



# The Status of Cardiac and Pulmonary Rehabilitation Programs in Arizona: 2019 Update

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## Abstract

The American Association of Cardiovascular and Pulmonary Rehabilitation (AACVPR) recommend that every cardiac and pulmonary rehabilitation program becomes nationally certified to ensure strict standards of patient care and quality programming. This investigation was conducted to update Arizona Society of Cardiovascular and Pulmonary Rehabilitation (ASCVPR) records of the number of cardiac rehabilitation (CR) and pulmonary rehabilitation (PR) programs that were AACVPR certified in Arizona (AZ). It also quantified the number of CR programs that offered billable Supervised Exercise Training (SET) for Peripheral Artery Disease (PAD) through the end of 2018. A delegated ASCVPR representative provided a record of programs that offered early outpatient CR and PR within the state. An updated record was then compiled. All programs were invited to complete a structured telephone interview and there was a 97% compliance rate. According to ASCVPR records, there were 33 early outpatient CR programs and 20 outpatient PR programs in Arizona. There were 21 (64%) CR and 5 (25%) PR certified programs. Five (15%) CR programs also provided billable SET for PAD. In 2014, there were 19 (59%) certified CR programs out of 32 facilities offering CR at that time. Three out of 11 (27%) PR programs were certified. It is recommended that the ASCVPR continues to routinely update their record of CR and PR programs and that initiatives be developed to assist programs in the AACVPR certification process.

## Background

Cardiac and pulmonary rehabilitation supports individuals in their efforts to optimize their health and reduce the disabling effects of a heart and pulmonary-related condition. Research has shown that CR can reduce recurrent cardiac events, control cardiac-related symptoms and stabilize or reverse the atherosclerotic process.<sup>1</sup> After a meticulous review of over 900 scientific studies involving CR exercise therapy, education and counseling, a group of independent reviewers came to the conclusion that CR is effective, safe and very much underutilized in the United States. This resulted in the 1995 publication of the Federal Guideline for Cardiac Rehabilitation,<sup>2</sup> which stipulated that CR is an essential component in a patient's recovery after a cardiac event, and for those who are eligible, a referral should be automatic. Recent research continues to support this statement. In a five-year follow-up study of over 600,000 Medicare beneficiaries with coronary disease, mortality rates were significantly lower in patients who participated in CR.<sup>3</sup>

Outpatient CR programs typically consist of a comprehensive range of services that includes medical evaluation, prescribed exercise and cardiovascular risk factor modification. Provision of these services is physician-directed and implemented by a team of healthcare professionals that may include exercise physiologists, nurses, dietitians, health educators, behavioral medicine specialists and other allied healthcare professionals.<sup>4</sup> This multidisciplinary team should be led by an appropriately qualified physician, who as medical director, is responsible for overseeing program policy and procedures by providing direction in the processes of program development, on-going quality improvement and clinical operations. This includes ensuring that the program meets required standards for patient monitoring, exercise supervision and compliance with reimbursement regulations.<sup>4,6</sup>

The Centers for Medicare & Medicaid Services (CMS) expanded the list of eligible cardiac conditions for Phase II CR in 2014, adding stable Chronic Systolic Heart Failure to the covered diagnoses.<sup>7</sup> These include Myocardial Infarction within the preceding year, Stable Angina, Coronary Artery Bypass Grafting, Heart Valve Repair or Replacement, Angioplasty (PTCA) or Coronary Stenting, and Heart or Heart-Lung Transplant.

Outpatient PR is an effective disease management program for patients with COPD, restrictive or interstitial lung disease, cystic fibrosis, lung cancer and those that are pre and post lung transplantation or lung volume reduction surgery. Evidenced based guidelines recommend PR as standard care for treating patients with chronic lung disease.<sup>8</sup> Programs should also involve a multidisciplinary staff and include core components of medical evaluation and supervision, exercise training and education, with a focus on self-care and psychosocial support. The American College of Chest Physicians conducted a systematic review of the literature between 1996-2004 and concluded that the inclusion of upper and lower extremity exercise and strength training produce improvements in dyspnea, functional capacity and health related quality of life outcomes.<sup>9</sup>

Adherence to the core components vetted by national standards will enable programs to stay current with advances in clinical treatment. After years of mounting evidence, effective May 25, 2017, CMS issued a National Coverage Determination (NCD) for SET as initial treatment in patients with intermittent claudication (IC), for the treatment of symptomatic PAD. CR and PR Programs are uniquely structured to be the perfect environment for instituting the newly approved SET for PAD. AACVPR has encouraged existing CR and PR programs to expand to accept this special population, and has provided a toolkit, educational webinars, reimbursement guidelines and other resources to implement SET for PAD on the website.

CMS has determined the following regulations for SET for PAD<sup>10</sup>

"Coverage is up to 36 sessions over a 12-week period, if all of the components are met. The SET program must have the following components:

- Consist of sessions lasting 30 to 60 minutes, comprising a therapeutic exercise training program for PAD in patients with claudication
- Be conducted in a hospital outpatient setting or in a physician's office
- Be delivered by qualified auxiliary personnel necessary to ensure benefits exceed harms, and who are trained in exercise therapy for PAD
- Be under the direct supervision of a physician (as defined in Section 1861 (r)(1) of the Social Security Act, physician assistant, or nurse practitioner/clinical nurse specialist (as identified in Section 1861 (aa) (5) who must be trained in both basic and advanced life supported techniques.

Beneficiaries must have a face to face meeting with the physician responsible for PAD treatment to obtain the referral for SET. The beneficiary must receive information regarding cardiovascular disease and PAD Risk Factor Reduction, which could include education, counseling behavior interventions, and outcome assessments". There are further considerations and coding requirements listed in the Change Request Number 10295 of Medicare Learning Network MM10295.

The AACVPR is the national professional association for CR and PR. It has a mission to advocate for quality cardiovascular and pulmonary care through education, research promotion, the development and application of standards and guidelines, and influence health care policy. The AACVPR recommends that every program becomes nationally certified through their organization to ensure strict standards of patient care and quality programming. Currently there is no AACVPR certification process for SET for PAD programs, but as best practices are determined, AACVPR will undoubtedly offer certification for these programs in the future. This investigation was conducted to determine the number of CR and PR programs that are AACVPR certified within Arizona.

## Methods

The ASCVPR is an affiliate organization of the AACVPR and represents cardiac and pulmonary professionals within the state. A delegated ASCVPR representative provided a record of programs that offered early outpatient CR and PR within the state. All programs were contacted to confirm they had an active program. Confirmation of national program certification and/or registration was verified with the AACVPR online directory. An updated record through December, 2018 was then compiled. All programs were invited to complete a structured telephone interview and there was a 97% compliance rate.

## Results

According to ASCVPR records, 33 programs offered early outpatient CR (Table 1). There were 21 AACVPR certified CR programs in AZ. This means that 64% of all early outpatient CR programs in AZ were certified, which was a 5% increase compared with 2014. Twenty programs offered outpatient PR (Table 2), which was more double the number reported in 2014. There were 5 (25%) PR certified programs. In 2014, there were 19 (59%) certified CR programs out of 32 offering CR at that time. Three out of 11 (27%) PR programs were certified. Five (15%) CR programs also provided billable SET for PAD.

Table 1. Outpatient Cardiac Rehabilitation Programs

Region	Name	X = AACVPR Certified Program	Services Offered Phase I: Inpatient Phase II: Early Outpatient Phase III: Extended Outpatient * indicates a self-pay program	Phone #
Bullhead City	Western AZ Regional Medical Center		Phase II, Phase III* SET for all populations*	928-763-0237
Chandler	Chandler Regional Medical Center	X	Phase II, Phase III*	480-728-3139
Cottonwood	Northern AZ Verde Valley Medical Center	X	Phase I, Phase II, Phase III* SET for cardiac populations*	928-639-6322
Glendale	Banner Thunderbird Medical Center	X	Phase I, Phase II, Phase III* SET for cardiac populations*	602-865-6986
Glendale	Abrazo Arrowhead Campus (Formerly Arrowhead Hospital)	X	Phase I, Phase II	623-561-7489
Goodyear	Abrazo West Campus (Formerly West Valley Hospital)		Phase I, Phase II, Phase III* SET for cardiac populations*	623-882-1776
Kingman	Kingman Regional Medical Center		Phase II	928-692-4605
Lake Havasu	Havasu Regional Medical Center	X	Phase II, Phase III* SET for cardiac populations*	928-302-5408
Mesa	Banner Desert Medical Center	X	Phase I, Phase II, Phase III*	480-412-3123 option 1
Mesa	San Tan Cardiovascular Center		Phase II, Phase III*	480-632-1577
Mesa	Banner Heart Hospital	X	Phase I, Phase II, Phase III* SET for PAD	480-854-5045
Parker	La Paz Regional Medical Center		Phase II, SET for PAD	928-669-7484
Phoenix	Abrazo Arizona Heart Hospital (Formerly Arizona Heart Institute)		Phase II, Phase III* SET for all populations*	602-240-6132
Phoenix	Abrazo Scottsdale Campus (Formerly Paradise Valley Hospital)		Phase I, Phase II	602-923-5760
Phoenix	Banner University Medical Center Phoenix (Formerly Banner Good Samaritan Medical Center)	X	Phase I, Phase II, Phase III* SET for PAD SET for cardiac populations*	602-839-2757
Phoenix	Carl T Hayden Phoenix VA Medical Center		Phase II, Phase III SET for all populations*	602-277-5551 ext. 5695
Phoenix	HonorHealth Cardiac Rehabilitation - Deer Valley Medical Center	X	Phase I, Phase II, Phase III* SET for all populations*	623-879-1800
Phoenix	HonorHealth Cardiac Rehabilitation - John C Lincoln	X	Phase I, Phase II, Phase III* SET for PAD, SET for all populations*	602-870-6368
Phoenix	Maricopa Integrated Health System		Phase II SET for cardiac populations*	602-344-1437
Phoenix	Phoenix College		Phase III* SET for all populations*	602-285-7225
Prescott	Pendleton Center at Yavapai Regional Medical Center	X	Phase I, Phase II, Phase III* SET for all populations*	928-771-5794
Scottsdale	Mayo Clinic Cardiac Rehabilitation	X	Phase I, Phase II, Phase III* SET for cardiac populations*	480-301-9400
Scottsdale	HonorHealth Scottsdale Shea Cardiac Rehabilitation (Formerly Scottsdale Healthcare)	X	Phase II, Phase III* SET for all populations*	480-323-4600
Show Low	Summit Healthcare Regional Medical Center	X	Phase II SET for all populations*	928-532-1150
Sierra Vista	Canyon Vista Medical Center		Phase II	520-263-3730
Sun City	Banner Boswell Medical Center	X	Phase I, Phase II, Phase III* SET for all populations*	623-832-5390
Sun City	Banner Del Webb Medical Center	X	Phase II, Phase III*	623-524-4290
Tuba City	Tuba City Regional Healthcare		Unable to obtain	928-283-2596
Tucson	Banner University Medical Center Tucson (Formerly University of Arizona Medical Center)	X	Phase I, Phase II, Phase III*	520-694-2476
Tucson	Carondelet St Joseph's Hospital	X	Phase I, Phase II, Phase III* SET for all populations*	520-873-3910
Tucson	Carondelet St Mary's Heart and Vascular Institute	X	Phase II	520-872-4807
Tucson	Northwest Medical Center	X	Phase I, Phase II, Phase III* SET for cardiac populations* Phase I, Phase II, Phase III* SET for PAD	520-202-2740
Tucson	Tucson Medical Center		Phase I, Phase II, Phase III* SET for cardiac populations*	520-324-5472
Yuma	Yuma Regional Medical Center	X	Phase II, Phase III SET for all populations*	928-336-1015

Table 2. Outpatient Pulmonary Rehabilitation Programs

Region	Name	X = Certified Program AACVPR	Phone #
Bullhead City	Western AZ Regional Medical Center		928-763-0237
Glendale	Abrazo Arrowhead Campus		623-561-7489
Glendale	Banner Thunderbird Medical Center		602-865-6986
Kingman	Kingman Regional Medical Center		928-692-4605
Lake Havasu	Havasu Regional Medical Center		928-854-0058
Mesa	Banner Desert Medical Center	X	480-412-3123 option 1
Mesa	Banner Heart Hospital	X	480-854-5045
Mesa	San Tan Cardiovascular Center		480-632-1577
Phoenix	Mayo Clinic Hospital	X	480-301-7174
Prescott	Yavapai Regional Medical Center		928-771-5624
Sun City	Banner Boswell Medical Center		623-832-5390
Sun City West	Banner Del Webb Medical Center		623-524-4290
Tuba City	Tuba City Regional Healthcare		928-283-2596
Tucson	Banner University Medical Center Tucson		520-694-2476
Tucson	Carondelet St Joseph's Hospital	X	520-873-3910
Tucson	Northwest Medical Center	X	480-301-8834
Scottsdale	Mayo Clinic Cardiac Rehabilitation		480-301-9400
Show Low	Summit Healthcare Regional Medical Center		928-537-6336
Sierra Vista	Sierra Vista Regional Medical Center		520-417-4517
Yuma	Yuma Regional Medical Center		928-336-1015

Table 3. Required Documentation for CR Program Certification

Program Certification Primary Contact Form/Program Profile			
Page 1	Program Staff and Competencies	Page 6	Improvement in Functional Capacity
Page 2	Individualized Treatment Plan	Page 7	Optimal Blood Pressure Control
Page 3	Medical Emergencies	Page 8	Tobacco Use Intervention
Page 4	Emergency Preparedness	Page 9	Improvement in Depression
Page 5	Exercise Prescription Policy		Attestation Statement

Table 4. Required Documentation for PR Program Certification

Program Certification Primary Contact Form/Program Profile			
Page 1.	Program Staff and Competencies	Page 5	Exercise Prescription
Page 2.	Individual Treatment Plan	Page 6	Functional Status/Exercise Capacity
Page 3.	Medical Emergencies	Page 7	Improvement in Dyspnea
Page 4.	Emergency Preparedness	Page 8	Improvement in Health-Related Quality of Life
			Attestation Statement

## Cardiac Rehabilitation Patient Testimonial



"Cardiac rehab saved my life after my heart procedure 4 years ago".  
Pat Brickhouse, Phase III with Perfect Attendance

## Discussion

Since 2014, AACVPR has streamlined and updated the CR and PR certification/recertification process each year. An online application is available on the AACVPR website<sup>11</sup> <http://www.aacvpr.org> in early December, one year in advance of the certification submission year, with a late February completion date. In 2018, the focus of the application changed to a more outcome-based process, highlighting measurement of outcomes described in the AACVPR Performance Guidelines. The AACVPR Program Certification Team also devised an Annual Report to ensure certified programs maintain compliance with the AACVPR guidelines by staying abreast with the updated application requirements. A tutorial video and resource materials are available on the website to instruct applicants on how to complete this preliminary mandatory report. This report is due in 2019 for programs seeking certification/recertification in 2020. A sample of the 2020 Certification Application is also provided, and applicants view a required training webcast prior the final submission. In the application, program information is entered in the category specific pages within the application. These categories have been identified as core components and applicants enter related program data that represent the previous 12-month period (Table 3 & 4). Standards of care for CR and PR are detailed in the AACVPR guidelines.<sup>12-13</sup>

AACVPR provides important information within the Application Resource page that includes a "Frequently Asked Questions" section and a description of what is new in the CR and PR application process during that calendar year. Each year the certification requirements reflect changes in current practice. Previously certified programs are required to update their processes in order to recertify every 3 years. Certification ensures that programs continue to provide optimal clinical care according to the latest evidence-based guidelines. The new Annual Report assures that programs seeking certification have all the components in place during their data collection year, before making the application in the recertification year.

## Conclusion

The AACVPR provides clear instruction on the certification process and they have assigned experienced people within the local affiliates of the organization to assist new applicants. It is recommended that the ASCVPR routinely updates their record of CR and PR programs within AZ and that they continue to encourage programs to register with the AACVPR. In addition, ongoing initiatives need to be developed to assist CR and PR programs in the certification process. The number of programs providing SET for PAD remains low. The national and state associations can provide guidance as programs refine their workflow process to accept this patient population within their practice.

## References

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