

National COPD Audit Programme

Primary care audit 2015-17

Local health board report

Powys

(Winter 2017)

This document contains the local health board and component cluster level results, in comparison to the national results from the 2015-17 primary care audit.

If you have any questions about any of the content, please contact the audit team on copd@rcplondon.ac.uk or 020 3075 1526 / 1566 / 1565.

Local health board report for **Powys**, primary care audit 2015-17

The Royal College of Physicians

The Royal College of Physicians (RCP) plays a leading role in the delivery of high-quality patient care by setting standards of medical practice and promoting clinical excellence. The RCP provides physicians in over 30 medical specialties with education, training and support throughout their careers. As an independent charity representing over 32000 fellows and members worldwide, the RCP advises and works with government, patients, allied healthcare professionals and the public to improve health and healthcare.

Healthcare Quality Improvement Partnership (HQIP)

The National COPD Audit Programme is commissioned by the Healthcare Quality Improvement Partnership (HQIP) as part of the National Clinical Audit (NCA) Programme. HQIP is led by a consortium of the Academy of Medical Royal Colleges, the Royal College of Nursing and National Voices. Its aim is to promote quality improvement, and in particular to increase the impact that clinical audit has on healthcare quality in England and Wales. HQIP holds the contract to manage and develop the NCA Programme, comprising more than 30 clinical audits that cover care provided to people with a wide range of medical, surgical and mental health conditions. The programme is funded by NHS England, the Welsh Government and, with some individual audits, also funded by the Health Department of the Scottish Government, DHSSPS Northern Ireland and the Channel Islands.

Citation for this document: Baxter N, McMillan V, Holzhauser-Barrie J, Robinson S, Stone P, Quint J and Roberts CM. *Primary care 2015-17 audit: Local health board report for Powys*. Local health board report. London: RCP, 2017.

Copyright

All rights reserved. No part of this publication may be reproduced in any form (including photocopying or storing it in any medium by electronic means and whether or not transiently or incidentally to some other use of this publication) without the written permission of the copyright owner. Applications for the copyright owner's written permission to reproduce any part of this publication should be addressed to the publisher.

Copyright © Healthcare Quality Improvement Partnership 2017

Royal College of Physicians

Care Quality Improvement Department
11 St Andrews Place
Regent's Park
London NW1 4LE

www.rcplondon.ac.uk/COPD @NatCOPDAudit #COPDAudit #COPDPRaudit #COPDPRbreathebetter #COPDAuditQI
Registered charity no 210508

Contents

About this report.....	4
Participation.....	5
Section 1: Demographics and comorbidities	7
Section 2: Getting the diagnosis right.....	9
Section 3: Assessing severity and future risk.....	12
Section 4: Providing high value care	18
Appendix A: Report preparation.....	24
Appendix B: Participating clusters and practices.....	25

About this report

This report is the local health board and component cluster level report for **Powys** for the National COPD Audit Programme's primary care audit 2015-2017.

This report presents regional figures in order to support local health boards, clusters and primary care staff to better understand the quality of care received by patients and, consequently, to inform quality improvement projects. It is **designed to be read alongside the national report 'Planning for every breath'** and, therefore, the **key findings, commentary and methodology have not been duplicated here**. Additionally, section 5 of the national report (displaying the data queries in relation to severe mental illness, smoking status, and socioeconomic deprivation at both health board and national level) has not been replicated here. This decision was taken because of the risk of small numbers in the cluster level analysis.

The following are available on the national report website of the national report (<https://www.rcplondon.ac.uk/planningeverybreath>):

- Both parts of the national report:
 - The shorter report contains the key findings, recommendations, and quality improvement (QI) opportunities,
 - The longer report contains the results, and analysis methodology employed for the audit.
- Local health board and component cluster level reports for all other Welsh local health boards.
- A key findings infographic.
- A summary slide set of the findings, with a QI focus.

Participation

The methodology for the National COPD Audit Programme's primary care audit 2015-2017 builds upon the learning from the 2014-15 audit. This audit uses data extracted from general practices (GP) in Wales in June 2017, pertaining to the two years following the last audit (1 April 2015 to 31 March 2017).

Data were extracted directly from GP electronic systems by the NHS Wales Informatics Service (NWIS), for all practices that opted-in. Data cleaning and analysis was conducted by Imperial College London.

The 2017 audit included **407/435** practices, 93.6% of all practices in Wales.

Number of participating practices and clusters, per local health board, in the 2017 primary care audit

Local health board (LHB) / cluster	Total practices	Number participating	Percent participating
Wales	435	407	93.6%
Powys (PT)	16	13	81.3%
Mid Powys	5	4	80.0%
North Powys	7	6	85.7%
South Powys	4	3	75.0%
Abertawe Bro Morgannwg (ABMU)	73	69	94.5%
Afan	9	9	100.0%
Bayhealth	9	8	88.9%
Bridgend East Network	6	6	100.0%
Bridgend North Network	8	8	100.0%
Bridgend West Network	4	4	100.0%
Cityhealth	10	8	80.0%
Cwmtawe	5	5	100.0%
Llwchwr	5	5	100.0%
Neath	8	8	100.0%
Penderi	6	5	83.3%
Upper Valleys	4	4	100.0%
Aneurin Bevan (AB)	80	79	98.8%
Blaenau Gwent East	5	5	100.0%
Blaenau Gwent West	6	6	100.0%
Caerphilly East	7	7	100.0%
Caerphilly North	11	11	100.0%
Caerphilly South	7	7	100.0%
Monmouthshire North	8	8	100.0%
Monmouthshire South	5	4	80.0%
Newport East	7	7	100.0%
Newport North	6	6	100.0%
Newport West	5	5	100.0%
Torfaen North	6	6	100.0%

Local health board report for **Powys**, primary care audit 2015-17

Torfaen South	7	7	100.0%
Betsi Cadwaladr (BCU)	108	105	97.2%
Anglesey	11	11	100.0%
Arfon	11	11	100.0%
Central & South Denbighshire	8	8	100.0%
Central Wrexham	7	7	100.0%
Conwy East	6	5	83.3%
Conwy West	12	12	100.0%
Dwyfor	5	5	100.0%
Meirionnydd	6	6	100.0%
North & West Wrexham	6	6	100.0%
North Denbighshire	6	6	100.0%
North East Flintshire	8	7	87.5%
North West Flintshire	7	6	85.8%
South Flintshire	7	7	100.0%
South Wrexham	8	8	100.0%
Cardiff & Vale (CVU)	66	53	80.3%
Cardiff East	5	4	80.0%
Cardiff North	11	11	100.0%
Cardiff South East	8	6	75.0%
Cardiff South West	11	7	63.6%
Cardiff West	8	8	100.0%
Central Vale	8	7	87.5%
City & Cardiff South	7	5	71.4%
Eastern Vale	5	3	60.0%
Western Vale	3	2	66.7%
Cwm Taf (CT)	42	38	90.5%
North Cynon	6	5	83.3%
North Merthyr Tydfil	4	4	100.0%
North Rhondda	5	4	80.0%
North Taf Ely	4	4	100.0%
South Cynon	5	5	100.0%
South Merthyr Tydfil	5	5	100.0%
South Rhondda	9	7	77.8%
South Taf Ely	4	4	100.0%
Hywel Dda (HD)	50	50	100.0%
Amman/Gwendraeth	7	7	100.0%
Llanelli	7	7	100.0%
North Ceredigion	7	7	100.0%
North Pembrokeshire	9	9	100.0%
South Ceredigion	7	7	100.0%
South Pembrokeshire	5	5	100.0%
Taf / Tywi	7	7	100.0%



Section 1: Demographics and comorbidities

[Back to contents](#)

1.3 Comorbidities*

Rationale for inclusion:

To allow assessment of the percentage of COPD patients with co-morbidities (to better categorise the audited cohort). **NICE CG101: Chronic obstructive pulmonary disease in over 16s: diagnosis and management**¹ recommends that co-morbidities are considered in the management of patients with COPD.

Rationale for inclusion of depression and anxiety screening:

NICE CG91: Depression in adults with a chronic physical health problem: recognition and management² / **NICE CG113: Generalised anxiety disorder and panic disorder in adults: management**³

NICE guidelines for both depression and anxiety recommend i) primary care to be alert to possible depression (particularly in patients with a past history of depression or a chronic physical health problem with associated functional impairment) and consider asking patients who may have depression two screening questions; and ii) consider the diagnosis of generalised anxiety disorder in people presenting with anxiety or significant worry, and in people who attend primary care frequently who have a chronic physical health problem.

Condition	Wales N=82,696	PT N=3,218	Mid Powys N=638	North Powys N=1,392	South Powys N=1,188
Asthma	34,622 (41.9%)	1,310 (40.7%)	238 (37.3%)	646 (46.4%)	426 (35.9%)
Bronchiectasis	3,946 (4.8%)	169 (5.3%)	38 (6.0%)	77 (5.5%)	54 (4.5%)
Coronary heart disease	33,054 (40.0%)	1,105 (34.3%)	217 (34.0%)	551 (39.6%)	337 (28.4%)
Diabetes	18,685 (22.6%)	713 (22.2%)	134 (21.0%)	300 (21.6%)	279 (23.5%)
Heart failure	7,443 (9.0%)	308 (9.6%)	76 (11.9%)	122 (8.8%)	110 (9.3%)
Hypertension	43,588 (52.7%)	1,640 (51.0%)	295 (46.2%)	689 (49.5%)	656 (55.2%)
Lung cancer	1,921 (2.3%)	79 (2.5%)	14 (2.2%)	28 (2.0%)	37 (3.1%)

* For information on gender (1.1) and age (1.2) of the audit cohort, please refer to the national report.

Local health board report for **Powys**, primary care audit 2015-17

Painful conditions[†]	10,450 (12.6%)	387 (12.0%)	57 (8.9%)	193 (13.9%)	137 (11.5%)
Stroke	8,623 (10.4%)	343 (10.7%)	79 (12.4%)	135 (9.7%)	129 (10.9%)
Osteoporosis	10,657 (12.9%)	405 (12.6%)	95 (14.9%)	160 (11.5%)	150 (12.6%)
<i>Mental health conditions</i>					
Schizophrenia, bipolar and other psychotic illness	6,448 (7.8%)	171 (5.3%)	31 (4.9%)	87 (6.3%)	53 (4.5%)
Anxiety	25,180 (30.5%)	818 (25.4%)	152 (23.8%)	332 (23.9%)	334 (28.1%)
<i>Screened for anxiety or been diagnosed in the past two years</i>	<i>4,108 (5.0%)</i>	<i>108 (3.4%)</i>	<i>31 (4.9%)</i>	<i>42 (3.0%)</i>	<i>35 (2.9%)</i>
Depression	24,861 (30.1%)	834 (25.9%)	147 (23.0%)	316 (22.7%)	371 (31.2%)
<i>Screened for depression or been diagnosed in the past two years</i>	<i>14,465 (17.5%)</i>	<i>507 (15.8%)</i>	<i>70 (11.0%)</i>	<i>252 (18.1%)</i>	<i>185 (15.6%)</i>

[†] Defined as patients who had a record of 4 or more prescription analgesia medications in the last 12 months, OR 4 or more specified anti-epileptics in the absence of an epilepsy Read code in the last 12 months.



Section 2: Getting the diagnosis right

[Back to contents](#)

Navigation

This section contains the following tables. If viewing this report on a computer, you can select the table that you wish to see from the list below.

- [2.1 Spirometry](#)
 - [2.1.1 The percentage of people diagnosed with COPD in the past 2 years who have a post-bronchodilator FEV1/FVC <0.7 \(consistent with airways obstruction\)](#)
 - [2.1.2 Spirometry: The percentage of people diagnosed with COPD in the past 2 years who have any FEV1/FVC ratio code \(including 339m\) with a result of >0.2 and <0.7](#)
- [2.2 X-ray](#)
 - [2.2.1 The percentage of people with COPD who had a chest x-ray or CT scan 6 months prior to diagnosis or within 6 months of diagnosis \(i.e. when COPD code first added to disease register\) \(for diagnoses made in the last two years\)](#)

2.1 Spirometry

Rationale for inclusion:

NICE CG101 COPD¹ and NICE QS 10 quality statement 1: *People aged over 35 years who present with a risk factor and one or more symptoms of chronic obstructive pulmonary disease (COPD) should have post -bronchodilator spirometry. A post bronchodilator FEV1/ vital capacity (VC)[‡] or FEV1/FVC < 0.7 is required to make a diagnosis of COPD.⁴*

[‡]A post bronchodilator FEV1/Slow or relaxed VC Read code does not exist, so it was not possible to extract information about the frequency with which this particular diagnostic test is conducted.

COPD can be diagnosed when the patient has been exposed to a known risk factor, they have a typical clinical presentation and when there is an objective measurement of fixed airways obstruction as determined by good quality spirometry. A small minority of patients may need more complex hospital based lung function or they may be diagnosed with emphysema after CT scanning.

2.1.1 The percentage of people diagnosed with COPD in the past 2 years who have a post-bronchodilator FEV1/FVC <0.7 (consistent with airways obstruction)

<i>Spirometry code</i>	Wales N=10,868	PT N=375	Mid Powys N=91	North Powys N=169	South Powys N=115
No 339m code	9,660 (88.8%)	356 (94.9%)	79 (86.8%)	164 (97.0%)	113 (98.3%)
339m is ≥0.2 and <0.7	918 (8.5%)	10 (2.7%)	7 (7.7%)	< 5	< 5
339m invalid or ≥0.7	290 (2.7%)	9 (2.4%)	5 (5.5%)	< 5	< 5

2.1.2 Spirometry: The percentage of people diagnosed with COPD in the past 2 years who have any FEV1/FVC ratio code (including 339m) with a result of ≥0.2 and <0.7

	Wales N=10,868	PT N=375	Mid Powys N=91	North Powys N=169	South Powys N=115
Any spirometry codes ≥0.2 and <0.7	5,906 (54.3%)	198 (52.8%)	58 (63.7%)	79 (46.7%)	61 (53.0%)

2.2 X-ray

2.2.1 The percentage of people with COPD who had a chest X-ray or CT scan 6 months prior to diagnosis or within 6 months of diagnosis (for diagnoses made in the last two years)

Rationale for inclusion:

NICE CG101 COPD¹ recommends that at the time of their initial diagnostic evaluation, in addition to spirometry, all patients should have a chest x-ray to exclude other pathologies.

Local health board report for **Powys**, primary care audit 2015-17

	Wales N=10,868	PT N=375	Mid Powys N=91	North Powys N=169	South Powys N=115
Chest x-ray within 6 months	4,300 (39.6%)	163 (43.5%)	50 (54.9%)	64 (37.9%)	49 (42.6%)



Section 3: Assessing severity and future risk

[Back to contents](#)

Navigation

This section contains the following tables. If viewing this report on a computer, you can select the table that you wish to see from the list below.

- [3.1 The proportion of people with COPD with MRC scores 1, 2, 3, 4, 5 and 'not recorded' in the last year](#)
- [3.2 The proportion of people with COPD who have a measure of FEV1 percent-predicted value recorded in the last year](#)
- [3.3 The proportion and status of people with COPD who were asked about tobacco smoking in the last year](#)
- [3.4 Exacerbation count in the past year](#)
 - [3.4.1 Using validated method](#)
 - [3.4.2 Using GP recorded exacerbation codes](#)
- [3.5 Oxygen: management and treatment](#)

3.1 The proportion of people with COPD with MRC scores 1, 2, 3, 4, 5 and 'not recorded' in the last year

Rationale for inclusion:

NICE CG101 COPD:¹ *One of the primary symptoms of COPD is breathlessness. The Medical Research Council (MRC) breathlessness scale should be used to grade the breathlessness according to the level of exertion required to elicit it.*

Breathlessness of MRC score 3 or more represents a significant functional impairment.⁵ Patients with MRC score 3 or more should be receiving the key components of a review. They should be receiving pulmonary rehabilitation as soon as possible. They may also require additional pharmacological interventions and oxygen therapy so a more targeted and intensive review may be required.

Local health board report for **Powys**, primary care audit 2015-17

MRC score	Wales N=82,696	PT N=3,218	Mid Powys N=638	North Powys N=1,392	South Powys N=1,188
1	6,368 (7.7%)	305 (9.5%)	90 (14.1%)	119 (8.5%)	96 (8.1%)
2	22,144 (26.8%)	781 (24.3%)	181 (28.4%)	375 (26.9%)	225 (18.9%)
3	13,715 (16.6%)	565 (17.6%)	93 (14.6%)	242 (17.4%)	230 (19.4%)
4	7,021 (8.5%)	277 (8.6%)	61 (9.6%)	84 (6%)	132 (11.1%)
5	1,153 (1.4%)	32 (1.0%)	5 (0.8%)	16 (1.1%)	11 (0.9%)
Not recorded	32,295 (39.1%)	1,258 (39.1%)	208 (32.6%)	556 (39.9%)	494 (41.6%)

Grade 1 – not troubled by breathlessness or strenuous exercise

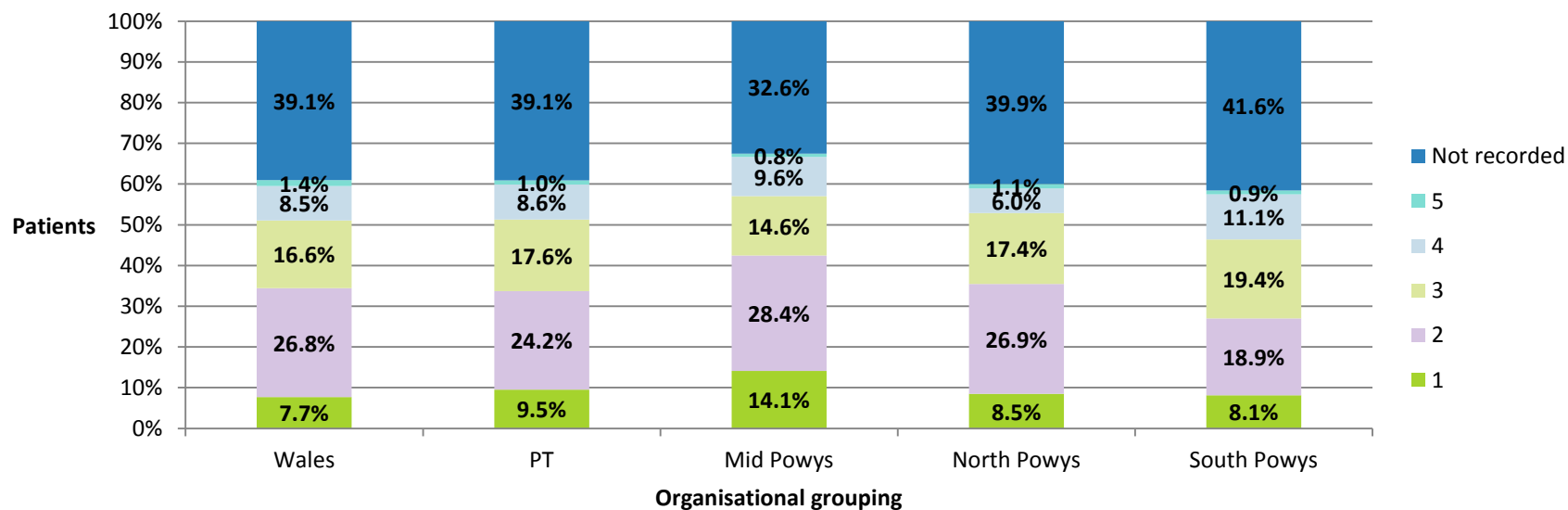
Grade 2 – short of breath when hurrying or walking up a slight hill

Grade 3 – walks slower than contemporaries on level ground because of breathlessness or has to stop for breath

Grade 4 – stops to breathe after walking 100 metres (109 yards) or after a few minutes walking on level ground

Grade 5 – too breathless to leave the house or breathless when dressing or undressing

The proportion of patients with each MRC score, or 'not recorded' in the last year



3.2 The proportion of people with COPD who have a measure of FEV1 %-predicted value recorded in the last year

Rationale for inclusion:

NICE CG101 COPD:¹ There is no specific recommendation to measure annually but treatment thresholds for pulmonary rehabilitation, inhaled therapies and assessment for oxygen are determined by FEV1%-predicted and the subsequent classification of severity.

	Wales N=82,696	PT N=3,218	Mid Powys N=638	North Powys N=1,392	South Powys N=1,188
FEV1 %-predicted value in last year	22,756 (27.5%)	842 (26.2%)	249 (39.0%)	354 (25.4%)	239 (20.1%)

3.3 The proportion and status of people with COPD who were asked about tobacco smoking in the last year

Rationale for inclusion:

NICE QS43 – Smoking: supporting people to stop⁶ **quality statement 1 (linked to NICE QS10):** *People are asked if they smoke by their healthcare practitioner, and those who smoke are offered advice on how to stop.*

Tobacco smoking is the cause of COPD in the vast majority of people. Stopping smoking reduces the rate of decline of lung function and reduces exacerbations. Other treatments for COPD work better if tobacco use has ceased.^{7,8}

Smoking status	Wales N=82,696	PT N=3,218	Mid Powys N=638	North Powys N=1,392	South Powys N=1,188
Never smoker	7,574 (9.2%)	329 (10.2%)	37 (5.8%)	196 (14.1%)	96 (8.1%)
Ex-smoker	34,551 (41.8%)	1,387 (43.1%)	297 (46.6%)	650 (46.7%)	440 (37.0%)
Current smoker	21,924 (26.5%)	738 (22.9%)	117 (18.3%)	338 (24.3%)	283 (23.8%)
Not asked about smoking	18,647 (22.6%)	764 (23.7%)	187 (29.3%)	208 (14.9%)	369 (31.1%)

3.4 Exacerbation count in the past year

Rationale for inclusion:

NICE CG101 COPD:¹ *A more comprehensive assessment of severity includes ... the frequency of exacerbations ...* The guideline also advises on treatment thresholds for pulmonary rehabilitation, self-management planning and inhaled therapies according to exacerbation frequency.

Exacerbations accelerate the decline of COPD, impair quality of life during the episode and, if left untreated, can result in hospitalisation and increase risk of death.^{9,10,11} Recovery can be prolonged during which time the patient and carer will need additional physical and psychosocial support. Recognising and recording exacerbations should be a key element of risk stratification in a general practice COPD population.

The learning from the first extraction was that exacerbation Read codes (eg 66Yf) are not reliably used. Therefore, in order to ensure that we were able to provide a more comprehensive and accurate breakdown of exacerbation rates at a population level, we have used a validated modelling method with high reliability.^{12,13,14,15} LRTI codes and concurrent respiratory antibiotic and oral prednisolone codes are used in this model (for more information, please refer to the methodology in the national report). An analysis solely using extracted exacerbation Read codes is also presented, for comparative purposes (see 3.4.2).

3.4.1 Exacerbation count in the past year – using validated method

Due to absent LRTI codes from some practices, there is a slightly lower COPD population denominator for this measure.[§]

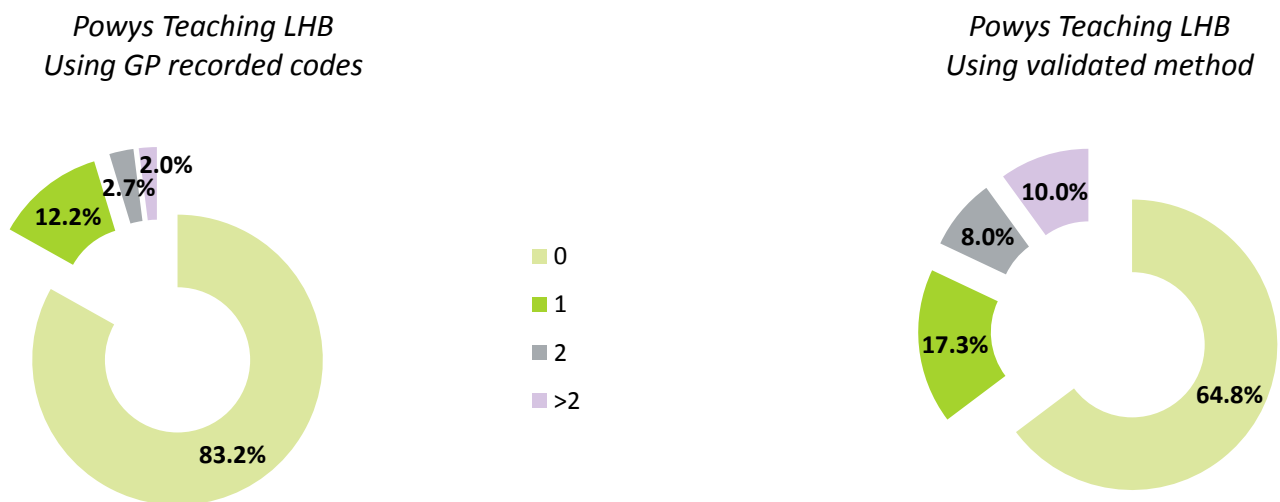
<i>Number of exacerbations</i>	Wales N=82,133	PT N=3,218	Mid Powys N=638	North Powys N=1,392	South Powys N=1,188
0	47,724 (58.1%)	2,084 (64.8%)	416 (65.2%)	880 (63.2%)	788 (66.3%)
1	15,017 (18.3%)	555 (17.3%)	102 (16.0%)	255 (18.3%)	198 (16.7%)
2	7,412 (9.0%)	258 (8.0%)	52 (8.2%)	111 (8.0%)	95 (8.0%)
>2	11,980 (14.6%)	321 (10.0%)	68 (10.7%)	146 (10.5%)	107 (9.0%)

[§] This is due to several practices closing partway through the extraction period.

3.4.2 Exacerbation count in the past year – using GP recorded exacerbation codes

Number of exacerbations	Wales N=82,696	PT N=3,218	Mid Powys N=638	North Powys N=1,392	South Powys N=1,188
0	68,458 (82.8%)	2,676 (83.2%)	534 (83.7%)	1,148 (82.5%)	994 (83.7%)
1	8,793 (10.6%)	391 (12.2%)	74 (11.6%)	174 (12.5%)	143 (12.0%)
2	3,064 (3.7%)	87 (2.7%)	16 (2.5%)	39 (2.8%)	32 (2.7%)
>2	2,381 (2.9%)	64 (2.0%)	14 (2.2%)	31 (2.2%)	19 (1.6%)

Exacerbation count in the past year in the health board



3.5 Oxygen: management and treatment

Rationale for inclusion:

NICE QS10 - Quality statement 3:⁴ *People with stable COPD and a persistent resting stable oxygen saturation level of 92% or less have their arterial blood gases measured to assess whether they need long-term oxygen therapy.*

Wales	PT	Mid Powys	North Powys	South Powys
People with stable COPD and a persistent resting stable oxygen saturation level of 92% or less in the last 2 years who have evidence of an arterial blood gas measurement or referral for home oxygen assessment				
N=6,734 747 (11.1%)	N=393 32 (8.1%)	N=86 10 (11.6%)	N=178 12 (6.7%)	N=129 10 (7.8%)
People with COPD who have a record of oxygen therapy in the past 6 months				
N=82,696 639 (0.8%)	N=3,218 24 (0.8%)	N=638 11 (1.7%)	N=1,392 8 (0.6%)	N=1,188 5 (0.4%)



Section 4: Providing high value care

[Back to contents](#)

Navigation

This section contains the following tables. If viewing this report on a computer, you can select the table that you wish to see from the list below.

- [4.1 People with COPD who are prescribed an inhaler who have evidence of an inhaler technique check in the past year](#)
- [4.2 The proportion of patients with COPD who have had the influenza immunisation in the preceding 1 August to 31 March](#)
- [4.3 The proportion of people with COPD who were recorded as a current smoker at any time in the past 2 years who have received or had a referral to a behavioural change intervention \(BCI\) and had a stop smoking drug prescribed](#)
- [4.4 Pulmonary rehabilitation](#)
 - [4.4.1 Proportion of people with COPD with MRC scores 3-5 who have been referred to PR in the past 3 years](#)
 - [4.4.2 Proportion of people with COPD who are breathless \(any MRC score\) and have been referred to PR in the past 3 years](#)
- [4.5 Use of inhaled therapies in the last 6 months of the audit period](#)
 - [4.5.1 Patients issued a prescription for inhaled therapy in the last six months of the audit period](#)
 - [4.5.2 Types of inhaled therapy prescribed to patients in the last six months of the audit period](#)

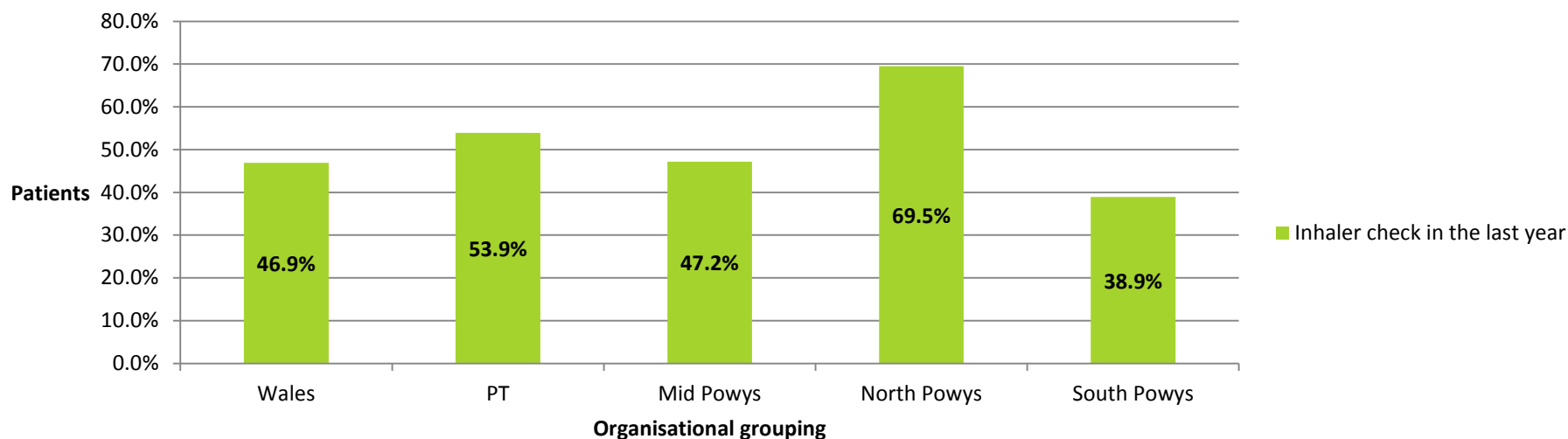
4.1 People with COPD who are prescribed an inhaler who have evidence of an inhaler technique check in the past year

Rationale for inclusion:

NICE QS10 - Quality statement 2:⁴ *People with COPD who are prescribed an inhaler have their inhaler technique assessed when starting treatment and then regularly during treatment.*

	Wales N=75,923	PT N=2,937	Mid Powys N=638	North Powys N=1,392	South Powys N=1,188
Inhaler check in the last year	35,572 (46.9%)	1,582 (53.9%)	273 (47.2%)	889 (69.5%)	420 (38.9%)

The percentage of patients with evidence of an inhaler check in the last year



4.2 The proportion of patients with COPD who have had the influenza immunisation in the preceding 1 August to 31 March

Rationale for inclusion:

NICE CG101 COPD:¹ *Pneumococcal vaccination and an annual influenza vaccination should be offered to all patients with COPD as recommended by the Chief Medical Officer.*

	Wales N=82,696	PT N=3,218	Mid Powys N=638	North Powys N=1,392	South Powys N=1,188
Influenza immunisation received	54,602 (66.0%)	2,095 (65.1%)	410 (64.3%)	978 (70.3%)	707 (59.5%)

4.3 The proportion of people with COPD who were recorded as a current smoker at any time in the past 2 years who have received or had a referral to a behavioural change intervention (BCI) and had a stop smoking drug prescribed

Rationale for inclusion:

NICE QS10 is linked to QS43 - Smoking: supporting people to stop:⁶

- NICE QS43 - Quality statement 2: People who smoke are offered a referral to an evidence-based smoking cessation service.
- NICE QS43 - Quality statement 3: People who smoke are offered behavioural support with pharmacotherapy by an evidence-based smoking cessation service.
- NICE QS43 - Quality statement 4: People who seek support to stop smoking and who agree to take pharmacotherapy are offered a full course.
- NICE QS43 - Quality statement 5: People who smoke who have set a quit date with an evidence-based smoking cessation service are assessed for carbon monoxide levels 4 weeks after the quit date.

	Wales N=35,045	PT N=1,400	Mid Powys N=202	North Powys N=630	South Powys N=568
Current smokers who received BCI referral/smoking-cessation pharmacotherapy	4,383 (12.5%)	192 (13.7%)	47 (23.3%)	74 (11.7%)	71 (12.5%)

4.4 Pulmonary rehabilitation (PR)

Rationale for inclusion:

NICE QS10 - Quality statement 4:⁴ People with stable COPD and exercise limitation due to breathlessness are referred to a PR programme.

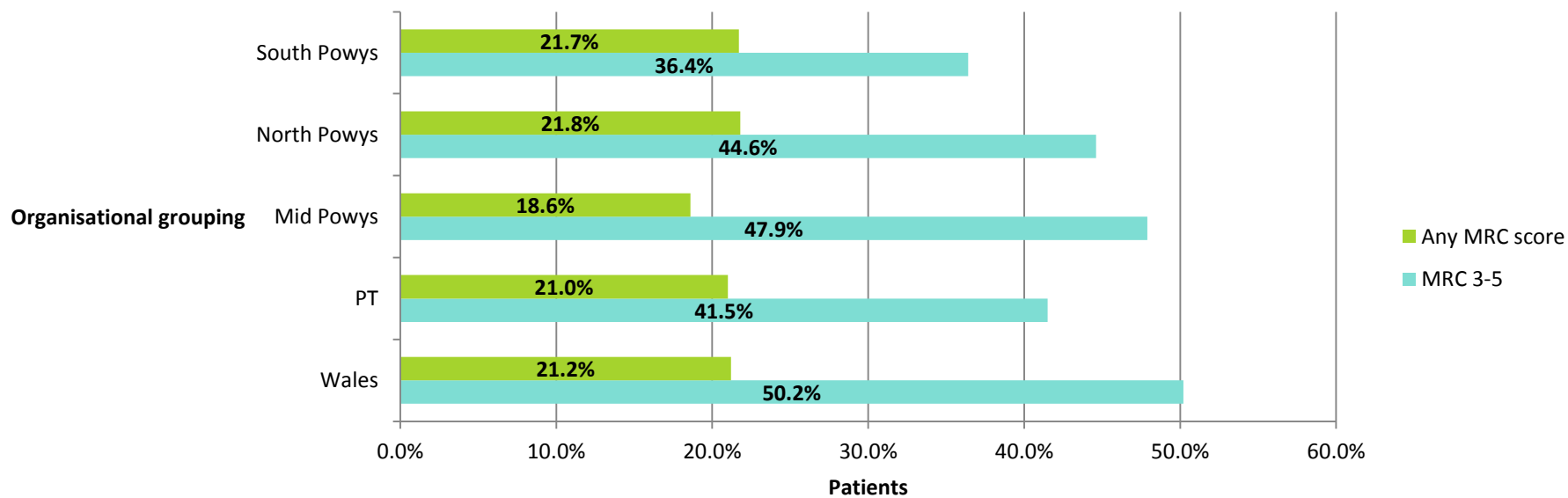
4.4.1 Proportion of people with COPD with MRC scores 3-5 who have been referred to PR in the past 3 years

	Wales N=15,190	PT N=496	Mid Powys N=96	North Powys N=175	South Powys N=225
MRC score 3-5 and referred	7,621 (50.2%)	206 (41.5%)	46 (47.9%)	78 (44.6%)	82 (36.4%)

4.4.2 Proportion of people with COPD who are breathless (any MRC score) and have been referred to PR in the past 3 years

	Wales N=47,974	PT N=1,642	Mid Powys N=392	North Powys N=682	South Powys N=568
Any MRC score and referred to PR	10,179 (21.2%)	345 (21.0%)	73 (18.6%)	149 (21.8%)	123 (21.7%)

Patients with COPD who have been referred for PR



4.5 Use of inhaled therapies in the last 6 months of the audit period

Rationale for inclusion:

NICE CG101 COPD¹

- *In people with stable COPD who remain breathless or have exacerbations despite use of short acting bronchodilators as required, offer the following as maintenance therapy: if FEV1 ≥ 50% predicted: either long-acting beta2 agonist (LABA) or long-acting muscarinic antagonist (LAMA) if FEV1 < 50% predicted: either LABA with an inhaled corticosteroid (ICS) in a combination inhaler, or LAMA.*
- *Offer LAMA in addition to LABA+ICS to people with COPD who remain breathless or have exacerbations despite taking LABA+ICS, irrespective of their FEV1.*
- *In people with stable COPD and an FEV1 ≥ 50% who remain breathless or have exacerbations despite maintenance therapy with a LABA: consider LABA+ICS in a combination inhaler, consider LAMA in addition to LABA where ICS is declined or not tolerated.*
- *Offer LAMA in addition to LABA+ICS to people with COPD who remain breathless or have exacerbations despite taking LABA+ICS, irrespective of their FEV1.*
- *Consider LABA+ICS in a combination inhaler in addition to LAMA for people with stable COPD who remain breathless or have exacerbations despite maintenance therapy with LAMA irrespective of their FEV1.*
- *The choice of drug(s) should take into account the person's symptomatic response and preference, and the drug's potential to reduce exacerbations, its side effects and cost.*

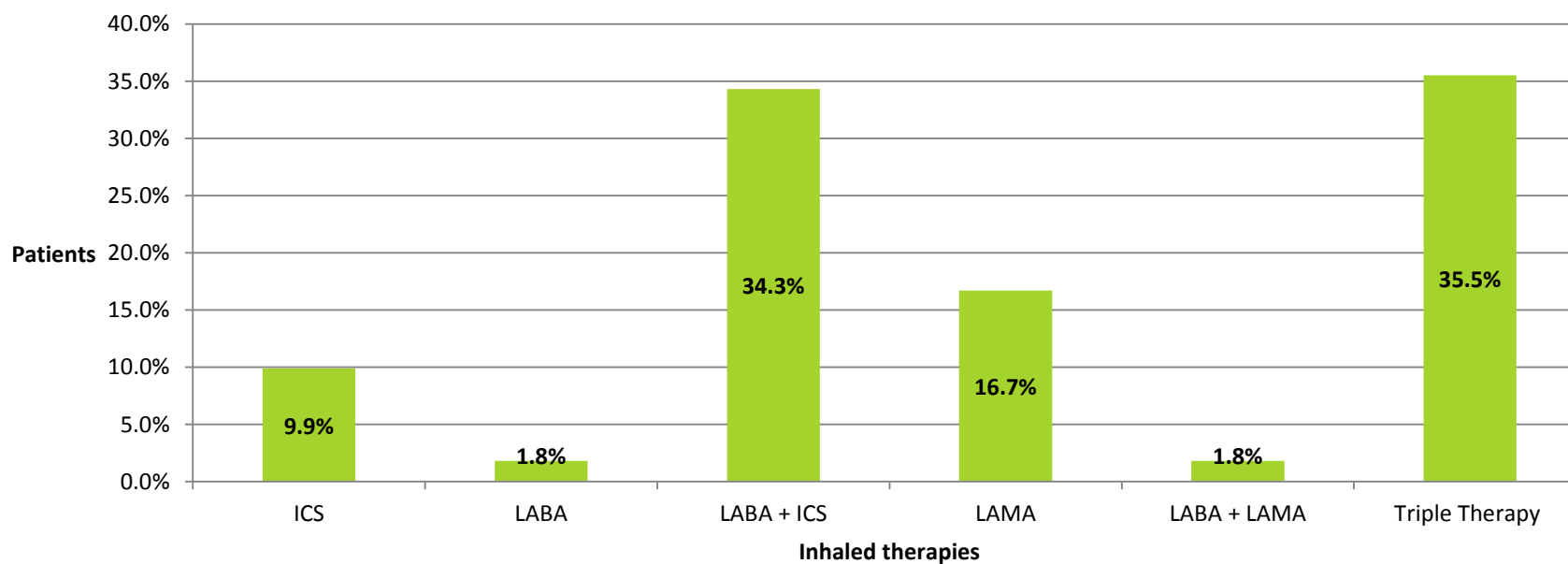
4.5.1 Patients issued a prescription for inhaled therapy in the last six months of the audit period

	Wales	PT	Mid Powys	North Powys	South Powys
Patients on inhaled therapy	55,434 (67.0%)	2,131 (66.2%)	411 (64.4%)	1,005 (72.2%)	715 (60.2%)

4.5.2 Types of inhaled therapy prescribed to patients in the last six months of the audit period

<i>Inhaled therapy</i>	Wales N=55,434	PT N=2,131	Mid Powys N=411	North Powys N=1,005	South Powys N=715
ICS	4,493 (8.1%)	211 (9.9%)	40 (9.7%)	117 (11.6%)	54 (7.6%)
LABA	2,075 (3.7%)	38 (1.8%)	< 5	11 (1.1%)	23 (3.2%)
LABA + ICS	16,351 (29.5%)	731 (34.3%)	113 (27.5%)	332 (33.0%)	286 (40.0%)
LAMA	10,899 (19.7%)	356 (16.7%)	99 (24.1%)	151 (15.0%)	106 (14.8%)
LABA + LAMA	1,699 (3.1%)	38 (1.8%)	15 (3.6%)	13 (1.3%)	10 (1.4%)
Triple therapy	19,917 (35.9%)	757 (35.5%)	140 (34.1%)	381 (37.9%)	236 (33.0%)

Inhaled therapies prescribed to patients in the last six months in your health board



Appendix A: Report preparation

This report was written by the following, on behalf of the National COPD Audit Programme's primary care workstream group.

Dr Noel Baxter

Clinical Lead, National COPD Audit Programme Primary Care Workstream; Co-Lead, London Respiratory Strategic Clinical Network and London Clinical Senate 'Helping Smokers Quit' programme; Chair, Primary Care Respiratory Society UK (PCRS-UK); NHS GP; and Clinical Lead, NHS Southwark Clinical Commissioning Group

Ms Viktoria McMillan

Programme Manager, National COPD Audit Programme, Clinical Effectiveness and Evaluation Unit, Care Quality Improvement Department, Royal College of Physicians, London

Ms Juliana Holzhauser-Barrie

Project Manager, National COPD Audit Programme, Clinical Effectiveness and Evaluation Unit, Care Quality Improvement Department, Royal College of Physicians, London

Mr James Riordan

Programme Coordinator, National COPD Audit Programme, Clinical Effectiveness and Evaluation Unit, Care Quality Improvement Department, Royal College of Physicians, London

Ms Sophie Robinson

Programme Coordinator, National COPD Audit Programme, Clinical Effectiveness and Evaluation Unit, Care Quality Improvement Department, Royal College of Physicians, London

Mr Philip Stone

Research Assistant in Statistics/Epidemiology, National Heart & Lung Institute, Imperial College London

Dr Jennifer Quint

Clinical Senior Lecturer Respiratory Epidemiology, National Heart and Lung Institute, Imperial College London; Honorary Respiratory Consultant Royal Brompton and Imperial NHS Trusts

Professor C Michael Roberts

Associate Director, Care Quality Improvement Department, Royal College of Physicians, London; Programme Clinical Lead, National COPD Audit Programme; and clinical academic lead for population health, UCL Partners.

Appendix B: Participating clusters and practices in your health board

For the full list of participating practices and clusters, please refer to the national report.

Powys Teaching Health Board		
Cluster	Practice(s)	
Mid Powys	Llandrindod Wells Medical Practice	Presteigne Medical Practice
	The Surgery (Rhayader)	Wylcwm Street Surgery
North Powys	Arwystli Medical Practice	Canolfan Iechyd Glantwymyn
	Llanfair Caereinion Medical Practice	Montgomery Medical Practice
	Newtown Medical Practice	Welshpool Medical Practice
South Powys	Ty Henry Vaughan	War Memorial Health Centre
	Ystradgynlais Group Practice	

Appendix C: References

- ¹ National Institute for Health and Care Excellence. *Chronic obstructive pulmonary disease: Management of chronic obstructive pulmonary disease in adults in primary and secondary care (partial update) (CG101)*. London: NICE, 2010. www.nice.org.uk/guidance/CG101
- ² National Institute for Health and Care Excellence. *Depression in adults with a chronic physical health problem: recognition and management (CG91)*. London: NICE 2009. <https://www.nice.org.uk/Guidance/CG91>
- ³ National Institute for Health and Care Excellence. *Generalised anxiety disorder and panic disorder in adults: management (CG113)*. London: NICE 2011. <https://www.nice.org.uk/guidance/CG113>
- ⁴ National Institute for Health and Care Excellence. *Chronic obstructive pulmonary disease in adults: Quality standard 10 (QS10)*. London: NICE 2016 <https://www.nice.org.uk/guidance/qs10/chapter/list-of-quality-statements>
- ⁵ Medical Research Council. MRC dyspnoea scale / MRC breathlessness scale. www.mrc.ac.uk/research/facilities-and-resources-for-researchers/mrc-scales/mrc-dyspnoea-scale-mrc-breathlessness-scale/ [Accessed October 2017]
- ⁶ National Institute for Health and Care Excellence. *Smoking: supporting people to stop (QS43)*. London: NICE 2013. <https://www.nice.org.uk/Guidance/QS43>
- ⁷ British Lung Foundation. *Key facts about your COPD*. www.blf.org.uk/support-for-you/copd/key-facts [Accessed September 2017]
- ⁸ NHS Choices, Chronic Obstructive Pulmonary Disease (COPD) Treatments for COPD. <http://www.nhs.uk/Conditions/Chronic-obstructive-pulmonary-disease/Pages/Treatment.aspx> [Accessed September 2017]
- ⁹ Stone R, Holzhauser-Barrie J, Lowe D, McMillan V, Searle L, Saleem Khan M, Skipper E, Welham S, Roberts CM. COPD: *Who cares when it matters most? National Chronic Obstructive Pulmonary Disease (COPD) Audit Programme: Outcomes from the clinical audit of COPD exacerbations admitted to acute units in England 2014*. National supplementary report. London: RCP, February 2017. www.rcplondon.ac.uk/projects/outputs/copd-who-cares-when-it-matters-most-outcomes-report-2014 [Accessed September 2017].
- ¹⁰ Dransfield MT, Kunisaki KM, Strand MJ, et al. *Acute Exacerbations and Lung Function Loss in Smokers with and without Chronic Obstructive Pulmonary Disease*. *Am J Respir Crit Care Med*. 2017 Feb 1;195(3):324-330. doi: 10.1164/rccm.201605-1014OC
- ¹¹ Esteban C, Quintana JM, Moraza J. *Impact of hospitalisations for exacerbations of COPD on health-related quality of life*. *Respir Med*. 2009 Aug;103(8):1201-8. doi: 10.1016/j.rmed.2009.02.002
- ¹² Quint JK, Müllerova H, DiSantostefano RL et al. Validation of chronic obstructive pulmonary disease recording in the Clinical Practice Research Datalink (CPRD-GOLD). *BMJ Open* 2014;4:e005540. <https://doi.org/10.1136/bmjopen-2014-005540>
- ¹³ Nissen F, Morales DR, Mullerova H et al. Validation of asthma recording in the Clinical Practice Research Datalink (CPRD). *BMJ Open* 2017;7:e017474. <https://doi.org/10.1136/bmjopen-2017-017474>
- ¹⁴ Nissen F, Quint JK, Wilkinson S et al. Validation of asthma recording in electronic health records: protocol for a systematic review. *BMJ Open* 2017;7:e014694. <https://doi.org/10.1136/bmjopen-2016-014694>
- ¹⁵ Nissen F, Morales D, Mullerova H et al. Misdiagnosis of COPD in asthma patients in the UK Electronic Health Records (Clinical Practice Research Datalink). *Am J Respir Crit Care Med* 2017;195:A2026. www.atsjournals.org/doi/abs/10.1164/ajrccm-conference.2017.195.1.MeetingAbstracts.A2026 [Accessed November 2017].