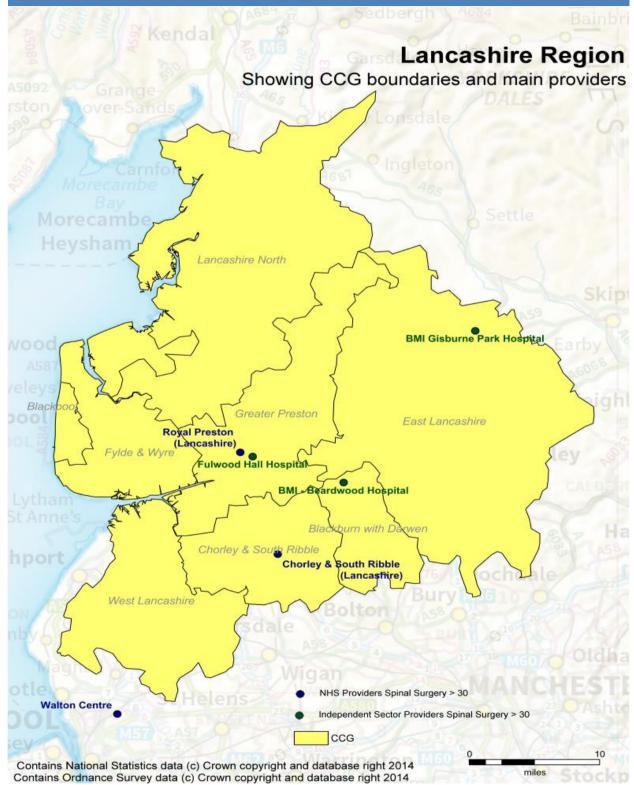


## North East Quality Observatory Service

# Back Pain Report

## **Greater Preston**

June 2016



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## BetterKnowledgeBetterCareBetterOutcomes

## **NEQOS Back Pain Report**

This back pain report contains health intelligence produced by NEQOS to support the implementation of the national pathfinder project to provide better pathways of care for people with low back and radicular pain. The NHS England Pathfinder Projects were established to address high value care pathways which cross commissioning and health care boundaries. Many conditions require a pathway of care which moves from the general practitioner through primary care and community services and into secondary care and sometimes specialised services. Difficulties in commissioning across boundaries, however, can cause artificial interruptions in what should be a seamless care pathway. The Pathfinder Projects are designed for all Stakeholders to work collaboratively to examine in depth these health care interfaces and to develop commissioning structures to commission care across the whole pathway. The Trauma Programme of Care Board selected low back pain and radicular pain as the Pathfinder Project as this is a high value care pathway in view of the very large number of patients involved.

The future of the pathway is that it is designed to be run in primary care (general practice and community physiotherapy) and referral into secondary specialist care is only at the end of the pathway. Key to the success of the pathway are the Triage and Treat practitioners; the highly trained practitioners, either extended scope physiotherapists or nurse specialists who essentially run the pathway and have access to bookable slots for the core therapies, nerve root blocks, spinal surgical clinic appointments or pain clinic appointments. This reduces very significantly the delays in the previous system and also reduces the "pinball" management that is a feature of so many health care systems. Quality care is less expensive by reducing ineffective or repetitive treatment and by reducing conversion into chronic disability

In this profile, the current utilisation of secondary care services for back and radicular pain are shown by CCG and providers, including both NHS Trusts and Independent Sector providers to demonstrate variation in activity regionally and across England. This report is based on the population of patients under the care of CCGs in the Lancashire Region and provides important information about patient flows from these CCGs across all providers within this region.

Information on hospital admissions is presented by admission method (elective vs. emergency) and type of procedure (surgery, injections, pain management etc.) undertaken. The aim of this report is to assist both clinicians and commissioners in comparing treatment activity rates between regional providers and against national data to reduce variation and develop evidence based care pathways to improve patient outcomes.

Ongoing monitoring of this secondary care activity will evidence where changes implemented through the national pathfinder project for acute low back and radicular pain to provide timely access to evidence based treatments can improve the quality of patient care, provide community based alternatives to secondary care admissions for back pain and reduce secondary care expenditure.

It is important to note that this report is based on the cohort of patients with back and/or radicular pain but does not include patients who have back pain due to specific diagnosis such as cancer, infection, spinal trauma, inflammatory arthritis, cauda equine syndrome as these patients have very different treatment pathways of care.

## Acknowledgements

This work has been funded through the Getting It Right First Time (GIRFT) project that is part of the Department of Health funded Clinically-Led Quality and Efficiency Programme.

Acknowledgements to the Health & Social Care Information Centre (HSCIC) as the source of data used in this report and to Professor Greenough and Mr Ashley Cole for their expert clinical guidance and advice.

## Introduction and background

Low back pain is extremely common and is the largest single cause of loss of disability adjusted life years, and the largest single cause of years lived with disability in England (Global Burden of Disease, 2013). In terms of disability adjusted life years lost per 100,000, low back pain is responsible for 2,313. By contrast the remainder of musculo-skeletal complaints counts for 911, depression 704 and diabetes 337. It should be borne in mind that this is principally occurring in people of working age, or with families. UK specific data shows that LBP was top cause of years lived with disability in both 1990 and 2010 – with a 12% increase over this time. Back pain accounts for 11% of the entire disability burden from all diseases in the UK; furthermore the burden is increasing both absolutely (3.7% increase) and proportionally (7% to 8.5%).

NEQOS have produced CCG and hospital Trust level activity profiles to understand the current position in terms of secondary care activity for back and radicular pain and have worked with a range of key stakeholders from both provider and commissioner organisations to develop the profiles to ensure that the indicators shown are appropriate and relevant to the project. This information needs to be viewed in conjunction with data soon to become available from Arthritis Research UK about the prevalence of back pain and associated risk factors and where possible with locally available data from general practice, including prescribing rates, and onward referrals from primary care (e.g. physiotherapy and radiology).

## Technical specification

Following a data discovery exercise supported by Professor Charles Greenough (National Clinical Director for Spinal Disorders, South Tees NHS Foundation Trust), definitions for low back and radicular pain were developed based on a combination of diagnosis codes (ICD-10) and relevant secondary care procedures were identified using OPCS 4.7 codes. These codes have been supported by Mr Ashley Cole, Chair of Specialised Spinal Surgery Clinical Reference Group (Consultant Orthopaedic Surgeon, Northern General Hospital and Sheffield Children's Hospital).

## **Data definitions**

Data Source: Hospital Episode Statistics (Health & Social Care Information Centre via HDIS). Please note that 2014/15 data is currently classed as provisional.

CCG populations: Health & Social Care Information Centre (Ages 15 & over as at April 2015) (Data was provided in 5 year ages bands, therefore we were unable to use exact figures for Ages 16 & over)

A summary of the data definitions used is shown below:

Time period: April 2011 - March 2015 Primary diagnosis = back pain (specific ICD10 codes) Limited to episode 1 Age 16 years and over Private patients are included unless specified Admission costs are based on the national tariff Directly Age & Sex Standardised Rates use the European Standard Populations

The NHS Trusts included for the Lancashire Region are:

- University Hospitals Of Morecambe Bay NHS Foundation Trust
- Blackpool Teaching Hospitals NHS Foundation Trust
- Lancashire Teaching Hospitals NHS Foundation Trust
- East Lancashire Hospitals NHS Trust
- Southport & Ormskirk Hospital NHS Trust
- Pennine Acute Hospitals NHS Trust
- The Walton Centre NHS Foundation Trust

The Independent Sector Providers included for the Lancashire Region are:

- BMI Gisburne Park Hospital
- Fulwood Hall Hospital
- BMI The Beardwood Hospital

#### Clinical Commissioning Group (CCG) activity summary

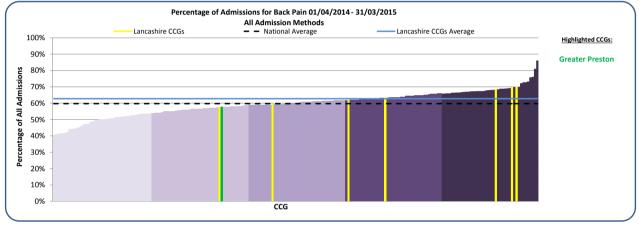
1. Hospital admissions for low back and radicular pain in people aged 16 years and over (April 2014 - March 2015), summary

a. Hospital admissions at national level, indicating back pain type and admission method

England	Back	Radicular	Total	% Back	% Radicular
Elective	134,448	102,808	237,256	56.7%	43.3%
Emergency	39,331	14,309	53,640	73.3%	26.7%
Other	771	951	1,722	44.8%	55.2%
Total	174,550	118,068	292,618	59.7%	40.3%
Lancashire					
CCGs	Back	Radicular	Total	% Back	% Radicular
Elective	6,636	4,085	10,721	61.9%	38.1%
Emergency	1,221	546	1,767	69.1%	30.9%
Other	10	32	42	23.8%	76.2%
Total	7.867	4.663	12.530	62.8%	37.2%

b. Hospital admissions at CCG level, indicating proportion of admissions for back pain

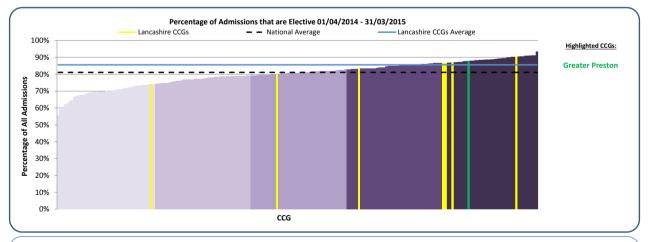
Table multates the proportion of admission	is for back pair only (a		
Lancashire North	57.7%	Blackburn With Darwen	63.2%
Greater Preston	57.8%	Fylde & Wyre	68.3%
Chorley & South Ribble	59.2%	West Lancashire	69.4%
East Lancashire	61.8%	Blackpool	70.0%
Lancashire CCGs	62.8%	England	59.8%



c. Hospital admissions at CCG level, by admission method

Table indicates the proportion of admissions for back and radicular pain that is recorded as elective

Blackpool	74.3%	Blackburn With Darwen	86.8%
Fylde & Wyre	79.9%	East Lancashire	87.0%
Lancashire North	83.4%	Greater Preston	87.9%
West Lancashire	86.8%	Chorley & South Ribble	90.5%
Lancashire CCGs	85.6%	England	81.1%



#### What is the data telling us?

In the 2014/15 financial year period there were almost 300,000 admissions for back and radicular pain in England, with 12,350 (4.2%) of these for patients registered within the Lancashire CCGs.

At a national level the proportional split for hospital admissions is 60% for back pain and 40% for radicular pain, and at CCG level in Lancashire the proportion of admissions for back pain ranges from 58% to 70%.

Nationally, approximately 81% of back and radicular pain admissions are elective, with Lancashire having a higher proportion (86%). At a CCG level in Lancashire, the proportion of elective admissions for these populations ranges from 74% in Blackpool to 91% in Chorley & South Ribble.

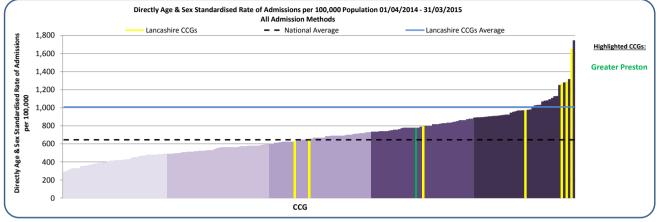
### **Clinical Commissioning Group (CCG) activity**

#### 2. Hospital admissions for low back and radicular pain in people aged 16 years and over (April 2014 - March 2015)

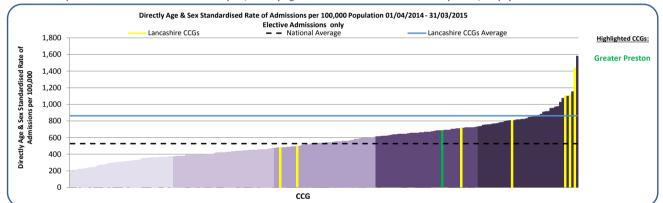
a. Hospital admissions for back pain by CCG (all admission methods), Directly Age & Sex Standardised Admission rate per 100,000 population

CCG name	All	Elective	Emergency	CCG name	All	Elective	Emergency
Blackburn With Darwen	1648.4	1439.0	201.6	Chorley & South Ribble	792.1	714.4	77.6
West Lancashire	1286.6	1111.3	171.0	Greater Preston	778.7	687.5	90.6
East Lancashire	1264.3	1099.9	159.0	Blackpool	647.5	482.4	161.1
Lancashire North	971.5	809.2	159.5	Fylde & Wyre	628.4	497.8	128.6
Lancashire CCGs	1008.5	862.9	142.2	England	645.6	526.5	115.4

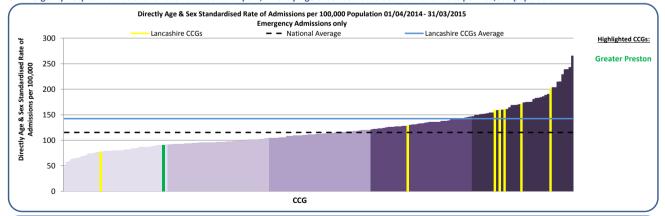
#### b. Hospital admissions for back and radicular pain (all admission methods), Directly Age & Sex Standardised Admission rate per 100,000 population



c. Elective hospital admissions for back and radicular pain, Directly Age & Sex Standardised Admission rate per 100,000 population



d. Emergency hospital admissions for back and radicular pain, Directly Age & Sex Standardised Admission rate per 100,000 population



#### What is the data telling us?

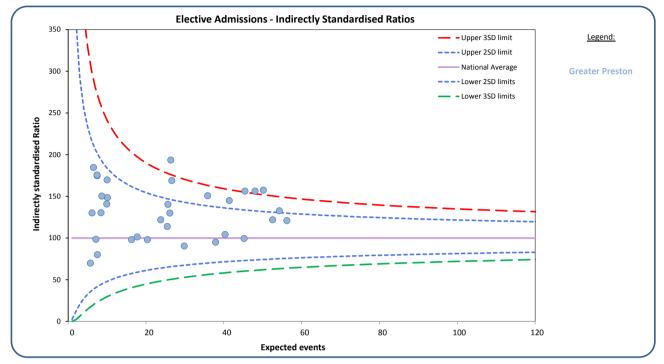
There is considerable variation in elective admission rates across the CCGs within Lancashire with almost a 3-fold difference between the regional lowest (Blackpool CCG) and the highest CCG for the region (Blackburn with Darwen CCG). The variation for emergency admissions is even greater with two CCGs (Greater Preston CCG and Chorley & South Ribble CCG) in the lowest quintile nationally and the remainder bar one (Fylde &Wyre CCG) in the highest quintile nationally.

## Clinical Commissioning Group (CCG) activity - GP practice level

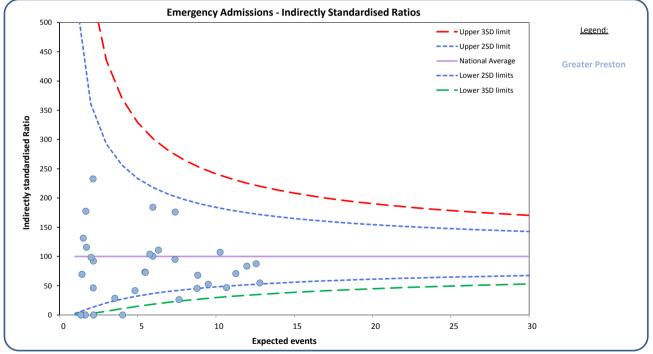
3. Hospital admissions for low back and radicular pain in people aged 16 years and over (April 2014 - March 2015)

Each symbol represents one GP practice

a. Hospital admissions for back pain (Elective admissions), Indirectly Standardised Ratio Greater Preston



b. Hospital admissions for back pain (Emergency admissions), Indirectly Standardised Ratio



#### What is the data telling us?

The admission rates for elective and emergency admissions for each GP practice within the CCG are expressed as Indirectly Standardised Ratios with 100 representing the national average. This adjustment has been made due to small numbers and in order that comparisons can be made between practices.

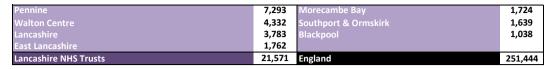
The upper and lower confidence limits on the funnel charts above are based on national data. Each circle represents the constituent GP Practices for the selected CCG(s). All GP practices within the funnel have admission rates that are not significantly different that the national rates with those above the upper blue funnel having significantly higher rates than the national average.

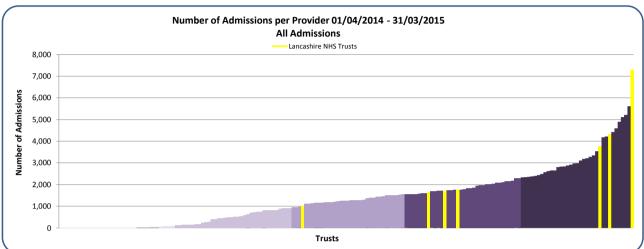
## 4. Indirectly Standardised Ratios for Elective & Emergency Admissions for Back & Radicular Pain, by GP Practice *Greater Preston*

Indirectly Standardised Ratios that are coloured Red are higher than 3 standard deviations from the mean. Those coloured Yellow are between 2 and 3 higher standard deviations from the mean.

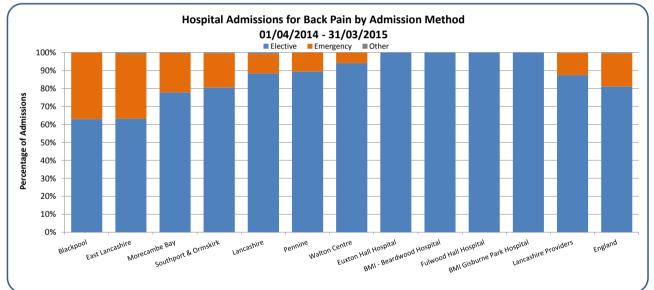
					Elective			Emergency Observed Expected	
Practice Code	Practice Name	CCG	Population 15+	Observed	Expected	Ratio	Observed	Expected	Ratio
P81015	Lytham Road Surgery	01E	9,184	79	50.17	157.46	<6	10.68	46.81
P81018	St Fillan's Medical Ctre	01E	7,505	60	41.41	144.90	<6	8.80	45.45
P81040	Longton Health Centre	01E	9,374	72	54.26	132.69	8	11.27	70.96
P81046	Park View Surgery	01E	4,652	20	20.37	98.17	<6	4.83	41.41
P81055	Berry Lane Medical Centre	01E	8,067	45	45.21	99.54	<6	9.52	52.54
P81059	Great Eccleston HIth Ctr	01E	6,439	36	37.89	95.02	<6	7.64	26.18
P81067	The Healthcare Centre	01E	11,077	68	56.21	120.98	11	12.56	87.55
P81071	The New Hall Lane Practice	01E	5,703	51	26.36	193.47	6	5.97	100.47
P81093	The Geoffrey Street Surgery	01E	1,503	12	6.50	184.74	<6	1.52	131.27
P81103	Dr D C Patel & Partners	01E	7,532	42	40.32	104.17	6	8.83	67.94
P81107	Stonebridge Surgery	01E	6,578	54	35.85	150.61	7	7.38	94.80
P81119	Doclands Medical Centre	01E	5,479	34	26.14	130.05	11	5.98	184.05
P81152	The Surgery	01E	5,248	36	25.64	140.42	6	5.78	103.83
P81163	The St Pauls Surgery	01E	1,699	13	7.44	174.64	<6	1.73	115.76
P81169	Fishergate Hill Surgery	01E	5,073	29	23.77	121.99	<6	5.47	73.18
P81176	Moor Park Surgery	01E	3,672	18	17.74	101.45		4.04	
P81179	Lostock Hall Medical Ctr.	01E	3,189	16	16.30	98.14	<6	3.54	28.29
P81184	Ribbleton Medical Centre	01E	6,155	45	26.64	168.90	7	6.32	110.78
P81185	Riverside Medical Centre	01E	9,230	75	48.00	156.26	11	10.27	107.14
P81196	Issa Medical Centre - Patel	01E	7,558	27	29.84	90.48	13	7.39	175.91
P81213	St.Mary's Health Centre	01E	14,819	71	45.43	156.30	7	12.80	54.69
P81647	Dr Jn Jha	01E	1,436	8	6.15	130.08	<6	1.44	69.52
P81664	The Park Medical Practice	01E	11,097	64	52.52	121.85	10	11.98	83.47
P81667	St Walburge's Medical Practice	01E	1,532	7	7.11	98.42		1.61	
P81685	Dr Sz Shahid	01E	2,071	14	9.94	140.81	<6	2.15	232.65
P81691	Beech Drive Surgery	01E	1,804	15	10.11	148.40	<6	2.17	92.22
P81700	Cottam Lane - Dr Nath	01E	1,596	6	7.49	80.10	<6	1.69	177.30
P81735	Dr A Hussain	01E	2,138	11	8.44	130.33	<6	2.03	98.56
P81748	Briarwood Medical Centre	01E	4,843	29	25.45	113.93	<6	5.49	72.82
P81750	Frenchwood Surgery	01E	1,619	13	7.40	175.65		1.66	
P81763	Dr Hp Chakrabarti	01E	1,457	<6	5.72	69.98		1.36	
P81770	Avenham Lane Practice	01E	2,362	13	8.65	150.24		2.18	
P81785	Medicom Ltd	01E	1,799	17	10.02	169.69	<6	2.16	46.26

5. Hospital admissions for low back and radicular pain in people aged 16 years and over (April 2014 - March 2015) a. Number of hospital admissions for back pain (all admission methods, NHS Trusts only)





b. Number of admissions per hospital Trust, by admission method (Lancashire Providers only)



### What is the data telling us?

The total number of admissions for back pain, rather than a rate, is presented due to the absence of a relevant denominator at provider level. Activity for the 7 NHS Trusts is variable with 3 Trusts in the highest quintile, including the Pennine Trust which is the highest volume provider nationally. Note that the Walton Centre, Pennine Trust and Morecambe Bay are all located outside of the Lancashire CCGs region.

The proportion of hospital activity for back pain which is classed as elective care for Lancashire is higher than the England proportion. However at NHS Trust level the proportion varies between 63% at Blackpool Trust to 94% at the Walton Centre. All NHS activity at the Independent Sector Providers is classed as elective.

5. Hospital admissions for low back and radicular pain in people aged 16 years and over (April 2014 - March 2015) c. Elective admissions for back and radicular pain, by treatment specialty

(Lancashire Providers only)

	Pain						
	Management &	Trauma &	Spinal Surgery	Interventional			
Provider Name	Anaesthetics	Orthopaedics	Service	Radiology	Neurosurgery	<b>Other Functions</b>	Total
Morecambe Bay	1,017	314	-	-	-	10	1,341
Blackpool	528	121	-	-	-	<6	649
Lancashire	1,438	1,104	-	-	752	52	3,346
East Lancashire	1,079	<6	-	-	-	33	1,112
Southport & Ormskirk	1,317	-	-	-	-	<6	1,317
Pennine	6,322	190	-	-	-	15	6,527
Walton Centre	2,710	-	-	-	1,341	26	4,077
BMI Gisburne Park Hospital	482	6	-	-	206	<6	694
Fulwood Hall Hospital	-	<6	-	-	379	8	387
BMI - Beardwood Hospital	2,296	8	-	-	57	-	2,361
Euxton Hall Hospital	-	164	<6		194	<6	358
Total	17,189	1,907	-	-	2,929	144	22,169

## d. Elective admissions for injections for back and radicular pain, by injection type and treatment specialty (national data)

Treatment Function Title	Other Back Pain Injection	Epidural (not specified)	Epidural Lumbar	Epidural Sacral	Injection Facet Joint	Spinal Nerve Root Injection	Total
Pain Management & Anaesthetics	11,485	1,572	19,926	12,780	46,506	12,482	104,751
Trauma & Orthopaedics	1,286	175	4,190	15,658	10,080	11,518	42,907
Spinal Surgery Service	200	60	590	1,430	2,338	3,571	8,189
Neurosurgery	191	123	1,074	600	1,270	1,303	4,561
Interventional Radiology	14	1	18	3	656	2,961	3,653
Rheumatology	38	12	138	2,428	390	32	3,038
Other Treatment Functions	24	10	81	278	223	591	1,207
Total	13,238	1,953	26,017	33,177	61,463	32,458	168,306

## What is the data telling us?

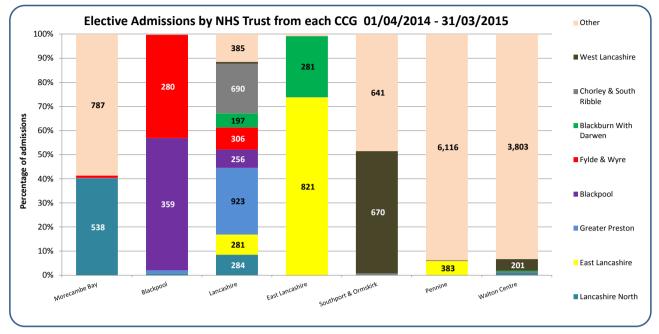
For elective activity the treatment specialty code indicated within the hospital data varies by hospital trust. Overall the most common specialties are Trauma and Orthopaedics and Pain Management/Anaesthetics, however Lancashire Trust, the Walton Centre and the Independent Sector Providers have activity is recorded within Neurosurgery.

The second table shows the different types of injections being undertaken within each of the treatment function codes and demonstrates that nationally over 62% (104,751) of injections take place within Pain Management/Anaesthetics and 25% of injections are undertaken within Trauma and Orthopaedics.

The most common injection type is facet joint injections, which mainly take place within Pain Management/Anaesthetics treatment function, but are also being used in Trauma and Orthopaedics, Spinal Surgery Service and Neurosurgery.

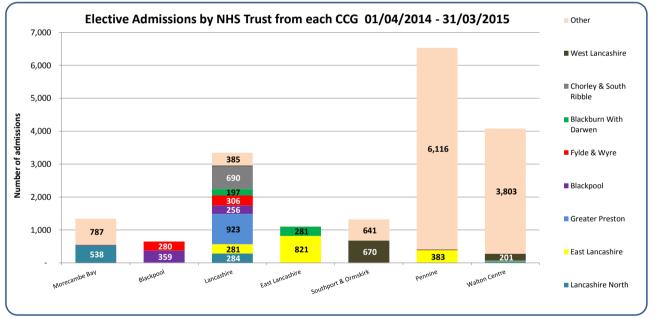
## Hospital Trust activity from CCGs

6. Patient flows from CCG to Hospital Trust for back and radicular pain in people aged 16 years and over (April 2014 - March 2015)



a. Hospital elective admissions by CCG population (percentage of activity)

b. Hospital elective admissions by CCG population (actual activity)



What is the data telling us?

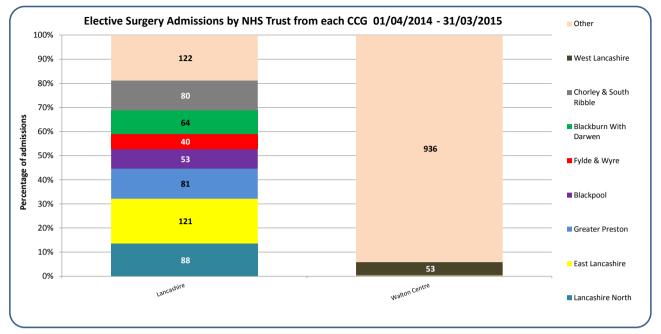
There is variation between hospital trusts in terms of the number of patients from each of the CCGs that are admitted for back and radicular pain.

Lancashire Trust are take patients from all CCGs across the region and the Trusts located outside of the Lancashire region (Morecambe Bay, Pennine and Walton Centre) also admit the majority of their patients from outside of the Lancashire region.

The data is shown in two ways, indicating both the proportion and number of admissions relating to each CCG.

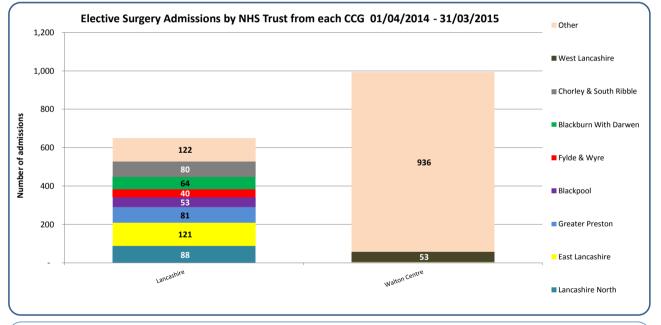
## **Hospital Trust activity from CCGs**

6. Patient flows from CCG to Hospital Trust for back and radicular pain in people aged 16 years and over (April 2014 - March 2015)



c. Hospital elective admissions for surgery by CCG population (percentage of activity)

d. Hospital elective admissions for surgery by CCG population (actual activity)



#### What is the data telling us?

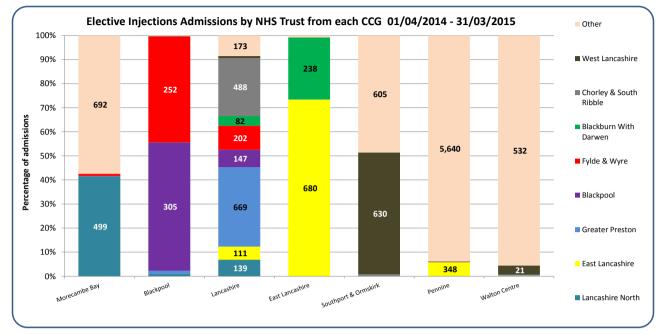
There is variation between hospital trusts in terms of the number of patients from each of the CCGs that are admitted for spinal surgery back and radicular pain.

The Lancashire CCGs only admit patients to the Lancashire Trust which admits patients from all of the CCGs across the region with the exception of West Lancashire CCG who uses the Walton Centre.

The data is shown in two ways, indicating both the proportion and number of admissions relating to each CCG.

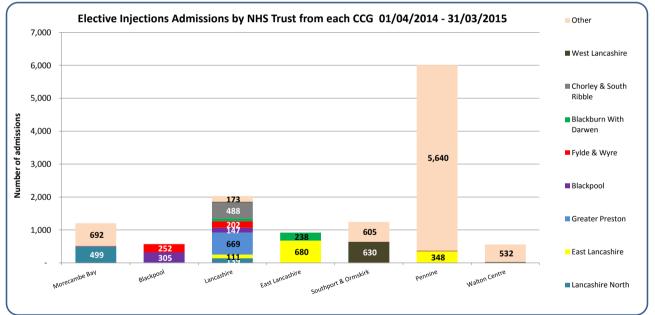
## Hospital Trust activity from CCGs

6. Patient flows from CCG to Hospital Trust for back and radicular pain in people aged 16 years and over (April 2014 - March 2015)



e. Hospital elective admissions for injections by CCG population (percentage of activity)

f. Hospital elective admissions for injections by CCG population (actual activity)



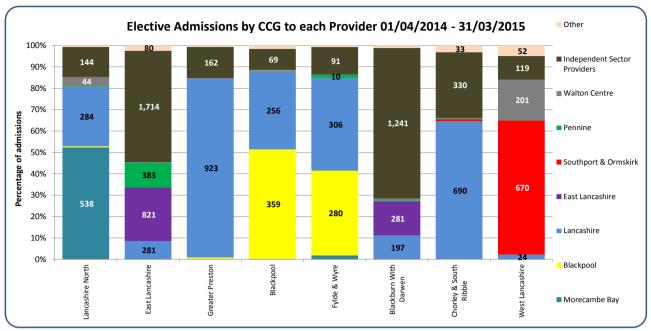
#### What is the data telling us?

There is variation between hospital trusts in terms of the number of patients from each of the CCGs that are admitted for injections for back and radicular pain.

In contrast to the patient flows for spinal surgery, the Lancashire CCGs use at least 7 NHS providers for injections with the highest overall activity in the Pennine Trust but the highest activity for patients registered with Lancashire CCGs at the Lancashire Trust.

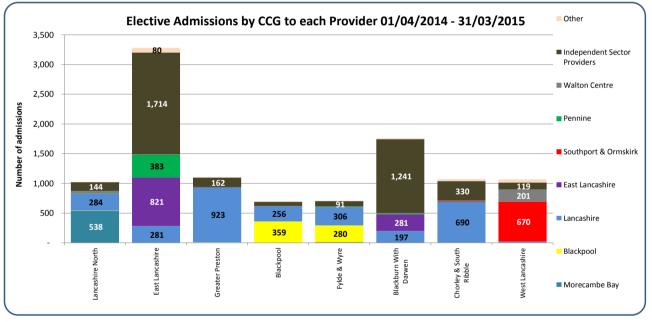
The data is shown in two ways, indicating both the proportion and number of admissions relating to each CCG.

## **CCG activity to Hospital Trust**



7. Patient flows to Hospital Trusts from CCGs for back pain in people aged 16 years and over (April 2014 - March 2015) a. Hospital elective admissions by CCG population (percentage of activity)

b. Hospital elective admissions from each CCG (actual activity)



#### What is the data telling us?

There is variation between CCGs in terms of the number of hospital trusts to which their patients are admitted.

Activity is highest for East Lancashire CCG with the majority of admissions to Independent Sector Providers as well as high levels of admissions to East Lancashire, Lancashire and Pennine Trusts.

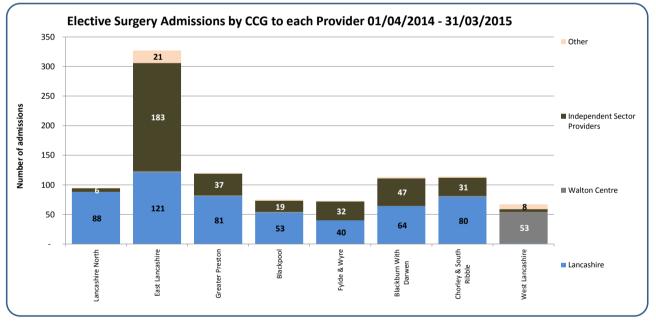
Blackburn with Darwin CCG has the highest proportion of activity (72%) in Independent Sector Providers in the Lancashire region. The data is shown in two ways, indicating both the proportion and amount of activity relating to each hospital trust.

## **CCG activity to Hospital Trust**

Elective Surgery Admissions by CCG to each Provider 01/04/2014 - 31/03/2015 100% Other 21 6 8 90% 37 19 31 80% 32 47 70% Percentage of admissions 183 Independent Sector 60% Providers 50% 88 40% 53 80 81 30% 40 64 Walton Centre 20% 121 10% 0% Chorley & South Ribble Lancashire North East Lancashire Greater Preston Blackpool Sylde & Wyre **3lackburn With** West Lancashire Lancashire Darwen

7. Patient flows to Hospital Trusts from CCGs for back pain in people aged 16 years and over (April 2014 - March 2015) c. Hospital elective admissions for surgery by CCG population (percentage of activity)

d. Hospital elective admissions for surgery from each CCG (actual activity)



#### What is the data telling us?

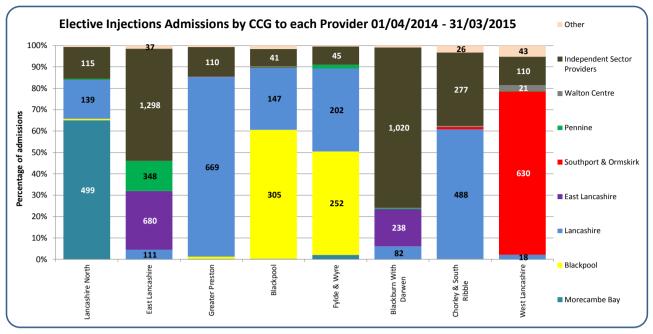
There is variation between CCGs in terms of the number of hospital trusts to which their patients are admitted for spinal surgery.

Activity is considerably higher for East Lancashire CCG compared to the other CCGs in the region. Patients from this CCG were admitted to Lancashire Trust but the majority have surgery with Independent Sector Providers. All Lancashire CCGs with the exception of West Lancashire and Lancashire North use Independent Sector Providers for at least 25% of their spinal surgery activity.

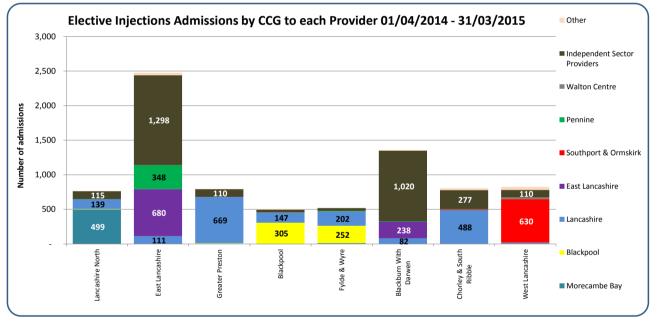
The data is shown in two ways, indicating both the proportion and amount of activity relating to each hospital trust.

## **CCG activity to Hospital Trust**

7. Patient flows to Hospital Trusts from CCGs for back pain in people aged 16 years and over (April 2014 - March 2015) e. Hospital elective admissions for injections by CCG population (percentage of activity)



f. Hospital elective admissions for injections from each CCG (actual activity)



#### What is the data telling us?

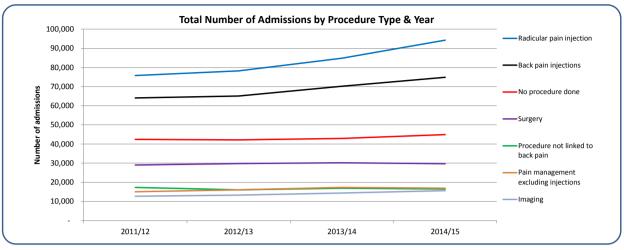
There is variation between CCGs in terms of the number of hospital trusts to which their patients are admitted for injections.

Activity is highest for East Lancashire CCG with the majority of admissions to Independent Sector Providers as well as high levels of admissions to East Lancashire, Lancashire and Pennine Trusts.

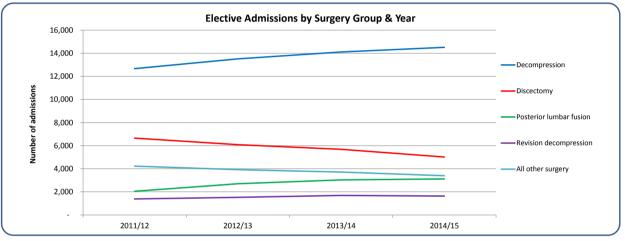
Blackburn with Darwin CCG has the highest proportion of activity (76%) in Independent Sector Providers in the Lancashire region. The data is shown in two ways, indicating both the proportion and amount of activity relating to each hospital trust.

### Hospital Trust activity (national level)

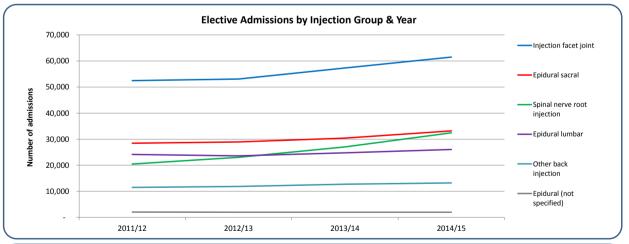
8. Hospital admissions for low back and radicular pain in people aged 16 years and over (1st April 2011 - 31st March 2015) a. Hospital admissions by procedure type over time (all admission types)



b. Elective hospital admissions by surgery procedure type over time



c. Hospital admissions by injection procedure type over time



#### What is the data telling us?

These charts show national trends in the types of procedures undertaken during elective admissions including a group where no procedure was undertaken during their admission. There is also a category listed as 'procedure not linked to back pain' which reports admission activity where there is a primary diagnosis of back pain but with a procedure not linked to back pain.

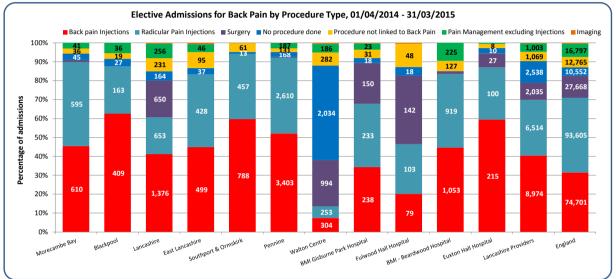
The main procedure type relating to elective admissions are for back and radicular pain injections which has increased from a combined total of just under 140,000 to 170,000 episodes over the four year period. This is in stark contrast to number of admissions related to surgery which has remained relatively constant at 30,000 admissions per year. The proportion of admissions with no procedure reported has remained at approximately 15-16% of all activity.

The charts in sections b and c show the elective admissions over time specifically for different groups of surgery procedures and injections.

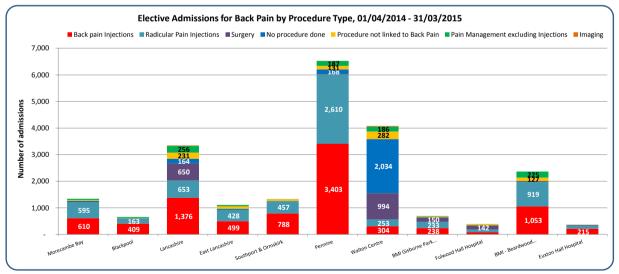
9. Elective hospital admissions for low back and radicular pain in people aged 16 years and over (April 2014 - March 2015) a. Elective hospital admissions by procedure type (national level including all providers)

Procedure type	Back	Radicular	Total	%
Radicular Pain Injections	40,034	53,571	93,605	39.5%
Back Pain Injections	62,317	12,384	74,701	31.5%
Surgery	3,925	23,743	27,668	11.7%
Pain Management excluding Injections	13,150	3,647	16,797	7.1%
Procedure not linked to Back Pain	8,197	4,568	12,765	5.4%
No procedure done	6,060	4,492	10,552	4.4%
Imaging	712	373	1,085	0.5%
Other Non-Surgical	53	30	83	0.0%
Total	134,448	102,808	237,256	100%

b. Number of elective admissions per hospital Trust, by procedure type (percentage of activity) (Lancashire Providers only)



c. Number of elective admissions per hospital Trust, by procedure type (actual activity) (Lancashire Providers only)



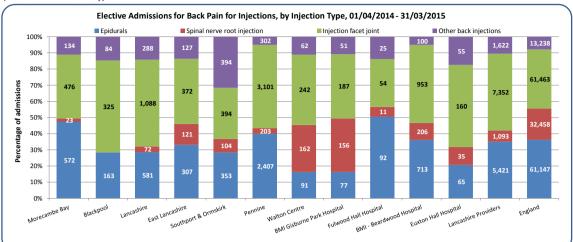
#### What is the data telling us?

The table shows the number of procedures done in the latest 12 month period, by procedure type, with injections being the most common elective procedure. Nationally only 4.4% of elective admissions have no procedure recorded indicating that there are relatively few elective admissions where no procedure is undertaken but this is more likely to occur in the Walton Centre (50% elective admissions).

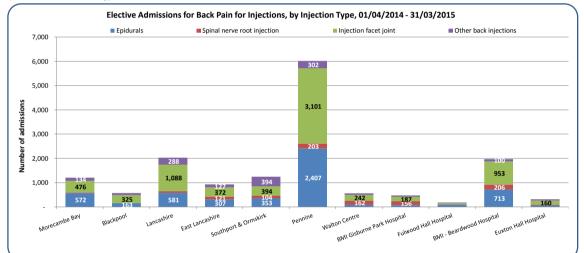
Five of the NHS Trust providers for the Lancashire CCGs have a higher proportion of elective activity for injections than the England rate (approx. 70%) and it is possible that the variation may be even greater due to differences in the point of delivery of care across hospital Trusts (for example it is possible that activity may also take place as outpatient procedures).

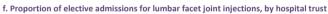
The data is shown in two ways, indicating both the proportion and amount of activity relating to each procedure.

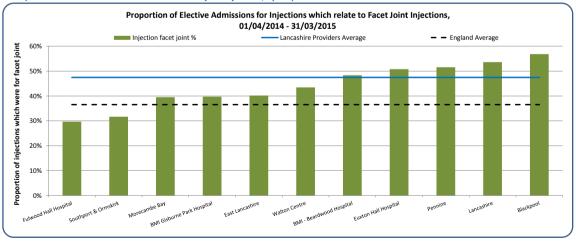
9. Elective hospital admissions for low back and radicular pain in people aged 16 years and over (April 2014 - March 2015) d. Number of elective admissions for injections per hospital Trust, by injection type (percentage of activity) (Lancashire Providers only)



e. Number of elective admissions for injections per hospital Trust, by injection type (actual activity) (Lancashire Providers only)







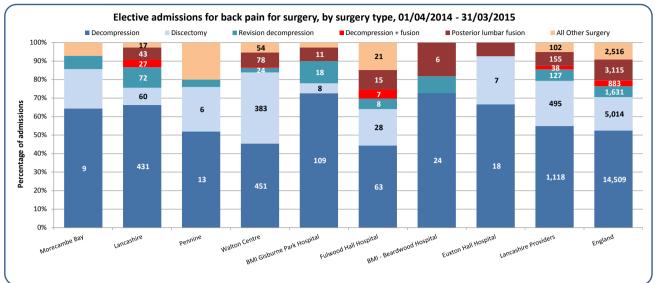
#### What is the data telling us?

Facet joint injections are those most frequently done within Lancashire region, constituting almost 50% of injection activity which is higher than the England proportion (37%). Providers for the Lancashire region overall do notably lower proportion of spinal nerve root injections compared to England (7 vs. 19%) but a similar proportion of epidurals (25 vs. 36%).

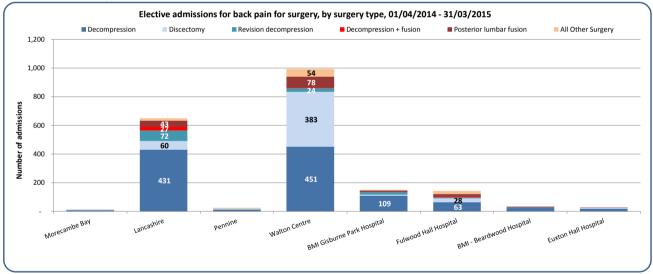
There is wide variation across all providers in how frequently they do the different types of injections. The data is shown in two ways, indicating both the proportion of overall activity and number of episodes for each Provider.

The proportion of facet joint injections done at NHS Trust level ranges from 32% (Southport & Ormskirk Trust) to 57% (Blackpool Trust) compared to the England figure of 37%.

9. Elective hospital admissions for low back and radicular pain in people aged 16 years and over (April 2014 - March 2015) g. Number of elective admissions for surgery per hospital Trust, by surgery type (percentage of activity) (Lancashire Providers only)



h. Number of elective admissions for surgery per hospital Trust, by surgery type (actual activity) (Lancashire Providers only)



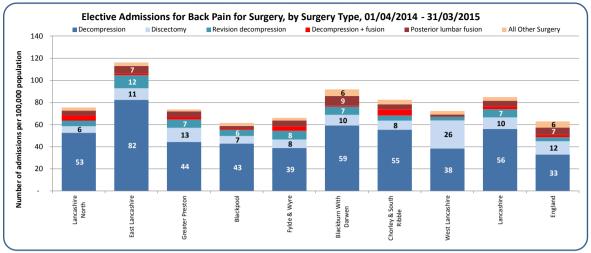
#### What is the data telling us?

The charts above show the range in activity relating specifically to elective admissions for surgery, by type of surgery, for providers used by the Lancashire CCGs. These providers overall do a higher proportion of discectomies and lower proportion of fusions compared to the England profile. There are variations at Trust level between the 2 main providers with a notably higher proportion of discectomies undertaken at the Walton Centre and a higher proportion of revision decompressions at Lancashire Trust.

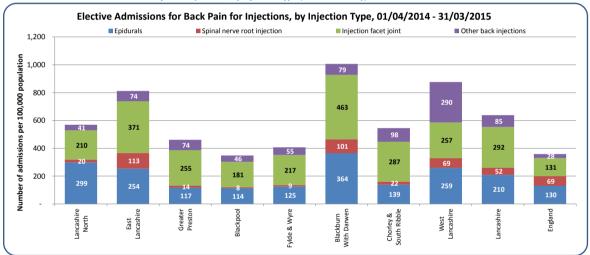
The data is shown in two ways, indicating both the proportion and amount of activity relating to each surgery type.

#### CCG activity by back pain procedure group

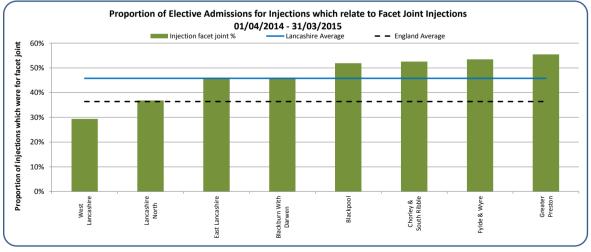
10. Elective hospital admissions for low back and radicular pain in people aged 16 years and over (April 2014 - March 2015) a. Number of elective admissions for surgery per CCG, by surgery type (Lancashire only)



b. Number of elective admissions for injections per CCG, by injection type (Lancashire only)







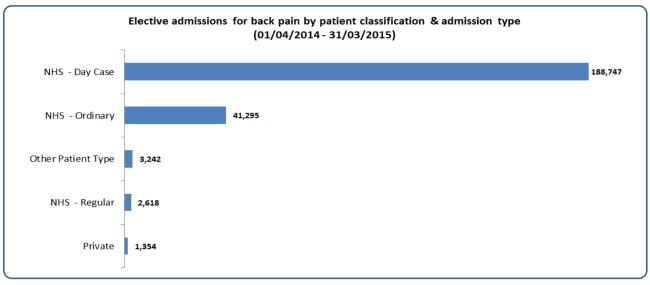
#### What is the data telling us?

Chart 9a shows the range in the activity rate relating specifically to elective admissions for surgery, by type of surgery, for the Lancashire CCGs, with chart 9b showing the same for injections.

Overall this region has higher rates per 100,000 of admissions for both surgery and injections compared to the England rates but there is wide variation across the region with East Lancashire having the highest rates of surgery and Blackburn with Darwen having the highest rates of injections.

The proportion of facet joint injections done at CCG level ranges from 29% (West Lancashire) to 55% (Greater Preston) compared to the England figure of 37%.

**11.** Hospital admissions for low back and radicular pain in people aged 16 years and over (April 2014 - March 2015) a. Elective admissions for back pain by patient classification and type, all providers

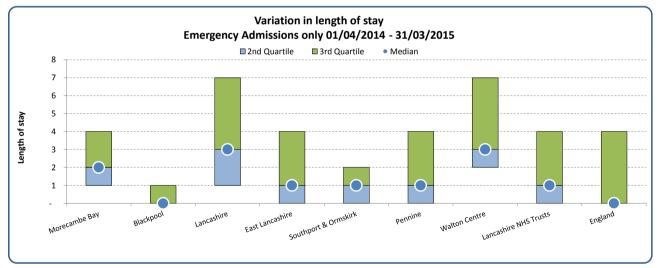


Other Patient Types are Amenity patients and Category II patients, and where the Administrative Category is unknown.

b. Elective admissions for back pain, average length of stay by provider

67% of elective admissions for back pain are day cases, therefore the range in length of stay has not been calculated.

c. Emergency admissions for back pain, average length of stay by provider (Lancashire Trusts only)



### What is the data telling us?

Over 98% of elective admissions for back pain in the current data extraction relate to NHS patients, with just over 0.5% relating to private patients.

The boxplot indicates the variation in length of stay for emergency admissions to the NHS Trusts used by the Lancashire CCGs and shows that all Trusts except Blackpool have a median length of stay of 1 to 3 days, compared to the England average of zero days.

## **Hospital Trust Activity Total Costs**

12. Total costs to the commissioner for hospital admissions for low back and radicular pain in people aged 16 years and over (April 2014 - March 2015)

a. Total Costs by Admission Method Type (Lancashire FTs only)

Provider Name	Ele	ctive	Eme	ergency	Oth	er	Tot	al
Walton Centre	£	7,426,010	£	870,753	£	22,441	£	8,319,204
Lancashire	£	5,394,333	£	910,930	£	114,357	£	6,419,621
Pennine	£	4,449,572	£	826,512	£	39,067	£	5,315,151
East Lancashire	£	740,649	£	745,016	£	77,842	£	1,563,507
Southport & Ormskirk	£	1,102,958	£	271,189	£	4,982	£	1,379,130
Morecambe Bay	£	829,564	£	422,209	£	10,624	£	1,262,396
Blackpool	£	377,614	£	324,589	£	1,609	£	703,812
Total	£	20,320,700	£	4,371,199	£	270,921	£	24,962,820

#### b. Total Costs by Procedure Type (Lancashire FTs only)

													Pain					
									Proc	edure not			Management					
			Rad	icular pain	Bac	k pain	No	procedure	linked to back				exclu	Iding	Other N	lon-		
Provider Name	Surg	gery	Inje	ctions	Inje	ctions	don	e	pain		Ima	ging	Injec	tions	Surgica		Tot	al
Walton Centre	£	5,101,683	£	163,732	£	161,719	£	1,270,055	£	1,114,512	£	99,721	£	407,783	£	-	£	8,319,204
Lancashire	£	3,425,083	£	440,256	£	935,879	£	243,737	£	923,966	£	182,134	£	268,566	£	-	£	6,419,621
Pennine	£	100,267	£	1,847,940	£	2,274,821	£	554,581	£	149,100	£	274,302	£	114,140	£	-	£	5,315,151
East Lancashire	£	-	£	280,211	£	367,765	£	601,173	£	119,085	£	170,400	£	24,872	£	-	£	1,563,507
Southport & Ormskirk	£	-	£	301,345	£	757,386	£	165,043	£	54,177	£	99,161	£	2,017	£	-	£	1,379,130
Morecambe Bay	£	53,636	£	391,575	£	340,858	£	227,717	£	66,047	£	152,276	£	30,287	£	-	£	1,262,396
Blackpool	£	-	£	101,959	£	238,955	£	226,323	£	47,150	£	71,438	£	17,986	£	-	£	703,812
Total	£	8,680,669	£	3,527,017	£	5,077,384	£	3,288,629	£	2,474,038	£	1,049,432	£	865,651	£	-	£	24,962,820

#### What is the data telling us?

Across all NHS Trusts used by the Lancashire CCGs in 2014/15 the total cost to commissioners for back and radicular pain admissions was approximately £25 million, with 81% of the costs attributed to elective activity. Note that these costs are by provider Trust and will include activity for CCGs outside of the Lancashire CCGs region outlined on the cover of the report.

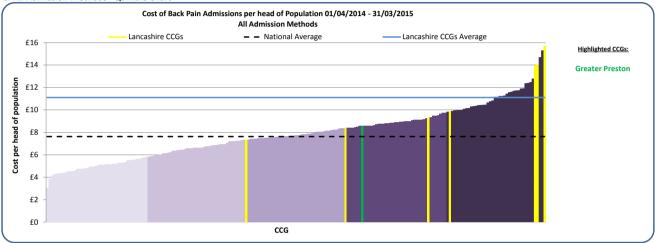
The surgery procedures group accounts for almost 35% of the total cost of all procedures, and the cost of injections is an additional 35% of the total.

## **CCG Activity Total Costs**

13. Hospital admissions Total Cost for low back and radicular pain in people aged 16 years and over (April 2014 - March 2015) a. All Admission Methods - Table

		All Adı	niss	sions		Elective A	۱dm	nissions		Emergency	/ Adr	nissions	
													Registered
	Cost	per head			Cos	t per head			Cos	st per head			Population
Responsible CCG Name	of Po	opulation	Tot	tal Cost	of F	Population	To	tal Cost	of I	Population	Tot	al Cost	(Ages 15+)
Blackpool	£	7.33	£	1,061,506	£	5.55	£	803,159	£	1.65	£	239,277	144,770
Fylde & Wyre	£	8.40	£	1,081,384	£	6.27	£	806,918	£	2.05	£	264,009	128,777
Greater Preston	£	8.58	£	1,488,383	£	7.31	£	1,267,363	£	1.24	£	214,698	173,490
Chorley & South Ribble	£	9.31	£	1,377,640	£	8.10	£	1,198,996	£	1.21	£	178,644	147,935
Lancashire North	£	9.87	£	1,333,404	£	7.87	£	1,062,593	£	1.93	£	260,459	135,047
West Lancashire	£	13.96	£	1,313,137	£	12.27	£	1,153,808	£	1.63	£	153,097	94,071
East Lancashire	£	14.01	£	4,269,301	£	11.65	£	3,551,907	£	2.19	£	668,734	304,761
Blackburn With Darwen	£	15.65	£	2,115,138	£	12.83	£	1,733,862	£	2.31	£	312,144	135,114
Lancashire Total	£	11.11	£	14,039,894	£	9.16	£	11,578,607	£	1.81	£	2,291,062	1,263,965

## b. All Admission Methods - Quintile Chart



## c. Elective Admissions only, by Procedure Type

			Radi	cular pain	Bacl	Back pain 🕴		No procedure		Procedure not linked to back				n nagement uding	Other Non-		1	Total Cost
Responsible CCG Name	Sur	gery	Injed	ctions	Inje	Injections			pain		Imaging		Inje	ctions	Surgic	al		
East Lancashire	£	1,417,566	£	720,576	£	922,629	£	13,665	£	366,770	£	5,386	£	105,315	£	-	£	3,551,907
Blackburn With Darwen	£	519,427	£	395,424	£	487,510	£	24,600	£	210,529	£	3,549	£	92,824	£	-	£	1,733,862
Greater Preston	£	566,465	£	143,882	£	392,358	£	6,880	£	87,712	£	724	£	69,341	£	-	£	1,267,363
Chorley & South Ribble	£	491,615	£	151,214	£	368,959	£	8,038	£	126,278	£	8,756	£	44,136	£	-	£	1,198,996
West Lancashire	£	310,104	£	197,350	£	496,182	£	60,724	£	62,194	£	837	£	26,416	£	-	£	1,153,808
Lancashire North	£	426,147	£	279,147	£	197,452	£	22,224	£	103,565	£	5,183	£	28,875	£	-	£	1,062,593
Fylde & Wyre	£	342,487	£	109,639	£	223,700	£	9,763	£	74,550	£	2,147	£	44,634	£	-	£	806,918
Blackpool	£	331,511	£	110,675	£	193,376	£	20,250	£	106,171	£	-	£	41,175	£	-	£	803,159

#### What is the data telling us?

There is wide variation across the CCGs in Lancashire in cost per head of population for admissions related to back and radicular pain.

Blackburn with Darwen CCG has the highest spend per head of population regionally (£15.65) driven mainly by high costs for elective admissions which is a reflection having the second highest elective admission rates nationally. In contrast, Blackpool CCG has relatively low costs per head regionally for both emergency and elective admissions (£7.33) but it should be noted that this is just under the national average highlighting that most CCGs in Lancashire have higher spend per head of population.

The final table shows the total spend for elective admissions for each CCG for 2014/15 (based on national tariff) and includes a breakdown of this spend by procedure type. Surgery generally accounts for the majority of spend but in several CCGs more is spent on admissions for injections compared to what is spent on surgery, most notably in Blackburn with Darwen CCG.

## 14. Back & Radicular Pain Admissions Breakdown for the Lancashire Region

Highlighted Provider Data is included in this report

(Blue=NHS	Trust &	Green=Independent	Sector Provider)

		Elec	tive Admissic	ons	Emergency	Other Admission	
Code	Provider Name	Surgery	Injections	Other	Admissions	Types	Total
RXN	LANCASHIRE TEACHING HOSPITALS NHS FOUNDATION TRUST	528	1,856	577	377	22	3,360
NT403	BMI - THE BEARDWOOD HOSPITAL	32	1,819	308	-	-	2,159
RXR	EAST LANCASHIRE HOSPITALS NHS TRUST	-	920	184	627	13	1,744
RXL	BLACKPOOL TEACHING HOSPITALS NHS FOUNDATION TRUST	-	571	82	355	<6	1,009
RVY RTX	SOUTHPORT AND ORMSKIRK HOSPITAL NHS TRUST	-	640	40	121	<6	804
NT497	UNIVERSITY HOSPITALS OF MORECAMBE BAY NHS FOUNDATION TRUST BMI GISBURNE PARK HOSPITAL	<6 135	513 437	40 70	174	<6	729 642
RW6	PENNINE ACUTE HOSPITALS NHS TRUST	155	373	38	- 10		421
NVC05	EUXTON HALL HOSPITAL	27	278	18	-		323
NVC07	FULWOOD HALL HOSPITAL	103	148	48	_		299
RET	THE WALTON CENTRE NHS FOUNDATION TRUST	58	25	191	7	-	281
NT449	BMI THE LANCASTER HOSPITAL	-	106	21	-	-	127
NVC16	RENACRES HOSPITAL	7	111	<6	-	-	121
RM3	SALFORD ROYAL NHS FOUNDATION TRUST	32	54	16	9	-	111
NT347	SPIRE FYLDE COAST HOSPITAL	36	37	<6	-	-	76
RRF	WRIGHTINGTON, WIGAN AND LEIGH NHS FOUNDATION TRUST	-	37	<6	13	<6	55
NT404	BMI - THE BEAUMONT HOSPITAL	-	34	16	-	-	50
NT420	BMI - THE HIGHFIELD HOSPITAL	13	14	<6	-	-	28
NVC20	THE YORKSHIRE CLINIC	-	26	<6	-	-	28
REM	AINTREE UNIVERSITY HOSPITAL NHS FOUNDATION TRUST	-	<6	<6	21	-	25
RCF	AIREDALE NHS FOUNDATION TRUST	-	<6	<6	15	-	20
RWW	WARRINGTON AND HALTON HOSPITALS NHS FOUNDATION TRUST	<6	14	<6	<6	-	19
RBN	ST HELENS AND KNOWSLEY HOSPITALS NHS TRUST	-	<6	-	<6	-	8
RAE	BRADFORD TEACHING HOSPITALS NHS FOUNDATION TRUST	-	<6	<6	<6	-	7
RMC	BOLTON NHS FOUNDATION TRUST	-	<6	<6	<6	-	6
RR8	LEEDS TEACHING HOSPITALS NHS TRUST	-	<6	<6	<6	-	6
NT337	SPIRE LIVERPOOL HOSPITAL	-	<6	<6	-	-	6
NT401	BMI - THE ALEXANDRA HOSPITAL	<6	<6	<6	-	-	6
RM2	UNIVERSITY HOSPITAL OF SOUTH MANCHESTER NHS FOUNDATION TRUST	-	<6	-	<6	-	<6
RW3 RQ6	CENTRAL MANCHESTER UNIVERSITY HOSPITALS NHS FOUNDATION TRUST ROYAL LIVERPOOL AND BROADGREEN UNIVERSITY HOSPITALS NHS TRUST	- <6	<6 <6	<6	<6 <6	<6	<6 <6
RW5	LANCASHIRE CARE NHS FOUNDATION TRUST	<0	<0	-	<6	-	<6
RWY	CALDERDALE AND HUDDERSFIELD NHS FOUNDATION TRUST	_	<6	<6	-0		<6
RWJ	STOCKPORT NHS FOUNDATION TRUST	<6	<6	-	<6		<6
RTD	THE NEWCASTLE UPON TYNE HOSPITALS NHS FOUNDATION TRUST	-	<6	-	<6	-	<6
RTG	DERBY TEACHING HOSPITALS NHS FOUNDATION TRUST	-	<6	-	<6	-	<6
RXW	SHREWSBURY AND TELFORD HOSPITAL NHS TRUST				<6	-	<6
R1K	LONDON NORTH WEST HEALTHCARE NHS TRUST				<6	-	<6
RAP	NORTH MIDDLESEX UNIVERSITY HOSPITAL NHS TRUST				<6	-	<6
RAX	KINGSTON HOSPITAL NHS FOUNDATION TRUST				<6	-	<6
RBL	WIRRAL UNIVERSITY TEACHING HOSPITAL NHS FOUNDATION TRUST				<6	-	<6
RBV	THE CHRISTIE NHS FOUNDATION TRUST	-	<6	-	-	-	<6
RC9	LUTON AND DUNSTABLE UNIVERSITY HOSPITAL NHS FOUNDATION TRUST				<6	-	<6
RH8	ROYAL DEVON AND EXETER NHS FOUNDATION TRUST	-	<6	-	-	-	<6
RJ1	GUY'S AND ST THOMAS' NHS FOUNDATION TRUST	-	<6	-	-	-	<6
RJE	UNIVERSITY HOSPITALS OF NORTH MIDLANDS NHS TRUST				<6	-	<6
RJR	COUNTESS OF CHESTER HOSPITAL NHS FOUNDATION TRUST	-	<6	-	-	-	<6
RK9	PLYMOUTH HOSPITALS NHS TRUST				<6	-	<6
RKB	UNIVERSITY HOSPITALS COVENTRY AND WARWICKSHIRE NHS TRUST	<6	-	-	-	-	<6
RMP	TAMESIDE HOSPITAL NHS FOUNDATION TRUST	-	<6	-	-	-	<6
RNL	NORTH CUMBRIA UNIVERSITY HOSPITALS NHS TRUST				<6	-	<6
RNQ	KETTERING GENERAL HOSPITAL NHS FOUNDATION TRUST				<6	-	<6
RQM	CHELSEA AND WESTMINSTER HOSPITAL NHS FOUNDATION TRUST				<6	-	<6
RRJ	THE ROYAL ORTHOPAEDIC HOSPITAL NHIS FOUNDATION TRUST	-	<6	-	-	-	<6
RRV	UNIVERSITY COLLEGE LONDON HOSPITALS NHS FOUNDATION TRUST	-	-	<6	-	-	<6
RTK	ASHFORD AND ST PETER'S HOSPITALS NHS FOUNDATION TRUST EAST KENT HOSPITALS UNIVERSITY NHS FOUNDATION TRUST		-6		<6	-	<6
RVV RVW	NORTH TEES AND HARTLEPOOL NHS FOUNDATION TRUST	- <6	<6	-	-	-	<6 <6
RWP	WORCESTERSHIRE ACUTE HOSPITALS NHS TRUST	~0	-	-	- <6	-	<6
RX1	NOTTINGHAM UNIVERSITY HOSPITALS NHS TRUST				<6		<6
RYJ	IMPERIAL COLLEGE HEALTHCARE NHS TRUST	-	<6	-	-	_	<6
NEY01	PIONEER HEALTHCARE LTD - CLAREMONT HOSPITAL	<6	-	-	-	_	<6
NT424	BMI - THE MERIDEN HOSPITAL	<0 <6			-	_	<0
NT447	BMI THE DUCHY HOSPITAL	<6	-	-	-	-	<6
NTX01	ONE HEALTH GROUP LTD	<6	-	-	-	-	<6
NVC12	OAKLANDS HOSPITAL	-	<6	-	-	-	<6
		985	8,053	1,683	1,767	42	12,530

DOCUMENT GOVERNANCE		
Document name	Back Pain Report	
Document type	Final	
Version	0.6	
Date	24/06/2016	
Document Classification	Confidential	
Prepared on behalf of	GIRFT	
Created by	Adam Fearing, Andrea Brown & Liz Lingard	
Approved by Epidemiologist	Liz Lingard	
Approved by Project Director	Helen Ridley	
Peer Reviewed by (if appropriate)		
Originating organisation	NEQOS	
Website of originating organisation	www.neqos.nhs.uk -	
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Contact email address	negos@nhs.net	
Public file location	N/A	
Internal file location	G:\Project Management\Project Mgt 15-16\Back Pain	

	VERSION CONTROL					
Version	Document Type	Date	Amendments	Ву		
0.1	First Draft	10/03/2016		Adam Fearing, Liz Lingard		
0.2	Draft V2	15/03/2016	Amendments & Final QA	Adam Fearing, Kayoung Goffe		
0.3	Draft V3	15/04/2016	Further minor amendments	Adam Fearing, Kayoung Goffe		
0.4	Draft V4	03/05/2016	Further minor amendments	Adam Fearing		
0.5	Draft V5	11/05/2016	Further minor amendments	Adam Fearing		
0.6	Draft V6	24/06/2016	Narrative & formatting	Liz Lingard		

CONFIDENTIALITY CHECKLIST – FOR COMPLETION PRIOR TO ANY DRAFTS SENT TO CLIENTS			
Does the report include any small numbers?	Yes		
If yes, can we produce a meaningful suppressed version?	Yes, the small numbers in this report have been suppressed. Observed events less than 6 have been replaced by "<6". Rates where the numerator or denominator are less than 6 have been shown, although to calculate that small number would not be possible from the data shown here.		
If not, the Epidemiologist AND Director must justify why not here, highlight, and agree the need for an NDA			
Have Lightfoot/HSCIC approved use of NDA in order to disclose small numbers?			
Has the recipient of the report signed the NDA?			