East Suffolk and North Essex NHS Foundation Trust

Respiratory Update During COVID

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To be covered

- Spirometry (20-25mins)
- Post COVID complications and follow up (5-10mins)
- How chest clinic is running at present (5mins)
  - Lung cancer
  - Sleep apnoea
  - Other conditions.
- Questions via Chat (plenty of time)

Spirometry

- Infection control implications
  - Should we be doing spirometry at this time?
  - Is it an AGP?
  - Does it matter if AGP?
  - What is secondary care doing?
- What should primary care be doing?
  - Indications for test in current environment
  - Alternatives for diagnosis asthma and COPD?
- How can we perform it safely?
  - ? Need for a diagnostic hub

Should we be doing spirometry?

- Pro:
  - Diagnostic test for breathless patients
    - Avoid inappropriate treatments
    - Avoid wrong diagnosis
  - Monitoring patients with known lung disease
    - National guidelines
  - Assess fitness for surgery

Should we be doing spirometry?

- Con:
  - Patient group may be shielding
    - Will patients attend for a test?
  - Potential for spread of infection
    - droplets vs aerosol
    - Risk to staff and patients
  - Will it change management?
  - Do we have previous results?

Does it matter if AGP?

- Yes
  - Different PPE
    - Surgical mask, gloves, apron, visor
    - FFP3, gown, gloves, visor
  - Time between tests
    - wipe down
    - Allow aerosol to settle (1 hour) depending on air changes

Is Spirometry an AGP?

- PHE list of AGPs
- New and Emerging Virus Threats advisory Group NERVTAG

NHS National Services Scotland

Assessing the evidence base for medical procedures which create a higher risk of respiratory infection transmission from patient to healthcare worker

Version Final. 12th May, 2020.

  - Spirometry not mentioned as AGP
  - But Induction of sputum using nebulised saline is AGP.

Professional Bodies

- ARTP guidelines 18/3/20, 9/4/20
  - No comment
- "COVID 19 Infection control issues for lung function" by ARTP. End April 2020
  - No irrefutable evidence
  - "suggest that Lung Function departments **discuss this issue with their local Infection Prevention Control teams"**

- ERS guideline 4/5/20
  - AGP
- ARTP/BTS guideline 26/5/20
  - Likely to be AGP
  - Should be treated as such
  - Suggests diagnostic hubs are set up

The nub of the matter!

- Filter catches virus from forced manoeuvre of doing test.
- But spirometry causes patient to cough.
- Is coughing : Aerosol generating or droplet producing
  - There is no irrefutable evidence.
  - Stop press: WHO considering recent papers

If cough is aerosol generating:

- Then we should wear FFP3 and gown seeing all patients with suspected COVID and cough.

If cough is not aerosol generating

- Spirometry should be undertaken in same PPE as when seeing coughing patients with suspected COVID.
  - Gloves, surgical mask, visor, apron
- Spirometry on well patients likely to be safer than being on COVID ward.
  - But asymptomatic cases.
  - COVID in community currently low

What is secondary care doing?

- Addenbrookes
  - Not AGP
- Papworth
  - Not AGP
- West Suffolk
  - Not AGP
- Norfolk and Norwich
  - AGP
- ESNEFT
  - Not AGP

What is secondary care doing?

- Capacity for testing is less than before
  - Infection control and cleaning
- We are only bring patients to hospital when absolutely necessary
  - Shielding
  - Social distancing
- Only do tests that will change management
- Don’t repeat test if recent one at hospital or on System1

What should Primary care be doing?

- PCRS Position statement 1/6/20
  - Spirometry has potential to increase risk of transmission of viral infections through droplet or aerosol formation

PCRS Position statement 1/6/20

- Asthma
  - History, examination, symptoms
  - Trial of treatment
  - Peak flow monitoring.
  - ?Train on PEFR via video at home

PCRS

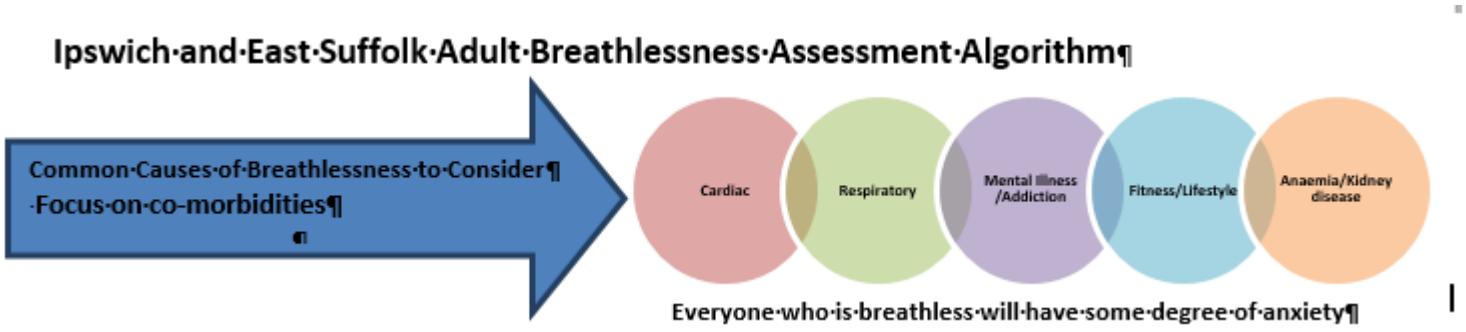
- Suspected COPD
  - "PEFR<75% predicted suggests a degree of airflow obstruction"
  - "If PEFR remains low and does not vary despite salbutamol this is suspicious for COPD **in the context of a supporting clinical history.**"
  - "Confirmatory spirometry should be carried out at a later date."
- JMD
  - If patient not improving as expected revisit diagnosis and arrange spirometry for diagnosis sooner rather than later.

Causes of PEFR persistently <70%

- COPD
- Uncontrolled asthma
- Obesity
- Pulmonary fibrosis
- Pneumonectomy/ lobectomy
- Neuromuscular problem
- Chest wall deformity/ scoliosis

Indications for spirometry in primary care

- Not for routine follow up of patients with known COPD
- Use breathlessness pathway to exclude other causes of breathless first



- Only for diagnosis of COPD
  - after infection control policy agreed (September)

Diagnostic hubs

- “PCRS was already recommending a network based approach to respiratory diagnosis in people with chronic respiratory symptoms to improve:
  - Patient experience
  - Safety
  - Effectiveness”
- CCG are investigating this route

How does IHT perform Spirometry “safely”?

- Before procedure: check patient has no symptoms of COVID or contacts
- Staff should wear, apron, surgical facemask, visor, gloves.
- During procedure: use mouth piece with bacterial viral filter such as “spiroguard”
  - This protects the equipment and the patient.

After each spirometry test

- Wipe down everything touched by the patient or their breath (within 2m of patient)
- Use clenil universal wipe, acticlor solution or similar.
- Wash hands and change personal PPE
- There should be at least 5 mins between patients
  - cleaning room etc likely to take longer than this.

At end of session.

- Follow manufacturer's instructions for cleaning of equipment.
  - This will include clean in soapy water.
  - Rinse in clean water.
  - Then soak in recommended solution following manufactures' advice. This is different for each device as is the length of time:

Post COVID complications

- NHSE document 5/6/20
- Nationally >95,000 inpatients
- Ipswich 232 inpatients
  - Respiratory (ILD, PE, Tracheostomy, pneumothorax, bronchiectasis, chronic cough,)
  - Cardiology (MI)
  - Urology / Renal (AKI and catheters)
  - Neuromuscular (deconditioning)

- Endocrine (diabetics)
- General function and wellbeing (nutrition, pressure ulcers, fatigue, Communication)
- Mental health (delirium, cognitive impairment, PTSD, insomnia)
- Social (impaired ADL)

Follow up of inpatients

- Therapy teams
- Critical care follow up clinic
- CXR
- Rehabilitation
- Onward referral to appropriate services

Chest clinic during peak

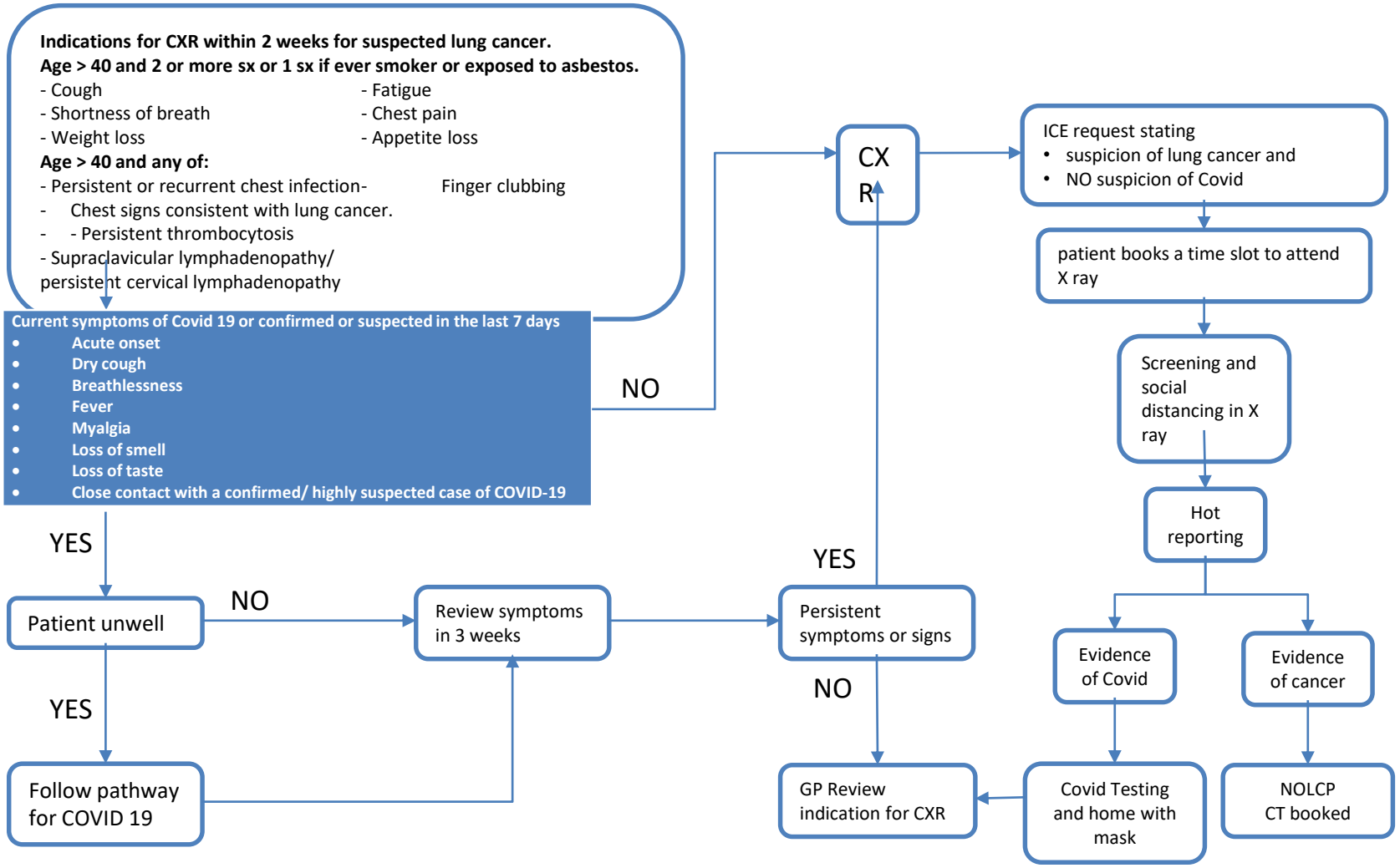
- We never closed completely but patients not seen F2F
  - Cold calling!
  - New Urgent and 2WW patients called as referred
  - Follow up patients called when time allowed
  - When time available new routine patients called
- Lung function only for cancer patients needing surgery
- Sleep service stopped apart from HGV drivers.

Chest clinic now

- There is advice on new referrals into chest clinic on GP area of trust website
- New general respiratory referrals
  - Advice and guidance issued where possible
  - Routine patients wait 12-14
- Sleep apnoea
  - 18 week wait for sleep study
  - CPAP is AGP

Lung cancer (Pete Holloway)

- Drop in all cancer referrals
  - Biggest fall lung cancer
  - COVID 19 and lung cancer cause a cough
  - Reduced access to general practice
  - 111 less likely to spot concerning symptoms
  - Less COPD reviews
- Main criteria for 2WW is abnormal CXR
- Optimal cancer pathway CXR to CT 3 days.


Indications for CXR within 2 weeks for suspected lung cancer.
Age > 40 and 2 or more sx or 1 sx if ever smoker or exposed to asbestos.
- Cough
- Fatigue
- Shortness of breath
- Chest pain
- Weight loss
- Appetite loss
Age > 40 and any of:
- Persistent or recurrent chest infection-
Finger clubbing
- Chest signs consistent with lung cancer.
- - Persistent thrombocytosis
- Supraclavicular lymphadenopathy/ persistent cervical lymphadenopathy
Current symptoms of Covid 19 or confirmed or suspected in the last 7 days
Acute onset
Dry cough
Breathlessness
Fever
Myalgia
Loss of smell
Loss of taste
Close contact with a confirmed/ highly suspected case of COVID-19
NO
CX R
ICE request stating
suspicion of lung cancer and
NO suspicion of Covid
patient books a time slot to attend X ray
Screening and social distancing in X ray
Hot reporting
YES
Patient unwell
NO
Review symptoms in 3 weeks
YES
Follow pathway for COVID 19
YES
Persistent symptoms or signs
NO
GP Review indication for CXR
Evidence of Covid
Evidence of cancer
Covid Testing and home with mask
NOLCP CT booked

Questions?

- Via Chat