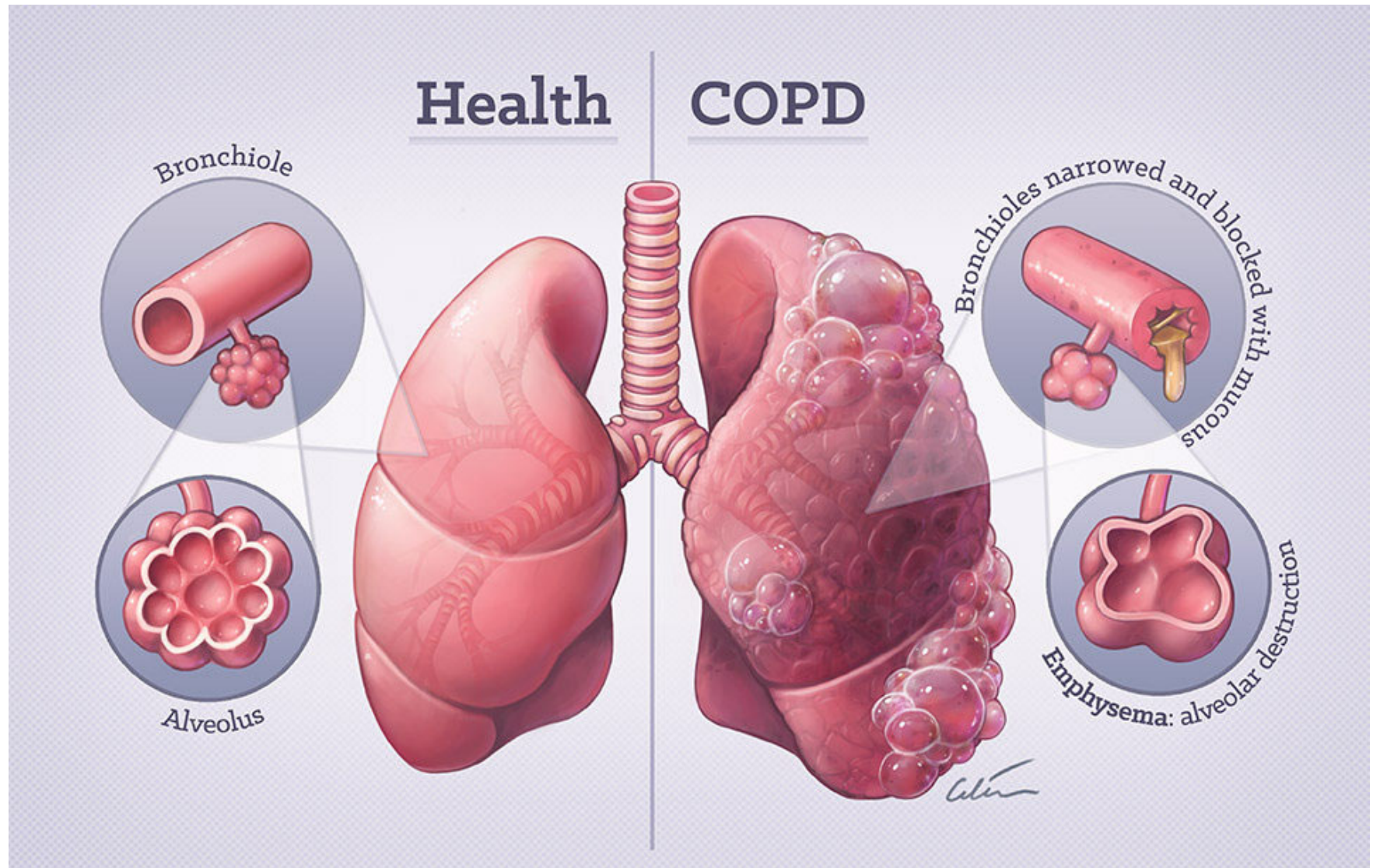


Tackling frequent exacerbations in COPD patients

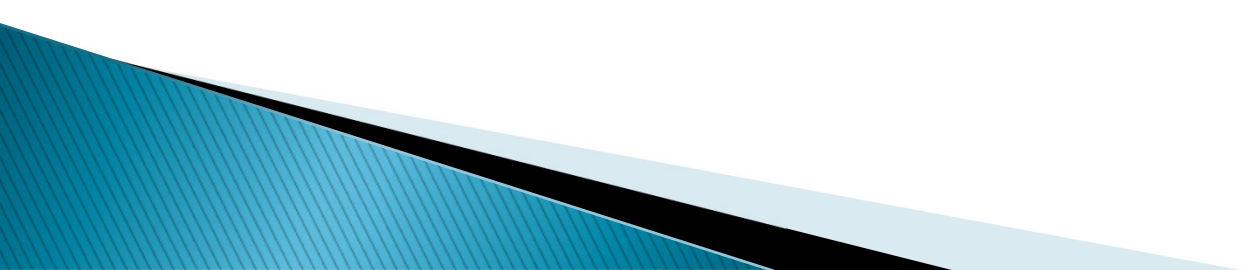
Aneela Tehseen
Clinical Pharmacist

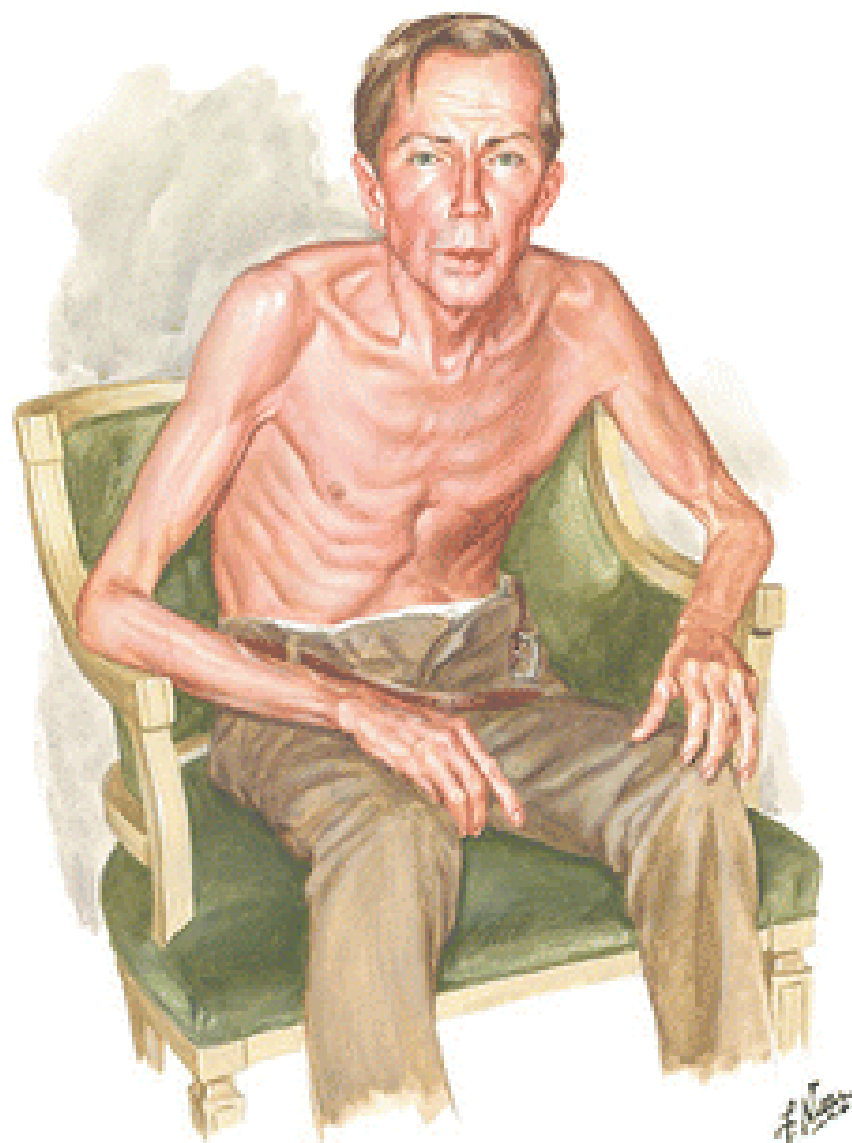
COPD airways vs Normal airways



COPD background

- ▶ Exertional breathlessness
- ▶ Chronic cough
- ▶ Regular sputum production
- ▶ Regular winter bronchitis
- ▶ Wheeze
- ▶ Risk factors (Smoking history, occupational exposure)
- ▶ Age \geq 35Y





Typical therapeutic regime for COPD

- ▶ Beta agonists



Typical therapeutic regime for COPD (continued)

► Muscarinic antagonists



Typical therapeutic regime for COPD (continued)

- ▶ Inhaled Corticosteroids with LABA



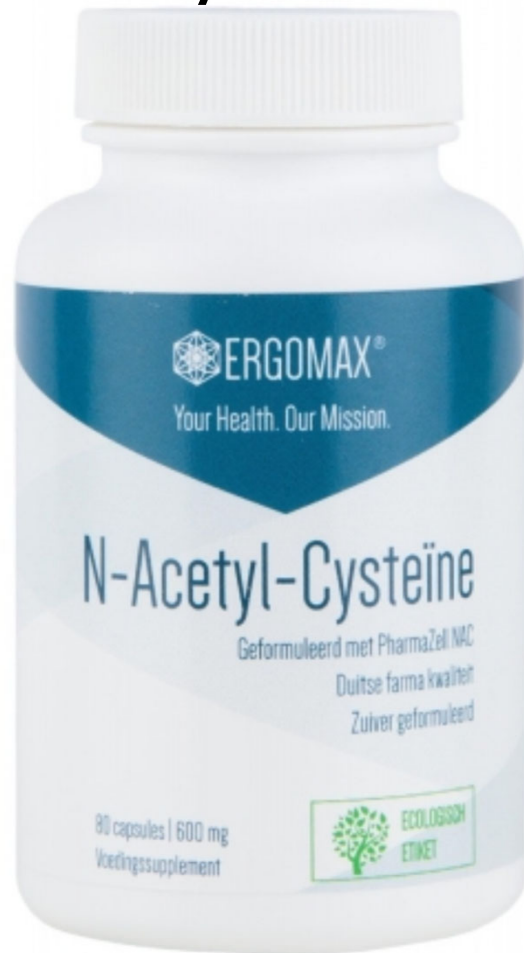
Typical therapeutic regime for COPD (continued)

- ▶ Theophylline
- ▶ Roflumilast



Typical therapeutic regime for COPD (continued)

- ▶ Mucolytics



Typical therapeutic regime for COPD (continued)

- ▶ Azithromycin



Typical therapeutic regime for COPD (continued)

- ▶ Oxygen



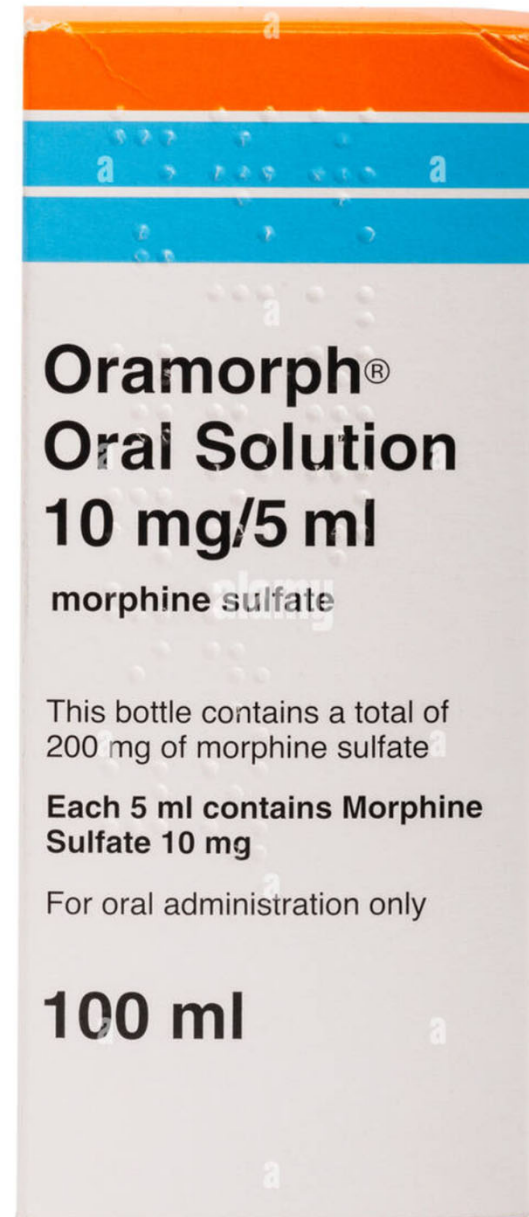
Typical therapeutic regime for COPD (continued)

- ▶ Smoking cessation



Typical therapeutic regime for COPD (continued)

- ▶ Opiates

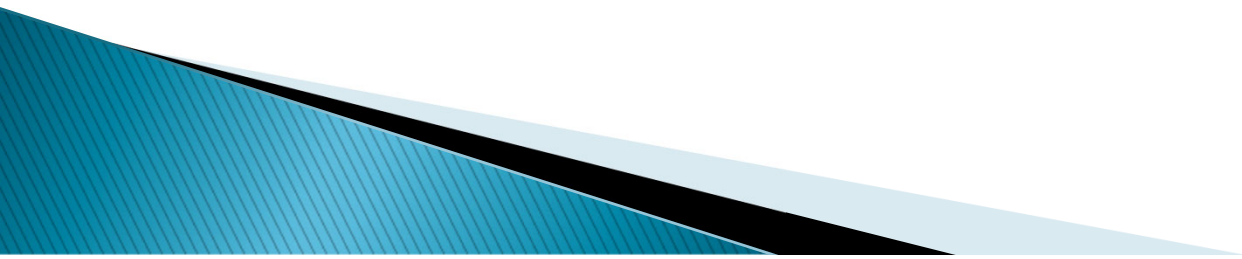


Typical therapeutic regime for COPD (continued)

- ▶ Other therapies

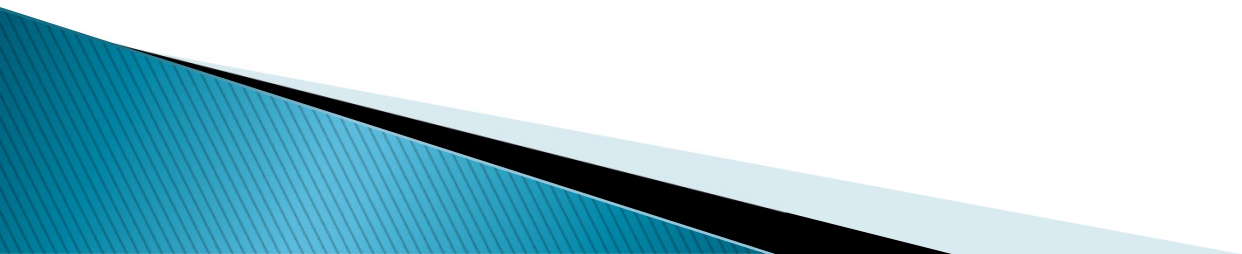


Features of acute exacerbation


- ▶ Worsening breathlessness
 - ▶ Increase in sputum volume
 - ▶ Change in sputum colour
 - ▶ Wheeze
 - ▶ New cough / increased cough
 - ▶ URTI within last 5–10 days
 - ▶ Fever with no obvious reason
- 

What causes an exacerbation?

- ▶ Viral respiratory infection
- ▶ Bacterial respiratory infection
- ▶ Exposure to certain triggers that makes it difficult to breathe (smoke, allergen, air pollution etc)

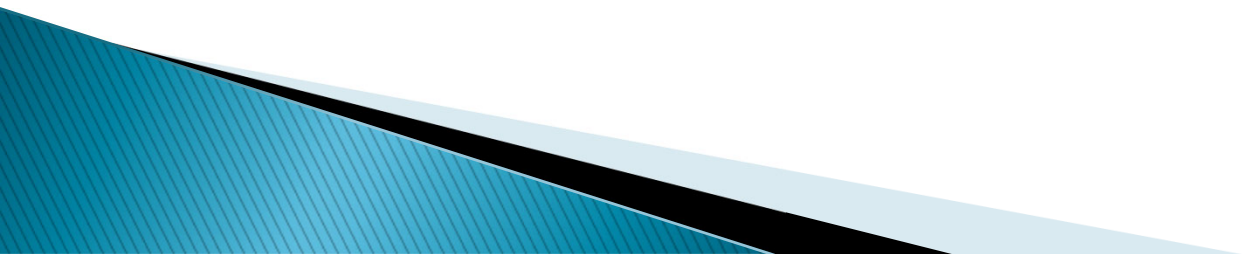


How is an exacerbation assessed and treated?

- ▶ Exclude Sepsis
 - ▶ Exclude need for hospitalisation
 - ▶ Have you considered COVID exposure?
 - ▶ Increase the dose of SABA using a spacer
 - ▶ For increased breathlessness not responding to optimised SABA consider oral steroids
(please consider contraindications too)
 - ▶ Where the exacerbation is accompanied with increased volume and/or change in colour of sputum consider antibiotics
- 

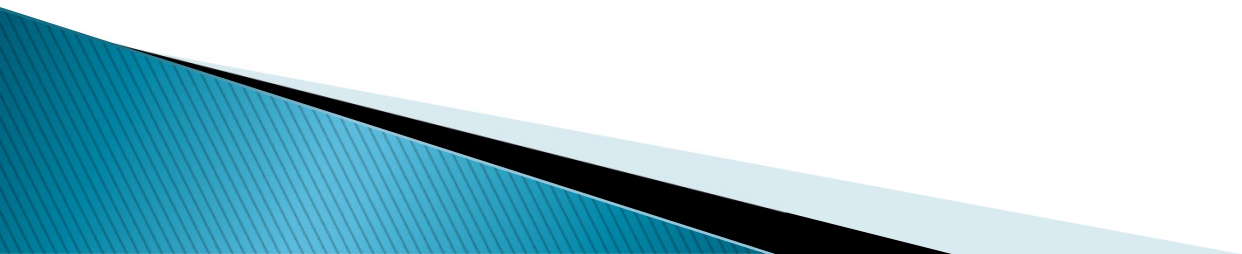
What is a rescue pack?

- ▶ A supply of standby medication that patient keeps at home to use if their condition (COPD) deteriorates.



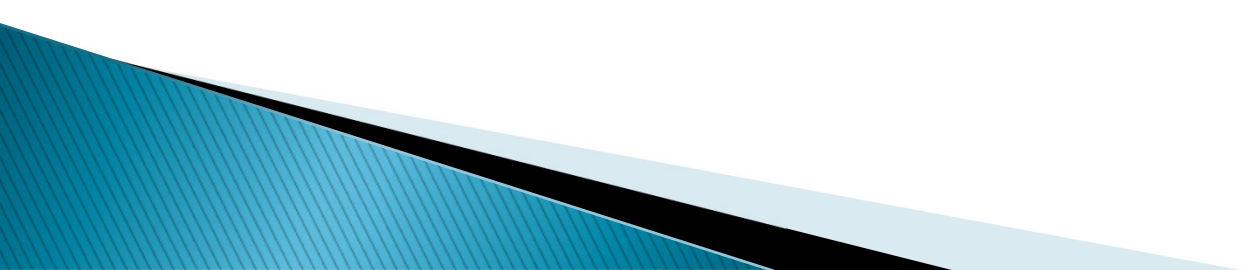
What does COPD rescue pack comprise?

- ▶ A course of Oral steroids tablets
- +
- ▶ A course of antibiotics



Who is suitable for a COPD rescue pack?

- ▶ Patient who has had a minimum of one exacerbation in past 12 months and remains at risk of further exacerbations
- ▶ Patient has had a respiratory disease related hospital admission in past 12 months
- ▶ Patient can demonstrate understanding of identification of COPD exacerbation symptoms.




What else needs to be in place for a rescue pack suitability?

- ▶ Patient must agree to notify GP practice when he/she starts using the rescue pack
- ▶ Patient has personalised self-management plan
- ▶ Patient has appropriate spacer device to use with SABA inhaler

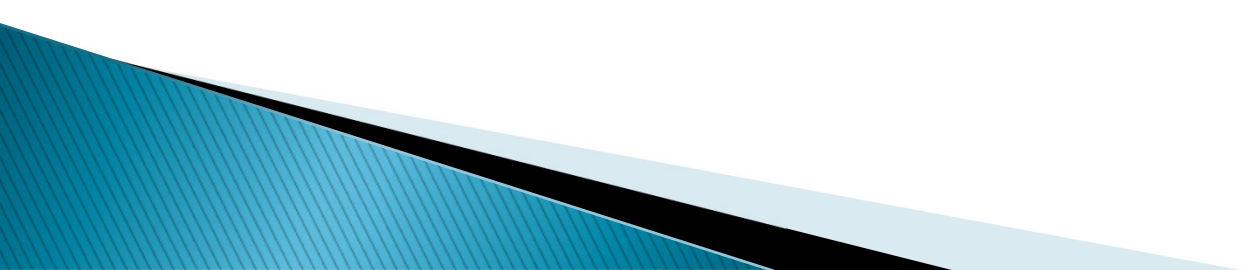


Challenges

- ▶ Patients / carers / Chemist requesting rescue pack too often
 - ▶ Prescribers issuing rescue pack without acknowledging the unsuitable frequency of prescribing
 - ▶ Undesirable and frequent use of oral steroids leading to multiple issues such as osteoporosis, water retention, worsening HF, depression etc.
 - ▶ Undesirable and frequent use of antibiotics giving rise to antimicrobial resistance
- 

Improving COPD exacerbation management!

- ▶ Re-assessment of judicious use of rescue pack
- ▶ Add large volume spacer as variable use repeat item and issue with easy to follow set of instructions on when and how to use during exacerbation



Example of spacer device on patient medication list

Variable use repeat

- N **AeroChamber Plus Flow-Vu Anti-Static with adult large mask (Trudell Medical UK Ltd)** To be used with Ventolin inhaler particularly during a flare-up (when you are experiencing increased breathlessness/wheeziness), 1 device
- O **Prednisolone 5mg tablets** six tablet daily for 5 days, Please consider using this course if you remain breathless or experience wheezing despite using your regular inhalers via the spacer, 30 tablet
Pharmacy Text - COPD: Rescue Pack

Example of Steroid rescue pack on patient medication list

Variable use repeat

- L **Prednisolone 5mg tablets** 6 tablets to be taken as a single dose every morning for 5 days (you may start using this medication if you experience increased breathlessness, cough despite increasing your use of blue inhaler via spacer), 30 tablet
- Pharmacy Text - Please counsel:
- Patient Text - If you have not felt better within 48 hours of using this medication, please contact your Doctor for the same day appointment.

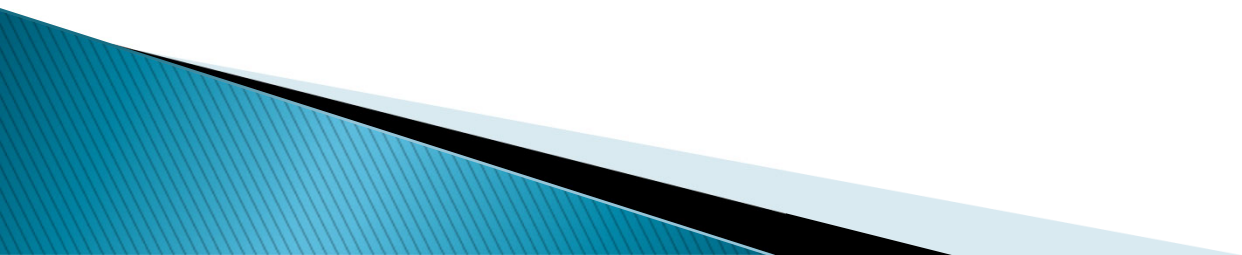
Hospital

Example of antibiotic rescue pack on patient medication list

- O **Amoxicillin 500mg capsules** (Personally Administered) One To Be Taken Three Times A Day, Please consider using this course if you develop more sputum than usual or change in colour of sputum or feel poorly despite having used the steroid course for 2 days already., 15 capsule
Pharmacy Text - This is advised by ARAS team July 2019

Meeting CPD needs of Clinicians

- ▶ Antimicrobial stewardship
- ▶ Variable use repeat Rx
- ▶ Adding, editing and removing Pharmacy/
Patient messages from prescriptions
- ▶ Coding exacerbations appropriately
- ▶ Manually using CPD exacerbation template



COPD exacerbation

Mode of consultation

Telephone encounter

New Section 3

- ☐ Wheezing?
- ☐ Abnormal amount of Sputum?
- ☐ Abnormal colour of sputum?
- ☐ Shortness of breath upon exertion
- ☐ Shortness of breath at rest
- ☐ Cough?
- ☐ Have fever and doesn't know why
- ☐ has had common cold in last 5 days
- ☐ Acute onset of confusion? (warning for RED flag)
- ☐ Has become drowsy ?(warning RED flag)

New Section 4

Please add the number of COPD exacerbations in past 12 months if known

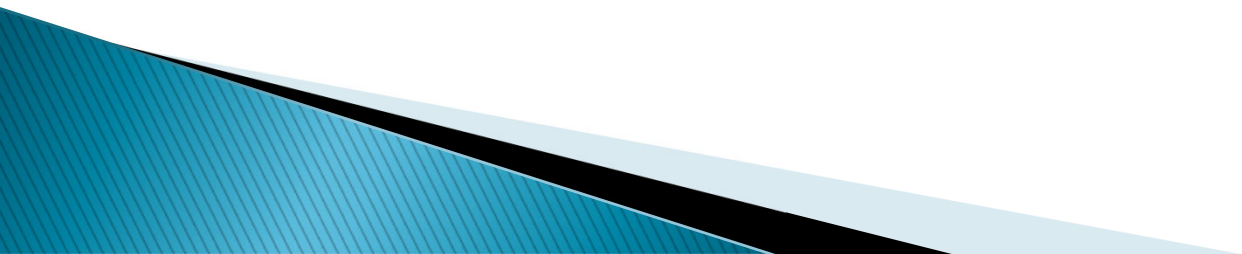
/year

- ☐ Please add number of Hosp admission in past 12 months


Text

Implementation

- ▶ Support MDT via regular communications
- ▶ Request feedback
- ▶ Prepare to be flexible for case by case scenarios as one size does NOT fit all

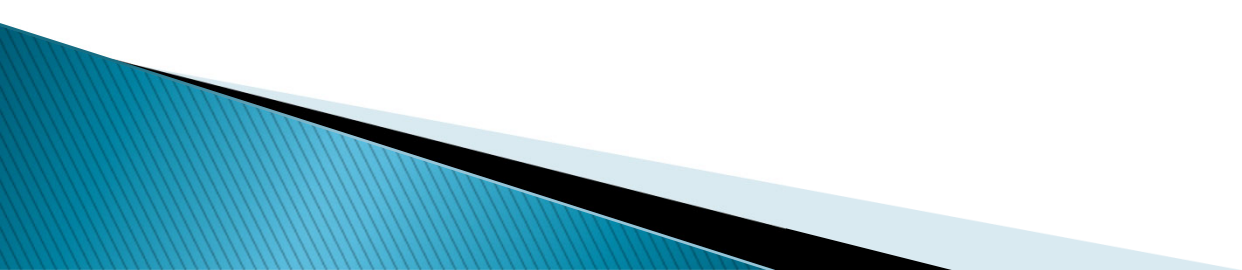


What we should achieve?

- ▶ A better patient understanding of a COPD exacerbation via written and verbal communication
 - ▶ A valuable additional clinical input into patients' care when they exacerbate
 - ▶ An educational intervention via printed message on dosing instruction of spacer, reliever, oral Steroid and Antibiotics.
Therefore, improving patients' knowledge on when, how and why to use each one of them
 - ▶ Reducing antimicrobial resistance
- 

Long COVID and COPD

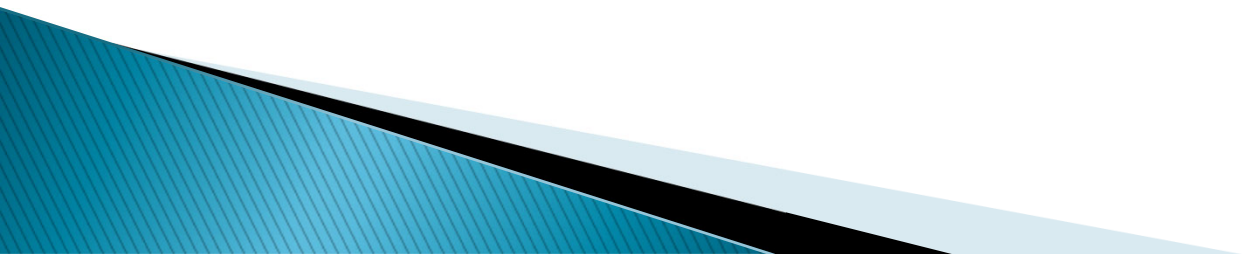
- ▶ Respiratory and Cardiovascular symptoms
 - Breathlessness
 - Cough
 - Chest tightness
 - Chest pain
 - Palpitations



Long COVID and COPD

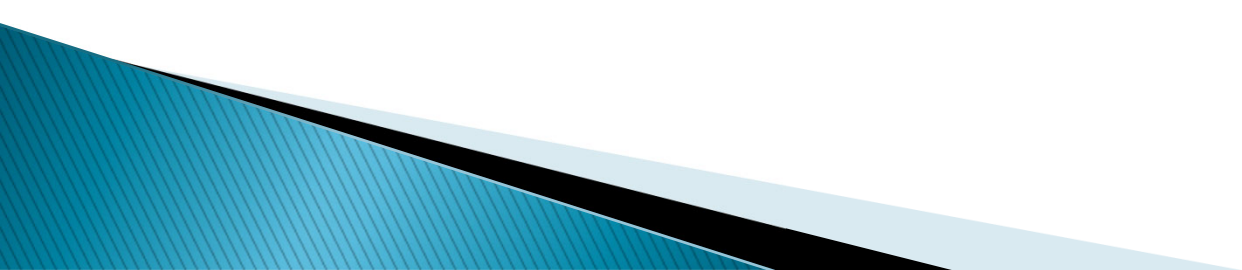
▶ Neurological symptoms

- Brain fog
- Memory loss
- Headaches
- Sleep disturbances
- Dizziness
- Delirium



Long COVID and COPD

- ▶ Musculoskeletal Symptoms
 - Joint and muscle pain
- ▶ Psychological symptoms
 - Depression
 - Anxiety
- ▶ Skin symptoms
 - Rashes



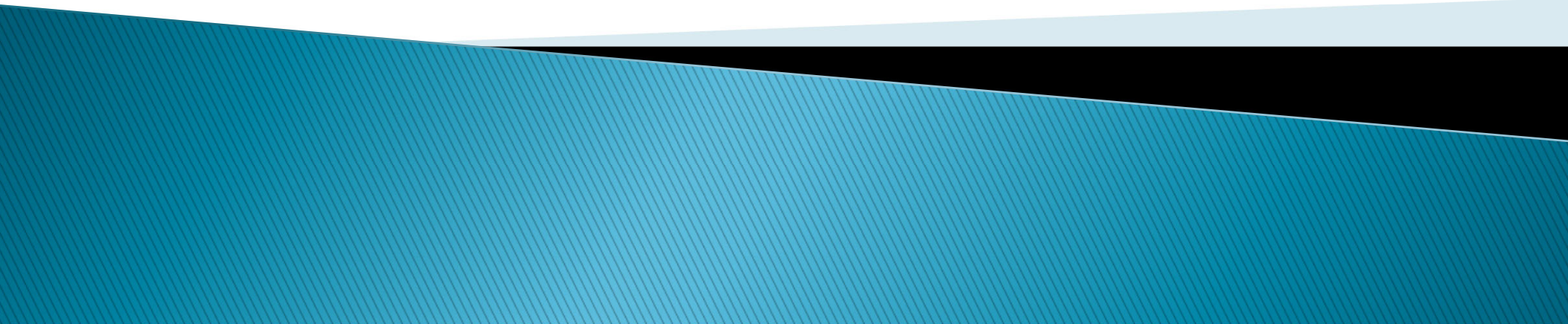
Long COVID and COPD

- ▶ ENT symptoms
 - Tinnitus
 - Loss of appetite
 - Earache
- ▶ Generalised symptoms
 - Fatigue
 - Pain
 - Fever



Managing Lung problems

In COPD patients with Long COVID



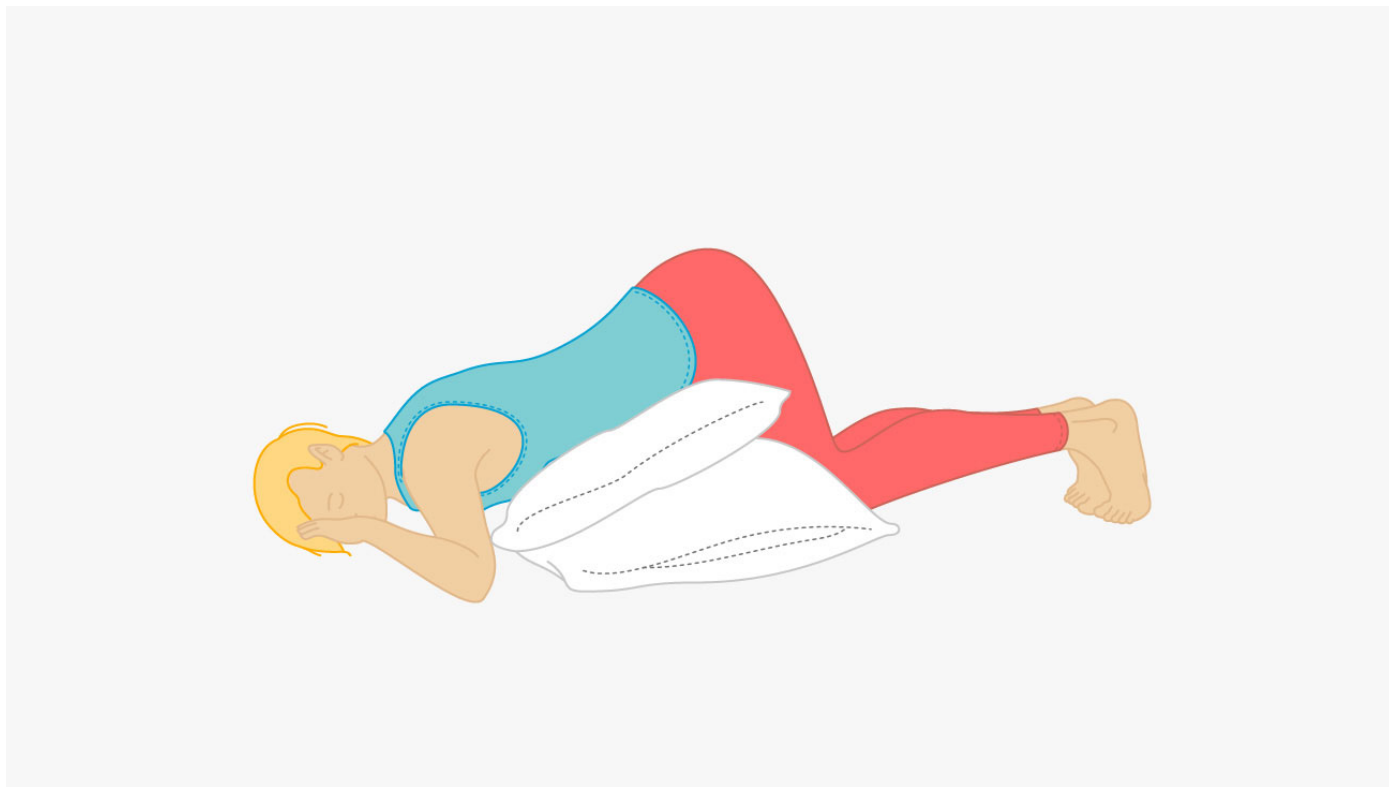
Mucous on lungs

Controlled coughing



Mucous on lungs

- ▶ Postural drainage



Mucous on lungs

- ▶ Postural drainage



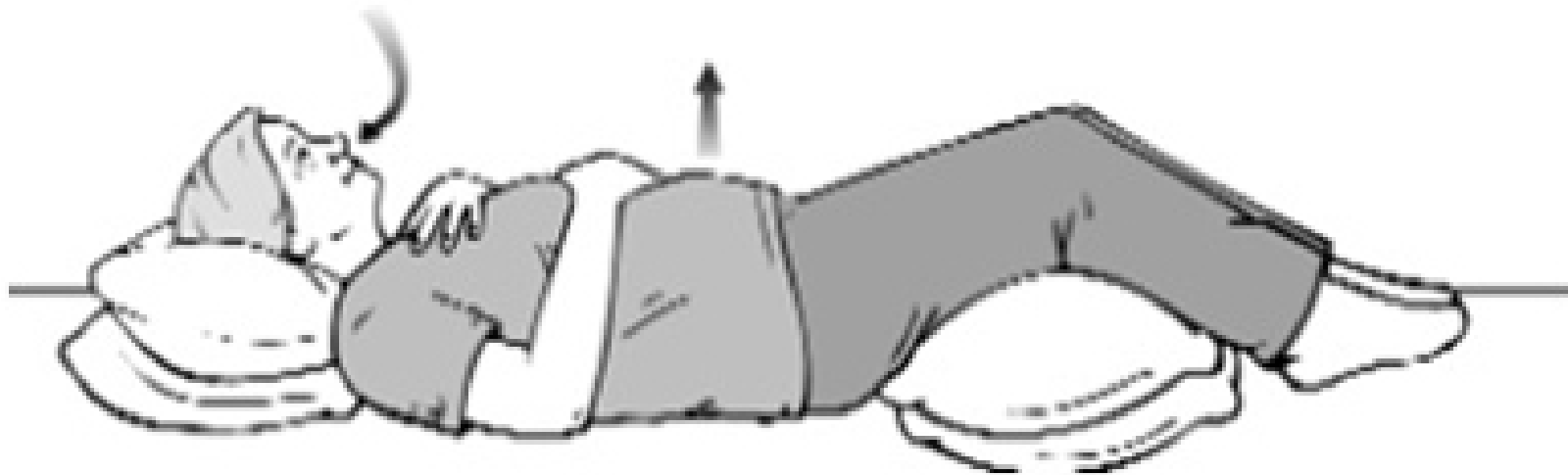
Mucous on lungs

- ▶ Chest percussion



Breathlessness

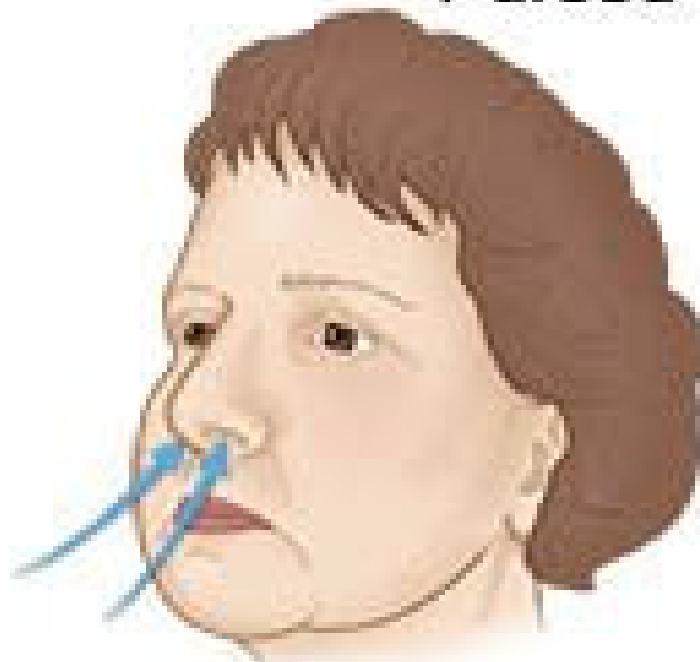
- ▶ Diaphragmatic breathing



Breathlessness

- ▶ Pursed lip breathing

Pursed Lip Breathing



Breathe in



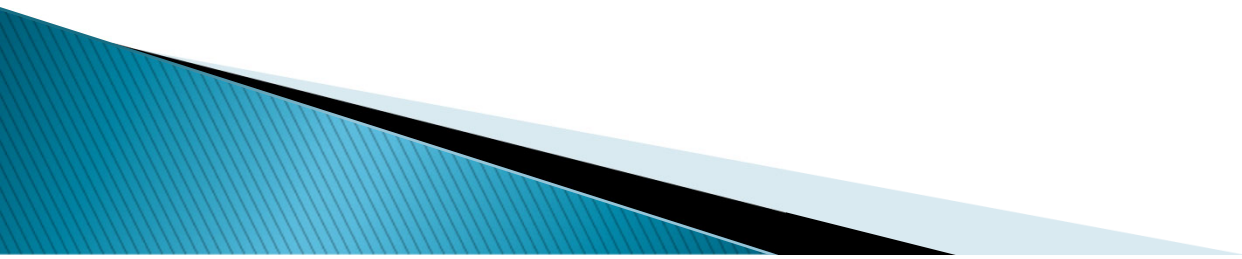
Breathe out

Equipment

- ▶ Flow rate
- ▶ Number of hours
- ▶ Equipment type



Advice on long COVID for COPD patients / Clinicians

- ▶ Continue inhaled therapies
 - ▶ Continue oral therapies
 - ▶ Follow self management plan for exacerbations
 - ▶ Do not offer rescue packs who are not clinically indicated to receive rescue packs otherwise
 - ▶ Do not start the rescue pack for a known viral illness (fever, dry cough, myalgia)
 - ▶ **STOP** smoking
 - ▶ Clear airways
 - ▶ Breathing exercises
- 

Any Questions?

