

NHS Doncaster

Clinical Commissioning Group



## Yorkshire & Humber Respiratory Programme Report

This report has been produced by the Yorkshire & Humber Respiratory Team. It highlights opportunities that will help you improve quality and productivity and improve outcomes for people with COPD in your CCG locality.

For more details contact: [Lisa.chandler@nhs.net](mailto:Lisa.chandler@nhs.net)

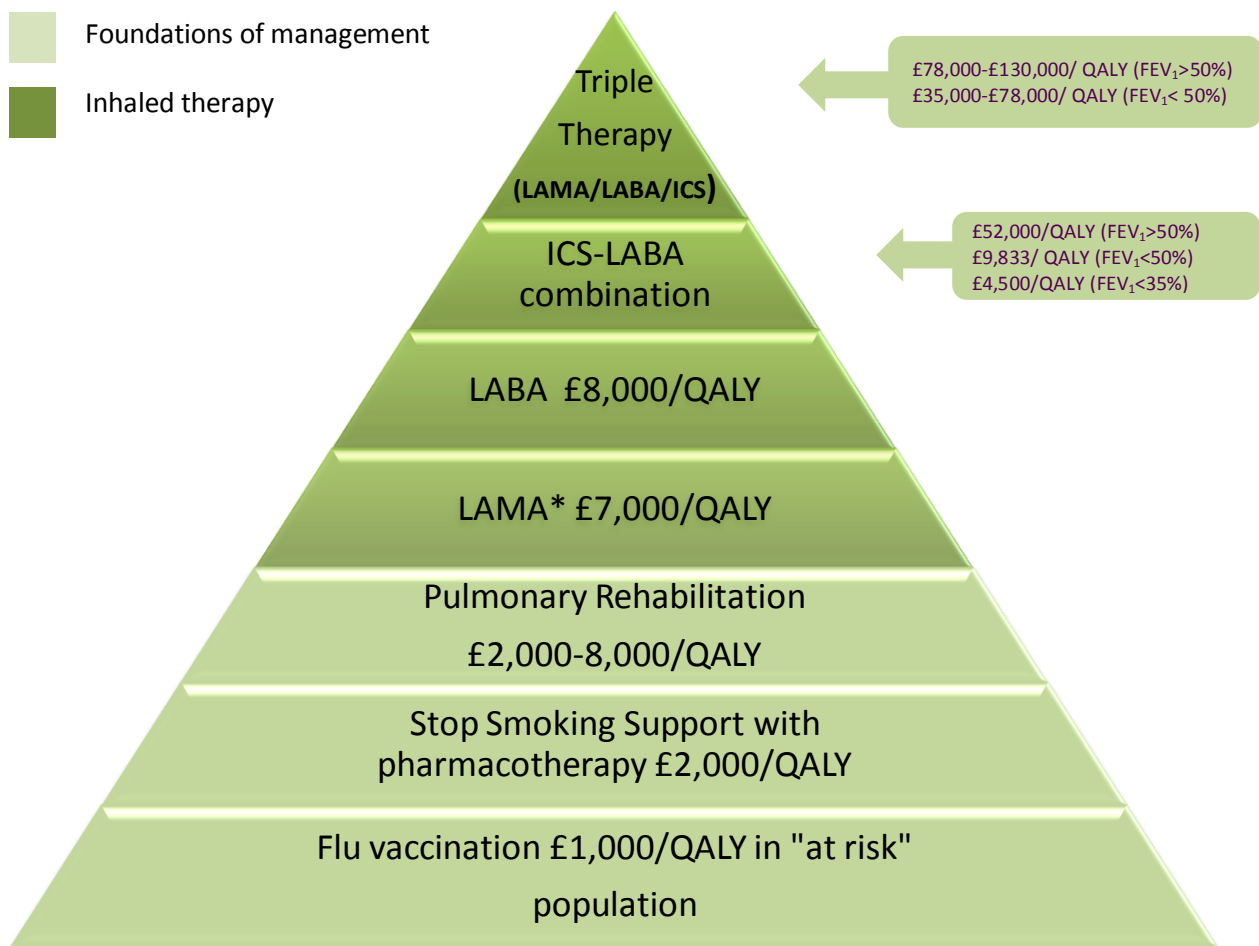
## COPD Value Pyramid (1) (2)

This pyramid illustrates cost effectiveness of treatment options in COPD, it is not a treatment algorithm. For guidance on management of COPD visit: [www.nice.org.uk/cg101](http://www.nice.org.uk/cg101)

A quality adjusted life-year (QALY) is the arithmetic product of life expectancy and a measure of the quality of the remaining life-years.

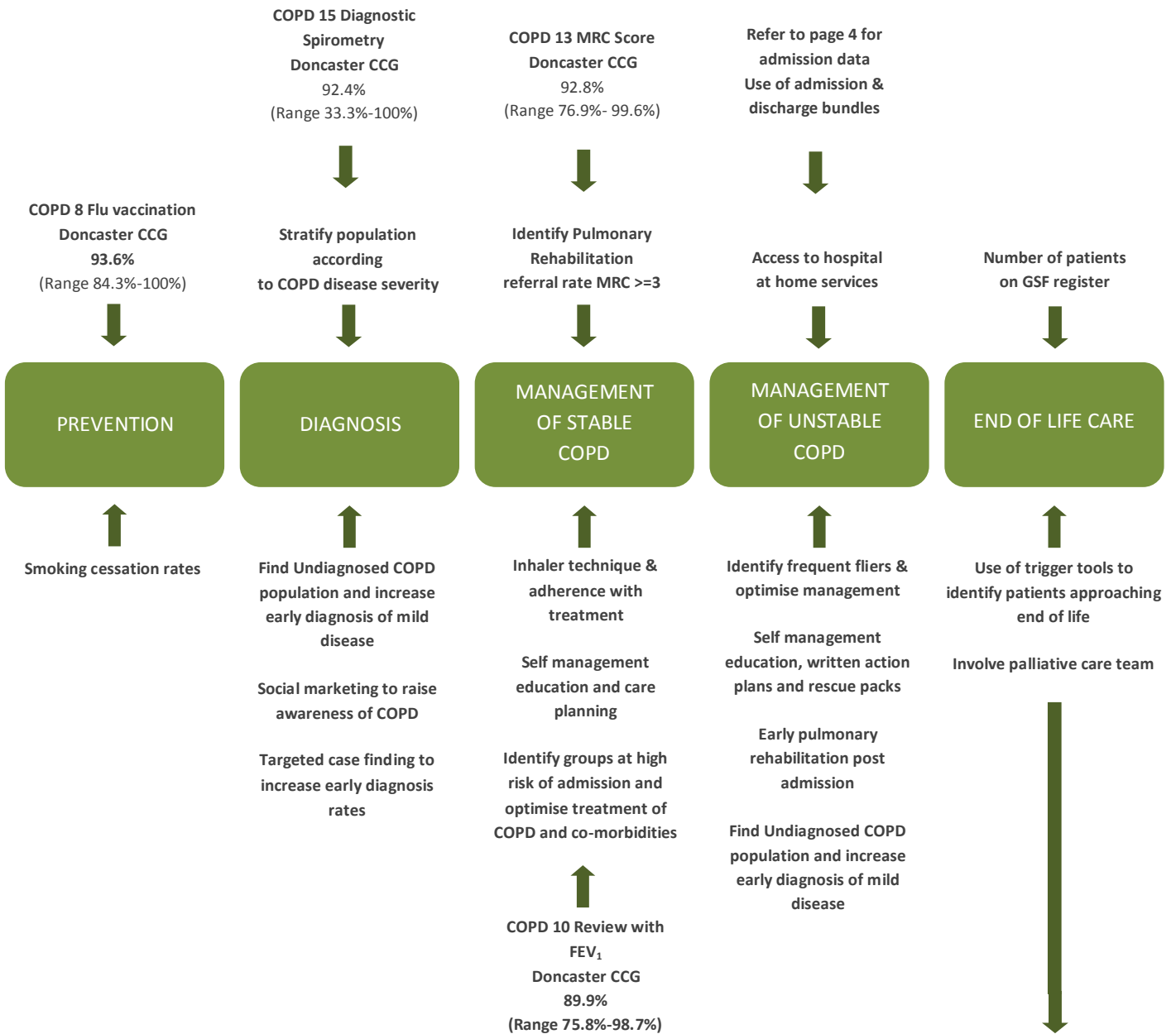
NICE defines an intervention to be cost effective if it costs less than £20,000-£30,000 per QALY.

The pyramid shows that the most cost effective interventions for COPD are influenza vaccination, stopping smoking and pulmonary rehabilitation and should underpin pharmacological treatment.

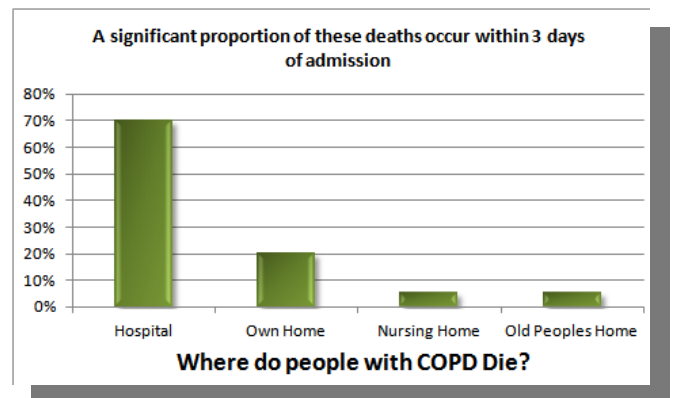


\*Costing calculations based on Tiotropium

## COPD Pathway



Figures for COPD pathway: see references for Table 1



## COPD Mortality



- Doncaster’s patients lose around 17.76 years of life due to mortality from Bronchitis, Emphysema and other COPD England 11.67 Yorkshire and the Humber 14.1 Range 8.7-23.



- Nationally, 70% of COPD patients die in the hospital (1)

### Domain Key

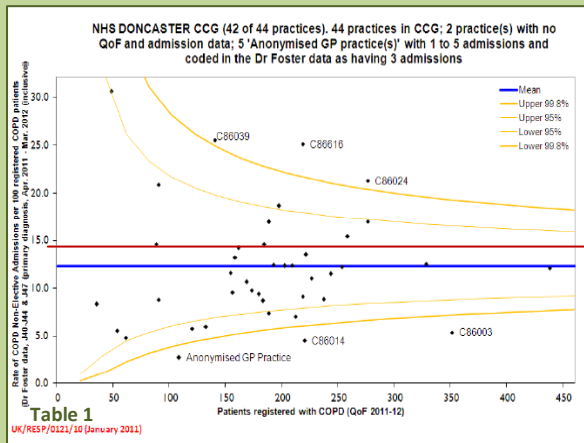


NHS Outcomes Framework



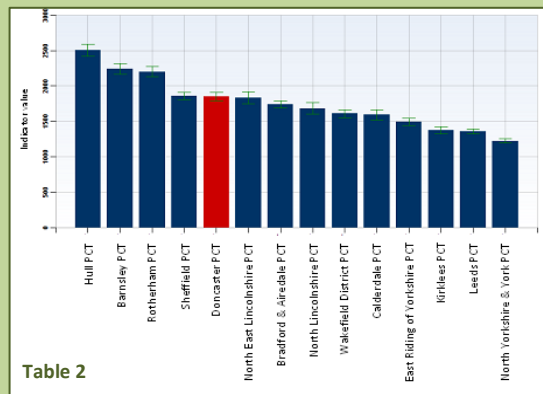
Public Health Outcomes Framework

## Rate of admissions vs the prevalence of COPD in CCG General Practices



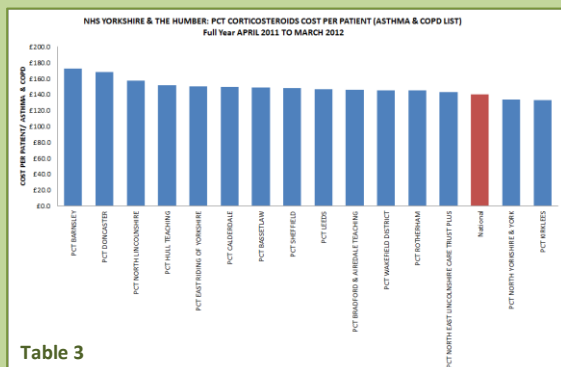
- It is predicted that Doncaster CCG has 9402 COPD patients. QoF 2011/12 reports 7822 have been diagnosed by GPs (4).
- In 2011-12, there were 945 admissions for acute exacerbations (AE) COPD in Doncaster CCG patients.
- A total of 6644 bed days were associated with AE COPD admissions
- Average cost of each COPD admission for Doncaster is £2,229
- Nationally 10% of emergency COPD admissions are in people whose COPD has not previously been diagnosed. (5).
- Average rate of admission for patients/100 on COPD register in Doncaster CCG was 12.26 (YH Range 9.92-23.12)
- 10.9 % of all admissions in Doncaster patients were for 0 bed days (YH Range 2.6%-12.2%)

## Smoking attributable hospital admissions per 100,000 population aged 35 years and over



- Smoking is the biggest risk factor for development of COPD. Smokers over 35 with one or more symptoms will be the majority of unidentified population.
- Stopping smoking is the most cost effective treatment for COPD, stop smoking support with pharmacotherapy costs £2000 per QALY.
- Stopping smoking is the only intervention shown to slow disease progression. It costs more to treat people with severe disease than mild or moderate disease (5).
- Supporting practices with high smoking prevalence in your CCG will significantly improve quit rates across the patch.

## Spend on Inhalers for COPD and Asthma Patients in Doncaster PCT



- Doncaster PCT 2011/12 total spend on inhalers is £7,111,322.31
- 50% of patients cannot use their inhalers correctly (6).
- 45% of patients forget to take doses as prescribed.
- 30% of patients stop treatment due to lack of perceived benefits (7).
- Patients with poor inhaler technique are 50% more likely to be admitted (6).
- Patients with poor inhaler technique are 60% more likely to have an exacerbation (8).

## Optimising best value COPD care in Doncaster (QIPPS)

This page outlines specific areas that need to be examined and considered locally in order to:

- Reduce premature mortality
- Reduce admissions
- Increase smoking cessation / quit rates
- Reduce prescribing costs (this is currently headed in the table as ‘smoking cessation/quit rates’)

Areas for consideration	Current provision in Doncaster
<p><b>Reduce premature mortality</b></p> <ul style="list-style-type: none"> <li>• Early Identification of COPD</li> <li>• Promote vaccination</li> <li>• Support Smoking Cessation efforts</li> <li>• Increase patient’s activity levels, refer to pulmonary rehabilitation</li> <li>• Optimise treatment according to guidelines</li> <li>• Commission specialist assessment during COPD admissions and adequate access to Non invasive Ventilation (NIV)</li> <li>• Provide appropriate and targeted Oxygen prescription in both emergency and elective settings</li> </ul>	<p><b>Reduce premature mortality</b></p> <p><b>Promote vaccination</b> The Public Health Team target “at risk” groups each year to promote and increase uptake of influenza and pneumonia vaccination.</p> <p><b>Pulmonary Rehabilitation</b> NHS Doncaster commissions a pulmonary rehabilitation service; we are currently working with the provider to improve access, uptake and completion rates.</p> <p><b>Local Guidelines and Education</b></p> <ul style="list-style-type: none"> <li>• Local guidelines for diagnosis, stable and acute management are in development</li> <li>• Local promotion of rescue packs and action plans</li> <li>• COPD handbook issues to patients includes record of exacerbations and details of self management plan</li> <li>• Education events for Health Professionals in development and practices to be offered education and support to increase concordance with evidence based practice</li> </ul> <p><b>Specialist assessment and access to NIV</b> COPD CQUIN in place with secondary care to support identification and access to NIV</p> <p><b>Oxygen assessment and prescription</b> Business case in development for Home Oxygen Service Assessment and Review service</p>

<p><b>Reduce Admissions</b></p> <ul style="list-style-type: none"> <li>• Target COPD patients for flu and pneumonia vaccinations as COPD death is a potential vaccine preventable event</li> <li>• Regularly offer stop smoking advice</li> <li>• Commission pulmonary rehabilitation for patients with MRC score of more than 3 or with MRC score of 2 and who have had an exacerbation OR post admission. The numbers needed to treat (NNT) with Pulmonary Rehabilitation is 4 to avoid 1 admission</li> <li>• Record exacerbations and optimise pharmacotherapy</li> <li>• Provide self management education, action plans and rescue medication packs</li> <li>• Provide “Hospital at Home” services</li> <li>• Commission CQUIN core bundles on discharge</li> </ul> <p><b>Inappropriate admissions of End of Life Care COPD Patients</b></p> <ul style="list-style-type: none"> <li>• Identify patients approaching last year of life using trigger tools (9)</li> <li>• Add them to Gold Standard Framework (GSF) Register</li> <li>• Conduct Multi Disciplinary Team (MDT) assessment of GSF review</li> <li>• Refer to End of Life care services if appropriate</li> <li>• Provide additional measures for palliation of breathlessness (e.g opiates)</li> </ul>	<p><b>Reduce Admissions and Readmissions</b></p> <ul style="list-style-type: none"> <li>• The above actions in relation to reducing premature mortality will have an impact on reducing admissions</li> <li>• A Care bundle CQUIN is in place with DBHFT to ensure patients admitted with exacerbation of COPD have treatment in accordance with NICE Quality standards</li> <li>• Hospital at home scheme, including admission prevention and early facilitated discharge in place</li> </ul> <p><b>Inappropriate admissions of End of Life Care COPD Patients</b></p> <ul style="list-style-type: none"> <li>• Raising awareness with key health care professionals re identification of those reaching end of life.</li> <li>• Community Respiratory Service provide additional support and advice at end of life across the health economy</li> </ul>
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### Smoking cessation

- Make every contact count. “Ask, Advise, Act” at every opportunity in primary or secondary setting
- Increase access to smoking cessation advice – in general practice or specialist services
- Ensure GP teams delivering smoking cessation advice have adequate skills and training to increase quit rates using motivation techniques and behavioural support
- Prescribe adjunct pharmacotherapy as this increases success;

#### Numbers Needed to Treat (NNT) to Obtain 1 Long-Term Quitter (7) (8)

Brief advice (45 minutes)	40
Medication Plus behavioural support	
NRT	23
Bupropion	18
Varenicline	10

### Reduce inappropriate prescribing and waste (1) (10)

- Make every contact count, check inhaler technique and adherence with therapy at every opportunity in primary and secondary settings.
- Use structured review to ensure right patient, right treatment, right time
- Work with community pharmacists using structured MURS.

### Smoking Cessation

- Smoking cessation services within primary care and pharmacies are commissioned supporting patient choice.
- We *currently* have a model of specialist and LES services that deliver 4-week quits and but with no reduction in smoking prevalence and associated morbidity. Public Health will be implementing a comprehensive tobacco control programmes that support smoke free lives.

For more information about the smoking cessation programme contact: Kerry Warhurst, Public Health Specialist Starting & Developing Well Programme and Tobacco control. Email: [kerrywarhurst@doncasterpct.nhs.uk](mailto:kerrywarhurst@doncasterpct.nhs.uk)

### Reduce inappropriate prescribing and waste (1) (10)

- Community Pharmacy project to optimise respiratory Medicines Use Reviews. Funded by SHA working with Practices and Community Pharmacists to support improved management of Respiratory Patients through tMURS.
- Use of CQUIN bundles to encourage inhaler technique review during hospital admission or Emergency Department attendance

For more information about any element of the Respiratory Pathway please contact:

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## References

All information displayed at CCG level unless only available by PCT

### Data sources:

1. *IMPRESS Guide to relative value COPD interventions*  
<http://www.impressresp.com/index.php?option=comdocman&itemid=82>
2. *NICE COPD guidelines ; [www.nice.org.uk/cg101](http://www.nice.org.uk/cg101)*
3. *Deaths from Respiratory Diseases: Implications for end of life care in England - June 2011. National End of Life Care intelligence network and national end of life care programme*
4. *Eastern Region Public Health Observatory COPD prevalence estimates December 2011 –*  
<http://www.apho.org.uk/resource/item.aspx?RID=111122>
5. *An outcome strategy for chronic pulmonary disease (COPD) and Asthma in England – July 2011-*  
*Department of Health.*
6. *Restepo et al, Int of of Chron Pulmon Dis 2008; 3 (3); 3712384*
7. *Van Ganse et al, PCRJ 2003; 12 (2): 46-51*
8. *Garcia-Aymerich et al, Eur Respir J 2000 ; 16; 103721042*
9. *GSF toolkit <http://www.goldstandardsframework.org.uk/theGSFToolkit>*
10. *PCRS opinion sheet on COPD review; [http://www.pcrs-uk.org/opinions/copd\\_review\\_final.pdf](http://www.pcrs-uk.org/opinions/copd_review_final.pdf)*



**Data sources for Tables**

Table 1 (a) Foster/IMS Regional Healthcare Analysis data, COPD Non – Elective Admissions (J40-44 & J47), Yorks & Humber SHA CCG GP practices, April 2011 – March 2012, accessed 28 November 2012  
(b) QOF 2011-12; Yorks & Humber SHA CCG GP practices COPD prevalence data; Filename: [http://www.ic.nhs.uk/webfiles/publications/002\\_Audits/QOF\\_2011-12/Practice\\_Tables/QOF1112\\_Prac\\_Prevalence.xls](http://www.ic.nhs.uk/webfiles/publications/002_Audits/QOF_2011-12/Practice_Tables/QOF1112_Prac_Prevalence.xls); accessed 2 Nov 2012  
(c) GP Practice to Clinical Commissioning Group Mappings - created 26/10/12; Filename: [http://www.connectingforhealth.nhs.uk/systemsandservices/data/ods/ccginterim/interimpcmem\\_v3.zip](http://www.connectingforhealth.nhs.uk/systemsandservices/data/ods/ccginterim/interimpcmem_v3.zip) ; accessed 5 Nov 2012  
(d) QOF 2011-12; GP practice prevalence data; Filename: <https://catalogue.ic.nhs.uk/publications/primary-care/qof/qual-outc-fram-11-12-prac/qual-outc-fram-11-12-prac-prev.xls>; accessed 20 Jan 2013  
(e) QOF 2011-12; COPD clinical domain data; Filename: <https://catalogue.ic.nhs.uk/publications/primary-care/qof/qual-outc-fram-11-12-prac/QOF-11-12-data-tab-pracs-copd.xls>; accessed 20 Jan 2013  
(f) Eastern Region Public Health Observatory - COPD Prevalence Estimates Dec 2011; Filename: <http://www.apho.org.uk/resource/item.aspx?RID=111122>; accessed 20 Jan

Table 2 <http://www.lho.org.uk/viewResource.aspx?id=17431>

Table 3 Spend on inhalers national ePACT system (electronic Prescribing and Cost Trend) Analysis tool via ePACT.net

Funnel plots extracted from GlaxoSmithKline Ltd. presentation to Lisa Chandler given on 20 December 2012; Title: An introduction to Statistical Process Control (SPC) and associated analysis with data for: Yorkshire & Humber SHA CCG practices

## **Acknowledgements**

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