Long-Term Maintenance Programs – Key Factors for Success!

KIM RADTKE M.S. CEP
Disclaimer

- There are no conflicts of interest or financial affiliations associated with this presentation.

- For patient confidentiality, any patients included in these slides have signed a consent form and given verbal permission for the photographs/handouts to be used. Any patient names will be on a first name basis only.
Objectives

- How to grow a successful long-term maintenance program.
- Factors affecting compliance.
- Exercise prescription and implementation of ITP’s.
How to grow a successful long-term maintenance program...

- Know your mission, vision, values and philosophy of your department and/or organization!
- Recruit a great team!
- Get everyone on board!
How to grow a successful long-term maintenance program...

- Respected by providers.
  - Do not operate with a basement mentality!
  - Find a way to build relationships with your busy providers:
    - hallway conversations
    - ask to meet for coffee or lunch
    - give 10-20 minute presentation over lunch and learn for providers
    - invite to pulmonary rehab or cardiac rehab week open houses etc.

- Abundance of referrals.
How to grow a successful long-term maintenance program...

- Does your staff have sales skills?
- How many of you in this room have sales experience?
- When calling the referrals, be excited for the patient!
- Focus on the benefits of attending Cardiopulmonary Rehab!
- People pay for what they value and believe!
- Daily McDonald’s visit versus your monthly long-term maintenance fee.
Hello Mary, this is Kim Radtke from the Cardiopulmonary Rehab program at Gundersen Health System. You have been referred to our program for Cardiac Rehab. When you would like to start?

Mary replies, well I am not feeling very well and I am pretty sore yet so I think I will pass at this time.
Hello Mary, this is Kim Radtke from the Cardiopulmonary Rehabilitation department at Gundersen Health. You were referred to our program by Doctor Harbin who is a huge supporter of Cardiac Rehab. Our program will help you gain your strength back while teaching you how to minimize the chances of having heart problems in the future. Mary, we are so excited to have you join us and we have an opening tomorrow at either 10 am or 2 pm, which would work better for you to come in to get started?

Mary, well I guess 10 am works better for me. Where should I go?
How to grow a successful long-term maintenance program...

- Admired by Administration.
  - Know your numbers (revenue and expenses). Are you operating at a new gain or a net loss?
  - Connect with people in the business/finance departments of your organization.
  - Share the data from AACVPR’s national outcomes registry and how cardiopulmonary rehabilitation reduces hospital readmission rates and decreases overall morbidity and mortality rates.
  - Pull patients who have completed Cardiac Rehab and compare with patients who were not referred/not enrolled. Share the 30 day readmission rates between the two groups!
  - We have to be efficient!
How to grow a successful long-term maintenance program...

- Loved by patients.
- Our patients may be deconditioned and depressed but they are very aware of any negativity in our programs (i.e. staff attitudes, lack of leadership, tense work environment, identifying your program weaknesses etc.).
- Word of mouth travels fast weather it is positive or negative.
Program fees should be competitive with other programs in your area...

- Typically paid out of pocket.
- Twelve month - $350
- Six month - $210
- Monthly - $40
- Spouses pay one-half price.
Factors affecting compliance...

- Did you know that 40% of drop-outs in cardiopulmonary rehab are preventable?

- Studies have shown when expectations are clearly presented, 85% of patients will conform to those expectations (Hulka, 1977)
Patient characteristics associated with program drop out...

Characteristics...
- Smoking
- Obesity
- Physical Inactivity
- Low Self-Motivation
- Lack of Interest
- Lack of Spousal Support
- Symptoms
- Medical Instability
- Job-Related Factors
- Financial concerns
- Female gender

Solutions to problem...
- Tobacco Cessation Counseling
- Nutrition Counseling
- Behavior Modification
- Counseling Support
- Education/Events
- Counseling/Education
- Refer to MD
- Refer to MD
- Job Change/Intercession
- Meet with business office for options.
- Promote benefits of Cardiopulmonary Rehab.
Strategies to positively affect compliance...

Hire people who:

- Are naturally enthusiastic and positive people.
- Love to interact with patients, providers and coworkers and have a genuine good time.
- Have a sincere interest in cardiopulmonary rehab (not those employees wanting to transfer “for a change”).
- Good listeners
Strategies to positively affect compliance...

Cardiopulmonary Rehab Staff:

- Position all available staff in exercise area (except for person monitoring telemetry).
- No group employee huddles during program!
- Talk to and touch each participant every session.
- Expect certain tasks to be accomplished by the patient as it encourages the road back to independence.
Strategies to positively affect compliance...

Location of Cardiopulmonary Rehab should be:

- Close to convenient parking.
- On first floor if possible.
- Have an appealing atmosphere for the patients.
- Handicapped accessible.
Strategies to positively affect compliance...

Equipment:

- Place equipment in a circle to encourage socialization.
- Maintain facilities and equipment.
- Handicapped accessible.
- User friendly for the patients to start and stop.
- Offer wide variety if possible and budget allows (i.e. indoor or outdoor track, swimming pool, treadmills, nusteps, ellipticals, rowing machines, recumbent bicycles, schwinn airy dynes, resistance training equipment etc.).
Strategies to positively affect compliance...

Consider offering group exercise classes:

- Floor Warm Ups
- Chair Weights
- Chair Yoga
- Chair Pilates
- Aerobics
- Functional fitness
- Moderate/high intensity interval training
- Volleyball
Strategies to positively affect compliance...

- Staff should dress professionally! For some this is hospital approved uniforms.
- If budget allows, give patients a t-shirt, polo, vest or light jacket upon graduation or after attending so many hours/visits.
- Vary colors/styles as trends change so they will want to wear it.
- Make sure it has your organizations logo on it.
Strategies to positively affect compliance...

Offer social events throughout the year:
- Annual picnic
- Golf outing
- Open house
- Holiday party
- Cardiac Rehab week celebration.
- Pulmonary Rehab week celebration.
Strategies to positively affect compliance...

Other things to consider:

- Involve the spouse or significant other whenever possible.
- Offer different challenges throughout the year (i.e. strength training challenge, balance challenge, wellness challenge etc.).
- Print participants progress reports (monthly, quarterly or upon request). Can take or fax to PCP or Cardiologist.
- Monthly or quarterly newsletters that include risk factor modification, upcoming social events, heart healthy recipes, etc.
Exercise Prescription and Implementation of ITP’s…

- Exercise should be medically supervised, following nationally recognized standards (ACSM and AACVPR guidelines).
- Program should be based on current research in the field.
- Individuals should become educated concerning proper exercise and health habits.
- The participant is the most important person in the program!
- Exercise should be fun!
National guidelines for long-term maintenance programs?

- There are none!
- Major decision is “Standard of Care”:
  - Medically supervised (ACLS)
  - Non-medically supervised (CPR only)
- Staffing ratio 1:15
- Practice emergency situations.
- Know your standing orders.
ACSM Guidelines for Exercise Testing and Prescription, Ninth Edition (Ch. 2)

- PAR-Q & You
- Health History Questionnaire
- Identify Positive Risk Factors
- Complete Risk Classification Chart (page 28, follow chart for need for medical evaluation, exercise testing and supervision of exercise testing).
Exercise Prescription and Implementation of ITP’s…

Continue the ITP implemented in Phase II Cardiac Rehab:

- Initial Ex Rx
- Progression 1
- Progression 2
- Maintenance phase
- Annual review in birthday month
Exercise Prescription and Implementation of ITP’s...

- Clarify needs and expectations.
- Emphasize short-term and long-term goals.
- Employ fitness testing to monitor progress.
- Minimize injuries/complications.
Warm-up: 5-10 minutes of light to moderate intensity cardiorespiratory and muscular endurance activities.

Conditioning: at least 20-60 minutes of aerobic, resistance, neuromotor, and/or sports activities (exercise bouts of 10 min are acceptable if the individual accumulates at least 20-60 minute/day of daily aerobic exercise).

Cool-down: at least 5-10 minutes of light to moderate intensity cardiorespiratory and muscular endurance activities.

Stretching: at least 10 minutes of stretching exercises performed after the warm-up or cool-down phase.
Frequency: >5 days per week of moderate exercise, or ≥3 days per week of vigorous exercise, or a combination of moderate and vigorous exercise ≥3-5 days per week is recommended to a total of ≥150 minutes per week.

Intensity: Moderate (40-60% HRR or % VO₂R; RPE 12-13) and/or vigorous intensity (60 - < 90% HRR or % VO₂R; RPE 14-17) is recommended for most adults. Light to moderate intensity exercise may be beneficial in deconditioned individuals.

Time: 30-60 minutes per day of purposeful moderate exercise, or 20-60 minutes per day of vigorous exercise, or a combination of moderate and vigorous exercise per day is recommended for most adults. Less than 20 minutes of exercise per day can be beneficial, especially in previously sedentary individuals.
**Type:** Regular, purposeful exercise that involves major muscle groups and is continuous and rhythmic in nature is recommended.

**Volume:** A target volume of $\geq 500 - 1000$ MET min/week is recommended. Increasing pedometer step counts by $\geq 2000$ steps per day to reach a daily step count $\geq 7000$ steps per day is beneficial. Exercising below these volumes may still be beneficial for individuals unable or unwilling to reach this amount of exercise.

**Pattern:** Exercise may be performed in one (continuous) session per day or in multiple sessions of $\geq 10$ minutes to accumulate the desired duration and volume of exercise per day. Exercise bouts of $< 10$ minutes may yield favorable adaptations in very deconditioned individuals.

**Progression:** A gradual progression of exercise volume by adjusting exercise duration, frequency, and/or intensity is reasonable until the desired exercise goal (maintenance) is attained. This approach may enhance adherence and reduce risks of musculoskeletal injury and adverse cardiac events.
Adults should also perform resistance training exercises 2-3 days per week for each of the major muscle groups and neuromotor exercises involving balance, agility, gait and coordination.

A series of flexibility exercises for each of the major muscle tendon groups ≥2-3 days per week is recommended to maintain joint range of motion.
Exercise with caution and 10 bpm below HR associated with any of the following criteria:

- Onset of angina or other symptoms of cardiovascular insufficiency.
- Plateau or decrease SBP; SBP > 240 mmHg; DBP > 110 mmHg.
- > 2 mm ST-depression, horizontal, or down sloping.
- Evidence of reversible myocardial ischemia or evidence of moderate to severe wall motion abnormalities during exertion.
- Increased frequency of ventricular dysrhythmias.
- Other significant ECG disturbances (i.e. 2nd or 3rd degree heart block, atrial fib, atrial flutter SVT, complex ventricular ectopy).
- Other signs or symptoms of exertional intolerance.
Progression to independent exercise...

- Stable and/or controlled baseline HR, rhythm and BP.
- Demonstrate knowledge of the disease process, signs and symptoms, medication use and side effects.
- Demonstrate compliance and success with a program of risk factor modification and positive lifestyle habits!
What we have learned...

- People will stay because of the relationships they build along the way!
- Our patients stay young by living vicariously through our students/staff.
- Our students/staff grow in wisdom from our patients!
- Everyone wins!
How to grow a successful long-term maintenance program...

- Healthcare is rapidly changing (i.e. bundled payments coming in 2017 for inpatient/outpatient cardiac rehabilitation).
- Reframe our thinking!
- See problems as opportunities!
- All departments need to work together as a team.
- Get involved at the state and national level to keep up with the changes that are happening!
Thank you!