

#### **CHANGING LIVES**

#### BREATHE at BEST

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## Learning outcomes

- Understand the role of the BREATHE Service
- Understand how to refer a patient
- Understand the strategy for improving lives of patients with COPD in Barnsley





#### Declarations of interest

- Barnsley NHFT
- North Manchester Care Organization
- Manchester University
- (CQC)
- No Industry Sponsorship





# 1. In Barnsley, there are approximately this number of patients with COPD

- A) 2000
- B) 4000
- C) 8000
- D) 12000
- E) 16000





# 2) In 1 year, how many Barnsley patients are admitted to hospital with COPD?

- A) 1000
- B) 1200
- C) 1400
- D) 1600
- E) 2000





# 3) In Barnsley, we spend the following on oral aminophylline each year

- A) £10 k
- B) £20k
- C) £30k
- D) £40k
- E) £50k





# 4. In Barnsley, we spend the following on Biologic treatment for asthma each year

- A) £0
- B) £20k
- C) £50k
- D) £100k
- E) £500k





# 5) The following are on the "red list" for prescribers in Barnsley

- A) Roflumilast
- B) Ellipta device inhalers
- C) Monteleukast
- D) Serevent (for patients with COPD)
- E) Azithromycin





# 6) The following are cost effective interventions in COPD

- A) influenza vaccination
- B) smoking cessation
- C) pulmonary rehabilitation
- D) screening spirometry
- E) inhaled steroids





# 7) This number of patients in Barnsley are on home oxygen therapy

- A) 217
- B) 317
- C) 417
- D) 714
- E) 1470





# 8) In patients with occupational COPD, the following history is notifiable

- A) working as a coal miner
- B) working underground as a coal miner
- C) working for 20 years as a coal miner
- D) working underground for 20 years as a coal miner
- E) coal mining does not cause COPD





# 9) In Barnsley, the actual number of patients completing PR annually is

- A) 100
- B) 150
- C) 250
- D) 300
- E) 400





# 10. In Barnsley, the following proportion of COPD patients are on the EOL register

- A) 1 in 200
- B) 1 in 100
- C) 1 in 50
- D) 1 in 40
- E) 1 in 10





#### **BREATHE Service**

- 01226 431 673
- Right Care Barnsley
- Breathe.service@nhs.net





#### Commissioned as a new service

- Operational since 2017
- Consultant in post since May 2018





#### Outcome measures

- Reduction of patients admitted to hospital with exacerbations of COPD
- Meeting CQUIN standards for management of patients admitted with acute exacerbation
- Increase number of patients completing pulmonary rehabilitation





#### Current task

- 8000 + patients
- 1200 hospital admissions (target 800)
- 135 patients completing PR (target 400)





### Smoking prevalence

- Overall 23% (nationally 15.1%)
- Particularly high in some areas of Barnsley
- Particularly high in young adults





#### "Unknown unknowns"

- Prevalence of COPD may be an underestimate
- Primary care registers may not be accurate
- Spirometry rollout complete, but ongoing training issues





#### **Breathe Service**

- Early supported discharge
- Hot clinics
- Home oxygen assessment
- Case review





## Strategy

- "Tinkerbell"
- Can we actually prevent an admission once the patient is exacerbating?
- Evidence so far.....probably not





### Barriers to change

- Patients are referred or self refer to A+E
- Patients are admitted due to 4 hour target
- Patients are mis-diagnosed (in secondary care)
- Revolving door
- Patient and staff expectations





#### So what does work?

Early diagnosis

Smoking cessation, Flu vaccination, pulmonary rehabilitation

"Healthy lifestyle" and maintenance of activity

Telehealth for chronic disease £92,000/QALY\*

> Triple Therapy £7,000-£187,000/QALY

LABA £8,000/QALY

Tiotropium £7,000/QALY

Pulmonary Rehabilitation £2,000-8,000/QALY

Stop Smoking Support with pharmacotherapy £2,000/QALY

Flu vaccination £1,000/QALY in "at risk" population





### Reducing exacerbations

- Done by better long term control of disease
- Patients will exacerbate: only question is whether that leads to an admission





## The long tail

- 30% of hospital admissions with COPD are presenting with new diagnosis
- 50% have 2-4 admissions per year
- Small number of patients have high frequency of admissions
- Consequently different strategies required for each of these groups





### Precision of diagnosis

- Over-diagnosis of COPD in secondary care
- Under-diagnosis of asthma
- Lack of stratification of severity
- Lack of detailed occupational history





## EOL register

- 1% of patients "should" be on a EOL register
- COPD patients: less than 0.5%
- Consequently, lack of advanced care planning, multiple admissions in last year of life, death in hospital





## New strategy

- Early support and identification of patients
- Community based clinics rather than hospital based setting
- High quality review in Hot Clinic: one stop
- Detailed occupational history
- Cost effective interventions
- Advanced care planning





### In parallel with

- Improving asthma service
- Improving referral pathway for patients requiring home NIV
- Developing a Sleep Service
- Improving access to Palliative Care
- Improving relationships with contiguous CCGs





# Any questions?





#### **CHANGING LIVES**

# BREATHE Team – Case studies

Laura Gill Wednesday 19<sup>th</sup> September 2018









#### Introduction

- Early supported discharge (ESD)
- Post discharge follow up
- HOT Clinic

Case management





### Case Study 1

#### Background

- 82 year old with moderate COPD and bronchiectasis
- MRC Score 3
- Ex smoker, 40 pack year history
- Worked in mills and glassworks
- PMH MI, Hiatus Hernia, Angina, Macular degeneration





### Challenges

- Not improving
- Had a repeat exacerbation
- Patient struggled to administer her own nebulisers due to impaired sight
- 8 hospital admissions in 12 months

- Extended ESD and was on ESD for 25 days
- HOT clinic
- Demonstrated how she could administer nebulisers





#### **Outcome**

- Eventually started to improve and able to discharge from ESD
- Not had a hospital admission since December 2017

### Feedback

"It is a very good service and I like that I could be at home and didn't have to stay in hospital. I felt safer with the BREATHE team coming to visit. I wouldn't have managed without them and would have ended up back in hospital"





- 74 year old with end stage COPD
- 3L LTOT
- Maximum inhaled therapy and home nebuliser
- Under Community Matron
- Community DNACPR
- PMH IHD, Angina, MI x3, AAA, Coeliac Disease





### Challenges

- 24 ED attendances in 12 months
- Anxiety
- End stage disease

- Enrolled on to ESD then enrolled on to caseload
- Discussed strategies to help manage anxiety
- Started palliative care discussions





#### **Outcome**

- Still receiving continued support from us
- Not attended ED for 3 months
- Attending Hospice for therapy days

#### Feedback

"It gives me more confidence knowing the BREATHE team are coming. I have got to know all the nurses and trust them. I feel I will be able to die at home comfortably with the BREATHE Team helping me. I use to be terrified of dying at home but now I'm not half as frightened."





- 71 year old with end stage COPD
- 1L LTOT
- Chronic T2RF has domiciliary NIV
- Maximum inhaled therapy and home nebulisers
- PMH AF, CCF
- Very independent around her flat, good support from family
- Well informed about her disease
- Manages her condition well
- 5 exacerbations per year





### Challenges

- Severe life threatening exacerbations
- Increased frequency of exacerbations
- Very limited by breathlessness

- Enrolled on to caseload
- Referred for OT + PT assessment
- Started advanced care planning discussions
- Suggested she be discharged home with oramorph





#### Outcome

- Remains on caseload
- Not been in hospital since she was discharged beginning of August.

### **Feedback**

"I think the BREATHE Team are marvellous and can't fault them. When I need them I just have to phone and the next minute they are at the door. It makes life easier not going to the hospital and I feel really comfortable with them. Great idea!"





- 80 year old lady with severe COPD
- Ex heavy cigarette smoker with 90 pack year history
- Emphysema with lung bullae
- PMH AF, Angina, MI x3
- Lives alone, good support from daughter





## Challenges

- Anxiety
- New on LTOT
- Felt that having long term oxygen stopped her leading her usual busy lifestyle

- Discussed non-pharmacological interventions
- Post installation visit
- Discussed alternative oxygen devices





#### **Outcome**

- Daughter feels they are managing her mum's breathlessness and anxiety well
- Ordered transportable concentrator
- Now able to continue a normal life

#### Feedback

Patients daughter said "It has made my life easier not having to fetch her for appointments. Finds it easier to contact us rather than GP. Life is much easier now not having to wait in for oxygen. The transportable concentrator is fantastic, it's much easier to carry. The nurse's in the BREATHE Team are fantastic, they are always very helpful and polite and have been able to answer any questions we have had."





- 64 year old with COPD
- Still smoking
- On maximum inhaled therapy
- PMH Alcohol dependence, HTN, Colostomy





### Challenges

- 8 hospital admissions in the last 6 months
- 20 ED attendances in the last 12 months
- Difficulty getting him to engage with the service

- Enrolled on to ESD
- 2 week post discharge follow up
- Referred to Community Matrons
- Referred to Adult Safeguarding





### Outcome

- Continues to not engage with any service
- Continues to present to ED at least once a month





# Thank you

Any questions?



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