

The mission of the MACVPR is to promote the practice of high standards of care in cardiovascular and pulmonary rehabilitation in Massachusetts

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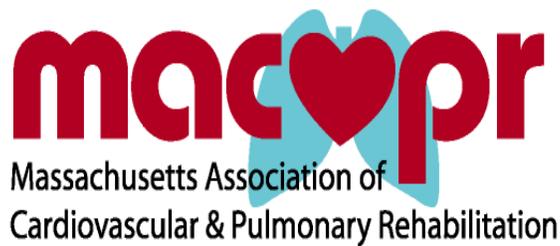
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**A Publication of the  
Massachusetts Association  
of Cardiovascular and  
Pulmonary Rehabilitation**



**News**

**Spring 2015**

## President's Message

As you all have heard the MACVPR has been considering becoming a "Joint Affiliate" of the AACVPR for the past few months. There are many other states considering this as well. We have had informational talks about it at meetings and sent emails as well. We did a mailing and asked **YOU** to vote and the final tally was 34 voting YES and 11 voting NO. Accordingly we have decided to move forward in this effort to become a "Joint Affiliate" of the AACVPR effective July 1, 2015.

Since many of our MACVPR members may have already renewed their memberships, we have worked diligently with the AACVPR to work out appropriate compensation for these memberships that have already been paid.

- Any MACVPR members whose local membership is set to expire within the 2015 calendar year will be offered the full Joint Affiliate rate of \$215, beginning July 1, 2015. Membership will expire June 30, 2016.
- Any MACVPR members whose local membership is set to expire within the 2016 calendar year will be offered a discounted rate of \$165 – a \$50 discount – beginning July 1, 2015. Membership will expire June 30, 2016.
- Any MACVPR members whose local membership is set to expire within the 2017 calendar year will be offered a discounted rate of \$165 – a \$50 discount – beginning July 1, 2015. MACVPR will additionally grant \$50 off of the local MACVPR conference for these individuals in October 2015. Membership will expire June 30, 2016. A total discount of \$100 is being afforded to these individuals.
- Any individual who is currently dual-member of AACVPR and MACVPR will not receive a discounted rate, but will be offered the full Joint Affiliate rate of \$215, beginning July 1, 2015. Membership will expire June 30, 2016. these individuals will maintain dual-membership for the single Joint Affiliate membership fee. Dual members who have paid MACVPR dues through 2017 will also receive a \$50 discount off of the local MACVPR conference in October 2015.

Additionally:

- If you choose to renew your current AACVPR membership for the 2015-2016 membership year, you will automatically gain access to both state and national benefits.
- If you are currently an **EducationAdvantage** member with AACVPR and choose to renew, you will receive the same great benefits **for less!** Joint Affiliates pay the Professional Member rate and also receive the **EducationAdvantage** benefits.

If you are currently a Professional Member and choose to renew, you will also receive **EducationAdvantage** benefits for the standard renewal rate you are used to paying. Joint Affiliation membership automatically includes the **EducationAdvantage Membership** – which provides all the benefits that come with the AACVPR Professional Membership plus up to 10 complimentary AACVPR or nursing continuing education credits (CEC) through AACVPR webcasts a \$650 value. This membership also provides discounted access to the AACVPR Annual Conference, access to the members-only sections on the AACVPR website, direct access to the latest reimbursement updates, online and live CEC opportunities, extensive national networking and membership in one of the most progressive and recognizable organizations in this field.

# Presidents Address

Benefits to the MACVPR are numerous:

AACVPR staff will:

- Manage all aspects of membership dues invoicing, processing and reconciliation.
- Provide annual reconciled financial reports to Joint Affiliate leadership
- Provide monthly membership rosters and an additional roster prior to Joint Affiliate conferences
- Dedicate staff to maintain and enhance the AACVPR-Joint Affiliate relationship.
- Promote the Joint Affiliate programs and opportunities for membership engagement on the AACVPR Events Calendar.
- Provide support for generating mailing lists and distributing correspondence to members
- Provide a specialized listing on the AACVPR Web site.
- Provide an alias e-mail address for communications that link to a Joint Affiliate leadership member's account

**Joint Affiliate members receive access to discounted Directors and Officers (D&O) insurance** through AACVPR's insurance carrier. AACVPR will cover up to **\$500** of the cost.

**Joint Affiliates receive a discounted CEU application fee for all AACVPR CEU Program Credits -** Joint Affiliate Societies are charged a discounted application fee of \$150 for the CEC application. All other Affiliates pay \$225 and non-affiliates pay \$425.

Joint Affiliates are guaranteed complimentary registration to attend all Affiliate Leadership Forums.

Joint Affiliates participate in quarterly calls to get up-to-date information from the National organization and discuss any issues or ideas the Joint Affiliates have for enhancements.

It is important to note that the MACVPR will still operate as an independent organization, and our dedication to programs within the state of Massachusetts remains its primary focus. The Joint Affiliate Membership simply allows MACVPR members to access extensive benefits offered by the national organization. Also, of note is that if you choose not to become a Joint Affiliate Member you can still attend MACVPR's excellent educational offerings by paying the non-member rate.

We hope this new venture will prove to be very advantageous to both the individual member as well as the MACVPR organization as a whole. We welcome any questions, suggestions, and/or comments. Please feel free to contact any member of the Executive Committee or myself.

**Karen LaFond, MSN, RN,CCRP**

**President MACVPR**

[karen\\_lafond@sshosp.org](mailto:karen_lafond@sshosp.org)

# Letter From the Editor

***“Continuity gives us roots; change gives us branches letting us stretch and grow and reach new heights .”***

— **Pauline R. Kezer**

How appropriate this quote is to the change we are going through with the MACVPR becoming a ‘Joint Affiliate’ of the AACVPR. I anticipate this change to be a positive one fostering new growth as individual professionals and as a collective organization.

I am trying to make the newsletter as helpful to you as practitioners as possible. Unfortunately, we never get much feedback about the newsletter from all of you so I try to think of what would help me in my practice. I have thought that having more patient education material already written would be helpful to me. It's nice to get some information here in this newsletter, but who has time to translate that into patient education??? Therefore I have asked the contributors to the newsletter to provide information that can be just printed off and used in your practices. You will find these documents in Word format on the website under the newsletter section.

I am also happy to report that we have an additional new column titled **“Pearls” about Pills** contributed by **Yue See Lee, RPH of Beth Israel Deaconess Hospital-Milton**, who has agreed to be a regular contributor to our newsletter. Her inaugural article is on Food and Drug Interactions and has provided a patient education handout on the topic.

I hope you find this new ‘focus’ of the newsletter helpful. I welcome any feedback.

Feel free to email me at [macdonald23@beld.net](mailto:macdonald23@beld.net) with your ideas or contributions. Thanks!

Lynne MacDonald, PT

Beth Israel Deaconess Hospital-Milton Cardiac Rehab

**MACVPR Newsletter Editor**

*MACVPR does not accept responsibility for the accuracy of the information produced herein. The statements and opinions contained in the articles of the MACVPR Newsletter are solely those of the individual authors and contributors and not of MACVPR. We do encourage comments, articles, and other contributions while reserving the right to reject or edit the material. The articles in the newsletter are for readers to use as they deem necessary in their programs of clinical practice and are not necessarily standards of care by MACVPR.*

# Reimbursement Update



The AACVPR continues to work on the issues of supervision of cardiac and pulmonary rehabilitation programs by non-physician practitioners in all hospital outpatient settings. Here is a short recap of their continued efforts as a result of Day on the Hill on March 3<sup>rd</sup> and 4<sup>th</sup> :

- 70 AACVPR members joined together in Washington, D.C. to visit U.S. Senate and U.S. House of Representatives Congressional members
- Approximately 30 states were represented
- U.S. Senate passed the *Medicare Access and CHIP Reauthorization Act of 2015* (MACRA), first passed by the U.S. House, that repeals physician payment using the SGR (Sustainable Growth Rate) formula. The final bill does not include our amendment, S.488, which would have allowed non-physician practitioners to supervise cardiac and pulmonary rehabilitation services
- AACVPR will proceed with "Plan B", which is a companion bill to S.488 in the U.S. House
- This bill could go as a stand-alone or in a bill later in the year that includes other Medicare "extenders" or issues that require Congressional correction
- As a result of Day on the Hill 2015, numerous legislators are now aware of our issue
- We have strong participation from the American Heart Association and united support from the American College of Cardiology, and virtually all other professional cardiac and pulmonary medical societies.
- We have a "small, but mighty" number of U.S. Senators and U.S. House of Representative members who have expressed a commitment to see this issue finally corrected *this year*
- We are waiting to hear from AACVPR asking us to use our collective voice as constituents to make this happen in 2015!

## Transition to ICD-10 Diagnosis Codes

October 15, 2015 is the targeted date for transition to the ICD 10- codes. Preparation has been underway for the last several years and through code training, system upgrades, and software testing. Facilities should be well positioned for this transition by mid summer. Your hospital billing department and coders will be your strongest ally to keep you up to date with your billing practices. Conversion tools may not provide the necessary codes as clinical analysis may be required. AACVPR recommends staying connected with professionals from your MAC for particular diagnosis code specification. This will be a learning curve for all of us.

As we transition to our joint affiliation with the AACVPR we will have access to the latest information as it is posted. Those of you who are current members of AACVPR please take a look at the link below for additional details.

<https://www.aacvpr.org/Portals/0/June%205,%202015%20Reimbursement%20Update%20-%20Transition%20to%20ICD-10%20Diagnosis%20Codes.pdf>

**Deborah Sullivan, MS, APRN-BC, CCRP**

**Immediate Past President**

## *Reminder:*

The Executive Committee is continually looking for more involvement in the MACVPR. Please consider joining a committee or taking a position on the board. It is a great opportunity for you to get involved with your organization and improve your professional growth. It truly is a great experience.

Remember we always work together as a team. No one is expected to do it all alone.

**Consider joining the EC...you won't regret it!!**

# Education Updates

## MAY GENERAL MEETING

The May Member Meeting was held Thursday May 21 at the American Cancer Society in Framingham. Thirty eight participants attended the three hour meeting which included an opening address from our president, Karen LaFond MSN, RN, highlighting the AACVPR Joint Affiliate and National Updates. **DASH to Cardiopulmonary Health and Mediterranean Cruise to Pulmonary Health** provided a mix of both cardiac and pulmonary nutrition education. **Core Competencies What and Why? Clinical Competency in Cardiac and Pulmonary Rehabilitation** was followed by group breakout hands on networking session: **Core Competencies How To**.

Margaret Wandrey RD, LDN Clinical Nutrition Manager Lowell General Hospital delivered the first of a two part presentation beginning with the cardiac population illustrating the science of nutrition behind the DASH Dietary Approach to Stop Hypertension studied by the National Institute for Health. The DASH eating plan is rich in fruits, vegetables, fat-free or low-fat milk and milk products, whole grains, fish, poultry, beans, seeds, and nuts. It also contains less salt and sodium; sweets, added sugars, and sugar-containing beverages; fats; and red meats than the typical American diet. This heart healthy way of eating is also lower in saturated fat, trans fat, and cholesterol and rich in nutrients that are associated with lowering blood pressure—mainly potassium, magnesium, and calcium, protein, and fiber. Practicing the DASH lifestyle includes knowing your calorie level restriction and energy expenditure. The link provided offers a pdf overview of the DASH diet as well as a chart listing three different calorie restrictions and the serving sizes, examples, and significance to each food group to the DASH eating plan. There is a form to help patients evaluate what's on their plate and how much are they moving and a sample day with the DASH eating Plan.

[https://www.nhlbi.nih.gov/files/docs/public/heart/dash\\_brief.pdf](https://www.nhlbi.nih.gov/files/docs/public/heart/dash_brief.pdf)

**Mediterranean Cruise to Pulmonary Health** presented the Mediterranean Diet having many similarities to the DASH eating plan with decreased sugar and increased high consumption of fruits, vegetables, whole grains, potatoes, beans, nuts and seeds. Olive oil is an important monounsaturated fat source. Dairy products, fish and poultry are consumed in low to moderate amounts and little red meat is eaten. Wine is consumed in low to moderate amounts. Moderation, water, and daily physical activity are components as well.

Optimal nutrition in respiratory disease is important in disease prevention as well as keeping respiratory muscles strong to resist infection and speed recovery from exacerbations. A diet with higher fat, lower carbohydrate results in better breathing for existing COPD. Metabolism of carbohydrate forms the most carbon dioxide and metabolism of fat forms the least. A diet such as the Mediterranean diet is high in fruits and vegetables with moderate amounts of fats from nuts and oils. COPD guidelines for calorie intake recommend less carbohydrate in the diet and increased fat resulting in less carbon dioxide production which enables easier breathing.

Patricia Comoss RN, BS, MAACP, President and Principle Consultant Nursing Enrichment Consultants Inc., and AHA/AACVPR Writing Group Member: Core Components of Cardiac Rehabilitation/Secondary Prevention Programs presented in two formats: **Part 1: Core Competencies What and Why? Clinical Competency in Rehabilitation** PowerPoint and lecture followed by **Part 2: Core Competencies How To** networking and breakout work group sessions. *Part 1* Matched Core Competencies for Cardiac Rehabilitation/Secondary Prevention and Pulmonary Rehabilitation with the Joint Commission and AACVPR Core Expectations. Pat utilized the WHAT, WHY, WHEN, and HOW approach to AACVPR Program Certification. Both cardiac and pulmonary rehabilitation staff should possess a common core of professional and clinical competencies, regardless of academic discipline and program must provide evidence of annual assessment of clinical/professional staff competency.



1600 mg sodium  
DASH eating  
plan has effects  
similar to single

“Complete  
competency  
templates  
were  
provided...”

Continued on next page

# EDUCATION UPDATE.....continued

PULMONARY REHAB Program Certification: **Four** assessed competencies MUST be specific to the...

## **Clinical Competency Guidelines for Pulmonary Rehabilitation Professionals 2014**

Collins EG, Bauldoff G, Carlin B, et al.

CARDIAC REHAB Program Certification: **Four** assessed competencies MUST be specific to the...

## **Core Competencies for Cardiac Rehabilitation/ Secondary Prevention Professionals: 2010 Update** Hamm L, Sanderson B, Ades P, et al

### **Similar Categories:**

Patient Assessment  
Exercise Training  
Psychosocial Management  
Tobacco Cessation  
Emergency Planning

### **Cardiac Rehab**

Blood pressure management  
Lipid management  
Diabetes management

### **Pulmonary Rehab**

Dyspnea assessment & management  
Oxygen assessment & management

Part 2 Networking session broke down into smaller work groups to discuss and prepare a draft of a competency on an identified topic. An official systematic review of the European Respiratory Society/American Thoracic Society: Measurement Properties of Field Walking Tests in Chronic Respiratory Disease published October 30, 2014 provided current evidenced based guidelines for preparation of a competency checklist on the six minute walk on a provided template. . Key take home points were the assessment of two six minute walks at the initial assessment using patients own O2 and allowing desaturation to 80% without titration. <http://www.thoracic.org/statements/resources/copd/FWT-Tech-Std.pdf>  
Treatment of Hypertension in Patients with Coronary Artery Disease: A Scientific Statement from the American Heart Association, American College of Cardiology, and American Society of Hypertension published March 31, 2015 provided the current evidence for the cardiac competency. The new target for secondary prevention of cardiac events is 140/90 and lower is not necessarily better and may contribute to side effects and complications. <https://circ.ahajournals.org/content/early/2015/03/31/CIR.0000000000000207>

Complete competency templates were provided for the 6 minute walk test (6MWT) as a measure of functional capacity in outpatient pulmonary rehab patients, the role of cardiac rehab in managing hypertension, Calculation of MET-minutes to evaluate total exercise volume compared to the evidence-based recommendation of 500 – 1000 MET-minutes per week , calculation of BODE Index pre & post rehab to include with outcome data and to evaluate longer term patient prognosis , and Tobacco Cessation Counseling.

The program has been approved by the American Association of Critical Care Nurses (AACN) for 3.00 Contact Hours: 2.00 Contact Hours Synergy CERP Category A and 1.00 Contact Hour Synergy CERP Category B, File Number 00019279.

Twenty three evaluations were returned with a unanimous response that speakers were knowledgeable and the meeting content applied directly to clinical practice. There was a mix of cardiac, pulmonary and nutrition and the networking opportunities, new information, and new guidelines were listed as major strengths of the program. Suggestions for future programs:

- Met Minute calculation workshop
- Help with Psychosocial management competency (2)
- Exercise in patients with LVADs.
- Motivational interviewing.
- Take each core component and structure like this meeting.
- New exercise programs i.e. X fit risk/benefits for cardiac patients.

Thank you to Jen French and Astra Zeneca Brilinta as our sponsor!

**AstraZeneca** 

  
**BRILINTA**  
ticagrelor tablets

Deirdre Proudman MSN, RN-BC, CCRN  
Education Committee Chair

# Save the Date

## MACVPR 2015 New England Regional Cardiovascular and Pulmonary Rehabilitation Symposium

October 29, 2015

Hampton Inn Boston/Natick

319 Speen Street, Natick, Massachusetts, 01760

Note new location...we  
listened to requests for a  
more central location

### ***Pre- and Postoperative Pulmonary Rehabilitation for a Patient Undergoing Bilateral Lung Transplant***

**Carolyn Come MD**

Brigham and Women's Hospital, Instructor, Harvard Medical School, Pulmonary and Critical Care

### ***Novel Left Atrial Appendage Closure Devices as Stroke Prevention Strategy in Atrial Fibrillation***

**Bruce G Hook MD**

Lahey Hospital & Medical Center, Cardiology/Electrophysiology

### ***Clinical Features of Spontaneous Coronary Artery Dissection (SCAD)***

**Malissa Wood MD**

Co-director of the MGH Heart Center Corrigan Women's Heart Health program and lead investigator of the MGH Spontaneous Coronary Artery Dissection (SCAD) Registry

### ***The Role of Cardiac Rehabilitation in Heart Failure Patients***

**Kate Traynor, RN, MS, FAACVPR**

Director, Cardiovascular Disease Prevention Center/  
Massachusetts General Hospital, Institute for Heart Vascular and Stroke Care

### ***AACVPR Updates***

**Kate Traynor, RN, MS, FAACVPR**

### ***Topic to be Determined***

**Mary McGowan**

Women Heart Organization

**Watch your emails for the  
on-line registration link**

# "Pearls" about Pills

By Yue See Lee, RPh

## FOOD AND DRUG INTERACTIONS

Yue See Lee RPh  
Pharmacist  
Beth Israel Deaconess  
Hospital—Milton

*".....never take  
alcohol  
with any  
medications."*

This information is meant to serve as a patient education handout. You can find a link to it to print out in Word on MACVPR website

Patients prescribed medications for cardiovascular issues often have many concerns about the medications they are taking. Among these concerns are food and drug interactions. Some typical questions that patients ask include:

- "Should I take this medication with food or on an empty stomach?"
- "I like grapefruit juice, but do I have to give it up if I'm on this medication?"
- "I like to drink a glass of wine in the evening. Is it ok to take my medications at the same time?"

This brief article will hopefully clarify these and other questions patients may have about food and their cardiovascular medications. The following is a summary based on certain foods and what medications can interact with them. While I will only focus on cardiovascular drugs, it is important to recognize that there are many other food-drug interactions that are not covered here.

### GRAPEFRUIT JUICE

This is one of the most misunderstood interactions. Grapefruit juice inhibits an enzyme called CYP3A4 which is responsible for metabolizing certain medications. These medications include the cholesterol-lowering HMG-CoA reductase inhibitors also known as "statins", calcium channel blockers for blood pressure (e.g. nifedipine, amlodipine, nicardipine, felodipine, and verapamil), and amiodarone, an anti-arrhythmic. Drinking grapefruit juice effectively diminishes metabolism of these medications which increases the side effects of the medications.

Some medications are affected by grapefruit more than others, therefore there is no absolute consensus on grapefruit and drug interactions. The best advice would be to avoid grapefruit juice while on these medications, unless your doctor states otherwise.



### HIGH-FAT MEALS

Another interaction is medications with fatty foods. Patients may be on gemfibrozil which helps decrease triglycerides and cholesterol. Ironically, eating a fatty meal and taking gemfibrozil will lower its ability to decrease cholesterol and triglycerides. This is another reason to limit the amount of fats in your diet!

### ALCOHOL

A moderate amount of wine is often touted for its health promoting properties. However, combining medications with alcohol is not recommended because alcohol can increase the side effects. For example, taking alcohol and nitrates (nitroglycerin, Imdur, Isordil, etc.) together can cause dangerously low blood pressure. Many patients are commonly on aspirin, but it is not recommended to take it with alcohol since aspirin can cause GI irritation and bleeding and alcohol can exacerbate this effect. The final recommendation is never take alcohol with any medications.



### FIBER

Avoid taking digoxin with high fiber foods since fiber can bind with digoxin, decreasing its absorption and effect.

### LICORICE

Digoxin should not be taken with licorice, as it has a chemical called glycyrrhizin, which in conjunction with digoxin, can cause arrhythmias and heart attacks.

## “Pearls” about Pills .....continued

### VEGETABLES

Vitamin K is the main concern when considering drug interactions and green vegetables. Vitamin K antagonizes the effects of the anticoagulant warfarin, thus making warfarin less effective. An easy way to remember this is “K = Klot”, which is what we are trying to avoid in patients on warfarin. Examples of vitamin K rich foods include blueberries, leafy green vegetables such as kale, spinach, broccoli, and turnips greens. The best recommendation is while patients are on warfarin, don't stop eating healthy vegetables, but do limit drastic diet changes since these changes may alter the amount of vitamin K intake which in turn will alter warfarin effectiveness. A more comprehensive list can be found at :



[http://www.coumadin.com/pdf/Foods\\_With\\_VitaminK.pdf](http://www.coumadin.com/pdf/Foods_With_VitaminK.pdf)

[http://www.cc.nih.gov/ccc/patient\\_education/drug\\_nutrient/coumadinI.pdf](http://www.cc.nih.gov/ccc/patient_education/drug_nutrient/coumadinI.pdf).

### POTASSIUM-RICH FOODS

Certain drugs such as ACE inhibitors, diuretics, and digoxin are affected by or can affect potassium levels. Couple these drugs with potassium-rich foods and minor problems like cramping or more serious problems like arrhythmias can occur. The key is to check potassium levels regularly and not to change your diet drastically without informing your doctor. Some foods with high potassium include leafy green vegetables, sweet potatoes, tomato paste/sauce, yogurt, prune juice, and avocados, but a more comprehensive list can be found at <http://www.health.gov/dietaryguidelines/dga2005/document/html/appendixb.htm>

This is not an exhaustive list and there are many other interactions with medications with other foods and with herbal supplements that are not covered here. When in doubt, ask your doctor or pharmacist!

## Tales from the Trenches

For those of you that missed the May meeting.....instead of an article in this column we decided to provide you with some practical help for your programs.

As mentioned in the **Education Update** Pat Comoss RN, BS, MAACVP, President and Principle Consultant Nursing Enrichment Consultants Inc., and AHA/AACVPR Writing Group Member: Core Components of Cardiac Rehabilitation/ Secondary Prevention Programs provided us with a competency for the 6 Minute Walk Test based on the article from the European Respiratory Society/American Thoracic Society: Measurement Properties of Field Walking Tests in Chronic Respiratory Disease published October 30, 2014 <http://www.thoracic.org/statements/resources/copd/FWT-Tech-Std.pdf>

The article discusses the proper way to conduct a 6 MWT so that the results are consistent and reproducible. Deirdre Proudman graciously provided us with a copy of the competency that she typed up to utilize in her program . This competency will be available as a link on the MACVPR website associated with this newsletter.

**THANKS TO DEIRDRE FOR PROVIDING THIS FOR ALL TO USE!!!**

# Tidbits From The Dietitian

By Holly Brassett MS, RD, LDN



Holly Brassett MS, RD, LDN  
Outpatient Dietitian  
Lahey Hospital and Medical  
Center, Burlington MA

This information is meant to serve as a patient education handout. You can find a link to it to print out in word on MACVPR website

Note:  
AACVPR guidelines recommend not starting exercise unless BS is  $\geq 100$  and patients should not leave class and drive home unless BS is  $\geq 90$

## EXERCISE AND DIABETES



Exercise is a wonderful way to manage your diabetes, increase overall fitness and reduce your risk of heart disease and stroke. If you aim to be active each day you will have more energy and maintain a healthy weight. Before you exercise it is important keep a few things in mind. \*Purchase some proper athletic shoes. Exercising in sneakers that are too floppy or do not provide appropriate support will lead to blisters and poor foot care. \*

- CHECK your blood glucose prior to working out. It is always a good idea to know what your numbers are to avoid a LOW.
- If you are below your target range, you may need to have a snack prior to exercise. Healthy snacks would include a small piece of fruit, 3-4 crackers with peanut butter, yogurt, cheese stick with 1 cup of grapes, rice cake with almond butter or cottage cheese with mixed fruit. Test blood sugars 15 minutes after your snack to make sure your numbers are not low and you are safe to exercise. If all looks good, you can start your workout.
- Begin slow and work up to your goal.
- If you are trying a new activity or are new to working out you may want to test your blood sugars again mid-way through your workout. This is to prevent a low. If you are below your target range, you may need to have a snack or have 3 glucose tablets. Do not continue working out until your blood sugars are within acceptable range (acceptable range is different for everyone and your target blood glucose is typically a range that you and your doctor have discussed). No one should exercise if blood sugars are less than 70.
- Once you are done working out it is also a good idea to test again. If you are below your target range feel free to have a snack. Test again within 15-20 minutes to make sure your blood sugars are within a comfortable range.
- This may seem like a lot of testing but it will help you to understand your body and how your blood sugars respond to exercise. Knowing your number will help you to plan and understand how diabetes affects YOU.

### WHAT CAN YOU DO FOR EXERCISE?

Exercise does not need to be rigorous or exhausting. You will want to find an activity that you enjoy and maintain. Here are a few to get you started:

- Walking: You can start at 5 minutes a day and slowly work up to 30 minutes or more. You can also break up your workouts into small bouts of physical activity. Try 10 minutes 3 times a day. This works out great if you do not have a lot of time to work out or if you have tired joints that cannot endure too much in one shot. Try not to get caught up into heart rates and target fat burning zones. Just MOVE!
- Swimming: Excellent if you have trouble with balance or joint pain. Swimming can burn many calories and will keep you cool in the process
- Biking: You can ride a stationary bike or ride around your town. Either way you will burn calories and help stay fit.
- Recreational teams: Some of you may like to join a soccer league or walking club. Finding a workout buddy will pass the time and help you to stick with it.

OVERALL GOAL: 30 minutes a day. Remember, your goal is to get moving. No goal is too small.

REMEMBER, IF YOU ARE CONSISTENTLY LOW OR HIGH PRIOR, DURING OR AFTER EXERCISE PLEASE CONSULT WITH YOUR PHYSICIAN. Sometimes medications or insulin can be adjusted to ensure a safe workout.

# Student Corner



## Why Resistance Training Is Important In Cardiac Rehab

By Danielle Bruyere · Fitchburg State University

My name is Danielle Bruyere and I am a student from Fitchburg State University majoring in Exercise and Sports Science with a concentration in Clinical Exercise Physiology. During my internship at Lahey Hospital and Medical Center's cardiac rehabilitation program, I have heard a few patients ask similar questions regarding resistance training: Why is resistance training just as important as aerobic exercise? How does it benefit the heart?

The heart is a muscle as well as an organ that supplies our body with blood and oxygen during both rest and physical activity. When we put higher physical demands on our body during exercise, our heart also works harder to compensate for these demands. This occurs during aerobic exercise (such as walking or jogging on a treadmill) as well as resistance exercise (such as lifting weights). Training our skeletal muscles through resistance exercise allows for improvement in both muscular strength and endurance, thus improving our ability to carry out activities of daily living more easily. If our muscles are better able to carry out activities at home or work with less effort, then that means there is less stress placed on the heart due to a decrease in physical demand.

Not only does resistance training improve muscular strength and endurance, it also helps to treat other diseases such as osteoporosis, type II diabetes, and obesity. Just like muscle, bone responds to outside stress by becoming stronger over time. With age our body uses up calcium more than our bones create it. Weight bearing on the joints and bones causes an increase in what is known as bone mineral density: our bone tissues grow in response to external stressors and create more calcium. Increases in muscle mass that accompanies resistance training also causes an increase in what is known as resting metabolic rate: our metabolism increases to fuel our muscles throughout the day thus helping to treat metabolic diseases such as obesity and type II diabetes. Lastly, resistance training is important in cardiac rehabilitation especially for those that are placed on diets. Caloric deficits through both exercise and different meals that our bodies are not used to can cause a decrease in fat mass but can also cause a decrease in muscle mass. Because of this, it is important that we maintain and build our muscles so that our bodies can perform activities of daily living and are protected from falls and other injuries.

So how often should we resistance train? American College of Sports Medicine recommends that all individuals aerobically exercise for at least 30 minutes a day 5 days a week, totaling in 150 minutes per week. Although there is no time frame recommended for resistance training, it is recommended that individuals exercise at least 2 days per week for each muscle group, every other day. Normally it takes about 3 sets of 12 repetitions until our muscles fatigue. Some may perceive the feeling of muscle fatigue to be a bad thing, but as long as the exercise is not causing pain this actually means that we are training our muscles properly for endurance and strength! However, if resistance training is causing pain to muscles, joints, or bones, these exercises should not be done. It is important to avoid any exercises involving injured body parts unless the members of the rehabilitation team advise you to do so. It is also important to properly exhale while lifting weights, and inhale upon returning to the beginning position to avoid Valsalva Maneuver. This will prevent a dangerously high increase in pressure that can strain the heart!

### References

Pescatello, L. (2014). *ACSM's guidelines for exercise testing and prescription* (9th ed.).

Philadelphia: Wolters Kluwer/Lippincott Williams & Wilkins Health.

# Membership News

**“....still be able to attend MACVPR half day meetings and symposiums but will pay the non-member conference rate.”**

Happy Summer to All!

Thanks to MACVPR members who attended the May meeting and provided such great feedback on the half day program. As you know by now MACVPR members voted 34- yes to 11- no to transition to becoming an AACVPR Joint Affiliate.

AACVPR and each state affiliate are similar organizations with many common interests and goals. The MACVPR executive committee recognized a need to pursue a closer connection with AACVPR. By becoming a “Joint Affiliate” our hopes and goals were to foster greater collaboration between the entities and allow state affiliate members to take advantage of additional benefits offered by AACVPR.

MACVPR members should have received emails directly from AACVPR regarding the renewal process instructing them on the next step to transition to becoming an AACVPR Joint Affiliate member. If you did not receive notification, please contact me at [capemda@gmail.com](mailto:capemda@gmail.com) and I will assist you.

For those members not wishing to join AACVPR, you will still be able to attend MACVPR half day meetings and symposiums but will pay the non-member conference rate.

MACVPR continues to work with our student Danielle Bruyere in encouraging student participation. The AACVPR encourages student involvement and also offers a student rate. AACVPR speaks to students on the importance of professional membership involvement, attending professional conferences and symposiums and how to become involved.

Hope to see you at the October Symposium! Watch for emails regarding date and location.

Melessa Fox, RN, BSN  
Falmouth Hospital Cardiac Rehab  
MACVPR Membership Chair

## Treasurer's Report

Current balances as of June 15, 2015 :

Citizen's Bank checking:	\$ 8536.09
Citizen's Bank Money Market fund	<u>\$ 2634.62</u>
Total	\$11,170.71



As a reminder PAYPAL is available for all payments to MACVPR

Donna Hawk, RRT, AE-C  
Baystate Medical Center Pulmonary Rehab  
MACVPR Treasurer



## MACVPR Forum Update

The MACVPR Forum is currently under construction as Ann diligently continues updating our website to provide greater ease of access to update and change the website that Ann can do (which saves the MACVPR and YOU a great deal of money!) We will notify you when the forum is up and functioning.



# Connections: Mind/Body/Spirit

By Pamela Katz Ressler, MS, RN, HN-BC



*A regular column designed to help you better understand your patients' needs and promote self healing during rehabilitation and beyond...*

*"...educating families and caregivers in the tools available to open the dialogue around the kitchen table instead of a hospital bed."*

## END OF LIFE DECISIONS

Have you had "the conversation"? I am not talking about the birds and the bees, but about end of life decisions and choices. If you are like the majority of Americans you have not discussed your wishes and have not had a conversation with your family or health care professionals about your values and choices at the end of life. There is an immense gap in what we say we "want" and what actions we have taken to share our wishes. Here are some enlightening statistics from the 2012 Survey of Californians by the California HealthCare Foundation (retrieved from The Conversation Project website <http://theconversationproject.org> )

- **80%** of people say that if seriously ill, they would want to talk to their doctor about end-of-life care, yet only **7%** report having had an end-of-life conversation with their doctor
- **60%** of people say that making sure their family is not burdened by tough decisions is "**extremely important**", but **56%** have not communicated their end-of-life wishes
- **82%** of people say it's important to put their wishes in writing, only **23%** have actually done it.

It is interesting to consider why we have this immense disconnect between desire and action in our society. As we have gained sophisticated technology for life-sustaining treatment, have we lost sight of the high touch conversations that are more than simply checking a drop down box on an electronic medical record? Over the past 50 years medical care has undergone a transformation, what previously had been acute and often fatal illnesses have now become chronic diseases that have extended trajectories of months, years and decades. Previously, conversations about end of life care were often conducted at the bedside or before a surgical procedure but rarely included ongoing discussions especially about personal desires and values. It has become imperative to pull back the curtain on these conversations as our choices in treatment and end of life wishes have expanded.

Having taught palliative and end of life courses at Tufts Medical School for the past several years, I can assure you that everyone finds it difficult to begin these conversations. However, it is our own discomfort that is usually the biggest hurdle to overcome when initiating discussions about end of life decision making. How can we make these conversations ongoing and meaningful versus a one-time act of filling out a form? One way is by educating families and caregivers in the tools available to open the dialogue around the kitchen table instead of a hospital bed. One of the most user friendly tool kits I have found in my practice is The Conversation Project's Starter Kit.

The Conversation Project's Starter Kit is available for free download at <http://theconversationproject.org/wp-content/uploads/2013/01/TCP-StarterKit.pdf>

The purpose of this educational tool is to think, write and talk about values and wishes before a medical crisis. This is a non-clinical guide that is extremely helpful in beginning the discussion around medical decision making in a less threatening way than immediately discussing advance directives. The Starter Kit should be the first step in initiating conversation and dialogue. After completing the Starter Kit, moving on to completing medically necessary documents such as Advance Directive, Health Care Proxy or MOLST forms is a bit easier.

Our fear of discussion about the final phase of life is one of the reasons why care is fragmented and often inappropriate as we enter the later stages of life. If we, as health care professionals, are committed to providing quality care throughout the life span of our patients, we need to be as open and educated in choices and decision-making at the end of life as we are about education and preparation at the beginning of life.

My question and challenge to you...have YOU had the conversation with your loved ones?

# Connections: Mind/Body/Spirit

By Pamela Katz Ressler, MS, RN, HN-BC

## Resources:

The Conversation Project <http://theconversationproject.org/>

Massachusetts Health Care Proxy Form <http://molst-ma.org/sites/molst-ma.org/files/MA-Health-Care-Proxy-Form.pdf>

Engage with Grace: The One Slide Project <http://www.engagewithgrace.org/>

Massachusetts Medical Orders for Life Sustaining Treatment (MOLST) --this site includes patient and professional education materials and handouts <http://molst-ma.org/>

Five Wishes (Aging with Dignity)--access to patient teaching and facilitators guide to end of life conversations <https://www.agingwithdignity.org/five-wishes.php>

As always, I love comments and feedback from readers. What topics of mind/body/spirit would you be interested in exploring in future columns? Let me know at [ressler@StressResources.com](mailto:ressler@StressResources.com)

**Pamela Katz Ressler, MS, RN, HN-BC** is the founder of Stress Resources (StressResources.com) located in Concord, MA. Stress Resources specializes in providing individuals and organizations with strategic, sustainable tools to build resilience and mindfulness. Pam is a frequent speaker to local, national, and international audiences on topics relating to stress management, mindfulness, resiliency strategies, therapeutic communication, patient advocacy through social media, and holistic healthcare. She is a faculty member at the Tufts University School of Medicine teaching courses in pain research, education and policy, as well as stress management, palliative care, and mindfulness for healthcare providers. Pam serves on the Consumer Health Council of the Massachusetts Health Quality Partners (MHQP) and on the board of directors of the Integrative Medicine Alliance.

## AACVPR Updates

It's time to start planning:



**AACVPR@30: OPTIMAL CARE, EXCEPTIONAL QUALITY**  
September 9-12, 2015 | Washington, DC

**30<sup>TH</sup>**  
ANNUAL  
MEETING

**AACVPR**  
American Association of Cardiovascular  
and Pulmonary Rehabilitation  
Promoting Health & Preventing Disease