As 2013 dawns, Cardiac and Pulmonary Rehabilitation programs continue to wrestle with many of the same issues as in years past: underutilization of services, under reimbursement of services, and overly restrictive regulations regarding physician supervision. Hanging over all of this is the uncertainty of what health care reform will look like: and more specifically how it will affect each of us. Lesser individuals than the professionals working in cardiac and pulmonary rehabilitation throughout MA would likely to become discouraged, but not us!

There are good reasons to be excited about the future of cardiac and pulmonary rehabilitation as we move deeper into the 21st century. Starting with the almighty dollar, reimbursement for cardiac rehabilitation increased ~ 13% to about $80/session effective 01/01/2013. Pulmonary rehabilitation reimbursement increased slightly to approximately $39/ session for CPT G0424. While these increases are modest, they are moving in the right direction. Nationally, AACVPR is petitioning CMS to make the currently voluntary use of non-standard cost centers mandatory for the reporting of cardiac and pulmonary rehabilitation costs from which reimbursement rates are determined. The recently released Pulmonary Reimbursement Tool Kit from AACVPR is a huge step in the right direction. If you are not familiar with this topic, please see someone from the MACVPR EC for assistance. Please don’t assume your hospital is participating in this data collection. Only more data; and more importantly, better quality data, will lead to better reimbursement rates.

Utilization rates for both cardiac and pulmonary rehabilitation have been disappointing for years, but the passage of the Affordable Care Act of 2010 promises to help change that by encouraging physicians to do a better job of managing their patients’ chronic diseases or suffer financially. Who better than physicians to do a better job of managing their chronic disease? In fact, a multi-society just named disease a level 1a recommendation, the strongest referral to cardiac rehabilitation for stable ischemic heart disease a level 1a recommendation, the strongest possible level of evidence. CMS knows this as well and will begin to track referral rates to cardiac rehabilitation programs in 2014-15. The launch of the AACVPR Outcomes registry for cardiac and pulmonary rehabilitation will provide additional data to support what we all know intuitively to be true; that graduates of our programs manage their symptoms better and have fewer hospitalizations than those who don’t attend rehabilitation. With hospital systems nationwide facing the reality of un-reimbursable readmissions within 30 days of discharge, NOW is the time to dust off the plans for any chronic disease management program you’ve ever had!

AACVPR remains committed to correcting the “technical error” that prohibits non physician providers (NPP) from supervising cardiac or pulmonary rehabilitation and represents a significant obstacle to many programs. This issue will again be the focus of their annual “Day on the Hill” (DOTH) activities on March 6-7, 2013. This year’s DOTH will also feature the first ever “Co-Pay Workshop” to address what has probably become the single greatest roadblock for patients wishing to participate in rehabilitation programs.

There is a saying, more of an urban myth really, that the Chinese characters for “crisis” and “opportunity” are identical. Regardless, out of the crisis filled past years comes real opportunity for our profession. Health care is poised to enter a new era, an era of “health care” as opposed to “sickness care,” an era where the focus is on disease prevention, an era when cardiac and pulmonary rehabilitation will come into their own as part of the integrated care of the patient. We are entering an era where there is real cause for real optimism about what the future may bring for us.

Robert Berry MS RCEP FAACVPR
Dennis O’Brien, RN
president@macvpr.org

Dates to remember in 2013
- February 10-16: Cardiac Rehabilitation Week
- February 28: AACVPR Program Certification applications due
- March 6-7: AACVPR DOTH
- March 10-16: Pulmonary Rehabilitation Week
- May: MACVPR General Meeting (Date/Location TBD)
- October 3-5: AACVPR Annual Meeting, Nashville, TN
- October 24 or 25th: MACVPR Regional Symposium, Devens Common Center, Devens, MA
WE HAVE ANOTHER INFORMATIVE, ALTHOUGH DELAYED, EDITION OF MACVPR NEWS. MANY THANKS TO ALL THAT HAVE CONTRIBUTED. DUE TO THE DELAY IN GETTING THE NEWSLETTER OUT WE DECIDED TO MAKE IT A COMBINED FALL/WINTER NEWSLETTER.

DEBORAH SULLIVAN MS, ANP-BC HAS CONTINUED WITH A GREAT NEW FEATURE “THE BEAT GOES ON...EKG CHALLENGE” IN WHICH SHE DISCUSSES AN INTERESTING FINDING ON A RHYTHM STRIP AND PRESENTS IT AS A BRIEF CASE STUDY.

I HAVE COMPILED THE DATA THAT YOU SUBMITTED IN RESPONSE TO MY EMAIL QUESTION LAST FALL REGARDING PROGRAMMING FOR EACH OF THE DISCIPLINES IN THE TALES FROM THE TRENCHES COLUMN. HOPEFULLY YOU MIGHT FIND THIS INFORMATION INTERESTING AS WELL AS HELPFUL TO YOUR PROGRAMS.

ONCE AGAIN I ENCOURAGE EVERYONE TO USE THE NOW NOT SO NEW, BUT DEFINITELY IMPROVED MACVPR WEBSITE. THE FORUM IS MUCH MORE USER FRIENDLY AND A GREAT WAY TO SHARE INFORMATION WITH OTHER MEMBERS, AND GET YOUR QUESTIONS ANSWERED BY OTHERS IN YOUR FIELD. HOPEFULLY MORE PEOPLE WILL BEGIN TO UTILIZE THIS GREAT RESOURCE.

PLEASE FEEL FREE TO E-MAIL ME AND SHARE YOUR IDEAS. I AM ALWAYS INTERESTED IN YOUR THOUGHTS TO IMPROVE THE NEWSLETTER.

LYNNE MACDONALD, PT
BETH ISRAEL DEACONESS HOSPITAL-MILTON CARDIAC REHAB
NEWSLETTER EDITOR  newslettereditor@macvpr

MACVPR NEWSLETTER

AS WE WEATHER THE STORMS (LITERALLY AND FIGURATIVELY) NOW AND IN THE FUTURE, WE HOPE THAT MACVPR WITH AACVPR PROVIDE YOU SUPPORT TO SURVIVE THE CHALLENGES IN THE FIELD OF CARDIAC AND PULMONARY REHAB. SEVERAL ISSUES REMAIN UNRESOLVED AND CONTINUE TO NEED WORK TO PROVIDE THE BEST OUTCOMES FOR OUR PROGRAMS AND PATIENTS. AMONG THESE INCLUDE THE PROPOSED 2013 REIMBURSEMENTS BY CMS, THE SENATE BILL S.2057, AND THE NEED TO USE KX MODIFIERS.

CMS REIMBURSEMENT: WHILE THE REIMBURSEMENT FOR CARDIAC REHAB INCREASED TO $80.06 IN 2013, REIMBURSEMENT FOR PULMONARY REHAB COPD CODE GO424 REMAINS LOW AT $39.58. REIMBURSEMENT FOR NON-COPD CODE GO237-39 UNDER RESPIRATORY THERAPEUTIC SERVICES REIMBURSEMENT WILL BE $35.12 PER 15 MINUTE PROCEDURE CODES. ALL PULMONARY REHAB PROGRAMS ARE HIGHLY ADVISED TO COMPLETE THE PULMONARY TOOLKIT: GUIDANCE TO CALCULATING APPROPRIATE CHARGES FOR GO424 TO REVEAL A MORE REALISTIC COST OF YOUR PROGRAM. THE TOOLKIT SHOULD ASSIST WITH CLARIFYING ISSUES ASSOCIATED WITH THE PAYMENT REDUCTION IMPLEMENTED BY MEDICARE SINCE JAN. 1, 2012 AND HELP TO INCREASE REIMBURSEMENT. THE TOOLKIT IS AVAILABLE ON OUR WEBSITE AND ON THE AACVPR WEBSITE.

SENATE BILL S. 2057: AACVPR CONTINUES TO WORK ON SUPPORTING SENATE BILL S.2057, WHICH ALLOWS FOR THE USE OF NONPHYSICIAN PRACTITIONERS (NPs AND PA’S) TO MEET SOME OF THE PHYSICIAN SUPERVISION REQUIREMENTS. THE USE OF NONPHYSICIAN PRACTITIONERS IS ALREADY IN PLACE IN OTHER HOSPITAL OUTPATIENT PHYSICIAN SUPERVISED SERVICES AND IS ESPECIALLY IMPORTANT FOR CRITICAL ACCESS HOSPITALS PROVIDING CARDIAC AND/OR PULMONARY REHAB. IT IS A NON-PARTISAN, NO COST TECHNICAL CORRECTION. EVERYONE IS ENCOURAGED TO CONTACT THEIR SENATORS TO SUPPORT THIS BILL. DOTH (DAY ON THE HILL) 2013 WILL FOCUS ON THIS ISSUE AGAIN AND IS SCHEDULED FOR MARCH 6-7, 2013 IN WASHINGTON D.C. IF YOU PLAN TO ATTEND THIS EVENT, PLEASE CONTACT DONNA AT www.admin@macvpr.org SO THAT MA CAN HAVE A COORDINATED EFFORT IN D.C.

CARDIAC REHAB KX MODIFIER: THE KX MODIFIER IS REQUIRED FOR CARDIAC REHAB PATIENTS WHO HAVE EXCEEDED 36 VISITS AS OF 1/1/10. THE CMS COMMON WORKING FILE (CWF), UNDER THE PROVIDER INQUIRY SCREEN, WILL INDICATE IF THIS MODIFIER IS NEEDED. IT IS RECOMMENDED THAT PROGRAMS CONTACT THEIR HOSPITAL’S CODING SPECIALIST TO ENSURE THAT THEIR HOSPITAL AdHERES TO THIS REQUIREMENT AND PREVENT CLAIM DENIALS.

THROUGHOUT THIS YEAR (STORMY AND OTHERWISE), JUDY AND I HAVE FELT PRIVILEGED AND HONORED TO SERVE AS IMMEDIATE PAST CO-PRESIDENTS AND APPRECIATE YOUR CONTINUED EFFORT AND SUPPORT OF YOUR PATIENTS, PROGRAMS, AND MACVPR. WE LOOK FORWARD TO CONTINUING IN THIS ROLE NEXT YEAR AND WELCOME ANY QUESTIONS, COMMENTS, OR CONCERNS.

ESTHER BURCHINAL, MS, CES, RCEP
EMERSON HOSPITAL CARDIAC REHAB

JUDY FLANNERY, RN, BSN
HARRINGTON HOSPITAL CARDIAC REHAB
IMMEDIATE PAST CO-PRESIDENTS www.macvpr.org
I nominate Deborah L. Sullivan, MS, RNC for the 2012 MACVPR Distinguished Service Award.

A Registered Nurse since 1982, Debbie received her Master's degree in 1996 and has been working in cardiac rehab since 1986, initially at New England Rehab Hospital and then in 1988, started the program at the Lahey Clinic Medical Center for which she wrote all policies and procedures and brought it to be a department of its own, which has more than doubled under her direction.

A MACVPR Charter Member and recognized as a leader in her field, Debbie also served in the executive committee many times since 1990. Primarily Education Chair or a committee member, she has also chaired and been a member of the certification committee and served on the Task Force for Vascular Rehabilitation in 1992. She consistently worked within and outside of her job description on the EC to serve MACVPR in superlative fashion, whether simply welcoming new members, helping new professionals to “learn the ropes” of our particular state and national issues or assisted and mentoring countless Executive Committee members. Though never president, her leadership is well recognized by her quiet presence and thoughtful discussion of all issues and topics brought before the EC. Her opinion highly valued by all EC members, Debbie has been involved with nearly every success and major undertaking of MACVPR. A look at educational offerings of MACVPR during her tenure as Education Chair gives a perfect illustration of Debbie’s dedication to cooperation, teamwork and excellence in furthering the care of our patients and expertise of our membership. Her recent newsletter feature- “The Beat Goes On” is a welcome and informative addition to our excellent newsletter.

Stepping off the EC in 2010, she joined AACVPR’s Education Committee in 2011 and has been a valuable asset to that committee and has enhanced Massachusetts’ representation with AACVPR as well as our reputation as an excellent state organization.

Her work in all areas reflects a steadfast commitment to the advancement of care of patients and continued education of students and professionals in our field. Debbie’s innovative ideas continue to motivate the executive committee as well as the general membership of MACVPR and now AACVPR.

It is my sincerest wish that her example inspires members to contribute their time and talents to MACVPR.

Sincerely,
Wayne Reynolds

I would like to add to Wayne’s summary:

As the education co-chair, I know how much work it is to be in this position and the fact that Deb has done it for many years (first beginning in 1990 when I first joined MACVPR) shows her dedication to our organization and to the field of cardiac and pulmonary rehab.

I began working on the executive committee in 1997 and have held several executive committee positions (membership, president and now education) and in all this time I have never felt anyone could match the dedication to improving the quality of education of our MACVPR organization than Deb. This is why I nominated her in 2008 and again in 2012. She “raised the bar” by improving the CEU’s to meet standards for board certified nurses and improved the quality of education in the newsletter. She consistently sought out education needs from members and ideas for speakers as well. She is a great addition to the national organization with her many years of experience.

Thanks so much,
Ginny Dow

Dear Executive Committee,

As a recipient of the MACVPR Distinguished Service Award for 2012 I would like to graciously thank all those that nominated and supported me for this prestigious honor. In the words of a noted public service award recipient, “It is an even greater honor to be placed in such a distinguished ranks as those past honorees” all of whom have made significant contributions to the MACVPR and the field of cardiovascular and pulmonary rehabilitation. Their leadership, mentorship and inspiration have made it possible to follow in their footsteps and I am grateful for their past accomplishments.

As I accept this award I think of the outstanding contributions of the MACVPR members that have helped to facilitate my efforts as nothing was achieved singlehandedly. I know I benefitted more from my volunteer efforts than I gave. This includes: knowledge passed on from many stellar committee members; the numerous opportunities for personal and professional growth; self satisfaction for the contributions made; the many friendships developed; and the sense of pride for meeting a few of the challenges we have faced. It is gratifying to belong to an organization that shares my passion!

Let me reiterate my sincere appreciation. I will continue to do my best to represent our organization according to the standards this award represents.

Deborah Sullivan
The Executive Committee is pleased to make the following announcements:

**Karen LaFond and Deborah Sullivan**

have agreed to take on the position of Co-Presidents for 2014!!

**Ann Stone**

will be resuming her role as our Administrative Assistant!!

**Donna Hawk**

will be taking on the position of Treasurer!!

We look forward to 2013 having all positons filled on the Executive Committee

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**Innovation Award**

*Is your program doing something unique and creative, beyond the traditional model of Cardiac or Pulmonary Rehab??*

The AACVPR is seeking applications for the innovation award. The Innovation Award was designed to recognize a program that used outstanding creativity in patient care and program design to maintain excellence and expand services today and in the future. **The Innovation Award is selected by the AACVPR Membership and Affiliate Relations Committee and may not be awarded every year.**

Please see attachment in email alerting you to this newsletter posting or contact us at president@macvpr.org
Greetings MACVPR Members,

Thanks to all of you who continue to support and participate in MACVPR. Attendance at our October symposium shows the interest in the organization despite a trend in program closings and staff reductions in cardiac rehab. We want to CONTINUE to keep MACVPR a strong organization. Your individual membership is vital! I encourage you to continue to encourage co-workers to join or renew their membership. Explain the benefits of networking, continuing education, keeping up to date on current standards, federal and state guideline, legislature and reimbursement issues. I welcome your suggestions, ideas and questions.

Melessa Fox

Membership Chair

Falmouth Hospital Cardiac Rehab

membership@macvpr.org

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Welcome Donna Hawk as our new Treasurer!

MACVPR Forum Update

Currently we have posts on these topics:

- What are PR programs doing to screen pts with cardiac risk factors?
- Does anyone have any experience with SCIFIT UBE’s or recumbant bikes?
- Looking for suggestions/advice for limited space/eqip space in PR program maintenance
- Does anyone mix maintenance pts with monitored pts in PR?
- Do any programs have pts record calories taken in and calories burned with exercise to facilitate weight loss?
- What cuts can be made with dietitian and still meet requirements for CMS and certification?
- What key outcomes are programs using for PR performance measures?
- Solutions to high co-pays
- Is anyone using the wrist pulse oximeter and can make recommendations ona brand

Try to make it a habit to check out the Forum at least once a week. One new feature that you may not have noticed is the ability to watch or subscribe to the topic. If you subscribe to the topic when a new post is posted you are automatically sent an email alerting you to go to the forum to read the new post. So easy to track! This is a great but underutilized resource...so please start to take advantage of it. Sharing our thoughts and experiences with one another helps all of our programs improve the care we provide to our patients.

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<table>
<thead>
<tr>
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<td></td>
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<tr>
<td>Melessa Fox Membership Chair Falmouth Hospital Cardiac Rehab <a href="mailto:membership@macvpr.org">membership@macvpr.org</a></td>
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Treasurer’s Report

Current balances as of December 6, 2012:

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<td>Citizen’s Bank Money Market fund</td>
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Welcome New Members

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<thead>
<tr>
<th>Name</th>
<th>Title</th>
<th>Affiliation</th>
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<tr>
<td>Patrick Weyer</td>
<td>MD</td>
<td>Brown University</td>
</tr>
<tr>
<td>Maria Buckley</td>
<td>PhD Staff</td>
<td>Miriam Hospital</td>
</tr>
<tr>
<td>Diane Carrier</td>
<td>Nurse Mgr</td>
<td>Lawrence General Hospital</td>
</tr>
<tr>
<td>Jacqueline Pierce</td>
<td>PT</td>
<td>The Miriam Hospital</td>
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<tr>
<td>Sophia Saropoulos</td>
<td>BS,EP</td>
<td>Emerson Hospital</td>
</tr>
<tr>
<td>Kelley Weider</td>
<td>RN, BSN</td>
<td>Berkshire Medical Center</td>
</tr>
<tr>
<td>Mary Ann Riley</td>
<td>RT</td>
<td></td>
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<tr>
<td>Regina Stevenson</td>
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<tr>
<td>Carol Sue Sanchez</td>
<td></td>
<td>Concord Hospital</td>
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<tr>
<td>Paula Downes Vogel</td>
<td>PT</td>
<td>Massachusetts General Hospital</td>
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<tr>
<td>Lisa Porazzo</td>
<td>RN</td>
<td>Faulkner Hospital</td>
</tr>
<tr>
<td>Kara Ciesielczyk</td>
<td>BS,EP</td>
<td>Boston Medical Center</td>
</tr>
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</table>

Save the Date

NEXT GENERAL MEETING
MAY 14, 2013
More details to follow
The MACVPR 2012 New England Cardiovascular & Pulmonary Rehabilitation Symposium on October 26, 2012 was a huge success! Kudos to Ginny Dow and Deirdre Proudman, Education Co-Chairs as well as the entire Education Committee for their hard work in developing a well rounded and informative agenda featuring Chris Garvey from National who spoke on PR and Evidenced Based Outcomes and also provided us with an AACVPR Update. Here’s a summary of the offerings in case you missed the day.

**Education Updates**

**Pulmonary Rehabilitation Reimbursement Update**

Chris Garvey FNP,MSN,MPA,FACVPR was our keynote speaker who travelled to us from California. She spoke about the Medicare Reimbursement rules including program requirements, physician’s role, the diagnosis criteria and coding and billing. She then described details around outcomes assessment, and described the components of a good pulmonary rehab program including individualizing the education and goals. The pulmonary rehab reimbursement challenges were discussed, including the payment rate of $37. These rates will remain in effect until 2014 and new rates will be announced in July 2013. The pulmonary rehab toolkit was developed to offer PR providers steps to take to address the inappropriate charges for pulmonary rehab. (See the pulmonary toolkit available on our website.)

**Heart Disease in Women**

Heart Disease in Women was presented by Nandita S. Scott MD, FACC, and Co-Director of MGH Heart Center Corrigan Women’s Heart Health Program. Dr. Scott discussed the topics of micro vascular disease, stress cardiomyopathy and other non coronary causes of chest pain in women. Beginning with coronary anatomy and function, gender differences in the coronary structure reveal that women have smaller coronary arteries; and that the mechanism of acute coronary syndrome is more commonly plaque erosion in women. Her presentation opened with a case study interwoven throughout the lecture beginning with evaluation for obstructive CAD in women and illustrating the AHA algorithm for evaluation and testing of symptomatic women using exercise ECG or cardiac imaging.

In women with micro vascular coronary heart disease, cholesterol plaque may not build up into major blockages, but instead spreads evenly throughout the artery wall. As a result, diagnostic coronary angiography reveals that these women have “clear” arteries, no blockages, incorrectly indicating low risk. Despite this, many of these women have a high risk for heart attack (Women’s Ischemia Syndrome Evaluation (WISE) study). Hormonal alterations coupled with proatherogenic factors lead to vascular dysfunction symptoms treated with aspirin and statins to reduce atherosclerosis and adverse prognosis. This is combined with treatment to reduce angina and improve quality of life. Current angina guidelines do not specifically address micro vascular disease.

Takosubo or stress cardiomyopathy is a heart syndrome first described in Japan in 1990 and a topic at our May meeting. It is a unique reversible cardiomyopathy that is frequently precipitated by a stressful event and has a clinical presentation that is indistinguishable from a myocardial infarction. Typically, there is catecholamine mediated myocardial stunning of the mid and apical segments of the left ventricle resembling the shape of a Japanese octopus pot without obstructive coronary lesions. Supportive treatment leads to rapid recovery in nearly all patients.

Spontaneous coronary artery dissection (SCAD) is a rare clinical entity of unknown cause that typically affects young women without coronary risk factors. The coronary artery can suddenly develop a tear, causing blood to flow between the layers which force them apart, potentially causing a blockage of blood flow through the artery and a resulting heart attack. The clinical presentation of SCAD depends on the extent and the flow limiting severity of the coronary dissection, and ranges from asymptomatic to unstable angina, acute myocardial infarction, and ventricular arrhythmias to sudden cardiac death.

Despite less prevalence of obstructive CAD with clean coronary arteries, women have symptoms, ischemia, and worse prognosis contributing to CHD being the leading killer of women as a paradox needing explanation. There are differences between men and women’s cardiovascular systems and disease presentation, yet they are still largely treated the same.
Margaret Wandrey, RD, LDN, Clinical Nutrition Manager at Lowell General Hospital gave us food for thought with her presentation, What’s on Your Plate? Does It Really Matter? A major take home point of the presentation was that it isn’t what you don’t eat that really matters, it is all about what we do eat. Margaret illustrated taking action on the 2010 AHA Diet and Lifestyle Recommendations for Cardiovascular Disease Risk Reduction by balancing calories and exchanging typical choices for nutrient dense food choices. Components of a Cardioprotective diet include 4-5 servings of fruit AND 4-5 servings of vegetables, 3+ servings of whole grains in place of refined grains, 2+ servings of fish and shell fish, and the monounsaturated fiber and vegetable protein benefits of nuts and legumes. Two to three servings per day of low fat or non fat dairy foods are recommended for their source of selected nutrients. Constituents of meats (SFA and cholesterol) could increase risk of CHD, and when consumption is replacing foods with cardiometabolic benefits such as low fat dairy, nuts, and fish, it is associated with CVD risk. Sugar sweetened beverages are associated with obesity and increased caloric intake and a higher incidence of DM and Metabolic Syndrome. Moderate use of alcohol had been associated with lower risk of CHD in some populations but is not advisable as a population based strategy to reduce CVD risk. Examples of dietary patterns with evidence of cardiovascular health benefits emphasize a whole diet approach and include Dietary Approaches to Stop Hypertension (DASH), the Mediterranean Diet, and the Full Plate Diet. In summary:

- Eat more fruits and vegetables
- Select whole grains
- Fit in the fish
- Do your dairy
- Watch the fat amount and quality
- Manage your beverages
- Balance your energy intake with daily exercise

Dr. Linda Nicci presented a very comprehensive (and enjoyable!) discussion on “The Integrated Care of the COPD Patient.” Some key points from her presentation:

- Comprehensive care must include prevention and health promotion.
- Integration of care must occur “vertically” – amongst the various care providers and “horizontally” – over the lifetime of the patient.
- > 50% of the costs associated with caring for COPD patients are due to hospitalizations.
- The average COPD patient has an average of 3.7 chronic medical conditions compared to 1.8 for non COPD patients.
- “The Tyranny of the Urgent” – acute symptoms and concerns take precedence over achieving optimal control of the chronic disease. Patients are not taught to care for their own illness.
- Risk factors for admission for AECOPD are previous admission, lower FEV1, under-prescription of O2 and decreased activity level.
- COPD patients who are hospitalized have 3 year mortality rates between 38-50%.
- Each exacerbation of COPD is associated with dramatic changes in airflow mechanics and exercise tolerance.
- Low physical activity levels are associated with decreased exercise capacity, increased risk of bronchial hyper-responsiveness and greater lung function decline.
- One study revealed there was a decreased risk of readmission associated with higher “usual” levels of physical activity (>232 kcal/day).
- Dr. Nicci discussed the important role that Pulmonary Rehab can play related to educating the patient in self-management skills, including exercise – and potentially decreasing the number/severity of exacerbations, impacting disease progression and decreasing hospitalizations.

Summary of the Program Evaluation Form

The last speaker of the day was Pamela Katz Ressler MS, RN, HN-BC on “Novel Approaches to Relaxation and Meditation”.

Pam spoke about the background of Mindfulness and Mindfulness research including brain changes and MRI studies supporting the benefits of mindfulness. She described brain changes that occur with chronic stress. The next component of her talk was on Labyrinths as an ancient tool of meditation which has been “rediscovered”. All labyrinths have only one path and one entrance and exit. These could be an outdoor path or a lap tool to be used for those who cannot walk. She shared that many health care institutions have labyrinths and are used by patients and staff. This is a low cost intervention that is effective at eliciting the relaxation response. Tools are available at LabyrinthSociety.org
Labyrinths for Wellness

Labyrinths are ancient meditative tools that have been "rediscovered" for use in health care over the past decade. It may be helpful to differentiate between mazes and labyrinths to understand how a labyrinth can play a role in decreasing the stress response and eliciting relaxation. A maze is a puzzle, one which we attempt to solve with our analytical or left brain function. Mazes often have high hedges or walls to prevent one from seeing the full pattern. Mazes most often have separate entrances and exits, with blind alleys and confusing turns and angles throughout the pattern. Alternatively, a labyrinth is constructed of a single circular path using the same entrance and exit. A labyrinth is always flush with the ground without obstructions or hidden paths obscuring the pattern. Labyrinths elicit the relaxation response by shifting the brain to a right-brain or more free-flowing function.

Interest in labyrinths in health care settings has been driven by a number of factors including increased attention to creating healing environments, patient and family demand for integrative healing strategies, and recent research on the benefits of regulating the stress response as a component of wellness. As of 2011, over 100 health care institutions have included labyrinths in their facilities. Some have permanently installed labyrinths on their campuses, often as part of a larger outdoor or indoor space, while other health care facilities have opted to use portable canvas labyrinths which can be moved from location to location. Some current health care uses for labyrinths include:

- Elicit the relaxation response
- Decrease stress
- Connect with own sources of strength
- Body-focused gentle exercise of walking
- Decision making
- Centering
- Conflict resolution
- Creative problem solving

Patients and families, as well as staff, have found that labyrinths may facilitate a sense of calm amidst the stressful environment of a hospital or clinic setting. Teams and groups have found that walking a labyrinth together can help with joint decision making and conflict resolution. Simplified labyrinths (larger paths, and only a few turns) have been installed in some memory-impaired units, where they have been met with enthusiastic results from caregivers and patients. The ability to calm oneself in this very elemental way appears to have beneficial results for individuals with dementia as well as their caregivers.

For those individuals who cannot walk, either because of physical challenges or because they need to remain in a seated posture (i.e. individuals receiving infusions or other medical interventions, family members sitting at the bedside of a patient, or waiting for an appointment in an office environment) finger or lap labyrinths may provide a welcome way to elicit a relaxation response. Repetitively tracing the pattern of the labyrinth with one’s finger allows the brain to shift from the analytic or processing mode to a more free-flowing or relaxed mode. There are several sources for lap or finger labyrinths, but one I highly recommend is The Sand Labyrinth by Lauren Artress (see references below). The affordability, portability and ability to clean appropriately for a health care environment make this a great addition for a waiting room area.

Why would a health care institution choose to install a labyrinth? Here are a few thoughts from Robert Ferre:

- Demonstrating that the institution cares about the whole person, whether patient or employee.
- Balancing science and technology with complementary care.
- Providing an excellent form of outreach to the community for promoting wellness.
- An inviting oasis that adds unexpected beauty to a clinical environment.
- A perfect center in which to retreat, commune, celebrate, honor, and remember.
- Cost effective -- costs less than a typical piece of health care equipment.
- The center of a healing garden or outdoor space.
Labyrinths for Wellness ……continued.

I encourage you to explore using labyrinths both for yourself and your patients as a component for wellness care. I would be interested in hearing how you have used a labyrinth and what benefits you may have experienced.

To learn more about labyrinths:

• Labyrinth Society: find out more about the history of labyrinths, types of labyrinths, research on labyrinths [http://labyrinthsoociety.org](http://labyrinthsoociety.org)
• Labyrinth Locator: find a labyrinth in any area in the U.S., and internationally
• Labyrinth Journal ([http://veriditas.org/journal](http://veriditas.org/journal))
• The Sand Labyrinth (Lauren Artress) available on Amazon.com
• Curry, Helen: The Way of the Labyrinth: A Powerful Meditation for Everyday Life (Compass)

As always, I love to hear comment and feedback from readers. What topics of mind/body/spirit would you be interested in exploring in future columns? Let me know at pressler@StressResources.com

Pamela Katz Ressler, MS, RN, HN-BC is the founder of Stress Resources ([StressResources.com](http://StressResources.com)) located in Concord, MA. Stress Resources specializes in stress management, holistic healthcare education, and health communication for healthcare providers, organizations, and individuals. 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 an adjunct faculty member both Tufts University School of Medicine and University of Massachusetts Boston, College of Nursing and Health Sciences, teaching courses in pain research, education and policy and stress management for healthcare providers. Pam serves

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<thead>
<tr>
<th>Day/Date</th>
<th>Webcast Title</th>
<th>Webcast Presenter</th>
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<tbody>
<tr>
<td>Tuesday  February 19, 2013</td>
<td>Review of the AACVPR Pulmonary and Cardiac Rehab Registries</td>
<td>Mike McNamara, MS, FAACVPR, MT Dept of Public Health &amp; Human Services &amp; Mark Vitcenda, MS, RCEP, FAACVPR, Univ of WI Hospitals and Clinics</td>
</tr>
<tr>
<td>Tuesday  March 19, 2013</td>
<td>Keeping Up to Date with Your Diabetes Patients</td>
<td>Leigh Taylor, PharmD, Lahey Clinic</td>
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<tr>
<td>Thursday  April 4, 2013</td>
<td>How to Improve Compliance in Cardiac Rehabilitation in Patients with Diabetes</td>
<td>Susan D’Agostino, RN, BC, MS, BSN, Baptist Hospital of Miami</td>
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<td>Tuesday  April 23, 2013</td>
<td>Intensive Cardiac Rehabilitation: Dr. Ornish’s Program for Reversing Heart Disease</td>
<td>Dean Ornish, MD, Preventive Medicine Research Institute</td>
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<td>Wednesday  May 15, 2013</td>
<td>Interval Training in Phase II Cardiac Rehabilitation</td>
<td>Ray Squires, PhD, FAACVPR, Mayo Clinic</td>
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<tr>
<td>Wednesday  June 5, 2013</td>
<td>Testing for Muscular Strength and Endurance in Pulmonary Rehabilitation: The Good, The Bad, and The Ugly</td>
<td>David Verrill, MS, RCEP, FAACVPR, University of North Carolina at Charlotte</td>
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Cardiac Rehab Week
February 10-16, 2013

Pulmonary Rehab Week
March 10-16, 2013
Mr. A. is a 55 year old white male status post STEMI with drug eluting stent (DES) to his proximal left anterior descending (LAD) artery 4 weeks ago. His initial presentation included 2 hours of mid sternal chest pain 8/10 associated with profuse diaphoresis, dizziness and shortness of breath. His initial ejection fraction (EF) was 30% as demonstrated by his echocardiogram. Prior to his MI he had a history of hypertension which had been managed with medication for the last 2 years. His hospital course was uneventful.

He was evaluated for your cardiac rehabilitation program 2 days ago. His current meds include aspirin 325 mg daily, atorvastatin 80 mg daily, prasugrel 10 mg daily, lisinopril 5 mg daily, metoprolol succinate 50 mg daily and nitroglycerin 0.4 mg prn. He is adherent to his medical regimen and has not required the NTG for chest pain/discomfort. He underwent an exercise tolerance test (ETT) using the Standard Bruce Protocol and went 7 minutes to a heart rate of 111 beats per minute (bpm) and blood pressure of 124/68 with no evidence of ischemia at heart rate achieved and was cleared to begin the rehabilitation program.

During his prescreening prior to his exercise session he reported having several episodes of mild indigestion but no pain or discomfort at this time. His blood pressure was 110/62 and heart rate of 52 bpm (sinus bradycardia). He reports that his weight is down another pound because of his recent dietary changes. This is his first cardiac rehabilitation exercise session. His ECG tracing is noted below (lead II and III respectively):

**Part I.** Your initial response is:
A. Call the MET Team because you feel this patient is unstable and will need to be transported to the emergency room right away.
B. Further assess the patient’s symptoms and review of his most recent EKG, seek expert opinion as needed prior to exercising this patient.
C. Obtain a 12 lead EKG, call the medical director for an order to give Nitro 0.4 mg and ASA according to your programs protocol or the ACLS guidelines because this is ACS.
D. Proceed with exercise as no further intervention is needed.

In reviewing his 12 lead EKG from 2 days ago you notice that he has non specific T wave abnormalities with inverted T waves in leads V3 and V4.

**Part II.** The inverted T-wave is most likely representative of:
A. Left ventricular hypertrophy
B. Myocardial ischemia
C. Persistant changes associated with the evolution of his myocardial infarction
D. Digoxin effect
E. Wellens’ syndrome

General review: The T wave represents ventricular repolarization of the cardiac electrical cycle. When looking at a 12 lead ECG the T wave is normally upright in leads I, II, and V3 to V6; inverted in lead aVR; and variable in leads III, aVL, aVF, V1, and V2. T-wave inversions can be the result of a variety of clinical syndromes. These range from life-threatening events, such as acute coronary ischemia, pulmonary embolism, and CNS injury, to entirely benign conditions such as digitalis effect and the persistent juvenile T-wave pattern (Morris 2006.).

**Part I.**
A. Incorrect. Call the MET Team is incorrect in this scenario because the patient is not unstable.
B. Correct. Further assess the patient’s symptoms is the correct answer and review of his most recent EKG, seek expert opinion as needed prior to exercise.
C. Incorrect. Obtain a 12 lead EKG, call the medical director for an order to give Nitro 0.4 mg and ASA according to your programs protocol or the ACLS guidelines because this is ACS is incorrect as well. The patient is asymptomatic. Obtaining a 12 lead ECG, though is not unreasonable but in this case scenario this was done two days ago and there has not been any change in his clinical condition since that time.
D. Incorrect. Proceed with exercise as no further intervention is needed is also incorrect. You want to make sure the T wave inversion is not new for him.

Part II.
A. Incorrect. Left ventricular hypertrophy (LVH) is incorrect in this case. Although he has history of hypertension in reviewing his 12 lead ECG he does not meet the Sokolov-Lyon criteria (most commonly used criteria to diagnosis LVH) for LVH which includes an S wave depth in V1 plus the tallest R wave height in V5 or V6 greater than 35 mm.

B. Incorrect. Myocardial ischemia should always be considered in the cardiac rehabilitation population and ruled out. In this case the patient had an ETT two days prior which demonstrated no evidence of ischemia and no reports of chest discomfort. There was no significant change in his presentation from two days ago.

C. Correct. Changes associated with the evolution of an MI is the correct answer in this case scenario. Following an infarction post ischemic T wave changes may develop and can be followed on serial ECGs as was the case with this patient. These post ischemic T waves indicate that there is no ongoing myocardial ischemia and may represent successful reperfusion from salvaged myocardium. These changes may eventually resolve over time. Consistency with lead placement will help you follow his T waves over time. (It is important to remember that the ECG is a tool used in the clinical setting and if the patient was reporting symptoms often associated with an acute or unstable condition additional action as stated in part I A and C may be indicated.)

D. Incorrect. Digoxin effect is incorrect although this medication is often used in the setting of heart failure. With an ejection fraction of 30% this patient is at high risk for heart failure but is not taking digoxin at this time.

E. Incorrect. Wellen’s syndrome was first described in a subset of patients with unstable angina (Mattingly 2012). As defined in Mosby’s medical dictionary (2009) Wellen’s syndrome is the electrocardiographic signs of critical proximal left anterior descending coronary artery stenosis in patients with unstable angina. The signs are: normal or minimally elevated enzyme; little or no S-T segment elevation; no loss of precordial R waves; and progressive, deep, symmetric inversion of the T waves in leads V2 and V3, and sometimes in other leads. The signs are seen when the patient is without pain and represent reperfusion following transient occlusion. Recognition of this ECG abnormality is of paramount importance because this syndrome presents a pre-infarction stage of coronary artery disease that often progresses to a devastating anterior wall MI.

References


Here is the summary of data collected from my email questions. I was disappointed in the response with only approx. 10 programs responding. This is pretty poor with over 100 members in the MACVPR! Please let me know of any ideas to help your programs in any other ways.

### PULMONARY REHAB SUMMARY

<table>
<thead>
<tr>
<th>Program Name</th>
<th>Avg # of pts/day</th>
<th># class/day</th>
<th>Format of Program</th>
<th>Dietitian Functions</th>
<th>Content of program</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baystate Health</td>
<td>14-16</td>
<td>2</td>
<td>Classes are 120 min</td>
<td>Budgeted position 4 hrs/month, patients are seen for a 1 hour initial visit and if needed a 1/2 hour follow up visit</td>
<td>warm-up exercises, stretching exercises, wt training/resistance training and then 30 min aerobic exercise on equipment; program is 8 weeks and have an ed class each class; staffing ratio is 4 patients to 1 staff members.</td>
</tr>
<tr>
<td>Berkshire Medical Center</td>
<td>16</td>
<td>2</td>
<td>2x/wk; Classes are 1 hour, once/week an additional 30 min for educational session</td>
<td>RD is budgeted for program approx. 2 hrs/week, sees pts individually if pt is interested, also does a group ed session for all pts</td>
<td>Classes: 30-40 min aerobic; 5-10 strength training; 15 min check in check out, warm up cool down….most pts are doing about 35 min aerobic, 5-10 of strength training; we combine the 2 classes for our ed group</td>
</tr>
<tr>
<td>Brigham and Women’s Hosp.</td>
<td>7-14 depending on day</td>
<td>1-2</td>
<td>2x/week; Education is done at the beginning or end of exercise. Class is 120 min.</td>
<td>All patients hear her once in group classes</td>
<td>We check vitals upon arrival, then either lecture or sometimes we do it during the last 30 mins of class. Then some gentle chair stretches and strength training. Then go into the aerobics -at least an hour. We do about 15-20 mins of breathing exs and stretching at the start of every session</td>
</tr>
<tr>
<td>Holy Family Hosp.</td>
<td>8</td>
<td>1</td>
<td>2x/wk; 90 min classes</td>
<td>1 hr. per wk., visit with each new patient and when we don’t have a new patient we plan a group education class.</td>
<td>4:1 ratio; Tues an exercise physiologist and respiratory therapist work and Fridays 2 respiratory therapists work. There are no benefited staff positions.</td>
</tr>
<tr>
<td>NE Sinai Hosp.</td>
<td>10</td>
<td>2</td>
<td>2x/wk; 60 min classes</td>
<td>No budgeted position - refer to the Diabetes Center dietician – otherwise staff does basic dietary education</td>
<td>VS/WUEs/breathing exercises - 10 min.; conditioning exercise - 40-45 min.; CDEs/breathing exercises - 5 min.; 1x/week UE weights as group and additionally individually as desired.</td>
</tr>
<tr>
<td>Newton-Wellesley Hosp.</td>
<td>8</td>
<td>1</td>
<td>2x/week</td>
<td></td>
<td>PTs for exercise twice per week, much like the cardiac and emphasis on aerobic but some strength as well. Patients come in pairs, maybe 3 at a time, or individually for that. Then we have a series of interdisciplinary lectures, OT, RT, SLP, dietician, for the group, they run on an ongoing rotation</td>
</tr>
<tr>
<td>Saints Medical Center (merged: now Lowell general)</td>
<td>15-20</td>
<td>4</td>
<td>3x/wk; 60 min classes</td>
<td>We do not have dietitian budgeted into our program. We do provide some nutritional counseling but basically we have them see our dietician as an outpatient which is billed separately. Pts are waiting 1 - 1/2 months to see our dietician.</td>
<td>Stretching, weights, treadmill, bike, UBE or airdyne. Teaching is done on the same day as they exercise Staff: one resp therapist and EP</td>
</tr>
<tr>
<td>Signature Health-care Brockton</td>
<td>1</td>
<td>60 min</td>
<td>Dietician is budgeted for an hour per week for 2 half hour lecture spots</td>
<td></td>
<td>Classes are 1 hour long, education is during the exercise sessions, mainly as they do not attend, otherwise. Relaxation is part of the exercise cool down</td>
</tr>
<tr>
<td>South Shore Hosp.</td>
<td>15</td>
<td>2</td>
<td>60 minutes exercise 2 days/week; 30 minute weekly education classes.</td>
<td>Yes 4 hrs/wk. They see new patients 1:1 for their initial assessment and follow-up with the patients within their weekly group rounding. Patients are also given a weekly dietary handout as part of the rounding process.</td>
<td>Each class has initial warm-up stretch, generally 30 minutes of mixed aerobic exercise, 5 minutes hand weights, followed by cooldown stretches.</td>
</tr>
<tr>
<td>Program Name</td>
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<tr>
<td>Berkshire Medical Center</td>
<td>42/day</td>
<td>4</td>
<td>3x/wk; we allow 1 hour for each exercise class; 1x/wk education which lasts 30 minutes, combine groups if they dovelat with each other</td>
<td>12 hrs but includes Primary Prevention and Maintenance. Initial assessment 30 min, also does a follow up on all cardiac pts (this is a quickie while they are working out, or if needed, she meets with them formally)</td>
<td>Start with check in (pts complete a questionnaire each time they come in (suggested by Pat Comoss). Group warm up of 5 mins, followed by 30-40 min of aerobic exercise and approx. 5 min of strength training; followed by a 5 min group cooldown and cooldown bps. We do a formal (long) relaxation as a part of stress management/ed sessions, in addition we do a 3 minute relax with music at the end of the sessions 1x/week (it’s part of 1 hr session).</td>
</tr>
<tr>
<td>Brigham and Women’s Faulkner Hosp.</td>
<td>20-24</td>
<td>4</td>
<td>3x/wk; Education is done while the patients exercise. Class is 60 min.</td>
<td>4 hrs/month; The dietician comes for all 4 sessions once a month. Alternates a class on heart healthy eating and one on weight management.</td>
<td>The patients do a 5 min warm-up and a 5 min cool down. They do aerobic exercise for as much as 50 mins. One day a week we do 20 mins of free weights. The patients do less aerobic exercise on these days.</td>
</tr>
<tr>
<td>Emerson Hosp.</td>
<td>40</td>
<td>4</td>
<td>3x/wk; classes are 90 min; education classes 1x/wk for 12 weeks</td>
<td>about 10-12 hours per week. She sees pts @ intake, midway, and D/C as well as for 3 lectures in 12 wk program.</td>
<td>15 pre assessment, 15 min warm up with therabands, 30 min aerobic, 10 min cool down, 10 post assessment, 10 conditioning, stretching and relaxation.</td>
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<tr>
<td>Holy Family Hosp.</td>
<td>25</td>
<td>6</td>
<td>3 days per week; education weekly; no relaxation. Classes are 60 min but come in 15 min early</td>
<td>5 hrs/wk. RD sees 4 pts (45 min each, uses other hr to analyze food recalls and prepare teaching materials.) We squeeze in F/U appts when we can. If no f/u with the RD, RN will f/u on goals set by pt/RD.</td>
<td>Active w/u on a machine, 5 - 7 min. 40 - 50 min aerobic exercise. Active cool down 5 - 7 min, stretching, then resistance training if pt. interested.</td>
</tr>
<tr>
<td>Miriam Hospital</td>
<td>85-100</td>
<td>5</td>
<td>3x/wk; classes are 1 hr 45 minutes which includes 30 mins of education</td>
<td>8 hrs; 30 minute appointments, based on need or Rate the Plate score</td>
<td>30-50 mins of aerobic exercise, 5-10 mins of weight training, 15 minutes of cool down stretching and relaxation – 25 minutes of education at each class</td>
</tr>
<tr>
<td>Newton-Wellesley Hosp.</td>
<td>30</td>
<td>3</td>
<td>2x/wk, classes 2hrs.(one hr ex and one hr either educ or yoga)</td>
<td>1 hours, dietician sees all pts before entering program and speaks in- formally in the gym plus classes</td>
<td>get 40-50 minutes aerobic exercise, sometimes strength as well but not always, brief (5 min) stretch on days without yoga staff: nurse and PT</td>
</tr>
<tr>
<td>Norwood Hosp.</td>
<td>30-40</td>
<td>4</td>
<td>3 days/wk; Mon, Weds, Fri; classes are 1:15 min except when educ class then 1:45 (give all pts an educ book); do relaxation every Fri. in place of resistance training</td>
<td>6 hrs/week budgeted dietician; teaches 3 different topics during 3 month cycle CR and schedules 1:1 half hr assess with each pt, also walks around gym talking to pts while ex if she’s not reviewing charts or counseling 1:1.</td>
<td>Pts come in 10 min prior to get flow sheets, BP, rest pulse and be hooked up to monitor, do a 5 min warm-up together; cardio equipment for a total of 30-35 mins exercise time(3) 10 min sessions, about 10-12 min for resistance training and final cool down where we do all of our stretching. During final cool down, EP also teaches about a topic on the white board for that week. Resistance training and final cool down are done as a group as well.</td>
</tr>
<tr>
<td>NSMC Union Hosp.</td>
<td>Avg 40 (Schedule 48-56)</td>
<td>4</td>
<td>3x/wk; 90 min Mon: Ex/ relaxation and open support session Wed: Ex/ Education Thurs: ex only 60min</td>
<td>16 hours, RD is also CDE and sees all patients for initial eval, weekly follow up during groups and does 4 of the 12 education sessions.</td>
<td>5 min warm up, 30 min aerobic, 15 min strength training, 10 min cool down</td>
</tr>
<tr>
<td>Saints Medical Center</td>
<td>5-10 Census low lately</td>
<td>4</td>
<td>3x/wk; 60 min classes, educ done on same day, no relaxation</td>
<td>Do not have a dietitian budgeted into our program. See OP dietitian.</td>
<td>Cardiac classes are stretching, treadmill, bike, UBE or air dyne. Staff: one nurse and one EP</td>
</tr>
<tr>
<td>Signature Healthcare Brockton</td>
<td>25</td>
<td>5</td>
<td>60 min; educ. during the ex sessions, mainly as they do not attend, otherwise.</td>
<td>Dietician is budgeted for an hour per week for 2 half hour lecture spots. Initial assess done by OP dietitian.</td>
<td>Each session is 60 minutes, all inclusive with warm-up exercises, weights, cardiovascular and education occurring during that time. Relaxation part of ex cool down.</td>
</tr>
<tr>
<td>South Shore Hosp.</td>
<td>50</td>
<td>7</td>
<td>60 minutes exercise 3 days/week. 45 minute weekly education classes usually before or after class</td>
<td>12 hours. They round in all the groups every week. They see all the new patients 1:1 for their initial assessment and follow-up with the patients within their weekly group rounding.</td>
<td>Each class has initial warm-up stretch, generally 30 mins of mixed aerobic exercise, 5 mins hand weights, followed by cool down stretches. We have a certif id yoga instructor on staff so she does yoga stretches every Friday as part of the cooldown stretches. Relaxation is once a wk usually Fridays and also have relaxation techniques as one of our weekly education sessions. Also given relaxation CD for home.</td>
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**PLEASE RENEW YOUR MEMBERSHIP**

The following individual memberships have either expired since Oct 2012 or will expire before the next newsletter. Please take a moment to renew now to avoid missing benefits such as announcements, updates and the “Members Only” section of the web site which includes the newsletter and on-line forum.

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<td>Ann Knocke</td>
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<td>Deborah Sullivan</td>
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**MEMBERSHIP APPLICATION**

Or

Download application from www.macvpr.org

Name (with Credentials):

________________________

Mailing Address you want the card sent:

Home/Work (Please circle)

________________________

________________________

Work #:

Home #:

E mail: _____________________________

Profession: _____________________________

Institution: _____________________________

☐ Cardiac  ☐ Pulmonary

☐ New or ☐ Renewing Membership

☐ $100 Two year membership (Begins on the first day of the month joined and ends two years from that date)

☐ $25 for a One Year student membership

(Students must be enrolled in a minimal of 12 credits per quarter and provide copy of schedule with membership application.)

How did you learn about the MACVPR?

__________________________________________

Are you currently a member of the American Association of Cardiovascular and Pulmonary Rehab (AACVPR)?

☐ Yes  ☐ No

If you do not want your email and/or mailing address shared with the AACVPR please check here ________

Mail check or money order to:

MACVPR – C/O Donna Hawk
44 Park Circle • Westfield, MA 01085-3411
admin@macvpr.org