ACO Impact on Transitions of Care: Witnessing the Improved Value of Re-Engineering Communication at All Points of Care

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Transitions of Care within the ACO/Community Setting

- ER to being an admitted patient
- PCP to specialist/hospitalist
- Acute hospital setting to long-term care (LTC)
- LTC facility to home and back to PCP practice

Common Medical Reasons for Re-Hospitalization

- Heart failure
- Pneumonia
- COPD
- Psychosis
- GI disorders

11,855,702 hospital discharges in 2003-4

30-day re-hospitalization rate 21.1%

Jencks SF, *et al. N Engl J Med* 2009; 360(14): 1418-1428.

Common Surgical Reasons for Re-Hospitalization

- Coronary artery stent
- Hip surgery
- Femur surgery
- Knee surgery
- Vascular surgery
- Major bowel surgery

11,855,702 hospital discharges in 2003-4

30-day re-hospitalization rate 15.6%

Jencks SF, *et al. N Engl J Med* 2009; 360(14): 1418-1428.

Completeness and Accuracy of Discharge Summaries

- Name of hospital attending 25%
- Name of primary care MD 16%
- Main diagnosis 17.5%
- Physical exam findings 10.5%
- Diagnostic test results 38%
- Consultant recommendations 52%
- Discharge medications 21%
- Follow-up plans 14%

Kripalani S, et al. JAMA 2007; 297(8): 831-841.

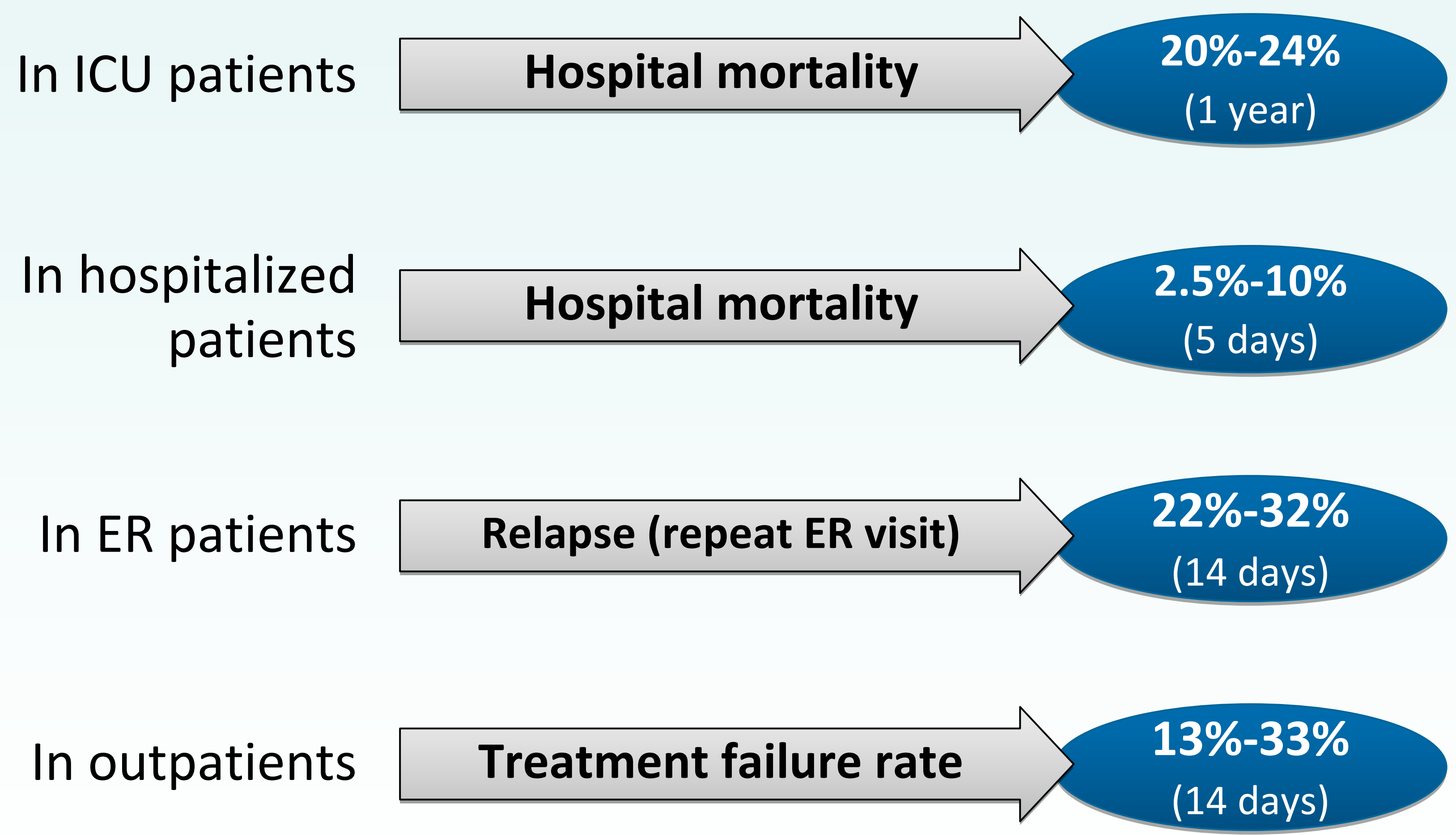
Medication Discrepancies During Transition of Care

- 375 discharged patients >65 years old
- Medication assessments @ 24-48 hours
- 14.1% had ≥1 medication discrepancies
- Those with no medication discrepancies had 6.1% re-hospitalization @ 30 days*
- Those with medication discrepancies had 14.3% re-hospitalization @ 30 days*

*P<0.001

Coleman EA, *et al. Arch Intern Med* 2005; 165(16): 1842-1847.

Mortality Associated with COPD Exacerbations



Seneff et al. *JAMA. 1995*; 274: 1852–1857; Murata et al. *Ann Emerg Med*. 1991; 20: 125–129; Adams et al. *Chest. 2000*; 117: 1345–1352; Patil et al. *Arch Int Med*. 2003; 163:1180–1186

Key Objectives for Improved Transitions of Care

- Identification of tasks/roles within each setting
- Establish a process that elicits responsibility and ownership of care coordination

Pathways for the Care Team

Education on COPD guidelines/protocols and treating/preventing serious sequelae

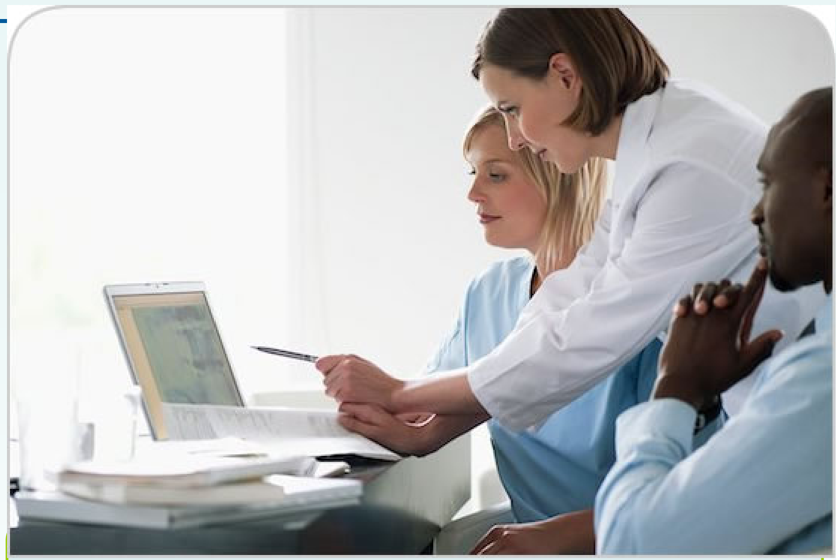
Team Leader

Pharmacists/pharmacies

- Drug information
- Group practice protocols
- Patient education

Community resources

- Nonpharmacologic interventions
- Support
- Other



Office protocols for:

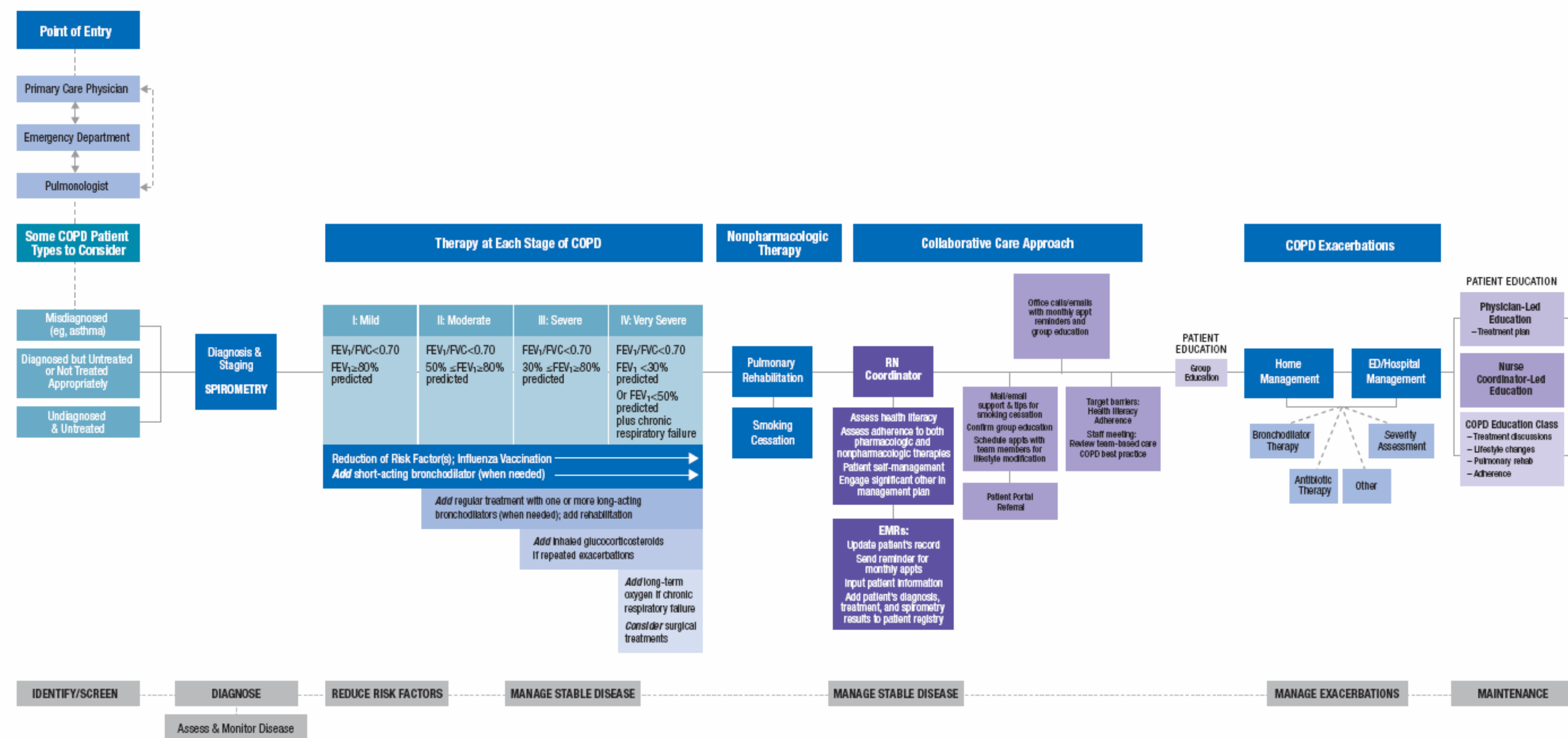
- Recognizing at-risk patients
- Assessing & evaluating patients—consistent use of spirometry
- Diagnosing and staging COPD
- Treat forward philosophy: establish goal for next visit, 3-month visit, etc, and provide means to achieve goals
- A stepwise approach to treatment
- Patient education/self-management info and tools
- Monitoring/adjusting treatment

COPD to Illustrate the Transition of Care Patient Journey Concept

- Identify the specific role(s) of each healthcare provider at each transition of care (Task Grids)
- Develop best practices for transitions of care at each level of care and within each care setting
- Create a Care Plan that travels with the patient and is monitored at each level of care
- Demonstrate how the communication process and tools can be extended to the patients’ support system as well as for care providers

THE PATIENT JOURNEY

The Challenges of Diagnosing and Managing Chronic Obstructive Pulmonary Disease (COPD)



Delineation of therapy is adapted from Global Initiative for Chronic Obstructive Lung Disease. *Global Strategy for the Diagnosis, Management, and Prevention of Chronic Obstructive Pulmonary Disease.* Updated 2009. www.goldcopd.org.

Let’s Begin the Patient Journey With Stan

Stan: 55-year-old white man presents at the office for an assessment

Reason for the Visit	Medical History, Exam, Diagnosis, Treatment Initiation

▪ “Bothersome” cough of at least 4 wks duration
▪ Cough is productive, and patient reports having some trouble breathing
▪ Currently not taking medication to treat symptoms
	• Patient history
	  • 35-year history of smoking
	  • Currently is not taking any medications
	  • Patient reports little breathlessness on exertion
	• Exam/testing/diagnosis
	  • Characterization of cough, timing, color of sputum, etc
	  • Patient history, findings from exam, and spirometry results indicate stage II moderate COPD with partial reversibility
	  • Average of 3 blood pressure measurements (152/98 mm Hg) indicates stage I hypertension
	• Treatment Initiation
	  • Long-acting bronchodilator for management of stage II moderate COPD with partial reversibility
	  • Thiazide diuretic (25 mg qd) for stage I hypertension
	  • Referral to pulmonary rehab
	  • Nonpharmacologic measures

COPD Collaborative Care Checklist

Sample Task List	Physician NP/PA	Nurse (RN/LVN)	Medical Assistant	Respiratory Therapist	Case Manager	Pharmacist	Office Staff	Other
Pre-office Visit								
Contact patient to confirm appointment/ request tests, if needed								
Review EMR/patient data								
Other:								
Office Visit								
Clinical Assessments								
Obtain patient history (previous and/or current symptoms)								
Administer the COPD Population Screener								
Perform spirometry when ≥5 on COPD Poulation Screener								
Determine current COPD stage according to GOLD guidelines								
Conduct physical examination								
Build/Manage Treatment Plan								
"Treat Forward"—set goals and identify means to achieve them								

COPD Collaborative Care Checklist (cont.)

Build/Manage Treatment Plan								
"Treat Forward"—set goals and identify means to achieve them								
Form treatment plan according to guidelines • Medication, dosing, and as needed • Nonpharmacologic (eg, smoking cessation, flu vaccine) • Pulmonary rehab								
Create and sign written action plan								
Regularly assess for adherence to comprehensive patient management								
Update treatment plan regularly; revise as appropriate								
Schedule referrals for education, smoking cessation when applicable, pulmonary rehab when applicable, and other								
Assess COPD management with spirometry and other tools at recommended intervals								
Other:								

COPD Collaborative Care Checklist (cont.)

Patient Education								
Educate patient on disease, therapy, and self-management tasks								
Educate patient on proper inhale technique								
Educate patient on importance of smoking cessation when appropriate								
Educate patient on importance of adhering to full treatment plan								
Assess/evaluate health literacy; address any deficiencies								
Educate patient on how to access and utilize patient portal								
Refer patient to group visit when available								
Other:								
Post-Office Visit								
Patient Follow-up								
Review patient care with case manager								
Schedule next follow-up appointment before patient leaves office								
Input information and therapeutic regimen in EMR and patient portal								

COPD Collaborative Care Checklist (cont.)

Contact patient to assess understanding and knowledge from first visit								
Routinely check on patient self-management								
Routinely assess need for pulmonary rehab when appropriate								
Routinely assess smoking cessation when appropriate								
Routinely assess for barriers/problems								
Routinely assess adherence to full treatment plan using tools such as motivational interviewing								
Address patient questions/concerns								
Other:								
Office Follow-up								
Calls/emails with reminders for appointments, refills, tests, other tasks								
Ongoing team communication								
Regularly update patient portal; add tips/tools								
Regularly update EMR								
Review patient registry to track population progress, best practices, etc								
Other:								

COPD Diagnosis and Management Sample Check List

	Yes?	Comments/Description
Perform detailed review of patient history (confirm with EMR)	✔	
Identify risk factors for COPD	✔	
Conduct office spirometry	✔	
Diagnose and stage	✔	
Evaluate health literacy	✔	
Address cultural issues (if any)	✔	
Identify family/caregiver support (who)	✔	
Collect treatment history Smoking cessation Medications Pulmonary Rehab Diet/exercise Exacerbations (hospitalizations/ ED visits) Other	✔	
Review adherence commitment	✔	
Review written treatment plan	✔	

Stan's 4-Week Visit to the Emergency Department (ED)

Initial Visit

Patient Dashboard

Test	Data
Height/Weight/BMI	5´11"/144 lbs/20.1 kg/m^2 (normal weight)
Average of 3 office BP measurements	152/98 mm Hg
Diagnosis	Stage II moderate COPD Stage I hypertension
Initiation of treatment	Stage II moderate COPD Long-acting bronchodilator Short-acting bronchodilator prn Stage I Hypertension Thiazide diuretic (25 mg qd) for antihypertensive therapy

4-Week ED Visit

Patient Dashboard

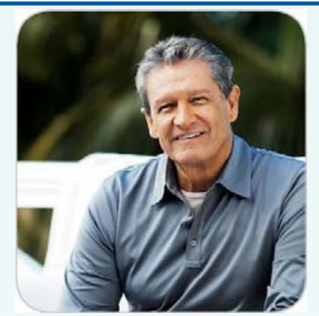
Test	Data
Height/Weight/BMI	5´11"/144 lbs/20.1 kg/m^2 (normal weight)
Average of 3 office BP measurements	139/88 mm Hg
Patient report	Patient presents with chronic, productive cough, similar to initial manifestation of COPD Admits he stopped taking his medication because the cough "went away" Has been taking his antihypertensive medication "religiously"
Treatment	▪ Stage I hypertension: well-controlled on current regimen ▪ COPD: long-acting bronchodilator; short-acting bronchodilator prn ▪ Education on patient adherence and proper use of inhaler ▪ Nonpharmacologic measures (smoking cessation) ▪ Pulmonary rehab

Possible Components of Hospital/ED Care Documentation

- Reason for stay/visit with specific principal diagnosis and important findings
- Description of procedures performed and care, treatment, and services provided to patient
- List of acute medical issues, tests, and studies for which confirmed results were pending at time of discharge and need follow-up
- Complete medication list
- Description of patient's condition at discharge
- Information about consultative services, if appropriate
- Full information provided to patient

Jack BW, et al. *Ann Intern Med.* 2009;150:178-187.

Transitioning Care From the Hospital/ED to the Community



THE PATIENT JOURNEY

Hospital/ED

- Patient education
- Schedule follow-up app'ts
- Emphasize importance of regimen adherence
- Explain purpose of medications, dosing & possible side effects
- Provide verbal and written instructions
- Update EMRs
- Alert community-based provider

Community Care

- Review EMRs and info from hospital/ED
- Address issues before visit, if possible
- Review test results, if available
- At visit, ask patient questions to:
  - Measure comprehension
  - Assess level of adherence, medication tolerability, changes since hospital/ED
- Conduct exam
- Update EMRs
- Follow-up with hospitalist/other providers

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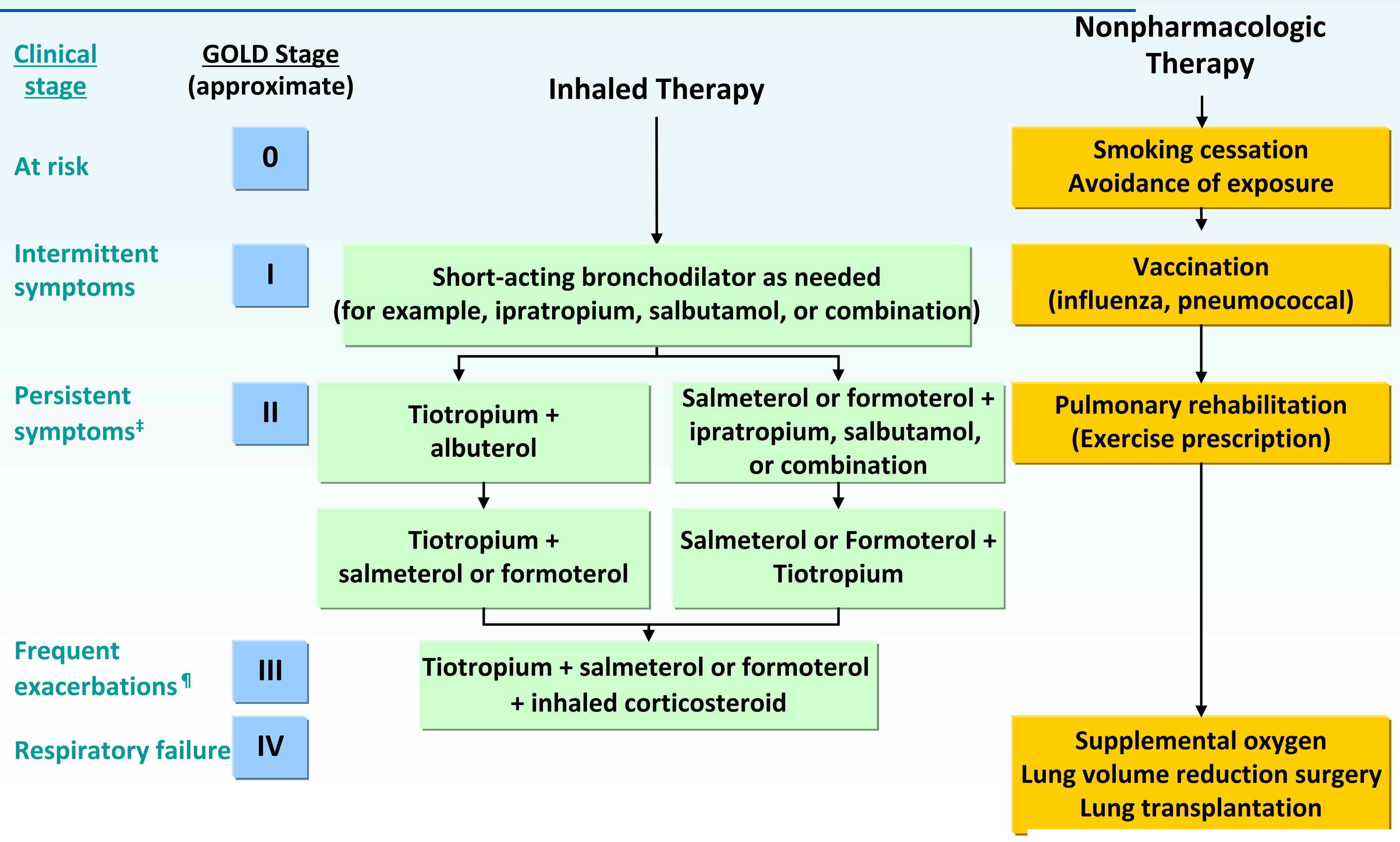
Example of Best Practices for the COPD Patient Journey

- Use of evidence-based medicine through use of GOLD Guidelines
- Earlier identification of COPD with COPD Population Screener
- Accurate diagnosis with use of spirometry
- Collaborative Team-based Care Approach
- Use of provider and patient tools to enhance communication
- Assessment of patient health literacy and education leading to improved adherence

Clinical Algorithm for the Treatment of COPD



Cooper CB, Tashkin DP. *BMJ*. 2005;330;640-644

Effect of Communication Intervention on Re-Hospitalization Rates

Intervention consisted of:

- **Medication self-management**
- **Patient-owned record**
- **Timely follow-up**
- **Action plan for worsening**

Re-Hospitalization	**Intervention (n=379)**	**Control (n=371)**	**P-value**
Within 30 days	8.3%	11.9%	0.048
Within 90 days	16.7%	22.5%	0.040

Coleman EA, *et al. Arch Intern Med* 2006; 166(17): 1822-1828.

Prevent Duplicative Tests from Being Ordered

- Reduces the costs to the patient and their insurer(s)
- Avoids numerous and confusing changes to the care plan
- Deters ordering and filling of unnecessary prescriptions
- Prevents unnecessary side effects
- Avoids unanticipated development of new conditions

Reengineered Hospital Discharge Program (Boston Medical Center)

- 11 components including:
  - Patient education
  - Discharge planning
  - Telephone reinforcement
- 30% reduction in 30-day readmission
- Readmission costs reduced from $268,942 to $412,544

Jack BW, *et al. Ann Intern Med* 2009; 150(3): 178-187.

Thank You