

## **Management of COPD in Primary Care**

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## 2 Introduction

### 2.1 Aim of the project

A new clinical system template has been developed to record information on COPD patients registered in Newcastle, which is above the level of detail already collected as part of QOF. The additional measures are:

Number of COPD exacerbations	Inhaler technique
Depression screening	Self-management plan given
Issue of COPD rescue pack	Referral to pulmonary rehabilitation
MRC Breathlessness scale	

The aim of this project is to review whether better information is recorded for COPD patients using the new template than in those practices where the template is not used, and if it is possible to determine the impact of this additional data collection on patient outcomes. This report describes the variation in recording of the management of COPD in primary care, based on information collected from COPD patients registered in GP practices situated within Newcastle (previously Newcastle North & East and Newcastle West CCGs).

Two data extractions relating to COPD have been obtained from GP practice clinical systems. The queries written to produce this information were identical apart from the time period. Extraction 1 related to the 12 month period August 2014 to July 2015 and represents the baseline period. Extraction 2 related to the subsequent 12 month period, August 2015 to July 2016, which was the intervention period. The data extractions were provided to NEQOS by the North of England Commissioning Support Unit (NECS).

A baseline position was established for all Newcastle practices and the aim was to understand the variation between practices with regard to the existing level of recording of the management of COPD in primary care in this baseline period. Information from the second data extraction was used to determine the impact of the introduction of the standard COPD management template within the practice clinical system, in terms of improvements in data recording and in consistency of coding.

Data relating to Falcon Medical Group and Thornfield Medical Group is presented here as Thornfield Medical Group due to the merger of the two practices.

### 2.2 Stages of analysis

This report contains the following information:

**Patient based measures** (relating to the latest 12 month extraction)

**Condition based measures**

- a. Baseline period August 2014 to July 2015 (extraction 1)
- b. Intervention period August 2015 to July 2016 (extraction 2)

**Comparison between two periods** to identify any areas of improvement.

Section 7 of this report also contains a summary of emergency admissions and readmissions for COPD, by GP practice, using funnel (SPC) charts to show activity in context of the COPD register size.



### 3 Patient based measures

The patient based measures relate to the latest extraction (August 2015 to July 2016) and a summary of the findings is shown in the table below. The numbers indicate where a relevant Read code is present within the patient record and the percentages represent the proportion of patients with COPD who have the Read code present.

There are 6,412 patients recorded as having COPD across all Newcastle practices at the extraction date in 2016. COPD prevalence ranges from 0.1% at Newcastle Medical Centre to 4.36% at Newburn Surgery. Ethnicity recording varies across the practices and is present in approximately 30% of COPD patient records. The residential status of the patient (indicating for example if the patient lives in a care home, in their own home, or is housebound) is recorded in 137 patient records across all practices.

Practice Code	Practice Name	Practice Population	COPD Subset	COPD Prevalence Rates	Ethnicity	Ethnicity (%)	Residential status	Residential Status (%)
A86003	Saville	33,761	332	0.98%	121	36.4%	8	2.4%
A86004	Prospect	15,658	323	2.06%	166	51.4%	8	2.5%
A86006	Roseworth	5,127	77	1.50%	10	13.0%	0	0.0%
A86007	Dr KW Conrad	3,110	23	0.74%	1	4.3%	0	0.0%
A86008	Park Medical	12,233	244	1.99%	148	60.7%	5	2.0%
A86010	Biddlestone	9,712	103	1.06%	40	38.8%	7	6.8%
A86011	Walker	11,181	461	4.12%	130	28.2%	9	2.0%
A86012	West Road	9,076	187	2.06%	55	29.4%	5	2.7%
A86013	Denton Park	7,277	241	3.31%	17	7.1%	5	2.1%
A86015	Holly Medical	8,662	66	0.76%	20	30.3%	2	3.0%
A86017	Cruddas Park	10,099	369	3.65%	63	17.1%	9	2.4%
A86018	The Grove	12,819	153	1.19%	38	24.8%	4	2.6%
A86020	Osbourne Road	5,323	24	0.45%	13	54.2%	1	4.2%
A86021	Holmside	9,478	299	3.15%	82	27.4%	17	0.0%
A86022	Parkway	8,348	145	1.74%	48	33.1%	1	0.7%
A86023	Benfield Park	8,727	183	2.10%	51	27.9%	1	0.5%
A86024	Heaton Road	7,495	157	2.09%	21	13.4%	2	1.3%
A86025	Westerhope	12,646	396	3.13%	61	15.4%	6	1.5%
A86026	Throckley	6,460	204	3.16%	34	16.7%	1	0.5%
A86027	Newcastle Medical	13,559	14	0.10%	8	57.1%	0	0.0%
A86028	Regent	3,846	65	1.69%	2	3.1%	0	0.0%
A86029	Thornfield	19,476	631	3.24%	232	36.8%	8	1.3%
A86030	Betts Avenue	10,550	308	2.92%	96	31.2%	3	1.0%
A86031	Fenham Hall	8,818	185	2.10%	38	20.5%	0	0.0%
A86033	Brunton Park	5,085	26	0.51%	17	65.4%	0	0.0%
A86035	Broadway	2,615	51	1.95%	14	27.5%	0	0.0%
A86036	Gosforth Memorial	8,945	125	1.40%	23	18.4%	2	1.6%
A86037	Grainger	7,226	233	3.22%	78	33.5%	13	5.6%
A86040	St Anthonys	6,317	217	3.44%	85	39.2%	6	2.8%
A86601	Denton Turrett	8,600	216	2.51%	136	63.0%	7	3.2%
Y00184	Dilston Road	8,597	51	0.59%	21	41.2%	1	2.0%
Y02711	Ponteland Road	3,156	62	1.96%	34	54.8%	2	3.2%
A86038	Newburn	5,529	241	4.36%	59	24.5%	4	1.7%
<b>Average</b>	<b>Average / sum</b>	<b>309,511</b>	<b>6,412</b>	<b>2.07%</b>	<b>1,962</b>	<b>30.6%</b>	<b>137</b>	<b>2.1%</b>

Table 1: COPD patient based measures by practice (to July 2016)



## Management of COPD in Primary Care

The age breakdown of COPD patients registered at Newcastle practices is shown in the following table. It must be noted that 5 year age bands are used from age 35 years and upwards only due to small patient numbers in the younger age bands. The asterisks indicate a patient count of <6.

Age band (years)	Count	% of total
0-4	*	*
5-9	*	*
20-34	9	0.14%
35-39	27	0.42%
40-44	70	1.09%
45-49	199	3.10%
50-54	422	6.58%
55-59	652	10.17%
60-64	852	13.29%
65-69	1,110	17.31%
70-74	1,009	15.74%
75-79	882	13.76%
80-84	641	10.00%
85-89	394	6.14%
90-94	119	1.86%
95+	23	0.36%
<b>Total</b>	<b>6,412</b>	

*Table 2: Age breakdown of COPD patients (to July 2016)*



## 4 Condition based measures

### a. Baseline period (August 2014 to July 2015)

#### 4.1 Summary of data per practice (baseline period)

The table below shows the number and percentage of patients per practice with each of the seven measures recorded.

Practice Name	Exacerbations	COPD Exacerbations in the last year (%)	Inhaler Technique	Inhaler Technique (%)	Depression Screening using questions	Depression Screening using questions (%)	Self Management plan given	Self management plan given (%)	Issue of COPD Rescue pack	Issue of COPD rescue pack (%)	Referral to pulmonary rehabilitation	Referral to pulmonary rehabilitation (%)	MRC Breathlessness Scale	MRC Breathlessness Scale (%)
Saville	149	44.9%	148	44.6%	70	21.1%	125	37.7%	26	7.8%	*	1.2%	201	60.5%
Prospect	98	30.3%	110	34.1%	7	2.2%	53	16.4%	80	24.8%	8	2.5%	216	66.9%
Roseworth	32	41.6%	55	71.4%	*	1.3%	*	6.5%	17	22.1%	*	5.2%	63	81.8%
Dr KW Conrad	12	52.2%	12	52.2%	*	21.7%	*	21.7%	0	0.0%	*	4.3%	15	65.2%
Park Medical	116	47.5%	95	38.9%	54	22.1%	*	0.8%	0	0.0%	*	1.2%	148	60.7%
Biddlestone	46	44.7%	44	42.7%	*	1.0%	0	0.0%	*	1.9%	*	4.9%	77	74.8%
Walker	214	46.4%	246	53.4%	265	57.5%	29	6.3%	10	2.2%	8	1.7%	315	68.3%
West Road	53	28.3%	55	29.4%	61	32.6%	50	26.7%	14	7.5%	*	1.1%	123	65.8%
Denton Park	136	56.4%	110	45.6%	6	2.5%	15	6.2%	19	7.9%	*	0.8%	194	80.5%
Holly Medical	7	10.6%	16	24.2%	11	16.7%	9	13.6%	*	1.5%	*	3.0%	38	57.6%
Cruddas Park	72	19.5%	80	21.7%	98	26.6%	7	1.9%	*	1.1%	6	1.6%	198	53.7%
The Grove	*	2.0%	8	5.2%	46	30.1%	*	1.3%	*	2.0%	0	0.0%	101	66.0%
Osbourne Road	*	4.2%	*	16.7%	*	12.5%	*	16.7%	*	12.5%	*	4.2%	15	62.5%
Holmside	170	56.9%	143	47.8%	128	42.8%	97	32.4%	68	22.7%	*	1.3%	212	70.9%
Parkway	63	43.4%	63	43.4%	44	30.3%	39	26.9%	20	13.8%	*	2.8%	98	67.6%
Benfield Park	97	53.0%	56	30.6%	17	9.3%	40	21.9%	*	1.6%	17	9.3%	144	78.7%
Heaton Road	63	40.1%	29	18.5%	*	1.9%	*	3.2%	*	0.6%	*	3.2%	89	56.7%
Westerhope	151	38.1%	158	39.9%	158	39.9%	83	21.0%	49	12.4%	0	0.0%	258	65.2%
Throckley	125	61.3%	119	58.3%	111	54.4%	126	61.8%	26	12.7%	0	0.0%	134	65.7%
Newcastle Medical	*	21.4%	*	14.3%	0	0.0%	*	7.1%	0	0.0%	0	0.0%	*	21.4%
Regent	18	27.7%	24	36.9%	0	0.0%	*	7.7%	0	0.0%	0	0.0%	36	55.4%
Thornfield	240	38.0%	294	46.6%	79	12.5%	156	24.7%	11	1.7%	7	1.1%	465	73.7%
Betts Avenue	177	57.5%	212	68.8%	176	57.1%	183	59.4%	79	25.6%	*	0.3%	241	78.2%
Fenham Hall	75	40.5%	63	34.1%	*	1.6%	61	33.0%	12	6.5%	0	0.0%	118	63.8%
Brunton Park	*	7.7%	11	42.3%	7	26.9%	*	3.8%	0	0.0%	0	0.0%	16	61.5%
Broadway	38	74.5%	37	72.5%	11	21.6%	8	15.7%	0	0.0%	0	0.0%	41	80.4%
Gosforth Memorial	0	0.0%	17	13.6%	10	8.0%	0	0.0%	0	0.0%	*	0.8%	91	72.8%
Grainger	76	32.6%	95	40.8%	51	21.9%	49	21.0%	22	9.4%	8	3.4%	135	57.9%
St Anthony's	103	47.5%	10	4.6%	65	30.0%	48	22.1%	*	0.5%	*	1.4%	147	67.7%
Denton Turret	116	53.7%	117	54.2%	23	10.6%	113	52.3%	*	1.4%	0	0.0%	157	72.7%
Dilston Road	28	54.9%	24	47.1%	22	43.1%	26	51.0%	25	49.0%	0	0.0%	37	72.5%
Ponteland Road	22	35.5%	26	41.9%	16	25.8%	24	38.7%	0	0.0%	0	0.0%	42	67.7%
Newburn	177	73.4%	121	50.2%	0	0.0%	169	70.1%	57	23.7%	*	1.2%	201	83.4%
Average / sum	2,683	41.8%	2,604	40.6%	1,552	24.2%	1,540	24.0%	556	8.7%	99	1.5%	4,369	68.1%

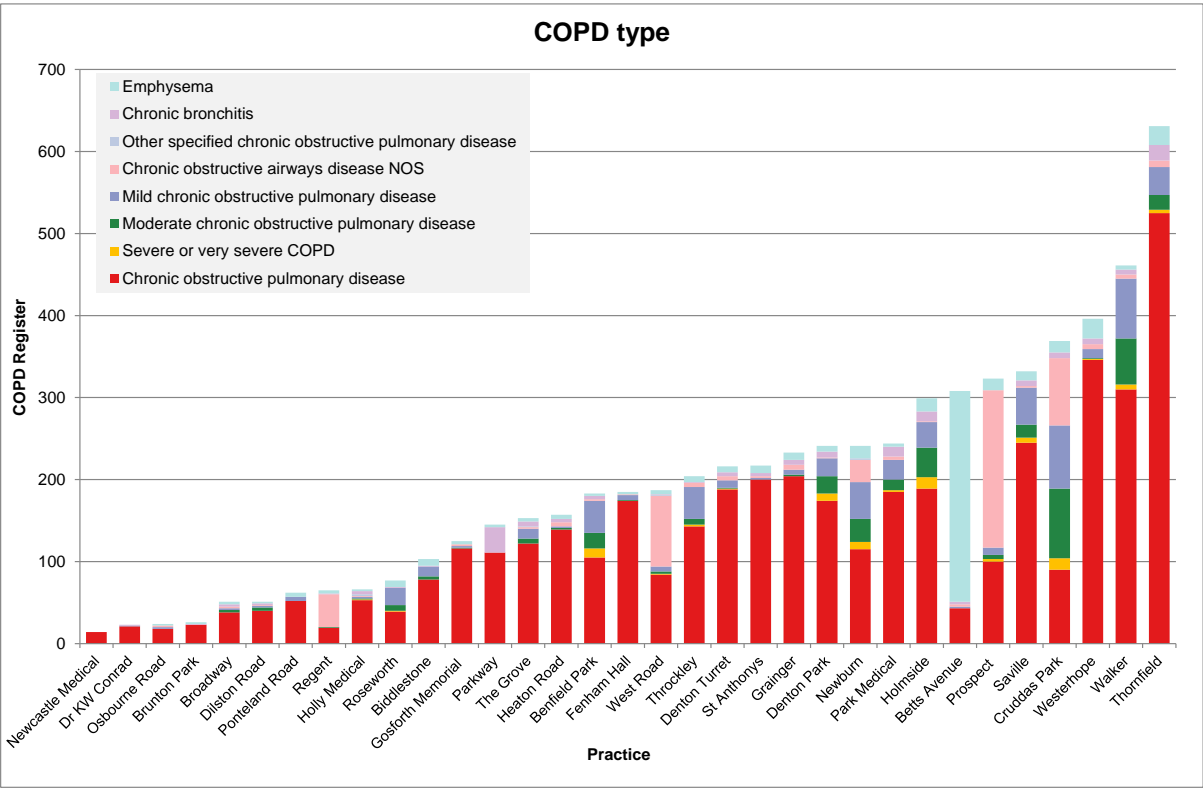
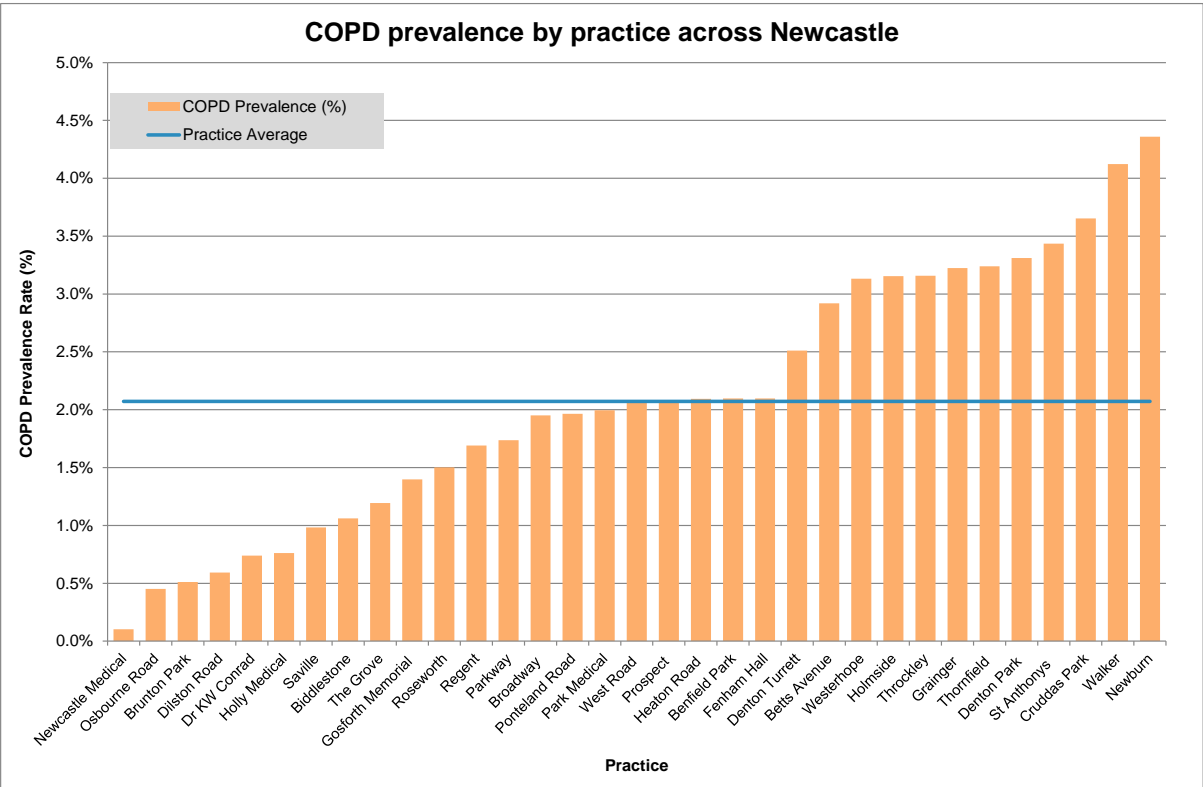
Table 3: COPD condition based measures by practice (August 2014 – July 2015)

Asterisks denote patient numbers <6



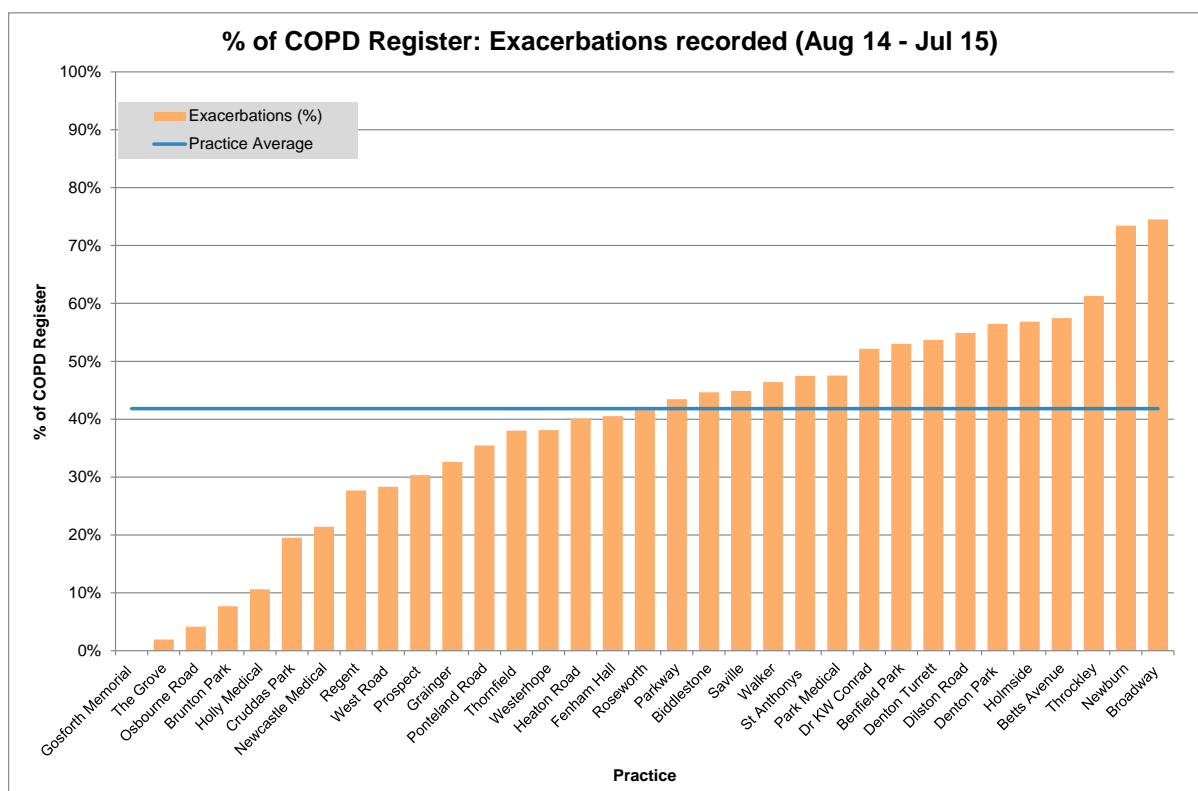
4.2 Practice level analysis

4.2.1 COPD prevalence

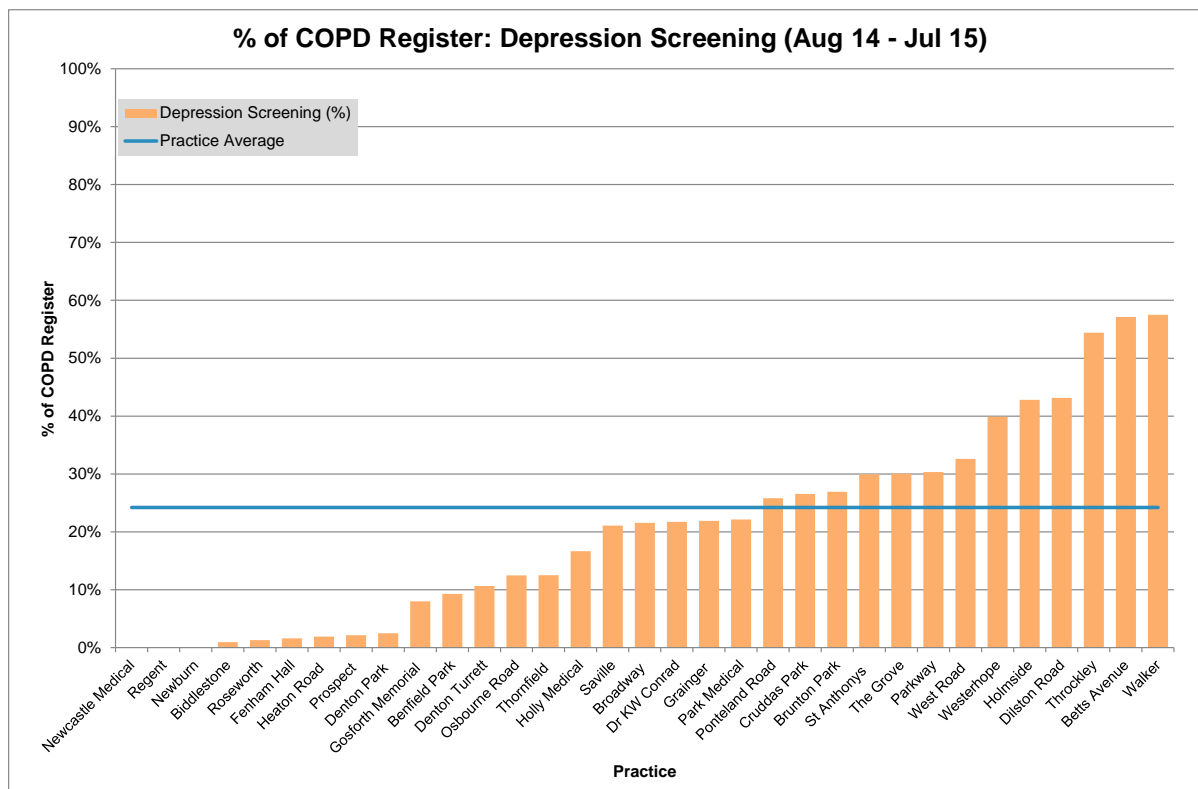




## 4.2.2 Exacerbations recorded

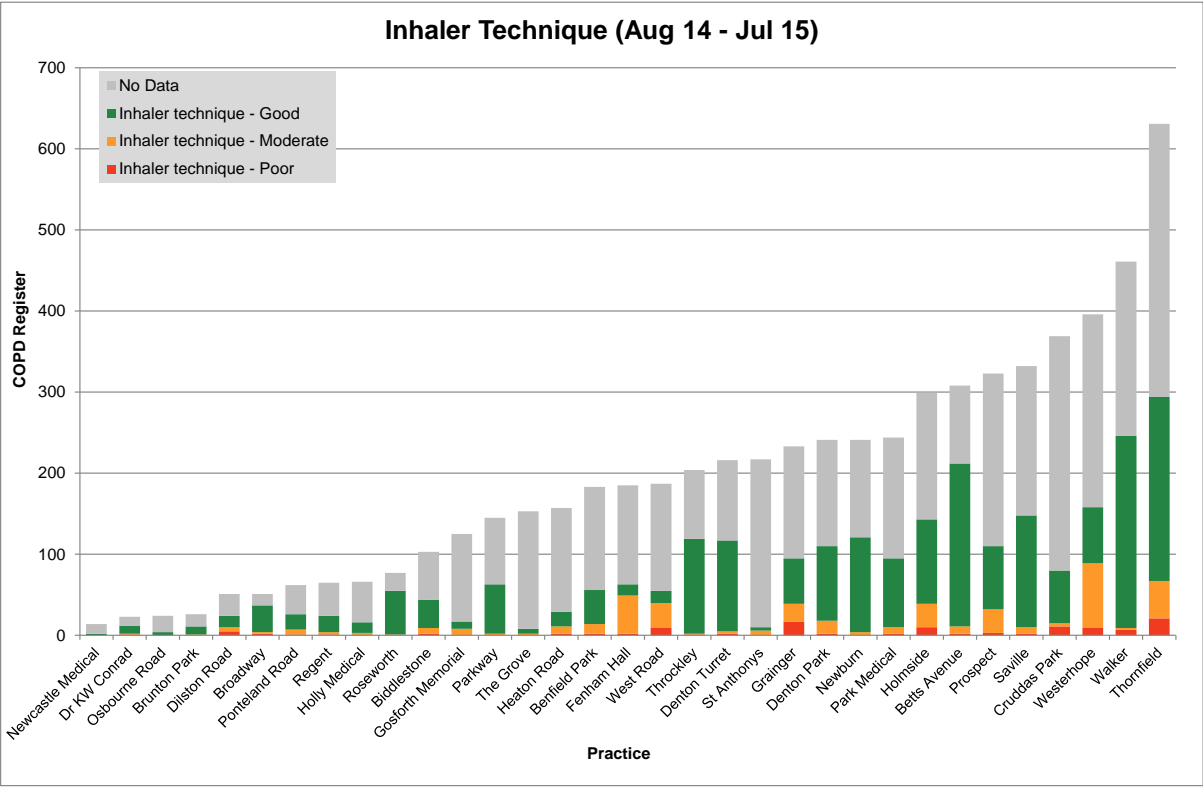
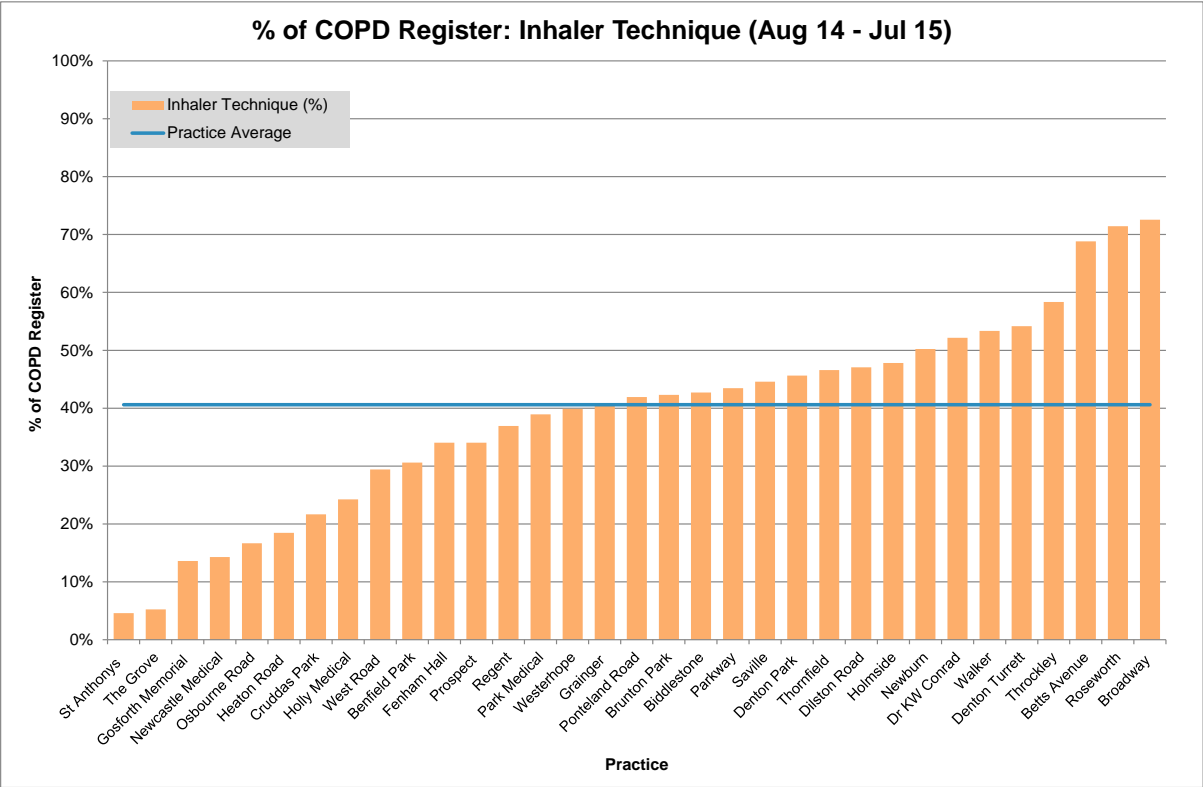


## 4.2.3 Depression screening



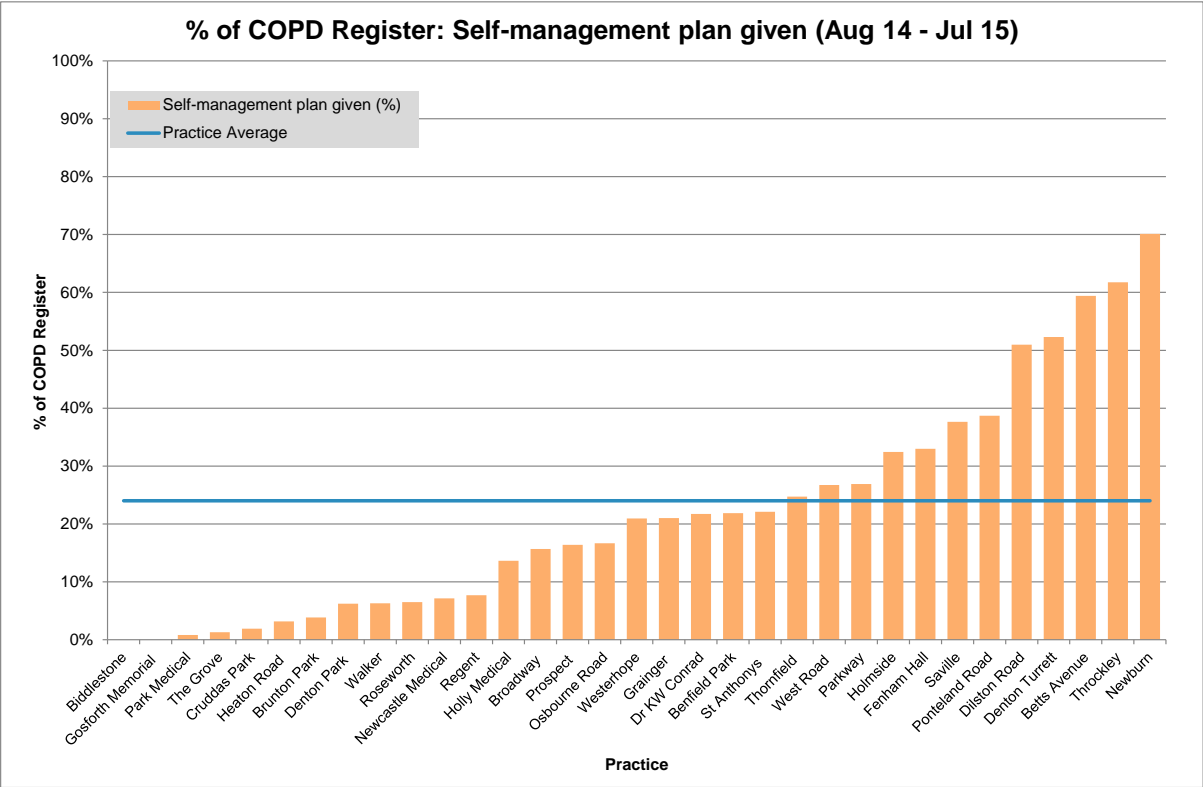


4.2.4 Inhaler technique

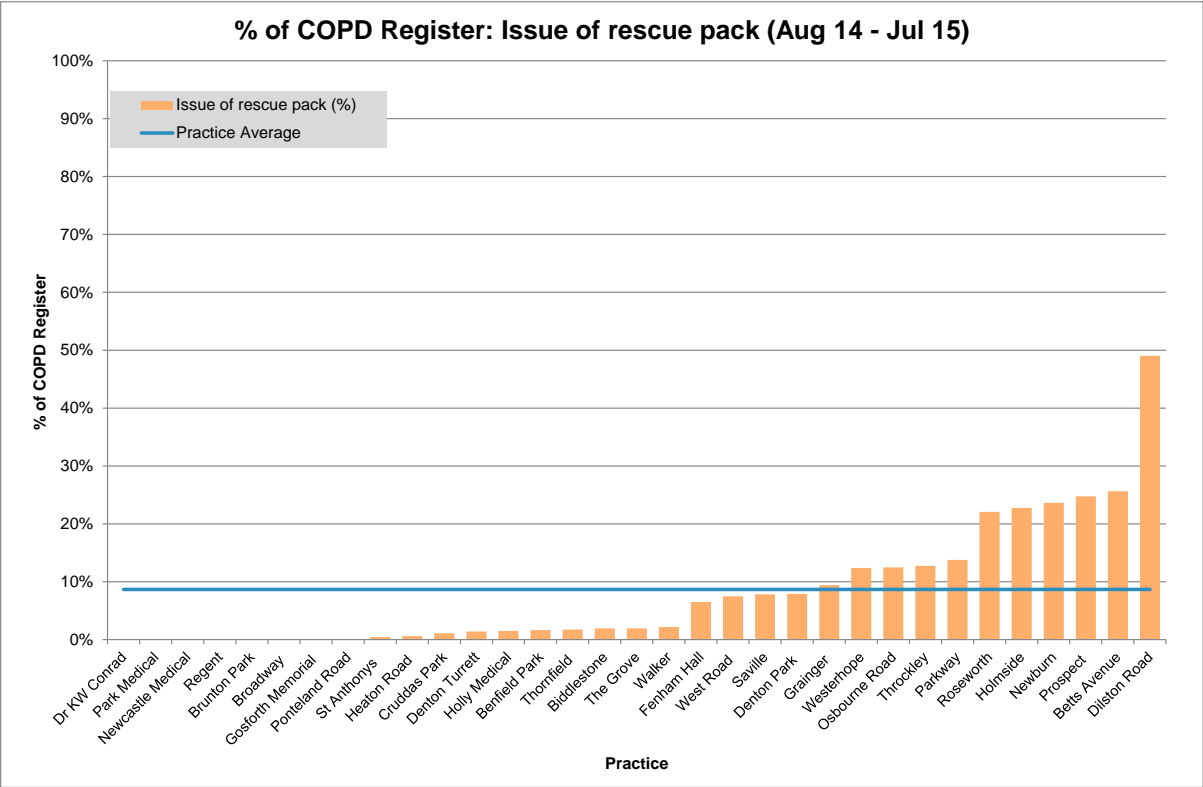




4.2.5 Self-management plan

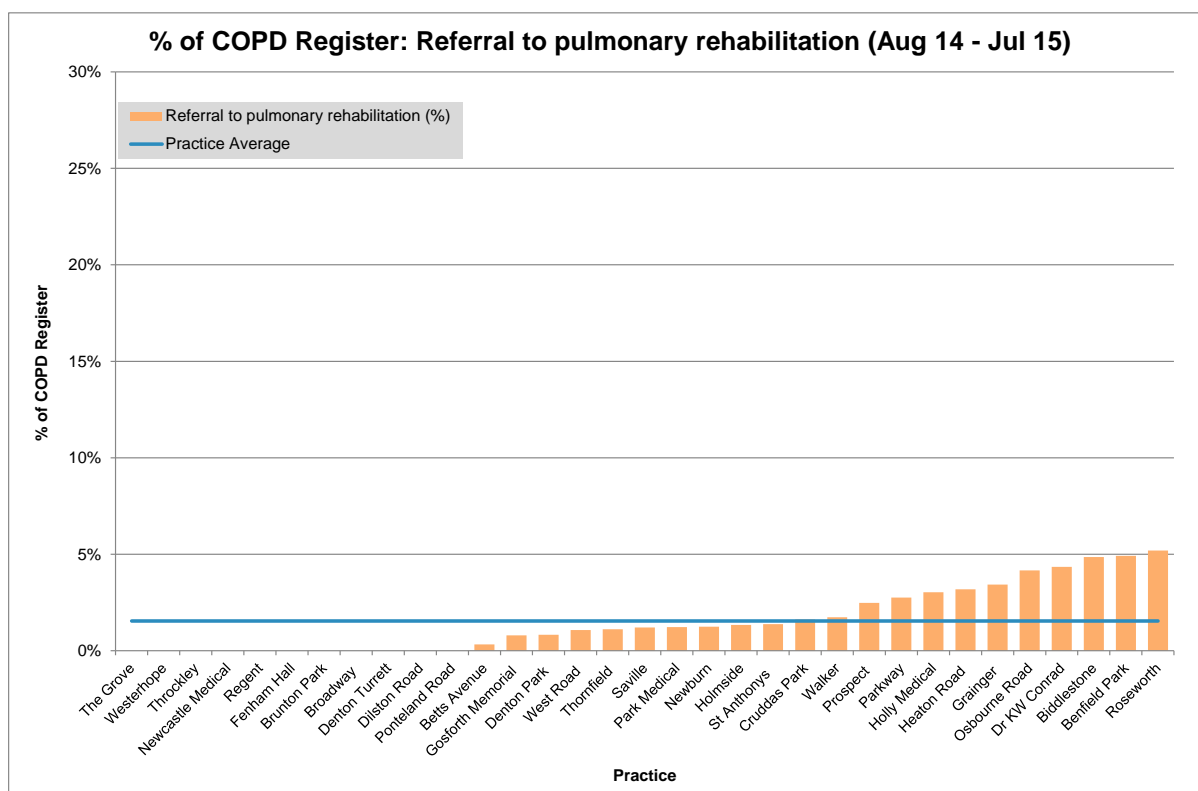


4.2.6 Rescue pack





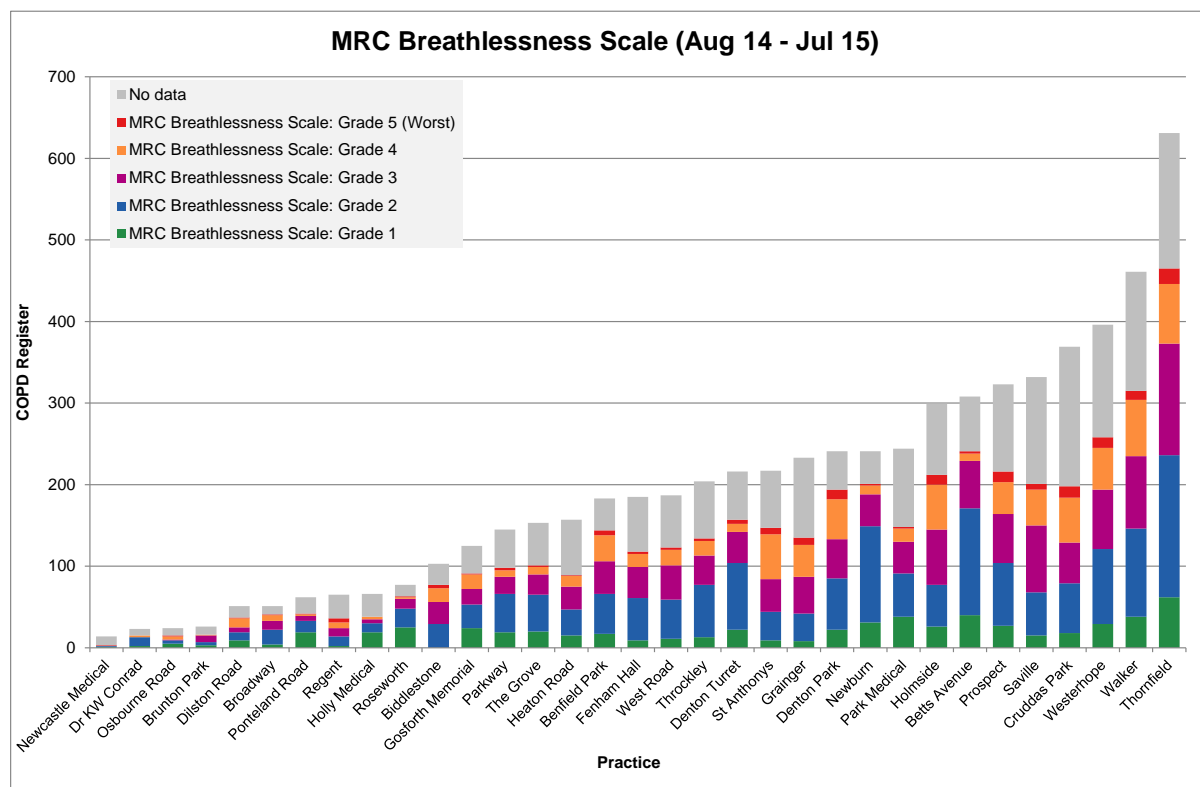
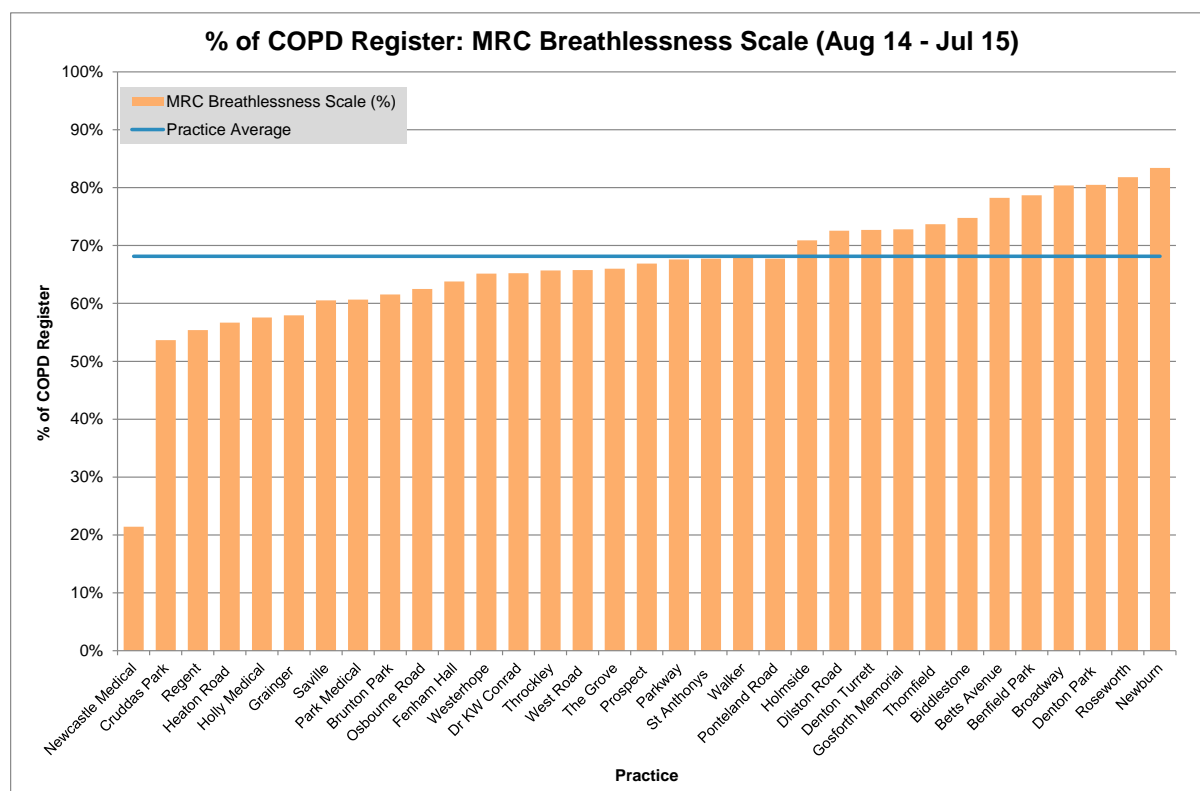
#### 4.2.7 Referral to pulmonary rehabilitation



Note that the axis on this chart is limited to 30% rather than 100% due to the small numbers.



#### 4.2.8 MRC Breathlessness scale





## b. Intervention period (August 2015 to July 2016)

## 4.3 Summary of data per practice (intervention period)

The table below shows the number and percentage of patients per practice with each of the seven measures recorded in this period.

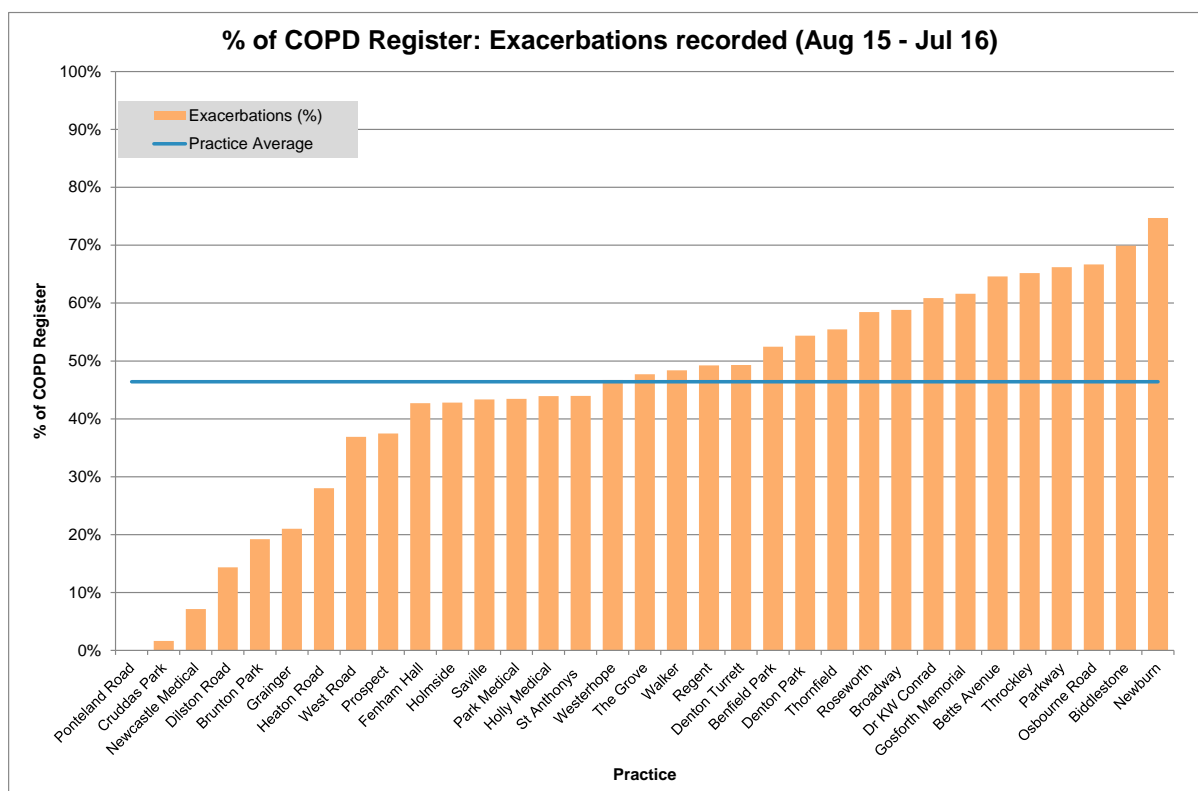
Practice Name	Exacerbations	COPD Exacerbations in the last year (%)	Inhaler Technique	Inhaler Technique (%)	Depression Screening using questions	Depression Screening using questions (%)	Self Management plan given	Self management plan given (%)	Issue of COPD Rescue pack	Issue of COPD rescue pack (%)	Referral to pulmonary rehabilitation	Referral to pulmonary rehabilitation (%)	MRC Breathlessness Scale	MRC Breathlessness Scale (%)
Saville	144	43.4%	163	49.1%	68	20.5%	127	38.3%	14	4.2%	*	0.9%	212	63.9%
Prospect	121	37.5%	85	26.3%	24	7.4%	94	29.1%	95	29.4%	8	2.5%	240	74.3%
Roseworth	45	58.4%	46	59.7%	15	19.5%	39	50.6%	17	22.1%	*	5.2%	62	80.5%
Dr KW Conrad	14	60.9%	11	47.8%	15	65.2%	*	8.7%	*	4.3%	0	0.0%	14	60.9%
Park Medical	106	43.4%	76	31.1%	35	14.3%	7	2.9%	*	1.6%	7	2.9%	177	72.5%
Biddlestone	72	69.9%	69	67.0%	*	2.9%	31	30.1%	13	12.6%	9	8.7%	76	73.8%
Walker	223	48.4%	239	51.8%	263	57.0%	149	32.3%	15	3.3%	10	2.2%	330	71.6%
West Road	69	36.9%	40	21.4%	116	62.0%	62	33.2%	12	6.4%	9	4.8%	139	74.3%
Denton Park	131	54.4%	108	44.8%	*	0.8%	96	39.8%	26	10.8%	18	7.5%	187	77.6%
Holly Medical	29	43.9%	30	45.5%	22	33.3%	27	40.9%	*	6.1%	*	7.6%	33	50.0%
Cruddas Park	6	1.6%	118	32.0%	10	2.7%	0	0.0%	*	0.3%	8	2.2%	223	60.4%
The Grove	73	47.7%	59	38.6%	68	44.4%	33	21.6%	10	6.5%	8	5.2%	93	60.8%
Osbourne Road	16	66.7%	10	41.7%	13	54.2%	15	62.5%	8	33.3%	0	0.0%	20	83.3%
Holmeside	128	42.8%	113	37.8%	145	48.5%	102	34.1%	65	21.7%	30	10.0%	165	55.2%
Parkway	96	66.2%	69	47.6%	71	49.0%	81	55.9%	25	17.2%	18	12.4%	109	75.2%
Benfield Park	96	52.5%	34	18.6%	26	14.2%	50	27.3%	55	30.1%	17	9.3%	140	76.5%
Heaton Road	44	28.0%	37	23.6%	15	9.6%	12	7.6%	*	3.2%	*	3.2%	114	72.6%
Westerhope	185	46.7%	179	45.2%	176	44.4%	130	32.8%	66	16.7%	*	1.0%	260	65.7%
Throckley	133	65.2%	139	68.1%	15	7.4%	83	40.7%	16	7.8%	*	0.5%	148	72.5%
Newcastle Medical	*	7.1%	8	57.1%	0	0.0%	*	21.4%	0	0.0%	0	0.0%	10	71.4%
Regent	32	49.2%	19	29.2%	0	0.0%	17	26.2%	*	6.2%	0	0.0%	38	58.5%
Thornfield	350	55.5%	311	49.3%	295	46.8%	135	21.4%	67	10.6%	46	7.3%	471	74.6%
Betts Avenue	199	64.6%	223	72.4%	25	8.1%	199	64.6%	75	24.4%	28	9.1%	253	82.1%
Fenham Hall	79	42.7%	75	40.5%	11	5.9%	64	34.6%	23	12.4%	*	1.6%	132	71.4%
Brunton Park	*	19.2%	7	26.9%	9	34.6%	10	38.5%	0	0.0%	0	0.0%	16	61.5%
Broadway	30	58.8%	30	58.8%	13	25.5%	23	45.1%	0	0.0%	0	0.0%	37	72.5%
Gosforth Memorial	77	61.6%	62	49.6%	75	60.0%	77	61.6%	10	8.0%	*	2.4%	89	71.2%
Grainger	49	21.0%	43	18.5%	8	3.4%	10	4.3%	28	12.0%	*	1.7%	147	63.1%
St Anthonys	106	44.0%	96	44.2%	121	55.8%	74	34.1%	8	3.7%	18	8.3%	151	69.6%
Denton Turret	107	49.3%	105	48.6%	68	31.5%	64	29.6%	12	5.6%	*	1.9%	138	63.9%
Dilston Road	31	14.4%	26	51.0%	29	56.9%	24	47.1%	18	35.3%	0	0.0%	35	68.6%
Ponteland Road	0	0.0%	21	33.9%	12	19.4%	13	21.0%	0	0.0%	0	0.0%	37	59.7%
Newburn	180	74.7%	137	56.8%	0	0.0%	169	70.1%	53	22.0%	*	2.1%	198	82.2%
<b>Average / sum</b>	<b>2,977</b>	<b>46.4%</b>	<b>2,788</b>	<b>43.5%</b>	<b>1,768</b>	<b>27.6%</b>	<b>2,022</b>	<b>31.5%</b>	<b>750</b>	<b>11.7%</b>	<b>275</b>	<b>4.3%</b>	<b>4,494</b>	<b>70.1%</b>

Table 4: COPD condition based measures by practice (August 2015 – July 2016)

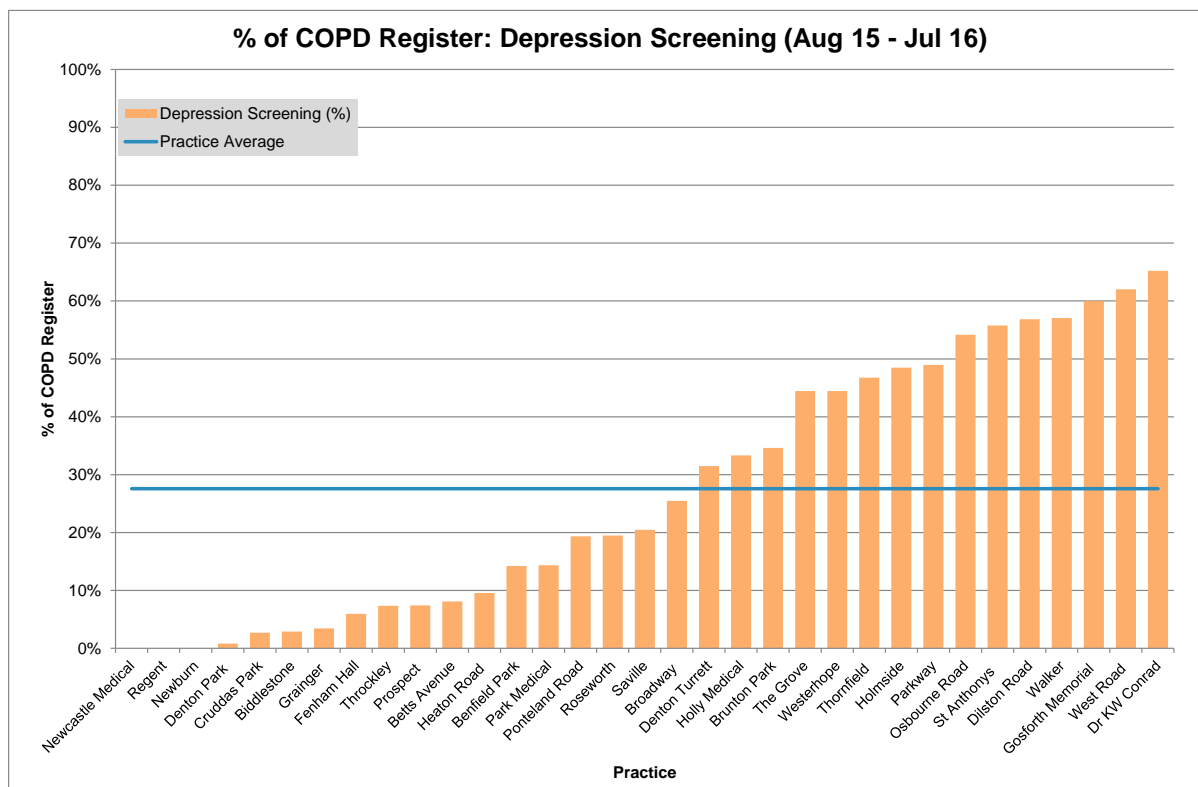
Asterisks denote patient numbers <6



### 4.3.1 Exacerbations recorded

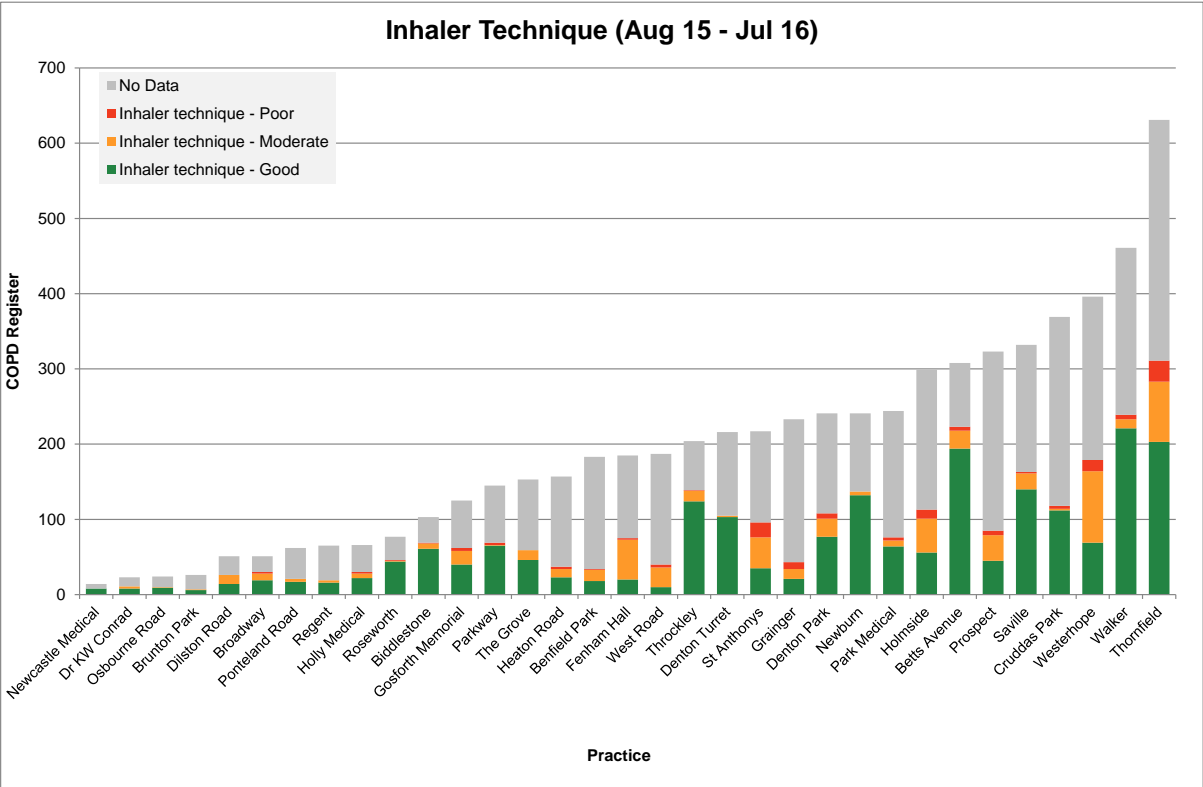
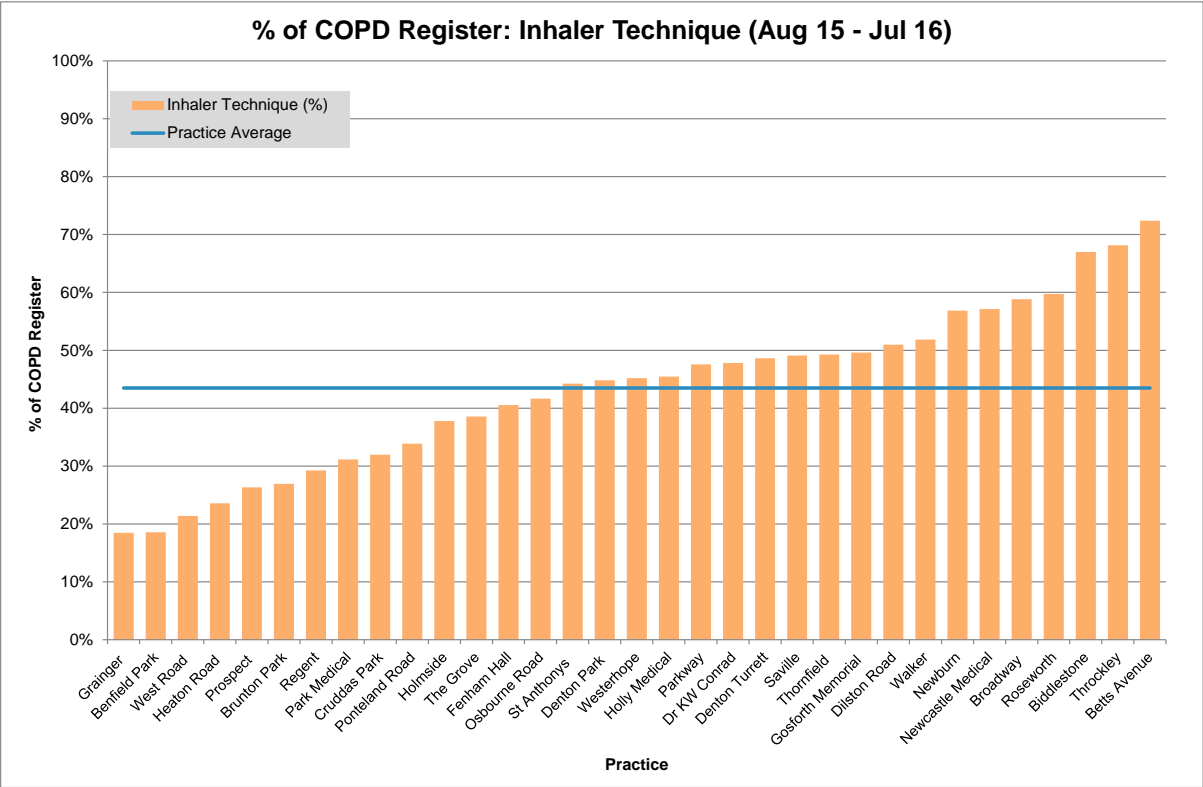


### 4.3.2 Depression screening



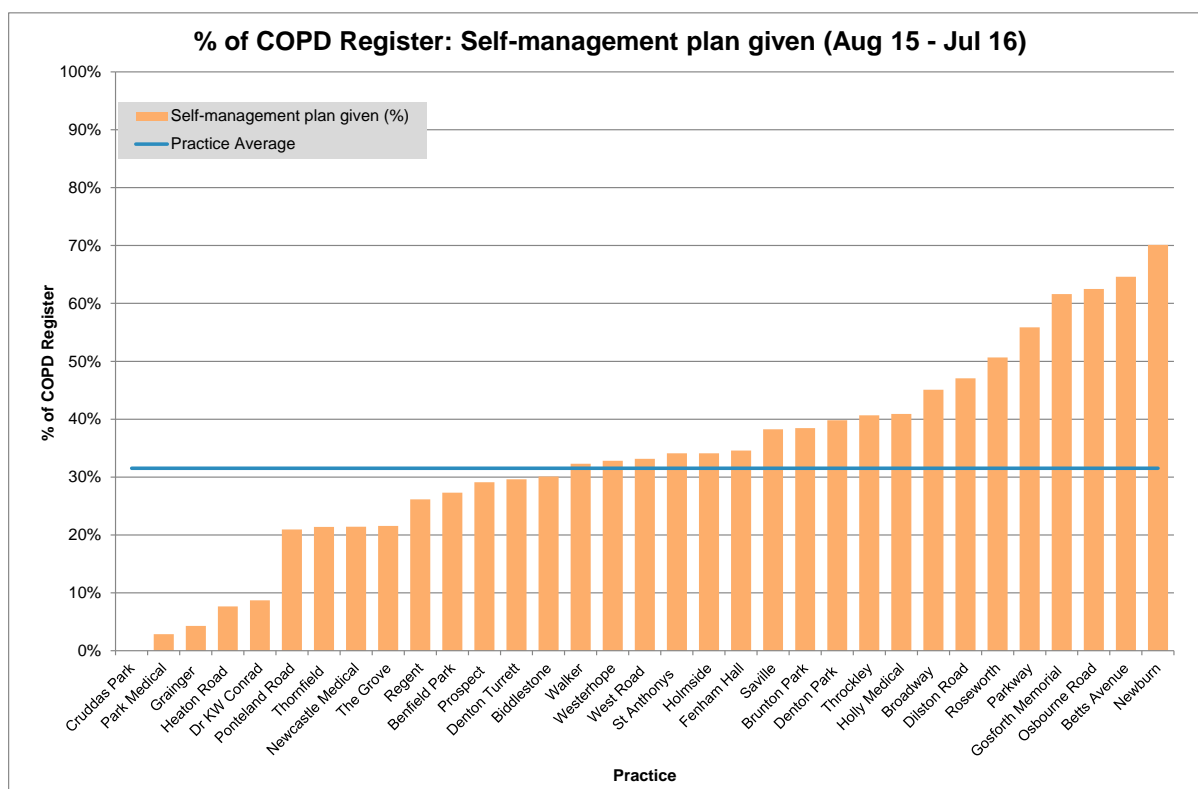


4.3.3 Inhaler technique

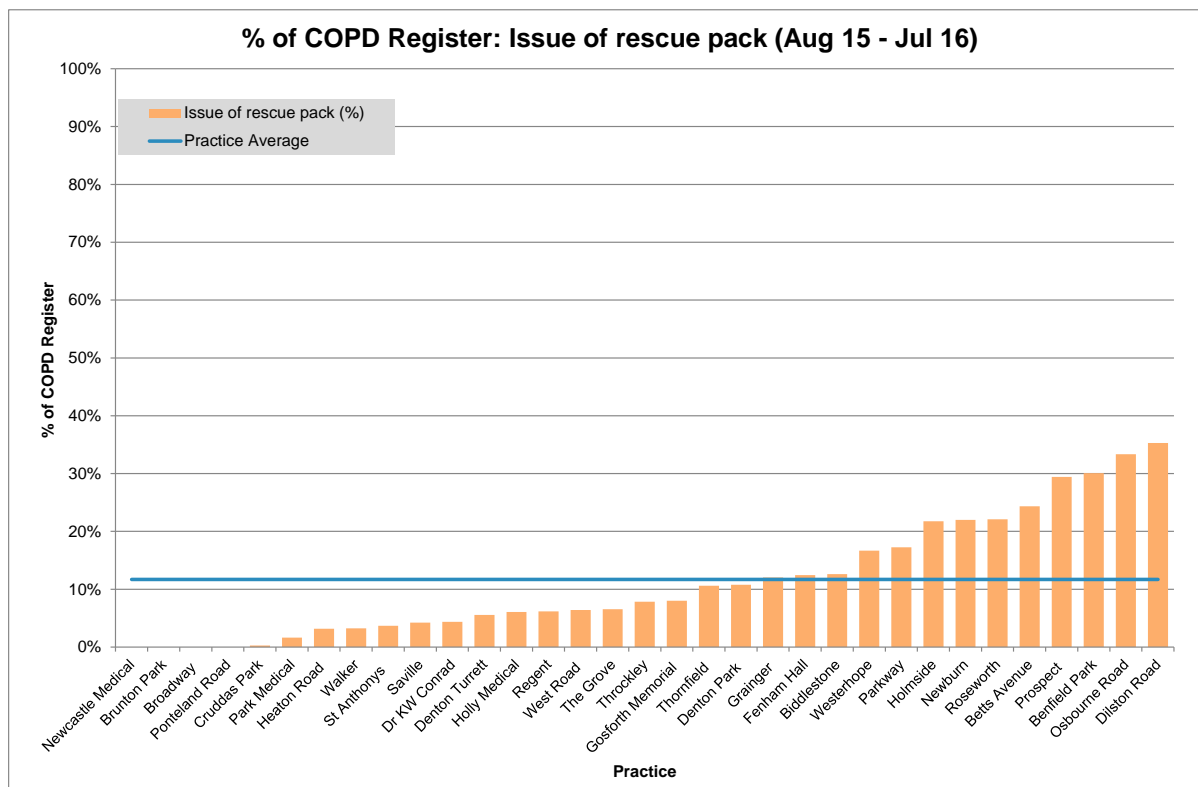




#### 4.3.4 Self-management plan

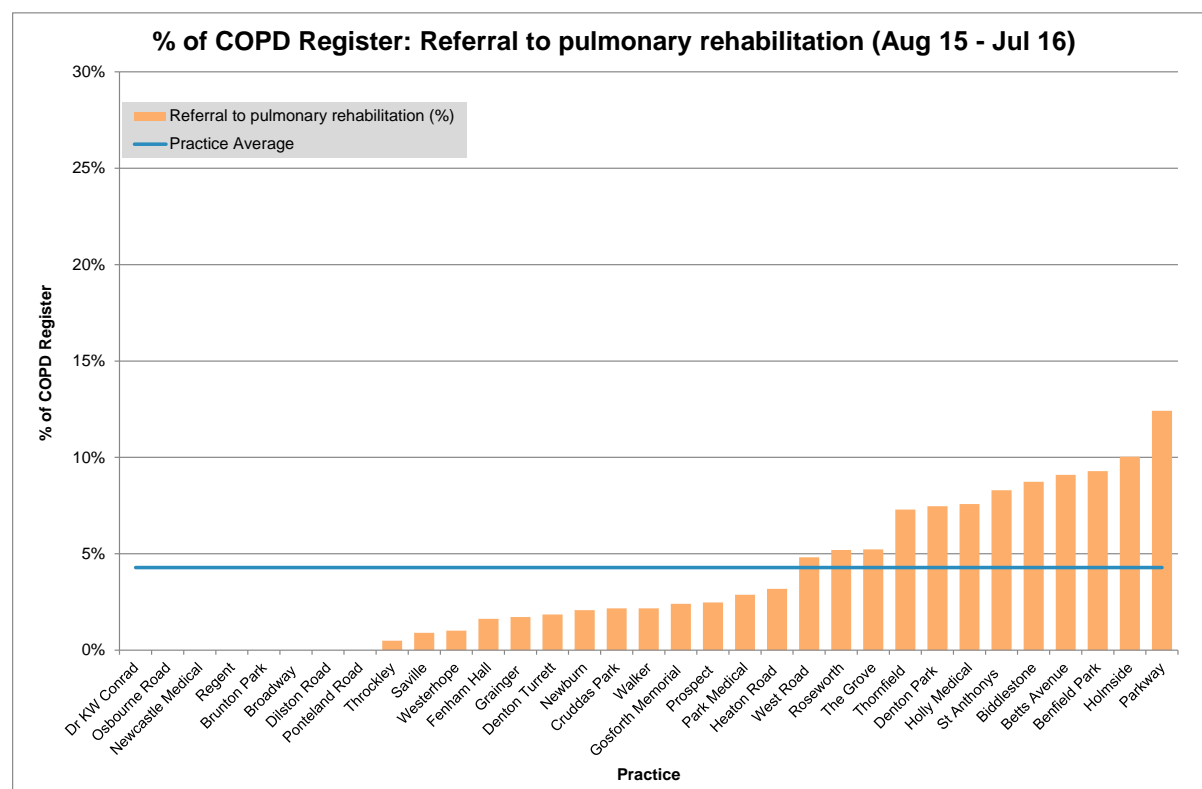


#### 4.3.5 Rescue pack



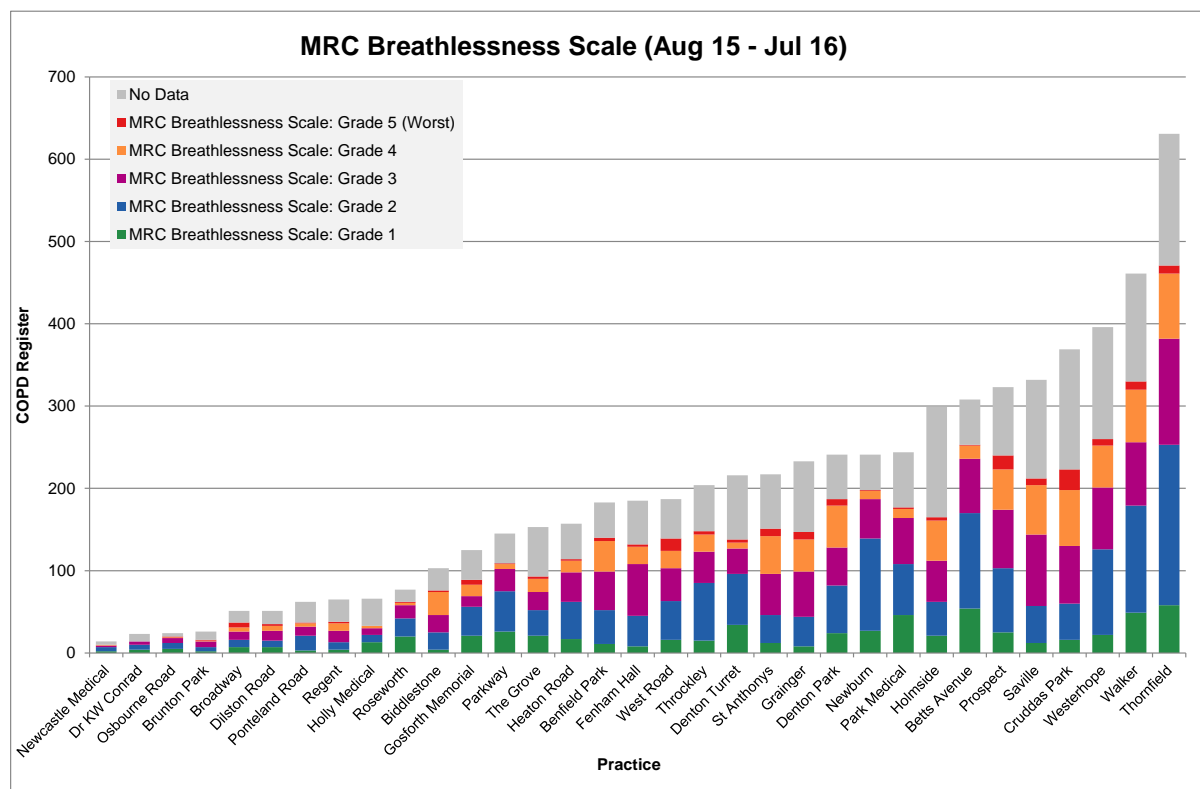
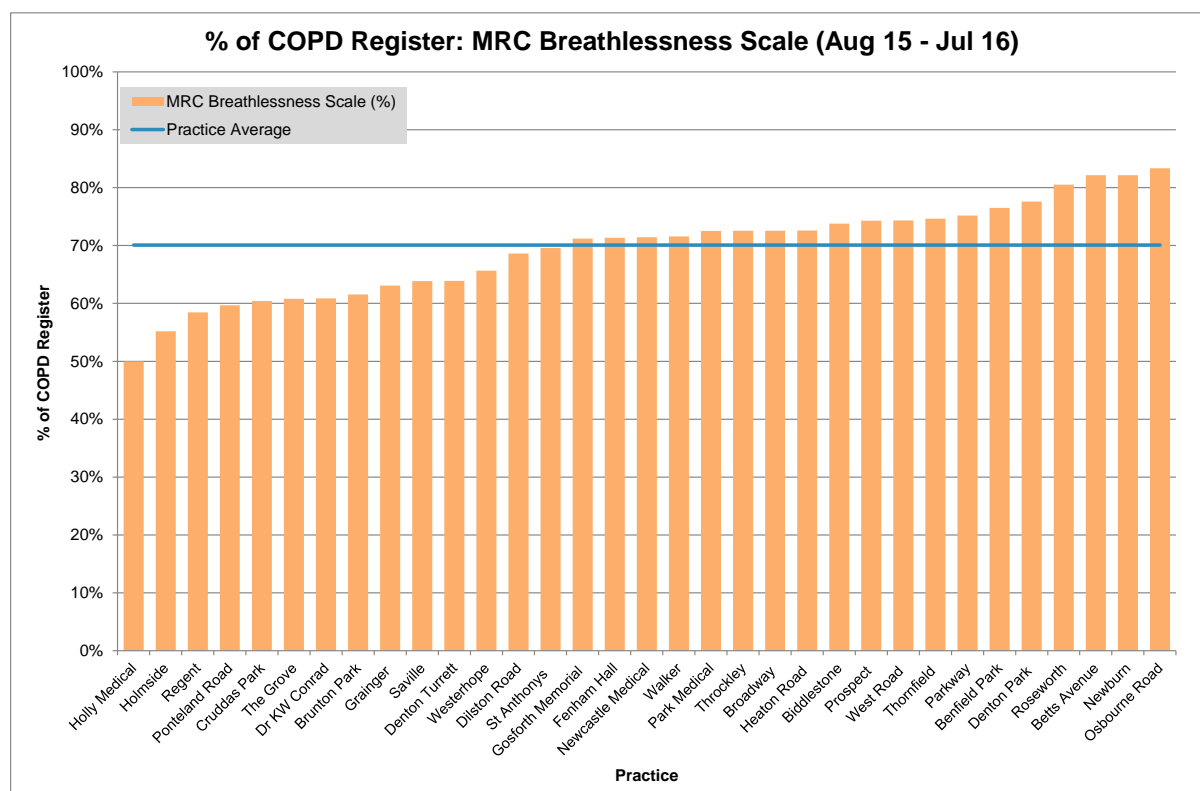


### 4.3.6 Referral to pulmonary rehabilitation





#### 4.3.7 MRC Breathlessness scale





## 5 Comparison of COPD data recording between the two time periods

The table below shows the change in the number of patients (and the percentage change from baseline) with each measure recorded across the time periods, for each of the seven COPD measures.

Orange shading indicates that the patient count for the baseline period was <10 patients, therefore it is possible that the percentage change over time can be greater than 100% (indicated in red text).

Blue shading indicates that the patient count in the baseline was zero, therefore a percentage change cannot be calculated and has been set to 100%, unless the change is <5 patients, in which case it has been set to 0% (i.e. no real change observed).

Practice Code	Practice Name	COPD Subset	Exacerbations	COPD Exacerbations (% change)	Inhaler Technique	Inhaler Technique (% change)	Depression Screening using questions	Depression Screening (% change)	Self Management plan given	Self management plan given (% change)	Issue of COPD Rescue pack	Issue of COPD rescue pack (% change)	Referral to pulmonary rehabilitation	Referral to pulmonary rehabilitation (% change)	MRC Breathlessness Scale	MRC Breathlessness Scale (% change)
A86003	Saville	332	-5	-3.4%	15	10.1%	-2	-2.9%	2	1.6%	-12	-46.2%	-1	-25.0%	11	5.5%
A86004	Prospect	323	23	23.5%	-25	-22.7%	17	242.9%	41	77.4%	15	18.8%	0	0.0%	24	11.1%
A86006	Roseworth	77	13	40.6%	-9	-16.4%	14	1400.0%	34	680.0%	0	0.0%	0	0.0%	-1	-1.6%
A86007	Dr KW Conrad	23	2	16.7%	-1	-8.3%	10	200.0%	-3	-60.0%	1	0.0%	-1	-100.0%	-1	-6.7%
A86008	Park Medical	244	-10	-8.6%	-19	-20.0%	-19	-35.2%	5	250.0%	4	0.0%	4	133.3%	29	19.6%
A86010	Biddlestone	103	26	56.5%	25	56.8%	2	200.0%	31	100.0%	11	550.0%	4	80.0%	-1	-1.3%
A86011	Walker	461	9	4.2%	-7	-2.8%	-2	-0.8%	120	413.8%	5	50.0%	2	25.0%	15	4.8%
A86012	West Road	187	16	30.2%	-15	-27.3%	55	90.2%	12	24.0%	-2	-14.3%	7	350.0%	16	13.0%
A86013	Denton Park	241	-5	-3.7%	-2	-1.8%	-4	-66.7%	81	540.0%	7	36.8%	16	800.0%	-7	-3.6%
A86015	Holly Medical	66	22	314.3%	14	87.5%	11	100.0%	18	200.0%	3	300.0%	3	150.0%	-5	-13.2%
A86017	Cruddas Park	369	-66	-91.7%	38	47.5%	-88	-89.8%	-7	-100.0%	-3	-75.0%	2	33.3%	25	12.6%
A86018	The Grove	153	70	2333.3%	51	637.5%	22	47.8%	31	1550.0%	7	233.3%	8	100.0%	-8	-7.9%
A86020	Osbourne Road	24	15	1500.0%	6	150.0%	10	333.3%	11	275.0%	5	166.7%	-1	-100.0%	5	33.3%
A86021	Holmside	299	-42	-24.7%	-30	-21.0%	17	13.3%	5	5.2%	-3	-4.4%	26	650.0%	-47	-22.2%
A86022	Parkway	145	33	52.4%	6	9.5%	27	61.4%	42	107.7%	5	25.0%	14	350.0%	11	11.2%
A86023	Benfield Park	183	-1	-1.0%	-22	-39.3%	9	52.9%	10	25.0%	52	1733.3%	0	0.0%	-4	-2.8%
A86024	Heaton Road	157	-19	-30.2%	8	27.6%	12	400.0%	7	140.0%	4	400.0%	0	0.0%	25	28.1%
A86025	Westerhope	396	34	22.5%	21	13.3%	18	11.4%	47	56.6%	17	34.7%	4	0.0%	2	0.8%
A86026	Throckley	204	8	6.4%	20	16.8%	-96	-86.5%	-43	-34.1%	-10	-38.5%	1	0.0%	14	10.4%
A86027	Newcastle Medical	14	-2	-66.7%	6	300.0%	0	0.0%	2	200.0%	0	0.0%	0	0.0%	7	233.3%
A86028	Regent	65	14	77.8%	-5	-20.8%	0	0.0%	12	240.0%	4	0.0%	0	0.0%	2	5.6%
A86029	Thornfield	631	110	45.8%	17	5.8%	216	273.4%	-21	-13.5%	56	509.1%	39	557.1%	6	1.3%
A86030	Betts Avenue	308	22	12.4%	11	5.2%	-151	-85.8%	16	8.7%	-4	-5.1%	27	2700.0%	12	5.0%
A86031	Fenham Hall	185	4	5.3%	12	19.0%	8	266.7%	3	4.9%	11	91.7%	3	0.0%	14	11.9%
A86033	Brunton Park	26	3	150.0%	-4	-36.4%	2	28.6%	9	900.0%	0	0.0%	0	0.0%	0	0.0%
A86035	Broadway	51	-8	-21.1%	-7	-18.9%	2	18.2%	15	187.5%	0	0.0%	0	0.0%	-4	-9.8%
A86036	Gosforth Memorial	125	77	100.0%	45	264.7%	65	650.0%	77	100.0%	10	100.0%	2	200.0%	-2	-2.2%
A86037	Grainger	233	-27	-35.5%	-52	-54.7%	-43	-27.3%	-39	-79.6%	6	27.3%	-4	-50.0%	12	8.9%
A86040	St Anthonys	217	3	2.9%	86	860.0%	56	86.2%	26	54.2%	7	700.0%	15	500.0%	4	2.7%
A86601	Denton Turret	216	-9	-7.8%	-12	-10.3%	45	195.7%	-49	-43.4%	9	300.0%	4	0.0%	-19	-12.1%
Y00184	Dilston Road	51	3	10.7%	2	8.3%	7	31.8%	-2	-7.7%	-7	-28.0%	0	0.0%	-2	-5.4%
Y02711	Ponteland Road	62	-22	-100.0%	-5	-19.2%	-4	-25.0%	-11	-45.8%	0	0.0%	0	0.0%	-5	-11.9%
A86038	Newburn	241	3	1.7%	16	13.2%	0	0.0%	0	0.0%	-4	-7.0%	2	66.7%	-3	-1.5%
Average	Average / sum	6,412	294	11.0%	184	7.1%	216	13.9%	482	31.3%	194	34.9%	176	177.8%	125	2.9%

Table 5: Difference over time in COPD condition based measures by practice (Aug 2014 – July 2015 compared to Aug 2015 – July 2016)

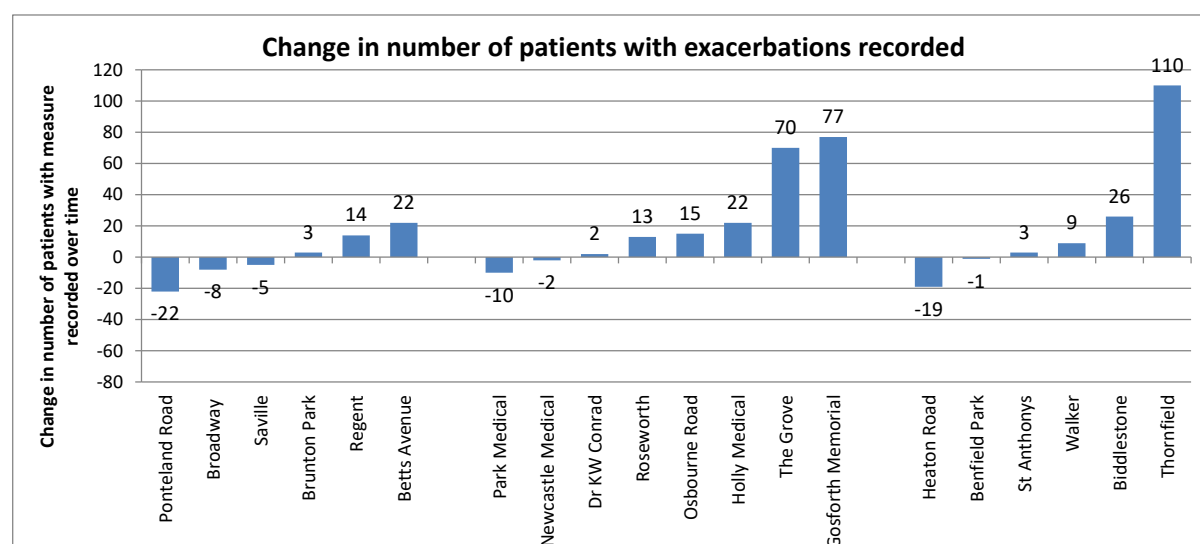
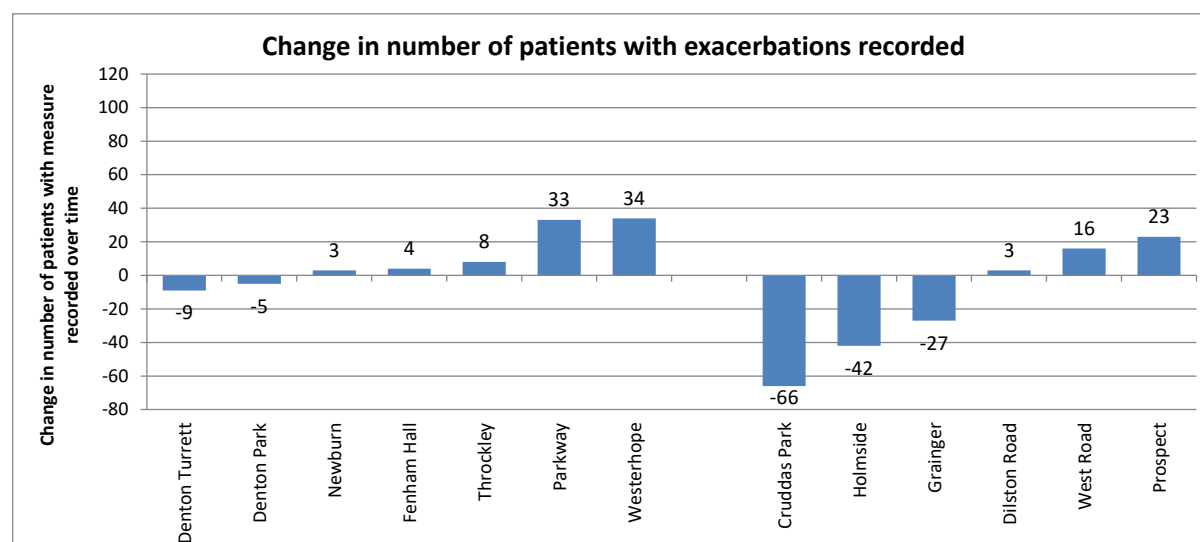


The charts below show the change in patient numbers per practice for each COPD measure. It has not been possible to express this as percentage change due to the very high percentage changes seen in some cases (due to small patient numbers).

### 5.1 Change in exacerbations recorded

There has been a net increase in coding of exacerbations across all practices, with an additional 294 COPD patients (11% increase) in Newcastle having the relevant codes added in the latest 12 months.

The total increase in data recording for exacerbations based solely on those practices who have improved on the baseline position is 510 COPD patients.

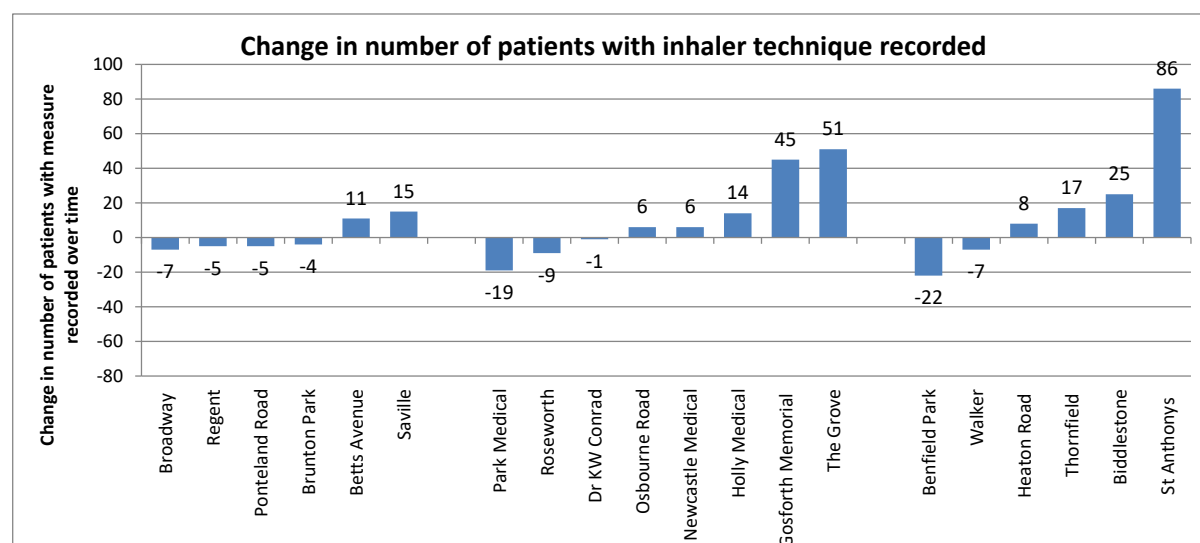
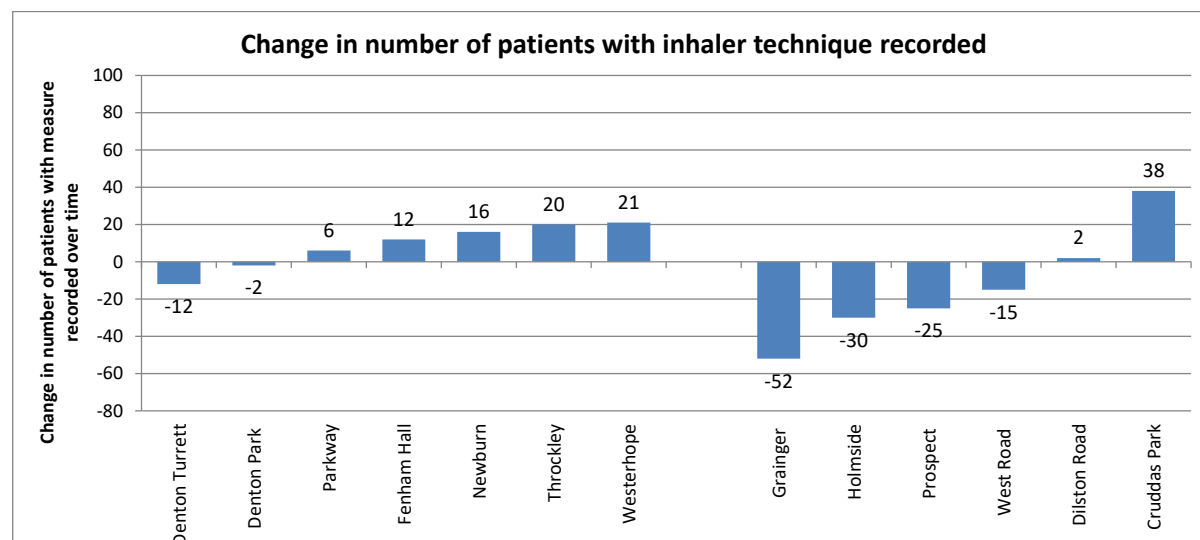




## 5.2 Change in inhaler technique recorded

There has been a net increase in coding of inhaler technique across all practices, with an additional 184 COPD patients (7.1% increase) in Newcastle having the relevant codes added in the latest 12 months.

The total increase in data recording for inhaler technique based solely on those practices who have improved on the baseline position is 399 COPD patients.

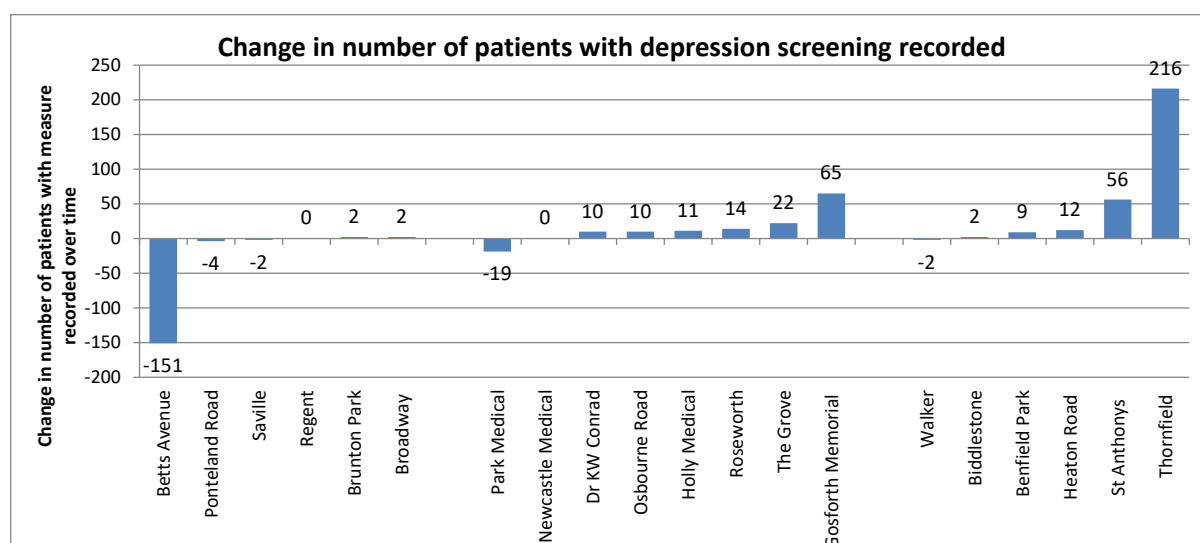
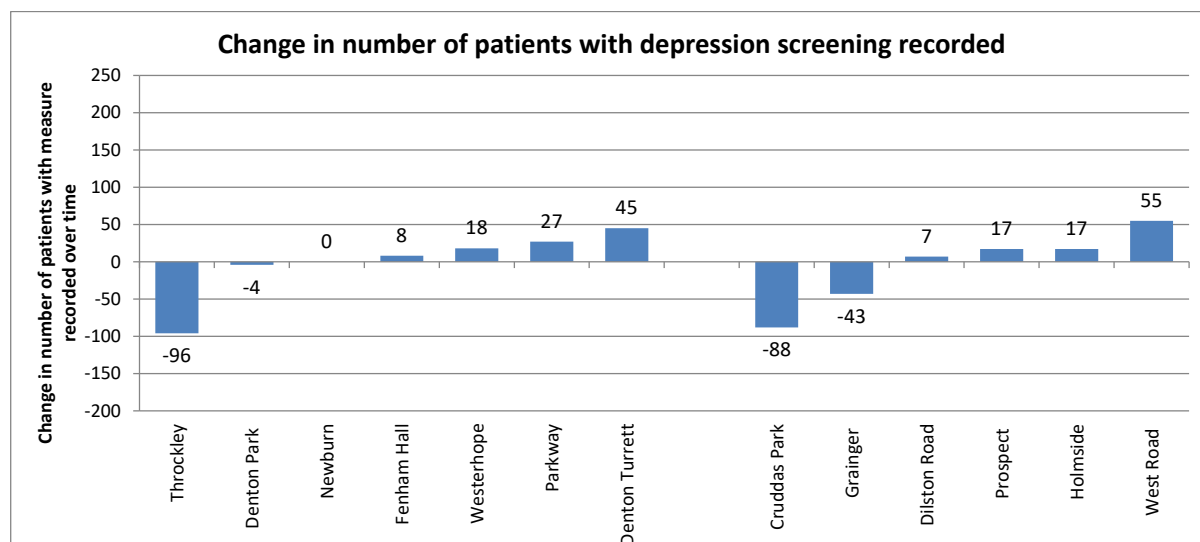




### 5.3 Depression screening

There has been a net increase in coding of depression across all practices, with an additional 216 COPD patients (13.9% increase) in Newcastle having the relevant codes added in the latest 12 months.

The total increase in data recording for depression screening based solely on those practices who have improved on the baseline position is 625 COPD patients.

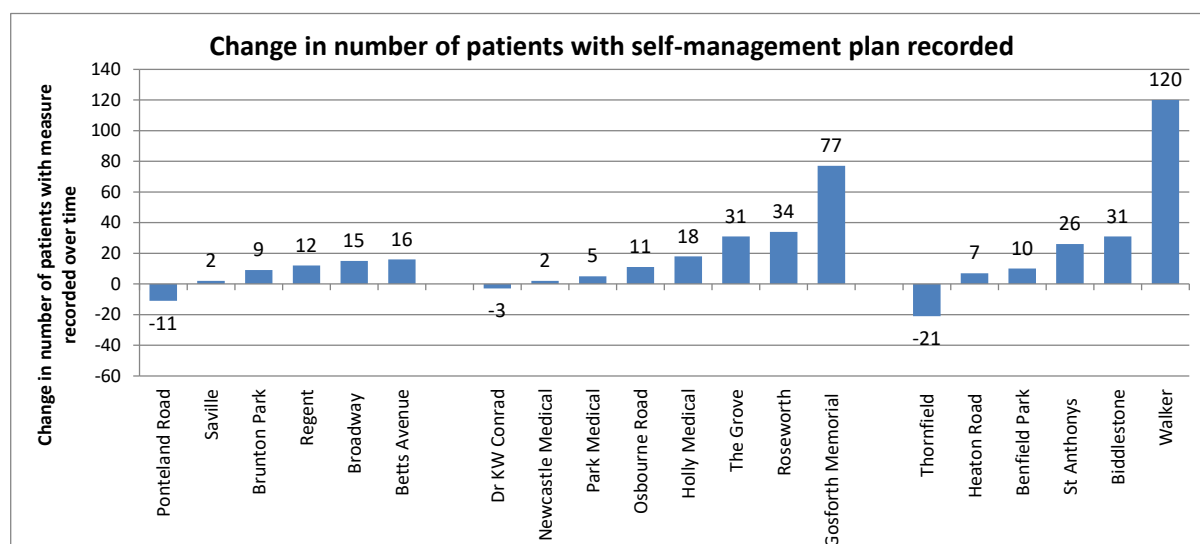
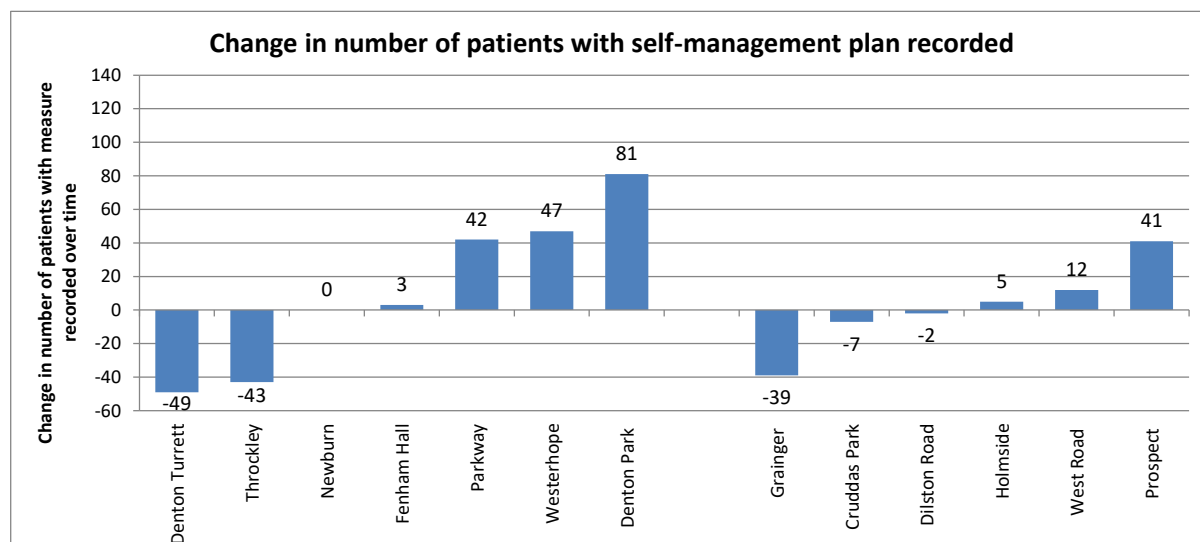




## 5.4 Self-management plan recorded

There has been a net increase in coding of self-management plans across all practices, with an additional 482 COPD patients (31.3% increase) in Newcastle having the relevant codes added in the latest 12 months.

The total increase in data recording for self-management plans based solely on those practices who have improved on the baseline position is 657 COPD patients.

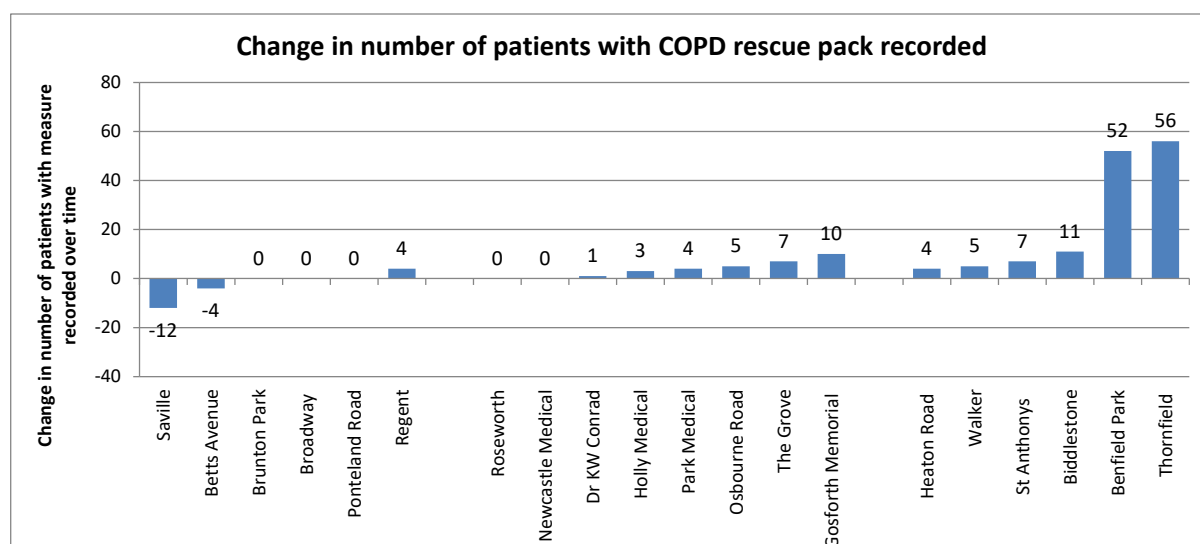
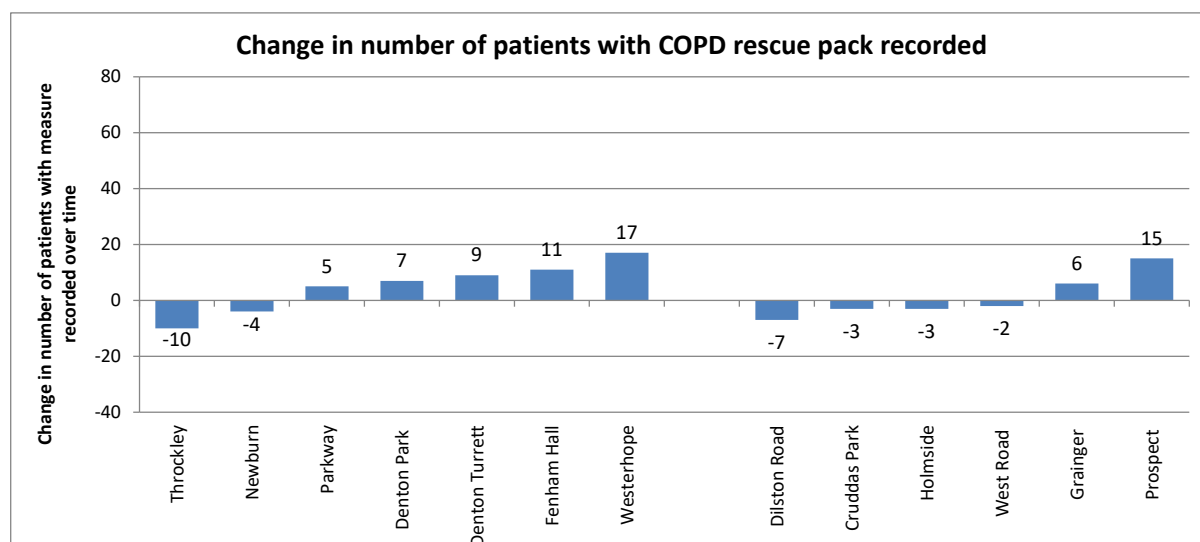




## 5.5 Issue of COPD rescue pack

There has been a net increase in coding of the issue of COPD rescue packs across all practices, with an additional 194 COPD patients (31.3% increase) in Newcastle having the relevant codes added in the latest 12 months.

The total increase in data recording for COPD rescue packs based solely on those practices who have improved on the baseline position is 239 COPD patients.

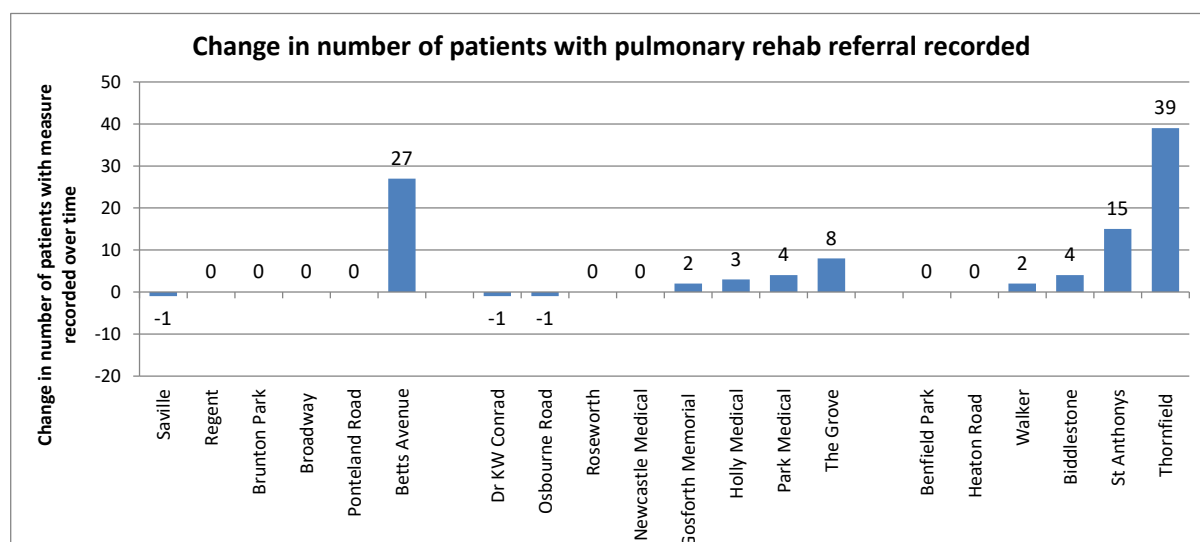
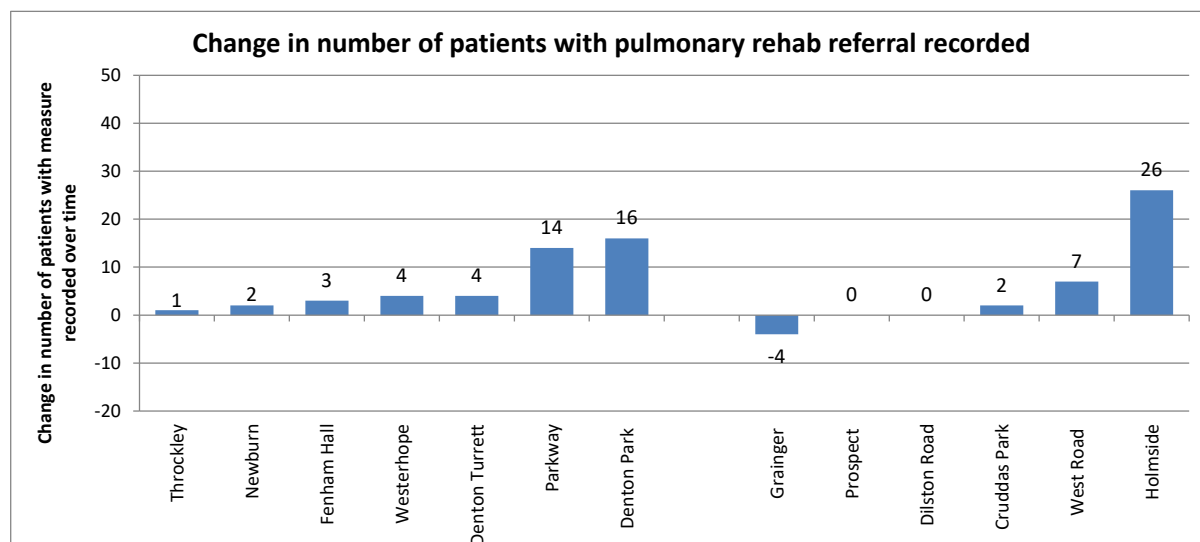




## 5.6 Referrals to pulmonary rehabilitation

There has been a net increase in coding of referrals to pulmonary rehabilitation across all practices, with an additional 176 COPD patients (177.8% increase) in Newcastle having the relevant codes added in the latest 12 months.

The total increase in data recording for referrals to pulmonary rehabilitation based solely on those practices who have improved on the baseline position is 183 COPD patients.

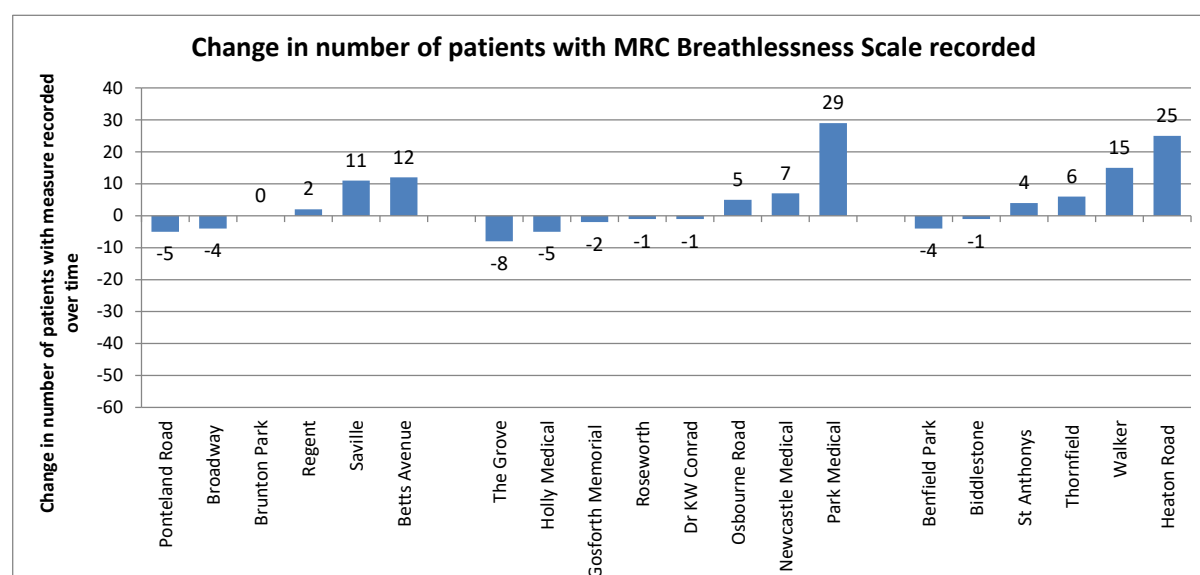
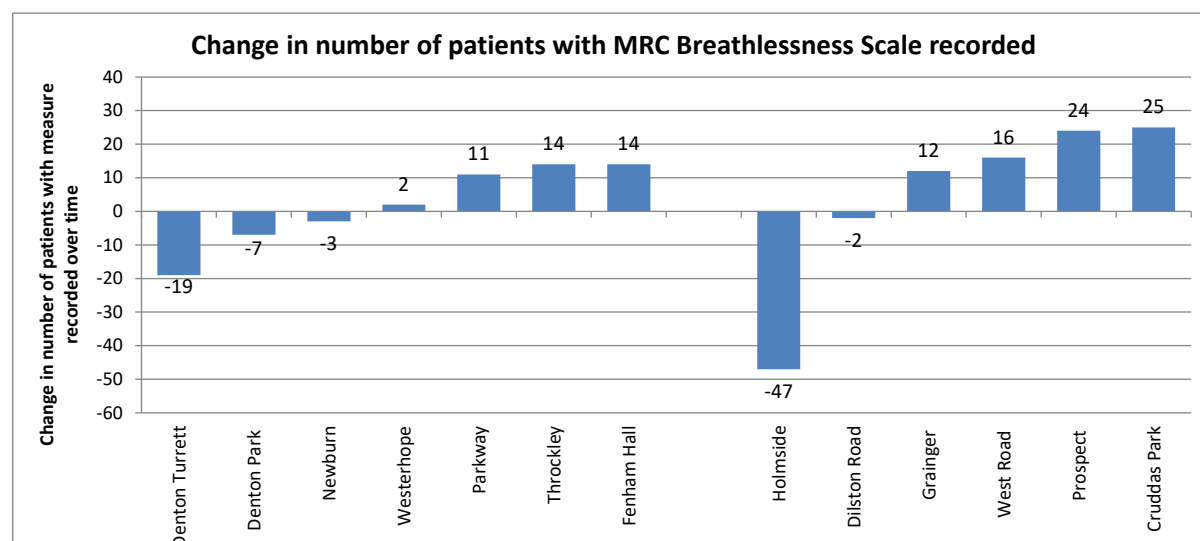




## 5.7 MRC Breathlessness Scale

There has been a net increase in coding of the MRC Breathlessness Scale across all practices, with an additional 125 COPD patients (2.9% increase) in Newcastle having the relevant codes added in the latest 12 months. Recording of this measure was already relatively high in the baseline period, at 68.1% of patients.

The total increase in data recording for the MRC Breathlessness Scale based solely on those practices who have improved on the baseline position is 234 COPD patients.





## **6 Summary of findings**

Analysis of the data extractions from GP practices has demonstrated that there have been substantial improvements in data recording over time, but in some practices large reductions can also be seen.

Clear improvements have been made by some practices in the recording of measures which are key to the management of COPD. This can be seen in a number of measures, for Thornfield, Gosforth Memorial, Westerhope, Parkway and Grove practices. Other practices have made improvements in specific measures only, such as Biddlestone and St Anthony's.

There are a number of measures where a specific practice has seen a stark reduction in the number of COPD patients with a specific measure recorded when compared to the baseline position.

It must be noted that the size of the improvement must be viewed in the context of the COPD register size and the practice list size as the percentage improvement may be high but the absolute change may only be small.



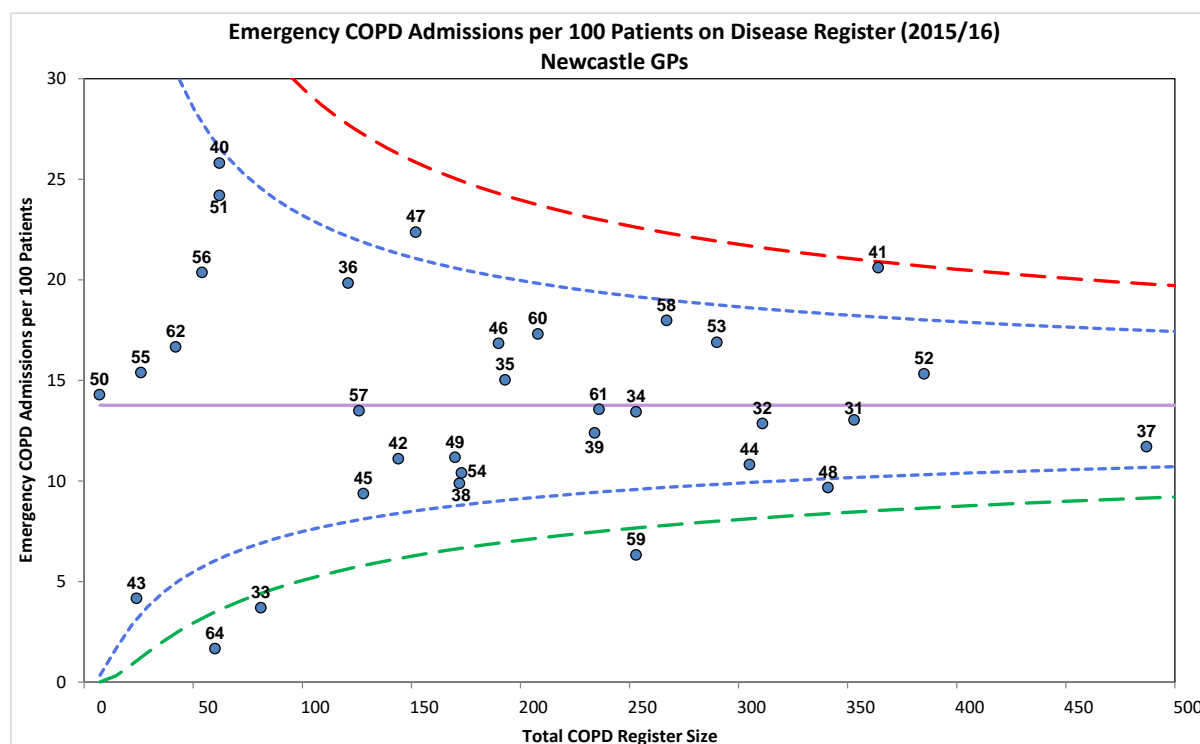
## 7 Hospital activity by practice

The funnel charts below indicate, for all practices registered within the Newcastle area of Newcastle Gateshead CCG, the COPD emergency admission rate, proportion of admissions which are short stay (0-1 days) and the proportion of admissions with readmissions within 30 days. Due to the number of data points on the charts, each practice has been given a number, and the reference table for this is at the end of this report section.

### 7.1 Emergency COPD admissions per 100 patients on disease register

The funnel chart below shows emergency admissions for COPD per 100 patients on the COPD disease register. Activity ranges from less than 5 admissions to over 25 admissions per 100 COPD patients and the CCG mean admission rate is 13.8 per 100 COPD patients.

One practice has a COPD emergency admission rate that is close to the upper confidence limit for this measure (i.e. greater than 3 standard deviations from the mean).

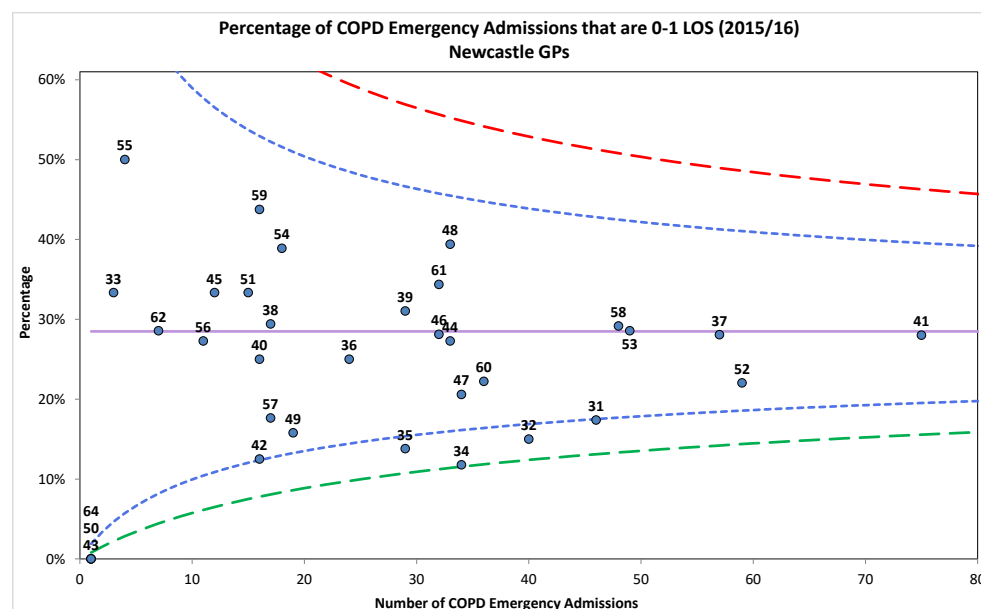


Data sources: Hospital Episode Statistics, Copyright © 2017, re-used with the permission of NHS Digital. All rights reserved. Quality and Outcomes Framework (QOF) 2015/16, NHS Digital (<http://qof.digital.nhs.uk/>)



## 7.2 Emergency COPD admissions (0-1 day length of stay) per 100 patients on disease register

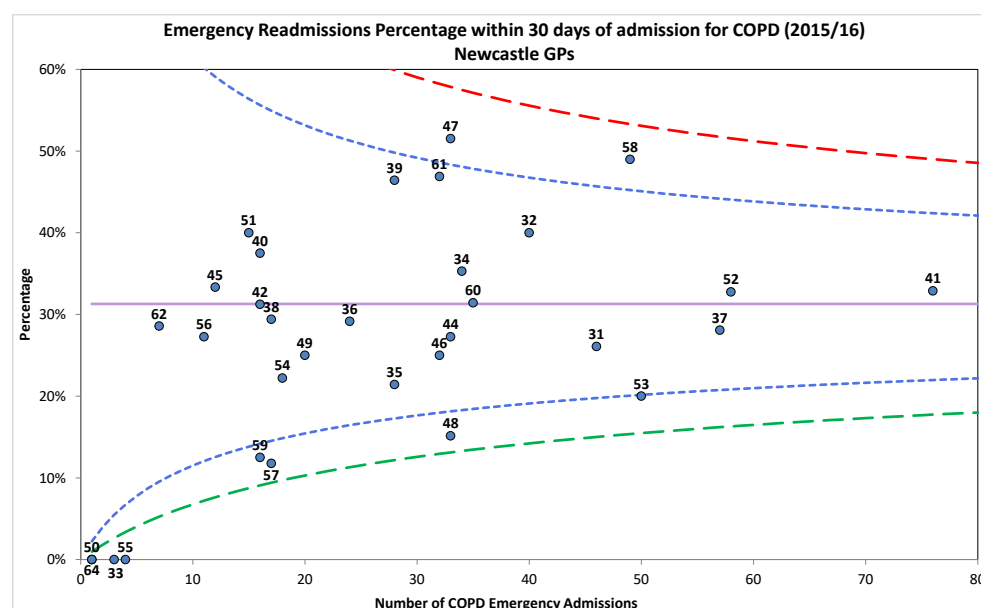
The funnel chart below shows the proportion of emergency admissions for each practice that were for short stay only (i.e. between 0 and 1 day length of stay). The short stay percentage for the CCG overall is just under 30%, but at practice level this varies between 0% and around 50%.



Data sources: Hospital Episode Statistics, Copyright © 2017, re-used with the permission of NHS Digital. All rights reserved.

## 7.3 Emergency readmissions within 30 days of an admission for COPD

This chart shows the percentage of patients admitted for COPD who are discharged and readmitted within 30 days. The CCG readmission rate is approximately 31% although for one practice the rate is 51.5%.



Data sources: Hospital Episode Statistics, Copyright © 2017, re-used with the permission of NHS Digital. All rights reserved.



## 7.4 GP practice reference table

ID	GP	GP practice name
31	A86003	Saville
32	A86004	Prospect
33	A86006	Roseworth
34	A86008	Park Medical
35	A86009	Falcon
36	A86010	Biddlestone
37	A86011	Walker
38	A86012	West Road
39	A86013	Denton Park
40	A86015	Holly Medical
41	A86017	Cruddas Park
42	A86018	The Grove
43	A86020	Osbourne Road
44	A86021	Holmside
45	A86022	Parkway
46	A86023	Benfield Park
47	A86024	Heaton Road
48	A86025	Westerhope
49	A86026	Throckley
50	A86027	Newcastle Medical
51	A86028	Regent
52	A86029	Thornfield
53	A86030	Betts Avenue
54	A86031	Fenham Hall
55	A86033	Brunton Park
56	A86035	Broadway
57	A86036	Gosforth Memorial
58	A86037	Grainger
59	A86038	Newburn
60	A86040	St Anthony's
61	A86601	Denton Turrett
62	Y00184	Dilston Road
64	Y02711	Ponteland Road

There is no data in HES for GP practice A86007 therefore at present this practice is missing from the charts. NHS Digital has been contacted regarding this and a response is expected shortly.



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Approved by Epidemiologist	Andrea Brown
Approved by Project Director	Valerie Corris
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Contact email address	<a href="mailto:neqos@nhs.net">neqos@nhs.net</a>
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Internal file location	G:\Project Management\Project Mgt 15-16\AHSN Respiratory\Data extraction