TRANSPLANT MEDICINE

Orientation Class at
University of Washington Medical Center
OVERVIEW

• Pre-Transplant Planning
• In the Hospital
• When You Leave the Hospital
• Immunosuppressive Medicines
• Other Prescription Medicines
• Non-Prescription Medicines
• For Your Follow-up Clinic Visits
Before your transplant:

• Know what drugs your health insurance plan will pay for, and how much of the cost it will pay.

• Get this equipment you will need at home:
  - Blood pressure cuff
  - Thermometer
  - Scale
Transplant medicines are very expensive. On average, they cost:

- $3,000 a month for the first 3 months
- $20,000 a year for the first year
- $10,000 a year after the first year

Most people need insurance to help pay for these medicines.
• Use the medicine cost list handout to see if you will be able to pay for the medicines you need.

• This information will help you estimate how much you will have to pay every month for your medicines.
Know how your pharmacy benefits work:

- What is your prescription **co-pay**? This is the amount you must pay yourself.
- Will your pharmacy bill your insurance company, or do you have to pay and then wait to be reimbursed?
- Do you have more than one insurance company? If so, find out if your pharmacy will bill more than one company.
PRE-TRANSPLANT PLANNING

• Find out if there is a preferred pharmacy or a mail-order pharmacy that is cheaper.
  - Even if you find a mail-order option that costs less, you will still need to use a local pharmacy to fill the prescriptions you receive when you are ready to leave the hospital.

• Are you eligible for military pharmacy benefits?
  - If so, set up those benefits before your transplant.

• Can you afford your health plan’s yearly **deductible**? This is the amount you must pay before your insurance starts paying for your medicines.
• Do you need help understanding your prescription insurance benefits? Talk with your:
  - Insurance company caseworker or representative
  - Pharmacist
  - Transplant Financial Coordinator

• Stay aware of your pharmacy benefits. They may change before or after your transplant.
PRE-TRANSPLANT PLANNING

What if I lose my prescription benefits after my transplant?

• Talk with your Transplant Financial Coordinator at 206-598-6737.
What if I lose my prescription benefits after my transplant?

- **Manufacturer assistance programs** help patients who cannot pay for their medicines. Some of these programs are:
  - **Prograf** (Astellas):
    800-477-6472
  - **Cellcept, Valcyte** (Genentech):
    800-4-ACCESS (800-422-2377)
  - **Neoral, Sandimmune, Myfortic** (Novartis):
    800-277-2254
What if I lose my prescription benefits after my transplant?

- Charity programs may be able to help. Here are some you can find online:
  - www.rxhelpforwa.org
  - www.together-rx.com
  - www.rxoutreach.com
  - www.themedicineprogram.com
  - www.pparx.org
  - www.rxhope.com
  - www.rxassist.org
If Medicare is your primary insurance at the time of your transplant:

- **Part A** pays for your hospital stay.
- **Part B** pays for your:
  - Doctor visits and supplies once you are out of the hospital.
  - Immunosuppressive medicines (with a 20% co-pay).

Note: Your pharmacy is required to bill Part B for your medicines. You will need to make sure your pharmacy will do this for you.
Medicare **Part D:**

- May be optional, or enrollment may be required by your secondary insurance plan.
- Pays for other prescription medicines, but not immunosuppressives if you have Part B.
- Does not pay the 20% co-pay on medicines that are billed to Part B.

*Note: Your secondary insurance may help pay your Medicare co-pay.*
**Medicare Part D “Medicare Coverage Gap” or “Donut Hole”:**

- Most Part D prescription plans help pay for covered drugs until your total retail drug costs reach a certain amount (for example, about $2,000 to $3,000).
  - Transplant patients will reach this amount within 1 to 2 months.
- Then, you will have to pay entirely out-of-pocket until you reach the annual limit. This period is called the “Medicare coverage gap” or “donut hole.”
- After you reach this annual limit, your insurance resumes coverage of your medicines.
Your pharmacy benefits may not pay for all of your medicines because:

- You do not need a prescription for these medicines. These are called “over-the-counter” medicines.
- The medicines may not be listed on your company’s **formulary** (these are the medicines that your insurance company will pay for).

Note: Know what transplant medicines your insurance company will pay for **before** your surgery.
PRE-TRANSPLANT PLANNING

• You may have higher co-pays or poor coverage for certain medicines. Higher co-pays are common with many Medicare Part D programs.

• It may take your pharmacy several days to fill your prescriptions and refills because they may need to:
  - Special order some of your medicines. This is because they are expensive to keep in stock.
  - Call your insurance company for approval of certain medicines. This is called *prior authorization*.
Bring these things with you when you are called in for your transplant:

- Your Heart Transplant Manual
- List of your current home medicines and doses
- The medicines you are currently taking, in case they are not available in the hospital pharmacy
- Your pharmacy insurance card
- Personal items (reading glasses, contact lenses, cell phone, etc.)
IN THE HOSPITAL

After your transplant:

• A pharmacist will meet with you to teach you about your new medicines and doses.

• Plan to meet at a time when everyone who should learn about your medicines can be there, including caregivers.
The pharmacist will give you a:

- Medicine list
- Mediset (box to hold your medicines)
- 1-week supply of your medicines

You will begin taking your medicines while you are still in the hospital.
IN THE HOSPITAL

• Your medicine list will include:
  - Immunosuppressive medicines
  - Other prescription medicines
  - Non-prescription medicines

• Take **only** the medicines your doctor prescribed.

• Talk with your doctor before taking any new medicines. This includes over-the-counter medicines and herbal, natural, and vitamin supplements.

• Know the side effects of your medicines and call your doctor if you have concerns.
WHEN YOU LEAVE THE HOSPITAL

• You will leave with:
  - A 3- to 5-day supply of your medicines
  - Prescriptions for all of your medicines (for a 1-month supply plus refills)

• You may need to stop at a pharmacy on the way home to fill your prescription for pain medicine.

• Give all of your prescriptions to your pharmacy as soon as possible.
You will need *immunosuppressive medicines* after transplant because your body will see your new heart as “foreign.”

Immunosuppressives will:

- Prevent or treat rejection.
- Increase your risk of infection after transplant.
- Suppress your body’s immune system by decreasing the effects of white blood cells (*lymphocytes*).
You will take immunosuppressive medicines as long as you have your new heart.

Your cardiologist will create a medicine plan for you that best meets your needs.

Your medicine plan may be different from another heart transplant patient’s plan.
You will take up to 3 immunosuppressive medicines:

- Each one works differently. By taking 3 of them, you will be able to take lower doses of each one.
- Your doses will be higher right after transplant, but they will be lowered over time until you reach your **maintenance** dose. This is the dose you will take most of the time.
- It is very important to take these medicines at the right times and the right doses to help prevent rejection.

You may take a combination of:

- Tacrolimus (Prograf, FK-506)
- Mycophenolate (Myfortic, Cellcept)
- Prednisone
Tacrolimus (Prograf, FK-506)

- Decreases the number and function of white blood cells (lymphocytes).
- Is started while you are in the hospital.
- Is taken by mouth 2 times a day, 12 hours apart (for example, at 9 a.m. and 9 p.m.).
- Costs about $500 to $1,000 a month.

You will keep taking tacrolimus as long as you have your new heart.

Note: All estimates for medicine costs in this slideshow are based on UWMC Outpatient Pharmacy pricing without insurance. Your costs may be different.
Tacrolimus (continued)

- The amount of tacrolimus in your blood will be measured to control side effects and to make sure it is working well.

- Your dose will be adjusted based on the level of medicine in your blood.

- On clinic days when you have a blood draw:
  - Do not take your morning dose of tacrolimus at home.
  - Bring your dose with you. Take it after your blood draw.

- Do not eat grapefruit or drink grapefruit juice. They change the way tacrolimus works in your body.
Tacrolimus Side Effects

- Decreased kidney function
- Decreased magnesium level in your blood
- Higher blood pressure
- Higher potassium level in your blood
- Shakiness or tremors

- Headaches
- Convulsions
- Higher blood sugar levels
- Higher cholesterol levels
- Nausea or vomiting
- Higher risk of infection
Mycophenolate (Myfortic, Cellcept)

- Decreases the number of white blood cells (lymphocytes).
- Is taken by mouth 2 times a day, with food.
- Costs about $100 to $250 a month.

*Note: Only some transplant patients will take this medicine.*
Mycophenolate Side Effects

- Severe decrease in the number of white blood cells
- Lower number of platelets
- Lower number of red blood cells
- Nausea or vomiting
- Diarrhea
- Stomach pain
- Higher risk of infections
Prednisone
All patients receive large IV doses at the time of their transplant. Prednisone:

- Decreases the function and activity of white blood cells (lymphocytes).
- Is called a *steroid* or *corticosteroid*.
- Is related to a natural hormone in your body called *cortisol*.
- Is taken by mouth 2 times a day at first.
- Is decreased to 1 dose a day later on.
- Costs less than $10 a month.
Prednisone Short-term Side Effects

- Upset stomach, heartburn, or ulcers
- Disturbed sleep
- Higher blood pressure
- Higher blood sugar levels
- Slowed wound healing
- Higher risk of infections

- Emotional changes and mood swings
- Weight gain caused by fluid buildup and increased appetite
- Face swelling (“moon face”)
- Blurred vision
Prednisone Long-term Side Effects

- Muscle, bone, or joint weakness
- **Osteoporosis** (weak, brittle bones)
- Weak, dry, or thin skin and easy bruising
- High cholesterol
- Visual changes and cataracts
- Higher risk of certain infections and cancers
- Round shoulders (“buffalo hump”)

*Note: Getting regular exercise and eating a healthy diet will help keep your bones and muscles strong while you are taking prednisone.*

UW Medicine
OTHER PRESCRIPTION MEDICINES

Your medicine plan may also include some or all of these prescription medicines:

- Clotrimazole (Mycelex)
- Valganciclovir (Valcyte)
- Trimethoprim/Sulfamethoxazole (Bactrim or Septra)
- Pravastatin (Pravachol)
- Omeprazole (Prilosec)
- Docusate (Colace)
- Antibiotics
**Clotrimazole (Mycelex)** is an antifungal (anti-yeast) medicine that:

- Prevents an overgrowth of yeast (called **thrush**) in the mouth.
- Is taken as a lozenge (called a **troche**) in the mouth 4 times a day – after meals and at bedtime.
- Is taken for several months after transplant.
- Costs about $50 to $120 a month.
Valganciclovir (Valcyte) is an anti-viral medicine that:

- Prevents and treats *herpes* and *cytomegalovirus* (CMV) infections.
- Is taken once a day by mouth.
- Is taken for about 3 months after transplant.
- Costs about $1,500 to $2,000 a month.
Valganciclovir (Valcyte) Side Effects

- Nausea
- Headaches
- Decreased kidney function
- Lower number of white blood cells
Trimethoprim/Sulfamethoxazole (Bactrim or Septra) are antibacterial medicines that:

- Prevent a lung infection called *pneumocystis pneumonia*.
- Are taken as a tablet by mouth at bedtime with a full glass of water.
- Are taken for the rest of your life.
- Cost about $10 a month.
OTHER PRESCRIPTION MEDICINES

Trimethoprim/Sulfamethoxazole Side Effects

• Rashes
• Nausea
• Decreased number of white blood cells
• More likely to get sunburn
Pravastatin (Pravachol) lowers cholesterol and helps prevent heart disease. It:

- Is taken by mouth 1 time a day.
- Is taken for the rest of your life.
- Costs about $5 to $10 a month.

Pravastatin Side Effects

- Muscles aches or weakness
- Abnormal liver labs
**Omeprazole (Prilosec)** helps prevent heartburn and stomach ulcers. It:

- Decreases stomach acid.
- Is taken once a day.
- Costs about $10 to $20 a month.

*Note: Your doctor may prescribe a similar medicine, such as Protonix, Prevacid, or Nexium.*
Docusate (Colace) makes your stools softer. It:

- Helps prevent constipation.
- Is taken 2 times a day for a short time after your transplant.
- May be stopped or your dose may be lowered if you have loose stools or diarrhea.
- Costs about $5 a month.
Your medicine plan may also include some or all of these over-the-counter medicines:

- Multivitamin with folic acid
- Calcium and vitamin D
- Iron (ferrous sulfate)
Multivitamin with Folic Acid (prenatal vitamin):

- Is taken 1 time a day.
- Is taken for the rest of your life.
- Costs less than $10 a month.
Calcium and Vitamin D (Tums)

- Calcium helps prevent bone disease (osteoporosis).
- Vitamin D helps your body use calcium.
- Suggested daily doses:
  - 2,000 mg calcium, but take only 500 mg at a time
  - 2,000 units of vitamin D
- Both are taken for the rest of your life.
- They cost about $5 to $20 a month.
Iron (*ferrous sulfate*) helps prevent anemia (low red blood cell count). It:

- Is taken 2 times a day with food, to help reduce stomach upset and dark urine or stool.
- Is taken for a short time after your transplant.
- Costs less than $10 a month.
Your doctor may also advise you to take *magnesium* or *phosphate* after your transplant.

These non-prescription medicines are for *electrolyte deficiencies*, if they occur.
FOR YOUR FOLLOW-UP CLINIC VISITS

At home:

• Create a system that works for you to get and keep your medicine information organized.

• Keep track of changes to your medicine plan.

• Write down your questions as you think of them.
What to bring to your follow-up visits:

- Your mediset, medicine list, and medicines.
- Any records you are keeping, such as blood pressures, weights, and blood glucose values.
- Your list of questions.