

FALL NEWSLETTER



November 2025

Welcome to the Fall Edition of ISCVPR Newsletter

In this quarter's ISCVPR newsletter, we recap highlights from the recent AACVPR conference in West Palm Beach, including key takeaways and insights from our members who attended. We also share exciting updates about our Indiana society and its ongoing initiatives. Plus, you'll find articles on current research shaping the field of cardiopulmonary rehabilitation and a clinical competency to support patient assessment within your program.

AACVPR Meeting Recap

Aaron Wright and Katrina Riggan share about the 40th annual AACVPR Meeting. The conference featured updates on ACSM Guidelines, GLP-1 inhibitors, and 2025 Medicare reimbursement. Both share their gratitude for the chance to network with industry leaders and vendors to improve outcomes and maintain best practices within their own programs.



PR: New Clinical Practice Guideline

Debbie Koehl shares updated clinical practice guidelines for pulmonary rehabilitation. It is an evidence-based article that reviews clinical significance for patients with COPD, Interstitial lung disease and pulmonary hypertension. It also touches on delivery models of traditional on-site program and virtual/telerehabilitation settings. Debbie also shares that AACVPR will release a new pulmonary rehab guideline in the spring with expanded content and new chapters.

Health Benefits of RT with or without CVD

Darrika Van shares with us an updated article by the American Heart Association regarding resistance training and its impact on cardiovascular disease. This statement summarizes the benefits of resistance training alone or in combination with aerobic training for improving cardiovascular disease risk factors. Accumulating evidence suggests resistance training is safe and effective for promoting cardiovascular health in varied healthy and clinical populations.



From the Desk of the President:



I had the privilege of attending the 40th Annual AACVPR Conference in West Palm Beach, Florida, an experience that was both inspiring and enriching. I extend my heartfelt gratitude to the Indiana Society of Cardiovascular and Pulmonary Rehab (ISCVPR) board for granting me this incredible opportunity. It was an honor to represent Indiana and the ISCVPR, connecting with passionate professionals and industry leaders in our field.



Over the course of three days, I attended many impactful sessions covering critical topics, some of which included Medicare updates, improving program quality, PR therapy for diseases other than COPD, ACSM guideline revisions, and how to advocate for the growth of clinical exercise physiologist. These discussions provided valuable insights and practical knowledge that I am eager to apply in my work. Networking with like-minded colleagues on a national level and forging new relationships with vendors was a highlight of the conference. These interactions not only broadened my perspective but also sparked innovative ideas to enhance my program.



I wholeheartedly encourage anyone with the opportunity to attend a national conference to seize it. The experience has equipped me with new tools for professional growth and a wealth of fresh, actionable ideas to implement in my practice. Thank you once again to the ISCVPR for sponsoring me on this opportunity and I'm truly grateful.

Aaron Wright

A Delegates Recap: National AACVPR Meeting in West Palm Beach, Florida

The 40th Annual AACVPR Meeting in sunny West Palm Beach, Florida, was nothing short of inspiring! Surrounded by palm trees and a sea breeze, professionals from across the nation gathered to celebrate progress, share knowledge, and strengthen the network of those dedicated to advancing Cardiac and Pulmonary Rehabilitation.

A highlight of the week was the recognition of **Dr. Leonard Kaminsky**, who received the prestigious **Kent L. Smith Award of Excellence**. Dr. Kaminsky's lifelong contributions to exercise physiology, research, and the development of evidence-based rehabilitation practices have shaped how programs nationwide deliver patient-centered care. His leadership continues to raise the bar for all of us working in the field.

Educational sessions covered cutting-edge topics that are shaping the future of rehab. The unveiling of the **new ACSM Guidelines for Exercise Testing and Prescription** provided essential updates to help programs refine clinical exercise standards. Attendees also explored the expanding role of **GLP-1 inhibitors** and their potential benefits and challenges within Cardiac Rehab populations—a topic that sparked great discussion among clinicians and researchers alike.

Another key focus was the **2025 Medicare Reimbursement Guidelines**, which offered review and strategies for optimizing program sustainability while maintaining quality care. This review and legislative updates are vital for every department striving to balance clinical excellence with operational efficiency.

Beyond the sessions, the conference was a vibrant hub of collaboration and energy. Networking events, vendors, research posters connected professionals who share a common passion for improving outcomes and promoting best practices across the continuum of care. The sense of unity and shared purpose was proof that together, we continue to move the field forward.

I would like to share a heartfelt **thank you to the Indiana Society for Cardiovascular and Pulmonary Rehabilitation (ISCVPR)** for the delegate generous scholarship opportunity that made attendance possible. Representing Indiana among such dedicated peers was an honor and a reminder of how vital our collective work remains in restoring health and hope to those we serve.

Katrina Riggins

Pictures!



Pulmonary Rehabilitation: New clinical practice guidelines



Debbie Koehl, MS, RRT Program Manager PR/PFT IU Health Adult Academic Health

[Summary for Clinicians: Clinical Practice Guideline on Pulmonary Rehabilitation for Adults with Chronic Respiratory Disease](https://www.atsjournals.org/doi/epdf/10.1513/AnnalsATS.202310-909CME?role=tab)

<https://www.atsjournals.org/doi/epdf/10.1513/AnnalsATS.202310-909CME?role=tab>

A new guideline for PR was published by ATS in the Annals of the American Thoracic Society in January 2024. I think this article is well worth reviewing no matter how long you have been practicing and working in pulmonary rehabilitation. The authors of this article are some of our well-known clinicians in pulmonary rehabilitation.

This article is an excellent review of who we should be recruiting for our PR programs as well as why patients should participate in PR. It is an evidence-based article that reviews clinical significance for patients with COPD, Interstitial lung disease and pulmonary hypertension. It also touches on delivery models of traditional on-site program and virtual/telerehabilitation settings.

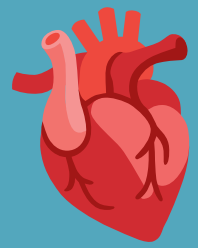
The article asks six key questions concerning the above-mentioned topics as well as discusses conclusions and future directions.

P.S. It is only 5 pages long – so it's a quick informative read! 😊

On another note, for clinical practice and Pulmonary Rehabilitation. Be on the lookout next Spring for the 6th Edition Guidelines for Pulmonary Rehabilitation Programs from the AACVPR. It has added some new chapters and expanded other chapters!

Cardiac/PAD Rehabilitation:

A resistance training article and semaglutide's impact on individuals with PAD and type 2 diabetes



Darrika Van shares:

[Resistance Exercise Training in Individuals With and Without Cardiovascular Disease: 2023 Update: A Scientific Statement From the American Heart Association - PubMed](https://pubmed.ncbi.nlm.nih.gov/38059362/)

<https://pubmed.ncbi.nlm.nih.gov/38059362/>

This updated American Heart Association statement highlights that resistance training is safe and effective for improving cardiovascular health in adults, both with and without cardiovascular disease. It summarizes benefits of resistance training alone or alongside aerobic exercise and offers practical strategies to promote it, addressing the low participation rate of US adults in recommended resistance training activities.

Katrina Riggin shares:

[Semaglutide and walking capacity in people with symptomatic peripheral artery disease and type 2 diabetes \(STRIDE\)](https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(25)00509-4/fulltext)

[https://www.thelancet.com/journals/lancet/article/PIIS0140-6736\(25\)00509-4/fulltext](https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(25)00509-4/fulltext)

The STRIDE trial, published in *The Lancet*, evaluated semaglutide's impact on walking capacity in patients with peripheral artery disease (PAD) and type 2 diabetes. Conducted across 20 countries with 792 participants, the study showed significant improvements in walking distance, quality of life, and ankle-brachial index over 52 weeks. Semaglutide also reduced the need for rescue therapies and demonstrated a favorable safety profile. These findings support its potential role in future PAD treatment guidelines.

Cardiopulmonary Rehabilitation Competency Series

With Joni B.



Curated by:

S. Joni Bertsch MSN, RN, CCRP, Certificate in Pulmonary Rehabilitation AARC/AACVPR

IU Health Ball Memorial Cardiopulmonary Rehabilitation

This series of educational tools and articles has been thoughtfully put together to support continued growth and excellence in cardiopulmonary rehabilitation. These materials can be used to strengthen patient education efforts, enhance clinical knowledge, and promote best practices across the state.

Please feel free to explore and implement these materials to further empower your staff and elevate the care you provide.

Summer 2025

Tobacco Cessation

Fall 2025

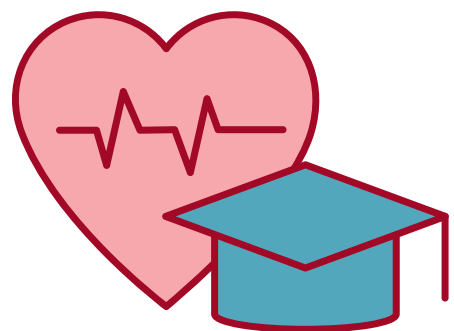
Patient Assessment

Winter 2025

Blood Lipid Management

Spring 2026

Non-COPD Respiratory Diseases



PATIENT ASSESSMENT

PAT COMOSS, RN, BS, MAACVPR

INTRODUCTION

Throughout healthcare it is well recognized that patient care and treatment have a beginning, an essential first step that is designed to collect information needed to guide practitioner decision-making about what is or is not happening (diagnosis), so that he/she can begin to craft a plan for how to handle the situation (treatment). Based on the scientific method, this first step is known as "assessment." Practice guidelines and professional standards call for it to occur in every healthcare setting, and that is equally true in outpatient cardiac rehabilitation. While the length and depth of assessment varies with the setting and circumstance, it occurs to some degree with every patient encounter. To proceed to provide treatment services without proper patient assessment would be careless and unprofessional at least, inappropriate and harmful at worst. Effective patient care depends on good patient assessment to identify what needs to be done next.

Webster's generic definition of assessment points in the right direction: assessment is the act of determining the importance or value of an item or situation.¹ The operative word there is "determining" because it infers that something purposeful is being done to obtain

further

information upon which a conclusion can be drawn. The Joint Commission (TJC) pins it down specifically for healthcare assessment²: an objective evaluation or appraisal of an individual's health status, including acute and chronic conditions. The assessment gathers information through collection of data, observation, and physical examination.

In outpatient cardiac rehabilitation practice, the obvious place for assessment is the professional's initial encounter with a patient, the intake or admission visit. However, since patients may be seen up to 35 more times after that initial visit, there are that many more occasions for assessment to occur, either as a planned

component of a patient encounter, a periodic update of a treatment plan, or as a response to an unexpected event. Each of these assessment opportunities occurs regularly in cardiac rehab and each is reviewed briefly in this chapter. **This chapter will address the following:**

1. Methods for gathering assessment data
2. Expectations of CRPs as case managers
3. Initial or intake assessment
4. Rehab visit assessment
5. Reassessment every 30 days
6. Assessment/Response to unexpected events
7. Final assessment

METHODS OF GATHERING ASSESSMENT

Methods of gathering sufficient information can generally be divided into two categories

1. Objective assessment – where the practitioner takes action to do the following:

- Gather information about the patient from available sources such as medical records or reports from diagnostic studies
- Perform direct measurements on the patient such as 12-lead EKG, blood pressure, or body mass index
- Conduct standardized tests, such as an exercise tolerance test or a six-minute walk test
- Observe patient responses or reactions such as cardiac rhythms on telemetry, oxygen saturation on pulse oximeter

2. Subjective assessment – where the patient provides the information, usually as solicited by the practitioner, such as:

- Describing their cardiac event
- Rating their level of pain or exertion
- Reporting on recent behavior, eg, diet, smoking, exercise
- Evaluating their own status by completing surveys

In AACVPR's 5th Edition of *Guidelines for Cardiac Rehabilitation and Secondary Prevention Programs* both methods of assessment are combined into Guideline #7.2 on Screening and Assessments³: At the time of program entrance and exit, all patients should undergo or have the following current screening and assessments:

- Current medical history – medical or surgical profile (or both), including complications, comorbidities, and other pertinent medical history
- Physical examination – cardiopulmonary systems assessment and musculoskeletal assessment, particularly upper and lower extremities and lower back
- Resting 12-lead electrocardiogram
- Current medications, including dose and frequency
- Cardiovascular disease (CVD) risk profile

To meet that Guideline, Cardiac Rehabilitation Professionals (CRPs) must use a consistent approach to collecting patient information. But completing that collection is not the end of the assessment function; it is just the beginning of a bigger process.

Gathering both subjective and objective information is the start of patient assessment. Much of that collection is done with the patient present in the healthcare setting. But the most important parts of patient assessment usually occur after the patient leaves. According to the

Joint Commission,² (Standard PC-

5) "The goal of assessment is to determine the care, treatment, and services that will meet the patient's initial and continuing needs. Identifying and delivering the right care, treatment, and services depends on the following three processes:

1. Collecting information about the patient's health history as well as physical, functional, and psychosocial status.
2. Analyzing the information in order to understand the patient's needs for care, treatment, and services.
3. Making care, treatment, and services decisions based on the analysis of information collected.

To begin the analysis step of assessment, the CRP can comb the information collected to find each patient's problems and needs to be addressed during their cardiac rehab participation. Completing that list of problems/needs is the first step in developing an individualized treatment plan, which is discussed later in this chapter. Being able to analyze the information

collected requires

more than a basic understanding of cardiovascular anatomy, physiology, and pathophysiology. At a minimum, the CRP must know how to distinguish between normal and abnormal findings in the information collected. Optimally, the CRP views assessment findings relative to current treatment guidelines in the field and quickly recognizes the difference between where the patient's health status currently is compared to where he/she needs to go to reach evidence-based goals put forth in those guidelines. Many of those guidelines are cited throughout this review book.

Extensive review of the knowledge base needed to understand assessment findings is beyond the scope of this chapter. Readers should use the following checklist to identify where gaps in their own knowledge may exist or to identify areas that need reinforcement. Resources listed below provide a more in-depth review of each topic.

Cardiovascular system anatomy and physiology	<i>ACSM Resource Manual for Guidelines for Exercise Testing and Prescription, 7th ed.</i> , Chapter 1: Functional Anatomy ⁴
Pathophysiology of cardiovascular disease	<i>AACVPR Cardiac Rehabilitation Resource Manual: Chapter 1, Atherosclerosis</i> ⁵
Risk factors that contribute to CVD	<i>AACVPR Guidelines for Cardiac Rehabilitation and Secondary Prevention Programs, 5th ed: Chapter 8, Modifiable Cardiovascular Disease Risk Factors</i> ³
Cardiovascular disease treatments and device therapies	<i>AACVPR Cardiac Rehabilitation Resource Manual: Chapter 2, Contemporary Revascularization Procedures</i> ⁵
Cardiovascular diagnostic tests and procedures	<i>ACSM Resource Manual for Guidelines for Exercise Testing and Prescription, 7th ed.</i> , Chapter 6: Pathophysiology & Treatment of Cardiovascular Disease ⁴
Cardiac rhythm identification	<i>AACVPR Cardiac Rehabilitation Resource Manual: Chapter 8, Electrocardiography in Heart Disease</i> ⁵
Cardiovascular medications	<i>ACSM's Guidelines of Exercise Testing and Prescription, 9th ed.</i> , Appendix A: Common Medications ⁶

EXPECTATIONS OF CRPS AS CASE MANAGERS

All cardiac rehabilitation professionals, regardless of academic credential or discipline-specific background, are expected to perform patient assessments. For some, most components of assessment will be familiar; for others certain assessment components will be a new experience. For example:

- Nurses may be adept at cardiac rhythm identification and recognition of cardiac signs/symptoms
- Exercise physiologists may have extensive experience with exercise testing and prescription
- Physical therapists may be expert at functional evaluations and orthopedic modifications

But all CRPs need to acquire the knowledge and skills to enable them to conduct the assessments outlined in this chapter and others noted throughout this review book. It is expected that through this review CRPs will be able to identify their own weak spots in the assessment process and will work to strengthen those areas through the use of resources noted here as well as through skill-building activities within their own facility and program. One of those activities that is helpful, not only for staff

education but also for program improvement, is a staff competency initiative.

Competency Development

To meet Joint Commission standards, hospitals are required to conduct competency assessments on their staff to prove that "Staff are competent to perform their responsibilities".² (Standard HR9) Recommended staff competencies for CRPs have been outlined in the AACVPR document Core Competencies for Cardiac

Rehabilitation/ Secondary Prevention

2010 Update.⁷ Since one of the responsibilities of a CRP is patient assessment, a plan to build skills in that area supports individual and organizational efforts alike.

Each of the tasks listed under Patient Assessment in the AACVPR Blueprint for the CRP certification exam could comprise a competency activity. For example:

Patient assessment 1.20: Develop an evidence-based, individualized treatment plan.

Recognizing that the basis for every Individualized Treatment Plan (ITP) is patient assessment, competency checklist could be constructed from points of information reviewed in this chapter. An in-service conference could then be held for staff members to review, discuss, and practice how to build an ITP from assessment information. A checklist would then be completed on each staff member to document their degree of proficiency.

Case Management

Given the knowledge and skills needed to perform patient assessments, the recommended methodology for carrying out related functions in the clinical cardiac rehab setting is case management, where a CRP is assigned to follow a specific group of patients, a caseload. According to AACVPR³:

Individualized case management is an integrated disease-management process that provides specific risk factor intervention strategies. The patient is the center of the process and takes an active role.

Selected therapeutic approaches are coordinated and communicated with the patient's physicians and other members of the cardiac rehab team, including through the ITP. But primary responsibility for following through from initial assessment to planning to intervention,

reassessment, and discharge, belongs to the case manager. The rest of this chapter reviews the assessments that occur along that case management path.

INITIAL OR INTAKE ASSESSMENT

No two patients who come to cardiac rehab are standing on the same spot in their recovery journey. Each is in a unique place that needs to be discovered and marked as their starting line before forward movement can be plotted. The method of that discovery is patient assessment and it is recognized as a core component, the first step of a cardiac rehab program.

Expectation

The cardiac rehab professional is expected to conduct a comprehensive initial assessment on each new patient entering the program and to construct an individualized treatment plan based on assessment findings.

Purpose

Initial assessment has several purposes each of which is a significant reason on its own to justify the time and effort required. Taken together, these purposes amplify the importance of this first patient encounter:

- Confirm referral diagnosis – it is not enough for a healthcare provider to scribble a diagnosis on a prescription pad or to type it onto an electronic referral sheet; that diagnosis must be confirmed by an official medical document to justify patient enrollment in rehab and subsequent payment for services rendered.
- Collect baseline data – each patient's starting point is verified through a series of facts and figures about their status.
- Begin risk stratification – information gleaned from activities comprising this first encounter may provide clues to the likelihood of a recurrent cardiac event.
- Build rapport with the patient – spending time with and showing a caring attitude toward a new patient sets the stage for all staff: patient encounters that follow during rehab.

Process

When a patient is referred to an outpatient cardiac

rehab program, the assessment process begins immediately with the simple step of assuring that the patient has an appropriate diagnosis to be enrolled. Medicare, the largest payer of cardiac rehab services, covers the following diagnoses for up to 36 sessions in up to 36 weeks⁸:

- Acute myocardial infarction (AMI) within the preceding 12 months.
- Coronary artery bypass surgery (CABG).
- Current stable angina pectoris.
- Heart valve repair or replacement.
- Percutaneous transluminal coronary angioplasty (PTCA) or coronary stenting.
- Heart or heart-lung transplant.
- Stable chronic heart failure defined as:
 - Ejection fraction of 35% or less.
 - New York Heart Association class II through IV despite being on optimal heart failure therapy for at least six weeks.
 - "Stable" HF is further defined as not having a recent (within last six weeks). cardiovascular hospitalization or a planned cardiovascular procedure (within the next six months).

Essential Assessment Components

1. Event/Medical History:

To confirm the referral diagnosis as well as to learn the details of how it was determined and treated, the patient's medical records for that event should be accessed (electronically or on paper) and reviewed. Records that are often helpful in providing background information include but not limited to:

- Admission history and physical from the hospital
- Diagnostic test results such as EKGs, echocardiograms, cardiac catheterization reports, stress test results, etc.
- Surgery or procedure reports such as those

from Coronary Artery Bypass Graft Surgery (CABG), angioplasty & stent placement, cardiac device insertion (pacemaker, defibrillator, valve replacement)

- Lab test results such as lipid profiles, blood sugars or hemoglobin A1C, etc.
- Hospital discharge summary

Medical record evidence of appropriate diagnosis should be retained in the cardiac rehab chart for the duration of the program.

2. First Patient Appointment:

Following diagnosis confirmation, an appointment is scheduled for the patient's first visit to cardiac rehab. This initial appointment is usually scheduled for a 1-2 hour time-block. Due to the extensive amount of information to be collected and its personal nature, the initial patient encounter is a 1:1 appointment. Some patients may not have the physical stamina or cognitive focus to endure a lengthy first visit and assessments may need to be distributed across the first several rehab visits.

Admission Interview/Patient History:

3. No particular form or format is required for completion of this initial interview. However, staff should design an admission information form that clearly and concisely prompts the collection of consistent information by all staff members, including:

a. Patient's recap of their cardiac event – hearing the story from the patient's perspective provides insight into their awareness of what happened and why.

b. Patient's general perception of their own state of health before the event and since – both physical (energy, stamina, etc.) and mental (mood, feelings, etc.).

c. Brief verbal review of systems with the patient to identify comorbidities relevant to rehab services such as:

- Other cardiovascular problems - peripheral arterial disease (PAD), cerebral vascular

disease, kidney disease.

other • Diagnosed problems involving body systems – pulmonary, endocrine, musculoskeletal, orthopedic problems. d. Risk factor

profile – history of hypertension,

diabetes, smoking, dyslipidemia, overweight/obesity, depression. Presence or absence of each of the above should be confirmed, and the patient's awareness (or lack of awareness)

for each factor verified. AACVPR's

Components paper provides an extensive outline of "evaluation" (assessment) steps for each risk factor.⁹ Many of those details are explained and expanded in subsequent chapters of this review book.

e. Overview of the patient's usual lifestyle and activities of daily living – diet, exercise, sleep, physical activity, sexual activity, work.

f. Identification of significant relationships and social activities – significant other, immediate family, social companions.

g. Cultural influences and spiritual beliefs that could alter rehab interventions – do's/don'ts for medications, diet, activity, rest, smoking, etc.

h. Learning considerations, including:

- Barriers – impaired sight or hearing, cognitive impairment, low literacy, language limitation.
- Preferences – reading material, videos, group interaction, classroom instruction.

Some of the above information may have been evident in the patient's medical records. But the intent of this face-to-face exchange goes beyond completing a checklist of helpful health facts. Soliciting the patient's comments on their health state is a learning opportunity for the CRP. The dialogue that occurs conveys more than the facts. It is a window into the patient's perception, understanding, attitude, emotional state, and cognitive ability. These personal characteristics may impact the rehab plan as much or more than the patient's medical condition itself. Knowing who the patient is as a person leads to knowing how best to help he or she through

what cardiac rehab has to offer.

4. Cardiovascular Exam:

The objective hands-on component of the initial encounter is an abbreviated physical examination with an obvious emphasis on identifying signs of cardiovascular problems. Steps involved follow the traditional outline of a physical examination:

a. Vital signs – temperature, pulse, and respiration should be standard; blood pressure be taken in both arms and in two positions, upright and supine; oxygen saturation via pulse oximetry is also recommended, especially in patients with history of CHF or COPD.

b. Inspection – visual observation of:

- Incision or procedure sites to uncover any problems, such as redness, swelling, or soreness, that could signal infection;
- Skin color, especially in extremities, that may be an indicator of poor circulation (pale) and/or poor oxygenation (bluish or cyanotic);
- Placement of implanted devices such as pacemakers, ICDs, left ventricular assistive devices (LVADs).

c. Palpation – feeling for presence and strength of pulses in each extremity to determine if/where blood flow may be compromised; special attention to lower extremities is important to determine presence of edema which could indicate a number of cardiovascular problems ranging from minor medication side effects to major heart failure.

d. Auscultation – in addition to taking blood pressures, a stethoscope should be used to listen to both heart and lung sounds; knowing where to listen and what normal sounds are like is the focus of this maneuver; sounds that seem abnormal should be further assessed by someone more experienced in auscultation such as a physician or non-physician practitioner (Physician Assistant or Nurse Practitioner).

5. EKG and Cardiac Rhythm Strips:



A recent 12-lead EKG should be available to provide a baseline for future comparisons if/when additional EKGs are needed. The EKG should be one recorded after the patient's acute event and/or cardiac intervention. It does not have to be performed by the cardiac rehab staff but may be retrieved from the hospital or physician's office. Rhythm strips from cardiac telemetry confirm current heart rate and rhythm and are often recorded during the initial visit in conjunction with other testing (eg, six minute walk test) done during or near this initial encounter.

Body Size and Strength Measurements:

6. a. Size – for accuracy, height and weight need to be directly measured, not just asked of the patient; both values are needed to calculate Body Mass Index (BMI), a major indicator of overweight and obesity; waist circumference measurement is also recommended as a simple measure of abdominal fat distribution so prevalent in metabolic syndrome.

b. Strength – for upper extremities, a simple bilateral hand grip performance may be sufficient to know if strength is the same in both arms; for lower extremities, a timed up-and-go test (TUG), especially in elderly patients, may reveal if leg strength is adequate for basic activities of daily living or if the patient has balance issues that may benefit from some basic physical therapy that may be helpful before proceeding with cardiac rehab exercise training.

Additional Assessment Components

As noted earlier, the patient's physical or mental state at the time of initial encounter may require that some assessment components be deferred until subsequent rehab visits. However, if stamina and attention span allow for further interaction, the following assessments should also be completed at this time:

1. Fall Risk Assessment:

Patient safety is a priority in the cardiac rehab setting. Due to space, equipment, and patient traffic issues the cardiac rehab gym may pose a threat of

accidents and injuries. A fall risk assessment helps to minimize such occurrence by identifying those patients who may need special assistance with or modification of exercise routines in order to stay safe. While some hospitals use the same assessment tool for both inpatients and outpatients, a quick checklist oriented to ambulatory patients may be more helpful. Some checkpoints that should be included to identify fall risk in cardiac rehab patients are:

- History of previous falls, depression, dizziness.
- Limited mobility due to balance disturbance, gait abnormality, use of assistive device (cane, walker), visual impairment.
- Medication side effects may be another source of uncertain stability.

2. Pain Assessment:

Exercise has the potential to increase or decrease pain levels. The obvious goal in rehab is to minimize contributing to any increase in pain level which could be due to

- New onset of acute pain, eg chest pain.
- Worsening of known chronic pain, eg low back pain.

Patients are often reluctant to report pain, especially when it is a recurring experience. To overcome that reluctance, the CRP needs to purposely solicit pain information from each patient at every visit. That process begins with the initial assessment. A rating scale is the recommended tool to help quantify the patient's level of pain. Most pain scales use a 0 = no pain, to 10 = the worst pain ever rating scale to help patients quantify their degree of current pain. Such scales should be posted in prominent places in the rehab facility for quick and easy access when patients are asked to report. To set a pain baseline, patients should be specifically asked about the following types of pain or discomfort as part of initial assessment: chest pain, leg pain, incision pain, muscle or joint pain. Ratings should be noted for future comparison.

3. Functional Assessment:

A symptom-limited exercise stress test remains the gold standard of functional evaluation.¹⁰ However, since stress test results are not readily or recently available to many cardiac rehab programs, a submaximal functional assessment is frequently substituted. The most common of these is a six minute walk test.

Quality of Life Assessment:

4. It has been well documented that one of the major benefits of cardiac rehabilitation is increased quality of life, the end result of both physical and psychological improvements that occur through the combination of rehab services. Quality of life is assessed using a subjective survey which each patient is asked to complete as part of his/her initial and final assessment. Survey suggestions can be found on the AACVPR website: www.aacvpr.org. The specific tool selected should be one that not only is validated but also is user-friendly, both for patients to complete and for staff to score. This quality of life assessment is a key outcome measure for every cardiac rehab program. Other surveys used for outcome measurement (diet habits, smoking triggers, depression screens, etc.) are covered in those specific chapters.

Medication Review and Reconciliation

5. The patient's medications impact a number of the above assessment findings, which makes it essential for the CRP to know what medicines the patient is taking, if they are taking them when and how they were prescribed, and what side effects or complications have been experienced. The ideal way to gather this information is live during the initial assessment. Patients can be asked to bring their medicines with them in a bag or box so that together the patient and the CRP can do a live inventory of current medicines. Results of the inventory are recorded on a paper or computerized medication sheet that follows the patient throughout rehab so that changes can be made as they occur to keep the medication record up to date. Recently administered vaccines - such as pneumonia, flu, and shingles - should also be recorded there.

Going beyond a simple listing of medications, the Joint Commission requires that medications be reconciled.² (Standard NPSG 9) That is, the list of medicines reported by the patient are compared to the list of prescribed medicine from the hospital or physician's office, whichever is more recent. This comparison serves the dual purpose of:

- Decreasing harmful medication errors.
- Increasing medication compliance.

Achieving those goals improves and protects patient safety and improves treatment effectiveness. Because of their ongoing contact with patients during rehab, CRPs are in an influential position to facilitate medication compliance.

Documentation

When the above assessment process of gathering information is completed, the CRP, preferably the staff person who is assigned to follow that patient as case manager, analyzes the information by identifying those areas that can either:

- Be impacted by rehab services to improve the patient's health status.
- Influence the way rehab care is delivered, requiring treatment changes/modifications.

Once those areas are identified, the case manager decides how cardiac rehab can address each problem or need through use of its multidisciplinary arsenal of services.

While the analysis itself is a mental exercise, not nearly as visible as the preceding assessments, results of the analysis are shown in three pieces of documentation that follow the patient through their cardiac rehab passage:

1. Individualized Treatment Plan (ITP) – lists the

problems/needs identified to be addressed during rehab; essentially, the ITP serves as the staff's to-do list projecting what rehab services would be most beneficial to this particular patient with this specific list of problems. (See the section on Reassessment Every 30 Days for further description of ITP content).

2. Risk Stratification Checklist – assessment findings are compared to published criteria to classify the patient as low, moderate, or high likelihood of another

cardiac event;3 risk placement may influence plans for pace of progression through or length of stay in the program.

3. Outcome Data Record – initial measurements set the baseline for future comparisons; to determine extent of change achieved through rehab efforts, those measurements will be repeated at the end of rehab as part of the patient's final evaluation.

Time and effort spent completing the above collection, analysis, and decision-making is the CRP's investment that optimizes patient safety and program effectiveness. The result is patient, program, and professional success.

ASSESSMENT AT EVERY REHAB VISIT

While the initial patient assessment is by far the most extensive, it is not the only occasion when patient assessment occurs. In fact, each and every patient encounter involves a degree of assessment that includes some level of subjective and/or objective check of patient status. The most frequently recurring encounter that prompts at least a mini-assessment precedes each cardiac rehab exercise visit.

Expectation

The cardiac rehab professional is expected to conduct a mini-assessment with every scheduled patient visit to the rehab program in order to clear the patient to proceed with planned exercise and other scheduled rehab services.

Purpose

There are three reasons to take a few minutes to do this brief pre-exercise check, every time, on every patient:

- Confirm that the patient is stable enough to proceed with this planned exercise session.
- Rule out a change in the patient's medical condition that would require further medical evaluation before proceeding.
- Discover additional problems/needs that may need to be added to the patient's ITP for further rehab follow-up.

Process

This pre-exercise mini-assessment usually takes place so quickly and informally that it goes by relatively unnoticed as an assessment effort. Common components include:

1. Questioning the patient, verbally or in writing, to determine if he/she has experienced any new symptoms or changes in condition since their last rehab visit. Some programs use a short checklist, about the size of an index card, for this purpose. The patient picks up the card upon arrival, signs in on it with name and date of birth (which serve as identifiers for that session), and quickly completes the short list of routine questions.

The completed card is then brought to the staff member who will check in the patient for their exercise session. That staff member reviews the answers at a glance to identify if any further assessment is indicated prior to allowing the patient to exercise.

2. Measuring vital signs to eliminate contraindications to exercise, to set baseline values for this session, and to watch for trends over time. These objective checks usually include: heart rate, blood pressure, pre-exercise blood sugar on diabetics, and oxygen saturation on patients with CHF or COPD.

3. Reviewing the patient's pre-exercise rhythm strip to assure that no acute changes have occurred. If the patient is not on telemetry monitoring, cardiac rate and rhythm can be determined by manual pulse check or pulse oximetry.

Exercise does not proceed unless/until the results of above mini-assessment are acceptable to the cardiac rehab professional. To make that decision, the CRP must know normal and abnormal values of the above assessments and recognize both obvious and subtle signs of a change in the patient's condition. Other decisions that hinge on this mini-assessment include:

- Adjustment to the day's exercise plan, eg, reported low back pain alter planned exercise modalities.
- Education that could be done during the session, eg, informal discussion of ideas on how to add more fruit to daily diet.
- Addition of a newly identified problem to the patient's ITP for further follow-up, eg, report of dizziness could change fall risk status.

- Increase in monitoring during exercise performance, eg, higher than normal pre-exercise BP would suggest extra BP checks during exercise.

During exercise, the level of clinical supervision and related type and frequency of patient assessment depends on a variety of factors including patient safety, especially when new to rehab or when stratified to high risk, staff observations, recent trends in risk factor values and patient compliance.³

At the conclusion of the rehab session, the patients are checked out in reverse order of assessments used to check them in. Post-exercise assessments inform the CRP of whether or not the patient has returned to their stable baseline state sufficiently enough to be discharged from the session and to return home safely.

Documentation

Key facts and figures from pre-, during, and post-exercise assessments are entered into the report for each rehab session. Most programs use a combination of data spreadsheets and descriptive text entries. No particular format is required. However, values measured are always included, not only to have a record of the patient's numbers from that day but also, and often more importantly, to be able to view a series of measurements over time to determine any positive or negative trends in those values, eg, blood pressure values over a two week or 30-day period, which may indicate that a change in rehab plan or medical management is needed. The extent of narrative notes often depends on hospital policy and staff comfort level. That is, some programs do minimal narrative entries opting to use more of a charting-by-exception approach where only negative findings are detailed. Others choose to detail daily observations whether unusual or routine.

REASSESSMENT EVERY 30 DAYS

In 2010, Medicare mandated that ITPs "must be established, reviewed, and signed by a physician every 30 days."¹¹ This requirement sets in stone the minimum timeline for how often each patient's case is to be re-examined and related rehabilitation services reapproved by a physician, most commonly the program's medical director.

Expectation

The cardiac rehab professional is expected to reassess the status of each patient's identified problems and needs at least every 30 days, to report progress (or lack of progress) toward identified goals, and to obtain physician approval for continuing or changing the rehab plan.

Purpose

In addition to compliance with Medicare regulations, 30-day reassessments provide an opportunity to:

- Re-prioritize a patient's needs so that attention can be given to what that patient needs most from rehab services.
- Provide a status report to the physician overseeing each patient's rehab care.
- Request medical input and guidance from that physician.
- Update the patient on progress made to date and plans for the remainder of rehab.

Process

There are any number of variations as to how this monthly reassessment and re-approval is accomplished. One common example, involves a two-step process:

1. The CRP assigned as case manager to a particular group of patients is responsible to track the due dates for when the 30-day reassessment is due on each patient in his/her caseload.

Near the due date, the case manager reviews the patient's rehab records to confirm what services have been delivered to that patient in the last 30-days and what progress has been documented. This review necessarily involves perusing the patient's rehab records and may need direct input from the patient as well. That is, if the CRP has worked with the patient directly providing rehab services, they are most likely familiar with the patient's rehab problems and goals and recent progress. A brief chart review may be sufficient to provide a quick refresher of patient status. Minimal patient input may be needed to confirm what the CRP already knows and to solicit any additional patient concerns. However, the less familiar the patient's

case is to the CRP conducting the reassessment, the more time that will need to be spent to revisit each of their documented problems and to recheck what services have been provided or are still required.

2. Reassessment findings are entered on the ITP itself to show updated status of each issue. Key items from that update are brought to the physician's attention either verbally or in writing (or both).

Questions and suggestions are exchanged between the physician and rehab staff. Treatment priorities are adjusted accordingly and the physician signs to approve the revised plan reflecting one of the following 30-day decisions:

- Continue with previous rehab plan.
- Do not continue due to: _____.
- Change plan to: _____.

Those decisions include but are not limited to the patient's exercise prescription.

Documentation

Neither Medicare nor AACVPR requires a particular layout for an ITP or the related 30-day reassessments; content is more important than format. Medicare specifies the following 11:

" Individualized treatment plan means a written plan tailored to each individual patient that includes all of the following:

- i. A description of the individual's diagnosis.
- ii. The type, amount, frequency, and duration of the items and services furnished under the plan.
- iii. The goals set for the individual under the plan."

Medicare also states that a cardiac rehab program must include as one of its components of care:

" 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."

In Guideline 10.4 of their 5th Edition of Program Guidelines, AACVPR reiterates the above three requirements and slightly restates the 30-day responsibility by saying:³

Exercise Assessment	Exercise Plan	Exercise Reassessment	Exercise Discharge Evaluation
Nutrition Assessment	Nutrition Plan	Nutrition Reassessment	Nutrition Discharge Evaluation
Psychosocial Assessment	Psychosocial Plan	Psychosocial Reassessment	Psychosocial Discharge Evaluation
Other Assessment	Other Plan	Other Reassessment	Other Discharge Evaluation

“Development and progression of the ITP by all members of the cardiac rehab and SP staff with direction, review, and signature of the Medical Director.” In addition, AACVPR explicitly requires the following content elements to be evident in an ITP for program certification.¹² (see table above)

The most basic of ITPs use a grid design like the above and simply record brief descriptions for each of the process steps as they occur. This approach is amenable to many hospitals’ electronic medical record (EMR) systems. In contrast, some rehab programs use a paper or computer-based flowsheet with check-off boxes for common rehab services and patient responses. The boxes provide choices from which to select descriptors of the patient’s status and actions to be taken by the staff. What’s important is that the staff of a cardiac rehab program selects an ITP format that they are able to use in a consistent and timely manner.

Regardless of format used, the CRP must recognize that an ITP is the product of good patient assessment/reassessment. It is the action plan built in response to what has been learned about why a patient needs to be in cardiac rehab in the first place, a to-do list of sorts. And information on the ITP is intended to track the patient through periodic live updates as he/she moves through the program.

ASSESSMENT/RESPONSE TO UNEXPECTED EVENTS

Any medically related event that requires cessation of exercise and medical assessment and intervention is considered an unexpected event. If that event results in an emergency room visit or hospitalization it is referred to as an adverse event. Thankfully, adverse events are rare in outpatient cardiac rehab programs. For instance, statistics over several decades of rehab research show that cardiac arrest occurs once in approximately every 100,000 hours of patient exercise.³ However, lesser medical crises, urgent and emergent, are more common. Early identification of pending problems through good patient assessment by rehab staff, followed by quick and appropriate response, is a major reason that cardiac rehab programs have a low rate of medical complications.

Expectation

The cardiac rehab professional is expected to identify any change in a patient’s condition that would warrant not starting or stopping exercise or otherwise would require notifying a physician for further medical advice to properly manage the patient.

Purpose

Whenever a change in a patient’s medical condition is observed or suspected, further assessment is indicated to:

- Identify and treat the medical cause quickly.
- Prevent or minimize further decline in condition.
- Discover contributing factors that through either/ both staff or patient education may be prevented in the future.

Process

Identification of a change in a patient’s condition hinges on the CRP being familiar with the patient and his/her usual state of health. Timely assessment is a critical step in determining if/when a change from that usual state has or is about to happen. In addition, the following information may provide a warning of a likely problem:

- Medical History – what complications occurred during the acute hospital stay? Some are more likely to recur than others, eg, cardiac arrest.

- Risk Stratification – was patient assigned to the appropriate risk group with its attendant amount of staff surveillance? High risk patients require closer supervision and more frequent assessment during exercise.

- Exercise Responses – were there any clues in prior sessions that something wasn't quite right? Increasing, For example, increasing PVCs with exercise may signal increasing ischemia and lead to more lethal ventricular rhythms.

Being prepared for even a rare emergency is a key safety feature for cardiac rehab programs and professionals alike. AACVPR's Performance Measures include several structure-based criteria pertinent to actual/potential patient emergencies. Measure B-2, Assessment of Risk for Adverse Cardiovascular Events states the following: 13

"The cardiac rehab program has the following processes in place:

A policy to provide recurrent assessments for each patient during the time of participation in the cardiac rehab program in order to identify any changes in clinical status that increase the patient's risk of adverse cardiovascular events. If such findings are noted, the cardiac rehab staff contacts the program's physician director and/or the patient's primary healthcare provider according to thresholds for communication included in the policies."

Further, The Joint Commission (TJC) requires that² (Standard PC 18):

"The hospital develops written criteria describing early warning signs of a change or deterioration in a patient's condition and when to seek further assistance."

AACVPR program certification criteria require plans/protocols be in place for common types of medical emergencies that happen in cardiac rehab,

including¹²:

- Cardiopulmonary arrest
- Tachycardia/bradycardia and other changes in cardiac rhythm
- Acute chest pain

- Acute dyspnea
- Hypertension and hypotension
- Hyperglycemia and hypoglycemia

Clearly, being able to recognize early signs/ symptoms of each of the above is a role expectation for every CRP who by position, serves on the first line of defense against worst case scenarios occurring in the cardiac rehab setting. But detecting early warning signs is a challenge even for the most seasoned cardiac rehab staff. Adopting a functional definition for what comprises a change in condition is a helpful place to start, for example:

In the cardiac rehab setting, a significant change in a patient's condition, is defined by two assessment criteria:

1. A new or significantly different presentation of a sign or symptom.
2. An objective measurement that exceeds the programs established acceptable values.

Either finding should prompt staff to stop or not start planned exercise and notify a physician for further medical direction.

The medical emergencies listed above are not intended to be a comprehensive list.

Response

When an event occurs during exercise, the first and obvious response by cardiac rehab staff is to stop exercise and assist the patient to sit or lie down where they are, which may mean on the floor in the exercise gym. Then further steps should be taken including the following:

- Check vital signs.
- Observe cardiac rhythm.
- Assess level of consciousness.
- Proceed to follow the treatment plan/protocol for that type of urgency.
- Summon additional assistance as indicated: rehab colleagues, supervising physician, hospital's rapid response team, code team.

Because such events occur infrequently, it is helpful for the staff to review emergency plans/protocols regularly. Performance and documentation of such practices is another requirement for AACVPR program certification.¹²

Documentation

The above types of events are the exception to daily activities in cardiac rehab. Just as their occurrence tends to stand out from usual gym activity, so too the documentation of what happened goes beyond the routine. The CRP most involved with the occurrence should take responsibility for completing related documentation. Notes should include:

- Description of the type and timing of the occurrence.
- Results of assessments made before, during, and after.
- Onsite treatment rendered and by whom.
- Outcome and disposition of patient – sent to emergency room, scheduled for follow-up in physician's office, sent home with family member in attendance, etc.

Such details may be written up on a special Event/Change in Condition form. Alternatively the occurrence may be documented in that day's session report, perhaps flagged with a "Special Event" heading to make it stand out from routine daily notations. Most importantly, a copy of the completed event note is urgently sent to the patient's physician along with any corroborating material, eg, rhythm strips, BP or BS values, etc. so that necessary follow-up can be arranged. In effect, an urgent event stops rehab in its tracks and the patient may not resume exercise participation unless/until cleared by the physician in writing.

FINAL ASSESSMENT

The true test of rehab success is the extent to which patient goals are met and evidence-based cardiac rehabilitation outcomes are achieved. The answer to those questions is captured in data collected at/near the end of rehab participation – the final assessment also referred to as discharge evaluation.

Expectation

The cardiac rehab professional is expected to conduct a final assessment on each patient near the end of their rehab program and to complete discharge documentation including repeat outcome measurements and a final update of the patient's ITP.

Purpose

A final patient assessment is needed to:

- Repeat performance of outcomes measured at the beginning of rehab.
- Compare final outcome results to initial results to document extent of change that occurred from beginning to end of rehab.
- Determine the degree to which actual patient results align with evidence-based goals for parameters measured.
- Complete the patient's ITP showing which problems/needs have been resolved/met and those who will require further follow-up after rehab.
- Report above results to both the patient and his/her physician with emphasis on self-management goals going forward.
- Solicit patient feedback about his/her cardiac rehab experience.

Process

Just as the first patient encounter in outpatient cardiac rehabilitation focuses on initial assessment, so too a rehab visit near the end of the program needs to focus on a final assessment. That assessment may be scheduled as an exit interview before or after a regular rehab visit or time may be carved out of an exercise session to complete the assessment.

Typically, the final assessment is shorter and less hands-on than the initial assessment. By this point in time the patient is well-known to the staff, is feeling quite well,

and

is usually willing/able to participate in the necessary repeat assessment activities, which usually include:

- Functional assessment performance such as exercise stress test, six-minute walk test, TUG test, etc.

- Quality of life assessment – SF-36, Dartmouth COOP, etc.
- Psychosocial assessment – completion of a standardized survey tool, eg, Patient Health Questionnaire 9 questions (PHQ-9).
- Blood pressure values – direct measurement of both systolic and diastolic.
- Blood sugar values – lab values for either/both Fasting Plasma Glucose (FPG) or Hemoglobin A1C
- Diet habits assessment – completion of a standardized survey tool, eg, Diet Habits Survey, Rate Your Plate, etc.
- Smoking habits assessment – patient report of cigarette use, or other tobacco products.
- Medication habits – patient report of adherence to prescribed medications.
- Physical activity habits – patient report of frequency, intensity, and duration of activity/exercise done outside of rehab; may be converted into METS or MET-minutes.

Timing of the discharge conference or exit interview with the patient ideally occurs after all final outcome measurements have been completed. Having outcome data available to review/discuss with the patient is essential to being able to highlight his/her successes and to show where rehab-initiated changes need to be continued. In addition, the patient's plan for exercise continuation after rehab should be confirmed and FITT Guidelines for him/her to follow communicated clearly. A take-home sheet outlining the plan and guidelines is recommended. And a patient-friendly copy of outcome results is recommended as a final report card for the patient to take home.

Documentation

The best discharge reports focus on communicating rehab results in as clear and concise a manner as possible to a variety of interested parties. Report readers may include a combination of healthcare professionals and non-professional parties. Patients and families, physicians, healthcare administrators, inspectors, third-party payers, and auditors may each have an interest

in knowing the results rehab has produced. Just as the ITP shows a track-record of how the patient got from beginning to end of rehab, the discharge report should enumerate the end results. It is not necessary to recap the entire journey but it is imperative to report status upon arrival at the destination – rehab discharge. The essence of that arrival condition is the findings of the final assessment. Those findings may be expressed in numbers, in summary sentences, or through a combination of both. Carrying out the assessment functions to obtain that final information is as important to the rehab process as any step along the way.

SUMMARY

Assessment in all of its iterations – initial, each visit, 30-day, urgent, final – is the source of all treatment planning and decision making about services needed for each patient in the cardiac rehab program. It is the only way to individualize and prioritize what patient needs what service in the program. Without it, a cardiac rehab program would lack direction and focus and patients would experience assembly-line handling. Good patient assessment sets the stage for a personalized high-quality rehab experience where patients are engaged as active partners and their chance for positive results is optimized.

To be successful, a cardiac rehab program depends on the function of its staff. To meet the expectations outlined in this chapter, each cardiac rehab professional needs to:

- Practice and perfect the skills needed to perform the assessments reviewed.
- Continually build the knowledge base to enable accurate interpretation of assessment findings.
- Collaborate with peers, patients, and physicians to craft a plan based on assessment results for how to best apply what rehab has to offer.

Commitment to those efforts sets a CRP above the crowd and benefits patients and programs alike.

PATIENT ASSESSMENT COMPETENCY - QUIZ

McKool, K RN, MSN, CTTS-M..(Ed.). (2018). Patient assessment. *CR Best practice resource: A CCRP study guide*. (pp. 9-22). The American Association of Cardiovascular and Pulmonary Rehabilitation.

NAME _____ DATE _____

1. It is important that the patient referred for outpatient cardiopulmonary rehab has an appropriate diagnosis for enrollment. Medicare will cover the following diagnoses: (select all correct answers)
 - a. Acute myocardial infarction (AMI) within the preceding 12 months
 - b. A new diagnosis of atrial fibrillation with an ejection fraction of 55%
 - c. Coronary artery bypass (CABG) surgery
 - d. Current stable angina pectoris
 - e. Heart valve repair or replacement
 - f. Percutaneous transluminal coronary angioplasty (PTCA) or coronary stenting
 - g. Heart or heart-lung transplant
 - h. Stable chronic heart failure with an ejection fraction of 35% or less
 - i. Stable chronic heart failure with New York Heart Association class II through IV despite optimal heart failure therapy for 6 weeks
 - j. Stable heart failure without hospitalization in the past 6 weeks or a planned cardiovascular procedure within the next 6 months

2. A good patient assessment is needed to identify and plan the individual treatment plan of the cardiac rehabilitation patient. In outpatient cardiac rehabilitation the patient will be assessed: (select all correct answers)
 - a. At the initial intake/ orientation visit
 - b. Only on an as needed basis
 - c. At every rehabilitation visit/session
 - d. As a reassessment every 30 days
 - e. Only when symptoms warrant
 - f. During any unexpected medical events
 - g. As final assessment at discharge/ graduation

3. A comprehensive initial assessment is expected on each new patient entering the cardiac outpatient rehabilitation program. Some essential assessment components include: (select all correct answers)
 - a. Event/Medical History
 - b. Admission interview/Patient history
 - c. Risk factor profile
 - d. Cultural influences and spiritual beliefs
 - e. Financial security assessment
 - f. Learning considerations
 - g. Fall risk assessment
 - h. Functional assessment
 - i. Medication review and reconciliation
 - j. Quality of life assessment

4. The ITP (individualized treatment plan) is a standardized plan that directs the plan of care based fully on the patient's diagnosis.
 - a. TRUE
 - b. FALSE

5. Plans and Protocols must be in place for common types of medical emergencies. These include:
- Cardiopulmonary Arrest
 - Tachycardia/Bradycardia
 - Acute Chest Pain
 - Acute Dyspnea
 - Hypertension and Hypotension
 - Hyperglycemia and Hypoglycemia

SELECT the correct protocol

1. A diabetic patient stops exercising while sweating and complaining of being lightheaded
 2. A patient collapses and is unresponsive
 3. A patient arrives to exercise with a resting heartrate of 42
 4. A patient sits down and is unable to speak in full sentences as they struggle to breathe
 5. A patient becomes lightheaded with a blood pressure of 82/48
 6. A patient states that their chest is hurting, rating it "8" out of "10"
 7. A patient complains of a headache with a resting BP 174/88
 8. Prior to exercising a patient's blood glucose is 360mg/dL
6. At the completion of the outpatient cardiac rehabilitation a final assessment will be completed for the purpose of comparing final outcome results to initial assessment results. Which of the assessments below would NOT usually be included?
- Functional assessment performance such as a six-minute walk test
 - Quality of life assessment such as the Dartmouth
 - Blood Pressure values
 - Repeated EKG
 - Vision assessment
 - Blood Sugar values
 - Diet habits assessment
 - Smoking habits assessment
 - Medication habits
 - Home oxygen evaluation
 - Physical activity habits

Mrs. Amin is referred for outpatient Cardiac Rehab with a diagnosis of chronic heart failure. She is a 62 year old immigrant from Uganda. While reviewing the medical record, the Cardiac Rehabilitation Professional (CRP) obtains the following information. The patient experienced a myocardial infarction 4 years prior after losing her job and husband due to COVID. She was diagnosed with heart failure 3 months ago, and was placed on optimal heart failure medication therapy, was classified as New York Heart Association class II, and had an ultrasound that measured her ejection fraction at 30%. At a recent follow-up appointment with her cardiologist she was ordered to participate in outpatient cardiac rehabilitation. She is documented as 50 pounds over her ideal body weight, has a HgB A1C of 7.5 %, and is documented as smoking as a way of relieving stress. A recent stress test and EKG were normal. Her Lipid profile is now normal after taking a statin for the past year. She is scheduled for an initial assessment orientation in Cardiopulmonary Rehab.

7. Due to her history and the fact that her medical record is very clear and completely accessible, most information should be obtained from the chart and the patient should be asked very few questions to prevent additional stress.
- True
 - False

8. While doing a physical assessment her vital signs are: HR 90, R 12, BP 147/ 87, SpO2 92%, with her weight 5 pounds higher than her doctor appointment 3 weeks prior. Breath sounds are clear and she does not have lower extremity edema. She is teary while being assessed and has a bruise on her left leg that occurred from a recent fall. Identifiable risk factors to address on the Individualized Treatment Plan (ITP) would include:

- a. Hypertension goals
- b. Nutrition Plan with weight management goals
- c. Tobacco Plan with cessation goals
- d. Lipid Management goals
- e. Diabetes (Blood Glucose) Management goals
- f. Psychosocial Plan with noted quality of life index score
- g. Safety and Fall Prevention Plan
- h. a,b,c,f,g
- i. b,c,e
- j. all the above

9. In determining the patient's ITP goals, although information in the medical record can guide needs and goals, a very important part of the information must be obtained through a face-to-face exchange.

- a. True
- b. False

10. At the initial orientation assessment, the assessment is extensive, and at all future patient encounters a less extensive assessment is done. Circle the 3 reasons listed below:

- a. To validate appropriate medical billing
- b. Confirm that the patient is stable to proceed with exercise
- c. Identify any medical change that could require additional medical evaluation
- d. Discover additional needs that should be addressed on the patient's ITP
- e. To meet CMS/ Medicare requirements

PATIENT ASSESSMENT COMPETENCY - ANSWER KEY

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- c. Identify any medical change that could require additional medical evaluation
- d. Discover additional needs that should be addressed on the patient's ITP
- e. To meet CMS/ Medicare requirements

Gluten Free Sugar Free Dairy Free Pumpkin Bread



Ingredients

- 1 15oz can pumpkin puree
- 2 cups monk fruit allulose
- 1 cup avocado oil
- $\frac{2}{3}$ cup water
- 4 large eggs
- 1 tsp vanilla
- 3 $\frac{1}{2}$ cup Connie's baking mix
- 2 tsp baking soda
- 1 tbs cinnamon
- 1 $\frac{1}{2}$ tsp salt
- 1 tsp nutmeg
- 1 tsp ginger

Directions

Preheat the oven to 350 degrees. Grease and flour 3 loaf pans. Mix together puree, monk fruit allulose, oil, water, eggs and vanilla extract in a large bowl until well blended. Whisk together baking mix, baking soda, cinnamon, salt, nutmeg and ginger in a second bowl. Sift the flour mixture on top of the pumpkin mixture. Fold in with a spatula until blended. Pour into prepared pans. Bake until nicely browned on top and the toothpick inserted comes out clean about 50 minutes.

Connie's baking mix: 3 cups almond flour, 1 cup coconut flour, 1 cup arrowroot starch, 1 cup tapioca starch

SAVE THE DATE



2026 ISCVPR CONFERENCE



**THURSDAY
APRIL 23RD**



**VALLE VISTA CONFERENCE
CENTER, GREENWOOD, IN**



Register at:
<https://www.iscvpr.org/annual-meeting/>



Guest speaker
THIS COULD BE YOU!



Guest speaker
TBA



ISCVPR Program Highlights

Regional Meetings –

Central

We will meet virtually sometime this winter – TBA

Northeast

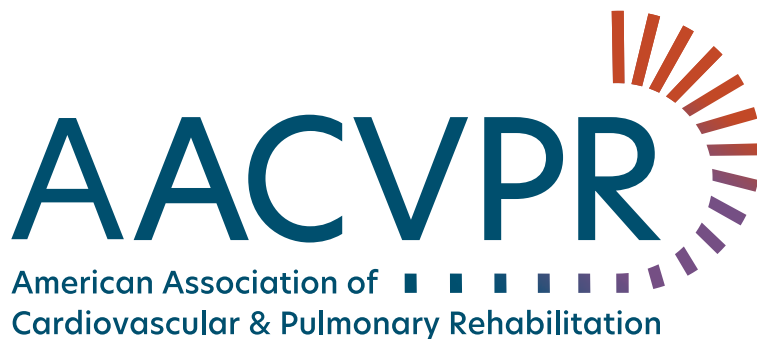
In-person on Nov 13th from 5:00–6:00pm with Carmen Garringer (cgarringer3@iuhealth.org).

Where: 10101 Ernst Rd, Roanoke, IN 46783

Guest speaker: Fort Wayne area Cardiologist; Dr. Scott Mattson.

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Did you know? AACVPR launched a new logo!



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