PRESIDENT’S ADDRESS

Wayne Reynolds RN, FAACVPR, CCRP
President-MACVPR

"Those who cannot change their minds cannot change anything." George Bernard Shaw

With the change of seasons and clocks, along is coming a change that we can and actually must do something about. HR 4838- Sustaining Outpatient Services Act will exempt services like Cardiac and Pulmonary Rehabilitation from the CMS plan to change reimbursement to services held off hospital sites from the hospital outpatient schedule to the physician fee schedule, roughly a 40% cut, which will put some CR and PR programs out of business.

You should have received the AACVPR Reimbursement update with the link to the AACVPR site’s lobbying tool. If you have not yet made time for the couple of minutes it takes to complete the letter to your congressperson, please do so ASAP as this is crucial, even if your program is currently based on hospital property. More on this will be in the ensuing reimbursement update.

I was extremely proud of the showing made by MACVPR at September’s AACVPR Annual meeting in Portland, Oregon. We had 38 members in attendance, several of whom were speakers, moderators, committee chairs, poster presenters and even an outgoing AACVPR President!

We were definitely a strong presence in Portland and received recognition at many levels. MACVPR is up to so much these days, that I have promised to apply for Outstanding Affiliate Award for 2020.

I was very impressed by the amount of sessions on change, improvement, operational excellence, Innovation, dealing with challenges as well as the programs on clinical advances, etc. When I first started attending, I would not have imagined some of the topics now being addressed and am impressed with how many new ideas are surfacing on
how to deal with the challenges we will be facing in the coming years.

MACVPR’s annual Fall Symposium was held on October 24th with sessions on Lung Cancer, Cardio Mems, both of which received rave reviews and something different-3 sessions with the same nationally known speaker, based on humor in dealing with health issues which garnered mixed reviews. Your EC will continue to seek out new and innovative topics and speakers for future meetings.

Almost finished is the re-vamping of our website, with AACVPR’s support. You will see direct links to AACVPR and we expect a very smooth website experience.

Your EC has worked tirelessly this year and I am constantly in awe of the enthusiasm, teamwork, dedication and expertise displayed by every EC member. Thank you all for your service to MACVPR.

Speaking of the EC, we are very open to new members. Please do not hesitate to contact me or any of our EC members to “jump on” or just get more information.

Please enjoy the rest of this newsletter and have a safe and happy holiday season.

Wayne Reynolds, RN, CCRP, FAACVPR
President-MACVPR

LETTER FROM THE EDITOR

Heather Nestor, MS CEP
North Shore Medical Center

Happy Fall! I hope you all had a great summer and that things are going well in your Cardiac and Pulmonary Programs.

I am excited that we now have an Exercise Physiologist contributing to our newsletter. Thank you to Patrick Schilling, BS, RCEP, EIM-3 Baystate Medical Center, for contributing. I think it is extremely important to try to cover the various disciplines that work in Cardiac and Pulmonary programs so we are grateful for his input.

Another new item is including a piece highlighting a patient experience in Cardiac or Pulmonary Rehab. We do important and gratifying work and sometimes the most rewarding part is seeing how we have positively impacted someone’s life.

Please feel free to send me any suggestions for future topics for the newsletter. My email is southpaw73@comcast.net

Wishing you all a wonderful holiday season!

Best,
Heather

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.
Legislative/Reimbursement Update

We have a bill number!

If you haven’t already heard, HR 3848 has been introduced and is now in need of co-sponsors. HR 3848 or the “Sustaining Outpatient Services Act”, if passed will amend section 603 of the Balanced Budget Act, allowing payment for outpatient services delivered off hospital campuses to continue to be reimbursed by Medicare under the prospective payment system rather than the physician fee schedule which is scheduled to begin in 2020.

Without this bill, cardiac and pulmonary rehab programs and other services that are off hospital campuses will receive approximately 40% less reimbursement starting in 2020. Most of these programs will not be able to survive such a decrease.

HR 4838 allows for services reimbursed by Medicare less than a total of 2 million dollars annually to remain under the outpatient prospective payment system and continue at basically the same reimbursement rate as in the past. Cardiac and Pulmonary Rehab are in this category, which is why this bill is crucial!

AACVPR has sent a reimbursement update describing the need for this bill to be passed soon as well as a link to the AACVPR Advocacy page and a link to the virtual lobbying tool. If you have not already done so, please take a moment to click on to this to send your congressional representative a letter. Also, please share the AACVPR email with the update with physicians, other healthcare professionals and patients. The tool has a customizable letter for each.

The next step will be showing up in Washington DC on March 2 & 3 to meet with your Congressional Representatives, Senators or their staff people to request co-sponsorship in person. These brief but important meetings can make a huge impact on how lawmakers perceive the impact of their action or inaction and can be the difference in whether enough co-sponsors are obtained to actually get a bill voted on and passed. Another bill before congress, with the support of the American Heart Association, is HR 3911- “Increasing Access to Quality Cardiac Rehabilitation Care Act of 2019” will move to 2020 from 2024 the effective date of non physician providers having the ability to supervise and independently order Cardiac AND Pulmonary Rehabilitation services. As important as this is, HR 4838 is at this time the main objective since if it does not pass, 3911 will surely become a moot point as was so eloquently stated by one of our “elder statesmen” on the most recent MAC Task Force/ MAC Resource Group conference call.

If interested in attending DOTH, but have questions or concerns please do not hesitate to be in touch with me. I’m happy to discuss how DOTH works, how to be effective in meetings with members of congress or their staffers, the importance of the bill and/or how much fun a trip to Washington DC can be. This will be my 11th Day on The Hill and 13th time lobbying in Washington for CR/PR related issues.

Wayne Reynolds, RN, FAACVPR, CCRP
AACVPR MAC Task Force Liaison
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508-930-5678
Our 2019 Fall Symposium Report started out with an update from our President, Wayne Reynolds, who shared some pertinent AACVPR regulatory updates and presented a strong case for members getting involved in the legislative process.

Wayne was followed by an Update on Lung Cancer Screening presented by Dr. Victor Pinto-Plata, PR Medical Director at Bay State Hospital. Dr. Pinto-Plata shared his expertise in the area of lung cancer screening and noted that while the mortality rate for lung cancer is declining, we still have way to go to help lower risk factors and getting these patients referred to PR. Participant evaluations regarding his session were resoundingly excellent with attendees finding his talk both engaging and informative.

This year, the MACVPR board tried something new by scheduling Joel Weintraub of “Humor for the Health Of It” to cover multiple topics relating to health and wellness. Mr. Weintraub has a master’s degree in physiology and managed a CR program in his past. He has lectured to a variety of audiences including several AACVPR affiliates. Participant evaluations were mixed with several attendees requesting a more in depth look at the topics and several attendees finding the presentation humorous.

Our final presenter was Leslie Griffin, RN, MS, ANP, currently the Heart Failure Therapy Specialist for St. Jude Medical/Abbott, who gave a dynamic presentation on the use and implementation of the CardioMEMS implantable hemodynamic monitoring sensor for management of patients with Class III heart failure. Leslie gave a spirited presentation on managing patients with HF and how the CardioMEMS system can help with decreased readmission rates by keeping patients healthier through earlier detection of changes in the PA pressure. Participants commented on her positivity, expertise, passion for the subject and her great presentation style and would like to see more of these peer to peer presentations in the future.

As we move forward into a new year, please know that the education committee takes your comments seriously. We have evaluated your feedback and plan to make adjustments in the future. It is our goal to provide members with a high quality educational experience to foster improved quality of care and we thank you for your support.
MEMBERSHIP REPORT

Diane Gaughran, BS, ACSM-RCEP, CCRP
Membership Chair

AS OF: 2019:
The MACVPR currently has 98 members. As you may know, MACVPR is a Joint Affiliate organization with the American Association of Cardiovascular and Pulmonary Rehabilitation (AACVPR). Membership follows AACVPR’s fiscal year: July 1 to June 30. Please encourage your co-workers and associates to join and receive all that the Joint Affiliation has to offer:

Continuing education opportunities:
- Two half-day complimentary meetings
- Reduced registration fee at the Fall Full-Day Membership meeting with national speakers
- Free access to all of AACVPR’s educational webcasts and corresponding CEUs (a $650 value)

Full access to the AACVPR websites including:
- Roadmap to Reform presentations/resources
- Latest updates on reimbursement and legislation
- Certification updates
- Access to members-only resources on the AACVPR website
- Tri-annual ‘MACVPR NEWS’ newsletters

Automatic enrollment in MACVPR and AACVPR
- One annual dues payment of $215 for the AACVPR Joint Affiliate membership for essentially two memberships with all the associated benefits.

If you have co-workers and others that you know might be interested in joining, but feel that the cost is prohibitive, there are letter templates to send to your employers to emphasize the benefit and costs of membership, maybe your company will supplement or even pay for your membership. The benefits far out way the costs! And as a joint affiliate member, you save money. Remember a joint affiliate membership gets you free membership in our local MACVPR and 2 free meetings in January and May as well as a discount at our all day annual meeting. There is even a group discount rate if your company wants to enroll all members in your program.

AACVPR also offers an 18-month membership option, starting the first business day of January. This prorated option allows members to join or renew between January and April and receive an extended membership that lasts until June 30 of the following calendar year. For example, if you were to join January 2, 2020, your membership would expire June 30, 2021 (18 months). 18-month memberships are a larger up-front cost, but the access to benefits has a longer duration.

SAVE THE DATE!

MACVPR HALF DAY MEETING

January 23, 2020
Hampton Inn-Natick

We are planning speakers on the topics of Interstitial Lung Disease and Exercise Physiology.

Agenda and further details to follow.

We hope to see you all there!

Group Discount for New Members

If you have more than 3 individuals from your Program/Hospital who are joining AACVPR as new members, we are offering a group discount. If you are interested in this offer, please contact AACVPR HQ, at aacvpr@aacvpr.org or at (312) 321-5146

Check out the link below to see all of the benefits and costs related to membership in AACVPR.
https://www.aacvpr.org/Member-Center/Join-Renew-Membership

If you have any questions about membership please feel free to contact Diane M. Gaughran BS, ACSM-RCEP, CCRP at diane.gaughran@steward.org or 781-278-6265.

TREASURY REPORT

Donna Hawk, RRT, AE-C, Treasurer

AS OF NOVEMBER 2019:
Checking- $14,433.53
Money Market- $2,636.78
Total- $17,070.31
THANK YOU TO OUR 2019 DIAMOND SPONSOR:

LSI

Dedicated to improving lives.

At LSI, we envision cardiac and pulmonary providers supported with the technology and resources they need to provide innovative, informative, and inspired care.

Visit lsi-medical.com or call 800-846-1279 for more information, advocacy resources, and to schedule a demonstration today.

- Cardiopulmonary Monitoring Systems
- Patient Monitoring for Rural and Community Hospitals
- Interfacing and Clinical IT Solutions
- Technical Support Programs
- Educational Library
- Professional Scholarships
INTERESTED IN BECOMING AN MACVPR SPONSOR?

Diamond Level $1500+
- Your company will sponsor a conference speaker of choice with logo on large screen prior to presentation. A representative from your company will introduce the speaker
- Premier space in exhibit area
- Able to have a table at our Half Day meetings in January and May
- Sponsor logo with link on MACVPR website
- Complimentary lunch at conference
- One skirted exhibit table
- Large Logo will appear on conference materials given to attendees
- Verbal acknowledgement by the President of MACVPR at the conference
- Half page advertisement in MACVPR newsletter three times per year

Silver Level $1000
- Sponsor logo with link to MACVPR website
- Complimentary lunch at conference
- One skirted exhibit table
- Midsize logo will appear on conference materials given to attendees
- Verbal acknowledgement by the President of MACVPR at the conference
- Mid size logo in the MACVPR newsletter three times per year

Bronze $750
- Complimentary lunch at conference
- One skirted exhibit table
- Small logo will appear on conference materials given to attendees
- Verbal acknowledgement by the President of MACVPR at the conference
- Small Logo in next MACVPR newsletter

Please contact Lisa Dion at admin@macvpr.org if you would like to become a sponsor or need more information. Thank you for your support.

THANK YOU TO OUR 2019 SILVER SPONSOR:

THANK YOU TO OUR 2019 BRONZE SPONSORS:

We have a new sponsorship opportunity for local colleges and universities. This is an opportunity for students in the field of Exercise Science or PT to get involved and attend our events with no cost to them.

SPONSORSHIP OPTIONS

**$100 FOR 5 STUDENTS TO ATTEND THE JANUARY OR MAY HALF MEETING

**$250 FOR 5 STUDENTS TO ATTEND OUR FULL DAY FALL SYMPOSIUM IN OCTOBER

If you know of any schools that would be interested please contact Lisa Dion at admin@macvpr for more information.
QUICK TIPS FOR DIABETES MEALS AND SNACKS:
FOOD OPTIONS IN A PINCH

I cannot tell you how many times I hear my patients ask “what do I eat” or “can you make me a meal plan,” or “if someone just gave me a list of foods to eat then I would eat them every day.” I tend to shy away from making meal plans as I like my patients to understand the reasoning behind why some foods are better choices than others. Also, I like to have my patients feel free to try a variety of foods and not feel pigeon holed into 1 size fits all. On the other hand, I can understand how putting the pieces together in creating a balanced meal can be overwhelming and sometimes a guide can be helpful. I have devised some basic breakfast, lunch and dinner ideas as well as snacks to be used as a tool to help make nutritious choices. I did put the carbohydrate grams with meals and snacks for individuals who may have diabetes and are carbohydrate counting.

BREAKFAST IDEAS (45-60 grams of carbohydrate)
*2 slices wheat toast with egg and 1 small piece of fruit or ¾ cup of berries.
*½ cup dry oatmeal with small apple cut into slices or ¾ cup of berries/fruit with sprinkle of nuts (1/8 cup)
*English muffin (whole wheat) with natural nut butter spread

and serving of 1 small fruit or 1 low fat yogurt
*Yogurt (plain) low fat option with berries (measure ½ cup) with 2 tbsp. of granola or favorite cereal
*2 whole wheat waffles (kasha or whole grain) with fresh fruit (1/2 cup) or 1 tbsp of sugar free syrup.
*2 egg veggie omelet with 1 slice of toast and 1 cup of fruit

LUNCH IDEAS (45-60 grams of carbohydrate)
*Whole grain pita pocket (try Josephs brand) with 1 oz of cheese, 2-3 oz of protein with side of fruit and 1 yogurt
*Salad with greens, protein (3-4 oz) with 1 serving of fruit and ½ cup of quinoa/pasta/or noodle on side
*Soup with sandwich combination (may add in 1 small fruit or 12 baked chips
*2 slices of thin crust pizza with side salad
*Sandwich wrap with 2-3 oz of lean protein, 1 oz of cheese, choice for sides (fruit, soup or baked chips)
TIDBITS FROM THE DIETITIAN

DINNER IDEAS (45-60 grams of carbohydrate)

* Practicing the plate method where ¼ plate is protein, ½ plate is non-starchy vegetables and ¼ plate is starch

* ¾ cup of brown rice with 3-4 oz of protein and 3 cups of raw salad or 1 ½ cup of steamed veggies
  Pasta 1 cup cooked with 4 oz of protein and 3 cups of raw salad or 1 ½ cups of steamed veggies

* 3-4 oz of fish with 4 oz baked potato (or sweet potato) with 1 cup of steamed brussel sprouts and 2 cups of salad

* Stir fry (2 cups of vegetables, ½ cup of brown rice or quinoa) with 4 oz of lean protein

* Lentil soup 1 ½ cups with 1 wheat roll and side salad (oil and vinegar dressing 1 tbsp) with craisins (1 tbsp)

SNACK IDEAS  15-30 grams of carbohydrate

* Package of skinny pop popcorn

* Hummus (2 tbsp. with mixed veggies)

* 12 whole grain tortilla chips with fresh salsa

* 1 siggi yogurt with ¼ cup of berries)

* 12 rice crackers with hummus dip

* Apple with 1 tbsp of peanut butter

* 1 ½ cup of grapes with 1 oz of cheese

* Cheese and crackers (1-2 oz of cheese with 12 crackers)

* 2 rice cakes with 1 tbsp of almond butter
A regular column designed to help you better understand your patients’ needs and promote self healing during rehabilitation and beyond

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

Can you care too much? Unfortunately, the answer is yes. If the caring we extend to others is not also extended to ourselves we can suffer from burnout or its cousin, compassion fatigue. Professional and family caregivers are at risk for both burn-out and compassion fatigue. It may be helpful to distinguish between the two:

Compassion fatigue is generally rapid onset and often is the result of exposure to extreme suffering or witnessing traumatic events and situations. It can be one event or a cumulative exposure. Compassion fatigue can co-exist with burnout.

Burnout can be described as emotional (and physical) exhaustion leading to withdrawal and disconnection from activities that once were meaningful. We often expend energy, caring, empathy as if it comes from a bottomless well. The first step in preventing burnout and compassion fatigue is awareness and recognition that the well of empathy, energy and caring needs to continually be refilled. Here are a few tips to refill the well of empathy to maintain your ability to care give effectively:

1. Schedule time to step away from “doing” and shift to “being”. Take five minutes to turn off your phone, notice your breath and release muscle tension in your body.

2. Make a “have done” list to acknowledge what you have accomplished instead of what needs to be done.

3. List 3 things that give you joy (you may need to set the bar low — it could be a sunny day, or a delicious fresh piece of fruit, listening to a favorite song or maybe engaging in a craft or activity)

4. Practice loving kindness— allow yourself to be as kind and empathic to yourself as you are to others. What “gift” would you give someone else to show they are appreciated? Give the same “gift” to yourself.

5. “Detribe” — Intentionally step away from your “tribe” for short periods of time to refill your reserves. This is a term I coined a number of years ago that is counterintuitive. How can we step away from our “tribe” when there is so much to do? Research shows that by intentionally engaging in self-care activities (think meditation, a walk in nature, a cup of tea with a friend) burnout can be reduced or eliminated.
What is an LVAD?

A left ventricular assist device, or LVAD, is a pump that is implanted inside a person’s chest to help a weakened heart pump blood. The LVAD doesn't replace the heart but helps it do its job. It’s surgically implanted just below the heart. One end is attached to the left ventricle -- that’s the chamber of the heart that pumps blood out of the heart and into the body. The other end is attached to the aorta. The LVAD pump is controlled by an external controller via a driveline and battery pack that is usually worn on a belt or harness and secured to the patient.

Why are LVAD’s going to become more prevalent?

Heart failure is on the rise due to coronary heart disease, high blood pressure and diabetes. It affects over 5.7 million people and about ½ of all people with heart failure die within 5 years of diagnosis. (1) This chronic condition is often treated with medications, cardiac rehab and regular cardiology appointments. Sometimes despite our best efforts the patient’s heart becomes more tired, pumps less blood and has a worsening EF of below 20% leading to the patient being constantly tired or short of breath. A patient who has maximized all current therapies for heart failure may be considered for an LVAD. The LVAD assists in delivering improved circulation to organs, muscles and lets a person go through cardiac rehabilitation.

How is a patient with an LVAD supported upon discharge?

A patient with an LVAD will be discharged fully knowing how the pump, batteries, connections and backup pack work. They will or should have had follow-ups with VNA (physical therapy, occupational therapy) social work and their LVAD team. A referral may occur at 4-6 weeks post LVAD to cardiac rehab.

What are some ideas for setting up a phase II exercise routine for patients with an LVAD?

Similar to heart failure, a good starting point is finding exercise machines that the patient is interested in and feels confident on. Treadmills, bicycles, nusteps are typically chosen by the patient. Also, there may be a loss of muscle mass due to a typical 18-20 day hospitalization so consider strength training in addition to cardiovascular exercise. Intrinsic heart rate may or may not be present so consider using RPE and patient symptoms (SOB, fatigue) as a guideline. (1) As a clinician, you should be aware to avoid machines that may cause repetitive force to the driveline or for any objects that may catch the battery pack.
I’m at a community hospital and interested in expanding our program to accept patients with LVAD. What steps do I need to take?

I would suggest meeting with your cardiac medical director and discussing the idea further
Identify which local VAD center is likely to refer patients
Get in touch with the LVAD programs cardiac rehab manager or director
Set up an initial meeting
Hold and in-service or training with the expertise and support of the referring hospital
Develop policies and procedures
Begin program and establish regular communication with the LVAD center

Here is a listing of current Massachusetts Medical Centers with LVAD programs:

- Heartmate Centers (Abbott Devices)
- Mass General Hospital
- UMass Memorial Worcester
- Brigham and Women’s

- HeartWare Centers (Medtronic devices)
- Baystate Medical Center
- Beth Israel Deaconess Hospital
- Tufts New England
Here is a typical patient and possible progression: Based on the above table it’s safe to assume light to moderate exercise with the LVAD patients.

Current Status: Patient states she can complete some ADL’s, run errands, walk 2 blocks. Approx. 2 METS

Patient Goal: Be able to walk 1 mile, play with grandkids, do light housework or gardening. Approx. 3-3.5 METS

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<tr>
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<th>Initial Phase - Build stamina to 30 min</th>
<th>Improvement phase - Increase intensity</th>
<th>Maintenance Phase – Goal achievement and self sufficiency</th>
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<tbody>
<tr>
<td></td>
<td>Weeks 1-4 (1-12 sessions)</td>
<td>Weeks 4-8 (12-24 sessions)</td>
<td>Weeks 8-12 (24-36 sessions)</td>
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<tr>
<td>Cardiovascular</td>
<td>5-10 min walking TM 1.5-2.0 mph</td>
<td>12-20 min walking, TM 2.0 -2.5 mph</td>
<td>Develop post cardiac rehab plan for activity</td>
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<td>5-10 min nustep, level 2 or 3, 35 watts</td>
<td>8-12 min nustep, level 4-5, 60 watts</td>
<td>Begin independent walking program on non-rehab days.</td>
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<td>5-10 min biking, 25-40 Watts</td>
<td>8-12 min biking, 50-60 watts</td>
<td>Review and Discuss goal ADL’s and develop plan to have patient attempt independently</td>
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<td></td>
<td>Progression – 1-2 min per session on each machine until 30-40 min achieved</td>
<td>Progression: Add 2-3 % incline to treadmill once faster speed is tolerated, increase levels by 10-20 watts if RPE is light on bike and nustep.</td>
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<th>Strength Training</th>
<th>Flexibility</th>
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<td>10-15 reps, 1-3 lbs.</td>
<td>Upright stretching all major muscle groups. Avoid twisting torso and excessive knee flexion, which may impact driveline.</td>
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<td>10-15 reps, 3-5 lbs. or as tolerated</td>
<td>Upright stretching all major muscle groups. Avoid twisting torso and excessive knee flexion, which may impact driveline.</td>
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<td></td>
<td>10-15 reps 5-10 lbs. or as tolerated</td>
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What’s All the Buzz Around CBD (Cannabidiol)

Nowadays in health care it seems like every patient, every patient’s caregiver, and every patient caregiver’s sister is using cannabidiol or CBD in some fashion. While its legality and effectiveness are obscure and unestablished, nobody really seems to question its safety, because everybody knows it’s completely safe (is it though?)! So, without further ado, let’s iron out the facts and examine the good, the bad, and the ugly of this popular… dare I say, pharmaceutical!

CBD is legal under federal law thanks to the Farm Bill of 2018, which reauthorized and broadened the legality of hemp use that was first established in the Agricultural Act of 2014. That being said, pure CBD that is cultivated from the hemp plant and contains less than 0.3% of delta-9-tetrahydragcannabidiol (THC) is legal in most states and legal from a federal perspective. However, potential advocates in South Dakota, Idaho, and Nebraska are not so fortunate; these states have banned the use of all cannabis products for any reason including medical.

Several other states mandate that users provide specific documentation indicating the need (epilepsy, seizure disorder) for CBD utilization. Providers that are CBD advocates should exercise vigilance in their recommendations regarding CBD due to variability in its state to state legal status, not to mention its relatively short career on the research stage.

Contrary to the low level of evidence available, I’m sure many of you have repetitively heard the anecdotal claims that CBD is extremely effective for ailments such as anxiety, insomnia, stress, and pain. Many patients administer CBD orally via lozenges, or sublingual drops; however, patients also use dosage forms that permit topical application to combat joint and muscle pain. Since the aforementioned legislation has allowed cannabis products to be studied in most states, a recent retrospective case series of 103 patients took place at a mental health center in Colorado. This study looked at the effects that CBD had on anxiety and sleep by collecting data using the Hamilton Anxiety Rating Scale (HAM-A) and the Pittsburg Sleep Quality Index (PSQI), respectively at baseline and at 3 months after daily administration of variable CBD doses. Although this was an open label, observational study, HAM-A scores did show a rapid and sustained decrease from baseline (mean – 23.87) to 3 months (mean – 16.38). The same decrease was not seen in sleep scores. Aside from anxiety relief, CBD has shown promising results in patients who suffer from seizure disorders.

Currently on the market, there is one FDA approved medication that is a pure form of CBD branded as Epidiolex. Epidiolex is made by GW Pharmaceuticals, is a DEA scheduled V controlled medication, and is approved for seizure disorders Lennox-Gastaut and Dravet syndromes in patients that are at least two years old. FDA approval requires any medication to be accompanied by an in-depth drug monograph and the same is true for Epidiolex. I encourage all providers to review the Epidiolex monograph as it provides evidence derived from pre-clinical and clinical studies on the dosing, and pharmacokinetic and pharmacodynamic properties of CBD.

Some pharmacokinetic highlights include an onset of action of up to 4 weeks and higher absorption when accompanied with a high fat meal. However, the most important characteristic to note is its relationship with...
enzymes CYP2C19 and CYP3A4, which it is an inhibitor and substrate of, respectively. Nothing too worrisome with respect to CYP3A4 unless CBD is being used for seizure control; CBD is a substrate of CYP3A4 so inducers or inhibitors of this enzyme could decrease or increase serum concentrations of CBD, respectively.

Regarding CYP2C19, CBD has shown to be a potent enzyme inhibitor. This is relative to many medications, but particularly important for patients with stents that use clopidogrel for antiplatelet therapy since clopidogrel is a prodrug that relies on CYP2C19 to convert to its active metabolite.

CBD could drastically decrease the effectiveness of clopidogrel which could have devastating results. Like many over the counter medications, CBD may have a place in patients’ lifestyles but should not be brushed off as a completely harmless treatment for anxiety, stress, and pain.
Giving Back With a Purpose

CPR Instructors Bob Shriver, Bill Pierce and Skip Faulkner have a unique perspective to share with their students. They are all survivors of a major cardiac event.

Bill, who had his first heart attack in 1987 at the age of 44, has been attending Cardiac Rehab at Sturdy Memorial Hospital in Attleboro, MA for the past 32 years. He met Bob 16 years ago when Bob started Cardiac Rehab after collapsing while refereeing a football game. Luckily for Bob, the trainer at the football game had just received an AED and was able to help save Bob’s life. Bob became involved with the Sudden Cardiac Arrest Association and earned his certification to teach CPR. Bob convinced Bill and Skip to join him and they have been teaching CPR to high school students together for the past 3 years.

"The students have no idea what to expect when they first see us, but most of them are anxious to learn. Some of the students would share their experiences about losing loved ones to sudden cardiac arrest and it is surprising how many have lost someone. When we talk to them about our personal experiences they are very attentive and want to know more."

When asked about their Cardiac Rehab experience, Bill said "If it wasn't for the Cardiac Rehab Program I probably wouldn't be here today. Any time I have had a heart problem, the doctors have told me that the exercises probably saved my life because otherwise my heart would not have been strong enough."

Some of their favorite memories include a student at Scituate High School who used her new skills to perform the Heimlich while she was babysitting just two weeks after taking their class. He was a six year old boy who was choking and she responded immediately and saved his life.

Another student at Somerset/Berkley High School who plans to pursue a Nursing degree was inspired to become a certified instructor and hopes to work with Bob, Bill and Skip in the future.