Chronic Obstructive Pulmonary Disease

Care Coordination

COPD Introduction

Care Coordination for participants with chronic diseases has the ability to improve clinical outcomes and participant satisfaction with the health care system and facilitate reduction of health care costs.

To be successful, Care Coordination must focus on:

- Establishing an interdisciplinary team
- Developing and implementing individualized care plans
- Coaching and behavior modification to promote participant self-care
- Coordinating care across all health care settings
- Providing for the social support needs of the identified population

These components support the Care Coordination philosophy of integration of clinical treatment guidelines, disease prevention strategies, participant self-care education, and social support services while demonstrating a quantifiable cost savings to the payer.

Clinical Practice Recommendations

Clinical Practice Guidelines are evidence based statements and recommendations written by clinicians and multidisciplinary panels. The COPD Care Coordination Program is constructed around the GOLD Guidelines ***"Global Initiative for Chronic Obstructive Lung Disease: Global Strategy for the Diagnosis, Management and Prevention of Chronic Obstructive Pulmonary Disease"*** and the Milliman COPD Chronic Care Guidelines. The GOLD standards of care serve to increase awareness of COPD among health professionals, health authorities and the public; improve the diagnosis, management and prevention of COPD; and stimulate research related to COPD.

The combination of these guidelines considers not only the physician practice standards of care but also the appropriate clinical components of Care Coordination team interventions to ensure the participant has been properly educated, has appropriate medical and social resources, and is able to self-manage their disease process.

Care Coordination Protocols

The COPD Care Coordination Program includes transitional care interventions after an acute, inpatient stay, program introduction, in-person and written disease specific education, general health reminders, telephonic/in person health coaching and behavior modification, telephonic and/or in person disease assessments with a Care Coordinator, including medication adherence and smoking cessation, and coordination assistance with social/community resources such as financial and transportation needs.

COPD Background

The signs and symptoms of COPD often begin slowly and gradually and consist of progressive dyspnea (often initially with exercise causing the person to think they are just "out of shape"), cough that may be productive or non-productive that may begin sporadically and progresses to a daily cough, and sputum production. COPDs impact on a person's life varies based on symptom severity. Co-morbid health conditions can have a significant impact on the severity of COPD. Co-morbid conditions often seen with COPD include weight loss, skeletal muscle dysfunction, cardiac disorders, osteoporosis, frequent respiratory infections, bone fractures, depression, diabetes, sleep disorders, anemia and glaucoma.

COPD cannot be cured but symptoms can be controlled, and possibly prevented, with appropriate pharmacotherapy. Medications can control symptoms, reduce the frequency and severity of exacerbations, improve health status, and improve exercise tolerance.

Once COPD is diagnosed, severity can be assessed based on spirometry measures, participant symptoms and the presence of co-morbid conditions. GOLD guidelines have defined four stages of COPD:

- **Stage I: Mild COPD**. Symptoms may include the presence of an intermittent cough and sputum production.
- **Stage II: Moderate COPD**. Symptoms include dyspnea on exertion
- **Stage III: Severe COPD**. Greater dyspnea, reduced exercise capacity, repeated exacerbations and quality of life is impacted
- **Stage IV: Very Severe COPD**. Quality of life is extremely impaired and exacerbations can be life threatening.

GOLD also concluded there are four main components to a COPD Management Program:

1. Assessment and monitoring of the disease
2. Reduction of risk factors
3. Manage stable COPD
4. Manage exacerbations

Objectives

The eQHealth COPD program is a comprehensive approach to addressing COPD education, treatment options and self-management within high-risk populations. It focuses on both the participant and family/caregiver's medical and social needs.

- Participant achievement of optimal health through the administration of an HRA and disease specific assessments, self care education, coaching and behavior modification, wellness screenings, in person and telephonic on-going engagement and resolution of barriers to care
- Promote adhernce to recommended drug therapy
- Promote physician understanding of and adherence to the GOLD guidelines
- Reduce variation in physician treatment practices by monitoring and evaluating phyisician prescribed treatment plans against national standards and provider peers
- Provide education and instruction on self care measures related to the management of COPD symptoms including: disease process education, education on risk factors of COPD, medication adherence, adherence to the physician prescribed treatment plan, smoking cessation, diet and exercise management
- Early identification of participants for earlier intervention by Care Coordination staff
- Promote a multidisciplinary approach to care of the high risk population
- Create a strong participant-physician-Care Coordinator relationship
- Demonstrate cost savings related to the integrated Care Coordination program
- Improve participant quality of life

Program Inclusion and Exclusion Criteria

Inclusion Criteria

- One-year continuous eligibility enrollment
- Beneficiaries with age >= 40 years old. Exclude all participants <40 years old
- Must have ***AT LEAST*** one of the following:

  a. One or more inparticipant discharges with a primary or secondary diagnosis codes: 491.XX (EXCLUDING 491.0), 492.XX, and/or 496.XX

  OR

  b. Two or more office/outparticipant visits, encounters or emergency department visits at least 14 days apart with ICD9 codes 491.XX, 492.XX, and/or 496.XX in any position

Exclusion Criteria

- End Stage Renal Disease (585.6)
- Transplants (996*, V42*, 33.6, 37.51-37.54, 37.60, 37.62, 37.63, 37.65, 37.66, 37.68)
- HIV/AIDS (042, 079.53)
- Hemophilia (286*)
- Hospice
- Non-skin cancers with evidence of active treatment (claims for chemotherapy, radiation therapy, etc.) **exclude all *except 173*, 184*, 187*, 198*, 232*, 233*, 216*, 221.2, 238.2, 239.2, 239.5, 236.3, 236.6***

Severity Stratification

Eligible participants will be initially stratified into three severity levels based on claims data. Stratification is re-evaluated each time new clinical information is received, each time there is a Care Coordinator-participant encounter, and/or at least every six months for the entire population.

The severity assigned to a participant determines the type and intensity of interventions that the member will receive as part of Care Coordination.

Severity levels include:

Low Level

- Documentation of the diagnosis of COPD and no inpatient admissions or ED visits within the last 12 months
  OR
- Stage I COPD (based on GOLD definitions. CC will have to determine after assessment)
  OR
- COPD plus the diagnosis of Asthma

Moderate Level

- 1 inpatient hospitalization or ED visit with the diagnosis of COPD (in any position) within the last 12 months
  OR
- Stage II COPD (based on GOLD definitions. CC will have to determine after assessment)
  OR
- COPD exacerbation requiring the use of oral corticosteroids within the last 12 months
  OR
- COPD plus the diagnosis of uncontrolled Asthma

High Level

- More than 1 inpatient hospitalization or ED visit with the diagnosis of COPD (in any position) within the last 12 months
  OR
- Current smoker (analytics to check for any smoking cessation medications in pharmacy claims)
  OR
- Stage III or Stage IV COPD (based on GOLD definitions. CC will have to determine after assessment)
  OR
- Diagnosis of COPD and no evidence of a prescription for any of the following:
  - Any Stage of COPD and no evidence of a prescription for a short-acting beta2 agonists and anticholinergic
  - Stage II-IV COPD and no evidence of a prescription for a long acting beta2 agonist and anticholinergic bronchodilators
  - Stage III and IV COPD and no evidence of a prescription for inhaled glucocorticosteroids in addition to beta2 agonists and anticholinergic bronchodilators

  OR
- At least two of the following risk factors that increase the chance of cardiovascular disease: hypertension, smoking, hyperlipidemia, diagnosis of Obstructive Sleep Disorder

Care Coordination staff will validate the participants' diagnosis of COPD and their agreement to participate in the program. Any participant who does not willing want to participate in the program can opt out at any time.

Medium and high-risk members who are unable to be contacted will receive low level interventions and are reevaluated every six months for updated demographic information.

All enrolled participants are processed through a tool to re-assess claims data every six months for current severity. If the stratification level has changed, related to changes in claims data, the Care Coordinator will be notified of the change, via a system notification alert, and the participant will be reassessed. If there is no change in the stratification, based on the claims data, the Care Coordinator proceeds with the current plan of care.

Participant Interventions

Participant Introductory Call/Visit

All participants will receive either an introductory visit or phone call and educational literature in addition to an informational welcome kit. The Care Coordinators will attempt to reach the participant within ***60 days*** of identification to perform an initial assessment and Quality of Life survey. The program welcome kit will provide the participant with information about the program, the opt-out process, and general COPD education.

If the Care Coordinator is unable to reach the participant by telephone or in person after four attempts (including at least one after normal business hours call), a written notification will be sent to the participant. If the participant does not respond to any attempts at outreach within 30 days, the participant will be transitioned to the low level of the program to receive mailed material.

Participant Follow Up Visits or Calls

All participants enrolled in a program will receive at least one additional visit or phone call in addition to the initial visit/call. Based on the initial visit/call assessment, the member may receive further Care Coordinator interactions at scheduled intervals.

Emergency Situations

In the event a participant is having an emergency while being assessed by the Care Coordinator (either in person or telephonically), the Care Coordinator will instruct a family member to call 911. If a family member is not present, the Care Coordinator will contact Emergency Medical Services while keeping the participant on the phone until emergency responders arrive on the scene. The Care Coordinator will also contact the participant's physician to notify him/her of the situation. If the situation is not life threatening, the Care Coordinator, if a Registered Nurse, may decide, based on their clinical knowledge, if the physician should be notified prior to emergency services. This will be up to the Registered Nurse to use his/her clinical judgment and direct care appropriately.

Care Transition

If a Care Coordination participant is admitted to the hospital for any reason, the Care Coordinator will be notified of the hospitalization. The Care Coordinator will then visit the participant while they are still in the acute setting. If the participant has been hospitalized related to their current, chronic condition, the participants will be re-assigned to a High Severity level of management for at least 1-2months for intensive education, coaching and behavior modification related to self-care measures, medication use and adherence, and follow up.

Participant Education

Education information will be sent to participants when deemed appropriate by the Care Coordinator. In addition, educational wellness and preventive care reminders will be sent to all program participants quarterly.

Some topics of participant education related to the COPD Program include:

- Smoking Cessation
- When to notify physicians
- Medications
- Self-management skills
- Proper use of inhalers/nebulizers/MDIs
- Use of Oxygen therapy
- Pulmonary Rehabilitation
- Activity/Exercise Training and COPD
- Nutritional education related to being underweight
- Strategies to minimize dyspnea

- Complications of COPD
- Coping skills related to having a chronic health condition
- Management of co-morbid conditions
- Irritants that can exacerbate COPD and how to avoid them
- Limiting exposure and/or eliminating exposure to risk factors
- Signs and symptoms of exacerbation and when to report to physician
- Treatment of COPD exacerbations
- Life threatening signs and symptoms and when to go to the Emergency Department

Multidisciplinary Team

A multidisciplinary team of healthcare professionals will collaborate to ensure the participants' needs are met. This is accomplished by addressing clinical, functional, financial, psychosocial, environmental, and support system needs. Team members include, *but are not limited to*, internal physician advisors, community physician advisors, treating physicians, registered nurses, pharmacists, respiratory therapists, and behavior health specialists. Any or all of these team members may participate in case conferences to coordinate care for individuals who require intense management.

Individualized Plan of Care

Every participant enrolled in the program will work collaboratively with the Care Coordinator to develop an individualized plan of care consistent with national guidelines and the physician treatment plan.

James Prochaska noted that in order for behavior change to be successful a person must want to make the change and must be involved in how the change will occur. The Care Coordination system will identify a list of participant problems based on their answers to the assessment tools. The Care Coordinator will review these problems with the participant to prioritize identified problems and discuss possible problem resolutions.

The Care Coordinator will supply the participant with any/all tools they may need to make informed decisions related to their problems and plan of care such as:

- Physician treatment plan
- Disease specific information
- Self-care education
- Community Resource referrals
- Medical equipment

Low, Medium and High Level Interventions

- Care Coordinator access
- Welcome kit
- Nurse visits/calls providing health education, behavior modification and/or health coaching.
    - **High level – At least 10 scheduled calls/visits (*more calls may be completed per the Care Coordinator's assessment*)**
        - Call/Visit Schedule – Initial, then months 1, 2, 3, 4, 5, 6, 8, 10, and 12

  - **Medium level – At least 6 scheduled calls/visits (*more calls may be completed per the Care Coordinator's assessment*)**
    - Call/Visit Schedule – Initial, then months 2, 4, 7, 10, and 12
  - **Low level- At least 2 scheduled calls/visits (*more calls may be completed per the Care Coordinator's assessment*)**
    - Call/Visit schedule- initial and then month 2

- Assessment of the participants social environment and psychosocial support system (either telephonically or through Care Coordinator home visit when indicated)
- Access to community resources to assist with social, family, financial needs
- Access to behavioral health resources to screen for depression and instruction on coping with chronic conditions
- Identification and resolution of gaps in care (wellness visits, physician follow up schedule, recommended follow up testing, medication adherence, etc.)
- Education materials tailored to the participant's primary language and reading level
- Ongoing collaboration with the primary care physician
- Assessment of co-morbidities and development of plan to address any uncontrolled conditions
- Evaluation of medications and medication adherence
- Smoking Cessation assistance
- Weight management
- Symptom journal
- Ongoing reassessment and adjustment of the plan of care
- Annual participant satisfaction survey

Physician Interventions

Local physician involvement is critical to Care Coordination. In order for participants to succeed in managing their chronic illnesses, they must be able to work with a primary care physician. The COPD Care Coordination program involves physicians/providers in the program by:

- Providing current GOLD guidelines through a provider web portal
- Providing current treatment algorithms
- Providing written and/or verbal notification of participant involvement in Care Coordination
- Ongoing communications between the participants's Care Coordinator and the physician to notify the physician of urgent and emergent health issues and assist with participant adherence.
- Access to a participant profile highlighting Care Coordination activities and how the provider ranks in adherence to the standards of care related to that participant
- Practice support tools
- Provider practice profile
- Annual provider satisfaction survey

Program Evaluation

Program outcomes will be measured at least semi-annually. Participant outcome measures will be compared to pre-enrollment baseline data. In addition, participants will be measured against those eligible participants who elected to opt-out of the program.

Clinical Measures

- Participant has a physician prescribed, stepwise treatment plan
- Participant, regardless of Stage of COPD, has been prescribed a short-acting beta2 agonists and anticholinergic
- Participants in Stage II-IV COPD have prescriptions for a long acting beta2 agonist and anticholinergic bronchodilators
- Participants in Stage III and IV COPD have a prescription for inhaled glucocorticosteroids in addition to beta2 agonists and anticholinergic bronchodilators
- Annual influenza vaccination
- Pneumococcal vaccination every five years

Quality of Life Measure

- SF 12

Financial Measures (enrollees compared over time to eligible program participants who chose not to participate*)*

- Admits/thousand (program enrolled participants)
- Days/thousand (program enrolled participants)
- ALOS (program enrolled participants)
- % of total admissions for diagnosis of COPD(program enrolled participants)
- Admits/thousand for the diagnosis of COPD(program participants)
- # COPD enrollees with ER visits
- # of total ER visits for COPD

Program Quality Measures

- Annual participant satisfaction
- Annual provider satisfaction