



OptimalCare for pulmonary

Evidence driven ~ Better outcomes ~ Lower cost

Lung cancer screening

- Not indicated outside the parameters of the National Lung Screening Trial (NLST).¹
- Overall absolute mortality reduction with screening 0.4%.²
- False positive rate of screening exceeds 96%.¹
- Shared decision-making is essential.
- Use Fleischner nodule algorithm for follow-up of nodules detected on screening.³

COPD management and best practices

- Treatment is predominately for symptom control as evidence weak for preservation of lung function.⁴
- Long-acting antimuscarinic agent (LAMA) therapy is superior to long-lasting beta-agonists (LABA) as a single agent.⁵
- ICS use is for the asthmatic subtype or severe COPD with frequent exacerbations.
- Mortality is predicted better by degree of dyspnea than degree of lung function impairment.⁶
- Pulmonary rehabilitation is of benefit in GOLD stages 3 and 4.⁷
- Daytime oxygen is not of benefit with mild to moderate daytime hypoxia.⁸
- Advanced care planning is essential when COPD is advanced.

Pharma management

- Because generic versions of ICS/LABA inhalers are available, branded agents should no longer be used.⁹
- LAMA inhalers and LAMA/LABA combination inhalers are similarly priced.⁹
- Triple inhaler therapy adds approximately \$1,500 to the yearly cost of LAMA/LABA.⁹
- New treatment option for mild persistent asthma – Begin with the use of LABA/ICS combination on an “as needed” basis to reduce ICS use by over 75%.⁴

Pulmonary embolus¹⁰

- 61% of CTA's are inappropriate due to low-risk.
- Use Dichotomized Wells Score and D-dimer for low-risk patients.
- Provoked deep venous thrombosis (DVT) and pulmonary embolus (PE) should be treated for 3 months.
- Consider lifelong therapy in unprovoked DVT/PE.
- Subsegmental PE may not need treatment if no ongoing PE risk.

Obstructive sleep apnea

- Obstructive sleep apnea (OSA) treatment is directed at symptom improvement, data does not support improved CV outcomes with OSA treatment or a clinical benefit if asymptomatic.¹¹
- Home sleep study is preferred over facility study with improved patient acceptance, improved OSA outcomes, and 67% cost reduction.¹²
- Mandibular advancement devices may be helpful up to apnea-hypopnea index (AHI) of 30.¹³
- Auto-titrating CPAP is preferred over facility CPAP titration.¹¹

1. *JAMA Internal Medicine*. 2018;178(3):326. doi:10.1001/jamainternmed.2017.8217
 2. *New England Journal of Medicine*. 2011;365(5):395-409. doi:10.1056/nejmoa1102873
 3. *RadioGraphics*. 2018;38(5):1337-1350. doi: 10.1148/rg.2018180017
 4. *New England Journal of Medicine*. 2018;378(20):1865-1876. doi:10.1056/nejmoa1715274
 5. Papi A, Vestbo J, Fabbri L, et al. Extrafine inhaled triple therapy versus dual bronchodilator therapy in chronic obstructive pulmonary disease (TRIBUTE): a double-blind, parallel
 6. *Chest*. 2002;12(5):1434-1440. doi: 10.1378/chest.121.5.1434
 7. Pocket Guide to COPD, Diagnosis, Management, and Prevention: A guide for Healthcare Professional 2020 Reports. GOLD COPD. https://www.goldcopd.org/wp-content/uploads/2020/03/GOLD-2020-POCKET-GUIDE-ver1.0_FINAL-WMV.pdf. Published 2020. Accessed August 11, 2020.

8. *New England Journal of Medicine*. 2016;375(17):1617-1627. doi:10.1056/nejmoa1604344
 9. COPD Medications. GoodRx. <http://www.goodrx.com/copd/drugs>. Published 2020. Accessed October 1, 2020.
 10. *Thrombosis and Haemostasis*. 2000;83(03):416-420. doi:10.1055/s-0037-1613830
 11. *Jama*. 2020;323(14):1389. doi: 10.1001/jama.2020.3514
 12. *Annals of Internal Medicine*. 2017;166(5):332. doi:10.7326/m16-1301
 13. *The Lancet Respiratory Medicine*. 2019;7(6):533-543. doi:10.1016/s2213-2600(19)30057-8

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