

Back Pain Report

Tameside & Glossop

June 2016



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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 Greater Manchester 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 Greater Manchester Region are:

- Wrightington, Wigan & Leigh NHS Foundation Trust
- Bolton NHS Foundation Trust
- Salford Royal NHS Foundation Trust
- Pennine Acute Hospitals NHS Trust
- Central Manchester University Hospitals NHS Foundation Trust
- Tameside Hospital NHS Foundation Trust
- University Hospital Of South Manchester NHS Foundation Trust
- Stockport NHS Foundation Trust

The Independent Sector Providers included for the Greater Manchester Region are:

- BMI - The Beaumont 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

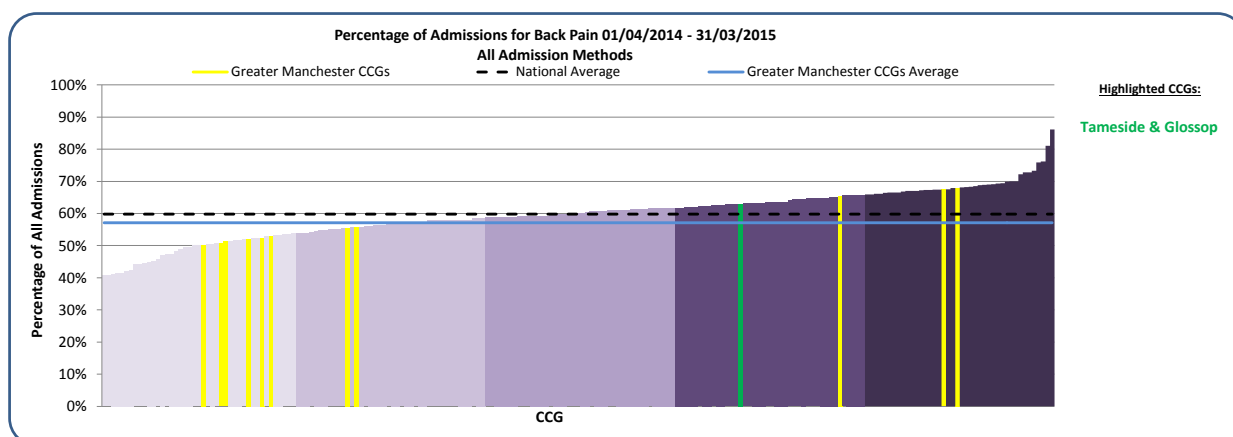
England	Back	Radicular	Total	% Back	% Radicular
Elective	134,448	102,808	237,256	56.7%	43.3%
Emergency	39,331	14,309	53,640	73.3%	26.7%
Other	771	951	1,722	44.8%	55.2%
Total	174,550	118,068	292,618	59.7%	40.3%

Manchester CCGs	Back	Radicular	Total	% Back	% Radicular
Elective	9,058	7,702	16,760	54.0%	46.0%
Emergency	2,556	1,079	3,635	70.3%	29.7%
Other	116	23	139	83.5%	16.5%
Total	11,730	8,804	20,534	57.1%	42.9%

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

Table indicates the proportion of admissions for back pain only (and not radicular pain)

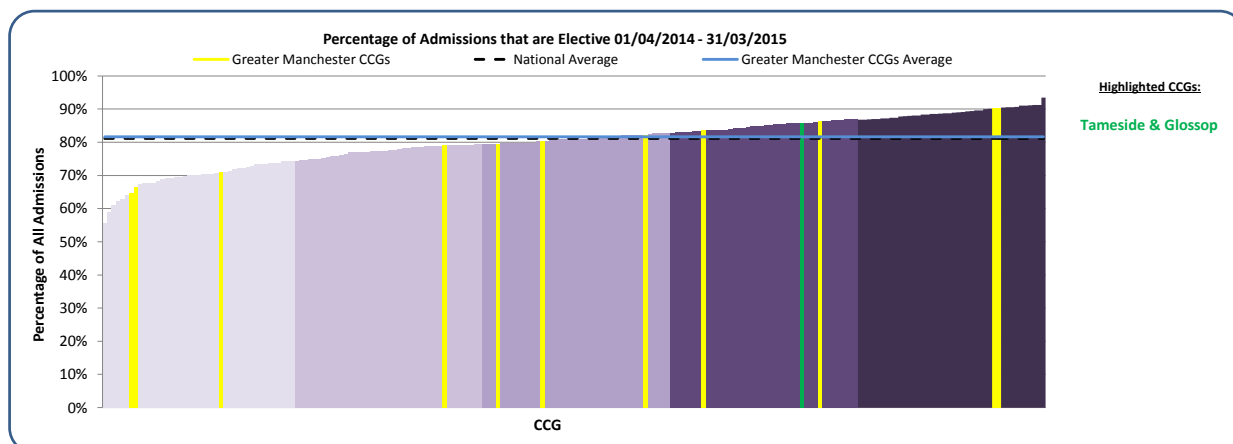
Oldham	50.2%	Central Manchester	55.5%
Salford	50.7%	South Manchester	55.8%
Heywood, Middleton & Rochdale	51.3%	Tameside & Glossop	63.0%
Bury	52.0%	Trafford	65.4%
North Manchester	52.4%	Bolton	67.4%
Stockport	53.0%	Wigan Borough	68.0%
Greater Manchester CCGs	57.1%	England	59.8%



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

Central Manchester	64.6%	Wigan Borough	82.1%
Salford	66.4%	Trafford	83.5%
Stockport	70.9%	Tameside & Glossop	85.7%
Oldham	79.0%	North Manchester	86.2%
Bolton	79.5%	Heywood, Middleton & Rochdale	90.4%
South Manchester	80.4%	Bury	90.4%
Greater Manchester CCGs	81.6%	England	81.1%



What is the data telling us?

In the latest 12 month period there were almost 300,000 admissions for back and radicular pain in England, with 20,534 (7%) of these from patients registered within the Greater Manchester.

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 Greater Manchester the proportion of admissions for back pain ranges from 50% to 68%.

Approximately 81% of back and radicular pain admissions are elective, with Greater Manchester mirroring the national rate. At CCG level in Greater Manchester the proportion of elective admissions across CCGs ranges from 65% in Central Manchester to 90% in Bury.

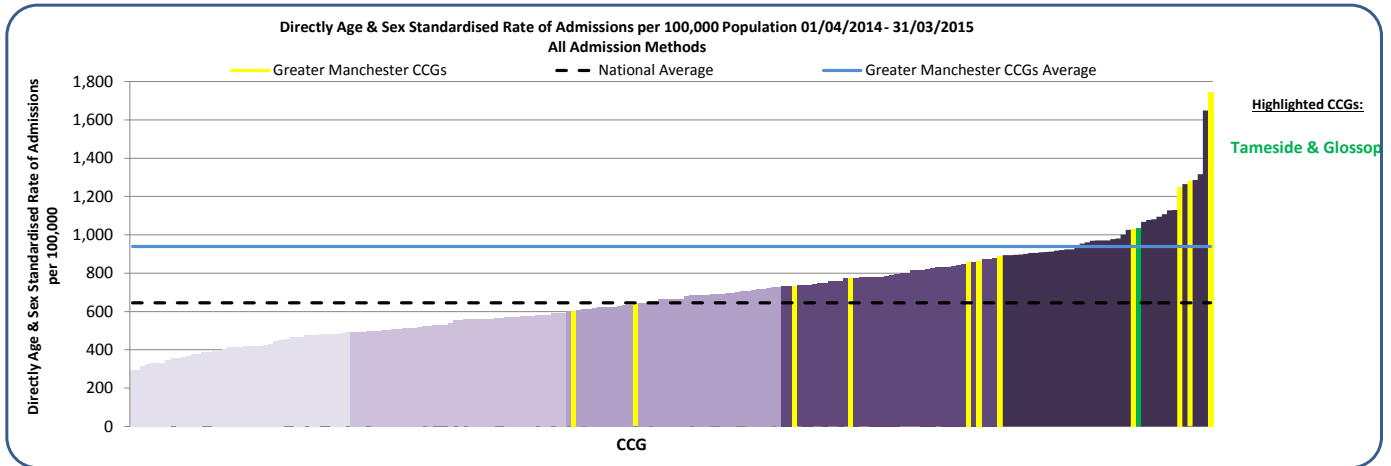
Clinical Commissioning Group (CCG) activity

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

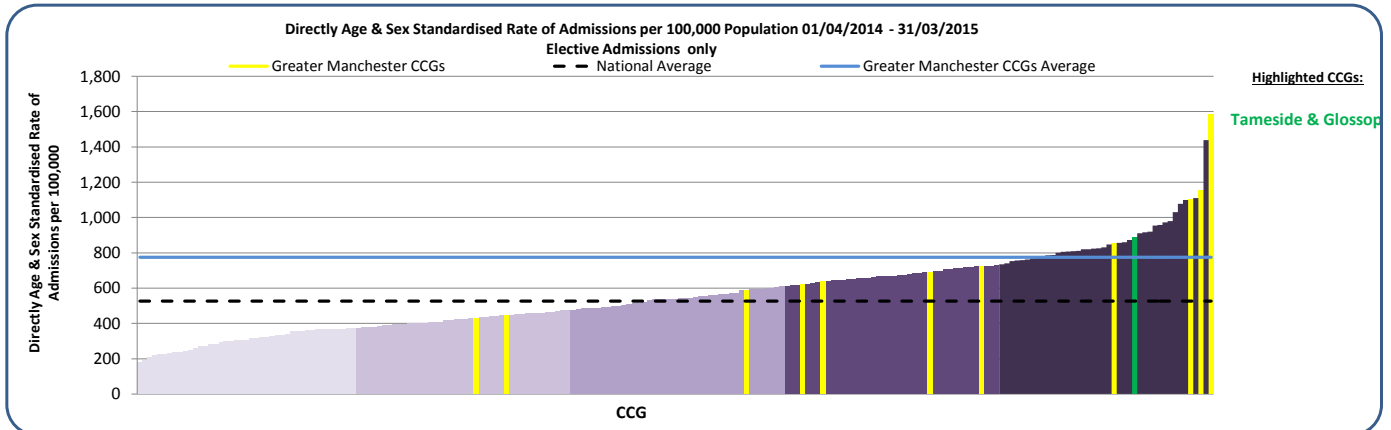
a. Hospital admissions for back pain by CCG (all admission methods), Directly Age & Sex Standardised Admission rate per 100,000 population

CCG name	All	Elective	Emergency	CCG name	All	Elective	Emergency
Heywood, Middleton & Rochdale	1745.5	1583.6	161.4	Oldham	862.0	689.3	169.1
Bury	1279.0	1156.5	120.2	Trafford	858.8	722.1	127.5
North Manchester	1251.6	1102.3	142.9	Wigan Borough	775.0	635.9	136.1
Tameside & Glossop	1032.0	885.5	137.3	Bolton	733.6	586.5	145.8
South Manchester	1029.4	852.3	175.4	Central Manchester	642.0	445.6	183.1
Salford	891.0	618.5	265.8	Stockport	602.4	429.2	169.4
Greater Manchester CCGs	938.5	775.4	157.7	England	645.6	526.5	115.4

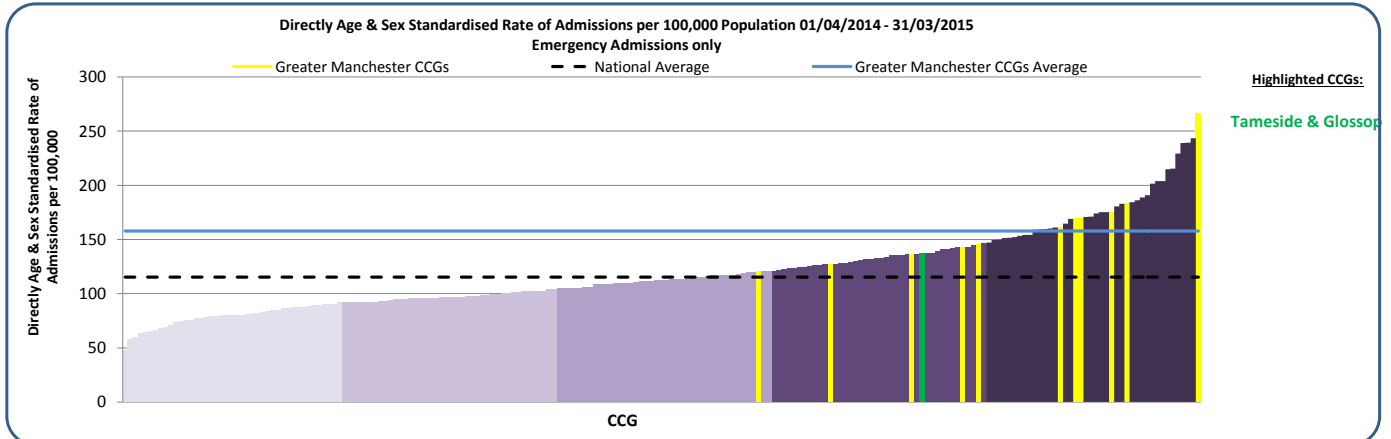
b. Hospital admissions for back and radicular pain (all admission methods), Directly Age & Sex Standardised Admission rate per 100,000 population



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 Greater Manchester with over 3.7-fold difference between the regional lowest (Stockport CCG) and the highest CCG for the region (Heywood, Middleton & Rochdale CCG).

In contrast, for emergency admissions all CCGs in the regions, except Oldham CCG, are in the highest two quintiles with Salford CCG having the highest rate nationally.

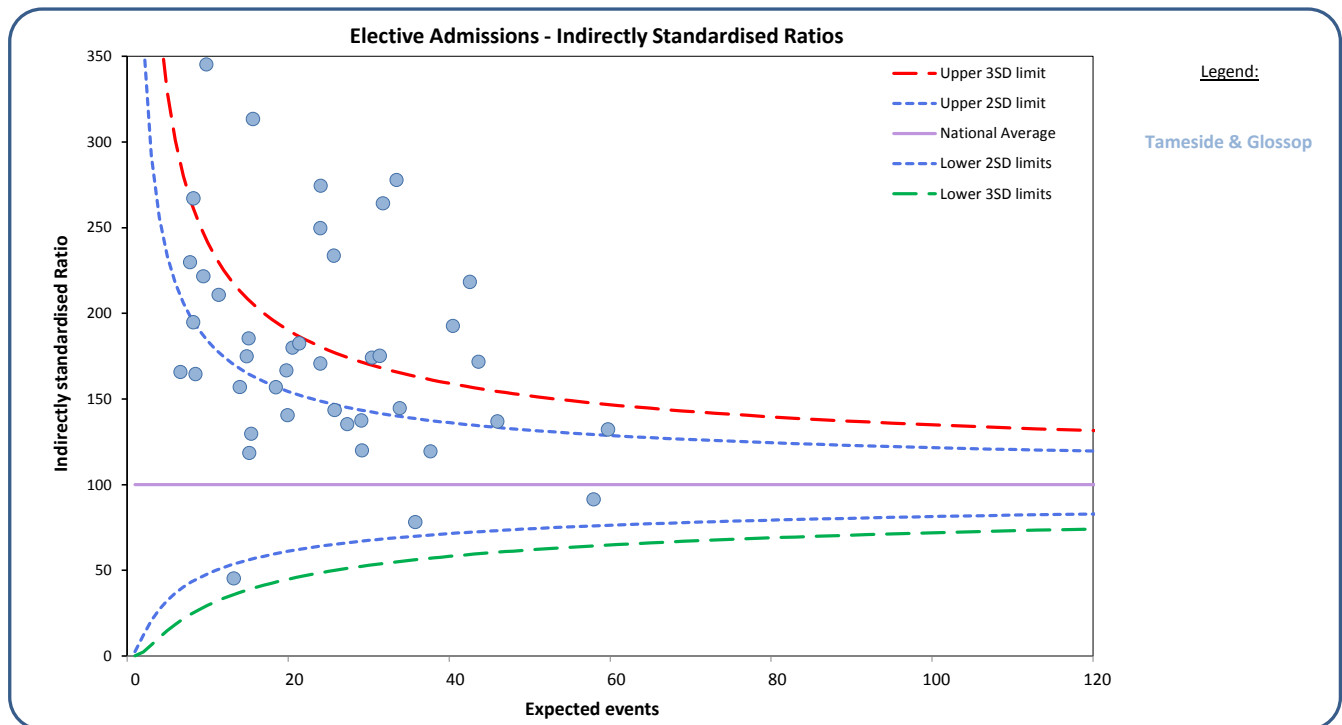
Clinical Commissioning Group (CCG) activity - GP practice level

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

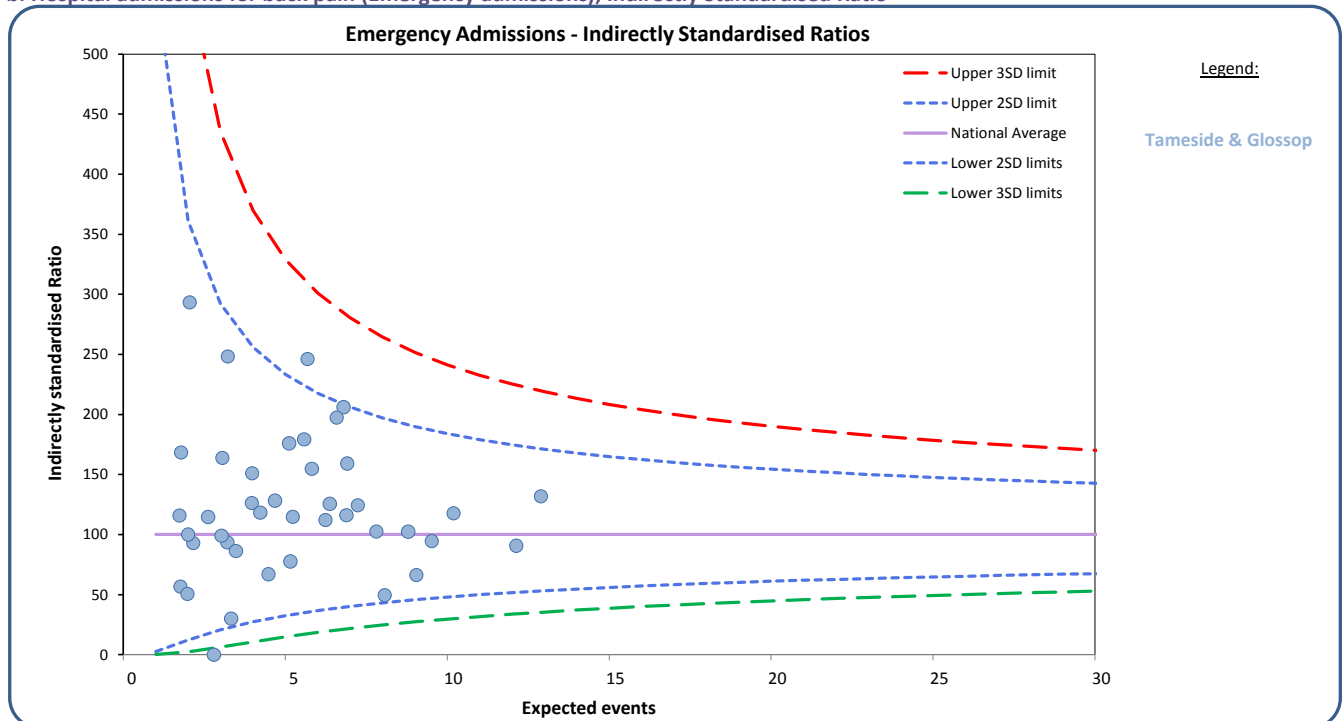
Each symbol represents one GP practice

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

Tameside & Glossop



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 Tameside & Glossop

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.

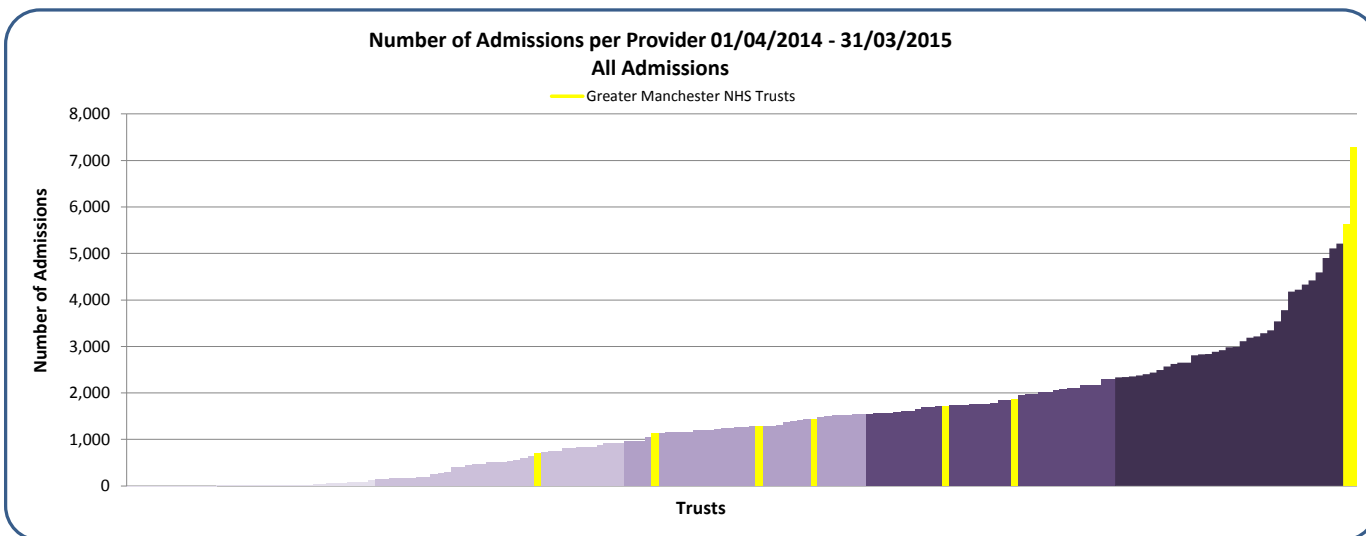
Practice Code	Practice Name	CCG	Population 15+	Elective			Emergency		
				Observed	Expected	Ratio	Observed	Expected	Ratio
C81077	Group Practice Centre	01Y	2,881	20	15.41	129.77	<6	3.21	93.52
C81081	Manor House Surgery	01Y	10,923	53	57.95	91.46	11	12.13	90.68
C81106	Lambgates Health Centre	01Y	5,437	37	27.35	135.29	9	5.82	154.64
C81615	Cottage Lane Surgery	01Y	1,668	18	7.83	229.81	<6	1.76	56.76
C81640	Simmondley Medical Practice	01Y	2,963	18	15.18	118.58	<6	3.05	163.73
C81660	Hadfield Medical Centre	01Y	2,503	6	13.26	45.26		2.79	
P89002	The Brooke Surgery	01Y	8,672	75	43.66	171.78	9	9.52	94.50
P89003	Albion Medical Practice	01Y	8,141	93	42.58	218.39	6	9.05	66.33
P89004	Awburn House Medical Practice	01Y	6,156	49	33.86	144.70	11	6.91	159.11
P89005	Lockside Medical Centre	01Y	6,057	35	29.17	119.98	8	6.37	125.55
P89007	Staveleigh Medical Centre	01Y	5,556	40	29.10	137.47	7	6.24	112.18
P89008	Bedford House Medical Centre	01Y	6,054	84	31.79	264.24	14	6.80	206.01
P89010	Medlock Vale Medical Practice	01Y	7,088	45	37.68	119.42	<6	8.07	49.58
P89011	Gordon Street Medical Centre	01Y	3,465	49	15.63	313.45	<6	3.48	86.29
P89012	Clarendon Medical Centre	01Y	6,521	93	33.47	277.88	9	7.24	124.38
P89013	Hattersley Group Practice	01Y	4,295	37	20.55	180.02	<6	4.48	66.96
P89014	Haughton/Thornley Medical Centres	01Y	9,386	63	46.01	136.93	12	10.20	117.70
P89015	Windmill Medical Practice	01Y	11,482	79	59.75	132.22	17	12.89	131.84
P89016	Donneybrook Medical Centre	01Y	7,779	78	40.48	192.67	9	8.79	102.35
P89017	Chapel Street Medical Centre	01Y	4,770	41	24.02	170.72	6	5.23	114.67
P89018	Denton Medical Practice	01Y	5,846	53	30.43	174.15	13	6.59	197.42
P89019	Churchgate Surgery	01Y	6,993	28	35.80	78.22	8	7.81	102.45
P89020	Ht Practice	01Y	6,416	55	31.39	175.20	8	6.89	116.16
P89021	Davaar Medical Centre	01Y	4,398	39	21.37	182.47	6	4.68	128.18
P89022	King Street Medical Centre	01Y	2,948	26	14.87	174.89	8	3.22	248.23
P89023	St.Andrew's House Surgery	01Y	4,685	60	24.02	249.76	9	5.12	175.90
P89025	Town Hall Surgery	01Y	2,748	22	14.01	157.01	<6	3.03	99.00
P89026	Grosvenor Medical Centre	01Y	4,775	66	24.04	274.49	<6	5.16	77.58
P89027	The Hollies Surgery	01Y	3,499	29	18.48	156.92	<6	3.96	126.18
P89029	Market Street Medical Practice	01Y	5,022	60	25.68	233.69	10	5.58	179.19
P89030	West End Medical Centre	01Y	4,018	28	19.93	140.51	<6	4.23	118.26
P89033	Tame Valley Medical Centre	01Y	5,400	37	25.78	143.50	14	5.69	246.20
P89602	The Smithy Surgery	01Y	3,699	33	19.80	166.68	6	3.97	150.96
P89609	Stamford House	01Y	3,211	28	15.11	185.35	<6	3.33	30.05
P89612	Mossley Medical Practice	01Y	1,939	21	9.47	221.68	<6	1.98	50.50
P89613	Waterloo Medical Centre	01Y	2,042	34	9.85	345.32	<6	2.15	92.88
P89618	Pike Medical Practice	01Y	1,571	16	8.21	194.81	<6	1.73	115.76
Y02586	Ashton Gp Service	01Y	1,926	11	6.64	165.73	<6	1.78	168.34
Y02663	Droylsden Medical Practice	01Y	2,579	24	11.39	210.75	<6	2.62	114.65
Y02713	Guide Bridge Medical Practice	01Y	2,024	14	8.51	164.59	6	2.05	293.23
Y02936	Millbrook Medical Practice	01Y	2,031	22	8.24	267.14	<6	2.00	100.00

Hospital Trust activity

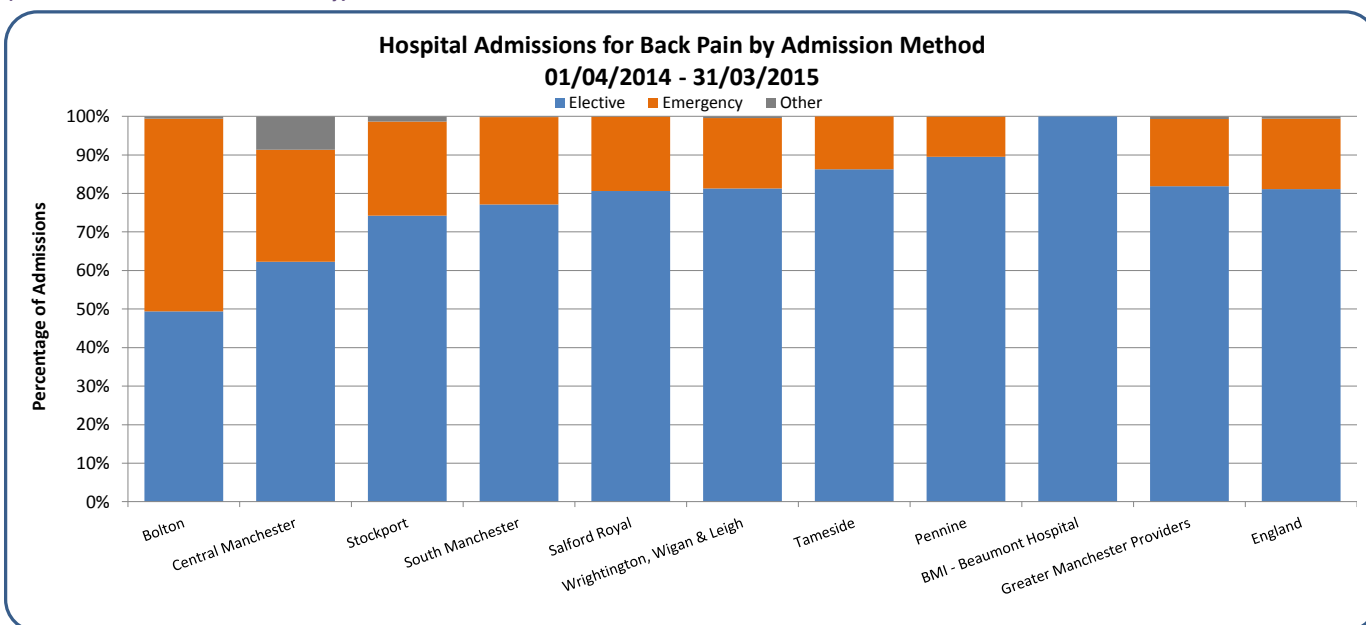
5. Hospital admissions for low back and radicular pain in people aged 16 years and over (April 2014 - March 2015)

a. Number of hospital admissions for back pain (all admission methods, NHS Trusts only)

Pennine	7,293	Tameside	1,440
Salford Royal	5,615	Wrightington, Wigan & Leigh	1,286
South Manchester	1,863	Central Manchester	1,120
Stockport	1,717	Bolton	696
Greater Manchester NHS Trusts	21,030	England	251,444



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



What is the data telling us?

The total number of admissions for back pain is presented due to the absence of a relevant denominator at hospital Trust level. Pennine and Salford Royal Trusts are the two highest activity NHS Trusts nationally with the other 6 Greater Manchester Trusts spread across the quintile chart.

The proportion of hospital activity for back pain which is classed as elective care is similar to the England rate for the Greater Manchester providers overall, however at NHS Trust level the proportion varies between 49% at Bolton to 90% at Pennine.

All NHS activity at Independent Sector Providers is classed as elective.

Hospital Trust activity

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 (Greater Manchester Providers only)

Provider Name	Pain Management & Anaesthetics	Trauma & Orthopaedics	Spinal Surgery Service	Interventional Radiology	Neurosurgery	Other Functions	Total
Wrightington, Wigan & Leigh	1,040	<6	-	-	-	<6	1,040
Bolton	336	<6	-	-	-	<6	336
Salford Royal	1,286	901	-	<6	2,314	25	4,526
Pennine	6,322	190	-	-	-	15	6,527
Central Manchester	530	130	-	-	-	37	697
Tameside	1,239	-	-	-	-	<6	1,239
South Manchester	1,417	<6	-	-	-	15	1,432
Stockport	866	372	18	-	-	19	1,275
BMI - Beaumont Hospital	652	-	-	-	-	52	704
Total	13,688	1,593	18	-	2,314	163	17,776

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 for the Salford Royal approximately 51% of activity is recorded against Neurosurgery. It is notable that for 5 of the 8 providers almost all activity is recorded against Pain Management/Anaesthetics.

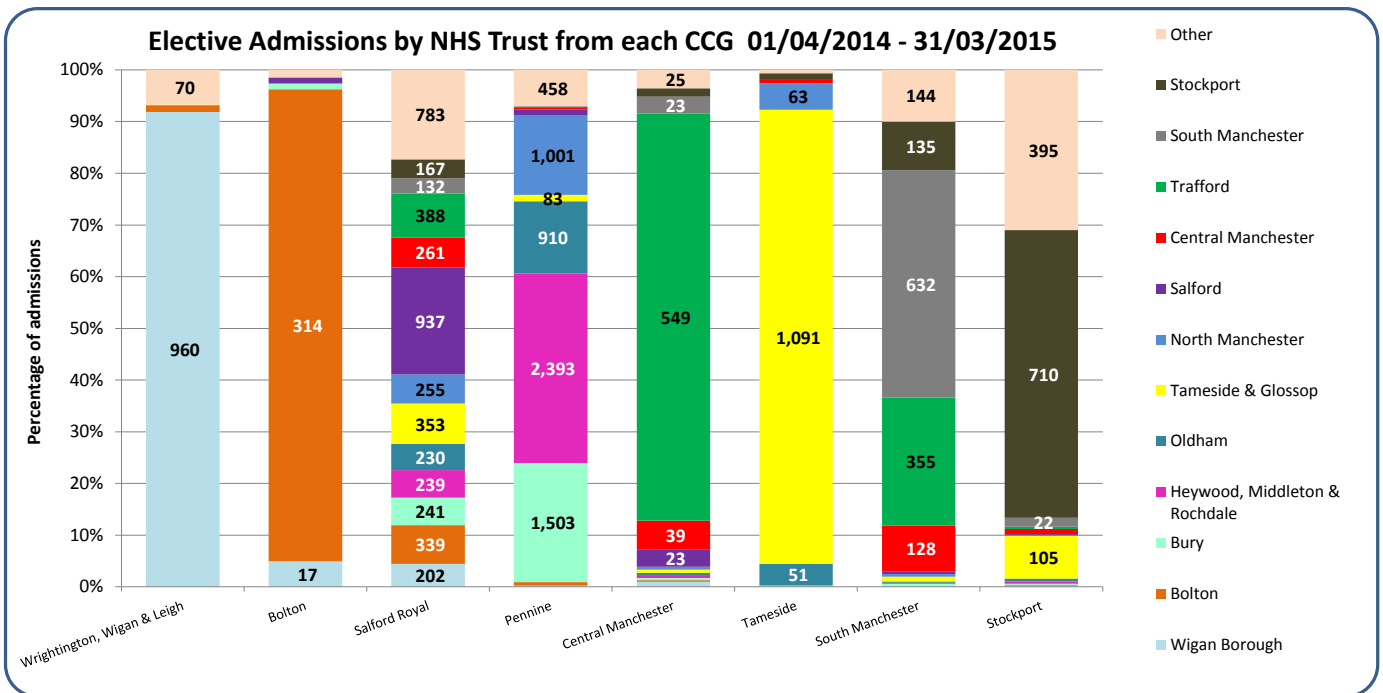
The second table shows the different types of injections being undertaken within each of the treatment function codes and demonstrates that nationally over 62% (104,751) of injections take place within Pain Management/Anaesthetics and 25% of injections are undertaken within Trauma and Orthopaedics.

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.

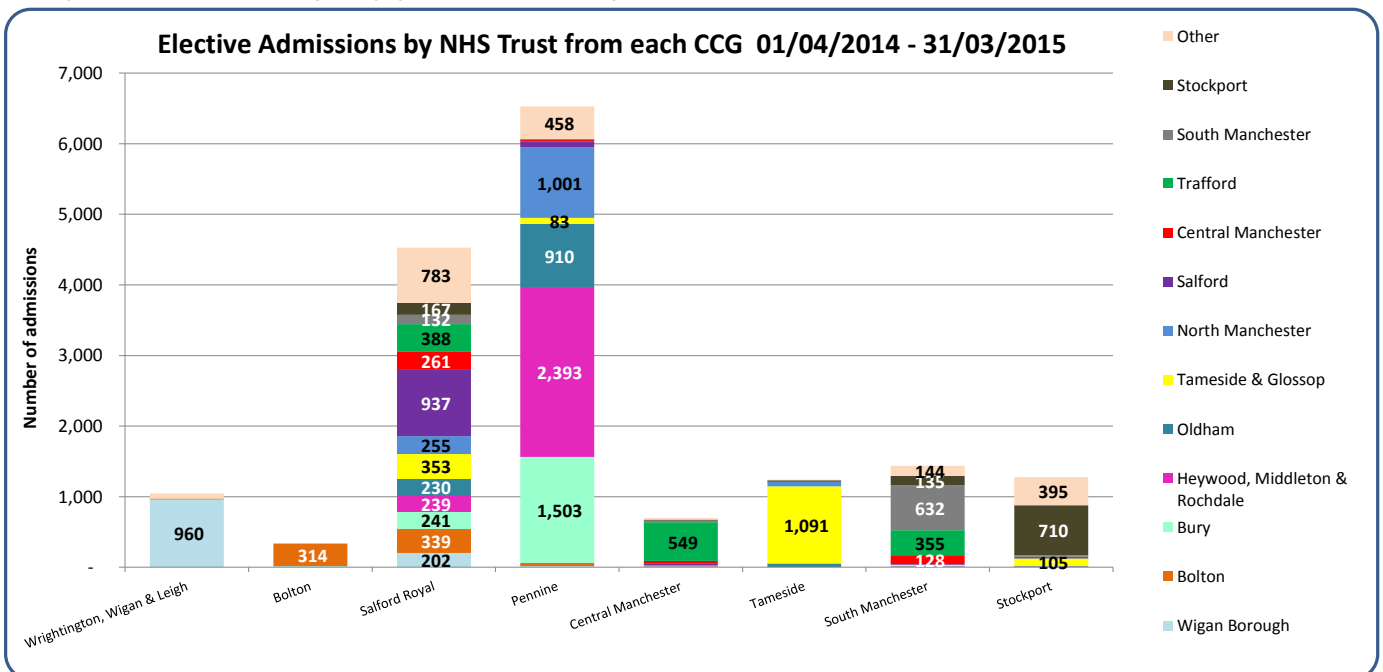
Hospital Trust activity from CCGs

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.

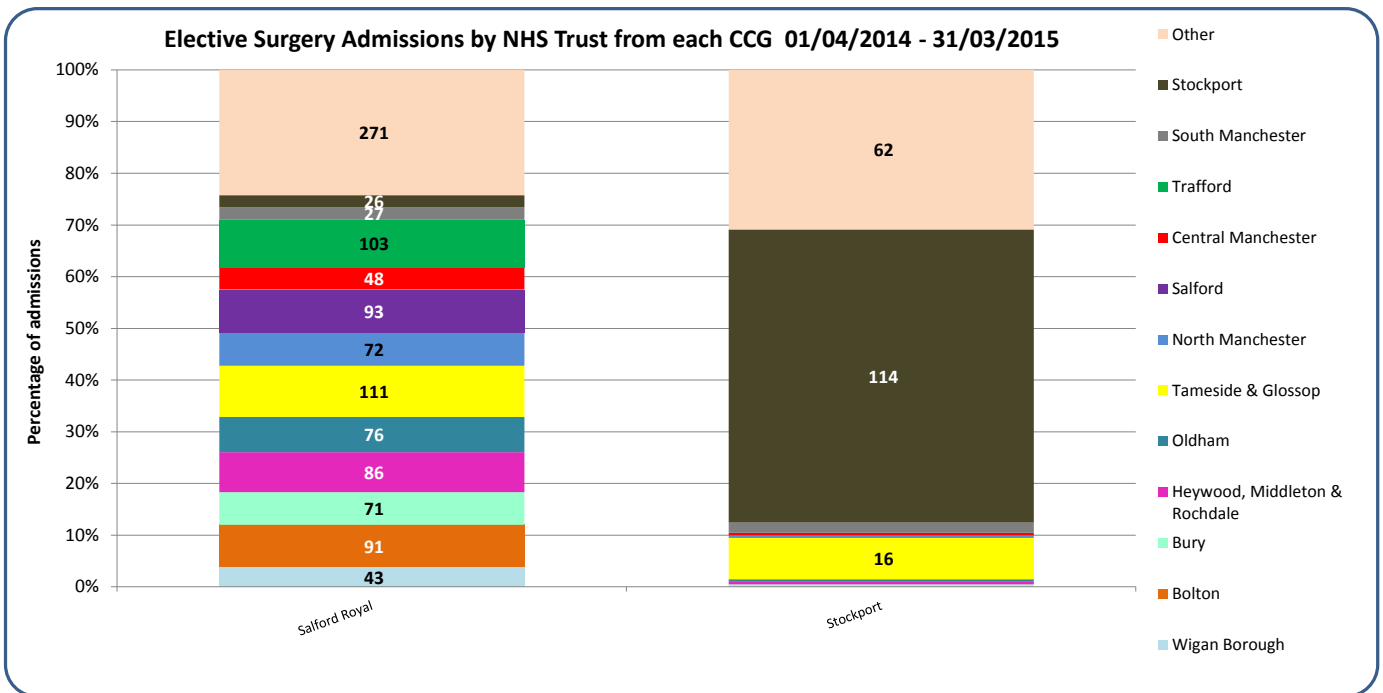
Salford Royal and Pennine Trusts have activity from at least ten of the Greater Manchester CCGs, whereas with Wrightington, Wigan & Leigh Trust, Bolton Trust and Central Manchester Trust the majority of activity comes from one main CCG.

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

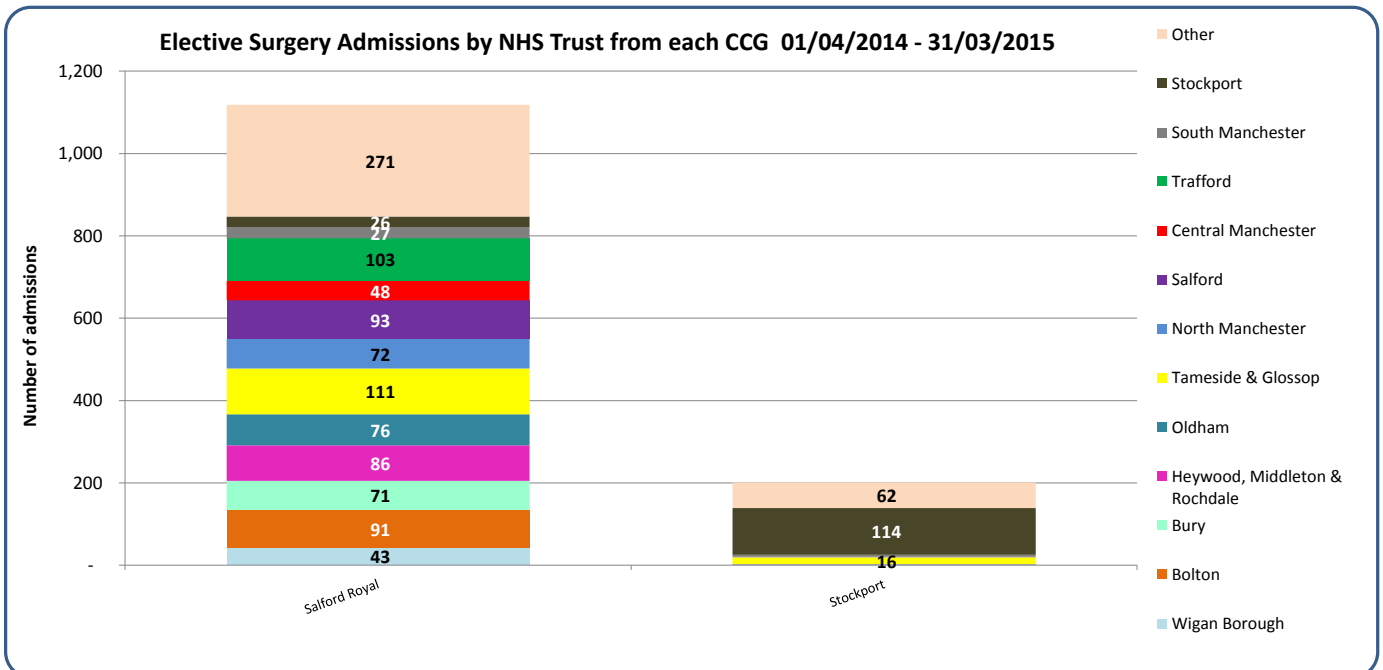
Hospital Trust activity from CCGs

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 surgery for back and radicular pain. In Greater Manchester, only Salford Royal and Stockport Trusts provide spinal surgery.

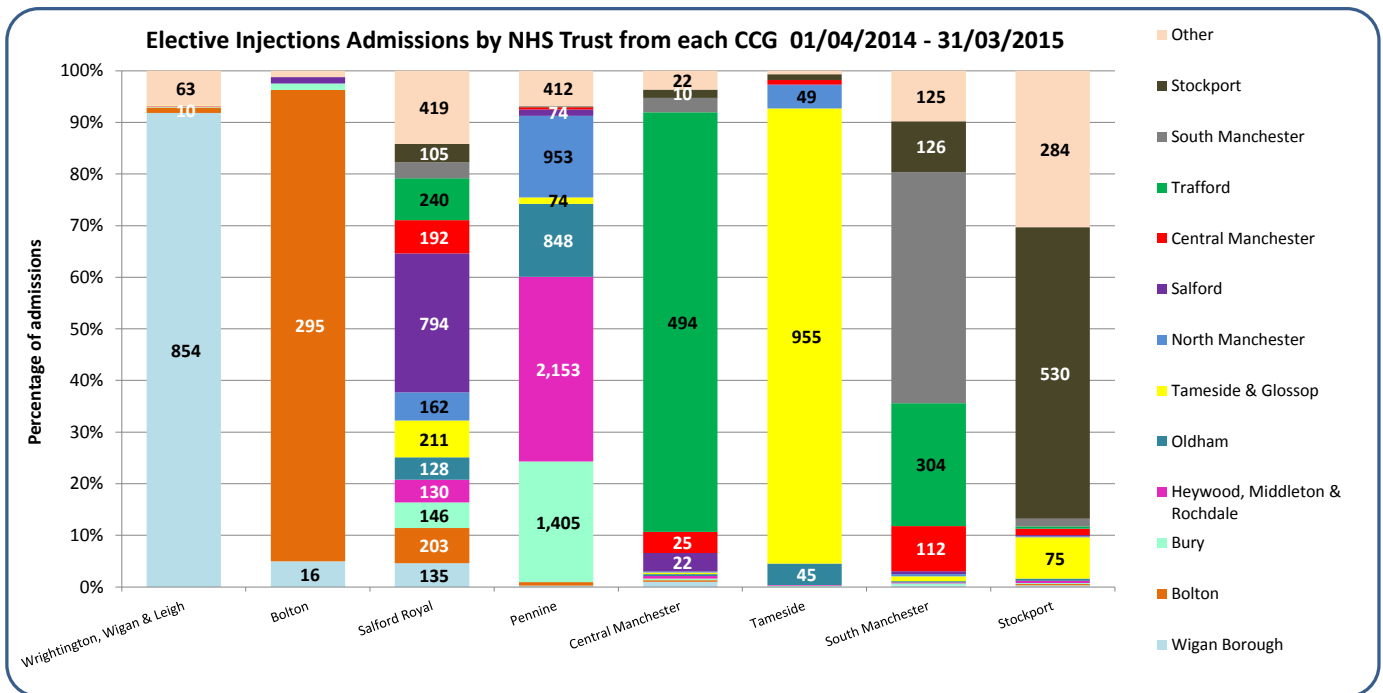
Salford Royal are more likely to take patients from all the CCGs across the region as well as CCGs outside of the region compared to the Stockport Trust which predominantly admit patients from the Stockport CCG where they are located.

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

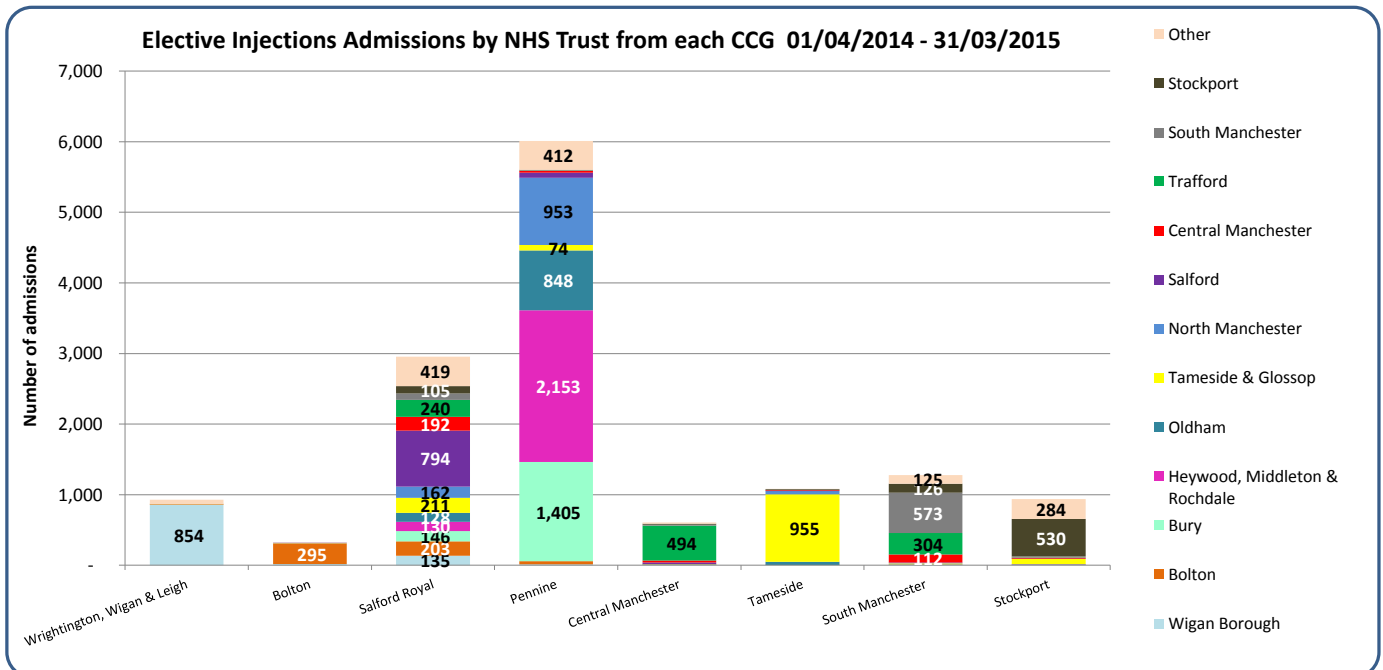
Hospital Trust activity from CCGs

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. Pennine Trust has the highest volume of activity for injections.

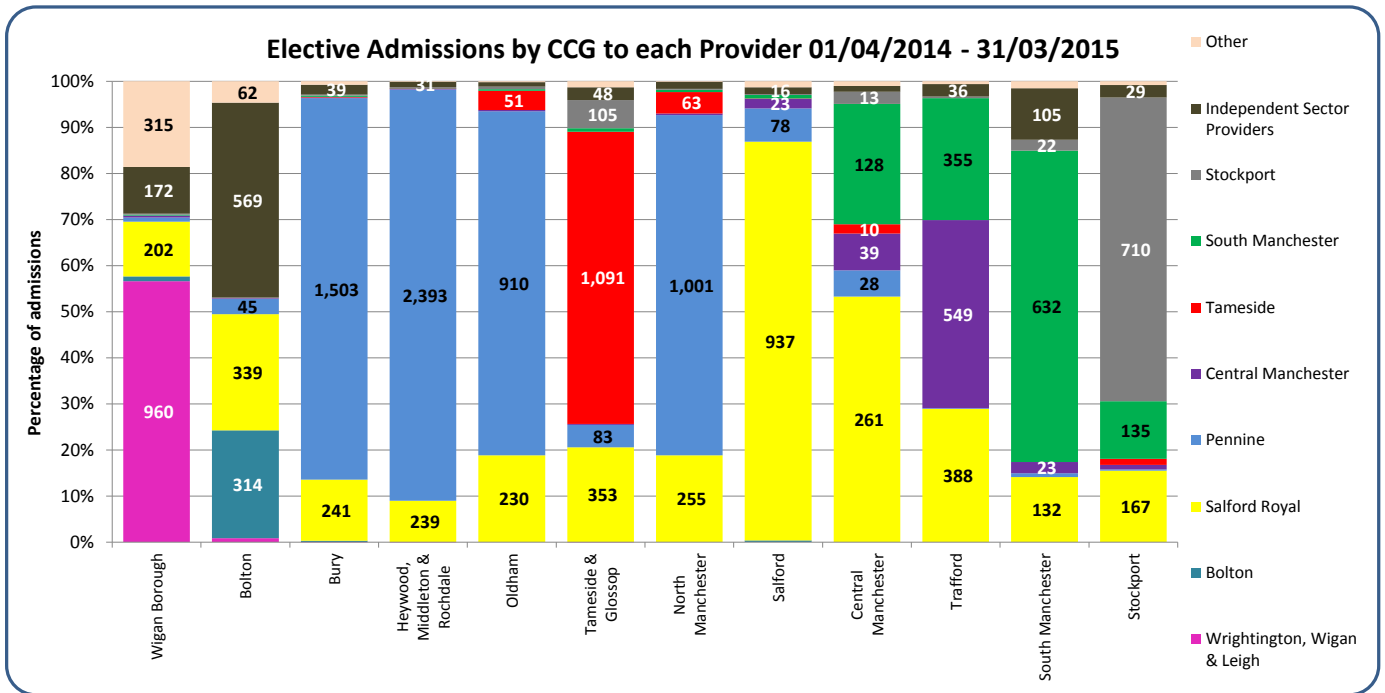
Pennine, Salford Royal and South Manchester Trusts are more likely to take patients from several different CCGs across the region compared to the other Trusts which predominantly admit patients from the CCG(s) where they are located.

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

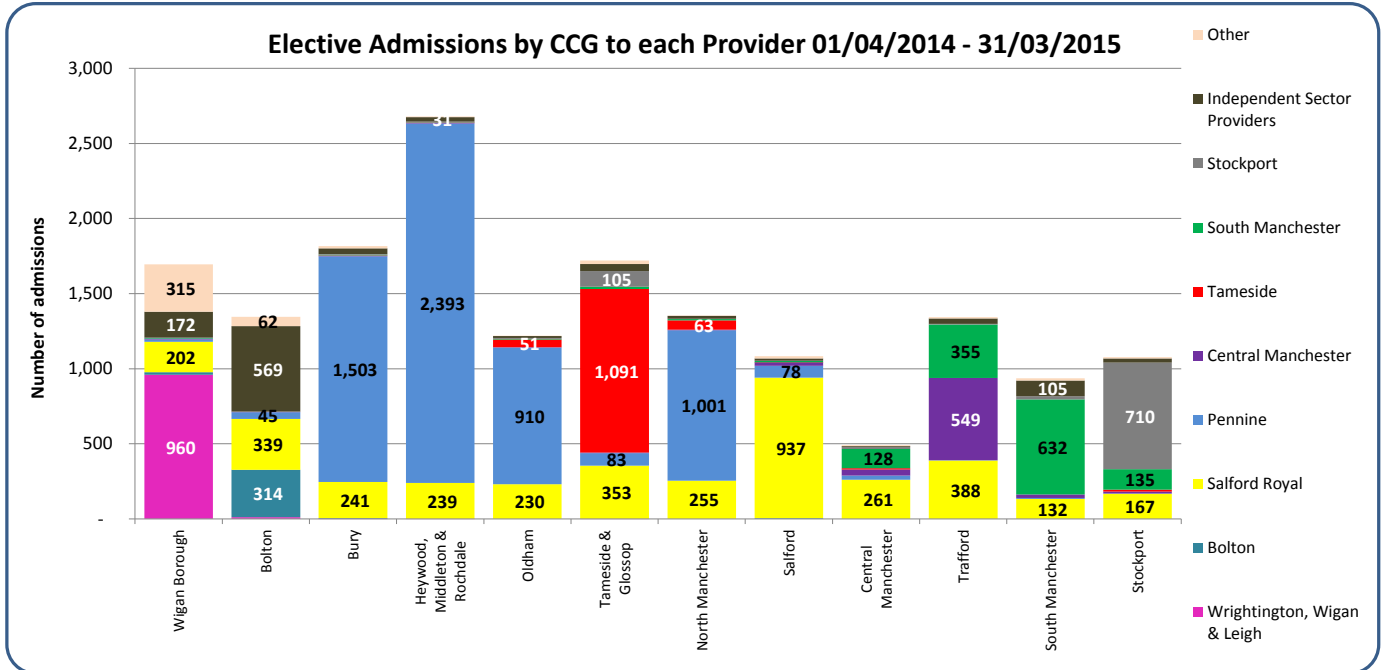
CCG activity to Hospital Trust

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 the number of hospital trusts that their patients are admitted to.

Activity is highest for Heywood, Middleton & Rochdale CCG. Patients were admitted mainly to Pennine and Salford Trusts as well as Independent Sector Providers. All CCGs admit patients to the Salford Royal Trust.

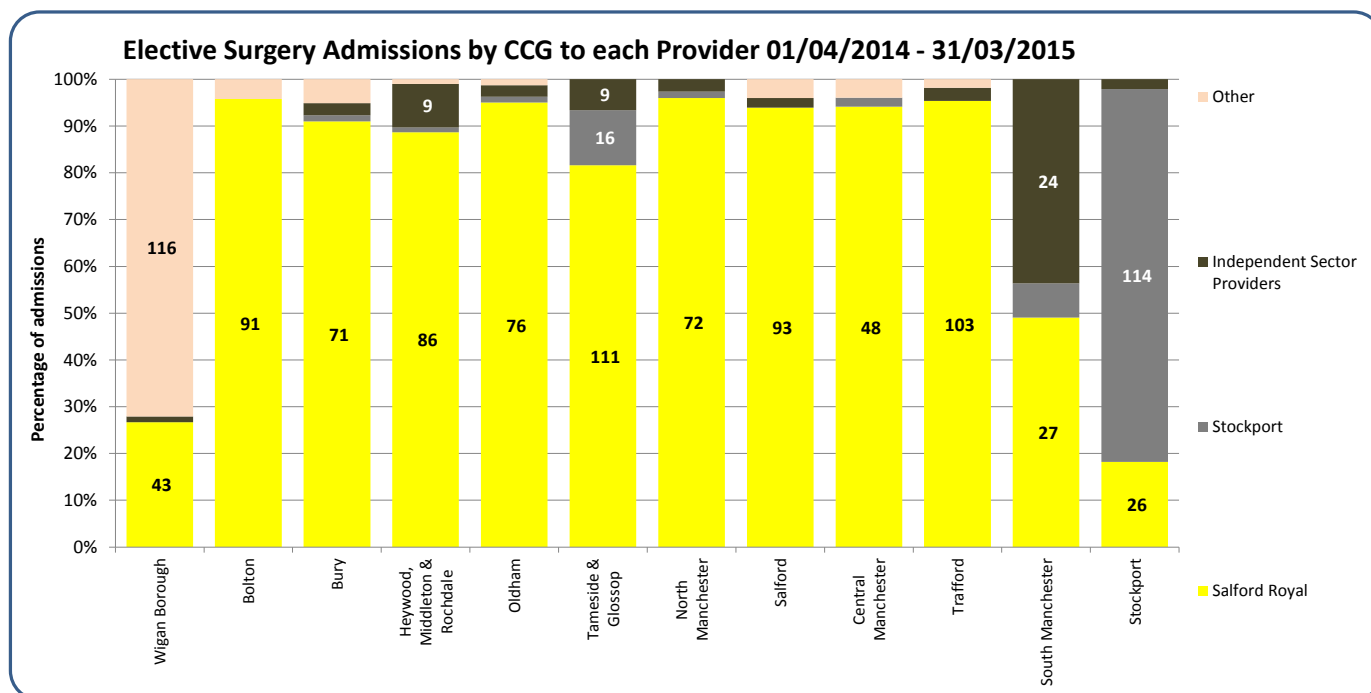
Wigan Borough and Bolton CCGs are the highest users of Independent Sector activity in Greater Manchester.

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

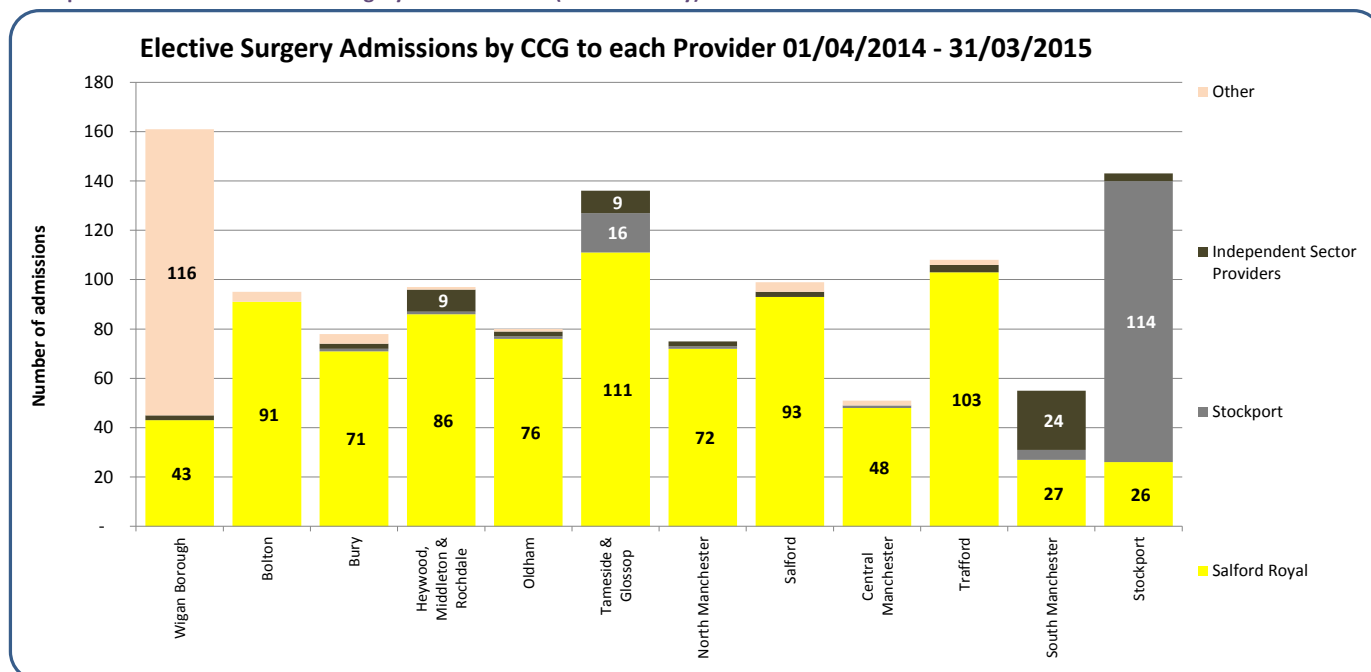
CCG activity to Hospital Trust

7. Patient flows to Hospital Trusts from CCGs for back pain in people aged 16 years and over (April 2014 - March 2015)

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 surgery.

Activity is highest for Wigan Borough CCG with 116 admissions for surgery to providers located outside the Greater Manchester region. All CCGs use Salford Royal Trust for surgery but Stockport CCG has a high volume of their patients using Stockport Trust.

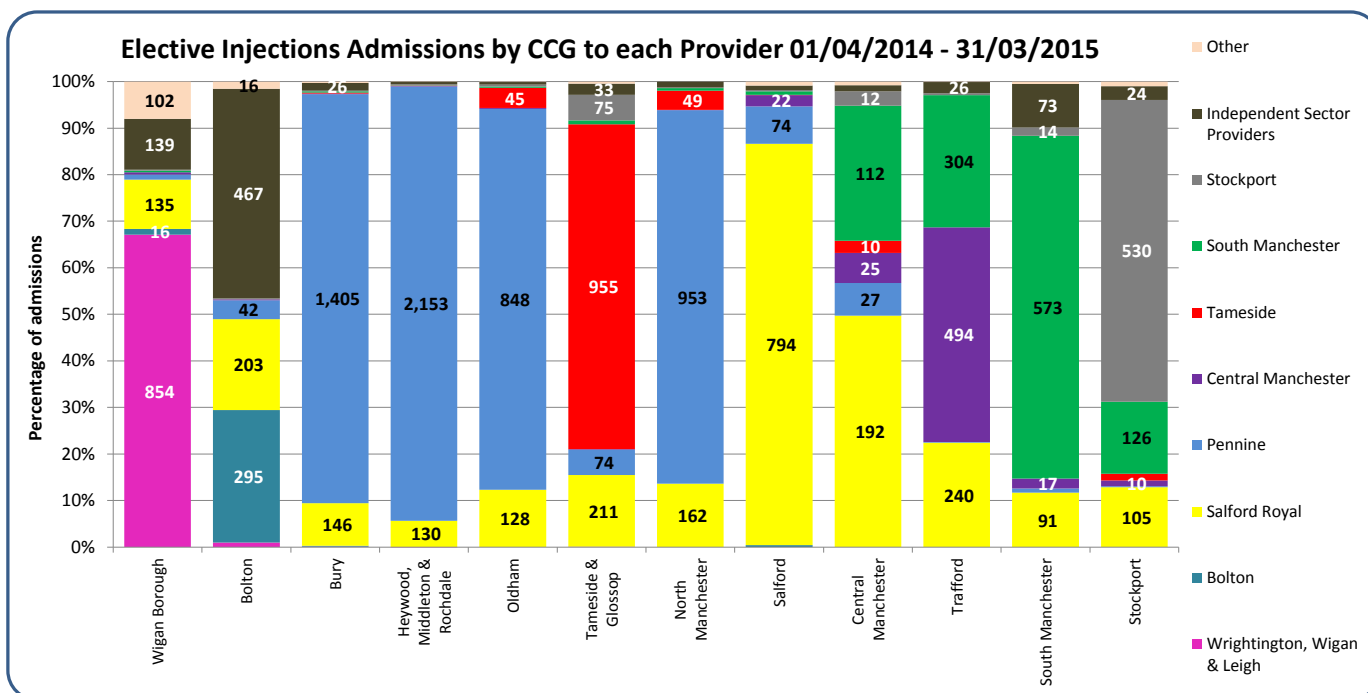
South Manchester CCG is the highest user of Independent Sector activity in Greater Manchester.

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

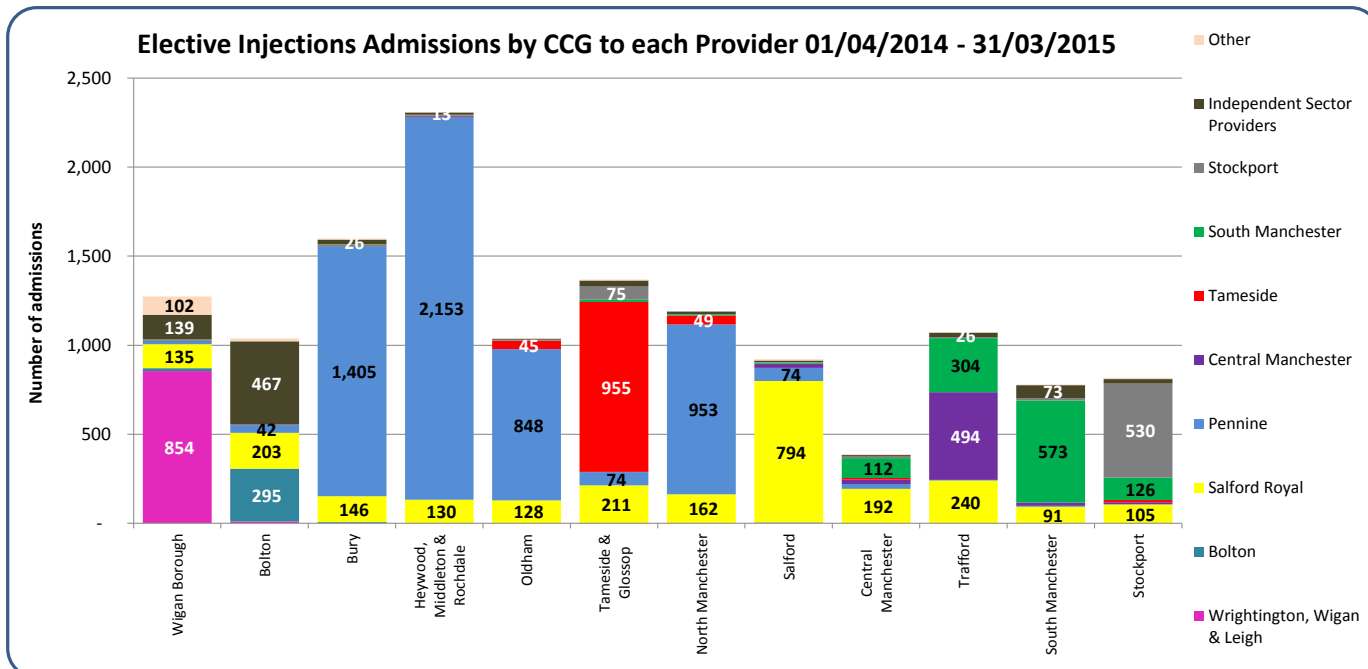
CCG activity to Hospital Trust

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 Heywood, Middleton & Rochdale CCG. Patients were admitted mainly to Pennine Trust. All CCGs across Greater Manchester admit patients to the Salford Royal Trust for injections.

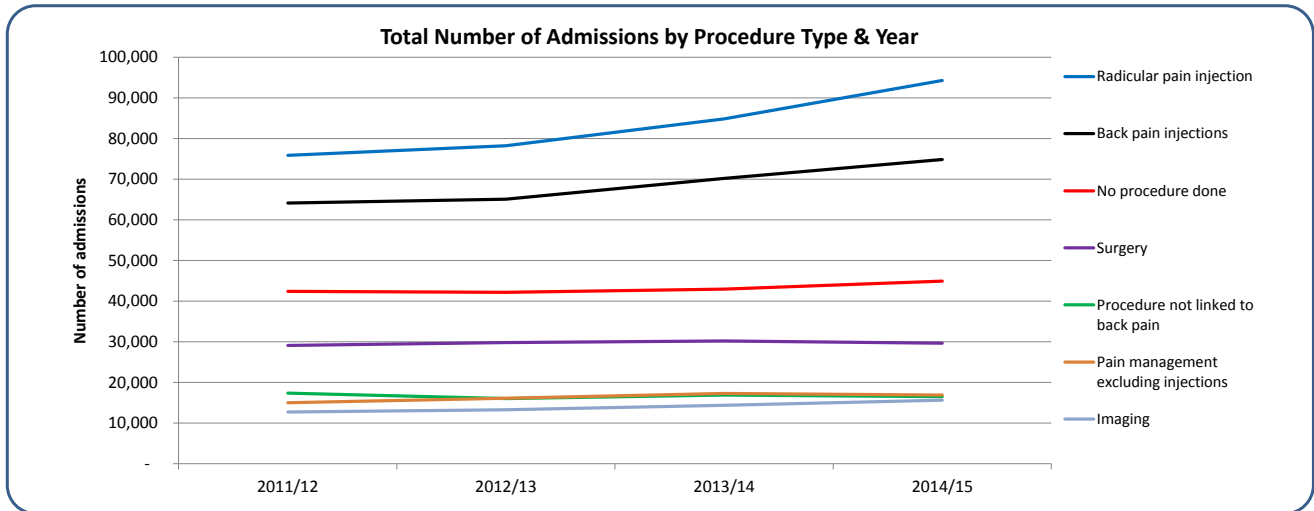
Wigan Borough and Bolton CCGs are the highest users of Independent Sector activity in Greater Manchester.

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

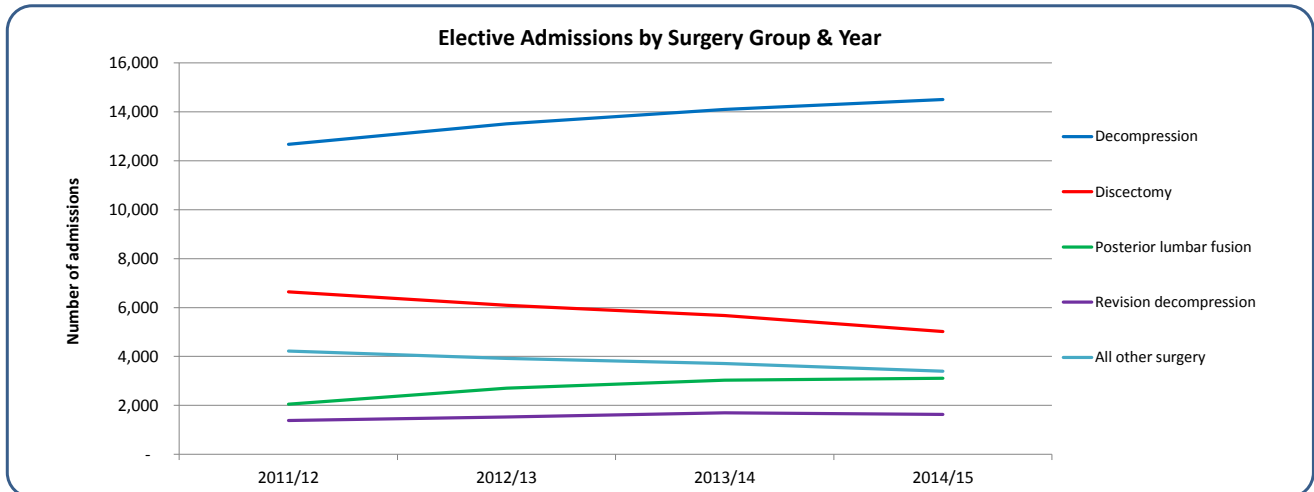
Hospital Trust activity (national level)

8. Hospital admissions for low back and radicular pain in people aged 16 years and over (1st April 2011 - 31st March 2015)

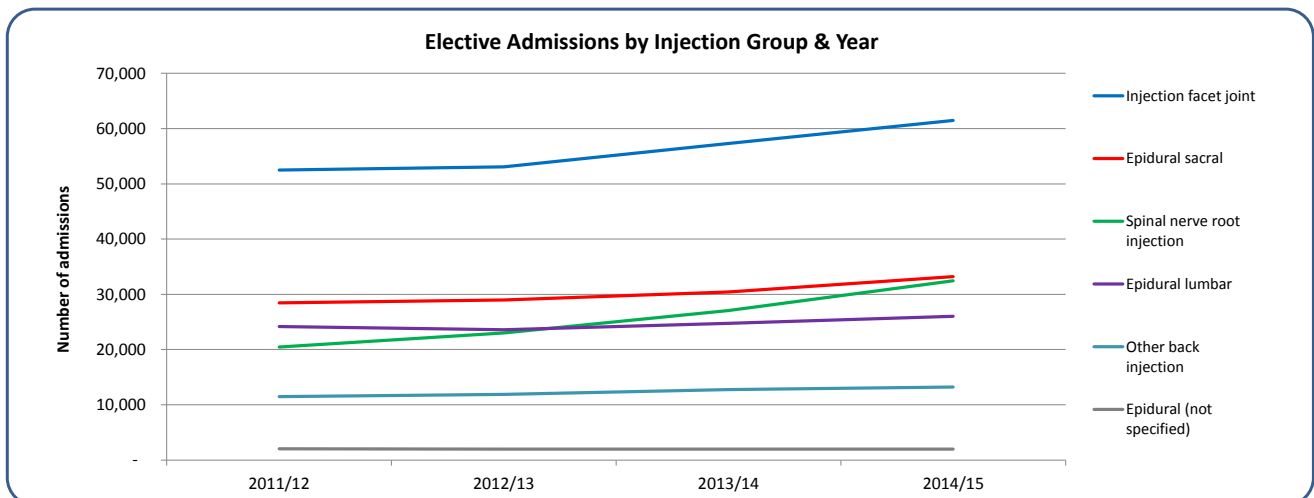
a. Hospital admissions by procedure type over time (all admission types)



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.

Hospital Trust activity

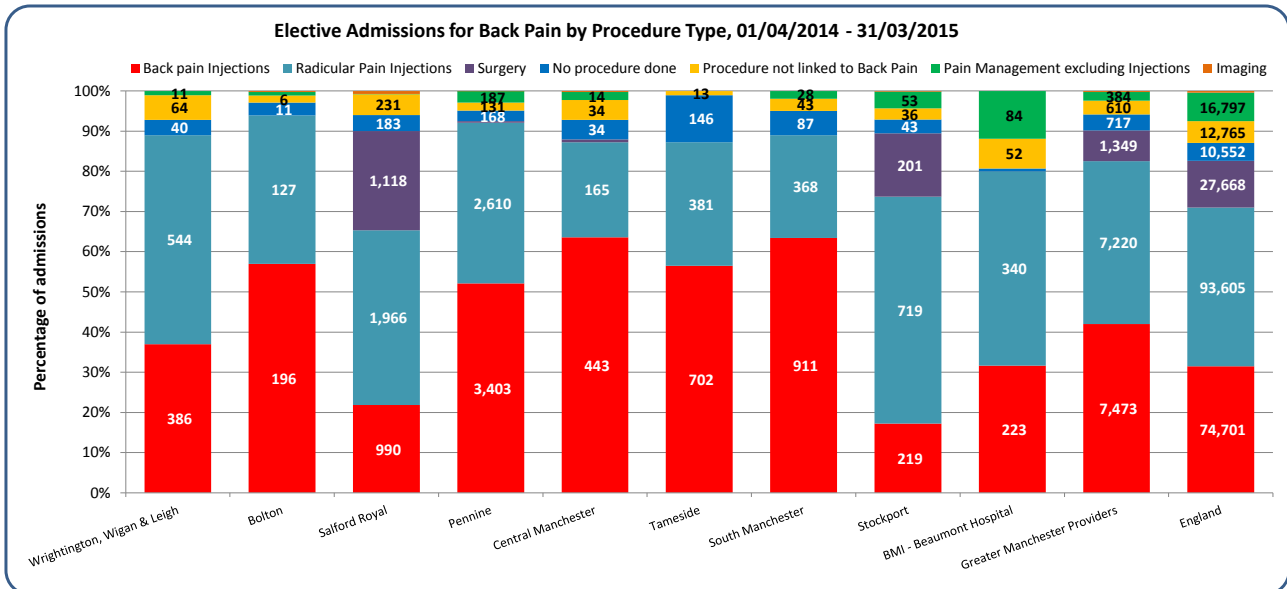
9. Elective hospital admissions for low back and radicular pain in people aged 16 years and over (April 2014 - March 2015)

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%

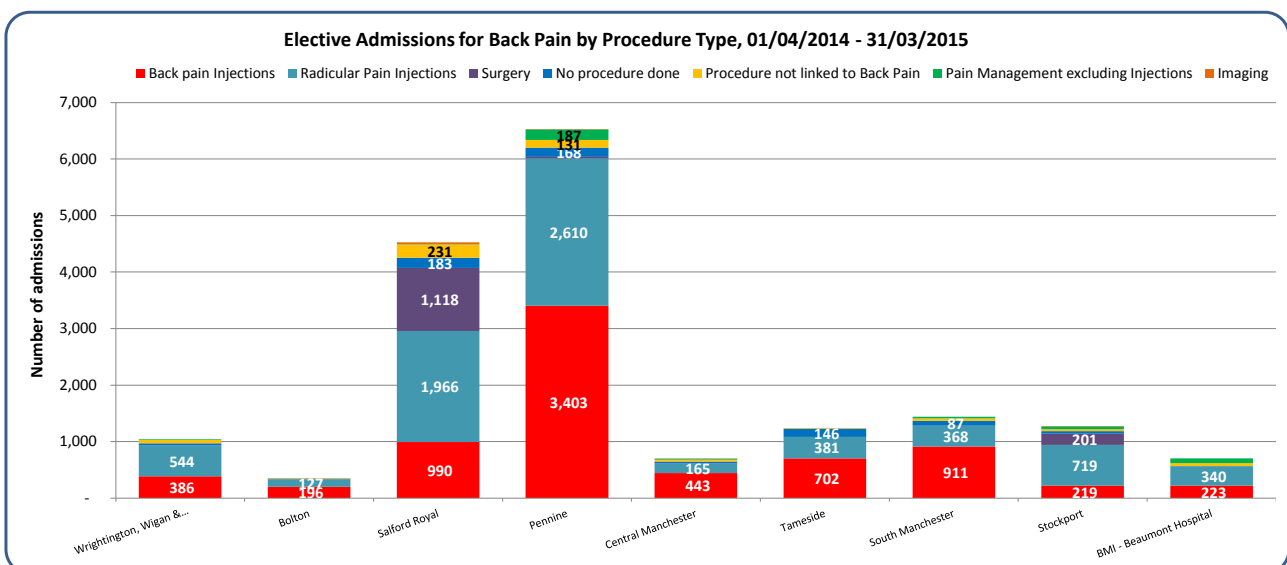
b. Number of elective admissions per hospital Trust, by procedure type (percentage of activity)

(Greater Manchester Providers only)



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

(Greater Manchester 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 (compared to 15-16% of all admission types - see previous sheet).

Greater Manchester providers overall do a higher proportion of admissions for injections compare to the England proportion 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).

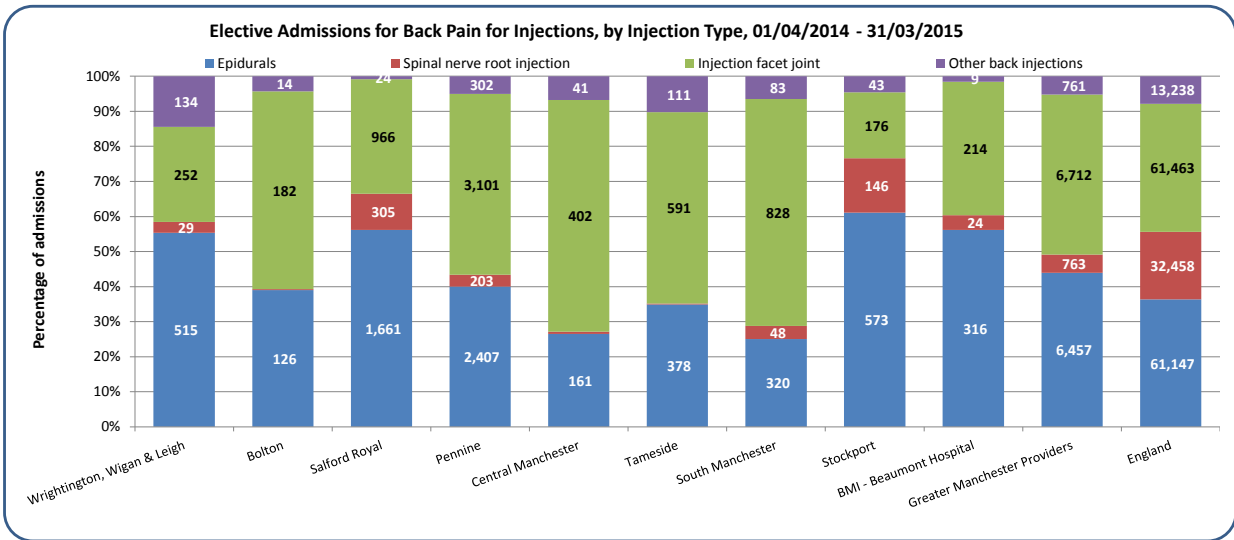
The data is shown in two ways, indicating both the proportion and amount of activity relating to each procedure.

Hospital Trust activity

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

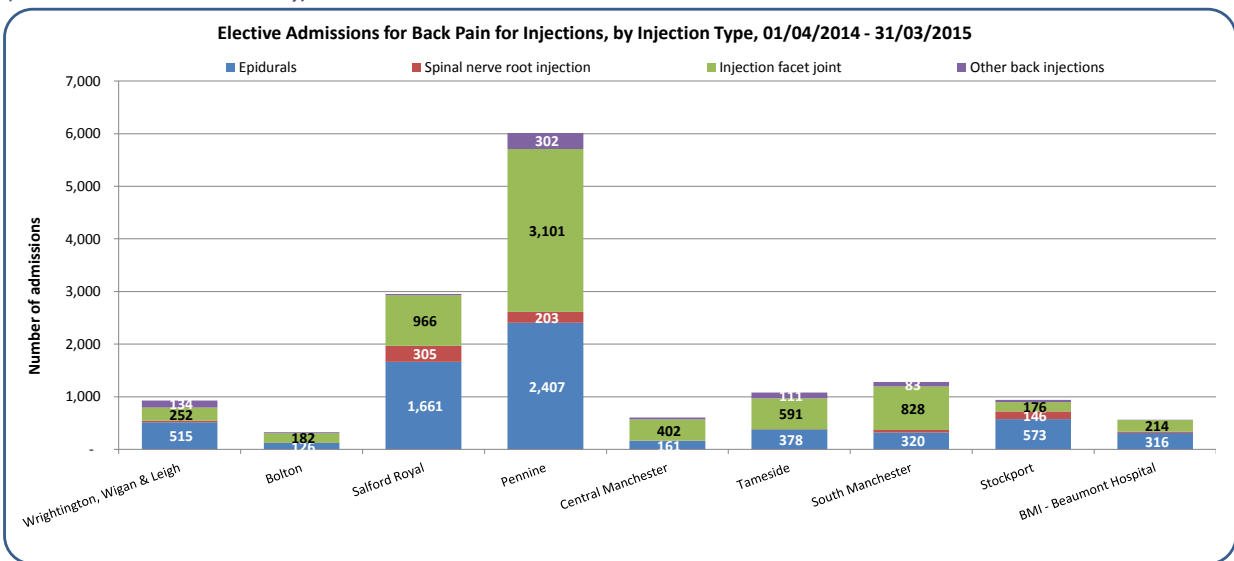
d. Number of elective admissions for injections per hospital Trust, by injection type (percentage of activity)

(Greater Manchester Providers only)

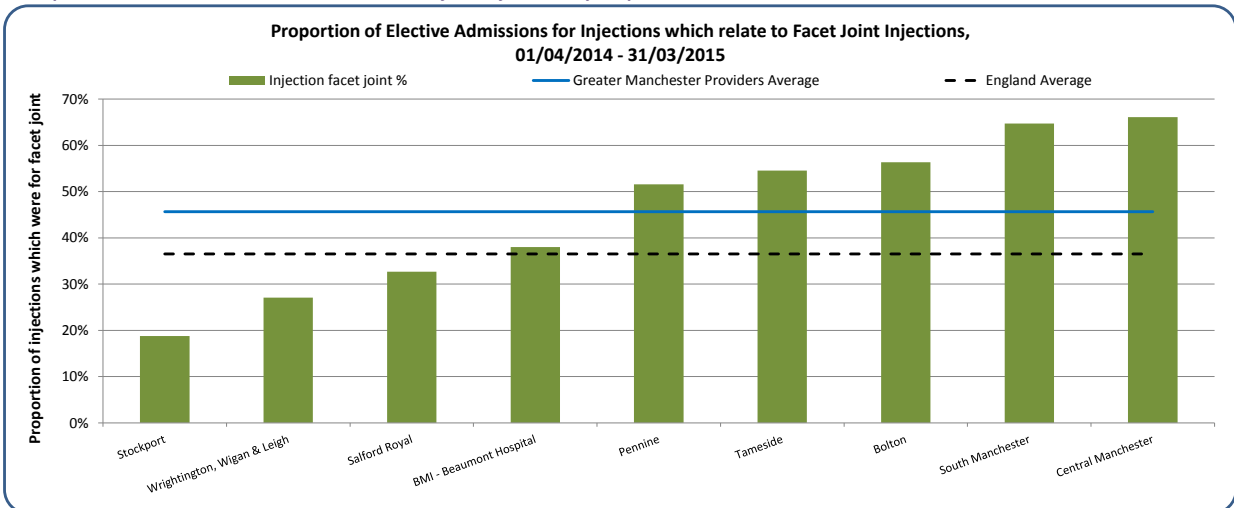


e. Number of elective admissions for injections per hospital Trust, by injection type (actual activity)

(Greater Manchester Providers only)



f. Proportion of elective admissions for lumbar facet joint injections, by hospital trust



What is the data telling us?

Epidurals and facet joint injections are those most frequently done within Greater Manchester, constituting 90% of injection activity compared to 73% across England as a whole. The data is shown in two ways, indicating both the proportion and amount of activity relating to each CCG.

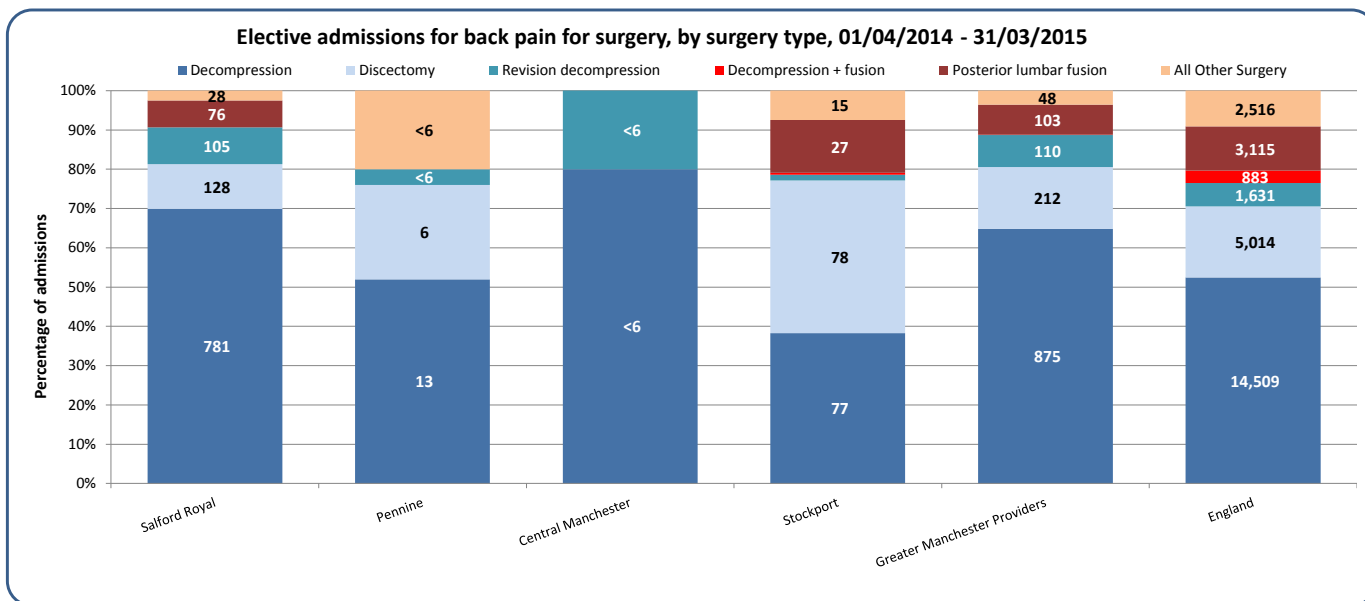
The proportion of facet joint injections done at Trust level ranges from 19% to 66% compared to the England figure of 37%.

Hospital Trust activity

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

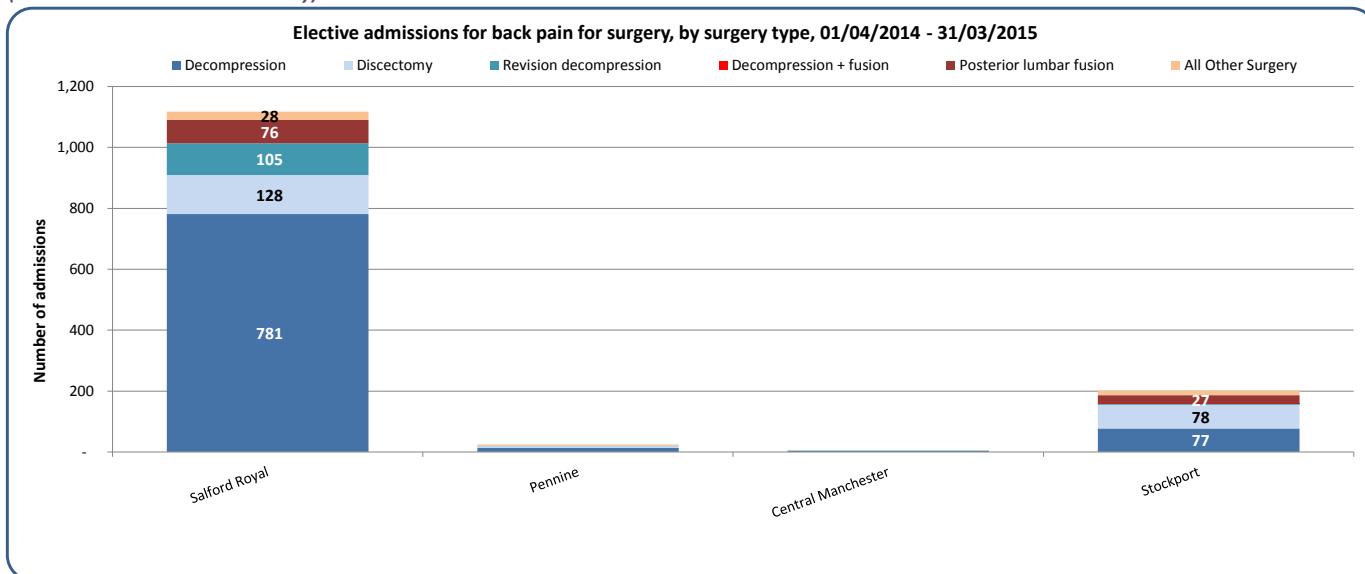
g. Number of elective admissions for surgery per hospital Trust, by surgery type (percentage of activity)

(Greater Manchester Providers only)



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

(Greater Manchester 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 Greater Manchester. The profile for the region overall demonstrates that there is a higher proportion of decompression surgery (including revision decompressions) and a lower proportion of spinal fusions compared to the England profile.

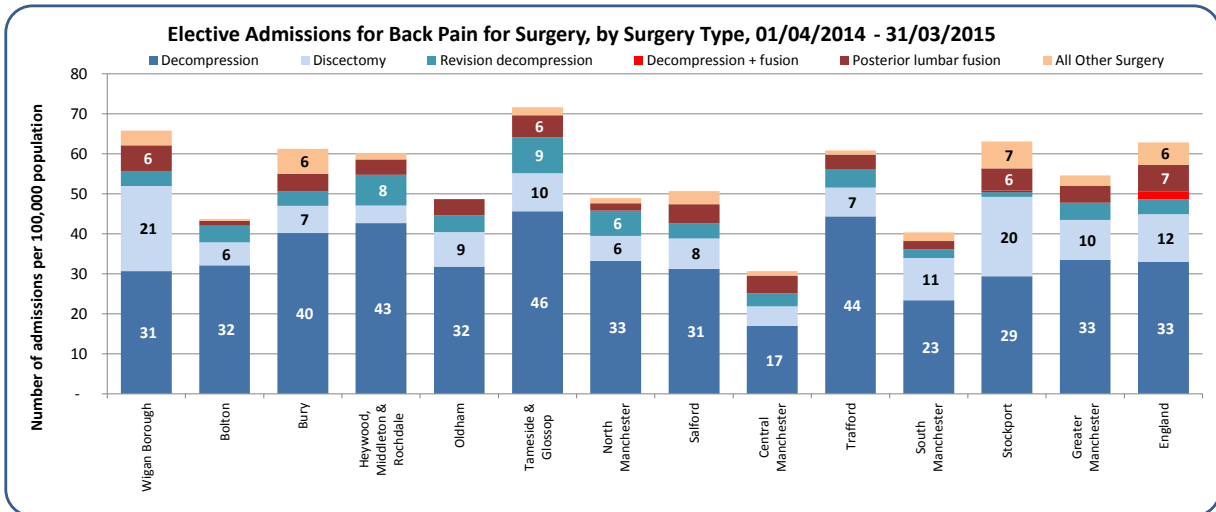
Decompression is the most common surgical procedure for back pain at Salford Royal Trust with 105 (12%) of these procedures being for revision surgery. Stockport Trust does equal proportion of decompression and discectomy surgery with fusions making up about 20% of their activity.

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

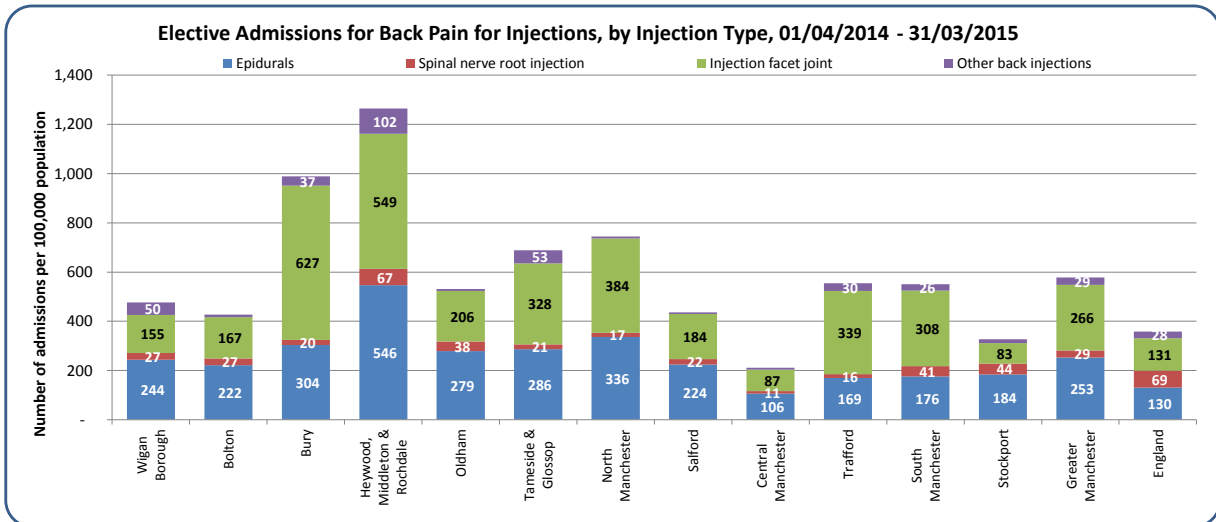
CCG activity by back pain procedure group

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

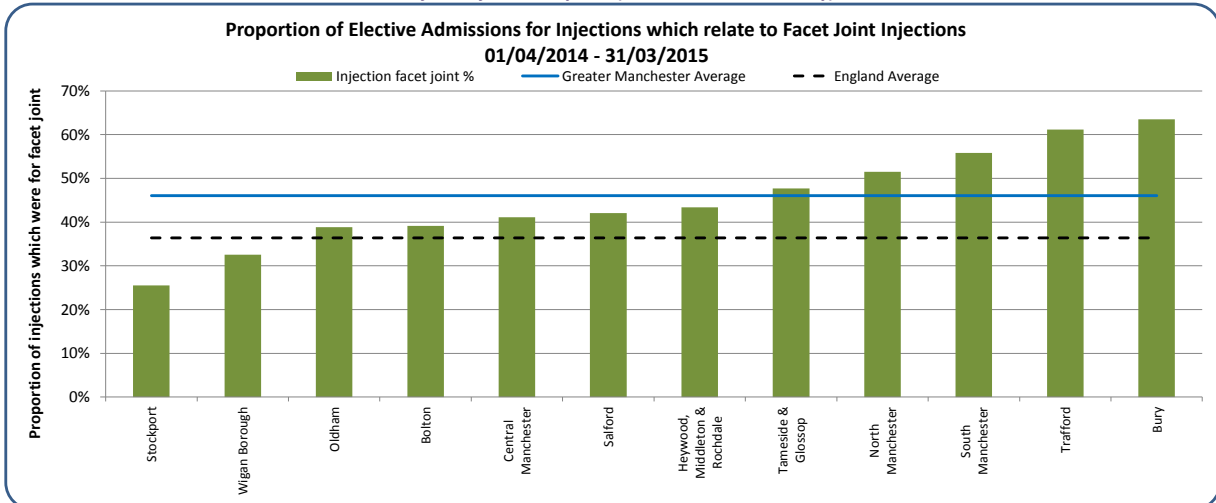
a. Number of elective admissions for surgery per CCG, by surgery type (Greater Manchester only)



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



c. Number of elective admissions for lumbar facet joint injections, by CCG (Greater Manchester only)



What is the data telling us?

Chart 10a shows the range in the activity rate per 100,000 relating specifically to elective admissions for surgery, by type of surgery, for the Greater Manchester CCGs, with chart 9b showing the same for injections.

Greater Manchester overall has lower rates of spinal surgery compared to the national rate per 100,000 population. There is wide variation in rates of surgery across the region with Tameside & Glossop CCG having the highest rate and Central Manchester CCG the lowest rate.

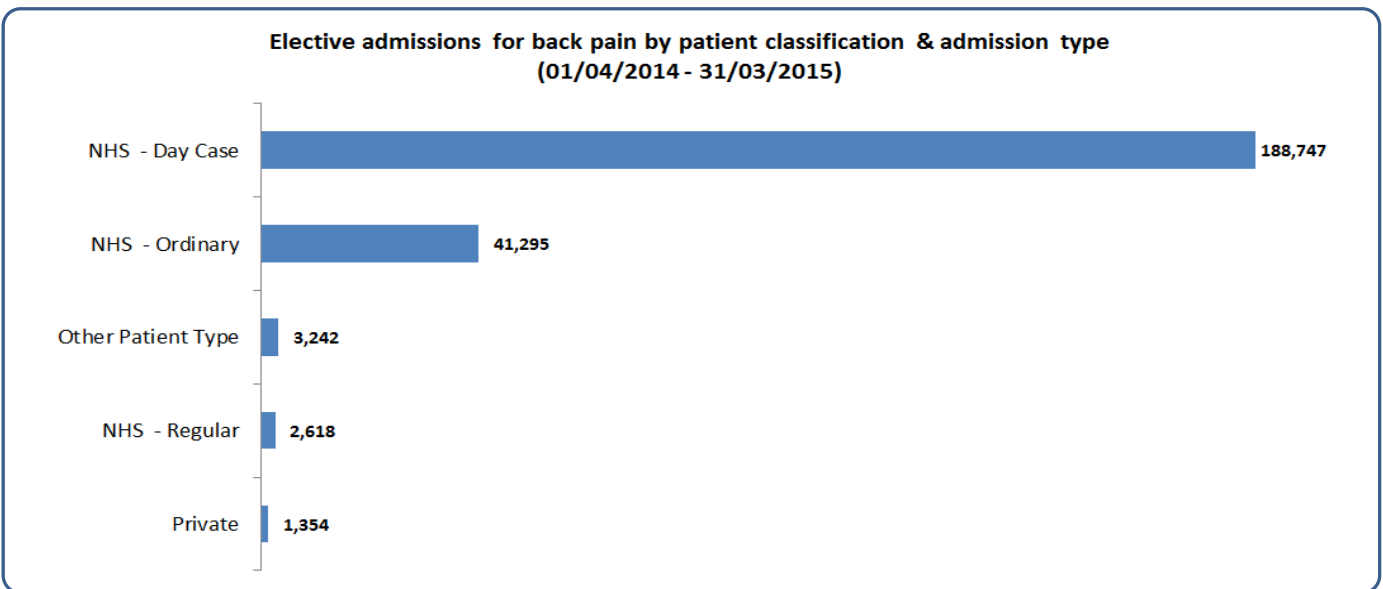
Greater Manchester overall has higher rates of injections compared to the national rate per 100,000 population. There is wide variation the region with Heywood, Middleton & Rochdale CCG having the highest rate and Central Manchester CCG the lowest rate.

Proportion of lumbar facet joint injections vary from 25% at Stockport CCG to 63% at Bury CCG.

Hospital Trust activity

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



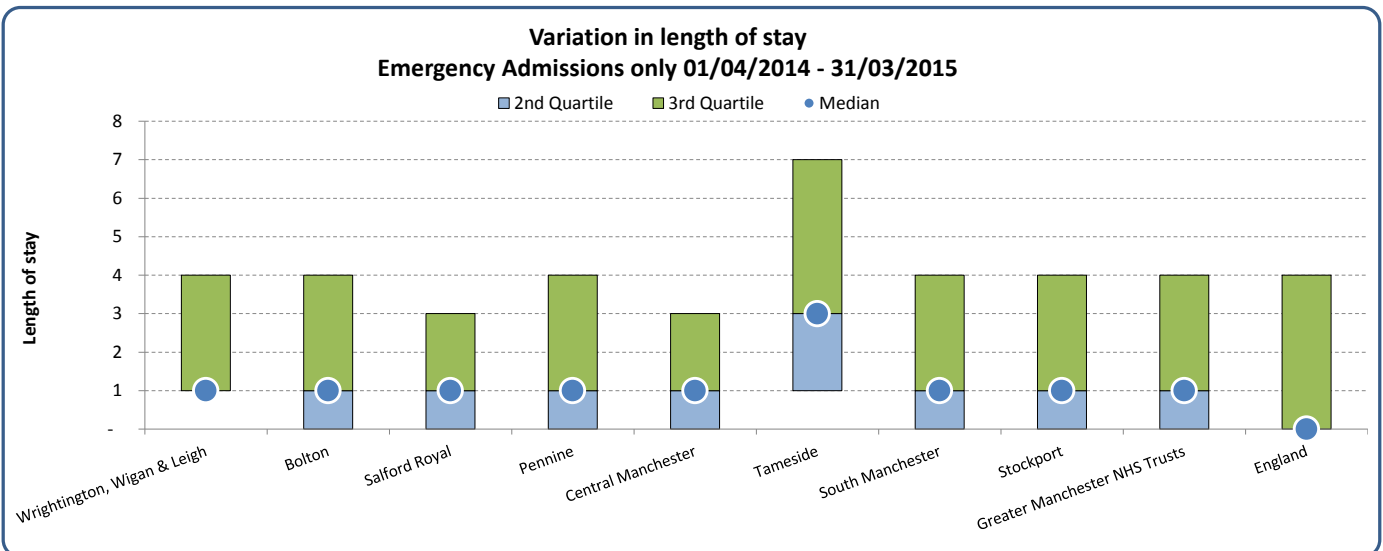
Other Patient Types are Amenity patients and Category II patients, and where the Administrative Category is unknown.

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

(Greater Manchester 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 Greater Manchester Trusts and shows that all Trusts have a higher median length of stay (ranging from 1 to 3 days), compared to the England rate 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 (Greater Manchester FTs only)

Provider Name	Elective	Emergency	Other	Total
Salford Royal	£ 8,494,749	£ 1,716,990	£ 7,696	£ 10,219,434
Pennine	£ 4,449,572	£ 826,512	£ 39,067	£ 5,315,151
Stockport	£ 1,663,766	£ 485,926	£ 29,062	£ 2,178,755
South Manchester	£ 890,128	£ 459,546	£ 4,581	£ 1,354,254
Tameside	£ 670,149	£ 262,084	£ -	£ 932,232
Central Manchester	£ 430,371	£ 367,806	£ 99,785	£ 897,962
Wrightington, Wigan & Leigh	£ 603,680	£ 244,266	£ 10,261	£ 858,207
Bolton	£ 208,365	£ 395,458	£ 9,179	£ 613,001
Total	£ 17,410,779	£ 4,758,588	£ 199,631	£ 22,368,997

b. Total Costs by Procedure Type (Greater Manchester FTs only)

Provider Name	Surgery	Radicular pain Injections	Back pain Injections	No procedure done	Procedure not linked to back pain	Imaging	Pain Management excluding Injections	Other Non-Surgical	Total
Salford Royal	£ 5,529,604	£ 1,417,305	£ 605,953	£ 646,873	£ 1,453,088	£ 558,080	£ 8,530	£ -	£ 10,219,434
Pennine	£ 100,267	£ 1,847,940	£ 2,274,821	£ 554,581	£ 149,100	£ 274,302	£ 114,140	£ -	£ 5,315,151
Stockport	£ 1,047,519	£ 496,983	£ 126,519	£ 317,220	£ 69,955	£ 88,114	£ 27,628	£ 4,817	£ 2,178,755
South Manchester	£ -	£ 272,762	£ 570,587	£ 341,178	£ 43,524	£ 108,536	£ 17,668	£ -	£ 1,354,254
Tameside	£ -	£ 248,585	£ 420,691	£ 122,893	£ 24,342	£ 115,721	£ -	£ -	£ 932,232
Central Manchester	£ 22,952	£ 111,841	£ 275,820	£ 364,047	£ 47,349	£ 63,766	£ 12,187	£ -	£ 897,962
Wrightington, Wigan & Leigh	£ -	£ 342,018	£ 221,802	£ 125,546	£ 58,561	£ 104,819	£ 5,461	£ -	£ 858,207
Bolton	£ -	£ 75,992	£ 112,113	£ 282,563	£ 25,986	£ 112,330	£ 4,018	£ -	£ 613,001
Total	£ 6,700,342	£ 4,813,425	£ 4,608,306	£ 2,754,902	£ 1,871,905	£ 1,425,668	£ 189,633	£ 4,817	£ 22,368,997

What is the data telling us?

Across all Greater Manchester NHS Trust providers in 2014/15 the total cost to commissioners for back and radicular pain admissions was almost £22.4 million, with 78% of the costs attributed to elective activity.

Activity at Salford Royal Trust accounts for 38% of the total spend for Greater Manchester providers.

The surgery procedures group accounts for almost 30% of the total cost of all procedures and it is notable that the cost of injections is higher at 42% of the total for Greater Manchester.

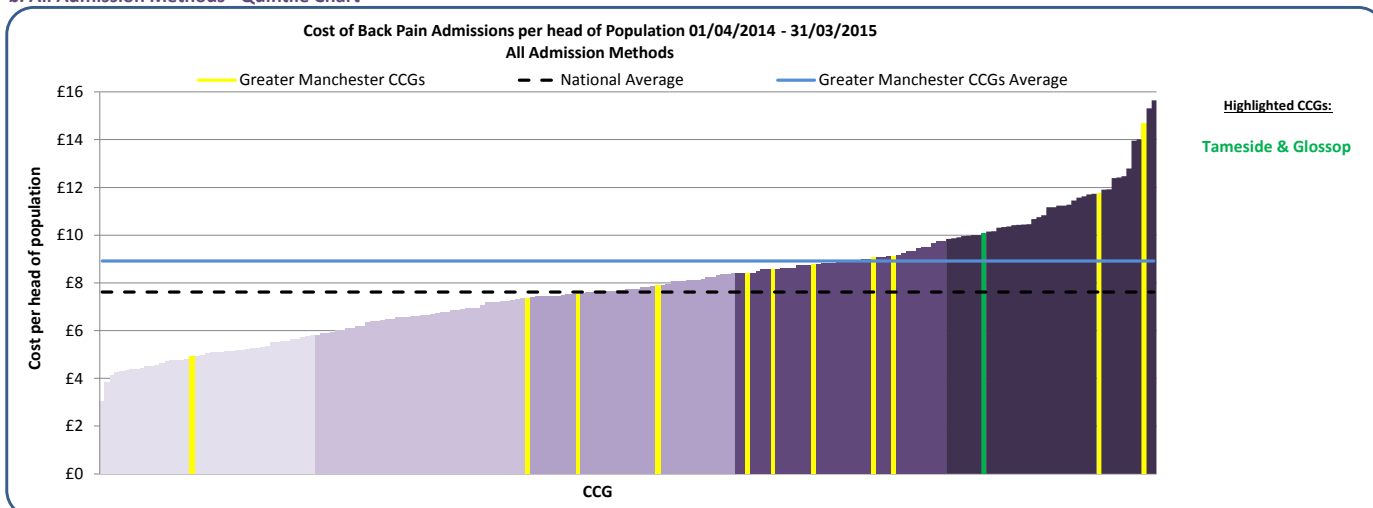
CCG Activity Total Costs

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

Responsible CCG Name	All Admissions		Elective Admissions		Emergency Admissions		Registered Population (Ages 15+)
	Cost per head of Population	Total Cost	Cost per head of Population	Total Cost	Cost per head of Population	Total Cost	
Central Manchester	£ 4.93	£ 901,489	£ 3.14	£ 573,933	£ 1.59	£ 291,487	182,831
Bolton	£ 7.34	£ 1,781,995	£ 5.42	£ 1,314,960	£ 1.89	£ 458,677	242,755
South Manchester	£ 7.53	£ 1,064,952	£ 5.97	£ 844,317	£ 1.54	£ 217,006	141,353
Stockport	£ 7.88	£ 1,986,708	£ 5.80	£ 1,462,070	£ 2.02	£ 509,479	252,025
Wigan Borough	£ 8.41	£ 2,249,222	£ 6.76	£ 1,807,548	£ 1.60	£ 428,532	267,419
Oldham	£ 8.58	£ 1,676,139	£ 6.15	£ 1,201,117	£ 2.27	£ 443,672	195,296
Salford	£ 8.77	£ 1,851,255	£ 5.83	£ 1,232,211	£ 2.83	£ 597,354	211,204
Trafford	£ 9.08	£ 1,761,102	£ 7.31	£ 1,417,721	£ 1.66	£ 322,088	194,052
North Manchester	£ 9.13	£ 1,456,443	£ 7.57	£ 1,207,285	£ 1.47	£ 234,225	159,570
Tameside & Glossop	£ 10.09	£ 2,014,351	£ 8.09	£ 1,613,707	£ 1.93	£ 384,264	199,567
Bury	£ 11.75	£ 1,901,423	£ 10.13	£ 1,638,608	£ 1.59	£ 256,868	161,789
Heywood, Middleton & Rochdale	£ 14.70	£ 2,685,710	£ 12.65	£ 2,310,965	£ 2.05	£ 373,916	182,676
Greater Manchester Total	£ 8.92	£ 21,330,789	£ 6.95	£ 16,624,442	£ 1.89	£ 4,517,570	2,390,537

b. All Admission Methods - Quintile Chart



c. Elective Admissions only, by Procedure Type

Responsible CCG Name	Surgery	Radicular pain Injections	Back pain Injections	No procedure done	Procedure not linked to back pain	Imaging	Pain Management excluding Injections	Other Non-Surgical	Total Cost
Heywood, Middleton & Rochdale	£ 466,608	£ 791,630	£ 847,519	£ 2,146	£ 154,621	£ 6,676	£ 41,765	£ -	£ 2,310,965
Wigan Borough	£ 762,312	£ 463,741	£ 320,753	£ 26,145	£ 185,525	£ 16,364	£ 30,429	£ 2,278	£ 1,807,548
Bury	£ 458,242	£ 377,254	£ 684,264	£ 1,757	£ 90,447	£ 2,504	£ 24,140	£ -	£ 1,638,608
Tameside & Glossop	£ 623,445	£ 408,589	£ 460,485	£ 20,751	£ 91,849	£ 1,727	£ 6,861	£ -	£ 1,613,707
Stockport	£ 700,613	£ 384,095	£ 151,684	£ 14,400	£ 188,112	£ 6,936	£ 13,822	£ 2,409	£ 1,462,070
Trafford	£ 508,648	£ 251,632	£ 434,891	£ 3,061	£ 176,497	£ 10,660	£ 32,332	£ -	£ 1,417,721
Bolton	£ 391,442	£ 398,340	£ 258,711	£ 36,820	£ 175,210	£ -	£ 54,437	£ -	£ 1,314,960
Salford	£ 471,943	£ 370,209	£ 249,672	£ 23,276	£ 113,187	£ 926	£ 2,999	£ -	£ 1,232,211
North Manchester	£ 323,057	£ 396,164	£ 405,667	£ 4,570	£ 54,788	£ 1,496	£ 21,541	£ -	£ 1,207,285
Oldham	£ 392,473	£ 430,998	£ 251,223	£ 981	£ 100,872	£ 2,421	£ 22,151	£ -	£ 1,201,117
South Manchester	£ 226,019	£ 222,455	£ 290,126	£ 14,390	£ 82,964	£ 2,469	£ 5,893	£ -	£ 844,317
Central Manchester	£ 246,062	£ 152,588	£ 107,762	£ 720	£ 63,607	£ 1,660	£ 1,534	£ -	£ 573,933

What is the data telling us?

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

Heywood, Middleton & Rochdale CCG has the highest spend per head of population regionally (£14.70) driven mainly by high costs for elective admissions which is a reflection having the highest elective admission rates nationally. In contrast, Central Manchester CCG has relatively low costs per head for both emergency and elective admissions (£4.93).

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 the spend but in Heywood, Middleton & Rochdale CCG almost 4 times the amount is spent on admissions for injections compared to what is spent on surgery.

14. Back & Radicular Pain Admissions Breakdown for the Greater Manchester Region

Highlighted Provider Data is included in this report

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

Code	Provider Name	Elective Admissions			Emergency Admissions	Other Admission Types	Total
		Surgery	Injections	Other			
RW6	PENNINE ACUTE HOSPITALS NHS TRUST	25	5,601	443	740	8	6,817
RM3	SALFORD ROYAL NHS FOUNDATION TRUST	847	2,537	360	1,001	<6	4,749
RM2	UNIVERSITY HOSPITAL OF SOUTH MANCHESTER NHS FOUNDATION TRUST	-	1,154	139	395	<6	1,691
RMP	TAMESIDE HOSPITAL NHS FOUNDATION TRUST	-	1,076	158	195	-	1,429
RWJ	STOCKPORT NHS FOUNDATION TRUST	139	654	87	342	15	1,237
RRF	WRIGHTINGTON, WIGAN AND LEIGH NHS FOUNDATION TRUST	-	867	108	213	<6	1,193
RW3	CENTRAL MANCHESTER UNIVERSITY HOSPITALS NHS FOUNDATION TRUST	<6	586	81	312	94	1,078
RMC	BOLTON NHS FOUNDATION TRUST	-	319	20	343	<6	685
NT404	BMI - THE BEAUMONT HOSPITAL	-	520	123	-	-	643
RET	THE WALTON CENTRE NHS FOUNDATION TRUST	112	33	138	<6	-	288
NT401	BMI - THE ALEXANDRA HOSPITAL	43	118	12	-	-	173
NT403	BMI - THE BEARDWOOD HOSPITAL	-	119	35	-	-	154
RWW	WARRINGTON AND HALTON HOSPITALS NHS FOUNDATION TRUST	13	59	9	16	-	97
RXN	LANCASHIRE TEACHING HOSPITALS NHS FOUNDATION TRUST	<6	34	16	<6	<6	55
NVC05	EUXTON HALL HOSPITAL	-	34	<6	-	-	37
NT420	BMI - THE HIGHFIELD HOSPITAL	11	7	<6	-	-	20
RBV	THE CHRISTIE NHS FOUNDATION TRUST	-	<6	<6	9	<6	17
NVC16	RENACRES HOSPITAL	<6	11	<6	-	-	14
RVY	SOUTHPORT AND ORMSKIRK HOSPITAL NHS TRUST	-	7	-	<6	<6	12
NT337	SPIRE LIVERPOOL HOSPITAL	-	9	<6	-	-	12
RRV	UNIVERSITY COLLEGE LONDON HOSPITALS NHS FOUNDATION TRUST	<6	-	<6	<6	-	8
RXL	BLACKPOOL TEACHING HOSPITALS NHS FOUNDATION TRUST	-	-	-	8	-	8
RTX	UNIVERSITY HOSPITALS OF MORECAMBE BAY NHS FOUNDATION TRUST	-	<6	-	6	-	7
NVC07	FULWOOD HALL HOSPITAL	<6	<6	<6	-	-	7
NVC12	OAKLANDS HOSPITAL	-	7	-	-	-	7
RJN	EAST CHESHIRE NHS TRUST	-	-	-	6	-	6
RQ6	ROYAL LIVERPOOL AND BROADGREEN UNIVERSITY HOSPITALS NHS TRUST	-	<6	-	<6	-	<6
RR8	LEEDS TEACHING HOSPITALS NHS TRUST	<6	-	<6	<6	-	<6
RXR	EAST LANCASHIRE HOSPITALS NHS TRUST	-	-	<6	<6	-	<6
RBN	ST HELENS AND KNOWSLEY HOSPITALS NHS TRUST	-	<6	-	<6	-	<6
RBT	MID CHESHIRE HOSPITALS NHS FOUNDATION TRUST	-	<6	-	<6	-	<6
RWY	CALDERDALE AND HUDDERSFIELD NHS FOUNDATION TRUST	-	<6	<6	<6	-	<6
RAN	ROYAL NATIONAL ORTHOPAEDIC HOSPITAL NHS TRUST	-	<6	<6	<6	-	<6
RBL	WIRRAL UNIVERSITY TEACHING HOSPITAL NHS FOUNDATION TRUST	-	<6	-	<6	-	<6
RJ1	GUY'S AND ST THOMAS' NHS FOUNDATION TRUST	-	<6	<6	-	-	<6
NT431	BMI - THE RUNNYMEDE HOSPITAL	-	-	<6	-	-	<6
NVC20	THE YORKSHIRE CLINIC	-	<6	<6	-	-	<6
RAL	ROYAL FREE LONDON NHS FOUNDATION TRUST	-	<6	-	-	-	<6
RBA	TAUNTON AND SOMERSET NHS FOUNDATION TRUST	<6	-	-	<6	-	<6
REM	AINTREE UNIVERSITY HOSPITAL NHS FOUNDATION TRUST	-	<6	-	-	-	<6
RHQ	SHEFFIELD TEACHING HOSPITALS NHS FOUNDATION TRUST	-	<6	<6	-	-	<6
RKB	UNIVERSITY HOSPITALS COVENTRY AND WARWICKSHIRE NHS TRUST	-	-	-	<6	-	<6
RTE	GLOUCESTERSHIRE HOSPITALS NHS FOUNDATION TRUST	-	<6	-	<6	-	<6
RVJ	NORTH BRISTOL NHS TRUST	<6	-	-	-	-	<6
RVW	NORTH TEES AND HARTLEPOOL NHS FOUNDATION TRUST	<6	-	-	<6	-	<6
RX1	NOTTINGHAM UNIVERSITY HOSPITALS NHS TRUST	-	-	<6	<6	-	<6
NT327	SPIRE MANCHESTER HOSPITAL	-	<6	<6	-	-	<6
NT497	BMI GISBURNE PARK HOSPITAL	<6	<6	-	-	-	<6
RC1	BEDFORD HOSPITAL NHS TRUST	-	-	-	<6	-	<6
RCD	HARROGATE AND DISTRICT NHS FOUNDATION TRUST	-	-	-	<6	-	<6
RD1	ROYAL UNITED HOSPITALS BATH NHS FOUNDATION TRUST	-	-	<6	-	-	<6
RD3	POOLE HOSPITAL NHS FOUNDATION TRUST	-	-	-	<6	-	<6
RDD	BASILDON AND THURROCK UNIVERSITY HOSPITALS NHS FOUNDATION TRUST	-	-	-	<6	-	<6
RDU	FRIMLEY HEALTH NHS FOUNDATION TRUST	-	-	-	<6	-	<6
REP	LIVERPOOL WOMEN'S NHS FOUNDATION TRUST	-	-	-	-	<6	<6
RFF	BARNSELY HOSPITAL NHS FOUNDATION TRUST	-	-	-	<6	-	<6
RFS	CHESTERFIELD ROYAL HOSPITAL NHS FOUNDATION TRUST	-	<6	-	-	-	<6
RGT	CAMBRIDGE UNIVERSITY HOSPITALS NHS FOUNDATION TRUST	<6	-	-	-	-	<6
RJ6	CROYDON HEALTH SERVICES NHS TRUST	-	-	-	<6	-	<6
RK5	SHERWOOD FOREST HOSPITALS NHS FOUNDATION TRUST	-	-	-	<6	-	<6
RK9	PLYMOUTH HOSPITALS NHS TRUST	-	-	-	<6	-	<6
RL1	THE ROBERT JONES AND AGNES HUNT ORTHOPAEDIC HOSPITAL NHS FOUNDATION TRUST	-	<6	-	-	-	<6
RM1	NORFOLK AND NORWICH UNIVERSITY HOSPITALS NHS FOUNDATION TRUST	-	-	-	<6	-	<6
RNA	THE DUDLEY GROUP NHS FOUNDATION TRUST	-	<6	-	-	-	<6
RTD	THE NEWCASTLE UPON TYNE HOSPITALS NHS FOUNDATION TRUST	-	-	-	<6	-	<6
RWA	HULL AND EAST YORKSHIRE HOSPITALS NHS TRUST	-	-	-	<6	-	<6
RXW	SHREWSBURY AND TELFORD HOSPITAL NHS TRUST	-	-	-	<6	-	<6
RYJ	IMPERIAL COLLEGE HEALTHCARE NHS TRUST	-	-	-	<6	-	<6
NEY01	PIONEER HEALTHCARE LTD - CLAREMONT HOSPITAL	<6	-	-	-	-	<6
NT339	SPIRE REGENCY HOSPITAL	-	-	<6	-	-	<6
NT348	SPIRE ELLAND HOSPITAL	-	<6	-	-	-	<6
NT422	BMI - THE LONDON INDEPENDENT HOSPITAL	-	-	<6	-	-	<6
NVG01	FAIRFIELD HOSPITAL	-	-	<6	-	-	<6
NYW04	ASPEN - CLAREMONT HOSPITAL	-	<6	-	-	-	<6
Total		1,208	13,785	1,767	3,635	139	20,534

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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	23/06/2016	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?	