NHS RightCare

NHS RightCare - The Power of Variation

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First Do No Harm

The first Atlas of Variation (2009) – destabilised complacency by highlighting huge and unwarranted variation in:

- Access
- Quality
- Outcome
- Value

Also revealed two other problems:

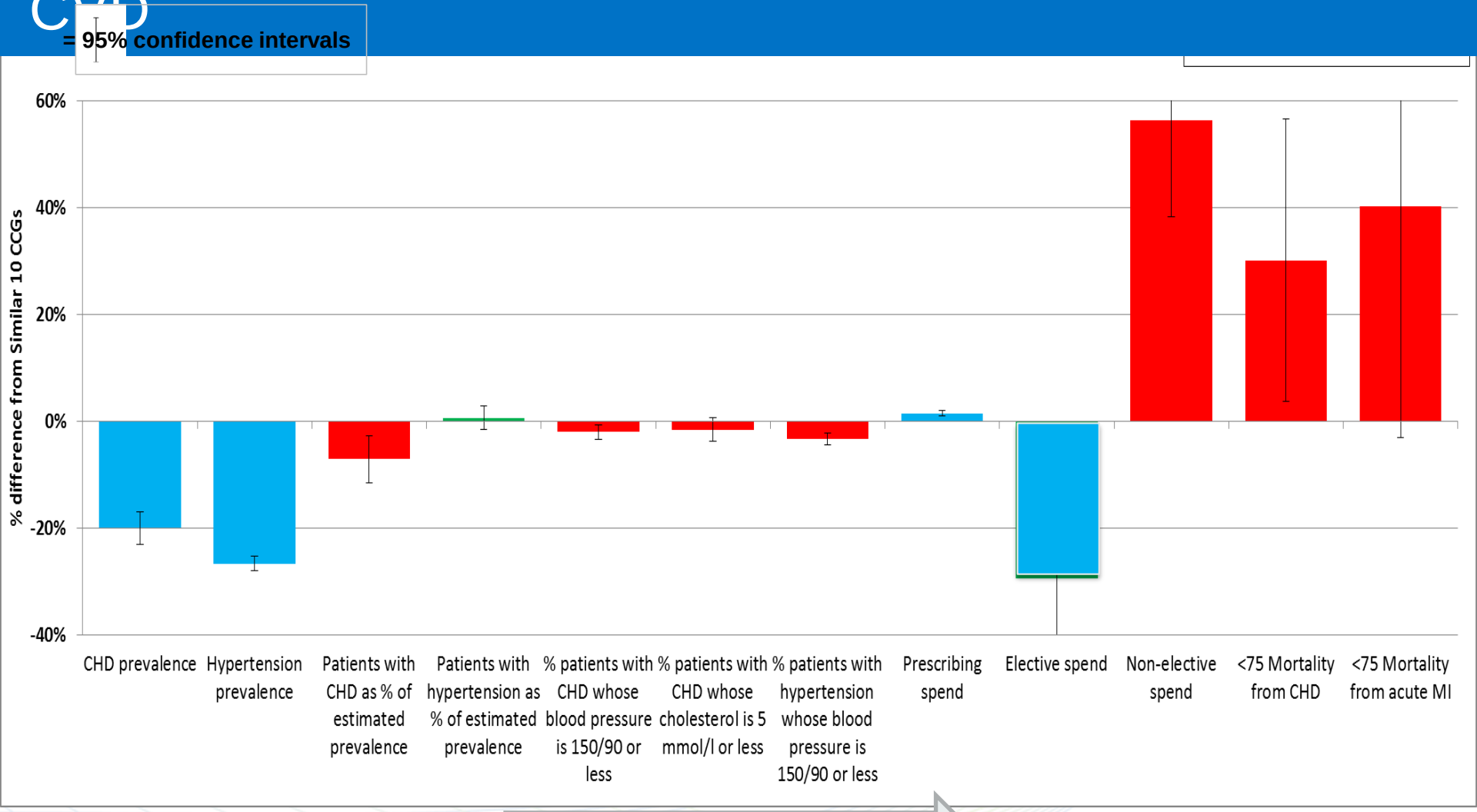
Overuse – leading to

- Waste
- Patient harm (even when the quality of care is high)

Underuse – leading to

- Failure to prevent disease
- Inequity

Heart disease pathway of a page – Why Bradford chose CVD



Initial contact to end of treatment

NHS Bradford City

Public Health England

Cardiovascular Disease Prevention: Risk Detection and Management in Primary Care

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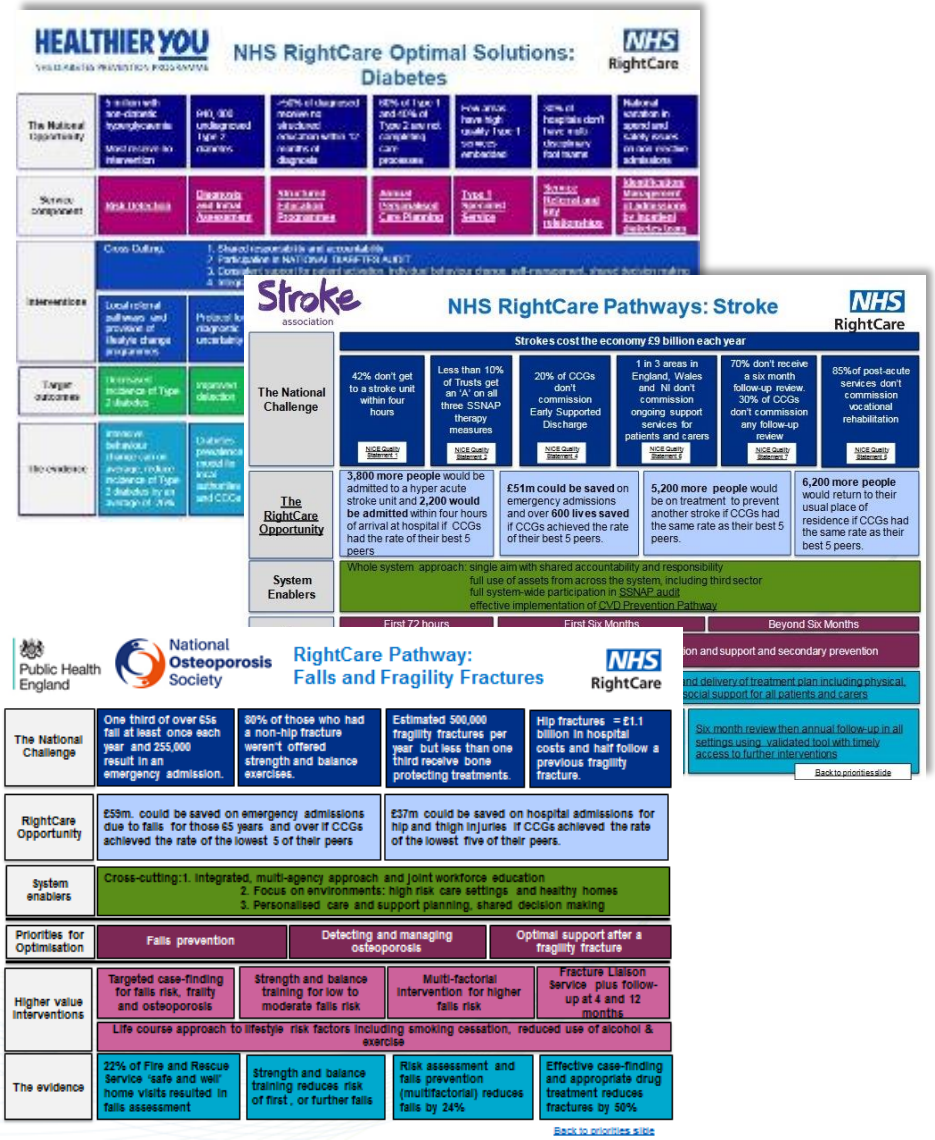
The Interventions	**Cross Cutting:** 1. NHS Health Check - systematic detection of high BP, AF, NDH, T2DM, CKD, high cholesterol, CVD risk 2. System level action to support guideline implementation by clinicians 3. Support for patient activation, individual behaviour change and self management					
	High BP detection and treatment	**AF detection & anticoagulation**	**Detection, CVD risk assessment, treatment**	**Type 2 Diabetes preventive intervention**	**Diabetes detection and treatment**	**CKD detection and management**
The Opportunities	5 million un-diagnosed. 40% poorly controlled	30% undiagnosed. Over half untreated or poorly controlled	85% of FH undiagnosed. Most people at high CVD risk don't receive statins	5 million with NDH. Most do not receive intervention	940k undiagnosed. 40% do not receive all 8 care processes	1.2m undiagnosed. Many have poor BP & proteinuria control
The Evidence	BP lowering prevents strokes and heart attacks	Anticoagulation prevents 2/3 of strokes in AF	Behaviour change and statins reduce lifetime risk of CVD	Intensive behaviour change (eg NHS DPP) reduces T2DM risk 30-60%	Control of BP, HbA1c and lipids improves CVD outcomes	Control of BP, CVD risk and proteinuria improves outcomes
The Risk Condition	**Blood Pressure**	**Atrial Fibrillation**	**High CVD risk & Familial H/ cholesterol**	**Non Diabetic Hyperglycemia ('pre-diabetes')**	**Type 1 and 2 Diabetes**	**Chronic Kidney Disease**

Detection and 2°/3° Prevention

The Outcomes	50% of all strokes & heart attacks, plus CKD & dementia	5-fold increase in strokes, often of greater severity	Marked increase in premature death and disability from CVD	Marked increase in Type 2 DM and CVD at an earlier age	Marked increase in heart attack, stroke, kidney, eye, nerve damage	Increase in CVD, acute kidney injury & renal replacement

NHS RightCare Pathways

- Diabetes
- Stroke
- Falls and Fragility Fractures
- And more to come…



Evolution of NHS RightCare

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- Atlases of Variation & Health Improvement Packs
- **Clinical Engagement**

- Improvement processing

- **Clinical leadership**
- Evidential and Indicative data - Triangulation of variation – Where to Look
- Intelligence packs

- Knowledge transfer and shared learning
- National mandate and industrialisation

NHS RightCare's essentials of population healthcare

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Objective	Maximise Value			
Principles	Get everyone talking about same stuff	Talk about fix and future	Demonstrate viability	Isolate reasons for non-delivery
Phases	Where to Look	What to Change	How to Change	
Ingredients	1 Clinical leadership	2 Indicative data	3 Engagement	4 Evidential data	5 Effective processes

Where to Look Packs – January 2017

Headline opportunity areas for your health economy

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Spend & Outcomes	Outcomes	Spend
Musculoskeletal	Maternity	Musculoskeletal
Gastro-intestinal	Musculoskeletal	Respiratory
Trauma and Injuries	Trauma and Injuries	Gastro-intestinal
Respiratory	Endocrine	Neurological
Neurological	Gastro-intestinal	Cancer

Where there has been a change to your improvement opportunities from the January 2016 pack this could have been caused by actual improvement or deterioration in your own CCG or peer CCG performance or the robustness and timing of local data
If your local opportunities have changed significantly and you would like to investigate the reasons for this further, please contact your Delivery Partner or england.healthinvestmentnetwork@nhs.net.

You can also request the methodology used to calculate your headline opportunities from this e-mail address : england.healthinvestmentnetwork@nhs.net.

COPD pathway

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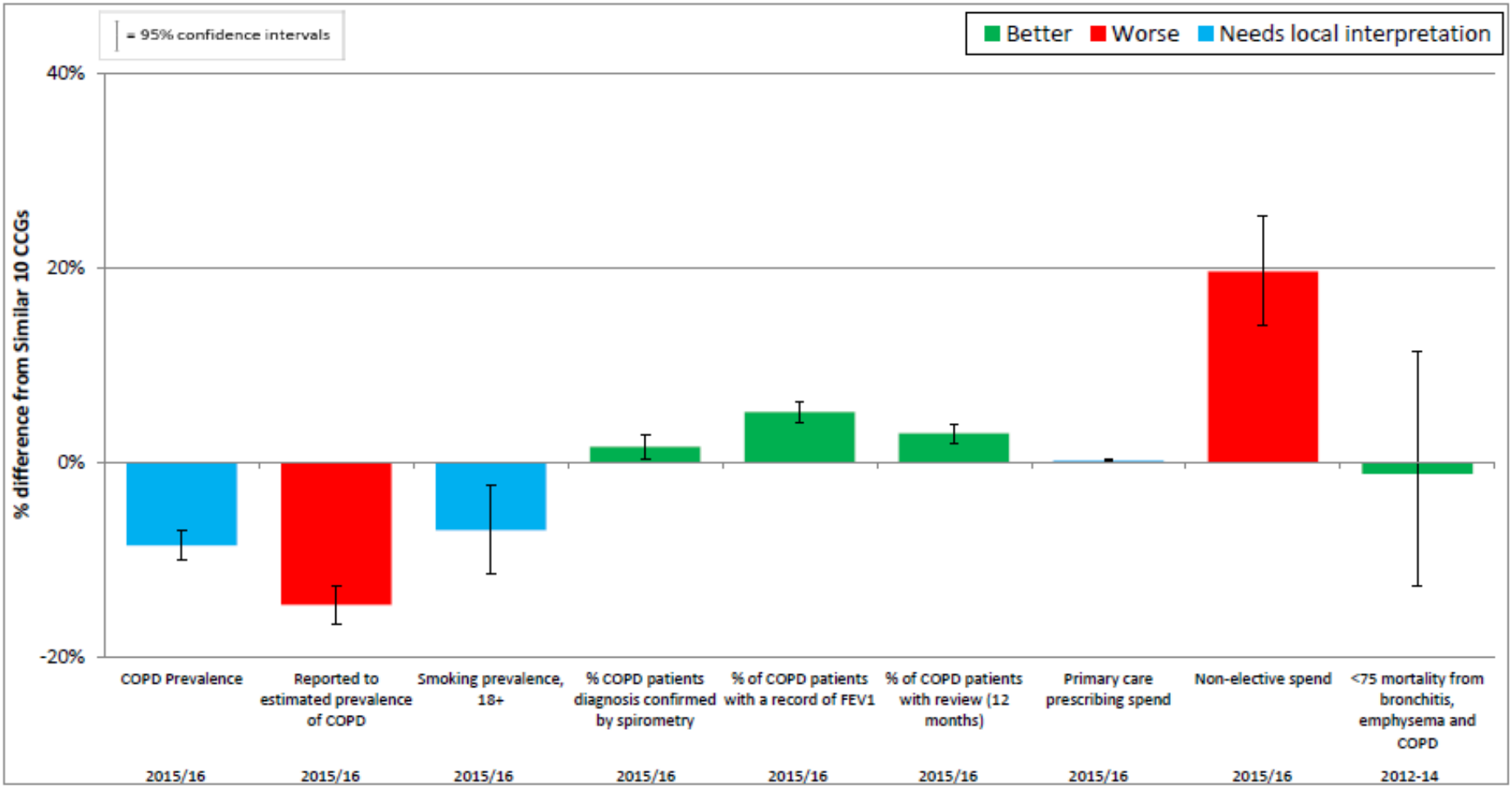
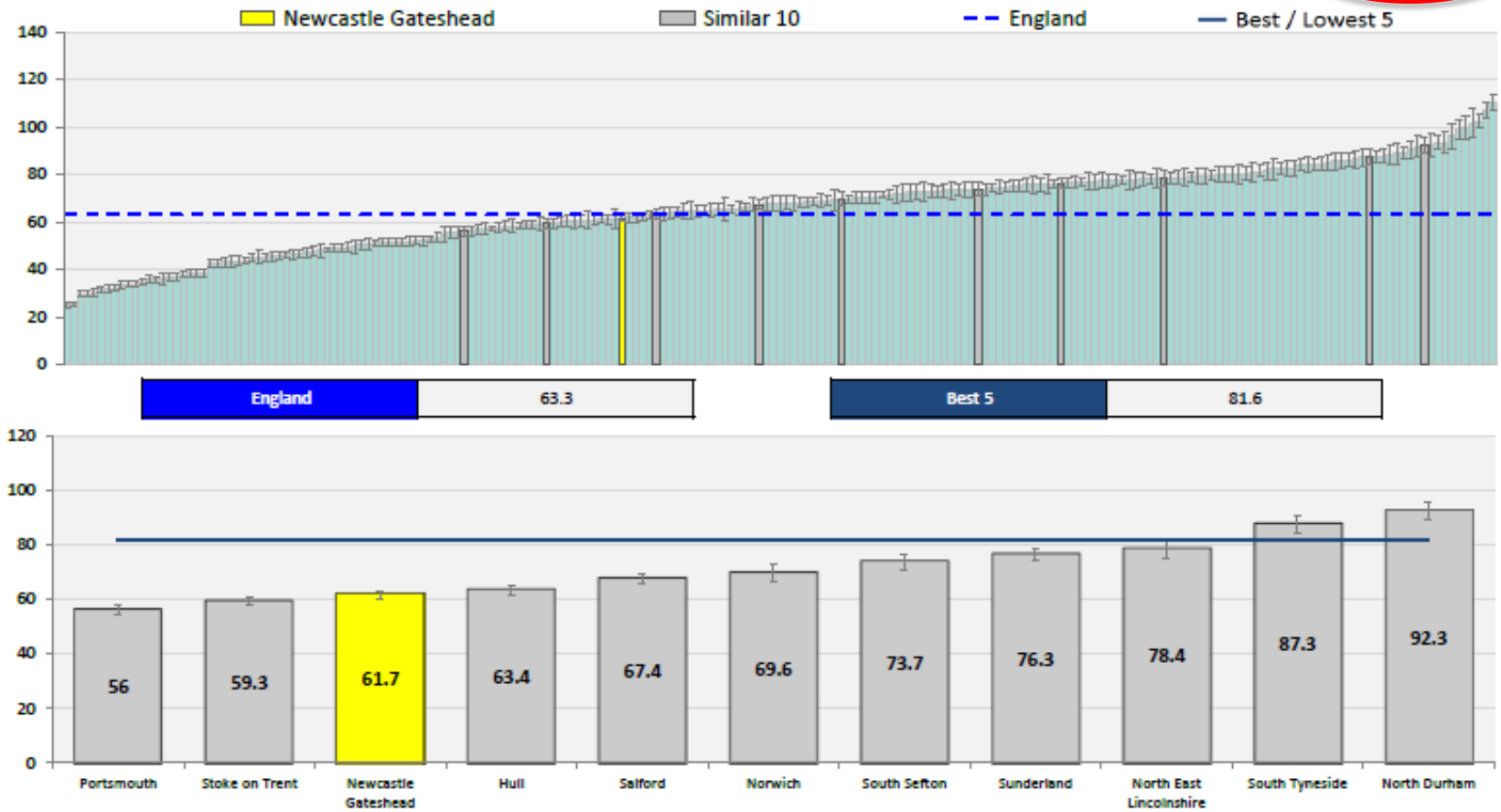


NICE guidance:
http://pathways.nice.org.uk/pathways/chronic-obstructive-pulmonary-disease
PRIMIS Toolkit:
http://www.nottingham.ac.uk/primis/tools-audits/tools-audits/grasp-suite/grasp-copd.aspx

Opportunity in the top right hand corner is how many additional people with COPD would be diagnosed if the CCG achieved the average of highest 5 of the 10 most similar CCGs

Reported to Estimated prevalence of COPD (%)

3964 Ppl.



Definition: Reported to Estimated prevalence of COPD (%)

Source: http://www.NHS Digital.gov.uk/catalogue/PUB18887, http://www.erpho.org.uk/inhale.aspx- CIs were calculated by the RightCare team and are underestimates. PHE will provide CIs in 2017

Year: 2015/16 (2011)

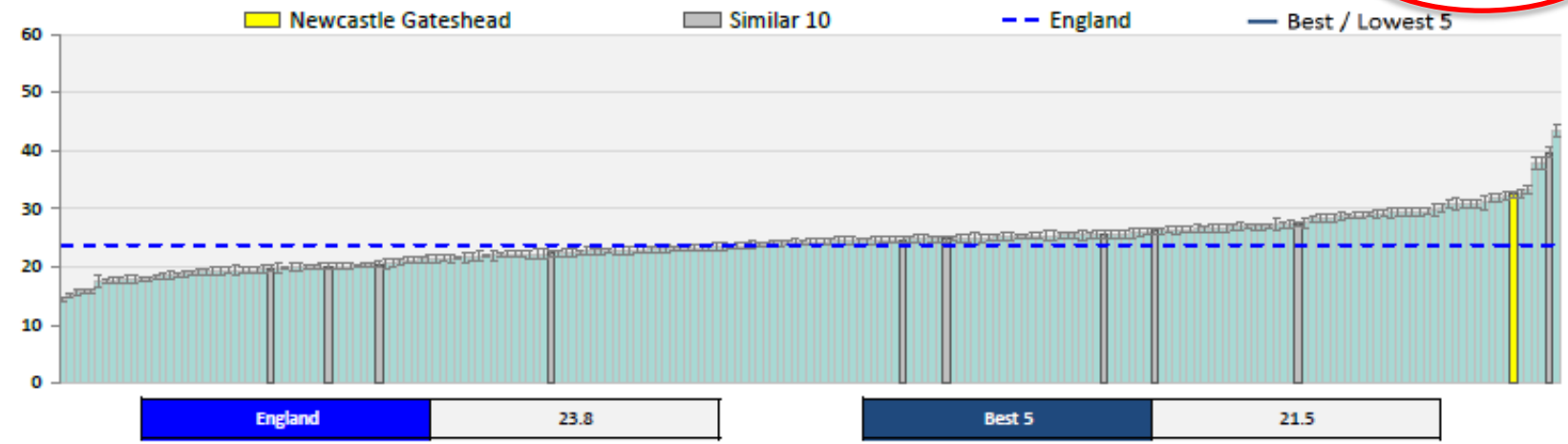
69

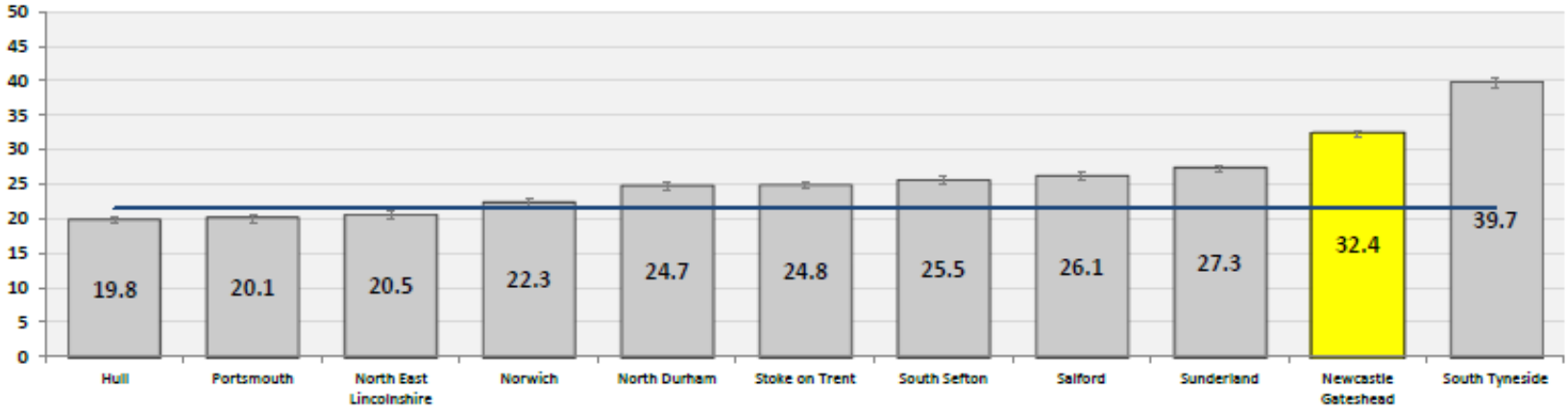
Source: RightCare Long Term Conditions Focus Pack

Opportunity in the top right hand corner is how many fewer days (nights) spent in emergency admissions people with respiratory disease would have in last year of life if the CCG achieved the average of lowest 5 of the 10 most similar CCGs

Respiratory: Average annual number of days (nights) spent in emergency hospital admissions during the last year of life of CCG residents who died 2013-2015

7120 Days





Definition: Respiratory: Average annual number of days (nights) spent in emergency hospital admissions during the last year of life of CCG residents who died 2013-2015

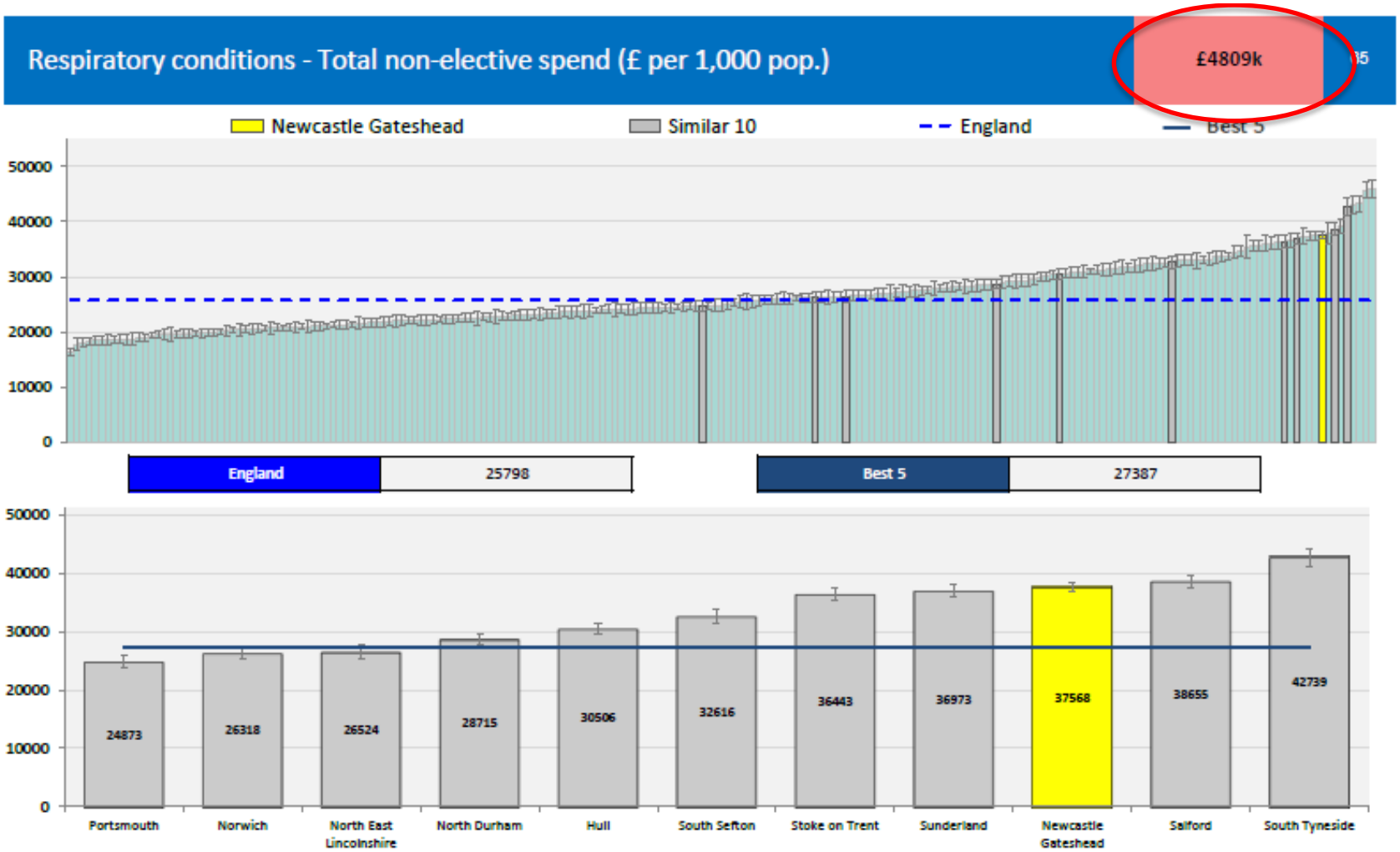
Source: PHE, ONS

Year: 2013-15

155

Source: RightCare Long Term Conditions Focus Pack

Opportunity in top right had corner is based on the difference in spend if the CCG achieved the same spend per 1,000 population as the average of lowest 5 of the 10 most similar CCGs



Definition: Respiratory - Total spend on non-elective admissions per 1,000 population
Source: Temporary National Repository – Hospital Admissions Databases, SUS SEM (Secondary User Services Extract Mart)
Year: 2014/15

Complex patients - Co-morbidities

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Of the 525 patients admitted for Gastro intestinal, 144 patients were admitted for a Cancer condition and 155 patients were admitted for a Respiratory condition.

*For more details on how to interpret the following table, please refer to the last slide of this pack "Complex Patients - How to interpret co-morbidities table"

Main conditions	Co-morbidity 1	Co-morbidity 2	Co-morbidity 3	Co-morbidity 4	Co-morbidity 5
Gastro intestinal	Cancer	Respiratory	Neurological	Circulation	Genito Urinary
525 patients	144	155	153	125	127
Respiratory	Gastro intestinal	Circulation	Cancer	Neurological	Genito Urinary
497 patients	155	143	130	139	123
Circulation	Respiratory	Gastro intestinal	Neurological	Genito Urinary	Cancer
478 patients	143	125	121	114	76
Cancer	Gastro intestinal	Respiratory	Genito Urinary	Neurological	Poisoning and adverse effects
434 patients	144	130	106	89	85
Neurological	Gastro intestinal	Respiratory	Circulation	Genito Urinary	Cancer
428 patients	153	139	121	127	89

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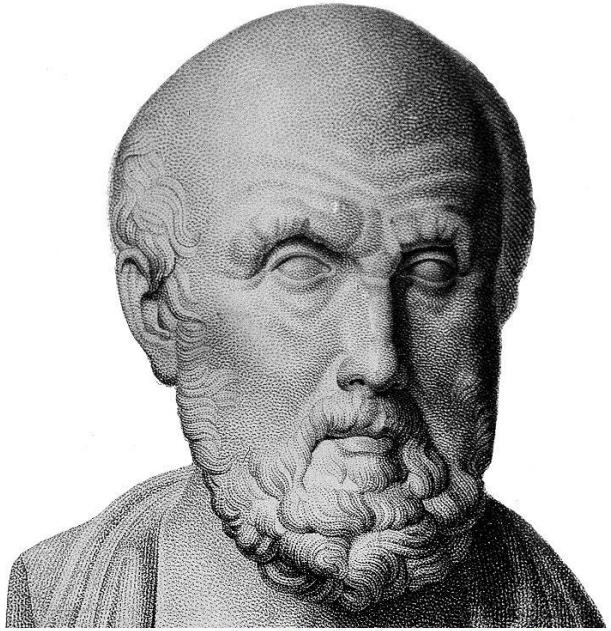
Closing the perception gap

- The perception gap pervades the system
- 70% of breast surgeons believe a primary concern of women with breast cancer is to keep their breast
  - The real number is 7% of informed women
- 95% of people with elective stents think they reduce risk of heart attack
  - They don't (most informed people don't want one)
- Vast majority of medics believe the primary concern for those with colorectal cancer is to get rid of the cancer
  - In reality, for many it is to maintain bowel function
  - How many? We don't know! Why not? Because we haven't sought either to inform the patients or to understand their preferences
- 5x more doctors think patients are the biggest barrier to Shared Decision Making (SDM) than think medics are
  - Cochrane found effective SDM is "physician, not patient, dependent"

Closing the perception gap

"It is far more important to understand the person who has the disease than it is to know what disease the person has"



Knowledge Transfer

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- GIRFT
- Academia
  - Warwick Business School
  - Salford University
  - Oxford University
  - LSE
  - Manchester Met Business School
- Clinical Colleges and national charities (best practice)
- Manchester Airport
- McLaren F1
- CIPFA, CIMA, HFMA (financial sustainability)
- Euler Hermes
- Pfizer

Generics of optimal improvement processing

- Step 1 – Awareness is the first step to improvement
- Step 2 – Find a champion
- Step 3 – Engage the right people to design optimal
- Step 4 – Understand the problem (use data)
- Step 5 – Convert data into knowledge and design optimal
- Step 6 – Use delivery levers to implement

- So, when did it all begin? Knowledge transfer from the ancient world….

Roman calendar c. 250BC - 49BC

- 355 days in a year
- 10 months (most years)
- Added an extra month every so often to catch up with the lunar cycle
- Extra months were determined by the College of Pontiffs (a set of priests with a focus on astronomy)

- Current situation – the system sort of worked and they muddled through year to year (sound familiar?)

- Problems – e.g. harvest would often officially occur weeks before or after the crops actually needed to be harvested

Egypt 48BC – Gaius Julius Caesar

What happened?

- Step 1 – Awareness is the first step to improvement
  - Senators had begun to notice lower corn supply in years prior to extra months and wondered whether the current system was fit for purpose (= **unwarranted variation**)

- Step 2 – Find a champion
  - Step forward Gaius Julius Caesar, enjoying a prolonged visit to Egypt, in the arms of Cleopatra (= **strong change leader**)

- Step 3 – Engage the right people
  - World's leading academics
  - Mathematicians, Astronomers (lunar cycle)
  - Epicureans (pre-cursor to modern scientists)
  - Senators and other land owners (farmers)

    (= **expert and stakeholder engagement**)

What happened?

- Step 4 - Collect and analyse data - understand the problem
  - Trawled back through all the calendar and seasonal records, star charts, religious festivals (= **produced CfV focus pack**)

- Step 5 – Convert data into knowledge and use to design optimal
  - Met with all the engaged experts in Alexandria Library until had the answer (= **optimal design event**)

What happened?

- Step 6 – Use delivery levers to implement
  - Took over the republic of Rome, made himself Dictator, enforced the change (= slightly tenuous link to – **isolate the reasons for non-delivery**)

What happened?

- Optimal design –
  - 365 day year
  - 12 months (even named one of the new ones after himself)
  - Extra day every fourth year to re-align with lunar cycle

- In time, led to increased corn supply to Rome which was used as a form of welfare benefit (**population healthcare improvement**)
- 2,065 years later, we're still benefitting

- Knowledge transfer:
  - The process itself

- Moral of the story:
  - If you do change properly you create a sustainable solution

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For further information -

- ***Email RightCare***
- ***rightcare@nhs.net***

- ***Twitter:***
- ***@nhsrightcare***
- ***@matthew_cripps1***

- ***Visit RightCare:***
- ***http://www.england.nhs.uk/rightcare/***