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CCRP Exam At-a-Glance

All exam details including exam windows and testing deadline may be found at www.aacvpr.org/ccrp.

Cost

AACVPR Members: $299 / Non-members: $359

Re-take fee:

AACVPR Members: $199 / Non-members: $259

American Association of Cardiovascular and Pulmonary Rehabilitation (AACVPR)

Professional Certification Commission (PCC)

330 N. Wabash Ave. • Suite 2000 • Chicago, IL 60611 • 312/321-5146

certification@aacvpr.org
Introduction and Overview of the Program

The AACVPR Professional Certification Commission (PCC) was established in 2013 to develop and implement the first and only comprehensive professional certification program for all healthcare practitioners who provide cardiac rehabilitation/secondary prevention services on a regular basis. The program is designed to certify health care professionals from the multiple disciplines that comprise cardiac rehabilitation services. The Professional Certification Program determines a standard of knowledge and skills that reflect evidence-based minimal qualifications necessary to deliver quality patient care outcomes in cardiac rehabilitation/secondary prevention. Earning certification as a CCRP provides prospective employers and the public with a means to identify qualified cardiac rehabilitation/secondary prevention practitioners. The CCRP certification acknowledges a commitment to the public to the delivery of quality patient care.

While maintaining an affiliation with its parent association (AACVPR), the PCC is solely responsible for the professional certification program. The PCC serves as an autonomous certifying arm of AACVPR, in order to protect against undue influence that could compromise the integrity of the certification program. The PCC holds independent authority in decision-making and is responsible for establishing the standards for the professional certification program and the operating policies of the PCC.

Responsibility of the Candidate

It is the responsibility of each candidate to read and understand the contents of this handbook before applying for examination. This handbook contains current information about the policies and procedures of the certification program. It is essential that each candidate keep this handbook readily available for reference until the entire certification process (including score reporting) is completed.

About the Certified Cardiac Rehabilitation Professional (CCRP) Exam

The Certified Cardiac Rehabilitation Professional (CCRP) exam is the only certification exam that encompasses the multiple disciplines of cardiac rehabilitation/secondary prevention. The PCC partners with Professional Testing Incorporated (PTI), an independent testing company that provides assistance with exam development, administration and scoring of the CCRP exam.

The examination content (see Exam Content Outline, beginning on page 5) is based on a standardized surveying of the profession. Surveys are conducted every five to seven years, to ensure that examination content is current, valid and representative of the responsibilities of cardiac rehab/secondary prevention professionals. The job analysis and all exam development activities will be conducted according to generally accepted psychometric guidelines.

The CCRP exam is an objective examination consisting of 140 multiple-choice questions. Candidates will have a total of three (3) hours to complete this exam.

A full listing of exam sites can be found on the AACVPR website at www.aacvpr.org/ccrp.

Computer-Based Testing

AACVPR has contracted with Pearson Vue, an independent exam administration company, to offer a computer based testing experience. CCRP candidates can take the exam at one of thousands of Pearson Vue testing centers across the country. Information on testing center locations will be sent to you upon completion of your exam registration.

The exam will also be administered in a paper and pencil format at the AACVPR Annual Meeting in Charleston, South Carolina in October.

Who Should Sit for the Exam and Eligibility Requirements

The CCRP exam is designed for those with experience in the field. Candidates are expected to have current and direct involvement in the major processes associated with cardiac rehab/secondary prevention, as outlined in the Exam Content Outline on pages 5-8.

Candidates must meet the following eligibility criteria by the application deadline date. The PCC reserves the right to conduct random audits to verify candidate eligibility.

- 1200 clinical hours in cardiac rehabilitation/secondary prevention
- Minimum of a Bachelor’s degree or higher in a health-related field from an accredited college or university or current RN licensure
  - Current RN licensure does not necessitate minimum of a Bachelor’s degree

Those who do not meet the eligibility requirements have the opportunity to appeal the eligibility criteria. Eligibility requirement appeals must be submitted in writing via email to certification@aacvpr.org. Alternatively, appeals can be submitted to AACVPR at the following address:

AACVPR
Attn: PCC - Eligibility Appeal
330 N. Wabash Avenue, Suite 2000
Chicago, IL 60611

Appeals must be received at least four (4) weeks prior to the testing date. All eligibility requirement appeals will be evaluated by the PCC. A detailed copy of the Appeals policy can be found at www.aacvpr.org/ccrp.
CCRP Exam Content Outline

1. Patient Assessment (14%)
   1.1 Explain cardiovascular system anatomy and physiology
   1.2 Recognize pathophysiology of cardiovascular diseases (e.g., atherosclerosis, valvular heart disease, chronic heart failure)
   1.3 Identify risk factors contributing to atherosclerotic heart disease
   1.4 Recognize cardiac dysrhythmias and potential implications during physical activity
   1.5 Identify cardiovascular interventions and device therapies (e.g., bypass surgery, valve replacement/repair, pacemakers/ICDs, LVADs)
   1.6 Review results of cardiovascular assessments, diagnostic tests, and procedures (e.g., 12-lead ECG, heart catheterization, echocardiogram, stress tests)
   1.7 Recognize signs and symptoms associated with cardiovascular diseases
   1.8 Recognize pharmacologic management plans and potential side effects
   1.9 Identify comorbidities that influence function or treatment strategies
   1.10 Identify potential psychosocial factors associated with CVD
   1.11 Conduct an assessment of functional capacity
   1.12 Conduct pain assessment
   1.13 Conduct psychosocial assessment
   1.14 Conduct patient learning assessment (e.g., preferred learning style, literacy level, and barriers to learning)
   1.15 Conduct nutrition assessment
   1.16 Stratify patients for risk of adverse events and disease progression using the AACVPR criteria
   1.17 Recognize patient cultural barriers and/or spirituality needs
   1.18 Collaborate with patient and family to establish goals
   1.19 Share decision-making and management with patient, family, providers and other staff
   1.20 Develop evidence-based individualized treatment plan

2. Nutrition Management (9%)
   2.1 Recognize role and impact of diet on CVD progression and risk factor management
   2.2 Assess dietary habits that influence disease development and progression
   2.3 Identify evidence-based nutrition recommendations for CVD
   2.4 Identify evidence-based nutrition recommendations for dyslipidemia
   2.5 Identify evidence-based nutrition recommendations for obesity
   2.6 Identify evidence-based nutrition recommendations for hypertension
   2.7 Identify evidence-based nutrition recommendations for diabetes
   2.8 Identify evidence-based nutrition recommendations for heart failure
   2.9 Recognize effective behavior change strategies that impact dietary modifications
   2.10 Recognize when to refer a patient or consult with other professional(s) for nutritional management

3. Weight Management (10%)
   3.1 Assess body weight status (overweight and obesity), body fat percentage, waist measurement, and body fat distribution
   3.2 Recognize the physiologic and pathologic effects of overweight/obesity and that of low body weight
   3.3 Identify methods that affect energy balance (caloric intake vs. caloric expenditure)
   3.4 Apply weight management strategies through the balance of caloric intake and caloric expenditure (e.g., diet strategies, physical activity strategies)
   3.5 Incorporate evidence-based guidelines and recommendations for healthy body weight
   3.6 Employ weight loss interventions that promote gradual, sustainable weight loss (5%–10%) over 3-6 months
   3.7 Recognize effective behavior change strategies that impact weight management
   3.8 Recognize when to refer a patient or consult with other professional(s) for weight management
4. Blood Pressure Management  (7%)

4.1 Recognize the etiology and pathophysiology of hypertension as a risk factor for CVD
4.2 Recognize the role of the kidney in blood pressure control
4.3 Explain the physiology of BP (at rest and during exercise)
4.4 Classify blood pressure according to current guidelines, including secondary prevention targets
4.5 Identify symptomatic hypotension
4.6 Manage patient with hypotension
4.7 Identify management strategies for patients with hypertension
4.8 Measure BP using an appropriately sized arm cuff with an aneroid sphygmomanometer or alternative devices
4.9 Perform accurate BP measurements at rest and during exercise
4.10 Educate patients on home BP monitoring and management
4.11 Reinforce to patients the importance of BP medication adherence
4.12 Recognize effective behavior change strategies that impact BP management
4.13 Recognize when to refer a patient or consult with other professional(s) for BP management

5. Blood Lipid Management  (8%)

5.1 Explain the components of a blood lipid profile (i.e., LDL-C, HDL-C, VLDL-C, TG, non-HDL-C)
5.2 Identify optimal blood lipid values based on evidence-based guidelines
5.3 Reinforce regular blood lipid assessments
5.4 Describe the physiologic role of lipids and inflammation in the atherosclerotic disease process
5.5 Reinforce the effect of various diets on blood lipids (e.g., TLC diet, Mediterranean diet, DASH diet)
5.6 Identify lipid lowering medications and common side effects
5.7 Describe the effects that dietary fats and simple carbohydrates have on blood lipid levels
5.8 Educate patients on the use of food labels related to the types and amounts of dietary fats
5.9 Explain the influence of type II diabetes on blood lipids
5.10 Describe the importance and efficacy of pharmacological approaches to control blood lipids
5.11 Describe the importance and efficacy of non-pharmacological approaches to control blood lipids (e.g., exercise, weight management, smoking cessation, alcohol consumption)
5.12 Reinforce to patients the importance of lipid lowering medication adherence
5.13 Recognize effective behavior change strategies that impact blood lipid management
5.14 Recognize when to refer a patient or consult with other professional(s) for blood lipid management

6. Diabetes Management  (9%)

6.1 Recognize the etiology and pathophysiology of type I and type II Diabetes Mellitus (DM)
6.2 Identify recommended fasting and non-fasting blood glucose values which define hypoglycemia and hyperglycemia
6.3 Recognize the clinical importance and recommended target value for glycosolated hemoglobin (HbA1c) in diabetic patients
6.4 Identify signs/symptoms of hypoglycemia and hyperglycemia
6.5 Explain appropriate responses to hypoglycemic and hyperglycemic events
6.6 Identify glucose lowering medications and common side effects
6.7 Reiterate the clinical importance of monitoring blood glucose values before and after exercise training sessions
6.8 Identify contraindications for beginning exercise based on blood glucose values
6.9 Identify the components of the metabolic syndrome
6.10 Modify exercise plan to accommodate for complications of DM (e.g., peripheral neuropathy, PAD, CAD/CVA, diabetic retinopathy)
6.11 Emphasize proper foot care for persons with DM
6.12 Describe the importance and efficacy of non-pharmacological approaches to control DM (e.g., exercise, weight management, reduced alcohol consumption)
6.13 Educate patients on the proper use of glucometers
6.14 Reinforce to patients the importance of DM medication adherence
6.15 Recognize effective behavior change strategies that impact DM management
6.16 Recognize when to refer a patient or consult with other professional(s) for DM management
6.17 Address psychosocial issues that affect DM management

7. Tobacco Cessation  (7%)
7.1 Incorporate current guidelines for treating tobacco use into patient plan of care
7.2 Identify the biochemical and physiologic consequences of tobacco use
7.3 Identify the physiologic and psychological aspects of nicotine addiction
7.4 Identify the risk for the development of CVD from secondhand smoke
7.5 Identify the risks for relapse and strategies for preventing relapse
7.6 Address psychosocial issues that affect tobacco cessation
7.7 Recognize effective behavior change strategies that impact tobacco cessation
7.8 Recognize when to refer a patient to or consult with other professional(s) for tobacco cessation
7.9 Reinforce to patients the importance of tobacco pharmacologic therapy and medication adherence
7.10 Provide patients with national and local resources for tobacco cessation
7.11 Identify tobacco cessation medications and common side effects

8. Psychosocial Management  (9%)
8.1 Recognize the influence of psychosocial risk factors on the pathophysiology of CVD
8.2 Recognize symptoms associated with psychosocial disorders
8.3 Recognize the influence of psychosocial risk factors on rehabilitation and compliance
8.4 Identify the important considerations in selecting tool(s) to screen for psychosocial risk factors
8.5 Incorporate psychosocial outcome measures to guide treatment
8.6 Recognize the association of psychosocial factors (i.e., anxiety, depression, anger/hostility, social isolation and substance abuse) with recurrent CVD events and negative outcomes
8.7 Implement AHA recommendation to screen for depression
8.8 Instruct patients on extrinsic chronic and acute psychosocial stressors (e.g., socioeconomic, work, marital, caregiving)
8.9 Explain to patients the interaction between psychosocial risk factors and other health issues (e.g., GI, chronic pain, impaired immune response, sleep disturbances)
8.10 Incorporate relaxation techniques, including deep breathing and progressive muscle relaxation
8.11 Reinforce to patients the importance of adhering to medication(s) used to manage psychosocial issues
8.12 Identify medications used for psychosocial issues and common side effects
8.13 Recognize effective behavior change strategies that impact psychosocial issues
8.14 Recognize when to refer a patient or consult with other professional(s) for psychosocial management

9. Physical Activity Counseling  (13%)
9.1 Differentiate between physical activity and exercise
9.2 Identify methods to assess physical activity (subjective and objective)
9.3 Recognize pros and cons of different types of physical activity assessment methodologies
9.4 Interpret physical activity assessment results
9.5 Recognize the lack of regular physical activity and sedentary behavior as risk factors for CVD morbidity and mortality
9.6 Counsel patients regarding current evidence-based recommendations for regular physical activity (intensity, frequency, and accumulate daily duration) for adults and older adults
9.7 Emphasize the importance of physical activity progression for previously sedentary or irregularly active adults
9.8 Consider modification of physical activity recommendations based on preexisting conditions (e.g., musculoskeletal and neuromuscular)

9.9 Identify physical activities that may increase the risk for an adverse event

9.10 Identify environmental conditions that increase the risk for an adverse event while performing physical activity

9.11 Recognize barriers to increasing physical activity

9.12 Counsel patients on metabolic requirements for common activities (e.g., recreational, occupational, sexual)

9.13 Differentiate between the physiologic demands of upper and lower body physical activities

9.14 Recognize effective behavior change strategies that impact physical activity

9.15 Recognize when to refer a patient or consult with other professional(s) to assist with physical activity limitations (e.g., physical therapy, occupational therapy, orthopedic)

9.16 Incorporate the use of goal setting to support physical activity behavior change

9.17 Advise patients on the benefits and usage of activity monitoring devices for increasing physical activity (e.g., pedometers, heart rate monitors)

9.18 Address interrelationship between psychosocial health and physical activity

10. Exercise Training (14%)

10.1 Identify absolute and relative contraindications for exercise

10.2 Identify absolute and relative indications for stopping exercise

10.3 Recognize serious dysrhythmias (e.g., ventricular couplets, ventricular fibrillation, ventricular tachycardia, bundle branch block, atrial fibrillation)

10.4 Recognize ECG changes and symptoms for myocardial ischemia and infarction

10.5 Specify the components of health-related physical fitness

10.6 Consider the importance of various cardiovascular physiologic measures (e.g., metabolic equivalents METs, rate pressure product RPP, oxygen uptake VO2, ejection fraction EF)

10.7 Recognize normal acute physiologic responses to aerobic exercise

10.8 Respond to adverse events during exercise

10.9 Recognize the effect medications have on exercise responses

10.10 Recognize normal chronic adaptations to aerobic exercise training

10.11 Recommend individualized, safe and effective modes, intensity, frequency, duration, and progression of the aerobic exercise prescription for cardiac patients

10.12 Consider modification of exercise prescription to accommodate existing comorbidities

10.13 Design an aerobic exercise training session (i.e., warm-up, exercise, cool-down and stretching)

10.14 Coach proper techniques for improving flexibility, balance, and strength

10.15 Prescribe individualized resistance training program (e.g., repetitions, sets, frequency, correct technique, and progression)

10.16 Instruct patients on proper skin preparation and electrode placement for ECG telemetry monitoring

10.17 Maintain and calibrate exercise equipment

10.18 Recognize effective behavior change strategies that impact the exercise training
Application Procedure

Complete the online application form in its entirety. Applications for the examination are available online at www.aacvpr.org/CCRP.

Full payment is due at time of application. Applications will not be accepted unless full payment has been received.

Upon submission of application, an automated confirmation notice will be generated. If this notice is not received, your application has not been submitted or received by AACVPR. Contact AACVPR Headquarters if this notice is not received.

Applications must be received by stated deadlines on the AACVPR website.

Incomplete applications and applications received after the stated deadlines are subject to an additional $50 late fee. Applications not completed by the indicated exam dates or that do not meet the eligibility requirements will not be permitted to take the exam.

Cancellations/Refunds

All requests for a cancellation/refund in writing, no later than two weeks prior to the exam date.

Requests for cancellations/refunds may be made only by the exam candidate. Refunds will be issued less a $50 processing fee.

Special Needs

AACVPR complies with the Americans with Disabilities Act in order to accommodate candidates with special needs. Candidates with documented visual, physical, hearing or learning disabilities that would prevent them from taking an examination under standard conditions may request special testing accommodations and arrangements.

Special needs as well as the accommodation that is being requested must be documented in writing by the candidate’s doctor or other qualified professional on official letterhead. This written documentation must accompany the CCRP application. Please note that requests for accommodations must be received at least eight (8) weeks prior to the testing date.

AACVPR
Attn: PCC - ADA Request
330 N. Wabash Avenue
Suite 2000
Chicago, IL 60611
certification@aacvpr.org

Statement of Nondiscrimination

The PCC, AACVPR and Professional Testing, Inc. do not discriminate against any individual or entity on the basis of religion, age, gender, race, disability, nationality or any other reason prohibited by law. All individuals submitting an application for the examination will be judged solely on published criteria. Candidates are not required to be a member of any organization to apply for AACVPR certification.
Exam Preparation

The PCC does not develop, administer, sponsor, endorse or financially benefit from any type of exam review, preparatory course or published materials related to the content of the certification examinations.

Exam questions are based on a wide variety of publications, regulations, and resources in the field. A full list of exam resources can be found at www.aacvpr.org/ccrp.

Exam Day Information

On the day of the exam, you are expected to report to the exam location at least 15 minutes prior to exam start time. This will give you adequate time to complete the necessary sign in procedures. If you arrive more than 30 minutes late for this exam and are refused admission, you will forfeit your exam fees.

Upon arrival, you will be required to present two forms of personal ID. One of the two IDs must be a government-issued ID (passport, driver’s license). Both must be current and contain your signature. Expired IDs are not accepted. The name on your photo identification must exactly match the name that appears on your exam application. Please note that during admission, you will be required to provide a digital signature, you will be photographed and your palm will be scanned.

The exam proctor will provide oral instructions prior to administering the exam. Once the exam has begun, you must remain in your seat during the examination. You may only leave your seat when authorized by the exam proctor. If you leave the room during the exam, extra time will not be provided.

No personal items may be taken in to the testing room. This includes all bags, books not authorized by the sponsor, notes, phones, pagers, watches, and wallets. The exam proctor will not permit anyone found possessing such materials to continue the exam and all exam fees will be forfeited. You will have three (3) hours to complete the exam. Candidates who complete the exam early are permitted to leave but may not return to the exam room for any reason. When three (3) hours has lapsed, you must cease work and turn in your exam materials and exit the exam facility.

Exam Security

The PCC and PTI maintain established test administration and security standards to ensure that all candidates are provided with a fair and consistent opportunity to demonstrate their knowledge, skills and abilities.

Any candidate who does not have positive identification, uses unauthorized aids, engages in misconduct or does not follow testing procedures may be dismissed from the testing location. The PCC may choose to have the test scores of such candidates cancelled, in which case all applicable exam fees will be forfeited.

Scoring Information

The pass/fail cut-off score is determined using a criterion-referenced method, which allows the performance of each candidate taking the exam to be judged against a predetermined standard rather than against other candidates. The predetermined standard is set by a committee of subject matter experts working with testing experts to ensure the validity, reliability and legal defensibility of the exam.

The PCC and PTI routinely apply a post-exam administrative review of the validity of exam scores. If irregularities are found, candidates will be notified of issues concerning their scores, when appropriate.

Exam Results

Exam results are mailed to candidates within six to eight weeks of exam administration. Candidates who pass the certification examination may use the CCRP designation. Newly certified individuals will receive a CCRP certificate.

To ensure confidentiality, exam results will not be released via telephone, fax, e-mail or any other electronic transmission by the PCC, PTI or AACVPR personnel. Scores will NOT be sent to employers, schools, other individuals or organizations under any circumstances. Names of candidates who do not pass the examination are confidential and are not revealed under any circumstances, except by legal compulsory process. The names of candidates taking an examination are released only to designated exam proctors for administrative purposes only. All exam proctors are required to keep such information confidential. Any questions concerning test results should be referred to the AACVPR at certification@aacvpr.org.

Requests for duplicate score reports should be submitted to certification@aacvpr.org.

Exam score reports are kept on file with AACVPR for a minimum of ten (10) years.
Re-Examination
An applicant may only take the exam one time during a testing window. Should an applicant need to re-take the exam, the applicant may re-apply to take the exam during the next testing window. A full listing of testing windows, dates and deadlines can be found at www.aacvpr.org/ccrp. Submission of a new application and payment of exam fees is required for each application. With each new application submission, candidates will be required to meet the eligibility requirements in effect at the time of submission.

Renewing Certification
Renewal of certification is designed to assure a level of continued competence through the ongoing enhancement of knowledge and skills in the cardiac rehab/secondary prevention field. Certificants must meet one of the following requirements every three (3) years in order to maintain his/her certification:

- Submit 60 hours of continuing education credits, at least 25 hours of which must be AACVPR-approved coursework. **Certification**
- OR
- Sit for and pass the current CCRP examination. **Certification**

**Renewal Application Fee:**
Members – $60 every three (3) years. Non-members – $110 every three (3) years. Prices subject to change.

Detailed information on certification renewal can be found at www.aacvpr.org/CCRP.

Standards of Conduct and Ethics for Certificants
AACVPR certificants shall abide by the ethical principles developed to safeguard the public and to promote quality patient care through support of the healthcare organization and its functions.

AACVPR certificants shall share knowledge, foster educational opportunities, and encourage personal and professional growth through continued self-improvement and application of current advancements in the profession and agree to follow the Ethics and Code of Conduct Policy.

AACVPR certificants shall refrain from conduct deemed harmful to the public or inappropriate to the profession.

Any such violation of the Ethics and Code of Conduct Policy by an AACVPR certificant may result in suspension or revocation of certification. For a copy of the Ethics and Code of Conduct Policy, please visit www.aacvpr.org/CCRP.