your blood pressure and heart rate.
- You will be sedated to make you quite sleepy, but will still be able to hear what we say to you.
- The staff will be wearing gowns and masks to help keep the procedure area clean to reduce the risk of infection and there will be sterile drapes over you.
- The exam is started by locating an area between the ribs where the biliary tube can be placed by using either the CT scanner or ultrasound.
- That area is numbed heavily.
Biliary Tube Placement continued

- A very thin, long needle is passed through that area into the liver until the needle is in a bile duct.
- The needle in the duct is removed and the biliary tube is inserted to drain the bile. This may be uncomfortable and painful, but you will be sedated as much as possible.
- The radiologist moves the tube into position, and the biliary tube is secured to the skin.

After the Test:

- If you are a hospital patient, you will return to your room. If you are an outpatient you will be taken to the Short Stay Unit for recovery or it is possible that your doctor will want you to be admitted to the hospital overnight.
- The nurse from the x-ray department will check the tube sight and make sure it is secured to your skin.
- Before you leave, a nurse will give you and your family proper instructions on caring for the tube and bandage. Special care must be taken so that the tube stays in place.
- You will need to have someone drive you home and be able to stay with you for 24 hours.
- Your exam will be evaluated by a radiologist and the report will be sent to your physician.

**Note** You will be exposed to ionizing radiation as part of the procedure. Women should always inform their physician or x-ray technologist if there is any chance of pregnancy.

Imaging Department Phone Number:
717-851-4624
what you should know about your **chemoembolization**.

**Purpose:**
Chemoembolization allows a high-dose of cancer-killing drug (chemotherapy) to be delivered directly to a tumor. At the same time, the tumor’s blood supply is cut off by blocking (embolizing) the blood vessels that are feeding the tumor. Chemoembolization is most commonly used to treat tumors in the liver.

**Preparation:**
Before coming to the hospital:
- Blood work will be drawn before the exam.
- You will be asked not to eat anything for six hours before the procedure.
- Staff will tell you if there are to be any changes with medications you may already be taking. You can take medicine with clear liquids.
- X-ray dye will be needed to enhance your exam. If you are allergic to the x-ray dye you may need to be pre-medicated. You will be given a prescription for the medications prior to your procedure and the prescription will need to be filled at a WellSpan Pharmacy. Premedication consists of a combination of medications such as steroids and antihistamines (Benadryl), so please inform us if you can not take either of these medicines. Taking antihistamines can cause drowsiness so you will need someone to drive you to and from your appointment.

After arriving at the hospital:
- You will come to the Imaging Department the day of your procedure. Staff will inform you of the time you need to be there.
- You may be asked to remove some or all of your clothes and to wear a gown during the exam. You may be asked to remove watches, necklaces or earrings if they interfere with the exam.
- In the Imaging prep area, you may be given different medications to help get you ready for your chemoembolization.
- You will then be taken to a special treatment room in the Imaging Department where your exam will take place.

**Procedure: What to Expect**
- You will be asked to verify your name, date of birth and exam you will be having done.
- We will take a brief medical history.
- You will be asked to lie on a table. Heart monitor patches will be placed on your chest to check your blood pressure and heart rate. You will be given IV fluids during your procedure.
- Your groin area (where the thigh meets the abdomen or belly) will be shaved and cleaned off with sterile solution and covered with sterile drapes. The staff will be wearing gowns and masks to help keep the procedure area clean to reduce the risk of infection.
Chemoembolization continued

- The area where the tube will be placed will be numbed first at the skin level then deeper into the tissue. The radiologist will then make a small nick in your skin to allow entry of the needle. You will experience pressure, but no sharp pain. Please let the technologist or nurse know if you experience pain.
- A very small tube is then put into the large blood vessel in your groin.
- X-rays and dye injections are used to help the doctor see the blood vessels and the small tube.
- The tube is gently placed into the liver artery.
- At this point, the chemotherapy (cancer-killing) drugs and the embolic (blocking) liquids are put through the tube and into the liver tumor.
- You may be asked to hold your breath and to not move at different times throughout the exam.

After the Procedure:

- When the procedure is finished, the tiny tube will be removed and pressure will be applied for 15-20 minutes to stop the bleeding.
- You will then be taken to your hospital room.
- You can expect to spend at least one night in the hospital.
- You will need to keep the affected leg straight with limited movement for at least four hours.
- You will be given medications to help you with the side effects of your exam.
- Staff will be watching you closely to help you with your recovery.
- When you are ready to go home, the doctor may set up an appointment for a CT scan or MRI to check the progress of your chemoembolization.
- After a chemoembolization procedure, it is normal to have flu-like symptoms for up to a week. If these side effects get worse or last longer than one week, please call the doctor who did your procedure.
- You will need to have someone drive you home from the hospital and to stay with you for the day.
- Your exam will be evaluated by a radiologist and the report will be sent to your physician.

**Note** You will be exposed to ionizing radiation as part of the procedure. Women should always inform their physician or x-ray technologist if there is any chance of pregnancy.

Imaging Department Phone Number:
(717) 851-4624
What you should know about your **Filter Placement**.

**Purpose:**
A filter can be placed through a vein in your abdomen called the vena cava to catch pieces of a clot that may come from your leg veins.

**Preparation:**
- You will be asked not to eat anything for six hours before your exam.
- You can take medicine with clear liquids. You may not drink liquids in the last two hours before the exam.
- X-ray dye will be needed to enhance your exam. If you are allergic to the x-ray dye you may need to be pre-medicated. You will be given a prescription for these medications prior to your procedure and the prescription will need to be filled at a WellSpan Pharmacy. Premedication consists of a combination of medications such as steroids and antihistamines (Benadryl), so please inform us if you cannot take either of these medicines. Taking antihistamines can cause drowsiness so you will need someone to drive you to and from your appointment.
- You may be asked to remove some or all of your clothes and to wear a gown during the exam. You may be asked to remove watches, necklaces or earrings if they interfere with the exam.

**Procedure: What to Expect**
- You will be asked to verify your name, date of birth and the procedure you will be having performed.
- We will take a brief medical history.
- Prior to signing the consent form to allow the exam, the radiologist will talk with you and your family about the procedure and answer any questions you may have.
- The procedure takes about one hour.
- You will be asked to lie on a table. Heart monitor patches will be placed on your chest to check your blood pressure and heart rate.
- An area on your arm or groin area will be shaved and cleaned off with sterile solution and covered with sterile drapes. The staff will be wearing gowns and masks to help keep the procedure area clean to reduce the risk of infection.
- Tell the staff if you have any pain, because they can give you medicine to ease the pain.
- The area where the catheter will be placed will be numbed first at the skin level then deeper into the tissue. The radiologist will then make a small nick in your skin to allow entry of the needle. You will experience pressure, but no sharp pain. Please let the technologist or nurse know if you experience pain.
- You may feel a little pressure as the radiologist inserts the needle.
- A catheter (hollow tube) will be put into the blood vessel.
- X-ray dye will be injected into the catheter to locate the appropriate vessel. We will take images at the same time.
Filter Placement continued

- The filter will be placed into your vein and the catheter will be removed.
- The catheter is removed from the site in the arm or leg (area of entry) and pressure will be applied for 10-15 minutes to stop the bleeding.

After the Procedure

- If you are a hospital patient, you will return to your room. If you are an outpatient you will be taken to the Short Stay Unit for recovery.
- Very little activity is allowed for two to four hours immediately following the procedure.
- Your activity will be limited for 24 hours after the procedure.
- You will need to have someone drive you home and be able to stay with you for 24 hours.
- Your exam will be evaluated by a radiologist and the report will be sent to your physician.

**Note** You will be exposed to ionizing radiation as part of the procedure. Women should always inform their physician or x-ray technologist if there is any chance of pregnancy.

**Imaging Department Phone Number:**
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What you should know about your **Nephrostomy Tube Placement**.

**Purpose:**
A nephrostomy tube is placed through the skin of your back into your kidney to drain urine. In some cases, the tube drains urine outside of the body into a bag. In other cases, the tube drains urine into the bladder and there is no outside bag. You may need a nephrostomy tube for reasons such as blockage of the ureter (the tube that normally carries urine from the kidney into the bladder), a hole in the ureter, preparation for surgery or other procedures on the kidneys or ureters.

**Preparation:**
- Blood work will be drawn before the procedure.
- You will be asked not to eat anything for six hours before the procedure.
- You can take medicine with clear liquids.
- X-ray dye will be needed to enhance your exam. If you are allergic to the x-ray dye you may need to be pre-medicated. You will be given a prescription for these medications prior to your procedure and the prescription will need to be filled at a WellSpan Pharmacy. Premedication consists of a combination of medications such as steroids and antihistamines (Benadryl), so please inform us if you cannot take either of these medicines. Taking antihistamines can cause drowsiness so you will need someone to drive you to and from your appointment.
- You may be asked to remove some or all of your clothes and to wear a gown during the exam. You may be asked to remove watches, necklaces or earrings if they interfere with the exam.
- Antibiotics will be given through an intravenous (IV) catheter either in your hospital room or in the X-ray department.

**Procedure: What to Expect:**
- You will be asked to verify your name, date of birth and exam you will be having done.
- We will take a brief medical history.
- Prior to signing the consent form to allow the procedure, the radiologist will talk with you and your family about the exam and answer any questions you may have.
- You must lay on your belly for this procedure. Heart monitor patches will be placed on your chest to check your blood pressure and heart rate.
- The exam will start with you either in the CT scanner or a specialized x-ray room. If started in the CT scanner you will eventually be moved to the x-ray room.
Nephrostomy Tube Placement continued

- The procedure will last about 90 minutes. You will be sedated to make you quite sleepy, but will still be able to hear what we say to you.
- The staff will be wearing gowns and masks to help keep the procedure area clean to reduce the risk of infection and there will be a sterile drape over you.
- The exam is started by finding an area where the tube can be placed by using CT scanner or ultrasound as guidance.
- That area is numbed heavily.
- A very thin long needle is passed through your back into the kidney.
- The needle in the duct is removed and the nephrostomy tube is inserted. This may be uncomfortable and painful, but you will be sedated as much as possible.
- The radiologist moves the tube into position, and it is secured to the skin.

After the Test:

- If you are a hospital patient, you will return to your room. If you are an outpatient you will be taken to the Short Stay Unit for recovery.
- The nurse from the x-ray department will check the tube sight and make sure it is secured to your skin.
- Before you leave, a nurse will give you and your family proper instructions on caring for the tube and bandage. Special care must be taken so that the tube stays in place.
- You will need to have someone drive you home and be able to stay with you for 24 hours.
- Your exam will be evaluated by a radiologist and the report will be sent to your physician.

**Note** You will be exposed to ionizing radiation as part of the procedure. Women should always inform their physician or x-ray technologist if there is any chance of pregnancy.

Imaging Department Phone Number:
(717) 851-4624
What you should know about your **PICC Line Insertion**.

**Purpose:**
A PICC line (Peripherally Inserted Central Catheter) allows medications to be given and blood drawn without a needle stick each time. It is designed for long-term use. (This procedure may be performed by WellSpan York Hospital Imaging Department or WellSpan York Hospital IV Team.)

**Preparation:**
- You can take medicine.
- You may be asked to remove some or all of your clothes and to wear a gown during the procedure. You may be asked to remove watches, necklaces or earrings if they interfere with the exam.

**Procedure: What to Expect**
- You will be asked to verify your name, date of birth and procedure you will be having done.
- We will take a brief medical history.
- You will be asked to lie on a table.
- The PICC will be done by using x-ray and ultrasound guidance.
- You will be given some numbing medicine at the PICC line insertion site.
- The PICC line will be inserted and positioned.
- We will save one image to record the position of the PICC line.
- A bandage will be placed over the PICC line.

**After the Test:**
- You may resume your normal activity.
- A nurse or technologist will give you instructions on the care of your PICC line.

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**Imaging Department Phone Number:**
(717) 851-4624
What you should know about your **Radiofrequency Ablation**.

**Purpose:**
Radiofrequency Ablation (RFA) is a procedure that uses heat to treat disease. This procedure is most commonly used to treat liver tumors, but can also be used to treat tumors in the kidney or lung. RFA treats a targeted area of tissue (the tumor) without harming healthy tissue surrounding the tumor.

**Preparation:**
Before coming to the hospital:
- Blood work will be drawn before the exam.
- Staff will tell you if there are to be any changes with medications you may already be taking.
- You will be asked not to eat anything for six hours before the procedure.
- You can take medicine with clear liquids.
- X-ray dye will be needed to enhance your exam. If you are allergic to the x-ray dye you may need to be pre-medicated. You will be given a prescription for these medications prior to your procedure and the prescription will need to be filled at a WellSpan Pharmacy. Premedication consists of a combination of medications such as steroids and antihistamines (Benadryl), so please inform us if you can not take either of these medicines. Taking antihistamines can cause drowsiness so you will need someone to drive you to and from your appointment.

After arriving at the hospital:
- You will need to go to an area of the hospital called the Short Stay Unit (SSU).
- You may be asked to remove some or all of your clothes and to wear a gown during the exam. You may be asked to remove watches, necklaces, or earrings if they interfere with the exam.
- You will be in the SSU for about two hours before your procedure.
- While in the SSU, you will be given different medications through an intravenous (IV) line. These medications are to help you get ready for your RFA.
- You will then be taken to a special treatment room in the Imaging Department where your exam will take place.

**Procedure: What to Expect**
- You will be asked to verify your name, date of birth and exam you will be having done.
- We will take a brief medical history.
- Prior to signing the consent form to allow the exam, the radiologist will talk with you and your family about the exam and answer any questions you may have.
- The radiologist will decide the best way to see the tumor by using ultrasound or CT scan, along with x-ray.
Radiofrequency Ablation continued

- You will be asked to lie on a table. Heart monitor patches will be placed on your chest to check your blood pressure and heart rate.
- The groin area where the tumor lies will be cleaned and covered with drapes. The staff will be wearing gowns & masks to help keep the procedure area clean to reduce the risk of infection.
- You will be sedated to make you quite sleepy, but will still be able to hear what we say to you.
- The area where the tumor lies will be numbed first at the skin level then deeper into the tissue. The radiologist will then make a small nick in your skin to allow entry of the needle. You will experience pressure, but no sharp pain.
- A special thin needle is placed through the skin. The radiologist will use CT scan or ultrasound as a guide to help place the needle into the tumor.
- Once the needle is in the correct place, heat is delivered through the needle directly into the tumor.
- The radiologist can control the temperature of the heat.
- After the tumor has been treated, the needle is taken out and a bandage is placed on the skin.

After the Test:
- If you are a hospital patient, you will return to your room. If you are an outpatient you will be taken back to the SSU.
- You will stay in the SSU for about four hours. Staff will be watching you closely to help with your recovery.
- You will be given medications to help you with the side effects of your RFA.
- When you are ready to go home, a nurse will go over some directions for you to follow over the next few days.
- The physician may also set up an appointment for you to have a CT scan to check the progress of your RFA.
- You will need to have someone to drive you home from the hospital. You should also have someone to stay the night with you.
- Your exam will be evaluated by a radiologist and the report will be sent to your physician.

**Note** You will be exposed to ionizing radiation as part of the procedure. Women should always inform their physician or x-ray technologist if there is any chance of pregnancy.

**Imaging Department Phone Number:**
(717) 851-4624
What you should know about your *Uterine Fibroid Embolization*.

**Purpose:**

Uterine Fibroid Embolization (UFE) is a procedure used to treat noncancerous (benign) growths in the wall of the uterus. This procedure involves using tiny plastic particles (the size of a grain of sand) to block (embolize) blood flow to these growths. When the blood flow to the fibroid is blocked, the fibroid shrinks.

**Consult:**
- Prior to being scheduled for an UFE, you will meet with an interventional radiologist to determine if the procedure is right for you.
- One of our radiologists will sit down with you and go over your medical history.
- If the radiologist thinks a UFE would be a good treatment for you, he may want you to have an MRI if you haven’t already had one.
- After the radiologist looks at your MRI, if he/she still feels a UFE would be good for you, an appointment will be made for your uterine fibroid embolization.

**Preparation:**

**Before coming to the hospital:**
- Blood work will be drawn before the exam.
- You will be asked to not eat anything for six hours before the procedure.
- You may have only clear liquids up to three hours before your procedure.
- You can take medicine with clear liquids.
- X-ray dye will be needed to enhance your exam. If you are allergic to the x-ray dye you may need to be premedicated. You will be given a prescription for these medications prior to your procedure and the prescription will need to be filled at a WellSpan Pharmacy. Premedication consists of a combination of medications such as steroids and antihistamines (Benadryl), so please inform us if you can not take either of these medicines. Taking antihistamines can cause drowsiness so you will need someone to drive you to and from your appointment.
- Staff will tell you if there are to be any changes with medications you may already be taking.
- Staff will also talk with you to give you more directions and also prescriptions that you will need to get filled before your UFE. You will need these medications when you get home from the hospital.

**After arriving at the hospital:**
- You will need to go to an area of the hospital called the Short Stay Unit (SSU).
- In the SSU, you may be given different medications to help get you ready for your UFE. These medications are given through an intravenous (IV) line.
Uterine Fibroid Embolization continued

- You will then be taken to a special treatment room in the Imaging Department where your procedure will take place.

Procedure: What to Expect
- You will be asked to verify your name, date of birth and exam you will be having done.
- We will take a brief medical history.
- Prior to signing the consent form to allow the procedure, the radiologist will talk with you and your family about the exam and answer any questions you may have.
- You will be asked to lie on a table. Heart monitor patches will be placed on your chest to check your blood pressure and heart rate.
- An area on your groin (where the thigh meets the abdomen or belly) will be shaved and cleaned off with sterile solution and covered with drapes. The staff will be wearing gowns and masks to help keep the procedure area clean to reduce the risk of infection.
- The area where the small tube will be placed will be numbed first at the skin level then deeper into the tissue. The radiologist will then make a small nick in your skin to allow entry of the needle. You will experience pressure but no sharp pain. Please let the technologist or nurse know if you experience pain.
- A very small tube is then put into the large blood vessel in your groin.
- The radiologist then guides this tube through your blood vessels to the uterine artery. The radiologist uses x-ray and dye injections to watch the tube travel through the blood vessels.
- Once the tube is in the correct place, the radiologist will insert tiny plastic particles through the tube and into the blood vessels. This cuts off blood flow to the fibroid(s) and causes it to shrink.
- You may be asked to hold your breath and to not move at different times throughout the procedure.
- When the procedure is finished, the tiny tube will be removed and pressure will be applied for 10-15 minutes to stop the bleeding.

After the Test:
- After your procedure you will be taken back to the SSU.
- The leg that the tube had been in must be kept straight with limited movement for at least four hours.
- You will be given pain killing medications and also drugs to help control swelling.
- Staff will be watching you closely to help you with your recovery.
- You can expect to spend about 12 hours total in the hospital on the day of your procedure.
- When you are ready to go home, staff will go over directions with you about your at home recovery.
- The radiologist may want you to have an MRI to check the progress of your UFE. Staff will help you set up that appointment.
- You will need to have someone drive you home from the hospital and stay the night with you.
- Once you are home staff will be calling you the next few days to check on your recovery.
**Note** You will be exposed to ionizing radiation as part of the procedure. Women should always inform their physician or x-ray technologist if there is any chance of pregnancy.

**Imaging Department Phone Number:**
(717) 851-4624
What you should know about your **Y90 Embolization**.

**Purpose:**
Y-90 Embolization is a combination of radiation therapy and embolization to treat cancer of the liver. Radiation therapy is the use of radiation to kill cancer cells and shrink tumors, while embolization is a procedure in which blood vessels are blocked off to prevent blood flow. In a Y-90 procedure, radioactive beads are placed directly inside the blood vessel and delivered directly to the tumor(s).

**Preparation:**
- You will first meet with an Interventional Radiologist to talk about the Y90 procedure and go over your treatment options.
- During this visit you will learn about the different steps of the treatment process. On average, a complete Y90 procedure is a three part process, requiring three separate visits.
- Blood work will be drawn prior to your first procedure day.
- You will be asked not to eat anything for six hours before the procedure. Staff will inform you if there are any medications you are currently taking that will need to be held before your procedure.
- X-ray dye will be needed to enhance your exam. If you are allergic to the x-ray dye you may need to be pre-medicated. In this case, you will be given a prescription for these medications before your procedure. This prescription will need to be filled at a WellSpan pharmacy. Pre-medication consists of a combination of medications such as steroids and antihistamines (Benadryl), so please inform staff if you cannot take either of these medicines.
- Staff will be in close contact with you to let you know what time to arrive in the Imaging Department for your procedure, along with any other specific instructions
- You may be asked to remove some or all of your clothes and to wear a gown during the procedure. You may be asked to remove watches, necklaces or earrings if they interfere with the procedure.

**Procedure:**
- You will arrive in the Imaging Department and staff will start your IV line and give you any necessary medications before your procedure.
- For each of your visits for this procedure, you will be asked to verify your name, date of birth and the procedure that you will be having done.
- You will be asked to lie on the x-ray table. Heart monitor patches will be placed on your chest to check your heart rate and blood pressure. You will be given IV fluids during your procedure.
- You will be sleepy during the procedure, but you will be able to communicate with your doctor and staff.
Y90 Embolization continued

- Your groin area (where the thigh meets the abdomen or belly) will be shaved and cleaned off with sterile solution and covered with drapes. The staff will be wearing gowns and masks to help keep the procedure area clean to reduce the risk of infection.

- The groin area will be numbed first at the skin level then deeper into the tissue. The radiologist will make a small nick in your skin to allow entry of the needle. You will experience pressure, but no sharp pain. Please let the technologist know if you experience pain.

- A very small, flexible tube (catheter) is then put into the large blood vessel in your groin.

- X-rays and dye injections are used to help the doctor see the blood vessels.

- At this point, on the **First Procedure Day (Mapping)**, the doctor will take pictures to look at or "map" the blood vessels that feed the tumor(s). During this mapping procedure, the doctor will block (embolize) any necessary vessels to lower the potential for the radioactive beads to travel to areas outside of your liver (stomach or intestine). Also on the Mapping Day, you will receive a small amount of “test beads” so that you can be taken to the Nuclear Medicine Department and have some pictures taken that will help the doctor determine the proper dose for your actual treatment day. The tiny tube will be removed and pressure will be applied for 15-20 minutes to stop any bleeding.

- On your **Treatment Day visit**, you will go through many of the same steps. Staff will be in close contact with you to determine the best day for treatment, what time you should arrive and any other important information.

- On your treatment day, the groin area will be numbed again. There will be a small needle stick and the small tube will again be directed through the large blood vessel in your groin and into the arteries that feed the tumor(s). When the doctor gets everything in position, the Y90 beads will be injected through the small tube and into the blood vessels that are feeding the tumor(s).

- You will again be transported to the Nuclear Medicine Department for more pictures.

- Typically, your liver is treated one lobe at a time making it necessary to have two procedures to complete the treatment.

**After the Procedure:**

- After your procedure, you will be taken to a recovery area where you should expect to stay for 4-6 hours.

- You will need to keep the affected leg straight with limited movement for at least 4 hours.

- You will be given medications to help you with the side effects of your procedure.

- Staff will be watching you closely to help with your recovery.

- You will need to have someone drive you home from the hospital and to stay with you for the day.

- After a Treatment Day visit, you will have received a radioactive treatment therefore there are some simple precautions that need to be taken during the first 24 hours. You will be provided with further information on these precautions when you leave the hospital.

- Your doctor will monitor your progress using blood tests and different x-ray tests.

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