AACVPR Program Certification
2015-2016 Update:
Moving Toward Program Excellence, Quality Improvement and Excellent Outcomes

Mark Stout, MS, CCRP
AACVPR Program Certification Vice-Chair
DISCLOSURES

This presentation is a collaborative effort of the AACVPR Certification Leadership Team. I have no other disclosures other than a passion for program excellence and a strong belief in the AACVPR certification process.
Why Certify?

• Alignment with current guidelines for appropriate and effective care.

• Physicians can rely on your program as an extension of their care to the patient.

• Demonstration of excellence for CMS, state department of health or TJC surveyors.
Why Certify?

• Insurance companies recognize that performance measures in patient care are part of the essential standards required for AACVPR certification.

• Many healthcare consumers would choose a certified over an uncertified program.

• Patients and family members confidence in your program.
The AACVPR Cardiac and Pulmonary Rehabilitation Program Certification process is the only peer-reviewed accreditation process designed to review programs based on their alignment with the latest evidence-based medicine, expert opinion, current regulations and measurement of individualized patient outcomes, and to recommend certification based on that review.
Does your program HAVE to be certified? 

NO

But if you want to be AACVPR Certified...

A program must comply with current standards and guidelines as approved by the AACVPR Board of Directors

The application review team’s role is to measure your program according to these standards
AACVPR
Board of Directors

BOD Liaison
Bonnie Anderson

Expert Panel
Pulmonary Chair
Trina Limberg

Certification Application
Review Team
Vice-Chair – Mark Stout

Remediation Team
Chair – Barb Flato

Program Certification Manager
Kate Murphy

Expert Panel
Cardiac Chair
Jeanne Ruff

Certification Application
Review Team
Chair – Kim Beyer

Remediation Team
Vice Chair
Bob Brown

Program Certification Associate
Kullan Buckrop

Ultimate goal of at least one highly trained and qualified reviewer from each state. Currently there are 41 reviewers representing 26 states!
Application Review Team

• Review each page of each application to assess based on the required elements for each
• Document deficiencies based on the requirements
• Recommend applications for approval, remediation, and denial as appropriate
• Work collaboratively with the Expert Panels, Registry, Professional Certification Committee, Quality of Care Committee, the DEMS (Data Elements and Measures Standardization) workgroup and others as appropriate to assure consistency and integration of information
Minimum qualifications for serving on the Program Certification Committee

• Work in a currently certified program
• Be actively involved in the certification process (primary or secondary contact)
• Be AACVPR member in good standing over at least the previous 3 years
• Express interest in the certification committee by filling out a Committee Service application
• Commit and have the ability to volunteer to serve a minimum of 5-10 hours per week during the review cycle based on anticipated number of applications for that year
Application Review Process

All applications thoroughly reviewed by a trained members of the Application Review Team.

**Inter-Rater Reliability Testing**

5-10% of ALL applications are automatically reassigned to another member of the review team for a second independent review.

IRR is utilized in the program certification process in order to assess the consistent evaluations of the same application. This strengthens the certification process and helps assure reliability of the review.
Application Review Process

- Applications recommended for denial during initial review are automatically reviewed by at least two members of the Certification Leadership Team.
- Denied applications are automatically reviewed by the BOD Liaison.
- Notifications are sent by August 31st.
Possible Submission Outcomes

• **Full Approval**
  Application meets **all** required elements

• **Eligible for Remediation**
  Application meets **most** required elements

• **Denial**
  Application **does not meet multiple** required elements after a thorough Program Certification Leadership Team review
Program Certification Maintenance Requirements

- Programs must adhere to all certification maintenance requirements throughout the three-year certification period, including:
  - Maintain at least one AACVPR member during the three year period to receive certification updates.
  - Maintain current contact information for the Primary and Secondary Certification Contacts
  - Review each year’s application to determine any gaps in your practices and update your processes as necessary.
The AACVPR Program Certification committee conducts annual audits, which may include site inspection and/or document review.  

2014 Audit Results: 30% of audited programs were not maintaining current certification standards  

Keeping up with annual standards will be key to transitioning your program to a more outcomes-based certification application in future cycles
Because you are certified, it does not mean that the information that you submitted last time will be automatically accepted for the next recertification. The requirements change from year-to-year as evidenced-based research and guidelines change.
Timeline for 2016 Cycle

Data Collection Period: January 1 - December 31, 2015

December 4, 2015: Application opens
February 28, 2016: Completed applications and payments due
March - May 2016: Program Certification Committee Review of certification and recertification applications

June - Aug 2016: IRR process
  Co-Chair Oversight Review
  BOD Liaison Review
  AACVPR prepares notifications and certificates

August 31, 2016: AACVPR notifies all programs of application decision
Sept - Oct 2016: Remediation process occurs mid-Sept through Oct
Oct - Nov 2016: Remediation decisions are finalized
December 31, 2016: Notification of remediation decisions
Be Prepared **BEFORE** You Apply

- Program Certification is for Early Outpatient Cardiac or Pulmonary Rehabilitation

- Review the application content and requirements carefully

- Certification and Recertification applications are now identical. Cardiac and Pulmonary Rehab applications **are different.**
Be Prepared **BEFORE** You Apply

- Your program must be in operation for **one** year prior to applying.

- In order to participate in the AACVPR Program Certification process, you must have a current AACVPR member within your program.
The Time for a Self Assessment is Now

- Print a copy of the application off the AACVPR website
- Gap Analysis
- One page at a time
General
- AACVPR Program Certification Policies & Procedures
- Sample Outcomes Calculations
- Outcome Assessment Tools
- Highlighted 2015 App Changes
- ITP Checklists 2015
- 2015 Program Certification Overview - Denver Annual Meeting Session

Pulmonary
- Guidelines for Pulmonary Rehabilitation Programs, 4th Edition
- Pulmonary Rehab Certification Changes 2015
- Additional Resource List
- Additional Resource - Pulmonary Systematic Reviews
- SAMPLE - PR Orientation Competencies
- SAMPLE - PR Clinical Competencies Check Off
- Pulmonary Quality Improvement Summary
- *NEW* - Final 2015 Pulmonary Program Certification Application

Cardiac
- Guidelines for Cardiac Rehabilitation and Secondary Prevention Programs, 5th Edition
- Cardiac Resource Manual
- AACVPR Expert Panel Literature Review
- Cardiac Quality Improvement Summary
- *NEW* - Final 2015 Cardiac Program Certification Application
Tips for Success

- Fill in the program roster with **all** staff prior to starting the application. *Be sure that you have a primary and secondary contact person or you will not be able to go further on the application.*

- All documentation will be requested with the initial application. **No additional or newly created documentation will be allowed after the application is submitted.** Don’t expect a reviewer to contact you during the review cycle to say “Could you please send me...” or “I see three of the five elements, could you send me the rest?”

- There is no reviewer-applicant communication during the review cycle.
Click on the “Upload Files” tab to upload the requested documents. To ensure accuracy of the upload, click on the document uploaded.

**NOTE:** Uploading the wrong documents will lead to a denial of the page.
Tips for Success

- All submitted documentation must be HIPAA compliant with all patient identifiable information blacked out or removed, including patient name, date of birth, medical record number, admission number, address, phone number, spouse’s name, etc.

- All submitted patient documentation must be for an actual patient who completed the program. Blank sample forms will not be accepted.

- Only submit what is asked for. More is not better.
Tips for Success

- Submitted documentation should be neat and legible, with correct spelling and grammar.
- There are text boxes for required narratives. Keep it brief and concise. There is a maximum number of characters allowed.
- All applications must be received by the application submission deadline. No extensions will be granted.
- All applications must be submitted online via AACVPR.
Tips for Success

- If you have questions while completing the application:
  - Go to the **Certification FAQ page** of our website. The FAQ provides general information and a page-by-page detailed Q&A addressing most common questions.
  - If the answer to your clinical question is not in the FAQ, email your question to **certification@aacvpr.org** to be forwarded to a volunteer clinical expert.
  - If you have technical or other non-clinical questions, Certification Specialists are available Mon-Fri during business hours to assist applicants via email at **certification@aacvpr.org** or by phone at 312-321-5146.
Tips for Success

- Printable versions of the 2016 application are currently available on the AACVPR website. The 2017 draft version will be posted in early 2016.
- Take advantage of all the available RESOURCES.
- Application fees are set annually by the AACVPR Board of Directors and must be paid in full by the final application submission deadline. The application will not be reviewed without payment.
Tips for Success

- **READ** the entire application before you begin the process.

- Be prepared **BEFORE** you apply. Start early. Enlist multiple people to review for appropriate content and to ensure what you submit is clear and concise to someone not familiar with your program.

- Remember that this is a **CERTIFICATION** process not a **MENTORING** process. Ask questions **before** submitting your application.
The Application

Application 4897 (2015 Cardiovascular Certification)

<table>
<thead>
<tr>
<th>Program Profile Review / Edit</th>
</tr>
</thead>
<tbody>
<tr>
<td>✓ Page 1: Program Staff and Competencies</td>
</tr>
<tr>
<td>✓ Page 2: Individualized Treatment Plan</td>
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<tr>
<td>✓ Page 3: Medical Emergencies</td>
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<td>✓ Page 4: Emergency Preparedness</td>
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<td>✓ Page 5: Exercise Prescription</td>
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<tr>
<td>✓ Page 6: Clinical Outcome Assessment</td>
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<td>✓ Page 7: Behavioral Outcome Assessment</td>
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<td>✓ Page 8: Health Outcome Assessment</td>
</tr>
<tr>
<td>✓ Page 9: Service Outcomes Assessment</td>
</tr>
<tr>
<td>✓ Page 10: Quality Improvement</td>
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Confirm Profile Information

Please check this box to confirm all your profile information is correct.

Edit Program Profile

<table>
<thead>
<tr>
<th>Facility Name:</th>
<th>Kate's Test Facility</th>
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<tbody>
<tr>
<td>Address 1:</td>
<td>Test</td>
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<tr>
<td>Address 2:</td>
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<tr>
<td>City</td>
<td>Test</td>
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<td>State</td>
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<td>Zip</td>
<td>444444</td>
</tr>
<tr>
<td>Country</td>
<td>USA</td>
</tr>
<tr>
<td>Program Name</td>
<td>Test Cardiac Program</td>
</tr>
<tr>
<td>When Did Your Program Begin</td>
<td>5/2/2011</td>
</tr>
</tbody>
</table>
Program Profile

- Complete the demographic information on the Program Profile page
- Fill in the program roster with all staff prior to starting the application. Be sure that you have a primary and secondary contact person or you will not be able to go further on the application.
- Remember to identify sister programs
For the purposes of AACVPR Program Certification programs must provide evidence of a **minimum of four different** assessed competencies specific to the Core Competencies (for either CR or PR) for each staff member.

**Ways to assess competency**

- Check off stations
- Test/quizzes
- Return demonstration
- Article review with post test
- ITP Completion on a patient

**BLS/ACLS counts as 1 IF it was completed during the data collection period**
Staff Competency

Staff competencies must reflect the published Core Competencies. As you plan your annual training schedule, be sure that you are able to clearly identify which of the Core Competencies your staff training activities reflect. They should be specific to the staff role …RN/Dietician/EP/PT/RT

Core Competencies = Knowledge and Skill
Core Competencies for Cardiac Rehabilitation/Secondary Prevention Professionals:

2010 Update
POSITION STATEMENT OF THE AMERICAN ASSOCIATION OF CARDIOVASCULAR AND PULMONARY REHABILITATION

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

Core Competencies - Cardiac

- Patient assessment
- Nutritional counseling
- Weight management
- Blood pressure management
- Lipid management
- Diabetes management
- Tobacco cessation
- Psychosocial management
- Physical activity counseling
- Exercise training evaluation
Clinical Competency Guidelines for Pulmonary Rehabilitation Professionals

POSITION STATEMENT OF THE AMERICAN ASSOCIATION OF CARDIOVASCULAR AND PULMONARY REHABILITATION

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

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

- Patient Assessment and Management
- Dyspnea Assessment and Management
- Oxygen Assessment and Management
- Collaborative Self Management
- Adherence
- Medications/Therapeutics
- Diseases Not Related to COPD
- Exercise Testing
- Exercise Training
- Psychosocial Management
- Tobacco Cessation
- Emergency Responses for Patients and Program Personnel
- Universal Standard Precautions
<table>
<thead>
<tr>
<th>Goal #1 Nutrition Counseling</th>
<th>Knowledge</th>
<th>Skill: Ability to perform</th>
<th>Education &amp; Training Aids Available</th>
<th>Method of Assessment</th>
<th>Remediation Options</th>
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<tr>
<td></td>
<td>KNOWLEDGE</td>
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</tbody>
</table>

**KNOWLEDGE**
- Demonstrate an understanding of:
  - Role and impact of diet on CVD progression and risk factor management
  - Analysis of diet composition with specific emphasis on total caloric intake and dietary content that influence risk factors (total fats, cholesterol, sodium, refined and processed carbohydrates, etc)
  - Potential risks and/or benefits of nonprescription nutritional supplements and alcohol intake
  - Target goals for dietary modification and nutrition interventions for identified risk factors and/or comorbidities (e.g., dyslipidemia, hypertension, diabetes, obesity, heart failure, kidney disease)

**SKILL:**
- Ability to perform the following:
  - Dietary intake assessment to estimate total calories; amounts of saturated fat, trans fat, cholesterol, sodium, fruits and vegetables, whole grains, fiber, and fish; number of meals/snacks; portion sizes; frequency of eating out; alcohol consumption
  - Education and counseling on specific dietary modification needed to achieve target goals
  - Behavioral interventions to promote adherence and self-management skills in dietary habits
  - Measure and report outcomes of nutritional management goals at the conclusion of the program
  - Effective behavior change strategies based on common theoretical models and adult learning strategies

**Method of Assessment**
- Written exam
- Patient Teaching Simulation
- Advanced Nutrition and Human Metabolism - Text
- Contemporary Nutrition - Text
- Health Coaching Review - Workshop

**Remediation Options**
1. One on One session with Dietician
2. Additional reading and study
3. Attend Nutrition workshop
Staff Competency Requirements

- Competencies must be assessed for all professional/clinical staff who directly report to the Cardiac or Pulmonary Rehab director or manager.
- You do not need to report competencies for the program medical director, ancillary or administrative staff, or consultants or the program director if they do no patient care.
- A minimum of four different assessed competencies FOR EACH STAFF MEMBER specific to the published Core Competencies for Cardiac and Pulmonary Rehabilitation
### Application 4897 (2015 Cardiovascular Certification)

**Page 1: Program Staff and Competencies**

Please click on "Edit Roster" to add all required roles to your staff roster or update existing information.

<table>
<thead>
<tr>
<th>Name</th>
<th>Role</th>
<th>Report To Director</th>
<th>Patient Care</th>
<th>CCRP</th>
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</thead>
<tbody>
<tr>
<td>BUCKROP, KULLAN</td>
<td>Administrator</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>BUCKROP, KULLAN</td>
<td>Certification Secondary Contact</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>BUCKROP, KULLAN</td>
<td>Medical Director</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>DOE, JANE</td>
<td>Staff</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>FLATO, BARBARA</td>
<td>Staff</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>LYNN, ABIGAIL</td>
<td>Program Director</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>MEREDITH, NEIL</td>
<td>Certification Primary Contact</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
</tr>
</tbody>
</table>
Staff Competency

Emergency procedures
How was the competency addressed?

Be specific on how the competency was addressed.

Check all staff that possess this competency

- Kate Murphy  Date of Competency: 2/04/2015
- Member Test  Date of Competency:  

Also, make sure that you enter the appropriate competency date.
Staff Competency

Automatic Denial

- Submission of general emergency, safety drills and in-services in the hospital facility, such as fire drills, infection control, safety inspections or health and safety reviews.

- Submission of documentation outside the stated date range. (ACLS /CPR must be completed in 2015)

- Submission of competencies not specific to cardiac or pulmonary rehab.

- Failure to submit a minimum of four different core competencies for each staff member.
The Centers for Medicare & Medicaid Services (CMS) 42 CFR 410.49 - Cardiac rehabilitation program and intensive cardiac rehabilitation program- Conditions of coverage states:

“Components of a cardiac rehabilitation program and an intensive cardiac rehabilitation program.

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

- Upload **COMPLETED** Cardiac or Pulmonary ITP that is HIPAA compliant
- ITP must be a single comprehensive document. (It does not need to be one page)
- ITP must be for an actual patient that has **completed all required components**
- Assessment and reassessment scores must be on the ITP. **Do not submit assessment tools.**
- ITP must be completed in the data collection period
- Must include physician signatures and dates
So whether paper or EMR, your ITP must include:

- Psychosocial Assessment
- Psychosocial Plan
  - Goals
  - Interventions
  - Education
- Psychosocial Reassessment
- Psychosocial Discharge/Follow-Up
- Other Core Components as appropriate (HTN management, lipid management, diabetes management and any other modifiable cardiovascular risk factors)
- Assessment
- Plan
  - Goals
  - Interventions
  - Education
  - Reassessment
  - Discharge/Follow-up
Pulmonary

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

So whether paper or EMR, your ITP must include:
What is the Individual Treatment Plan?

- A map of the best way to provide care for our patients and takes them from the admission assessment through the discharge/follow-up.

- This map is to be utilized by ALL those responsible for the patient’s management.

- An effective, comprehensive treatment plan can sometimes be the difference between a good and a great program.
Four Required Steps:

1. Assessment
2. Plan: Includes - Goals/Interventions/Education
3. Reassessment: With MD signature and date at least every 30 days
4. Discharge / Follow-Up

Core Elements:

1. Exercise
2. Nutrition
3. Psychosocial
4. Oxygen Use and titration *(required for Pulmonary Rehab application)*
5. Other Core Components as applicable to individual patient
Assessment

- Starting point.
- Gather information / behaviors to change determine outcomes to measure.
- Need all the data before you can make the plan.
- Need an assessment for exercise, nutrition, psychosocial, oxygen and other core measures that are important to THIS individual patient
- **Example:** (exercise) 6-MWT
Plan

- What are the **Goals**? Patient-centered
- What **Interventions** (Actions) are necessary to accomplish goals?
  - **Education** to assist patient with self-management
  - **Example**: (exercise) Exercise Prescription
    A progressive exercise program including: Mode, Intensity, Duration, Frequency, and Progression
- Evidence-based.
- Reasonable expectations.
- Specific, measurable and relevant.
- Individualize, keep in mind contraindications, individual abilities, limitations.
- Signed and dated by MD
Re-Assessment

- With MD Signature and Date at least every 30 days
- Evaluation of effectiveness (OUTCOMES)
  - Obstacles
  - How did it work?
  - May have to revise plan
  - May lead to further assessment
- Measurable.
- **Example:** (exercise) repeat the 6-MWT.
Discharge / Follow-up

- Was everything accomplished?
- Where to go from here?
  - Keeping on track, what else might be helpful?
  - How is the ITP reviewed or revised?
- Pose the next clinical question.
- Constantly evolving.
- **Example:** the goal to be able to walk 30 minutes without stopping was not met.....now what?
  Membership to Gym; New long term goals; Follow-up appointments; Updated Exercise Prescription
# Individual Cardiac Treatment Plan

## Exercise Plan

### Exercise Prescription
- **Mode:** [ ] Treadmill  [ ] Stationary Bike  [ ] Elliptical  [ ] Rowing Machine  [ ] Dumbbell
- **Frequency:** 3-5 times per week
- **Duration:** 27-45 min. x 4-12 weeks
- **Intensity:** 60-80% above RHR

### Exercise Plan
- **Progression:** Increase 0.5-1.0 met/wk according to protocol and patient response to exercise.

### Exercise Education
- **Self Pulse**
- **RPE Scale**
- **Equip Orient**
- **Warm-up/Cool-down**
- **Ex Safety**
- **5/5 to report**
- **Low Na Diet**
- **BP Meds**
- **Understand BP**

### Interventions
- **BP Meds:**
- **Understand BP**

### Goals
- **Target Goal:**
  - Individualized Exercise Prescription
  - Personal Met Goal:
  - BP <140/90 or <130/80 if DM or CKD
- **Aerobic activity:** 30+ minutes 5 days per week

## Exercise Reassessment

### Re-Assessment
- **Date:** 2/4/13
- **Exercising within ETR:** Yes
- **Return to previous activities:** No
- **Return to ADL's:** No
- **Return to work:** Yes
- **Current Met Level:** 4.0
- **Resistance Training:** Yes (Walk)
- **Frequency:** 3x/wk
- **Duration:** 20-30min
- **Angina with exercise:** No

### Successes/Challenges
- **Increased endurance, checkup - medical approval etc...**

### Untoward Events
- **Asthma flares with weather changes.**

### Discharge Plan
- **Planning to attend Phase 3 Non-Monitor Cardiac Rehab**

## Exercise Discharge

### Follow-up/Discharge
- **Current Exercise:** 250 total min per wk
- **Angina with exercise:** No
- **Current Met Level:**
- **TM Met Level:**
- **Walked ft:**
- **Max HR:**
- **TM Mets @ last session:**
- **RHR:**
- **SPO2:**

### Exercise Plan
- **Progression:** Maintain current fitness level and attempt to increase intensity, duration and frequency by at least 0.5 met/wk.

### Education
- **Self Pulse**
- **RPE Scale**
- **Equip Orient**
- **Warm-up/Cool-down**
- **Ex Safety**
- **5/5 to report**
- **Low Na Diet**
- **BP Meds**
- **Understand BP**
- **Physical Activity**
# Individual Cardiac Treatment Plan

## Initial Assessment

<table>
<thead>
<tr>
<th>Learning Barriers</th>
<th>Date</th>
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<tbody>
<tr>
<td>Speech</td>
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<tr>
<td>Hearing</td>
<td>12/21/12</td>
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<tr>
<td>Literacy</td>
<td>12/21/12</td>
</tr>
<tr>
<td>Cognitive</td>
<td>12/21/12</td>
</tr>
<tr>
<td>Ready to learn</td>
<td>12/21/12</td>
</tr>
<tr>
<td>Educational needs identified</td>
<td>12/21/12</td>
</tr>
<tr>
<td>Adequate family support</td>
<td>12/21/12</td>
</tr>
</tbody>
</table>

**Tobacco Use:**
- **Yes**: No
- **No**: Yes

**Date started:**
- < 6 mos ago
- > 6 mos ago
- Quit date set: Nov 2012

**Smokeless tobacco:**
- **Yes**: 0
- **No**: 0

**Successes/Challenges:**
- # cigarettes smoked per day:

## Discharge Plan:
- Patient does not smoke

## Tobacco Cessation

<table>
<thead>
<tr>
<th>Date</th>
<th>Tobacco Cessation</th>
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<tbody>
<tr>
<td>12/2012</td>
<td>Referred to Smoking Cessation Classes</td>
</tr>
<tr>
<td>11/2012</td>
<td>Referral to Smoking Cessation Classes</td>
</tr>
</tbody>
</table>

**Other Education**
- Tobacco Triggers
- Cardiac A&P
- CAD
- Angina S/S
- Risk Factors
- Stress Management
- CHF
- Nutrition
- Eating Out
- Reading Labels
- Medication Review and Compliance
- Advanced Directives
- Weekly Topics

**Other Goals**
- Complete cessation of tobacco use
- Understanding of risk factors for CAD
- Strategies for CAD risk factor management

---

**Follow-up/Discharge**

<table>
<thead>
<tr>
<th>Date</th>
<th>Other Discharge</th>
</tr>
</thead>
<tbody>
<tr>
<td>12/2012</td>
<td>Educational goals met</td>
</tr>
<tr>
<td>12/2012</td>
<td>Adequate family support</td>
</tr>
</tbody>
</table>

**Other Discharge**
- Tobacco Use:
  - **Yes**: No
  - **No**: Yes

**Date quit:**
- Nov 2012

**Quit date set:**
- # cigarettes smoked per day:

---

**Target Goal:**
- Met
  - Complete cessation of tobacco use
  - Understanding of risk factors for CAD
  - Strategies for CAD risk factor management
# Pulmonary Rehab Orders History

## Respiratory Care

<table>
<thead>
<tr>
<th>Name</th>
<th>Ordering Date/Time</th>
<th>Resulting Date/Time</th>
<th>Status</th>
<th>Priority</th>
<th>Auth Provider</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHASE II OIP PULMONARY</td>
<td>9/8/2014 1:42 PM</td>
<td></td>
<td>Signed</td>
<td>Routine</td>
<td>Jamie J Kling, DO</td>
</tr>
<tr>
<td>REHAB/RESPIRATORY SERVICES</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>PULMONARY TRAINING INITIAL</td>
<td>9/8/2014 11:56 AM</td>
<td></td>
<td>Signed</td>
<td>Routine</td>
<td>Benjamin Kleiber, MD</td>
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</table>

### Pulmonary ITP Report

<table>
<thead>
<tr>
<th>Core Components</th>
<th>MRN:</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical Assessment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Assessment Type</td>
<td>05/06/14</td>
<td>03/08/14</td>
</tr>
<tr>
<td>Assessment Type</td>
<td>1344</td>
<td>1345</td>
</tr>
<tr>
<td>Primary Diagnosis</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cardiac Risk Factors</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Risk Factors: Non-modifiable Risk Factors: Hyperlipidemia, Hypertension, Obesity</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other Considerations</td>
<td>Obstructive and central sleep apnea, diastolic heart failure, neuropathy, gout, Peyronie's disease, and pacemaker</td>
<td></td>
</tr>
<tr>
<td>Orthopedic/Pain concerns:</td>
<td>Rheumatoid arthritis, Left knee, History of bilateral knee replacement and back surgery</td>
<td></td>
</tr>
<tr>
<td>PFT Results</td>
<td>DLCO % Predicted</td>
<td></td>
</tr>
<tr>
<td>PFT Date</td>
<td>05/19/14</td>
<td></td>
</tr>
<tr>
<td>DLCO % Predicted</td>
<td>61.5</td>
<td></td>
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<tr>
<td>Activities Causing Shortness of Breath</td>
<td>Walking &lt; 500 feet, stairs, daily activities</td>
<td></td>
</tr>
<tr>
<td>Environmental Exposures</td>
<td>Dust; Outdoor pollution; Cold Weather</td>
<td></td>
</tr>
<tr>
<td>Tobacco Status</td>
<td>Former User</td>
<td></td>
</tr>
<tr>
<td>Patient will be Tobacco Free or moving toward cessation.</td>
<td>Continue with Established Goal</td>
<td></td>
</tr>
<tr>
<td>Smoking Cessation Plan/Interventions</td>
<td>Follow cessation stage and support.</td>
<td></td>
</tr>
<tr>
<td>Home Respiratory Equipment</td>
<td>Bipap</td>
<td></td>
</tr>
<tr>
<td>Fall Risk</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Assistive Device</td>
<td>Cane, Walker</td>
<td></td>
</tr>
</tbody>
</table>
### Physical Assessment Goals/Interventions

<table>
<thead>
<tr>
<th>Goal/Outcome</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Identify environmental exposures during initial assessment</td>
<td>Reduce or eliminate environmental pollution</td>
</tr>
<tr>
<td>Reduce indoor pollution</td>
<td>New Goal</td>
</tr>
</tbody>
</table>

### Physical Assessment Plan/Interventions

- **Instructed on when it is appropriate to**
  - be outside and when to wear a mask or other safety equipment;
  - Learn about good indoor ventilation including use of dehumidifier and regular maintenance of furnace/air conditioning;
  - Learn individual triggers and environmental exposures that increase their risk for exacerbations and progression of lung disease.

### Oxygen Assessment

<table>
<thead>
<tr>
<th>Date</th>
<th>Oxygen Use</th>
<th>Oxygen Flow</th>
</tr>
</thead>
<tbody>
<tr>
<td>02/05/14</td>
<td>N/A</td>
<td>room air</td>
</tr>
<tr>
<td>08/08/14</td>
<td>Initial</td>
<td></td>
</tr>
</tbody>
</table>

### Oxygen Goals/Outcomes

- **Understand proper oxygen use and systems available**
- **Understands benefits of oxygen**
- **New goal**

### Oxygen Plan/Interventions

- 6 minute walk test administered at initial session and at regular intervals in Pulmonary rehab to determine appropriate oxygen use; SpO2 levels monitored during exercise sessions and maintained ≥ or equal to 88% or per physician order; Instruction provided to patient on tips on traveling with oxygen.
<table>
<thead>
<tr>
<th>Exercise Assessment</th>
<th>09/08/14</th>
<th>09/08/14</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1344</td>
<td>1345</td>
</tr>
<tr>
<td><strong>Exercise Assessment</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Assessment</td>
<td>–</td>
<td>Initial</td>
</tr>
<tr>
<td>Type</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stages of Change</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Risk</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stratification</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exercise</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Feet Walked:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Length of Time</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Resting Heart Rate</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Max Heart Rate</td>
<td>54</td>
<td></td>
</tr>
<tr>
<td>Resting BP</td>
<td>106/62</td>
<td></td>
</tr>
<tr>
<td>Exercise BP</td>
<td>128/82</td>
<td></td>
</tr>
<tr>
<td>SpO2 Resting</td>
<td>92</td>
<td></td>
</tr>
<tr>
<td>SpO2 Exercise</td>
<td>90</td>
<td></td>
</tr>
<tr>
<td>RPE</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>RPD</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>MET Level</td>
<td>1.7</td>
<td></td>
</tr>
<tr>
<td>Home Exercise</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Equipment</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Exercise Interventions</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Projected Goals/Outcomes</td>
<td>Aerobic exercise 2-3 times per week;</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Strength training 2-3 times per week;</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Daily stretches;Decrease dyspnea;Energy conservation</td>
<td></td>
</tr>
<tr>
<td>Aerobic exercise</td>
<td>New</td>
<td></td>
</tr>
<tr>
<td>2-3 times per week</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Strength training</td>
<td>New</td>
<td></td>
</tr>
<tr>
<td>2-3 times per week</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Daily stretches</td>
<td>New</td>
<td></td>
</tr>
<tr>
<td>Decrease dyspnea</td>
<td>New</td>
<td></td>
</tr>
<tr>
<td>Energy conservation</td>
<td>New</td>
<td></td>
</tr>
<tr>
<td>Plan/Intervention</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Advance aerobic exercise by 1-10 minutes every week based on ability;Advance hand weights and repetitions based on ability;Attend education classes; Maintain or increase MET level;Encourage home exercise routine and develop plan</td>
<td></td>
</tr>
<tr>
<td>Home exercise</td>
<td></td>
<td></td>
</tr>
<tr>
<td>prescription given</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>09/08/14</td>
<td></td>
</tr>
</tbody>
</table>

**Additional Notes:**
- Harmonica stretches two times daily
<table>
<thead>
<tr>
<th>Physical Assessment Goals/Interventions</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Physical Assessment</strong></td>
</tr>
<tr>
<td>Goals/Outcomes</td>
</tr>
<tr>
<td>Identify environmental exposures during</td>
</tr>
<tr>
<td>initial assessment; reduce or eliminate</td>
</tr>
<tr>
<td>environmental exposures; reduce indoor</td>
</tr>
<tr>
<td>pollution</td>
</tr>
<tr>
<td>Identify new goal</td>
</tr>
<tr>
<td>environmental exposures during initial</td>
</tr>
<tr>
<td>assessment</td>
</tr>
<tr>
<td>reduce or eliminate environmental exposures</td>
</tr>
<tr>
<td>reduce indoor pollution</td>
</tr>
<tr>
<td>New goal</td>
</tr>
</tbody>
</table>

**Physical Assessment Plan/Interventions**
- Instructed on when it is appropriate to be outside and when to wear a mask or other safety equipment; learn about good indoor ventilation including use of dehumidifier and regular maintenance of furnace/air conditioning; learn individual triggers and environmental exposures that increase their risk for exacerbations and progression of lung disease.

**Oxygen Assessment**

<table>
<thead>
<tr>
<th>Date</th>
<th>Time</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>02/05/14</td>
<td>1344</td>
<td>Initial</td>
</tr>
</tbody>
</table>

**Oxygen Goals/Outcomes**
- Understand proper oxygen use and systems available
- Understands benefits of oxygen
- New goal
- Understans benefits of oxygen

**Oxygen Plan/Interventions**
- 6 minute walk test administered at initial session and at regular intervals in pulmonary rehab to determine appropriate oxygen use; SpO2 levels monitored during exercise sessions and maintained > or equal to 88% or per physician order; instruction provided to patient on tips on traveling with oxygen.
**Exercise Prescription**

<table>
<thead>
<tr>
<th>Mode</th>
<th>Walk; Recumbent; Bicycle; NuStep; Weights; Warm-up/Cool down; Arm Ergometer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency</td>
<td>3 exercise sessions per week; Provided with home exercise instructions; Encouraged to exercise on days not in rehab as recommended</td>
</tr>
<tr>
<td>Duration (min)</td>
<td>15-30 minutes</td>
</tr>
<tr>
<td>Duration</td>
<td>4-12 minute sets</td>
</tr>
<tr>
<td>Comment</td>
<td></td>
</tr>
<tr>
<td>Intensity - Target</td>
<td>70-105</td>
</tr>
<tr>
<td>Heart Rate (THR)</td>
<td></td>
</tr>
<tr>
<td>Intensity (METs)</td>
<td>1.7-2.2</td>
</tr>
<tr>
<td>Intensity Level -</td>
<td></td>
</tr>
<tr>
<td>Upper Limits of Rate of Perceived Exertion</td>
<td>3-4</td>
</tr>
<tr>
<td>Strength</td>
<td>1 to 3 Sets of 10 to 15 Repetitions</td>
</tr>
<tr>
<td>Progression</td>
<td>Parameters of THR, PRE, DS, Angina scale, SpO2 and without any signs and symptoms will determine if progression is appropriate; Duration of exercise will be advanced by 1-10 minutes every week up to a total of 60 minutes; METs will be advanced by 0.5-1.0 METs every 2 weeks; Light weights of 0-5 pounds of resistance and/or weights will be advanced by 1-2 pounds once prescribed repetitions can be lifted comfortably. Maintain SpO2 greater than or equal to 89%</td>
</tr>
<tr>
<td>Oxygen Titration</td>
<td></td>
</tr>
<tr>
<td>Oxygen Use</td>
<td>room air</td>
</tr>
</tbody>
</table>

**Nutrition Assessment**

<table>
<thead>
<tr>
<th></th>
<th>06/08/14</th>
<th>06/08/14</th>
<th>1344</th>
<th>1345</th>
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<tbody>
<tr>
<td><strong>Nutrition Assessment</strong></td>
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<td></td>
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<tr>
<td>Assessment Type</td>
<td>-</td>
<td>Initial</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stages of Change</td>
<td>Contamination</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Weight</td>
<td>109.408 kg (241 lb 3.2 oz)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Height</td>
<td>5' 10&quot; (1.778 m)</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>BMI (calculated)</td>
<td>34.68</td>
<td></td>
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</tr>
<tr>
<td>BMI Range</td>
<td>Obese Class 1</td>
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<tr>
<td>Weight Goal</td>
<td>90.719 kg (200 lb)</td>
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<tr>
<td>Salt Intake</td>
<td>&lt; 2000 mg/d</td>
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<tr>
<td><strong>Nutrition Intervention</strong></td>
<td>Lose weight</td>
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<tr>
<td>Projected Goals/Outcomes</td>
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<tr>
<td>--------------------------</td>
<td>-----</td>
<td></td>
<td></td>
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<tr>
<td><strong>Nutrition Plan/Interventions</strong></td>
<td>Attend education classes; Special diet provided and encouraged; Nutrition consult</td>
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<td></td>
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<tr>
<td><strong>Psychosocial</strong></td>
<td></td>
<td></td>
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<tr>
<td><strong>Psychosocial Assessment</strong></td>
<td>09/08/14 09/08/14</td>
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<tr>
<td>Assessment Type</td>
<td>Initial</td>
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<tr>
<td>Stages of Change</td>
<td>Pre-contemplation</td>
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<td>Psychosocial Tools</td>
<td>PHQ9</td>
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<tr>
<td><strong>Psychosocial Intervention</strong></td>
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<tr>
<td>Psychosocial Goals/Outcomes</td>
<td>Maintain a positive support system; Maximize coping skills</td>
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<tr>
<td>Maintain a positive support system</td>
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<tr>
<td>Maximize coping skills</td>
<td>New</td>
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<td></td>
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<tr>
<td><strong>Psychosocial Plan/Interventions</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Psychosocial Plan/Interventions</td>
<td>Learn how to recognize stressors; Develop coping strategies; Quality of life assessment administered</td>
<td></td>
<td></td>
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</tr>
<tr>
<td><strong>Fall Risk</strong></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Fall Risk</td>
<td>Yes</td>
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</tr>
<tr>
<td>Assistive Device</td>
<td>Cane, Walker</td>
<td></td>
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</tr>
<tr>
<td><strong>Core Components</strong></td>
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<tr>
<td><strong>Education Assessment</strong></td>
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<tr>
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</tr>
<tr>
<td>Stages of Change</td>
<td>Contemplation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Barriers to Learning</td>
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<tr>
<td>Pulmonary Self Confidence</td>
<td>Completed</td>
<td></td>
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<tr>
<td><strong>Questionnaire</strong></td>
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<tr>
<td>Activities Causing Shortness of Breath</td>
<td>Walking &lt; 500 feet, stairs, daily activities</td>
<td></td>
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<td></td>
</tr>
<tr>
<td><strong>Education Intervention</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Education Goals/Outcomes</td>
<td>Proper use of home exercise equipment; Compliant with medication use; Patient demonstrated proper inhaler use with a spacer; Patient understands lung function; Patient understands signs/indicators of exacerbation.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Plan/Interventions</td>
<td>Education provided on proper use of home exercise equipment; Education provided on medication compliance; Education provided on lung function; Education provided on recognizing signs/symptoms of infection and/or exacerbations of a lung disease; Patient demonstrates proper breathing techniques; Patient demonstrates good airway clearance techniques</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>--------------------</td>
<td>------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proper use of home exercise equipment</td>
<td>New</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Compliant with medication use</td>
<td>New</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Patient demonstrated proper inhaler use with a spacer</td>
<td>New</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Patient understands lung function</td>
<td>New</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Patient understands signs/symptoms of infection/exacerbation</td>
<td>New</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Patient demonstrates good breathing techniques</td>
<td>New</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Patient demonstrates good airway clearance techniques</td>
<td>New</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Individual Treatment Plan (ITP)  
Automatic Denial

- Failure to submit a completed ITP with physician signature and dates on an actual patient who completed your program.
- Submission of an ITP that does not contain all of required elements clearly labeled
- Submission of multiple documents i.e. assessment tools, letters to physicians/patients., progress notes, etc.
- No assessment or reassessment data provided
  – i.e. check boxes only indicating done but no data given.
- Submission of ITP that is dated outside the collection period
Medical Emergencies

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

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

- A department specific policy addressing all of the medical emergency conditions. They can be in separate policies/protocols for each specific condition or in one combined policy.
- Policies specific to CR/PR and specific to the role of the CR/PR staff in managing the emergency situation.
- Medical emergency policies must be detailed beyond calling 911.
- Medical emergency policies must address the treatment of the patient from onset of signs and symptoms until resolution of the emergency (transfer to ED, hospital admission, resolution of symptoms, discharge home, etc).
- If policy refers to hospital-wide policy, submit all related policies. (i.e. Code Blue Policy, Code White Policy)
HYPERTENSION
For consistently elevated BP greater than 180/100 investigate whether patient is compliant with medication and diet regimen. Provide reinforcement as needed and send report of readings to referring physician.

If systolic reading is greater than 180 mgHg or diastolic is greater than 110 mmHg have the patient rest and recheck the BP manually in 5-10 minutes.

Assess for signs and symptoms such as dizziness, headache, palpitations, blurred vision, fatigue, nosebleed, vomiting.

If BP continues elevated, do not exercise and notify the referring physician.

If BP remains above 200/110, administer NTG gr. 1/150 S.L. and monitor BP until under 190 systolic and 100 diastolic. Notify the referring physician.

If BP remains within acceptable limits and is asymptomatic, patient may exercise unless otherwise held by physician.

DYSPNEA
If patient develops dyspnea during exercise, discontinue the session.
Take history from patient describing symptoms he/she is experiencing, degree, type and change in pattern.
Check BP, pulse, rhythm and O2 saturation.
Administer O2 via nasal cannula at 2-6 liters per minute.
Assess lung sounds.

If no further dyspnea, continue exercise session at decreased workloads and monitor for reoccurrence of symptoms.

If condition deteriorates, call Medical Director or referring physician for further orders.

Transport to Spohn Emergency Department or bed designated by attending physician if necessary.

♦ Any patient requiring an IV or IV medication will be transported to Spohn Emergency Department or other designated bed accompanied by licensed personnel.

♦ In the presence of COPD, monitor patient carefully for respiratory depression. Avoid liter flows of O2 greater than 4 LPM unless symptoms are severe.

SIGNED: Thomas Alexander M.D., F.A.C.C. - MEDICAL DIRECTOR

DATE 01/01/21

CRS Policy and Procedure
Emergency Standing Orders
**Acute Dyspnea Management**

"Acute" = new or different shortness of breath rating $\geq 5$ on 1–10 scale ($5$ = severe) for rating perceived dyspnea (RPD)

<table>
<thead>
<tr>
<th>During exercise</th>
<th>At Rest</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stop exercise and have pt sit in chair + Assess: vital signs, O2 sat, lung sounds</td>
<td>Hold exercise + Assess: vital signs, O2 sat, lung sounds, weight change</td>
</tr>
<tr>
<td>$\downarrow$</td>
<td>$\downarrow$</td>
</tr>
<tr>
<td>O2 sat $&lt;$ 88% apply O2 2-4L n/c If Sat $&gt;$ 88% and SOB decreases with sitting, continue to assess and terminate exercise for the day and notify MD</td>
<td>O2 sat $&lt; 88%$ start O2 at 2-4l n/c If Sat $&gt; 88%$ and SOB decreases with sitting, abort exercise for the day and notify MD</td>
</tr>
<tr>
<td>$\downarrow$</td>
<td>$\downarrow$</td>
</tr>
<tr>
<td>Notify patient’s MD &amp; follow orders. No MD response or worsening of patients condition, transfer to Med Express via WC</td>
<td>Notify patient’s MD &amp; follow orders. No MD response or worsening of patients condition, transfer to Med Express via WC</td>
</tr>
<tr>
<td>$\downarrow$</td>
<td>$\downarrow$</td>
</tr>
<tr>
<td>Notify patient’s family</td>
<td>Notify patients family</td>
</tr>
<tr>
<td>$\downarrow$</td>
<td>$\downarrow$</td>
</tr>
<tr>
<td>Complete &amp; send Change in Medical Condition Form to MD</td>
<td>Complete &amp; send Change in Medical Condition form to MD</td>
</tr>
<tr>
<td>During Exercise</td>
<td>At Rest</td>
</tr>
<tr>
<td>-----------------</td>
<td>--------</td>
</tr>
</tbody>
</table>
| **SBP >200-220 or DBP >100-110**  
  Assess patient, VS, RPE  
  Question Medication compliance | **SBP >180 or DBP >100**  
  Assess patient, VS,  
  Question Medication compliance |
| Hold exercise and recheck BP in 5 min |
| Asymptomatic – lower patient’s intensity and recheck BP | Symptomatic-Stop exercise and have pt sit or lie down.  
  Monitor VS |
| If BP remains elevated (SBP>210 and/or DBP>110)  
  Stop exercise | If symptoms persist transport patient to Med Express |
| Reassess BP. If at any time patients condition becomes unstable, transfer to Med Express | Begin exercise and  
  monitor BP.  
  Evaluate trends of BP in future |
| If BP remains elevated, notify patient’s physician. | Complete & send Change in Medical Condition form to appropriate MD |
| Complete and send Change in Medical condition form to appropriate MD | * If at any time patient condition becomes unstable, transfer to Med Express |
Medical Emergencies
Automatic Denial

- Failure to submit all department policies that address all nine of the medical emergency conditions.
- Failure to submit any referenced policy (i.e. Code Blue, Hypoglycemia Hospital-wide policies)
- Submission of policies that do not include specific details related to staff involvement in treatment activities.
- Submission of policies that are ACLS protocols and/or algorithms only.
Emergency Preparedness

For the purpose of AACVPR certification, the following emergency equipment and supplies must be immediately available to Cardiac and Pulmonary Rehab along with daily verification of readiness of the defibrillator/AED and portable oxygen for each day the program is in operation.

Calling 911/EMS to manage the entire emergency situation is not acceptable.
Emergency Preparedness
Items Required for Application

- Portable oxygen and airway management equipment
- Defibrillator/ AED
- Pulse Oximeter- Pulmonary only
PART 2:
For each item below, please indicate where the item is located in relation to the Cardiac Rehabilitation unit for each day the Cardiac Rehabilitation program is in operation.

Portable oxygen and airway management equipment

description goes here

Defibrillator/AED

description goes here
Emergency Preparedness Requirements

- One (1) month's documentation of daily verification of readiness for each day the program is in operation. An explanation should be provided for any missing dates during that month. If you are closed, write CLOSED.

- Narrative description of the location in relation to the Cardiac or Pulmonary Rehabilitation unit for each equipment/supply listed.

- Dates and description of four (4) different department medical emergency in-services from the NINE (9) medical emergencies specific to Cardiac or Pulmonary Rehabilitation held during 1/1/2015 through 12/31/15.

- Submitted in-services may include mock code blues, review of crash cart/defibrillator, critique of an actual code, etc.
Emergency Preparedness

Date of In-Service #1
7/01/2014

Type of Medical Emergency
Bradycardia

Brief description of medical emergency in-service
description goes here
# Medical Emergency In-service

<table>
<thead>
<tr>
<th>Date</th>
<th>Brief description of medical emergency in-service</th>
</tr>
</thead>
<tbody>
<tr>
<td>3/12/14</td>
<td>In anticipation of a site survey prior to our hospital's successful chest pain accreditation the cardiac rehab team performed a Cardiac Alert Mock Drill.</td>
</tr>
</tbody>
</table>

**Situation:** A patient in the outpatient department complained of pain going down his left arm not responding to NTG x2.

**Actions Taken:** Code White called. Dr. A notified and arrived in 2 minutes. EKG completed and confirmed STEMI. Cardiac Alert called. 02/IV started. Dr. Alexander notified patient's cardiologist. Cath Lab team arrives in the department and places patient on stretcher to take immediately to the Cath Lab.

**Problems/Concerns:** Discussion of how to get an outpatient into the system without taking to ED and losing valuable time when we are adjacent to the Cath Lab. We determined that the Cath Lab could "schedule" them for a procedure in order to generate an account number.

**Overall Assessment:** All NSTEMI's need to go through ED for full work-up and all STEMI's will go straight to Cath Lab.
EMERGENCY PREPAREDNESS AUTOMATIC DENIAL

Failure to have all required emergency supplies and equipment immediately available to the Cardiac/Pulmonary Rehabilitation department as listed in the Guidelines for Cardiac Rehabilitation and Secondary Prevention Programs, 5th edition/ Guidelines for Pulmonary Rehabilitation Programs, 4th edition.

Depending on/calling 911/EMS alone to manage the entire emergency situation is not acceptable.

Failure to provide the specific location in relation to the rehab department of each required item.

Failure to provide one month documentation of verification of readiness for each required item.

Failure to provide explanation of dates without verification of emergency readiness (i.e. “closed or holiday” must be written) during the month submitted.

Failure to submit dates and brief description of four different medical emergency in services from the NINE medical emergencies listed on page 3 specific to Cardiac/Pulmonary Rehabilitation.

Submitted medical emergency in-services not specific to Cardiac/Pulmonary Rehabilitation — i.e. general hospital emergency and safety drills and in-services such as fire drills, infection control, safety inspections, or health and safety reviews.

Submitted medical emergency in-services dates outside the collection period.
Exercise Prescription - Form

- The exercise prescription is individualized, approved by the physician for each CR/PR patient.
- It must contain all required elements: mode, frequency, duration and intensity. *Cardiac Rehab programs must also include progression guidelines.*
- In addition to required elements, O2 saturation and titration for pulmonary rehab patients only.
- The Ex Rx can be a component of the ITP but it must be submitted for both the ITP AND the exercise prescription.
A written policy must be in place that details how an exercise prescription is developed, modified and advanced toward the patient’s discharge goals. The policy must contain all required elements of the exercise prescription: mode, frequency, duration and intensity. 

*Cardiac Rehab programs must also include progression guidelines.*

Pulmonary Rehab must include an oxygen saturation and titration policy.
Exercise Prescription Requirement

**Individual Exercise Prescription (ExRx)**

- **Initial** exercise prescription.
- Physician signature approving the exercise prescription.
- Includes mode, frequency, duration, intensity and progression. O2 saturation and titration (Pulmonary Rehab only)
- Intensity targets must be within AACVPR and ACSM guidelines
- **Progression** must be more specific than “as tolerated” or “as dictated by absence of signs and symptoms”, such as increase duration and intensity when a steady state has occurred in specific target HR, RPE, etc. (Cardiac Only)
Exercise Prescription Components

- **Mode:**
  - Bike, Treadmill, Elliptical, NuStep

- **Intensity:**
  - How hard (heart rate range, RPE, METs) Intensity targets must be within AACVPR and ACSM published guidelines

- **Duration:**
  - How long; minutes of exercise per session

- **Frequency:**
  - How often, days per week

- **Progression:** What methodology is used to advance patients?
  - “As tolerated” or “as per clinical signs and symptoms” is not acceptable.
  - IE: Goal: Progress activity an average of ½ Met per week

- **Oxygen Saturation and Titration** (Pulmonary Rehab only)
Exercise Prescription

Automatic Denial

- Failure to submit an exercise prescription that addresses the required components in detail.
- Submission of an initial exercise prescription that is not signed and dated for an actual patient in your program.
- Submission of daily exercise session sheets or progress reports.
- Failure to submit an ExRx policy that addresses mode, frequency, duration, intensity and progression in detail.
- Submission of a document outside of the data collection period.
Outcome measurement and process improvement in Cardiac and Pulmonary Rehab programs will enable us to **survive** and **thrive** in the future. **AACVPR** has launched an extensive effort to identify key performance measures, outcomes and appropriate tools for outcome measurement. A thorough review of the tools listed in the Registry, the CR Outcomes Matrix and the PR Outcome Resource Guide is currently underway. Program Certification is working with the Cardiac and Pulmonary Rehab Expert Panels, Quality of Care Committee and nationally recognized clinicians to provide programs with the most appropriate evidenced-based outcome measurement tools. Key information and suggestions will be forthcoming.
Outcome Assessment

Outcome measures are tests to evaluate if a desired end is met. They can be used to evaluate individual patient progress and to determine overall effectiveness of the program.

**Cardiac outcome categories:**
- Clinical
- Behavioral
- Health
- Service

**Pulmonary outcome categories:**
- Functional Status/Exercise Capacity
- Dyspnea Measurement
- Quality of Life
- Service
Clinical
Clinical outcomes measure objective clinical data, such as MET level, BMI, lipid levels, (6) six minute walk results, blood pressure, DEPRESSION, etc.

Behavioral
Behavioral outcomes measure the patient’s ability to make changes in lifestyle: minutes of exercise per week, dietary changes, number of cigarettes smoked per day. DEPRESSION IS NOT a Behavioral Outcome

Health
Health outcome measure changes in health/quality of life status: Quality of Life surveys are typically used. DEPRESSION is NOT a Health Outcome

Service
Service outcomes can measure patient satisfaction, effectiveness of program, access or utilization of services, cost of care
Outcome Assessment
Pulmonary

**Functional Status/Exercise Capacity**
Outcomes measure objective clinical data such as six minute walk test or shuttle walk test.

**Dyspnea Measurement**
Measurement for symptoms of dyspnea and fatigue such as Borg Dyspnea Scale, MMRC Scale, UCSD SOBQ, CRQ, etc.

**Quality of Life**
Quality of Life (QOL) measures changes in health/quality of life status: Quality of Life surveys such as SF-36, Ferrans & Powers – Pulmonary, Dartmouth, etc.

**Service – Page 75 in the Pulmonary Guidelines**
Service outcomes can measure: patient satisfaction, effectiveness of program, access or utilization of services, cost of care.

**See Pulmonary Rehab Outcomes Resource Guide or AACVPR Pulmonary Rehab Guidelines**
Cardiac Outcomes Requirement

- Description of one Clinical, Behavioral, Health and Service outcome.
- Measure an outcome listed on the AACVPR Outcomes Matrix whenever possible.
- Document from the data collection period.
- Description of the assessment tool used.
- Report on a minimum of 30 patients (N). If less than 30 patients completed your program during the data collection period, submit data for 100% of the patients who did complete.
- Pre and Post program score
- Percent change between the pre-and post-program scores.
  \[ \text{Equation} = \frac{\text{Post Score} - \text{Pre Score}}{\text{Pre Score}} \times 100 = \text{Percent Change} \]
- Conclusion, a summary of results of the outcome measurement for the pre-and post program scores.
- Describe your action plan to improve your CR program as a result of the outcome measured and based on the conclusion.
How many patients completed your early outpatient program from 1/1/15 through 12/31/15? 45

Describe one (1) CLINICAL outcome measured in your program 1/1/15 through 12/31/15? BMI

You must report on a minimum of 30 patients. If less than 30 patients completed your program outcomes in your program during January 1, 2015 to December 31, 2015, please provide an explanation below.

45 patients completed the program, 45 patients included in this outcome

Provide the pre-program score collective BMI pre program 33.8

Provide the post-program score collective BMI post program 32.4

Describe the percent change, units of change or change towards goal between the pre- and post-program scores

The percent change was a 4.14% decrease. There was a decrease in BMI by 1.39.

Briefly summarize your conclusions based on the outcome change found

It seems in our program we see a decrease in BMI but it is not a huge individual decrease that we would like to see. We will be able to use this data to help us process improve for the future.

Describe your action plan to improve your program as a result of this Clinical outcome

- Set up more than one meeting with the RD.
- The staff checks weight and process goals weekly that have been set by RD with patient.
- More individual exercise prescription changes for overweight individuals like modified circuit training to increase caloric demand.
- Moving the scale to the check in area so the patient is more accountable to actually weighing than self reporting.
Pulmonary Outcomes Requirement

- Description of one outcome measure for each of the following: Functional Status/Exercise Capacity, Dyspnea Measurement, Quality of Life and Service
- Measure an outcome listed in the Pulmonary Rehab Outcomes Resource Guide. Use the Cardiac Matrix for examples of Service Outcomes
- Document from the data collection period.
- Description of the assessment tool used.
- Report on a minimum of 30 patients (N). If less than 30 patients completed your program during the data collection period, submit data for 100% of the patients who did complete.
- Pre and Post program score.
- Percent change between the pre-and post-program scores.
  \[\text{Equation} = \frac{\text{Post Score} - \text{Pre Score}}{\text{Pre Score}} \times 100 = \text{Percent Change}\]
- Conclusion, a summary of results of the outcome measurement on the pre-and post program scores.
- **Describe your action plan to improve** your PR program as a result of the outcome measured and based on the conclusion.
Describe one (1) QOL outcome measured in your program during 1/1/15 to 12/31/15

**Physical Functioning**

Describe the assessment tool used to measure the QOL outcome

SF-36V2 Health Survey. The patients complete this questionnaire during the first and last exercise session.

Describe the number (N) of patients on which you are reporting data. 35

You must report on a minimum of 30 patients. If less than 30 patients completed your program during the data collection period, and the number listed above is less than 100% of the patients who did complete outcomes in your program during 1/1/15 to 12/31/15, please provide an explanation below.

35 completed program 35 filled out survey

Provide the pre-program score 35.92 points (out of 100)

Provide the post-program score 41.76 points (out of 100)

Describe the percent change, units of change or change towards goal between the pre-and post-program scores. Percent change was + 15.8%.

Briefly summarize your conclusions based on the outcome change found.

The physical functioning score reports patient limits in performing self-care, walking, stair-climbing, lifting, and moderate to vigorous activities.

Describe your action plan to improve your program as a result of this Quality of Life outcome.

- In 2015 our percent change for physical functioning was +9.9%.
- We started to look at more functional training.
- We invested in balance equipment to help improve this skill.
- We also sent employees to work functional assessment class.
- The also looked at the continuum of care outside of Pulmonary Rehab.
Outcomes Assessment

Automatic Denial

- Submission of an outcome measure that does not fall into the appropriate category according to the AACVPR CR Outcomes Matrix or PR Outcomes Resource Guide. (References found on the AACVPR web site)
- Failure to meet sample size requirements.
- Failure to submit any of the required elements.
- Failure to provide evidence of an action plan to improve your program as a result of the outcome measured.
Service Outcome

**Required Elements**

- One **Service** outcome measured in your program during the collection period.
- Description of the assessment tool used.
- Summary of conclusions based on the outcome change found.
- Describe your action plan to improve your program as a result of this CR/PR outcome

**Automatic Denial**

- Service measured not on AACVPR Cardiac Outcomes Matrix or Pulmonary Rehabilitation Outcomes Resource Guide
- Not in collection period
Describe one (1) SERVICE outcome measured in your program during 1/1/15 to 12/31/15. We measure patient satisfaction as it relates to patient care, progress, and likelihood of referring others to our program.

Describe the assessment tool used to measure the Service outcome
We utilize a 10 question survey that rates the patient's experience on a scale from strongly disagree up to strongly agree. Each choice is weighted and the overall average is calculated on a monthly basis.

Briefly summarize your conclusions based on the outcome change found
We have an overall patient satisfaction rate of 92% based on 50 responses. Our lowest scoring question is on How do you feel you will continue your exercise prescription at home.

Describe your action plan to improve your program as a result of this Service outcome
Based on the results, our team has begun to focus a great deal of our coaching time on identifying barriers to exercising at home early on in the program and attempting to develop plans to overcome these barriers long before the completion of the program. We have contacted other facilities to see if we can get a discount for our patients. One of the real big hurdles is financial. We are even looking at expanding our service line to offer a low cost alternative at our facility like a phase IV program.
AACVPR is moving to a more outcomes based application in 2018

- *The Quality Improvement page is designed to prepare you for 2018*
- *This will also help you with improving outcomes in your facility for better patient care.*
Quality Improvement

PDSA  Plan – Do – Study – Act

- Please list one item or area in your program that needed improvement.
- How did you know this item or area needed improvement? (e.g. what data did you base this on?)
- What changes did you make to address this?
- How did you know that your changes did or did not result in improvement? (e.g. what data did you use to determine this?)
- What are your next steps?
**Quality Improvement Examples**

<table>
<thead>
<tr>
<th>Please list one area of your program that needed improvement.</th>
<th>Functional Status tested by the 6 Minute Walk Test at discharge</th>
</tr>
</thead>
<tbody>
<tr>
<td>How did you know this item or area need improvement? (i.e. what data did you base this on?) Our goal is 3.32 METS on our discharge six minute walk test. We want to get our patients to a higher functional capacity and this would be an additional 400 feet of walking to their six minute walk test. Our current discharge rehab score is 2.74 METS.</td>
<td></td>
</tr>
<tr>
<td>What changes did you make to address this? Get clients to walk on treadmill for longer bouts of exercise instead of moving modalities every ten minutes. Try to incorporate a little more specific strength training to target the legs. Check to ensure all staff is administering the test correctly. This should be reassessed annually with their competencies.</td>
<td></td>
</tr>
<tr>
<td>How did you know that your change did or did not result in improvement? (i.e. what data did you use to determine this?) We continue to measure this outcome. In the past 2 quarters since incorporating the changes, our discharge six minute walk test MET level has increased from 2.7 METS to 3.0 METS. We are still below our goal but are improving as a result of the changes made.</td>
<td></td>
</tr>
</tbody>
</table>
| What your next steps? | 1. Reassess exercise prescription every week.  
2. Continue to monitor progress and adjust action plan based on results. |
Please list one area of your program that needed improvement.

**Depression screening**

How did you know this item or area need improvement? (i.e. what data did you base this on?)

We use the Beck Depression Inventory. Our goal is to have a score of < 10 because this relates to the client being relatively stable in levels of depression. Current score for this is 12 on the post exam.

What changes did you make to address this?

- Reassess patient with scores >17 monthly.
- Refer patients with scores >17 to a mental health provider.
- Check on medication adherence of patients daily.
- Consult a mental health professional to educate the staff on the signs/symptoms of depression

How did you know that your change did or did not result in improvement? (i.e. what data did you use to determine this?)

Our post depression scores have decreased to 10, which is very close to our goal.

What your next steps?

1. Continue to monitor progress toward this goal.
2. Continuing education for the staff related to depression.
3. Add a class “Coping with Depression” to our patient education series.
FAQ: What is the difference between the “New” Quality Improvement page and the 4 required Outcomes pages?

- Quality Improvement is not an outcome, it’s a process
- Developed to be a “road map” for programs to make quality improvements and changing processes
- A guide for applying outcome data to improve everyday practices
- Select an area of your program that needs improvement and then record the steps you would implement to improve this area.
- Follow the examples and create your “road map” for change
You must attest that all material and information submitted with this application is true and accurately represents program operations at this facility and would welcome a site visit if randomly selected.

All programs may be randomly selected to either send in current information or to have a site visit.

Programs who successfully remediate their application will likely be asked to send in current information sometime during the 3-year certification period. (e.g. – a current ITP or Exercise Prescription Form)
Submitting Your Program Certification Application

Here you can see a list of any pages that are incomplete. When all pages are complete, the submit button appears.

Don’t forget to click “SUBMIT”!
How Can We Help You Be Successful?

Be determined in achieving your goals...
Questions during the Application Process?

Log on to www.aacvpr.org and visit the Program Certification Application Resource Page

Contact the AACVPR Certification Center at www.certification@aacvpr.org
Phone: 1-312-321-5146, Option 1