

1 **1 It Ain't Easy Being Wheezy**

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 Pharmacy Grand Rounds
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2 **Objectives**

1. Identify the appropriate stepwise therapy for the management of COPD
2. Describe the patient population that would benefit from the use of a Trelegy Ellipta inhaler
3. Recall patient resources available at Baystate for access to medications

3 **PATIENT CASE**4 **Background**

- TH presented to pharmacotherapy clinic for the assessment and management of her uncontrolled COPD
- HPI: patient has been hospitalized for COPD exacerbations 3 times in the last 6 months

5 **Background**

- Patient problems:
 - CHF
 - COPD
 - Type 2 DM
 - Hyperlipidemia
 - CLBP
 - IBS
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- Allergies:
 - Antihistamines
 - Aspirin
 - Atrovent
 - Benadryl
 - Percocet
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6 **Background**

- Medications:
 - Albuterol HFA
 - DuoNeb
 - Docusate
 - Prednisone
 - Spiriva

- Symbicort
- Ferrous sulfate
- Insulin glargine
- Metformin
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- Vitamin D2
- Lovastatin
- Montelukast
- Omeprazole
- Simethicone
- Tramadol
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7 **CLINIC EVALUATION**

Referred for the management of uncontrolled COPD

8 **ASTHMA VERSUS COPD**

9 **Asthma Versus COPD**

- individual patients present with a spectrum of manifestations of COPD and related processes, so understanding the types of COPD
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11 **COPD**

12 **COPD**

- Nonpharmacologic therapy
- Pharmacologic therapy

13 **Nonpharmacologic therapy**

- Smoking cessation
- Long-term oxygen therapy

14 **Pharmacologic Therapy**

- For patients who continue to have symptoms or repeated exacerbations of COPD despite therapy with a long-acting muscarinic agent (LAMA), a long-acting beta agonist (LABA), plus an inhaled glucocorticoid, potential pharmacologic options include optimizing inhaler therapy, a trial of theophylline, and, in patients with recurrent exacerbation, roflumilast or chronic azithromycin.

15 **Pharmacologic Therapy**

- Optimizing triple inhaler therapy:
 - For patients who have persistent symptoms despite triple inhaler therapy (LAMA, LABA, inhaled glucocorticoid), it is worth reviewing their adherence to therapy and inhaler technique.

16 **Pharmacologic Therapy**

1. Adherence

- 2. Technique
- 3. Medication selection

17 **Adherence**

- Adherence to COPD medication regimens is suboptimal, and lower adherence is associated with more frequent hospitalization and greater overall cost. In an administrative claims database study of 14,117 patients with COPD, the proportion of days covered by prescriptions filled was 41 percent

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18 **Technique**

- Inhaler technique can be challenging, especially as the techniques for using pressurized metered dose inhalers (pMDIs), dry powder inhalers (DPIs), and soft mist inhalers (SMIs) are quite different.

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19 **Medication Adherence**

- Medication optimization should take into account variations in medication delivery based on the patient's ability to use the various inhaler devices. While patients are usually very familiar with pMDIs as they have used them as rescue inhalers, they may have problems with pMDI delivery, especially with hand-breath coordination.

20 **GOLD GUIDELINES**

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22 **GOLD Guidelines**

- Group A: Bronchodilator → Continue, stop or try alternative class of bronchodilator
- Group B: Long-acting bronchodilator (LAMA or LABA) → *persistent symptoms* → LAMA + LABA
- Group C: LAMA → *future exacerbations* → LAMA + LABA
 - Alternative therapy: LAMA → LABA + ICS
- Group D: LAMA + LABA → *future exacerbations/persistent symptoms* → LAMA + LABA + ICS
 - If further exacerbations:
 - Consider macrolide (in former smokers)
 - Consider roflumilast if FEV₁ < 50 % and patient has chronic bronchitis

23 **PATIENT CASE**

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25 **Patient Case**

- COPD hospitalization:
 - 4/2019
 - 3/2019
 - 1/2019

26 **Patient Case**

- 1 mMRC
- 2 • Grade 0 = breathless with strenuous exercise

- Grade 1 = short of breath when hurrying on the level or walking up a slight hill
- Grade 2= walk slower than people of the same age, I have to stop for breath when walking on my own
- Grade 3 = stop for breath after walking about 100 meters or fewer
- Grade 4 = too breathless to leave the house

3 CAT

- 4 • Cough
- Phlegm
- Chest tightness
- Sleep
- energy

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29 **Additional**

- Vaccines

30 **MEDICATION SELECTION**

Failed: LAMA + LABA

Next step: LAMA + LABA + ICS

31 **LAMA + LABA + ICS**

- Trelegy Ellipta 100-62.5-25 mcg
- Fluticasone, umeclidinium and vilanterol
-

32 **Trelegy Ellipta**

- DPI
- Indications:
 - Maintenance treatment of airflow obstruction in patients with COPD, including bronchitis, and to reduce COPD exacerbations in patients with a history of exacerbations
- Dosing:
 - Every 24 hours
- Special instructions
 - Rinse mouth out
 - Take dose as close to 24 hours apart as possible
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33 **Insurance Coverage**

- MassHealth:
 - Covered with a \$ 3.65 copay
- Health New England:
 - Covered with a \$ 30.00 -- \$ 50.00 copay
- Medicare Part D:
 - Covered with a copay based on the patients deductible
 -

34 **PATIENT CASE**35 **Insurance Coverage**

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36 **PATIENT COPAY**

Inhaler covered: \$ 270.95 copay

37 **Patient Counseling**

- Inhaler technique
- Regimen adherence
- Maintenance versus rescue inhaler education
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38 **BAYSTATE PATIENT RESOURCES**39 **Baystate Patient Resources**

- Baystate specialty pharmacy
- Specialty pharmacy liaisons
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40 **PATIENT CASE**41 **Patient Case**

- Increased access to medications:
 - Manufacturer contacted
 - Coupon utilized
 - Savings card applied
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42 **IMPORTANT POINTS**43 **Important Points**

- Test claims for copay information
- Technique assessment
- Continued follow up
- Disease education
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- **Access to medications**

44 **CE Credit**

- Number: 413-200-2444
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- Code: PENFAT