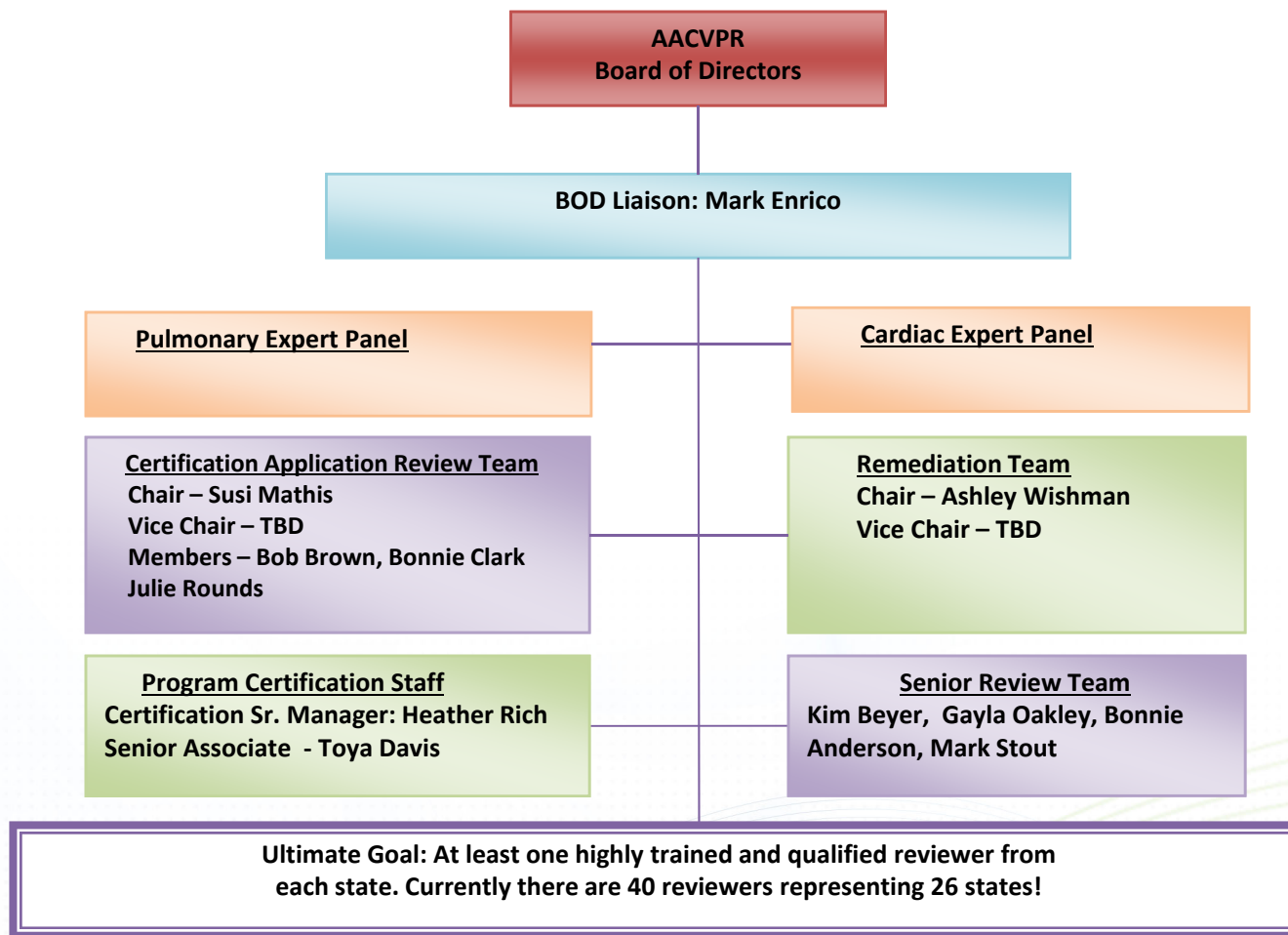


Disclosures

- This presentation is a collaborative effort of the AACVPR Program Certification Leadership Team
- We do not have any disclosures other than a passion for program excellence and a strong belief in the AACVPR Program Certification process



The AACVPR Cardiac and Pulmonary Rehabilitation Program Certification process is designed to review programs based on their alignment with the latest evidence-based medicine, expert opinion, current regulations and measurement of individualized patient outcomes, and to recommend certification based on that review



About Certification

- Certified for a 3 year period
- Required to maintain the current requirements thru the new “Annual Report” function
- Three application outcomes - Approved, Remediation, Denied

Timeline for 2020!

- **Data Collection Period: January 1 - December 31, 2019**
- **December 1, 2019:** Application opens
- **February 28, 2020:** Completed applications and payments are due
- **March - May 2020:** Program Certification Committee Review of certification and recertification applications
- **June - Aug 2020:**
 - IRR process
 - Co-Chair Oversight Review
 - BOD Liaison Review
 - AACVPR prepares notifications and certificates
- **August 31, 2020:** AACVPR notifies all programs of application decision
- **Sept - Oct 2020:** Remediation process occurs mid-September through October
- **October 31, 2020:** Remediation decisions are finalized
- **November 15, 2020:** Notification of remediation decisions

AACVPR Program Certification



The AACVPR Cardiac and Pulmonary Rehabilitation Program Certification process is the only peer-review accreditation process designed to review individual facilities for adherence to standards and guidelines developed and published by AACVPR and other professional societies.

During the 2018 Program Certification application, AACVPR moved to a more outcomes-based process with the measurement of more meaningful outcomes. The new [Performance Measures](#) highlight these changes.

Program Certification News

Important Dates for the 2019 Program Certification Cycle

- **December 1, 2018:** Application opens
- **February 28, 2019:** Completed applications and payments due
- **Data Collection Period:** **January 1, 2018 through December 31, 2018**
- **March - May 2019:** Program Certification Committee Review Team completes initial application review
- **June - August 2019:** Program Certification Committee Chair and Board Liaison oversight review; and Inter-Rater Reliability (IRR) testing
- **August 31, 2019:** Letters sent notifying programs of application decisions

Quick Links

Annual Report:

- [Accessing and Navigating the Annual Report](#)

Application:

- [2019 Cardiac Application Outlined](#)
- [2019 Pulmonary Application Outlined](#)
- [2019 Application Highlights](#)

Resources:

- [Application Resources](#)
- [Cardiac and Pulmonary Performance Measures](#)
- [AACVPR Outcomes Excel Spreadsheet](#)
- [Primary Contact Form](#)
- [FAQs](#)



Program Certification Application Resources

Thank you for your interest in the AACVPR Program Certification process. The certification process and requirements are updated each year and may have changed since your previous certification if you are re-certifying. Please **read the application carefully** and use the information provided on this website for guidance. [Click here](#) for general information about the Certification process. See below for a variety of resources and references to assist your program with the application process.



General Application Resources *(Cardiac & Pulmonary)*

- **NEW** - [ITP Checklists](#)
- [Program Certification Policies & Procedures](#)
- [HIPAA Privacy Rule and Violations](#)

Pulmonary Application Resources

- [Guidelines for Pulmonary Rehabilitation Programs, 4th Edition](#)
- [SAMPLE - PR Orientation Competencies](#)
- [SAMPLE - PR Clinical Competencies Check Off](#)
- [Additional References - PR Application](#)
- [PR Application Reference Update](#)

Cardiac Application Resources

2020 Application

- Staff Competencies
- Individual Treatment Plan (ITP) including Exercise Prescription
- Medical Emergencies
- Emergency Preparedness
- Exercise Prescription Policy
- Performance Measures

Staff Competencies

For AACVPR Program Certification, programs must provide evidence of a **minimum of four different** assessed competencies specific to the Core Competencies (CR or PR) for **each staff member**

Must include answers for two questions

1. *Objective for the competency?*
2. *Tool or method used to assess staff are competent?*



Ways to assess competency

Check off stations

Test/quizzes

Article review with post test

In-service with post test

***CCRP Certification**

***PR Certificate**

2020 Application Highlights

Staff Competencies

- **No significant changes from 2019**
- Competencies must be assessed for all professional/clinical staff who directly report to the Cardiac or Pulmonary Rehab director/coordinator/manager
- Please DO NOT provide competencies for the program director/coordinator/manager, Dietitians, Psychologists, Pharmacists or other specialists who are involved with patient care, but only in a supportive capacity rather than day-to-day rehabilitation
- **A minimum of four (4) different assessed competencies FOR EACH STAFF MEMBER specific to the published Core Competencies for Cardiac and Pulmonary Rehabilitation**





Competencies

Show Less Instructions

As you add staff above, tasks will be added here so you can describe in detail how you determined staff is competent in each competency area assessed. You must include the following:

1. Objectives for each competency
2. The specific tool or method used for assessment

For more information, please click the **Complete Page** button for Page 1 above.

Competency	Objectives	Tools	Next Step
Blood Pressure Management	To make sure that staff know how to properly attain an accurate blood pressure. To determine the appropriate cuff size for patients.	Direct observation and secondary assessment of blood pressure measurement by staff to determine competence. We also question to employee on selection of appropriate cuff size for certain sized arms.	<div>Completed</div>  
Diabetes Management	To understand the measurement of blood glucose. To understand the normal values for blood glucose for hypoglycemic and hyperglycemic values. To determine to competence in utilizing the glucometer	We reviewed the departmental. Hypoglycemia/hyperglycemia policy. The critical values were also reviewed. A test was given to each employees that assessed their response in treatment for specific blood glucose results. Also, the annual glucometer training and testing was a part of this competency. This test requires a score of at least 90% passing grade. If below 90% the employee must be re-tested.	<div>Completed</div>  

Core Competencies - CARDIAC

Core Competencies for Cardiac
Rehabilitation/Secondary
Prevention Professionals:

2010 Update

POSITION STATEMENT OF THE AMERICAN ASSOCIATION OF
CARDIOVASCULAR AND PULMONARY REHABILITATION



Larry F. Hamm, PhD, FAACVPR, Chair; Bonnie K. Sanderson, PhD, RN, FAACVPR; Philip A. Ades, MD, FAACVPR; Kathy Berra, MSN, ANP, FAACVPR; Leonard A. Kaminsky, PhD; Jeffrey L. Roitman, EdD; Mark A. Williams, PhD, FAACVPR

Hamm et al. Journal of Cardiopulmonary Rehabilitation and Prevention 2011; 31:2-10.

AACVPR
American Association of Cardiovascular
and Pulmonary Rehabilitation

Core Competencies - CARDIAC

- Patient assessment
- Nutritional counseling
- Weight management
- Blood pressure management
- Lipid management
- Diabetes management
- Tobacco cessation
- Psychosocial management
- Physical activity counseling
- Exercise training evaluation



Core Competencies - PULMONARY

Clinical Competency Guidelines for Pulmonary Rehabilitation Professionals



POSITION STATEMENT OF THE AMERICAN ASSOCIATION
OF CARDIOVASCULAR AND PULMONARY REHABILITATION

Eileen Collins, PhD, RN, Gerene Bauldoff, PhD, RN ,
Brian Carlin, MD, Rebecca Crouch, PT, DPT,
Charles F. Emery, PhD, Chris Garvey, FNP, MSN, MPA,
Lana Hilling, RCP, Trina Limberg, BS, RRT,
Richard ZuWallack, MD, Linda Nici, MD

Journal of Cardiopulmonary Rehabilitation and Prevention 2014; 34: 291-302

AACVPR
American Association of Cardiovascular
and Pulmonary Rehabilitation

Core Competencies - PULMONARY

- Patient Assessment and Management
- Dyspnea Assessment and Management
- Oxygen Assessment and Management
- Collaborative Self Management
- Adherence
- Medications/Therapeutics
- Diseases Not Related to COPD
- Exercise Testing
- Exercise Training
- Psychosocial Management
- Tobacco Cessation
- Emergency Responses for Patients and Program Personnel
- Universal Standard Precautions

Individual Treatment Plan (ITP)

The Centers for Medicare & Medicaid Services (CMS) 42 CFR 410.49 and 410.47- Cardiac rehabilitation and intensive cardiac rehabilitation programs and pulmonary rehabilitation programs

Conditions of coverage states: *Components of a cardiac rehabilitation and intensive cardiac rehabilitation programs and pulmonary rehabilitation programs must include all of the following:*

- (i)** Physician-prescribed exercise each day cardiac rehabilitation items and services are furnished.
- (ii)** Cardiac risk factor modification, including education, counseling, and behavioral intervention, tailored to the patients' individual needs.
- (iii)** Psychosocial assessment.
- (iv)** Outcomes assessment.
- (v)** An individualized treatment plan detailing how components are utilized for each patient. The individualized treatment plan must be established, reviewed, and signed by a physician every 30 days.

Individual Treatment Plan (ITP) Requirements

- Upload COMPLETED Cardiac or Pulmonary ITP that is **HIPAA** compliant
- ITP must be a comprehensive document. (It does not need to be one page)
- ITP must be for an actual patient that has completed all required elements and components and should be clearly labeled
- Assessment and reassessment data must be on the ITP
- ITP must be completed in the data collection period (2019)
- **Must include physician signatures and dates**
- There should be at least one ACTIVE core component (DM, HTN, Smoking, etc.)
- Pulmonary Rehab ITP should include a patient wearing oxygen. Oxygen titration should be addressed in reassessments

Individual Treatment Plan (ITP)

Core Elements:

1. Exercise
2. Nutrition
3. Psychosocial
4. Other Core Components/Risk Factors as applicable to individual patient
5. Oxygen use and titration (required for Pulmonary Rehab application)

Four Required Steps:



1. **Assessment**
2. **Plan:** Includes Goals/Interventions and Education ***including initial exercise prescription with mode, frequency, duration and intensity***
3. **Reassessment:** With MD signature and date at least every 30 days
4. **Discharge/Follow-Up**

Cardiac ITP Requirements

- **Exercise Assessment**
- **Exercise Plan**
 - Goals
 - Interventions
 - Exercise Prescription including Mode, Frequency, Duration, Intensity
 - Education
- **Exercise Reassessment**
- **Exercise Discharge Plan**
- **Nutrition Assessment**
- **Nutrition Plan**
 - Goals
 - Interventions
 - Education
- **Nutrition Reassessment**
- **Nutrition Discharge Plan**
- **Psychosocial Assessment**
- **Psychosocial Plan**
 - Goals
 - Interventions
 - Education
- **Psychosocial Reassessment**
- **Psychosocial Discharge Plan**
- **Other Core Components/Risk Factors as appropriate (diabetes, HTN, obesity, medications, tobacco cessation, etc.)**
- **Assessment**
- **Plan**
 - Goals
 - Interventions
 - Education
- **Reassessment**
- **Discharge Plan**

Pulmonary ITP Requirements

- **Oxygen Assessment**
- **Oxygen use & titration Plan**
 - Goals
 - Interventions /Education
- **Oxygen Reassessment**
- **Oxygen Discharge Plan**
- **Exercise Assessment**
- **Exercise Plan**
 - Goals
 - Interventions
 - Exercise Prescription including Mode, Frequency, Duration, Intensity
 - Education
- **Exercise Reassessment**
- **Exercise Discharge Plan**
- **Nutrition Assessment**
- **Nutrition Plan**
 - Goals
 - Interventions / Education
- **Nutrition Reassessment**
- **Nutrition Discharge Plan**
- **Psychosocial Assessment**
- **Psychosocial Plan**
 - Goals
 - Interventions /Education
- **Psychosocial Reassessment**
- **Psychosocial Discharge Plan**
- **Other Core Components/Risk Factors as appropriate (Tobacco cessation, Environmental factors, Medications (in particular inhaled medications), and Prevention/Management of Exacerbations, etc)**
- **Assessment**
- **Plan**
 - Goals
 - Interventions / Education
- **Reassessment**
- **Discharge Plan**

Individual Treatment Plan (ITP)

- Please note that AACVPR does not endorse any ITP or ITP format published by telemetry or electronic medical record companies
- Your ITP needs to tell the patient's rehab story from initial assessment to discharge from the program. Details are important!

Plan	
<input type="checkbox"/> Social service consult <input type="checkbox"/> Advance Directives consult <input type="checkbox"/> Physician referral <input type="checkbox"/> Stress Management <input type="checkbox"/> Discuss sleep patterns <input type="checkbox"/> Discuss sex and heart disease <input type="checkbox"/> Emotional support <input type="checkbox"/> Spiritual support Comments:	
Stress and Wellness: Humor: Ways of Thinking: Emotional/Spiritual: Signs and symptoms of depression: Sleep patterns: Advance Directives: Sex and heart disease:	
Goal 1: Goal 2: Goal 3: Goal 4: Goal 5:	

Plan	
<input type="checkbox"/> Risk factor education <input type="checkbox"/> Medication compliance <input type="checkbox"/> Medication knowledge <input type="checkbox"/> Cardiac education	
<input type="checkbox"/> Smoking cessation consult <input type="checkbox"/> Education classes as needed <input type="checkbox"/> Class schedule given <input type="checkbox"/> Individual educational counseling <input type="checkbox"/> Review knowledge test	
Smoking cessation: Effects of diabetes on heart: Signs/symptoms of hypo/hyper-glycemia: Daily weights: Diuretics: CHF symptoms to report: Nitro use:	
Goal 1: Goal 2: Goal 3: Goal 4: Goal 5: Scheduled appointments:	
Date/Time:	
Physician Comments: <input type="checkbox"/> No changes, proceed with rehab <input type="checkbox"/> Add/change the following:	
Physician Signature / Date:	

PSYCHO/SOCIAL	OTHER CORE COMPONENTS
Discharge	Discharge
Occupation <input type="checkbox"/> Currently working Job description: Return to work date: <input type="checkbox"/> Retired <input type="checkbox"/> Unemployed <input type="checkbox"/> Disabled Comments:	Knowledge test score: Improved score Y N % of change from admit:
Ferrans and Powers score: Improved score: Y N % of change from admit:	Diabetes <input type="checkbox"/> N/A Fasting blood glucose: HbA1C: Medication changes:
Hospital Anxiety and Depression score: Anxiety Depression Improved score Y N	Tobacco Use <input type="checkbox"/> N/A Change in use Y N Comments:
Stage of Change:	CHF Checks weight daily Y N Knows s/s to report Y N
Plan Education needs met Y N Refer to Social Services Y N Physician referral Y N Refer for Advance Directive Y N	Compliant with medication Y N
Goals (Met, Not met, In progress, NA) Goal 1: Goal 2: Goal 3: Goal 4: Goal 5:	Plan Education needs met Y N Refer to Diabetes Center Y N Refer to Smoking Cessation Y N Goals (Met, Not met, In progress, NA) Goal 1: Goal 2: Goal 3: Goal 4: Goal 5:
Discharge notes:	Discharge notes:

Name:		DOB:	Phase:
Risk Factor Assessment	Risk Factor Assessment	Risk Factor Assessment	Risk Factor Assessment
Initial Assessment Date:	Re-Assessment Date:	Re-Assessment Date:	Follow-up/Discharge Date:
Stages of Change: pre-contemp contemp, prep, act, maint, relapse	Stages of Change: pre-contemp contemp, prep, act, maint, relapse	Stages of Change: pre-contemp contemp, prep, act, maint, relapse	Stages of Change: pre-contemp contemp, prep, act, maint, relapse
CV Knowledge Test Score ____			CV Knowledge Test Score ____
Hypertension Y N Meds Diet	Hypertension Y N Meds Diet	Hypertension Y N Meds Diet	Hypertension Y N Meds Diet
Rest BP ____ Exercise BP ____	Rest BP ____ Exercise BP ____	Rest BP ____ Exercise BP ____	Rest BP ____ Exercise BP ____
Meds: _____	Meds: _____	Meds: _____	Meds: _____
Lipids (date: ____)	Lipids (date: ____) <input type="checkbox"/> No recent labs	Lipids (date: ____) <input type="checkbox"/> No recent labs	Lipids (date: ____) <input type="checkbox"/> No recent labs
Total Chol ____ HDL ____ LDL ____	Total Chol ____ HDL ____ LDL ____	Total Chol ____ HDL ____ LDL ____	Total Chol ____ HDL ____ LDL ____
Trig ____ TC/HDL ratio ____	Trig ____ TC/HDL ratio ____	Trig ____ TC/HDL ratio ____	Trig ____ TC/HDL ratio ____
Lipid lowering med _____	Lipid lowering med _____	Lipid lowering med _____	Lipid lowering med _____
Diabetes Y N N/A	Diabetes Y N N/A	Diabetes Y N N/A	Diabetes Y N N/A
Home monitor Y N Frequency ____	FBS/date ____ HgbA1C/date ____	FBS/date ____ HgbA1C/date ____	FBS/date ____ HgbA1C/date ____
FBS/date ____ HgbA1C/date ____	Diabetes med _____	Diabetes med _____	Diabetes med _____
Diabetes med _____	Referral to DM Education Y N	Referral to DM Education Y N	Referral to DM Education Y N
Referral to DM Education Y N			
Plan/Education	Plan/Education Classes <input type="checkbox"/> declined	Plan/Education Classes <input type="checkbox"/> declined	Plan/Education Classes <input type="checkbox"/> declined
<input type="checkbox"/> Regular assessment of BP / Lipids / DM	<input type="checkbox"/> Education class schedule given	<input type="checkbox"/> Education class schedule given	Risk Factor Education
<input type="checkbox"/> Weekly body weight assessment	High Cholesterol ____	High Cholesterol ____	Goals Met: Y N
<input type="checkbox"/> Individual dietitian consultation	Congestive Heart Failure ____	Congestive Heart Failure ____	(attended 5 of 6 classes)
<input type="checkbox"/> Practice lifestyle modification	What is CAD? ____	What is CAD? ____	
<input type="checkbox"/> Attend education classes / <input type="checkbox"/> schedule	Secondary Prevention CVD ____	Secondary Prevention CVD ____	
	Diabetes and CVD ____	Diabetes and CVD ____	
	Managing Your HTN ____	Managing Your HTN ____	
	<input type="checkbox"/> EDUCATION CLASSES COMPLETED	<input type="checkbox"/> EDUCATION CLASSES COMPLETED	
Patient Goals	Patient/Progression Notes:	Patient/Progression Notes:	Patient Goals Met: Y N
1. BP control: 140/90 - 130/80 for DM/CKD			Discharge Plan:
2. Lipids: LDL < 100 LDL < 70 for CVD			D/C Notes:
3. DM: HgbA1C < 7.0%			
4. Attend all education classes			
5. Medication adherence			

HIPAA VIOLATIONS

- Name
- Date of birth
- Telephone numbers
- Fax numbers
- Electronic email addresses
- Social Security number
- Medical record number
- Health plan beneficiary numbers
- Account numbers
- Certificate and license numbers
- Vehicle identifiers, serial numbers including license plate numbers
- Medical device identifiers including serial numbers
- Internet universal resource locators (URLs)
- Internet protocol (IP) addresses
- Biometric identifiers including fingerprints and voice prints
- Full face photographic images
- Any other unique identifying number, characteristics or code
- All geographic subdivisions smaller than a state, including county, city, street address, precinct, zip code

Medical Emergencies

For the purposes of AACVPR certification/recertification, written **program specific** policies/protocols for the following:



- Cardiopulmonary Arrest
- Angina
- Acute Dyspnea
- Tachycardia
- Bradycardia
- Hypertension
- Hypotension
- Hyperglycemia
- Hypoglycemia

Medical Emergencies Requirements

- No requirement changes in 2019
- A department specific policy addressing all of the medical emergency conditions. They can be in separate policies and protocols for each specific condition or in one combined policy.
- Policies specific to CR/PR and specific to the role of the CR/PR staff in managing the emergency situation. .
- Medical emergency policies must be detailed beyond calling 911
- Medical emergency policies must address the treatment of the patient from onset of signs and symptoms until resolution of the emergency (transfer to ED, hospital admission, resolution of symptoms, discharge home, etc.
- If policy refers to hospital-wide policy, submit all related policies. (i.e. Code Blue Policy, Code White Policy)

PURPOSE:

To establish guidelines concerning the appropriate procedure for the treatment of medical emergencies within Cardiac and Vascular Rehabilitation.

APPLIES TO:

All staff of Cardiac and Vascular Rehabilitation at Lexington Medical Center-Lexington.

POLICY:

Appropriate interventions will be followed for patients who are experiencing medical emergencies. **The referring physician and/or Medical Director will be notified of any changes in the patient's condition requiring medical advice.**

Chest Pain/Angina**TREATMENT****TREATMENT****Resolution****Resolution**

1. If a patient develops chest pain/angina, he/she should immediately stop exercise training and rest. A staff member will monitor vital signs, attach heart monitor if not already wearing a monitor, assess heart rhythm and heart rate, and inquire about the character of the pain, i.e. location, intensity, duration, quality, radiation and recent frequency of the pain.
2. If the pain is not relieved by rest, the clinical nurse may initiate the administration of nitroglycerin and/or oxygen therapy. The nurse may give NTG SL 0.4mg (1/150) sublingually as needed at 5 minute intervals for a maximum of 3 doses, titrating to pain and/or blood pressure. Oxygen therapy may be administered at 2 liters/min via nasal cannula. The patient may be laid down on a stretcher to assist with the improvement of the medical condition.
3. The patient's cardiologists and/or primary care physician will be notified or the Program Medical Director can also be contacted.
4. If the chest pain/angina persists or increases, the patient will be transported immediately to Urgent Care for more intensive assessment and treatment. If the patient deteriorates rapidly to the point of an acute emergency, the LMC-Lexington Mayday Protocol will be activated.

Acute Dyspnea Management

“**Acute**” = new or different shortness of breath rating ≥ 5 on 1 – 10 scale (5 = severe) for rating perceived dyspnea (RPD)

	During exercise	At Rest
TREATMENT	Stop exercise and have pt sit in chair + Assess: vital signs, O2 sat, lung sounds	Hold exercise + Assess: vital signs, O2 sat, lung sounds, weight change
TREATMENT	↓ O2 sat <88% apply O2 2-4L n/c If Sat > 88% and SOB decreases with sitting, continue to assess and terminate exercise for the day and notify MD	↓ O2 sat < 88% start O2 at 2-4l n/c If Sat >88% and SOB decreases with sitting, abort exercise for the day and notify MD
Resolution	↓ Notify patient's MD & follow orders. No MD response or worsening of patients condition, transfer to Med Express via WC	↓ Notify patient's MD & follow orders. No MD response or worsening of patients condition, transfer to Med Express via WC
Resolution	↓ Notify patient's family ↓ Complete & send Change in Medical Condition Form to MD	↓ Notify patients family ↓ Complete & send Change in Medical Condition form to MD

Emergency Preparedness Cardiac and Pulmonary Rehab

For the purpose of AACVPR certification, medical emergency equipment and supplies must be immediately available to the Cardiac and Pulmonary Rehab program along with daily verification of readiness of the **Defibrillator/AED and Portable Oxygen** for each day the program is in operation.

There may be other emergency equipment on the daily checklist. We are looking for ONLY the readiness for the Defibrillator/AED and Portable Oxygen



Emergency Preparedness Requirements

- No requirement changes in 2019
- Part 1: One (1) month's documentation of daily verification of the readiness of the Defibrillator/AED and Portable Oxygen for each day the program is in operation. There should be an explanation provided for any missing dates during that month. Those days should be labeled "Closed" or "Not Open for Patients"
- Part 2: Attestation to having Defibrillator/AED, portable oxygen, and airway management equipment immediately available
- Part 3: Dates and description of four (4) different department medical emergency in-services from the NINE (9) medical emergencies specific to Cardiac or Pulmonary Rehabilitation held during 1/1/2019 through 12/31/19. Submitted in-services may include an education or training session, a mock scenario or a review of an actual emergency

Exercise Prescription Policy Requirements



- **No requirement changes in 2019**
- A written policy must be in place that details how an initial exercise prescription for cardiac and pulmonary rehab is developed, modified and advanced toward the patient's discharge goals. The policy must contain all required elements of the exercise prescription: mode, frequency, duration and intensity. Progression guidelines can be included in the policy but they are not a required component for Program Certification
- **Pulmonary Rehab programs must include an oxygen saturation and titration policy. This policy must detail the assessment and treatment of oxygen saturation at rest AND during exercise**

Exercise Prescription Policy Example

Exercise Prescription for the Cardiovascular and Pulmonary Participant

PURPOSE

1. To establish guidelines for prescribing exercise and activity for Cardiovascular and Pulmonary Rehabilitation (CVPR) participants that ensures their safety during participation.
2. To establish guidelines for exercise prescription which enhance cardiopulmonary endurance, physical fitness, body composition, flexibility, and muscular strength/endurance and for the Pulmonary Rehabilitation (PR) participant: respiratory muscle training.
3. To establish guidelines for exercise prescriptions which promote health by reducing risk for future development of recurrence of disease and increase level of independence in Activities of Daily Living (ADL's).

POLICY

1. Exercise will follow specific guidelines set forth in current editions of "Guidelines for Exercise Testing and Prescription" from the American College of Sports Medicine (ACSM) as well as "Guidelines for Cardiac Rehabilitation and Secondary Prevention Programs" and "Guidelines for Pulmonary Rehabilitation Programs" from the American Association of Cardiovascular and Pulmonary Rehabilitation (AACVPR).
2. The exercise prescription will address the following components giving specific recommendations within the various phases.
 - A. Warm-up
 1. Patient will be instructed to begin exercise on equipment at a slower pace, gradually increasing speed or intensity to facilitate the patient's transition from rest to exercise.
3. Cardiorespiratory endurance
 - A. The exercise prescription will designate the mode, intensity, duration, frequency, and progression of the cardiorespiratory exercise to be performed by the participant.
 1. Mode: the type of activity used

2. Intensity: the target heart rate (THR), level of Rated Perceived Exertion (RPE), level of Rated Perceived Dyspnea (RPE for PR patient), and functional capacity at which the participant is to be exercising
 3. Duration: amount of time per exercise
 4. Frequency: number of days of exercise per week
 5. Progression: how the exercise prescription is adjusted in intensity, duration, and/or frequency to meet the stated goals of the individual participant and the exercise program
- B. The exercise prescription will utilize various types of training depending on the level and stage of conditioning.
 1. Interval training: work followed by a brief rest period to be followed by work OR short period of increased workload followed by return to previous workload.
 2. Continuous training: imposes a submaximal energy requirement that is consistent throughout the training period.
4. Muscular strength training/weight training
 - A. Patients will be shown a weight routine to be performed after aerobic exercise is complete. Patients may utilize free weights/resistance bands/weight machine.
 - B. Patients will be started at lower weight resistance as indicated by assessed ability. Increase resistance as patient tolerates.
 - C. Patients will perform one set of 10 to 15 repetitions of exercises, suggested three times per week.
 - D. Emphasize that exercises should be done slowly, both when contracting and relaxing the muscles.
 - E. Emphasize gradual progression or weight and repetitions as well as utilizing correct breathing technique with resistance exercise.
 - F. Weights will be advanced with the guidance of the CVPR staff.

Exercise Prescription Policy Example



4. After initial assessment patients will begin warm up. Warm up will consist of low intensity exercise on the patient's initial exercise modality.
5. Exercise modality will be any activity that uses the large muscle groups for a sustained period of time and is considered aerobic in nature. Participants will utilize treadmill, hall walking, exercise bike, upper body ergometer, elliptical trainer, NuStep, Air Dyne, REX, etc. PR participants will be encouraged to utilize upper body ergometer or Nu Step for at least 10 minutes each session.
6. Intensity: as determined by the referring physician using any of the above methods. These methods have been described above.
 - A. Cardiac participants - Intensity as determined by any of the above methods, maintaining HR within THR and without increase in cardiac arrhythmias or significant BP abnormalities. A participant's BP will be checked with at least one exercise modality when beginning program. When a participant has demonstrated acceptable BP at rest and with exercise with at least six consecutive exercise sessions, BP will be checked only at rest and if/when assessed necessary. The RPE should fall in the range of 3-4.
 - B. Pulmonary participants - Intensity as determined by the referring physician, pulse oximetry > 90% unless otherwise specified by referring physician, RPE 3-4, Dyspnea scale 3-4, or other symptoms. Pulse oximetry will be checked on each exercise modality to maintain oxygenation > 90%. When a patient's pulse oximetry is adequate on the arm ergometer for at least six exercise sessions, pulse oximetry will no longer be assessed on the arm ergometer unless CVPR assess need to measure.
7. Duration: will depend on the participant's individual response and level of conditioning. Duration should be gradually increased from 10 total minutes to 40 minutes, as the functional capacity and clinical status improve. While in the Phase II program, the aerobic exercise time will be 30 - 40 minutes. When working with debilitated participants, interval training may be utilized initially. By increasing exercise time and decreasing rest time, the participant is gradually progressed to continuous training.
8. Frequency: 2-3 exercise sessions per week in addition to a home exercise program are recommended. Phase II is considered to be 3 sessions per week for 6-12 weeks, depending upon status of patient, patient's continued exercise progression and their insurance coverage.
9. Progression: the exercise prescription is adjusted by the CVPR staff under the supervision of the Medical Director using the guidelines of the ACSM and the AACVPR. The THR range will be established as 60-85% of age predicted maximum HR at the initiation of Phase II Cardiac Rehabilitation and documented in the ITP. When the cardiac participant begins to show signs of conditioning, the exercise intensity and duration will be adjusted so that the participant remains within his/her THR. The duration is increased initially prior to gradually increasing the intensity. The participant's RPE must still remain in the 3-4. Cardiac exercise prescription is updated and signed off in the ITP by the Cardiac Medical Director every 30 days. Progression for the Pulmonary participant is adjusted as exercise tolerance increases using the participant's pulse oximetry, RPE of 3-5 and Dyspnea scale of no greater than 3-4.
10. After the desired functional/exercise capacity has been attained, long-term maintenance is the goal of this exercise program.

Oxygen Saturation and Titration Policy

- Pulmonary Rehab applicants must include a policy detailing assessment and treatment of oxygen saturation at rest and during the exercise session.
- The policy should provide information in relation to de-saturation during exercise and the specific treatment involved to ensure patient safety and maximal exercise benefit.
- **Example:** If oxygen saturation falls below 88%, initiate supplemental oxygen per nasal cannula at 2 liters/min to achieve an O2 saturation reading > 88%.

Performance Measures

- 7 Performance Measures released in 2018
- Applicants no longer reported “Outcome Categories or Domains” (Example: Clinical)
- Data collection started in 2019 for the 2020 application
- 4 Cardiac Rehab PM’s and 3 Pulmonary Rehab PM’s
- Each PM has a specific outcome measurement tools that were required for use
- All measures are detailed on the application and were taken directly from the published Performance Measures. They are available at www.aacvpr.org/pmresources

Performance Measures

Pulmonary Rehabilitation

- Improvement in Functional Capacity
- Improvement in Dyspnea
- Improvement in Health Related Quality of Life

Cardiac Rehabilitation

- Optimal Blood Pressure Control
- Improvement in Functional Capacity
- Improvement in Depression
- Tobacco Use Intervention Performance Measure

Performance Measure Requirements

- For each measure, please indicate the tool used, if indicated
- Indicate the numerator and denominator for the measure
- Calculate the Percent Increase
- “What is ONE change that you can make in your rehab process to help increase your percentage or if you achieved 100%, how do you plan to maintain your percentage as you continually work to improve your patient outcomes?”

Performance Measures: AACVPR Resources 4 You



- Education Resources – full listing of each measure
- Webcasts
- Flow Charts to assist with patient selection
- Education modules for each Performance Measure
- Data collection for the 2020 Program Certification Application started January 1, 2019
- Visit <http://www.aacvpr.org/PMresources> for more information

Preparing for Program Certification

- Visit www.aacvpr.org to look at the Application Draft copies
- Utilize the Certification FAQ's and resources
- Carefully read and review each page of the application
- Get prepared now and schedule competencies and emergency in-services
- Select an ITP that represents your program and tells the patient's story. The ITP must meet all stated requirements
- Medical Emergencies must provide detail about your department's management of an emergency situation. Key Point: Onset of symptoms to resolution of the issue
- Performance Measures: Put into place the specific tools and practice for each measure

Annual Reports

- The introduction of the “**Annual Report**” helps ensure each program certified through AACVPR has up-to-date information and tools needed to maintain the current standards required for certification.

The Annual Report process is essential for several reasons, including:

- To attest to continued compliance with all AACVPR Program Certification requirements
- To keep AACVPR-certified programs continually aware of the current Program Certification application requirements
- To provide organizations the opportunity to update demographic and contact information prior to the actual application period. By maintaining current information, AACVPR will be able to communicate effectively with your organization about Program Certification.
- **2020 Annual Report available March 18 – July 19, 2019**



Good Luck!!