
Pathway Pearls



Optimizing HF/COPD Medication

Pharmacists/Nurse Practitioners share
collaboration strategies and discuss best practice

2018May24

Learning Objectives



- Review recommendations
 - Identify resources providing Best Practice Recommendations
 - Discuss approach to optimizing HF/ COPD medications
 - Share site experiences with medication optimization
 - Identify 2 Pathway Pearls to assist implementation
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Outline



- Recommendations
 - Optimizing HF / COPD Medications
(Mike Johnson, Pharmacist, Medicine Hat Hospital)
 - Group Discussion:
 - How it works in your setting
 - Challenges / solutions
 - Wrap Up
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GOLD 2018 Summary Report: Global Strategy for the Diagnosis, Management and Prevention of COPD



Discharge Criteria: The introduction of care bundles should include education, **optimization of medication**, supervision and correction of inhaler technique, assessment and optimal management of comorbidities, early rehabilitation, telemonitoring and continued patient contact are all been investigated to address these issues (2018, p. 107)

2017 Comprehensive Update of the Canadian Cardiovascular Society Guidelines for the Management of Heart Failure



Principles underpinning the pharmacological management of HFpEF include:

- (1) identification and treatment of underlying etiological factors implicated in the development of HFpEF;
- (2) identification and treatment of comorbid conditions that might exacerbate the HF syndrome;
- (3) control of symptoms; and
- (4) realization of clinically meaningful cardiovascular end points such as HF hospitalization and mortality.....

Presentation



Mike Johnson

- Introduction

Pharmacist

Medicine Hat Regional Hospital

Pathway Pearls: Optimizing HF/COPD Medication

Sample Resources



Calgary COPD & Asthma Program

Alberta Health Services

COPD Medications

1 Taken / Inhaler as needed	My Dose	What it Does	Side Effects*	Comments
Aronix® Bricanyl® Salbutamol Ventolin®		<ul style="list-style-type: none"> Relaxes muscles in the airways Works within minutes when needed Used before activity to prevent attacks 	<ul style="list-style-type: none"> tremor (hands shake) fast heart rate nervousness headache weakness/dizziness sweating 	Keep with you at all times for use <ul style="list-style-type: none"> During lung attacks/flare-ups Episodes of shortness of breath Episodes of difficulty breathing Use spacer with all MDIs*
Tudorza® Seebri® Spiriva® Incruse®		<ul style="list-style-type: none"> Relaxes muscles in the airways 	<ul style="list-style-type: none"> dry mouth/throat constipation trouble urinating headache 	
Serevent® Onbrez® Oxeze® Striverdi®		<ul style="list-style-type: none"> Relaxes muscles in the airways 	<ul style="list-style-type: none"> headache tremor (hands shake) fast heart rate muscle cramps 	<ul style="list-style-type: none"> Avoid getting the powder in your eyes Avoid getting RespiMat mist in your eyes If trouble urinating, stop medication and see your Doctor
Ancoro®			<ul style="list-style-type: none"> dry mouth/throat trouble urinating 	

* 2 medications in one device

Alberta Health Services

Heart Failure Medicines

1 Take / Diuretics "water pills"	My Dose	What it Does	Side Effects*	Comments
Furosemide Other:		Gets rid of extra fluid by making you pass more urine.	<ul style="list-style-type: none"> Dehydration (dizziness, dry mouth, increased thirst) Skin rash, you may get sunburned more easily Gout 	<ul style="list-style-type: none"> Take the last dose before 4 pm to help prevent having to go to the bathroom at night. You'll need to have regular blood tests to check: <ul style="list-style-type: none"> your potassium (to see if it's low) how well your kidneys are working You only need this medicine if you have extra fluid in your body or are prone to holding extra fluid.
Enalapril Perindopril Ramipril Other:		Opens up blood vessels to make it easier for your heart to pump blood to your body. Prevents your heart from getting weaker.	<ul style="list-style-type: none"> Feeling lightheaded Cough 	<ul style="list-style-type: none"> Feeling lightheaded, especially when standing or sitting up suddenly, may be caused by low blood pressure. If it's enough to bother you, talk to your healthcare provider about it. Tell your healthcare provider if you start having a bothersome dry cough after starting this medicine. You'll need to have regular blood tests to check: <ul style="list-style-type: none"> your potassium (to see if it's high) how well your kidneys are working In less than 1 in 100 people, these drugs can cause swelling of the tongue, lips, and throat. If this happens, call 911 or go to the nearest emergency department.

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Affix patient label within this box

Maintenance Inhaler Therapy

Drug	Brand	Available Strengths	Delivery Device	Ordering Dose
Long Acting Muscarinic Antagonists (LAMA)				
tiotropium	Spiriva HandiHaler	18 mcg/dose	DPI	1 puff daily
tiotropium	Spiriva Respimat	2.5 mcg/dose	SMI	2 puffs daily
acclidinium	Tudorza Genuair	400 mcg/dose	DPI	1 puff BID
glycopyrronium	Seebri Breezhaler	50 mcg/dose	DPI	1 puff daily
Long-Acting Beta-Agonists (LABA)				
salmeterol	Serevent Diskus	50 mcg/dose	DPI	1 puff BID
formoterol	Oxeze Turbuhaler	12 mcg/dose	DPI	1 puff BID
indacaterol	Onbrez Breezhaler	75 mcg/dose	DPI	1 puff daily

Combination LAMA/LABA (Restricted use: see criteria 2 or 3)

Heart Failure

CCS 2014 Evidence Based Heart Failure Drugs/Doses† for Patients with Systolic LV Dysfunction

Drug	Start Dose (orally)	Target Dose (orally)
ACE inhibitors		
capTOPRIL	6.25 to 12.5 mg TID	25 to 50 mg TID
enalapril maleate	1.25 to 2.5 mg BID	10 mg BID
lisinopril	2.5 to 5 mg Daily	20 to 35 mg Daily
perindopril	2 to 4 mg Daily	4 to 8 mg Daily
ramipril	1.25 to 2.5 mg BID	5 mg BID
trandolapril	1 to 2 mg Daily	4 mg Daily
Beta-blockers		
bisoPROlol	1.25 mg Daily	10 mg Daily
carVEDilol	3.125 mg BID	25 mg BID††
ARBs		
candesartan	4 mg Daily	32 mg Daily
valsartan	40 mg BID	160 mg BID

Documentation - Optimizing HF & COPD Medication Therapy



Transition to Community Care

Chronic Obstructive Pulmonary Disease (COPD) Transition to Community Care		Affix patient label within this box
Select orders by replacing a (✓) in the associated box For more information, see Clinical Knowledge Topic <i>Chronic Obstructive Pulmonary Disease</i> http://insite.albertahealthservices.ca/13198.asp		
Date (yyyy-Mon-dd)	Time (hh:mm)	
Consultations (For all consultations, utilize the most appropriate/available health care provider(s) at your site to deliver services)		
<input checked="" type="checkbox"/> Ambulate - Early Mobilization (<i>done within 48 hours</i>) <input type="checkbox"/> Dietitian Referral to assess and treat if food intake is poor <input type="checkbox"/> Respiratory Therapy Referral to assess Home Oxygen requirements <input checked="" type="checkbox"/> Pharmacy Consult to optimize respiratory medication therapy <input checked="" type="checkbox"/> Physiotherapy and/or Occupational Therapy Referral to screen for the following as necessary <ul style="list-style-type: none"> ■ Frailty ■ Cognitive status 		

COPD Admission to Discharge Checklist				
Admission Date (yyyy-Mon-dd)			Time (hh:mm)	
Activity	Completed			Initial
Patient Education	Yes	No	N/A	Initial
1. Provide 'Patient Education Resource Package' – Review with patient/caregiver				
a) COPD Medications				
b) Inhaler Technique				
c) COPD: Learning to Breathe Easier				
d) COPD: Avoiding Your Triggers				
e) Pneumococcal / Influenza Vaccines				
f) Tobacco use; assess, provide brief intervention, and tobacco cessation support resources.				
Patient Demonstration				
2. Patient demonstrates adequate inhaler technique				
Prior to Discharge <i>Review results, where relevant, and ensure appropriate follow-up</i>				
3. Early mobilization (<i>done within 48 hours by any discipline</i>)				
4. Review and optimize respiratory medication				

Admission to Discharge Checklist

Pathway Pearls: Optimizing HF/COPD Medication



Participants are encouraged to participate in session talks.

If you would like to email your question, please send to:

hfpathway@ahs.ca
