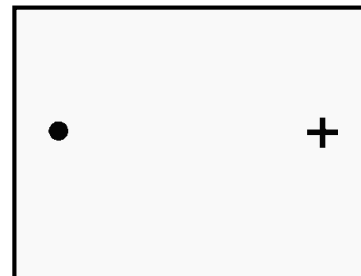


# The London Respiratory Network 2010-16 using a VBHC approach



NHS  
England

London Strategic  
Clinical Networks



Noel Baxter, GP and Clinical commissioner, Southwark

# VBHC – part of a broader strategy



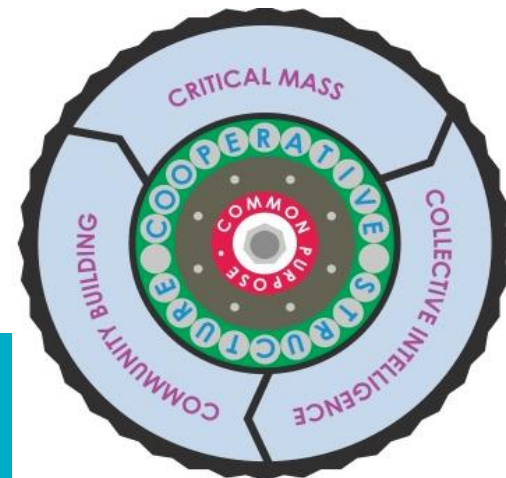
NHS  
England

London Strategic  
Clinical Networks

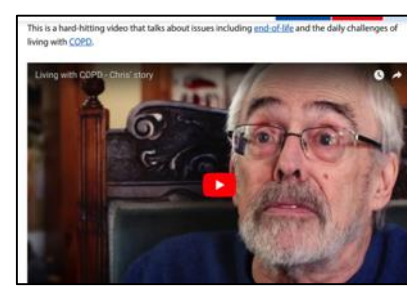
- Used learning from social movements & systems thinking
- Listened to & partnered with **patients & carers**
- Aimed to motivate & enable clinical leaders
- Focused on building **clinical collective leadership\***
- Paid attention to **network principles**
- Used **Right Care & Value** as frameworks



\*Shared leadership Model:  
Respiratory Clinician, GP & Programme Leader



# What 'respiratory' patients & families told ..and still tell us.. about their needs?



It's 1:30am in the morning and I am alone  
Sitting on the edge of my bed, cold but unable to lie down  
It's getting harder to breathe.  
My mind is trying hard to keep calm, but I am stiff with anxiety  
Shall I call for an ambulance? NO.

'I don't want to die'

'**breathlessness** is **frightening** and disabling'

'hospitals & GP teams don't talk to each other enough'

'I want 'better' conversations with those involved in my care'

# London Respiratory Priorities 2010-16

*Right care, value & collective clinical leadership*



## **Right Care**



Doing the 'right things' and doing things right first time

Using Maps



London Respiratory Team working with **Muir Gray** 2010

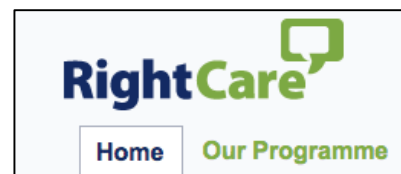
The NEW ENGLAND JOURNAL of MEDICINE

HOME | ARTICLES & MULTIMEDIA | ISSUES | SPECIALTIES & TOPICS | FOR AUTHORS | CME

Perspective **'Value'**

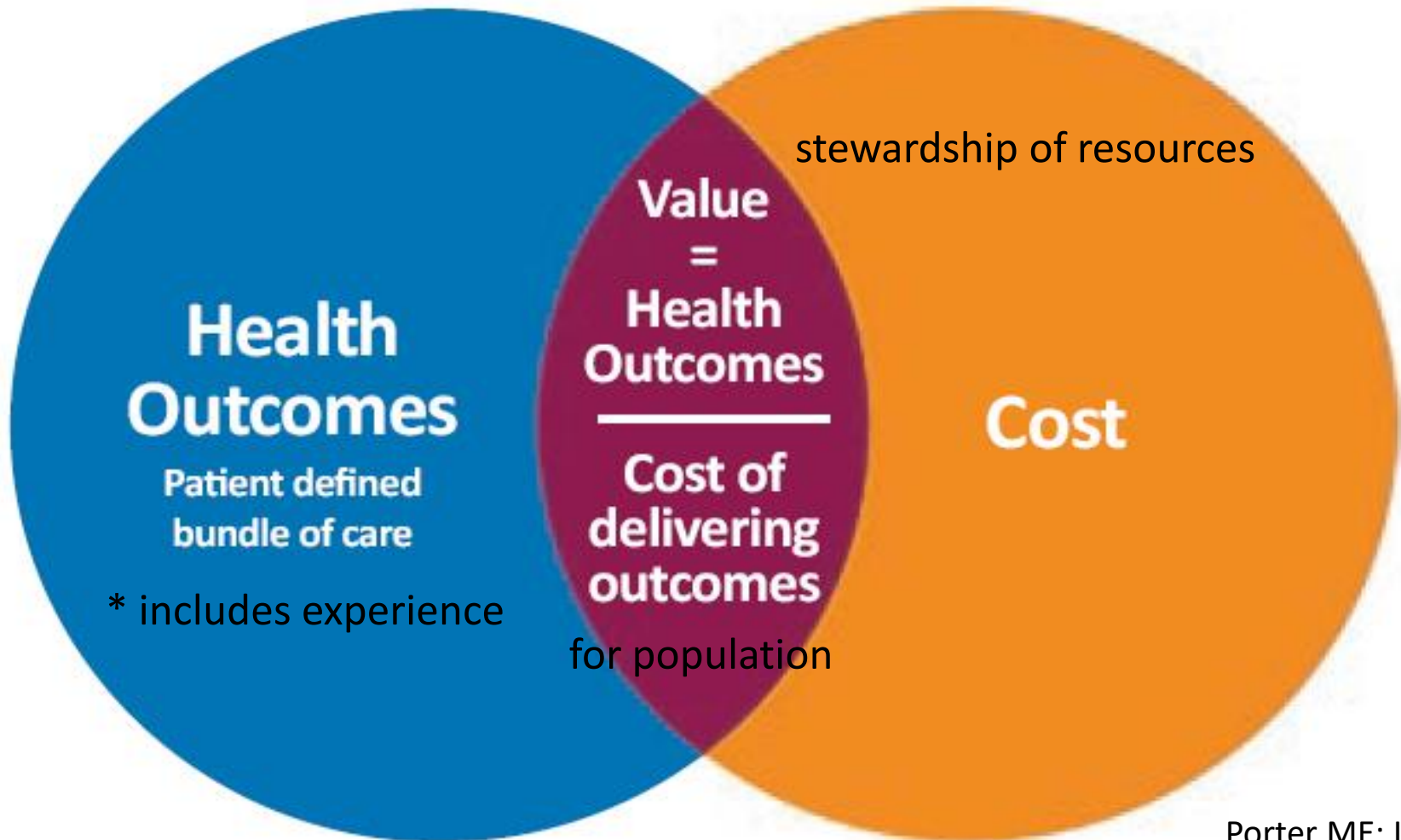
What Is Value in Health Care?

Michael E. Porter, Ph.D.  
N Engl J Med 2010; 363:2477-2481 | December 23, 2010 | DOI: 10.1056/NEJMp1011024



'London Respiratory Team' 2010-2013 – DH funded 'SHA' COPD leadership  
'London Respiratory Network' NHSE London funded 'SCN' 2013-2016  
London Senate Helping Smokers Quit Programme 2014-2016

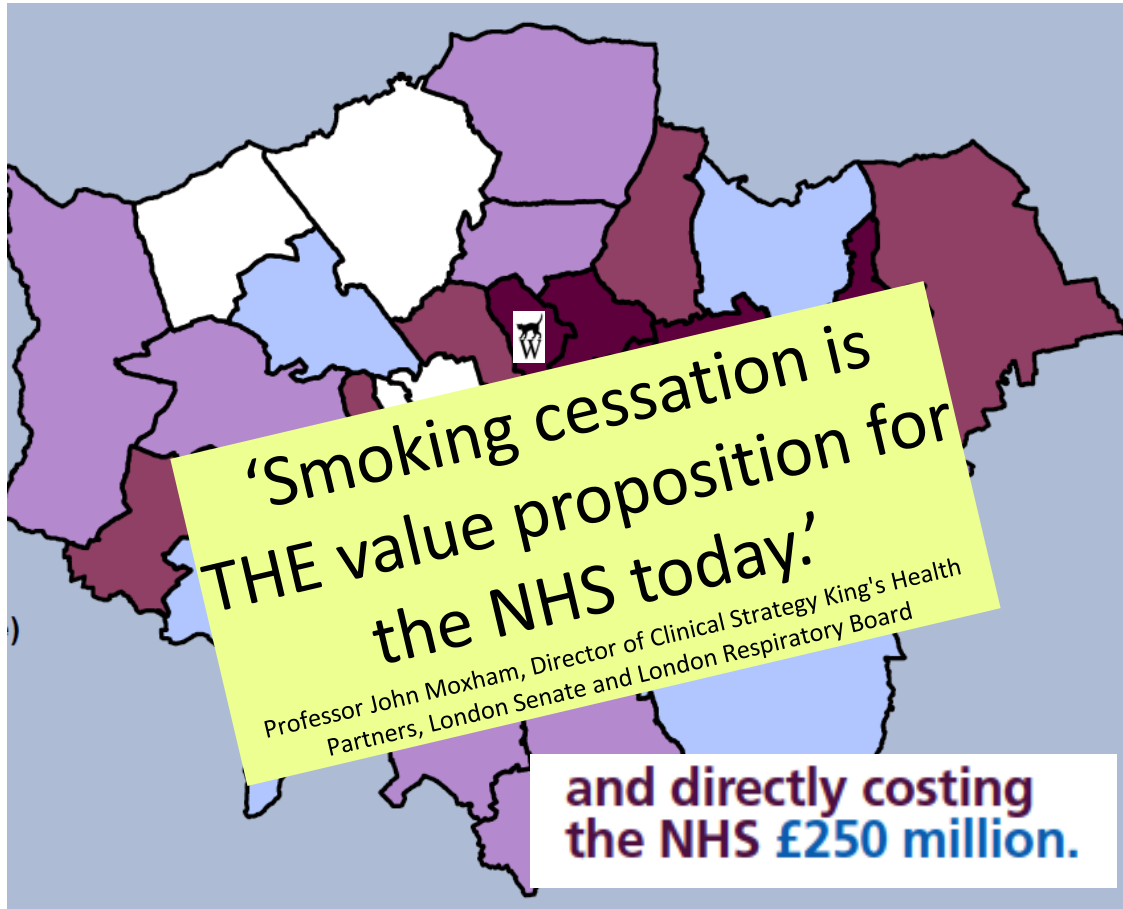
# Working out the 'right' things to do: using a Value framework



# Londoners' dying from smoking



1,125,000 smokers in London and smoking causes 8,175 deaths/year\*



## Legend

Local authority area

Rate per 100,000 population (directly age-standardised) aged over 35 years, 2006-2008 by national quintiles



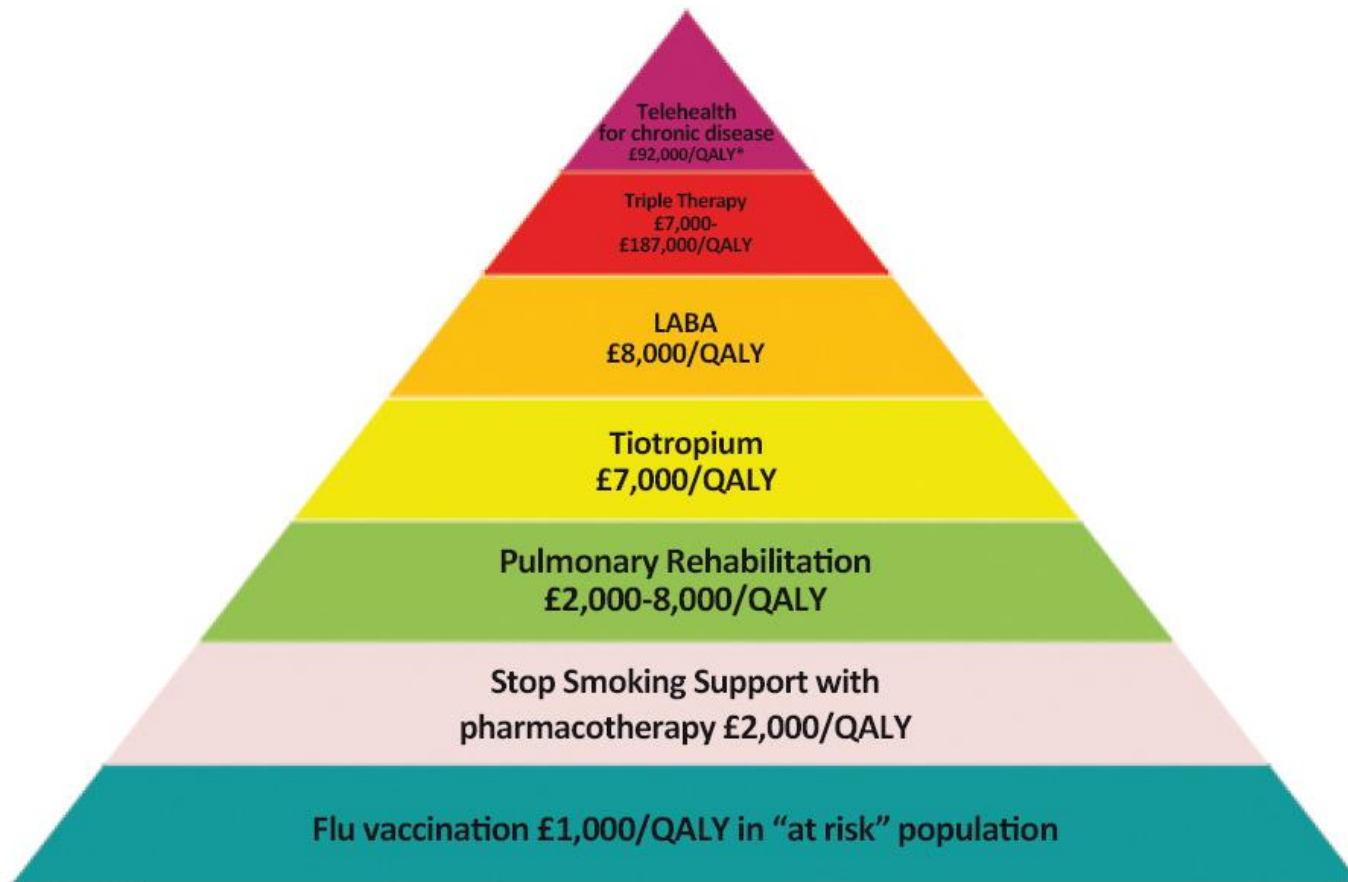
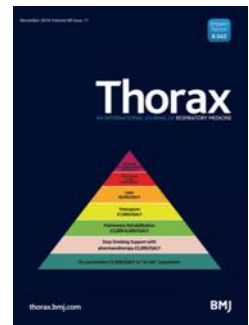
© Crown Copyright. All rights reserved.

**'1 in 5 deaths due to smoking'**

\*London Senate Helping Smokers Quit Programme Report 2016

# What is High Value Respiratory Care?

## LRN COPD 'Value' Pyramid 2011



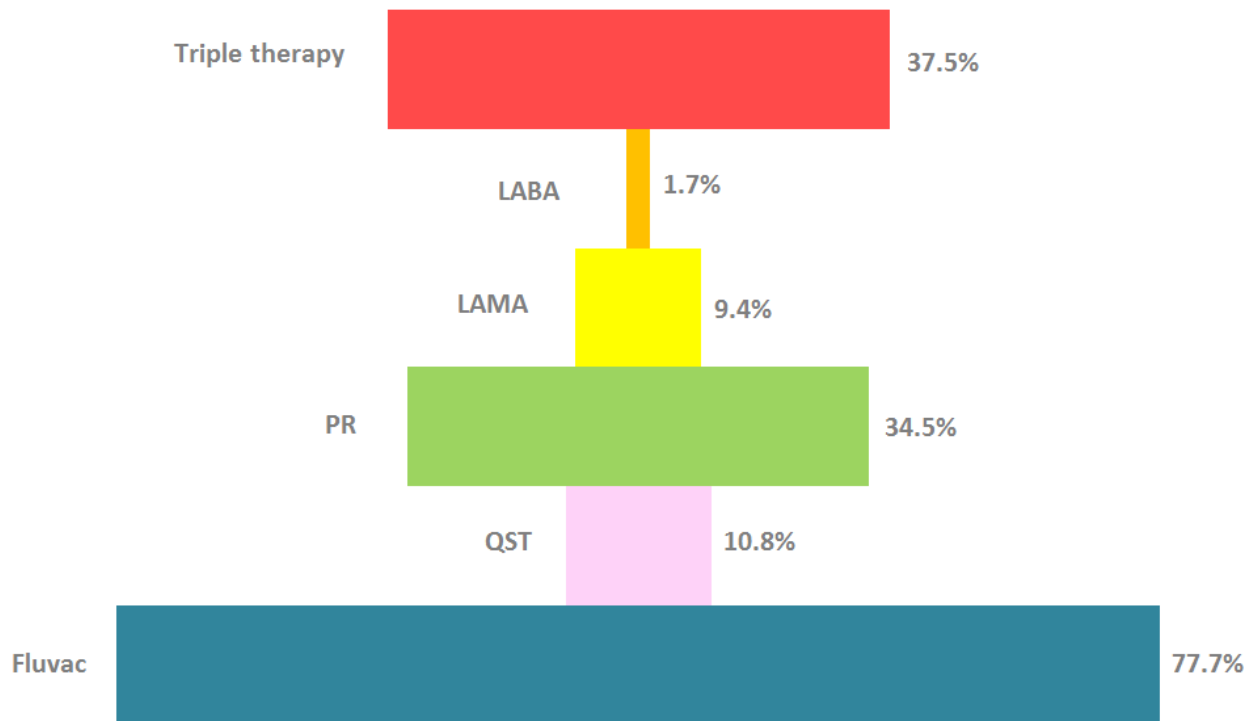
\* (not specific to COPD)

# High value interventions in COPD

## Are we delivering them?



London Strategic  
Clinical Networks

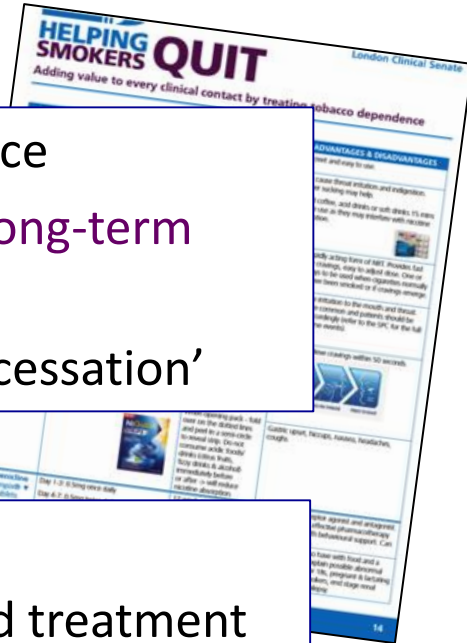


The value pyramid providing a representation of the proportion of people who were receiving value-based interventions for COPD in **Wales** in 2014-15.



# Changing how we think about smoking

Tobacco dependency is a long term and relapsing condition that usually starts in childhood; treating it is the highest value intervention for today's NHS and Public Health system, saving and increasing healthy lives at an affordable cost.

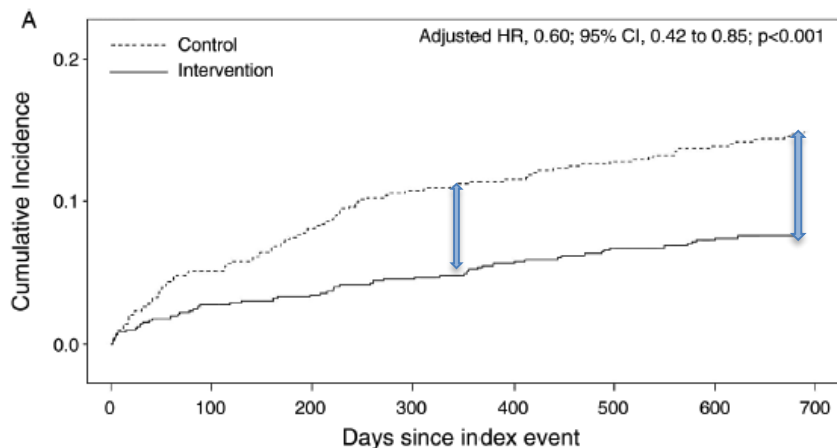


‘Smoking’ is tobacco/nicotine dependence  
**Tobacco dependence** is a relapsing, remitting long-term condition that starts in childhood  
 We have evidence-based treatment - ‘smoking cessation’

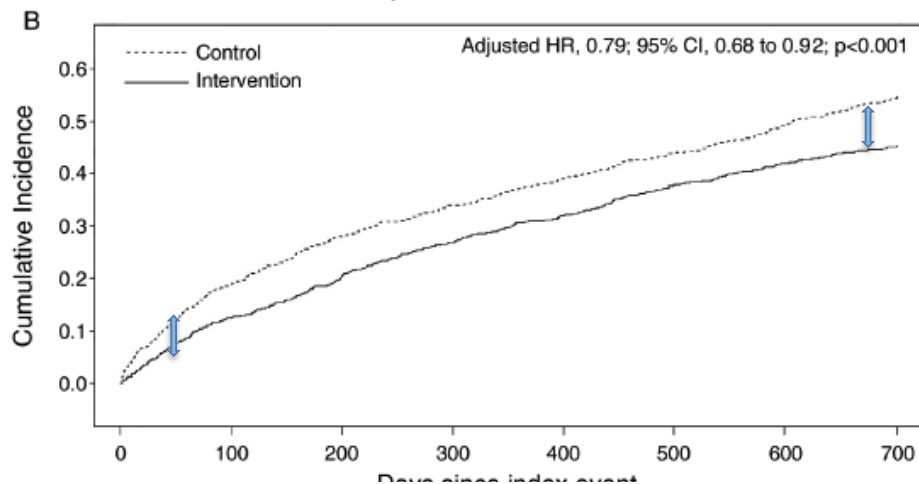
As a clinician ...  
 My key roles and responsibilities are diagnosis and treatment  
 I diagnose and treat other addictions/dependence eg alcohol  
 I ‘look after’ many patients who are sick because of smoking and are tobacco dependent

It is therefore my responsibility as a clinician to diagnose and treat tobacco dependence in every patient I see

# Influencing: treating tobacco dependence as the 'value proposition' for the NHS\* Sharing the Ontario Study Results ...



Mortality halved by **1 year**  
**11.4% vs 5.4%;  $p < 0.001$**



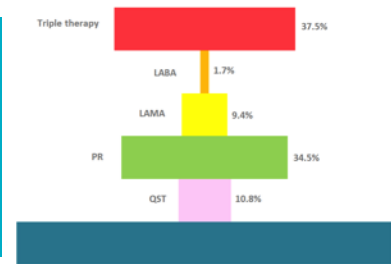
Re-admission halved by **30 days**  
**13.3% vs 7.1%;  $p < 0.001$**

**Figure 2** Cumulative incidence of mortality (Part A) and all-cause rehospitalisation (Part B) from index hospitalisation to 2-year follow-up in the control (n=641) and intervention (n=726) groups.

Effectiveness of a hospital-initiated smoking cessation programme: 2-year health and healthcare outcomes

Mullen et al **Tob Control** 2016;0:1–7. doi:10.1136/tobaccocontrol-2015-052728

# Responsible Respiratory Prescribing: the challenge in 2010



- NHS spend >£1 billion/yr on inhaled medications
- 4 of 5 most expensive medicines to NHS inhalers
- 2 of these 4 were high dose inhaled corticosteroids
  - Limited evidence for increased value from higher dose
  - Increasing evidence of harm from higher dose
- Concern that many diagnoses (& severity assessments) of asthma & COPD not accurate

# Responsible Respiratory Prescribing: Influence and impact 2010-16



NHS  
England

London Strategic  
Clinical Networks

- 100 000 high dose LRN ICS safety card ordered
- No. Responsible Respiratory Prescribing groups increased
- High dose ICS prescribing reduced by QI in many CCGs
- High dose ICS prescribing in England reduced!
- Estimated cost savings approx £20 million/yr 2015-16
- Evidence for role and value of 'virtual clinics' published

# Responsible Oxygen Prescribing: Where we started in 2010



NHS  
England

London Strategic  
Clinical Networks

## LRT RO message 1.

~£30



Oxygen is for treating hypoxia not breathlessness, so have and use a pulse oximeter.

## LRT RO message 2.



A specialist team for oxygen assessment should be part of a commissioned integrated respiratory service. This will improve effectiveness of oxygen therapy, reduce waste and reduce costs.

See <http://tinyurl.com/4ye3nws>

## LRT RO message 3.



Protect patients who are at risk from excessive oxygen. Identify at risk patients and use a combination of limiting oxygen to 28% in ambulance transit (universal precautions), O2 alert cards and/or patient specific protocols (PSPs) and report adverse events through the local SUI system. See <http://tinyurl.com/4ye3nws> for a step-by-step guide to oxygen.

Focused on  
addressing:  
Misuse  
Overuse  
Underuse

& the need to address  
breathlessness as a  
symptom better

# LRN work on breathlessness and its impact



It's 1:30am in the morning and I am alone  
Sitting on the edge of my bed, cold but unable to lie down  
It's getting harder to breathe.  
My mind is trying hard to keep calm, but I am stiff with anxiety  
Shall I call for an ambulance? NO.

'I don't want to die'

'breathlessness is **frightening** and disabling'

# Why respiratory patients come to hospital & keeping patients safe



'Care at home' provided correct diagnosis made, correct treatment started AND patient feels in control of breathlessness

Breathlessness (symptom)  
Can be frightening ...

Respiratory Failure (low oxygen saturation)

**Respiratory failure = diagnosis and treatment in hospital**

Breathless and low oxygen saturation

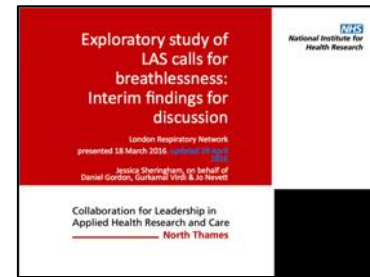
Breathless with normal oxygen saturation

Ask and listen

Measure



# Collaborative work on reducing impact of frightening disabling breathlessness



Patient-centred approach

- Talk about breathlessness (not 'dyspnoea')

Common & distressing symptom

- Work with psychologists

Could be managed better with same NHS resources

Many causes – diagnosis requires skilled assessment

- High quality history, examination, 'tests' & interpretation

Wrong diagnosis common & big impact: cost, experience, harm

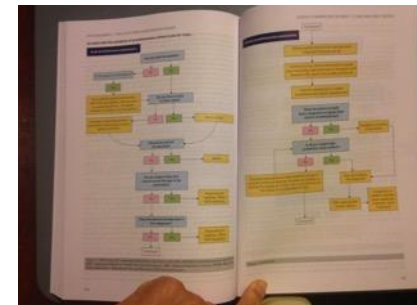
Overuse & misuse: oxygen/inhalers/Ambulance/ED/admissions

Underuse: PR/oximeters/admissions/NIV/psych skills

Need pathways that start with breathlessness



COMPLEX – lots more to do





# Making the right thing to do the easy thing to do.



## Breathlessness

A guide for Southwark General Practice<sup>©</sup>

### Key Messages

1. Breathlessness can be complex and multifactorial; code the symptom, quantify the burden and work through diagnostic algorithms
2. Identify and treat tobacco dependence early (measure exhaled CO, deliver very brief advice and offer onward referral and quit smoking treatment)
3. Quality Assured Spirometry from Community Lung Function Clinics is an essential component of diagnosis

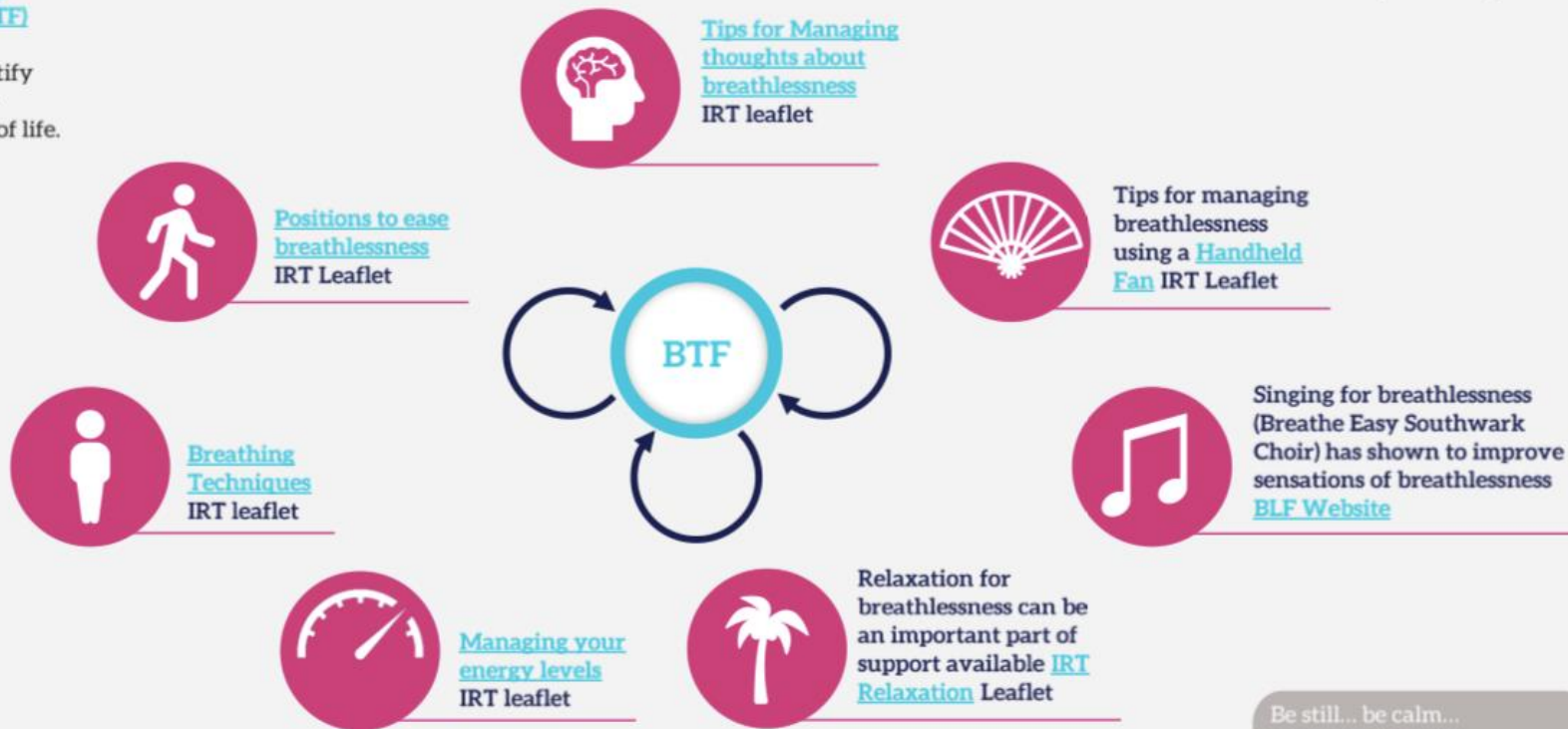
Always work within your knowledge and competency

## Managing Breathlessness Support Leaflets for Patients

Adapted from Spathis et al.

Discuss the [The Breathing Thinking Functioning \(BTF\) approach](#) (BTF) approach with patients to help identify strategies to manage their breathlessness at the end of life.

British Lung Foundation [Leaflet](#) on Breathlessness



## Sources of Support for Symptom Control and Palliative Care for Breathlessness

- Physiotherapy for breathing support can be accessed through **Chest Clinic** (eRS)
- Consider referral to IAPT for support around anxiety and breathlessness
- Consider referral to **palliative care** for breathlessness support at the end of life
- Consider adding patients to **Coordinate my Care**, discussion at next practice palliative care visit and having advanced care planning discussions early

Be still... be calm...  
Drop the shoulders  
Slowly sigh out... and out  
Hear the sigh  
Haaah... soft and quiet  
Feel control returning  
Peaceful and safe

– Jenny Taylor, Physiotherapist  
St Christopher's Hospice

# Collaborative work with Commissioners to enable 'Right' Care: COPD Bundle CQIN



NHS  
England

London Strategic  
Clinical Networks

Chest clinic

RESEARCH UPDATE

**CHEST CLINIC** Designing and implementing a COPD discharge care bundle

Nicholas S Hopkinson,<sup>1,2</sup> Catherine Englebretsen,<sup>1</sup> Nicholas Cooley,<sup>1</sup> Kevin Kennie,<sup>3</sup> Mun Lim,<sup>1,2</sup> Thomas Woodcock,<sup>1</sup> Anthony A Laverty,<sup>4</sup> Sandra Wilson,<sup>1</sup> Sarah L Elkin,<sup>1,5</sup> Cielito Caneja,<sup>1</sup> Christine Falzon,<sup>1,3</sup> Helen Burgess,<sup>1</sup> Derek Bell,<sup>1</sup> Dilys Lai<sup>1</sup>

**COPD DISCHARGE BUNDLE**

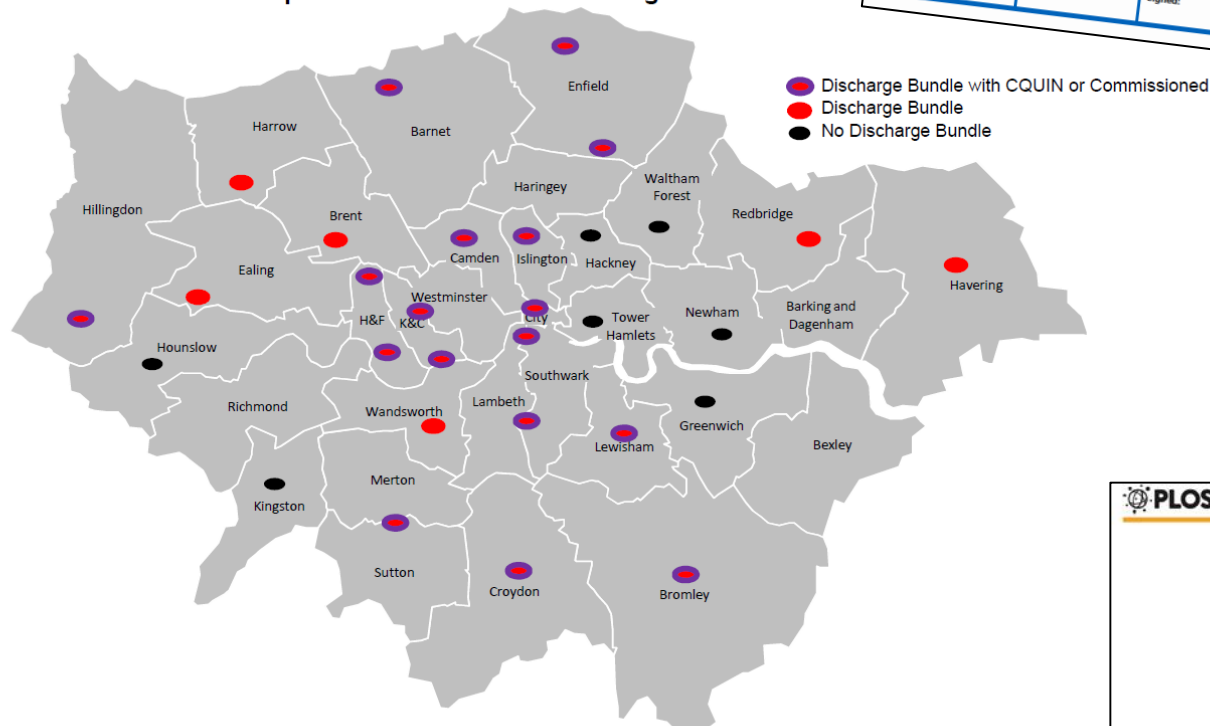
**COPD Discharge Bundle**  
To be completed before discharge for all patients admitted with exacerbation of COPD

Whittington Health NHS

Is this admission included in COPD audit? Yes  No

<p><b>1. Treatment of Tobacco dependence.</b></p> <p>Non/Ex-smoker* <input type="checkbox"/></p> <p>Current smoker* <input type="checkbox"/></p> <p>*If patient has smoked within last 3 months treat as current smoker.</p> <p>NB: Offer treatment of tobacco dependence and referral to smoking cessation for all current smokers.</p> <p>NRT / Varenicline Offered <input type="checkbox"/></p> <p>NRT / Varenicline Prescribed <input type="checkbox"/></p> <p>NRT / Varenicline Declined <input type="checkbox"/></p> <p>Smoking cessation ICE referral <input type="checkbox"/></p> <p>Referral declined <input type="checkbox"/></p> <p>Date: _____</p> <p>Signed: _____</p>	<p><b>2. Pulmonary Rehabilitation (PR).</b> For all patients admitted with breathlessness.</p> <p>PR Explained <input type="checkbox"/></p> <p>PR Offered <input type="checkbox"/></p> <p>PR ICE referral <input type="checkbox"/></p> <p>Declined referral <input type="checkbox"/></p> <p>Does not meet criteria* <input type="checkbox"/></p> <p>NB: Not meeting criteria should be exception.</p> <p>Date: _____</p> <p>Signed: _____</p>	<p><b>3. Introduction to/ enabling of COPD self-care.</b></p> <p>British Lung Foundation COPD leaflet provided <input type="checkbox"/></p> <p>Exacerbation management information provided <input type="checkbox"/></p> <p>Date: _____</p> <p>Signed: _____</p>	<p><b>4. Review of inhaled technique.</b> Initial inhaled technique. Good <input type="checkbox"/> Fair <input type="checkbox"/> Poor <input type="checkbox"/></p> <p>Satisfactory technique for all devices. Yes <input type="checkbox"/> No <input type="checkbox"/></p> <p>Spacer added for MDI. Yes <input type="checkbox"/> No <input type="checkbox"/></p> <p>If suboptimal technique refer to Respiratory Nurse Specialist or Ward Pharmacist <input type="checkbox"/></p> <p>Date: _____</p> <p>Signed: _____</p>	<p><b>5. Vaccinations</b></p> <p>Flu Vaccine <input type="checkbox"/></p> <p>Has the patient had a flu vaccine for current season? Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/></p> <p>If No Offer and arrange as in patient or Ask patient to request from GP Yes <input type="checkbox"/> No <input type="checkbox"/></p> <p>or Patient continues to decline vaccination Yes <input type="checkbox"/> No <input type="checkbox"/></p> <p>Pneumococcal Vaccine <input type="checkbox"/></p> <p>Has patient had a pneumococcal vaccine? Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/></p> <p>If No Ask patient to request from GP Yes <input type="checkbox"/> No <input type="checkbox"/></p> <p>Patient continues to decline pneumococcal vaccination Yes <input type="checkbox"/> No <input type="checkbox"/></p> <p>Date: _____</p> <p>Signed: _____</p>	<p><b>6. Appropriate follow up agreed with patient and patient advised to see GP within 2 weeks of discharge.</b> Yes <input type="checkbox"/> No <input type="checkbox"/></p> <p>Alternative community follow up e.g. CORE / Community Matron / Night Ward / Community Palliative Care / Resp Clinic Review <input type="checkbox"/></p> <p>Please check all that apply and for list below</p> <p>USE THIS INFORMATION TO COMPLETE ELECTRONICALLY IN DISCHARGE SUMMARY</p> <p>Date: _____</p> <p>Signed: _____</p>
-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

MAP 1 - Acute London Hospital Sites with COPD Discharge Bundle



**PLOS ONE**

RESEARCH ARTICLE

Impact of a COPD Discharge Care Bundle on Readmissions following Admission with Acute Exacerbation: Interrupted Time Series Analysis

Anthony A. Laverty<sup>1\*</sup>, Sarah L. Elkin<sup>2</sup>, Hilary C. Watt<sup>1</sup>, Christopher Millett<sup>1</sup>, Louise J. Restrick<sup>3</sup>, Sian Williams<sup>3</sup>, Derek Bell<sup>2</sup>, Nicholas S. Hopkinson<sup>1</sup>

Source: - London Respiratory Team Surveys

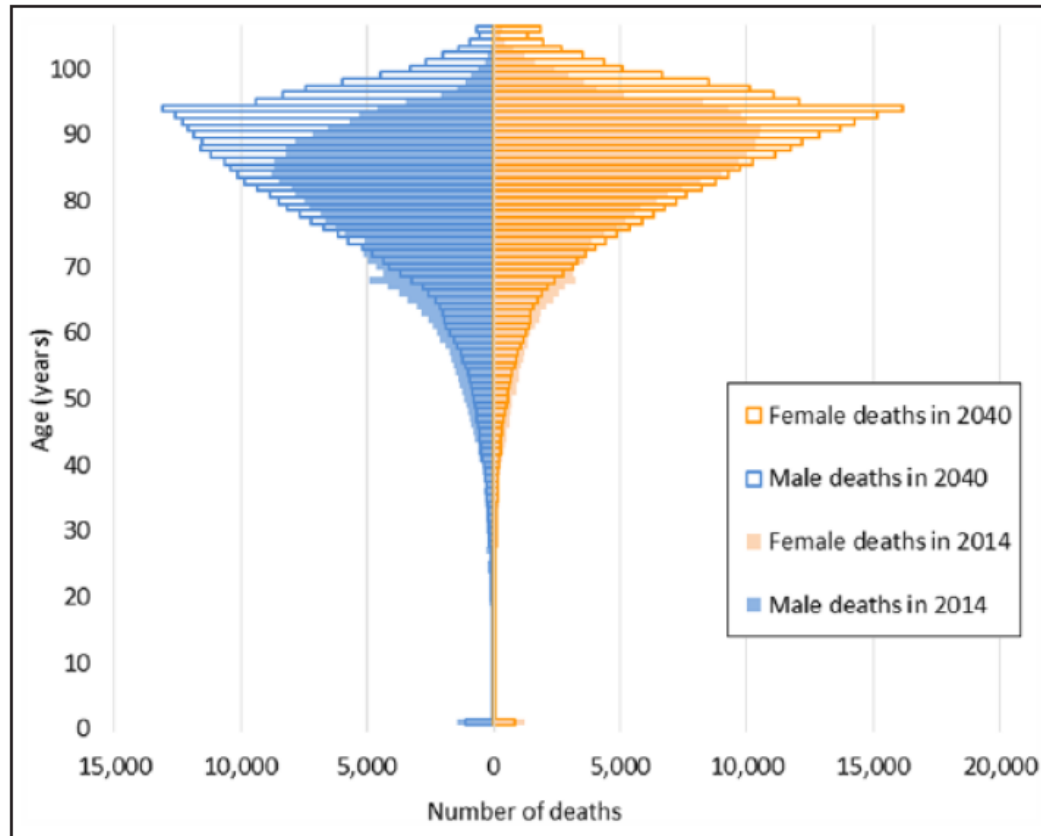
Contains Ordnance Survey data © Crown copyright and database right (2012). Contains Royal Mail data © Royal Mail copyright and database right (2012).

So, today do we  
commission with VBHC in  
mind or as a focus in SEL?

# **The value of and need for palliative care: an academic perspective**

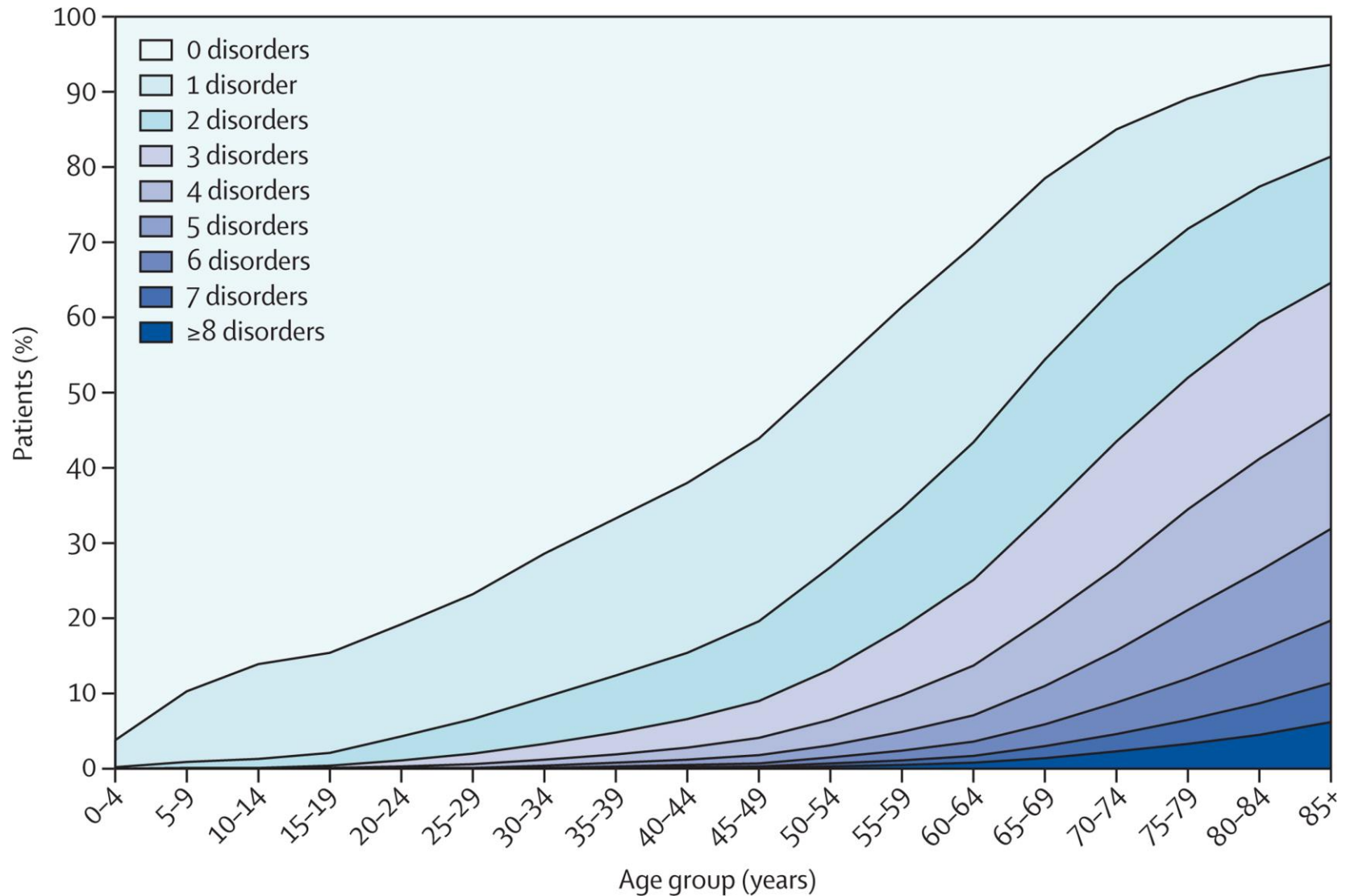
Dr Katherine Sleeman  
NIHR Clinician Scientist, KCL  
Honorary consultant, KCH

# The demographics of dying are changing



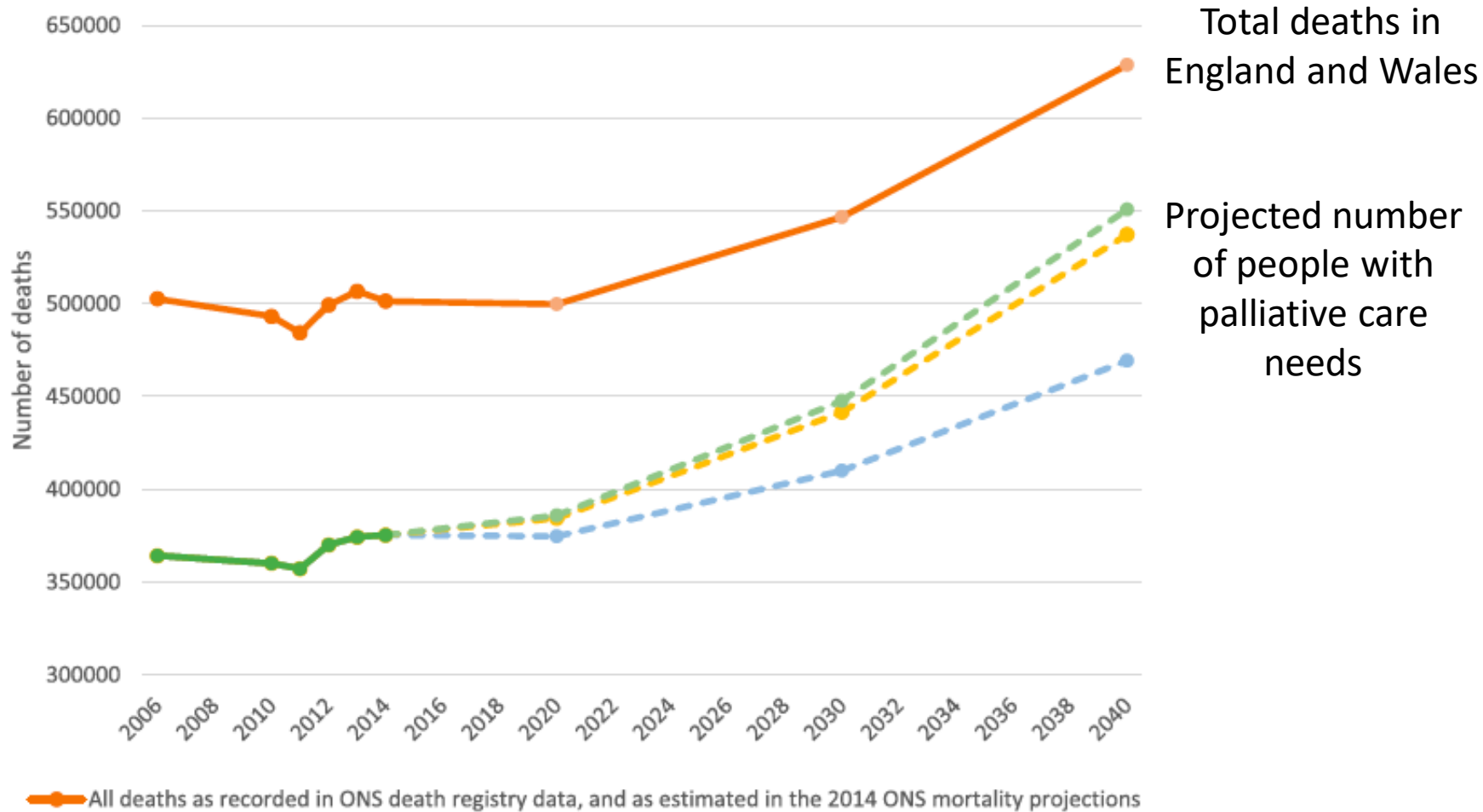
**Figure 1.** Actual and projected deaths in 2014 and 2040 by age and gender.

# Older deaths mean more complex deaths



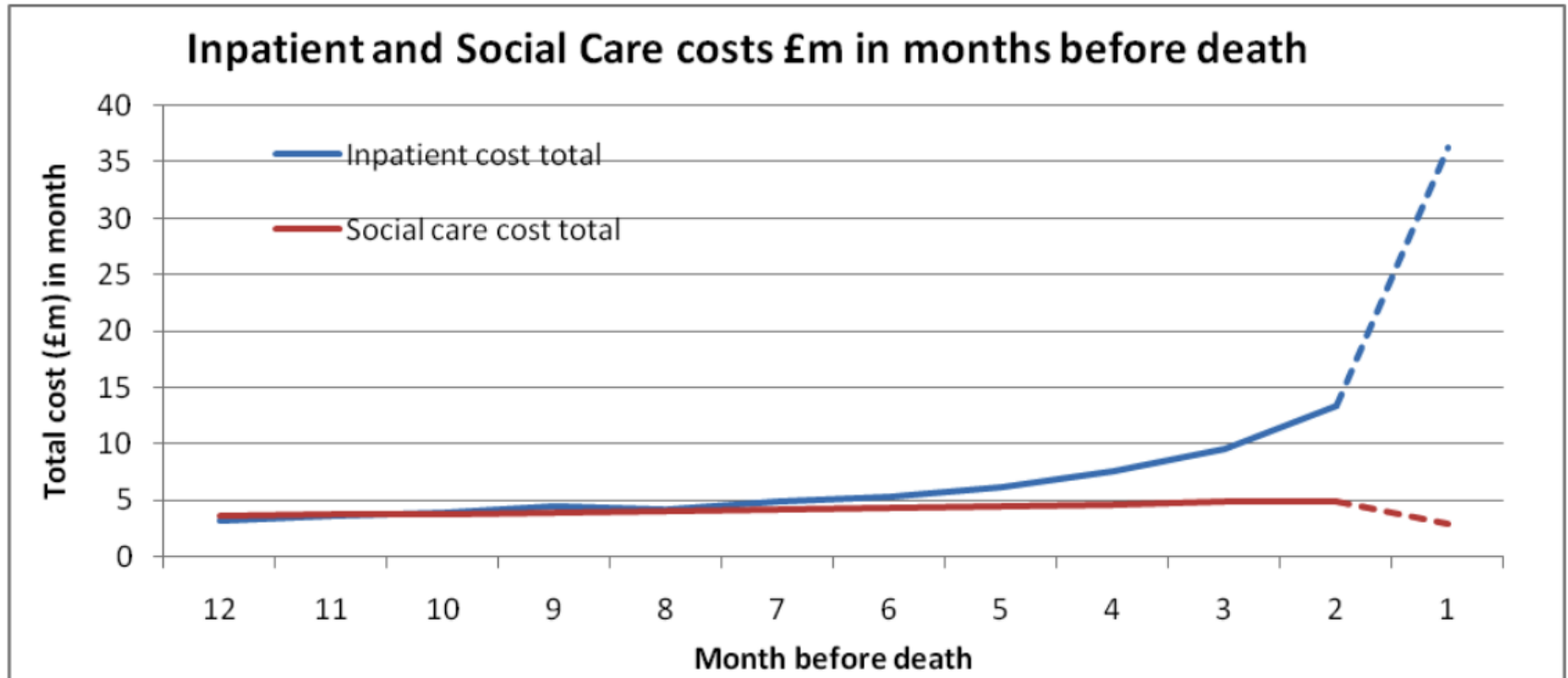
Barnett et al, The Lancet, 2012

# The number of people who die each year is going up





# Care for dying people takes resource



n=16,479

Nuffield Trust 2010

# Ambitions for palliative and end of life care

- 01 Each person is seen as an individual
- 02 Each person gets fair access to care
- 03 Maximising comfort and wellbeing
- 04 Care is coordinated
- 05 All staff are prepared to care
- 06 Each community is prepared to help



**NHS England  
Specialist Level Palliative  
Care:  
Information for  
commissioners  
April 2016**



# How can we measure quality of dying?



## Individual level

Patient Reported  
Outcome Measure  
(PROM)

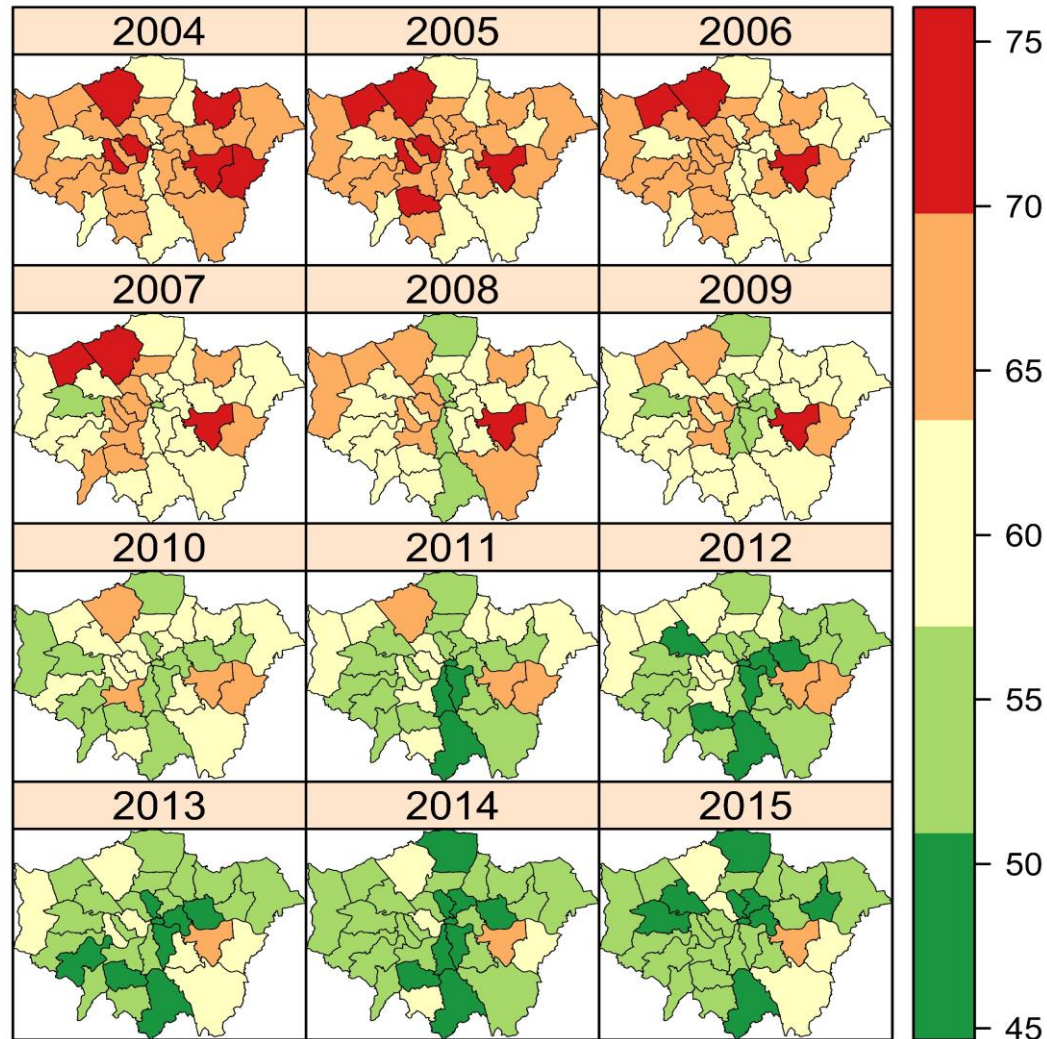


## Population level

Routine data

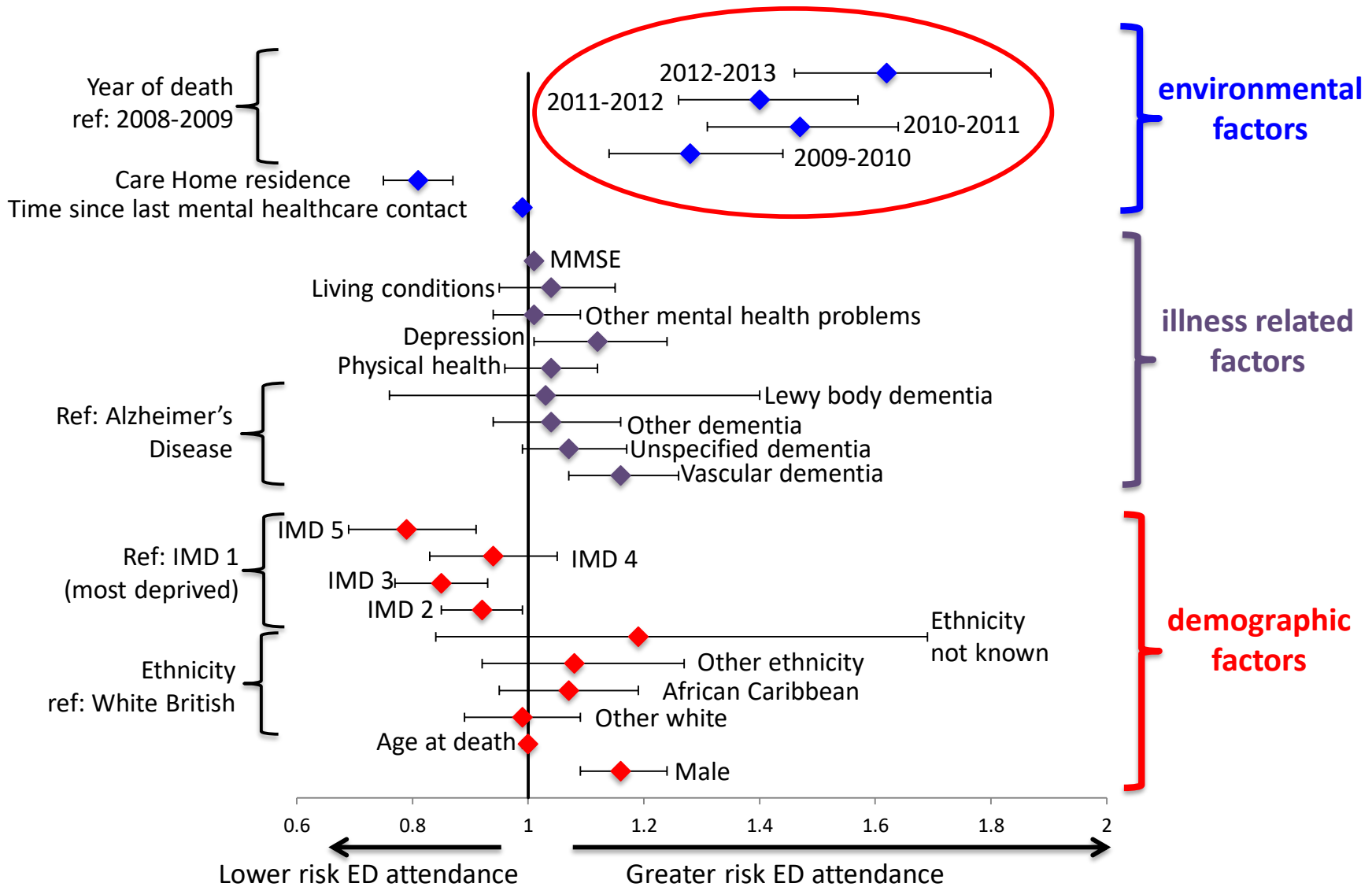
# Hospital deaths are falling in London

## Hospital Deaths(%)



Data Source: <https://fingertips.phe.org.uk>, figure produced by Dr Emeke Chukwusa

# Emergency department attendance is going up



N=4,867 people with dementia

Sleeman et al 2017



$$\text{value} = \frac{\text{outcomes}}{\text{cost}}$$

# Specialist palliative care is associated with better outcomes

- Better quality of life and symptom burden
  - Kavalieratos et al, 2017, Systematic Review



# Specialist palliative care is associated with better outcomes

- Better quality of life and symptom burden
  - Kavalieratos et al, 2017, Systematic Review
- More home deaths
  - Gomes et al, 2013, Cochrane Review
- Fewer Emergency Department admissions
  - Henson et al, 2014, Systematic Review
  - Bone et al, 2018, Systematic Review

Palliative care is better for patients...  
...but what about the system?

$$\text{value} = \frac{\text{outcomes} \uparrow}{\text{cost}}$$

# Specialist palliative care is associated with better outcomes

- Better quality of life and symptom burden
  - Kavalieratos et al, 2017, Systematic Review
- More home deaths
  - Gomes et al, 2013, Cochrane Review
- Fewer Emergency Department admissions
  - Henson et al, 2014, Systematic Review
  - Bone et al, 2018, Systematic Review
- Cost saving
  - May et al, 2018, Systematic Review

Palliative care is a high value intervention

$$\uparrow \text{value} = \frac{\text{outcomes}}{\text{cost}} \begin{matrix} \uparrow \\ \downarrow \end{matrix}$$

Thank you



Sciences Centre for London

---

# Value Based Healthcare

'Capturing what matters' Knowledge Exchange

---

King's Health Partners  
Karin Nilsson // March 2019



## What is 'Value Based Healthcare'?

- A management model aiming to reform the nature of competition on the healthcare market
- Developed by M. Porter and E. Teisberg at Harvard Business School
- Introduces the concept of “value”, a focal point around which to realign all players participating in healthcare delivery
- This concept of value is often presented as a mathematical equation, and defined as health outcomes in relation to dollars spent:

$$\text{Value} = \frac{\text{'Health outcomes'}}{\text{'Cost'}}$$

***How is this helpful, or even appropriate, for the NHS?***



Let's take a step back....

---

“Health care can **adapt** certain business concepts to fit its mission, but it cannot **adopt** them” (IHI, 2018)

What is the fundamental purpose of healthcare?





# The fundamental purpose of healthcare



.... are we achieving it?



# 'Outcomes that matter to patients'\* – a way to measure achievements

## 1. Have a **accurate** picture:

*Which are the outcomes that matter?*

### Engagement

- Patient, family and carer
- Staff

## 2. Have **meaningful** picture:

*Are the outcomes meaningful?*

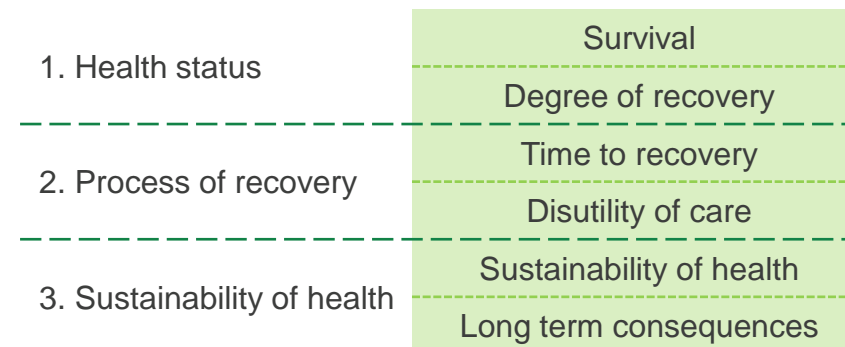
### Segmentation

- Condition
- Population

## 3. Have a **complete** picture:

*Which are the different outcomes?*

### Outcomes Hierarchy:



Tracking



# 'Outcomes that matter to patients'\* – how are they created?

Resources along the pathway:



- Healthcare needs are infinite
  - Resources are finite – how should they be used?
- Where they have the **most impact** on outcomes!

$$\text{KHP Value} = \frac{\text{'Outcomes that matter to patients'}}{\text{'Resources used over the whole pathway'}}$$





# Making it work in practice for KHP: A collaborative effort to navigating the way forward

