

Chronic Obstructive Pulmonary Disease (COPD) clinical management including trigger for rescue medication – protocol WM-AHSN-05a – with SATS question

Purpose

- To help patient understand how to manage their COPD, noting changes in SATS, temp & sputum colour; initiating rescue medication as appropriate.
- To support the shared management plan patient agreed with the GP practice team, empowering the patient to self-titrate medication, self care.
- To prevent deterioration of COPD and thus reduce avoidable admission to hospital or attendance at A&E.
- To improve compliance with use of inhalers.
- To help the patient adopt a healthier lifestyle – encouraging exercise, eating sensibly, maintaining a happy mood, taking care in adverse weather, etc.

NB The information provided by the measurement of Oxygen saturation levels enables the nurse or doctor to manage the long term condition better. The readings are for information, and do not by themselves trigger actions to be taken by the patient. Management is based on NICE guidelines.

Setting:

general practice or community setting if clinician takes responsibility

Selection of patients

Patient is on practice COPD disease register, diagnosed via spirometry, on regular medication; clinician feels clinical management might be improved and patient given more autonomy. They have one or more of following symptoms or behaviours:

- excessive use of inhalers
- breathlessness on exertion
- one or more exacerbations of COPD in last 12 months
- attended practice frequently in previous year for respiratory reasons, having been prescribed two or more courses of antibiotics
- been admitted to hospital with exacerbation of COPD in previous year
- attended A&E, walk in centre, out of hours service (OOHs) with exacerbation of COPD/chest infection – in previous 12 months

Expected outcomes:

- 1 Changes in healthcare usage:
 - Fewer avoidable admissions to hospital or attendances at A&E
 - Frequency and timing of rescue medication – initiated earlier when early signs of deterioration
- 2 Improved clinical outcomes:
 - Less breathless on exertion

Success criteria

50% of patients start rescue medication appropriately, in line with self management plan

Protocol summary (ongoing or 6 months over winter period):

- Patient issued with pulse oximeter, thermometer, and rescue medication
- The patient agrees a shared management plan and given copy
- Daily, the patient receives text messages asking about their sputum colour and SATS and temperature (as appropriate)
- Weekly automated information message giving general health and lifestyle advice.
- Monthly text enquiry of patient experience starting at baseline
- Message reminding them to make an appointment for their flu vaccination on 25th September

Daily Sputum reading

10:00am: *What colour is your sputum today? Reply: SPUTUM and the number of the colour. Thanks, Flo.*

2 hours later if the patient has not replied to the first message: *Hi, You haven't told us what colour your sputum is today. Please reply SPUTUM and the number of the colour. Thanks, Flo.*

Within range 1 - 2:

That's good, remember to keep warm and drink plenty.

Colour 3 :

Increase your inhaler to the maximum dose for 2 days.

Colour 4 - 5:

Carry on using your inhalers as prescribed and if you are feeling unwell please reply with your temperature. TP and temperature e.g.: TP 37.2.

If they respond with a temperature reading:

Temperature <36.0: *Your body temperature is very low. Wrap up warm with layers of clothes, and call the surgery to discuss this temperature reading with the nurse*

Temperature 36.1- 37.4: *That's good, increase your blue inhaler to the maximum dose for 2 days.*

Temperature ≥ 37.5 : *Are you more short of breath than usual? Please reply BR1 if you are more short of breath, or BR2 if you are not.*

Response BR1: *If this is typical of how your COPD gets worse, take your rescue medication today & increase inhaler to max dose for 2 days. Ask nurse within 2 days for advice.*

Response BR2: *If you're tired or more short of breath later today take your rescue medication & increase inhaler to max dose for 2 days. Ask nurse within 2 days for advice.*

Blood oxygen reading

Daily at 10:30: *What is your oxygen level today? Please reply: OX and then the number on the reading. e.g. OX 95 Thanks, Flo.*

Reminder at 14:00: *You haven't yet told us what your oxygen level is today. Please reply: OX and then the number on the reading. e.g. OX 95 Thanks, Flo.*

Reading ≥ 93 *Your oxygen level is normal, have a good day. Flo*

Reading <93 *That's a lower level today, make sure you take plenty of rest. Take care, Flo*

**Weekly information
messages**

Try to avoid smoky places; ask people around you not to smoke. Take care, Flo Relax and avoid caffeine before bedtime to help you sleep better.

Doing easy swinging exercises with your shoulders improves your flexibility and helps your breathing too. Take care, Flo

Eat more fruit and vegetables to maintain your health. Take care, Flo

Plan the activity you can manage each day. Increase that each week. If too much, cut back. Drink plenty of fluids - at least 8 glasses of fluid a day. Take care, Flo

Stop and rest when you need to, don't get over-tired.

Take 30 minutes rest after meals throughout the day. Take care, Flo

Practise deep breathing- rest your elbows on the arms of your chair to prevent your shoulders lifting. Take care, Flo

If it's too far to walk to the shops and back, take a bus or taxi one way. Take care, Flo Only do one thing at a time to keep your breathing steady.

Breathing uses energy, so good nutrition is very important. Eating healthy foods will help you fight off infections.

To keep fit stand up from sitting without using your hands; do it ten times.

Have regular quiet periods every day as relaxation helps your breathing.

If you feel a bit stuck at home it'd be good to find a new interest.

Daily short walks are really good for your lungs.

Keep the air in your house at a constant temperature to help your lungs.

Cover your nose and mouth with a scarf to help your breathing on a cold or windy day. Why not try a different hobby – one that gives you some more exercise?

Plan ahead to space out tasks so you don't get over-tired.

Stay away from people who have colds, so you don't catch it too.

Doing activity which gets you breathing a little quicker helps to keep your lungs as healthy as possible – but have a rest if you need one

If it's too cold to go outside for a walk, walk around inside your house for 15-20 minutes regularly. Phone a friend – it's easy to get isolated when you're less mobile.

Walking improves your circulation. If you're short of breath - set a target distance and walk a bit further each day.

If you can swim, try to do that twice a week.

It's good to cough and clear your lungs so don't take cough medicines to stop you coughing.

Flu vaccination reminder

25th September 13:00

Hi. Don't forget to make an appointment for your annual flu vaccination. It's important to have this protection. Take care, Flo.

Patient experience questions

BASELINE (xEvalQ-01/-02 & DIARY -06)

How often have you needed to see your doctor in the last month because of your chest? Please text CC, followed by the number of times, eg CC3 Thanks, Flo.

Do you think that you have good breathing control? Reply CC1 for yes; CC2 for no; CC3 for unsure. Thanks, Flo.

Do you think Flo will help your breathing control? Please reply CC1 if yes, CC2 if no, or CC3 if unsure. Thanks, Flo.

Thank you

END OF MONTHS 1, 2, 3, 4, 5, 6 (xEVALQ 04,06,08,10, DIARY 08,10)

How often have you needed to see your doctor in the last month because of your chest? Please text CC, followed by the number of times, eg CC3 Thanks, Flo.

Has Flo helped your breathing control? Please reply CC1 if yes, CC2 if no, or CC3 if unsure. Thanks, Flo.

Thank you. This information helps us to know how useful the Flo system is.