

EXHIBIT 9

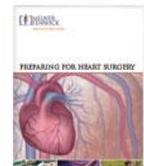
CARDIAC SURGERY PATIENT EDUCATION

Coronary Artery Bypass Graft & Valve Repair/Replacement

OVERVIEW

- The UMMC Cardiac Surgery program has a decades-long history of focusing on patient and family education from preop to post-discharge. Lessons learned are continually applied. For example, our RNs prepare a customized drug chart for patient safety since past paper forms and the current electronic medical record can be confusing to patients for safely taking home medications.
- UMMC was honored to be selected to be the primary hospital to help write and film the revised Milner-Fenwick heart surgery videos released in 2013 and referenced below.
- UMMC has a long history of sharing heart surgery nursing information and patient education. This has included orienting nurses from Jordan, western Maryland, and most recently Prince George's Hospital Center, as well as schools of nursing and new cardiac surgeons entering private practice.
- UMMC's cardiac surgery HCAHPS patient satisfaction scores related to patient education consistently rank in the 90th percentiles. Scores are run and shared weekly in cardiac surgery. FY 15, Q1:

NURSE COMMUNICATION	67
DR COMMUNICATION	99
RESPONSIVENESS	50
CLEANLINESS	65
QUIET AT NIGHT	19
PAIN MANAGEMENT	91
MEDICATIONS	99
New med explanation	99
New med side effects	93
DISCHARGE INFO	99
Talking re: help at home	94
Written, what to look for	94
OVERALL HOSPITAL	89
RECOMMEND UMMC	94
TRANSITION D/C	99
My D/C preferences	99
What I need to know	99
Purpose of D/C meds	99



PREOP EDUCATION

- Same Day Admits receive (in addition to routine SDA materials) :
 - CABG or Valve folder, customized to ambulatory patient experience
 - Video viewed— *Preparing for Heart Surgery*
 - Preop folder includes:
 - Krames booklet *Understanding Heart Valve Surgery* or *Understanding CABG Surgery*
 - Heart Surgery Education Videos sheet with links to view at home (preop thru discharge)
 - Shower disinfectant sponges with instructions, for night before and morning of surgery
 - Prophylactic nasal mupirocin prescription filled
- Inpatients receive:
 - CABG or Valve packet, customized to inpatient experience
 - Krames booklet 'Understanding Heart Valve Surgery' or 'Understanding CABG Surgery'
 - Videos viewed—*Preparing for Heart Surgery, Fall Prevention, Pain*

❖ POSTOP EDUCATION

- Postop videos—*Heart Surgery: First Days of Recovery, Pain, Falls, Guided Imagery for postop*
- Heart pillow to assist with coughing and comfort autographing
- Discharge folder (see below) to begin transition to home or rehab
- Fall prevention education each shift
- Sternal Precautions handout with rehab and nursing education
- *My After-Heart Surgery Education Plan* to reinforce what patient needs to know ‘before I leave’



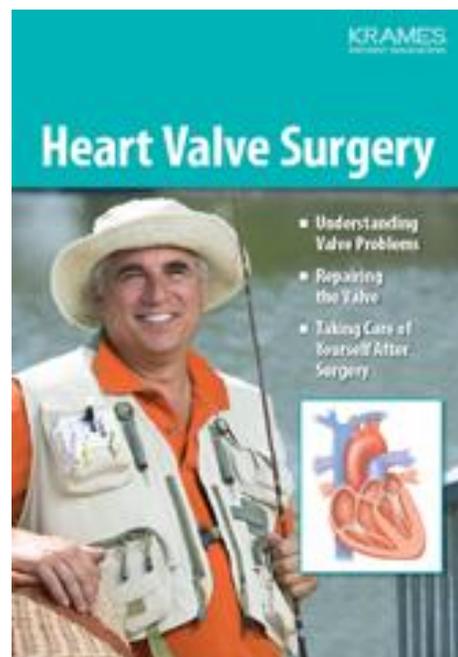
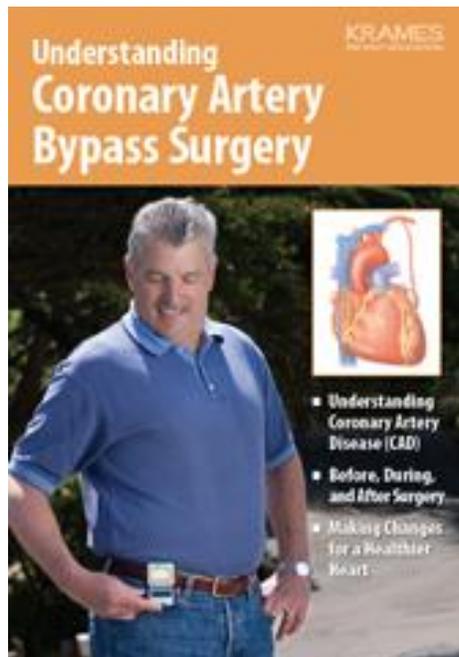
❖ DISCHARGE EDUCATION in addition to EMR printout with appts, meds, etc.

- Discharge videos—*Leaving the Hospital After Heart Surgery*, plus as needed—diabetes, warfarin, enoxaparin
- Discharge folder includes:
 - *Care After Heart Surgery*, customized printout of EMR’s heart surgery instructions
 - Sternal Precautions
 - Influenza and Pneumococcal Vaccine *What You Need to Know*
 - Heart Healthy Eating Guide
 - Preventing Falls During Your Hospital Stay
 - Take a Walk in the Mall list
 - *What You Need to Know About Depression* handout
 - Added as needed for diabetes, wound care, warfarin, etc.
- Medication Chart with purpose, brand and generic names, dose, number of times a day, times columns
- Guided imagery and Integrative Care Team offered to focus on importance of relaxation response for healing
- Family engagement

❖ FOLLOWUP

- On site home health liaison to coordinate 1-3 home nursing visits; includes education reinforcement
- Case manager to coordinate rehab and home health
- Anticoagulation and diabetes consultation followup as needed
- Close relationship with referring or new primary and cardiologist, and other specialty providers
- CRNP takes calls from patients 24/7 to evaluate patient concerns

❖ DOCUMENTS (partial):





Heart Surgery Education Videos.....important things to know to help yourself heal and recover

To our Patients and Families: UMMC has arranged for you to view important education videos online at home. This is NOT the surgery itself! The (3) videos cover *before*, *after*, and *discharge home*....to prepare you for heart surgery....and to reinforce what you learned in the hospital. You may recognize staff or places in the videos---UMMC was honored to participate in Milner-Fenwick's production of these updated videos. You may share the website with your loved ones so they may understand your journey and support you. You will also be able to view them on-demand from your hospital room.

1. (BEFORE) PREPARING FOR HEART SURGERY #555

http://www.umm.edu/media/video/preparing_for_heart_surgery.htm 16 minutes

For people having heart surgery, like CABG or heart valve surgery, this realistic and reassuring video will help them take an active role in preparing for surgery and recovery. **It includes practical information about what the patient should do before surgery.** It explains what they will likely experience in the operating room, and what to expect waking up in the ICU. The importance of pain management and incentive spirometry is highlighted. The video also covers an overview of transition from intensive care to progressive care. Actual patients share their experiences about having heart surgery and their recovery.

2. (AFTER) HEART SURGERY: FIRST DAYS OF RECOVERY #556

http://www.umm.edu/media/video/heart_surgery_first_days_of_recovery.htm 14 minutes

This video explains **what the patient is likely to experience as they move along their recovery path in the hospital.** It covers the importance of pain management, getting up and moving, breathing exercises (spirometry and controlled coughing), walking in the hospital, strengthening exercises, common emotions they may have, and how patients can take an active role in their care. The video helps patients realize that recovery will take time. Actual patients share their experiences and ways of coping in the video. Cardiac rehabilitation is presented as a possible recommendation by the healthcare team.

3. (DISCHARGE HOME) LEAVING THE HOSPITAL AFTER HEART SURGERY #557

http://www.umm.edu/media/video/leaving_hospital_after_heart_surgery.htm 16 minutes

This discharge education video gives heart surgery patients an overview of **what patients can expect before they leave the hospital, and care during the first few weeks of recovery.** It stresses that even though they are leaving the hospital their recovery is still ongoing. Specific guidelines include the drive home, physical activity restrictions, continuing breathing exercises, developing a daily routine, taking medications, incision care, signs of infection, resuming activity including sexual activity, when to contact a healthcare provider, and coping with common emotions after surgery. The video presents long term heart healthy lifestyle changes and the benefits of attending cardiac rehabilitation.

To search, instead of typing the full link:

www.umm.edu → Centers & Services → Heart Center → (*left side*) Audio/Video Library.
Will see the (3) heart surgery videos.

If you have trouble finding the videos or viewing them...or would like to provide feedback.... please contact Diane Smith, RN, dsmith2@umm.edu or 410-328-5339. Thank you.

After heart surgery,

What is MY PART in GOING HOME and HEALING?

After surgery, Before discharge

- Take PAIN medicine to keep scores below 4-5.....so you can cough every hour to clear your lungs, to increase your activity, to learn self-care, and to sleep well.
- Take 10 DEEP HOLDING 'count to 3' BREATHS every hour with your incentive spirometer...and COUGH to open your air sacs and clear your lungs.
- 'CALL-DON'T FALL' since you score High Fall Risk due to surgery, weakness, tubes, new medicines, and blood thinners. The alarms and belt help you remember to call first.
- WITH help, WALK 3-4 times a day, like out to the hall after you go to the bathroom.
- Take your FIRST SHOWER before you go home.
- Watch the PRESCRIBED VIDEOS and READ the FOLDER. ASK questions.
- Know where you will get your PRESCRIPTIONS filled and WHO will help you.
- Have your going-home CLOTHES brought here *before* discharge day.
- Know how to take your PRESCRIPTIONS using the DRUG CHART on discharge day.

At home

- Take your MEDICINES as directed. Use the CHART. Call if you do not understand or cannot get them filled.
- WALK at home during commercials...and walk a minute more each day to build your strength, confidence, and to prevent clots. 30 days will be 30 minutes! Go to the mall!
- Take a SHOWER every day with mild soap -- and water running over your incisions. Pat your incision dry--no ointments or powder. WATCH for swelling, redness, drainage, pain.
- CALL the nurse practitioner if you have any fever, palpitations, signs of infection or bleeding, clicking in your breastbone, or have other problems listed in your folder.
- KEEP your followup appointments. A home health nurse may visit.
- Use your MIND-BODY connection by picturing yourself back to your normal activities. Guided imagery CDs or MP3s help with pain, feeling blue, feeling scared, or not sleeping. Good resources: www.healthjourneys.com (Dr Oz helped with heart surgery CDs) or www.guidedimagerydownloads.com
- WATCH the home care video again at home if you need to (see video handout).

My After-Heart Surgery Education Plan



Name _____ OR Date _____
 I learn best in English _____ or Other _____

My GOALS before I LEAVE:



'Teach Back' SUCCESS

1. WATCH VIDEOS ASAP AFTER ICU.

PAIN ³⁰⁶ ___ FALLS ³⁴⁸ ___ AFTER SURGERY ⁵⁵⁶ ___

2. WATCH HOME CARE VIDEOS.

DISCHARGE ⁵⁵⁷ ___ MEDICINES ³¹¹ ___ COUMADIN ³¹³ ___

3. SIDE EFFECTS of COMMON MEDS.

- ▲ **Pain** eg Percocet, Oxycodone, Dilaudid, Morphine → drowsy, constipated, light-headed
- ▲ **Fluid** eg Lasix → sudden urge to pass urine
- ▲ **Blood pressure** eg Lopressor → dizzy if change position quickly

CAUTION: Often you are on all (3) so your **FALL RISK** is higher. **CALL DON'T FALL!**

YES ___

4. REVIEW RED FOLDER. Locate white video sheet to re-watch discharge video at home.

YES ___

5. STATE ACTIVITY. Change position slowly. Walk 1 min extra each day. If sternal incision, protect sternum--don't lift over 10 lbs, eg gallon milk.

YES ___

6. STATE INFECTION SIGNS. Redness, pain, skin warm. Creamy pink or yellow drainage. Fever 100.8. Thermometer at home?

YES ___

7. STATE FOLLOW-UP CARE. Surgeon, Family, Cardiologist, Home Health, Labs, Goal INR, Rehab, Calling NP/Unit if concerns, Help at home.

YES ___

8. PLAN SPECIAL NEEDS – Prescriptions, Travel clothes here before discharge day, Ride

YES ___



Care After Cardiac Surgery

DISCHARGED FROM CARDIAC SURGERY STEP DOWN
410-328-5380

PATIENT _____

SURGERY _____

DATE of SURGERY _____

Recovery from any surgery will be different for everyone. Some people feel quite well after 3 or 4 weeks, while others take longer depending on their condition before surgery. These instructions are general guidelines on caring for yourself after you leave the hospital. **Always follow your doctor's specific instructions.**

IT MAY BE NORMAL TO:

- Not have much appetite, feel nauseated by the smell of some foods or only want to eat one or two things.
- Have swelling in your legs, especially if you have an incision. Keeping your legs up will help.
- Have trouble sleeping at night. Sometimes taking a pain pill before bedtime helps. You may not need as much sleep at night if you are napping during the day.
- Be constipated because of changes in your diet, activity and medicines. Ask about stool softeners. Try to include more fiber, fruits and vegetables in your diet.
- Feel sad or unhappy. You may be frustrated or cranky. You may have good days and bad days. Do not give up. Getting better takes time.
- If you have a vertical chest (sternal) incision, you may have a lump at the top.
- Experience muscle pain or tightness in your shoulders or upper back. Time and pain medicine may help this discomfort.
- Have numbness to the side of your incision if an artery in your chest was used.
- Need physical therapy if you have weakness or tingling in one or both of your arms.
- Be confused or unable to think clearly if your surgery was done with a heart-lung machine. This usually gets better in six weeks or so.

MEDICINES:

- You will be given a list of all the medicines you will be taking before you leave the hospital. Be sure you understand this list.
- Do not add or stop taking any medicine until you check with your doctor.

Medicines may have **side effects**. Side effects are not the same as allergies. Call the doctor who prescribed the medicine if you:

- Start throwing up, have diarrhea or stomach pain.
- Feel dizzy or lightheaded when you stand up.
- Are confused, have trouble walking or keep dropping things.
- Feel that your heart is skipping beats, or beating too fast or too slow.
- Develop a rash.
- Notice unusual bruising or bleeding.

PAIN CONTROL:

- If your pain is not relieved by the medicine you were prescribed, becomes worse, or you have difficulty breathing, call your surgeon.
- Avoid driving until you are no longer taking narcotic pain medications and you have been approved to drive by your surgeon.

CARE OF YOUR INCISION(S):

- If you have a vertical chest (sternal) incision, tell your surgeon right away if you notice clicking in your chest (*sternum*).
- Support your chest with a pillow or your arms when you cough and take deep breaths.
- You should wash your incisions gently with soap and water. Pat incisions dry. Do not rub incisions with a washcloth or towel.
- If your old chest tube sites are no longer draining, leave them open to air. If your sites are draining, cover them with gauze. The dressing should be changed once a day or more often as needed.
- Do not apply any lotions, powders or perfumes to your incision(s) unless approved by your surgeon.
- If you have staples, they will be removed by the home health nurse or at the clinic.
- If your incision(s) is covered by steri-strip tape, the tapes may fall off on their own. If they do not, you may gently peel them off after 7 days.
- Protect your incision(s) from sunlight during the first year to keep the scar from getting darker.
- Call your surgeon if you notice:
 - Increased tenderness of your incision(s).
 - More redness or swelling.
 - Drainage or pus.

DIET:

- Most doctors advise a low fat, low salt diet to lower the risk of more heart problems. You may be given specific goals for how much sodium and fat you should consume every day.
- A dietician may help you learn how to plan meals and make better choices about what you eat and drink.
- Call your surgeon for persistent nausea or vomiting.

Care After Cardiac Surgery

WEIGHT:

- Weighing yourself every day is important so you know if you are retaining fluid that may make your heart or lungs have to work harder. Use the same scale each time.
 - Weigh your self every morning at the same time after you go to the bathroom, but before breakfast.
 - Your weight will be more accurate if you do not wear any clothes.
 - Record your weight.
 - Tell your doctor if you have gained 2 pounds or more overnight.

ACTIVITY:

Stop any activity at once if you feel short of breath, notice irregular heart beats, have chest pain or feel faint or dizzy. Tell your doctor or get help right away if the problem does not go away when you stop.

Showers.

- You may be able to be able to take a shower when you get home. You should wash your incision(s) gently with soap and water. Pat incisions dry. Do not rub incisions with a washcloth or towel.
- Avoid soaking in a tub or near water jets until approved by your surgeon.

Rest. You need a balance of rest and activity. You can rest by sitting quietly or by napping if you feel tired.

Walking. Walk at your own pace and increase gradually. Wear sturdy shoes, not slippers. Rehab programs usually begin 4 weeks after surgery, but with the guidance of your doctors, you may begin to exercise sooner. Start walking 5-10 minutes 3 times a day and try to work up to walking 1 mile a day. Remember you should be able to talk easily as you walk. If you become too winded to talk, slow down.

Climbing stairs. Unless your doctor tells you not to, go up stairs slowly and rest if you get tired. Do not pull yourself up by the handrail. Use your thigh muscles to lift your legs.

Driving a car. You may ride as a passenger at any time. Avoid driving until you are no longer taking narcotic pain medications and you have been approved to drive by your surgeon.

Care After Cardiac Surgery

Lifting. If you have a vertical chest (sternal) incision, avoid lifting, pushing or pulling anything heavier than 10 pounds for 10 weeks after surgery (approximately the weight of a gallon of milk). This includes carrying children, groceries, suitcases, mowing the grass and similar activities. Do not hold your breath during any activity, especially when lifting or using the rest room.

Returning to work. Check with your surgeon.

Sexual. You may resume sexual relations when you feel comfortable. This is 2 to 4 weeks after discharge for most people. Ask your doctor or nurse for detailed information.

CALL YOUR SURGEON IF:

- Any of your incisions are red, oozing, bleeding or the edges are separated.
- There is a "clicking" in your sternum when you move.
- You are more short of breath.
- You have a fever of 100° F (38° C) or higher twice in 24 hours.
- You have more ankle swelling, leg pain, or pain in your calf.
- If your heart beats are irregular and fast.
- You have any questions about your medicines.
- Weight gain of more than 2 pounds a day.
- Feeling dizzy or lightheaded when you first stand up.
- Painful, frequent or bloody urination.
- With questions about home health care.
- For any questions about your surgery.

GET IMMEDIATE MEDICAL HELP IF YOU HAVE:

- Angina or chest pain that goes to your jaw or arms.
- Sudden shortness of breath that does not go away with rest.
- Fast or irregular heart beats and trouble breathing.
- Numbness or weakness in your arms or legs.
- Coughing up bright red blood.
- Sudden severe headache.

