

## North East Quality Observatory Service

# **Back Pain Report**

# South Gloucestershire

June 2016

# **South West Region**

Showing CCG boundaries and main providers



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# BetterKnowledgeBetterCareBetterOutcomes

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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 South West 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 South West Region are:

- North Bristol NHS Trust University Hospitals
- Bristol NHS Foundation Trust
- Royal United Hospitals Bath NHS Foundation Trust
- Taunton & Somerset NHS Foundation Trust
- Northern Devon Healthcare NHS Trust
- Royal Devon & Exeter NHS Foundation Trust
- South Devon Healthcare NHS Foundation Trust
- Plymouth Hospitals NHS Trust
- Royal Cornwall Hospitals NHS Trust

The Independent Sector Providers included for the South West Region are:

- Spire Bristol Hospital
- Circle Bath Hospital
- Shepton Mallet NHS Treatment Centre
- Nuffield Health, Taunton Hospital
- Nuffield Health, Exeter Hospital
- Nuffield Health, Plymouth Hospital

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

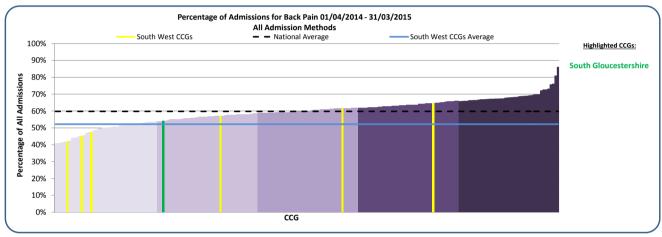
1. Hospital admissions for low back and radicular pain in people aged 16 years and over (April 2014 - March 2015), summary

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%
South West					
CCGs	Back	Radicular	Total	% Back	% Radicular
Elective	3,614	4,333	7,947	45.5%	54.5%
Emergency	2,066	861	2,927	70.6%	29.4%
Other	76	73	149	51.0%	49.0%
Total	5,756	5,267	11,023	52.2%	47.8%

#### 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)

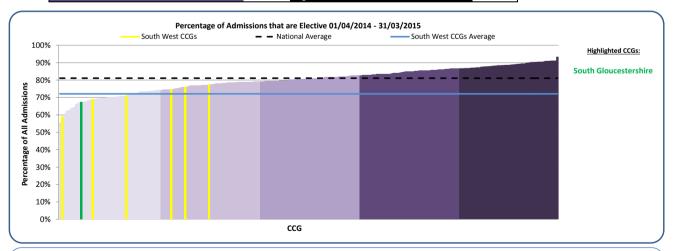
Somerset	42.0%	Bristol	57.2%
North Somerset	45.2%	Kernow	61.5%
Northern, Eastern & Western Devon	47.4%	South Devon & Torbay	64.7%
South Gloucestershire	54.0%		
South West CCGs	52.2%	England	59.8%



#### 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

Bristol	59.0%	North Somerset	74.8%
South Gloucestershire	67.5%	Northern, Eastern & Western Devon	76.1%
Somerset	69.2%	Kernow	77.4%
South Devon & Torbay	71.1%		
South West CCGs	72.1%	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 11,023 (3.8%) of these for patients registered within the South West 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 the South West this is variable with the proportion of admissions for back pain ranging from 42% to 65%.

Nationally, approximately 81% of back and radicular pain admissions are elective, with the South West having a smaller proportion (72%). At a CCG level in the South West, the proportion of elective admissions for these populations ranges from 59% in Bristol to 77% in Kernow.

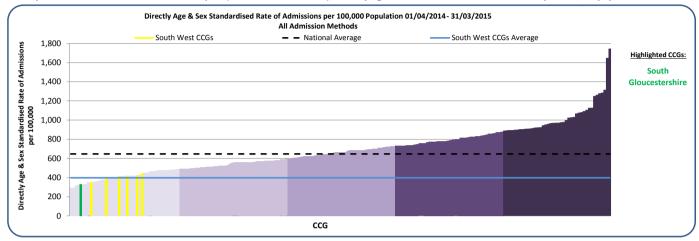
## **Clinical Commissioning Group (CCG) activity**

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

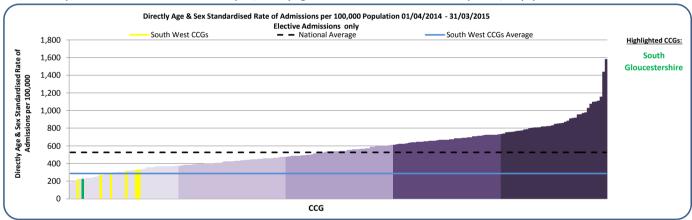
a. Hospital admissions for back pain by CCG (all admission methods), Directly Age & Sex Standardised Admission rate per 100,000 population

CCG name	All	Elective	Emergency	CCG name	All	Elective	Emergency
North Somerset	447.1	332.2	112.7	Somerset	386.8	269.4	113.4
Kernow	426.5	328.4	92.3	Bristol	353.9	219.8	130.9
South Devon & Torbay	417.7	294.0	114.7	South Gloucestershire	330.6	224.2	104.5
Northern, Eastern & Western Devon	413.1	314.7	92.0				
South West CCGs	397.0	287.0	104.9	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 Directly Age & Sex Standardised Rate of Admissions per 100,000 Population 01/04/2014 - 31/03/2015 Emergency Admissions only South West CCGs – – National Average South West CCGs Average 300 Highlighted CCGs: Directly Age & Sex Standardised Rate of Admissions per 100,000 South 250 Gloucestershire 200 150 100 50 0 CCG

#### What is the data telling us?

There is very little variation in elective admission rates across the CCGs within the South West with all 7 CCGs in the lowest quintile nationally.

The regional average for elective admissions (287 per 100,000) is almost half (55%) of the national average of 526per 100,000.

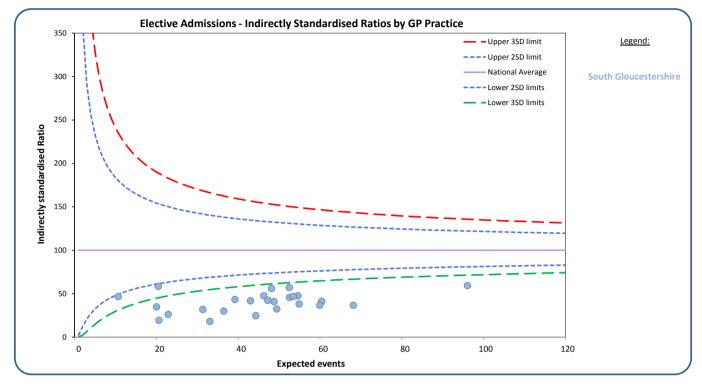
In contrast, for emergency admissions there is wider variation across the CCGs in the region, ranging from Northern, Eastern & Western Devon CCG in the second lowest quintile to Bristol CCG in the second highest quintile nationally.

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

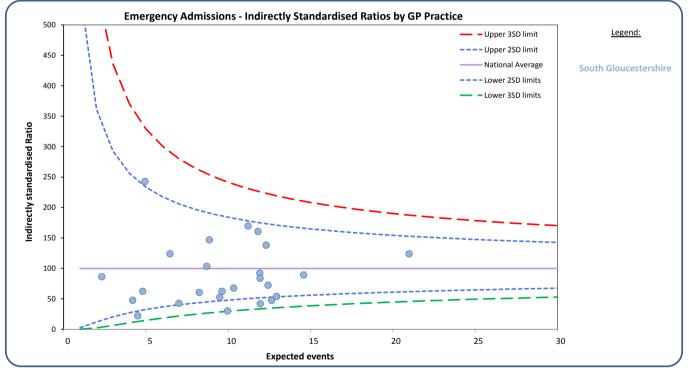
3. Hospital admissions for low back and radicular pain in people aged 16 years and over (April 2014 - March 2015)

Each symbol represents one GP practice

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



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 *South Gloucestershire*

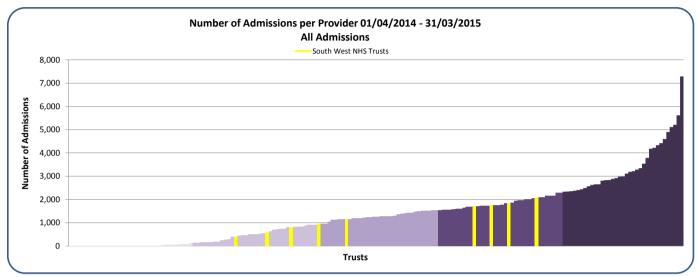
Indirectly Standardised Ratios that are coloured Red are higher than 3 standard deviations from the mean. Those coloured Yellow are between 2 and 3 higher standard deviations from the mean.

					Elective			Emergency	
Practice Code	Practice Name	CCG	Population 15+	Observed	Expected	Ratio	Observed	Expected	Ratio
L81014	Frome Valley Medical Centre	12A	12,183	25	68.14	36.69	13	14.58	89.18
L81018	Thornbury Health Centre - Burney	12A	7,855	22	46.25	47.56	<6	9.49	52.69
L81019	Concord Medical Centre	12A	11,378	21	54.93	38.23	11	11.91	92.35
L81024	Courtside Surgery	12A	11,643	25	60.44	41.36	7	12.93	54.12
L81026	Christchurch Family Medical Centre	12A	10,169	30	52.51	57.14	<6	11.94	41.86
L81028	Northville Family Practice	12A	4,519	12	20.50	58.52	12	4.94	242.90
L81029	Three Shires Medical Practice	12A	7,631	18	43.01	41.85	13	8.85	146.81
L81036	Coniston Medical Practice	12A	8,037	17	39.22	43.35	9	8.70	103.48
L81042	Kennedy Way Surgery	12A	9,434	20	47.24	42.34	<6	9.96	30.12
L81046	Leap Valley Medical Centre	12A	8,505	27	48.13	56.10	7	10.33	67.73
L81047	West Walk Surgery	12A	10,966	22	59.96	36.69	6	12.63	47.50
L81050	Close Farm Surgery	12A	6,055	10	31.34	31.90	8	6.46	123.90
L81052	The Willow Surgery	12A	9,885	24	52.53	45.69	19	11.81	160.87
L81055	Orchard Medical Centre	12A	10,967	26	54.61	47.61	17	12.30	138.20
L81063	Kingswood Health Centre	12A	9,809	20	48.78	41.00	19	11.20	169.60
L81079	Hanham Health	12A	17,766	57	96.04	59.35	26	20.99	123.85
L81103	St Mary Street Surgery	12A	5,853	6	33.09	18.13	<6	7.01	42.82
L81106	Thornbury Health Centre - Male	12A	4,160	6	22.93	26.16	<6	4.80	62.45
L81117	Pilning Surgery	12A	3,759	7	20.05	34.91	<6	4.20	47.67
L81118	Stoke Gifford Medical Centre	12A	11,633	25	53.45	46.77	9	12.42	72.48
L81127	Almondsbury Surgery	12A	3,870	<6	20.64	19.38	<6	4.50	22.22
L81130	Cadbury Heath Healthcare	12A	9,014	11	44.33	24.81	6	9.62	62.35
L81632	Emersons Green Medical Centre	12A	8,026	11	36.48	30.15	<6	8.24	60.68
L81642	Wellington Road Surgery	12A	1,995	<6	10.71	46.67	<6	2.32	86.28
L81649	Bradley Stoke Surgery	12A	12,177	16	49.42	32.38	10	11.94	83.77

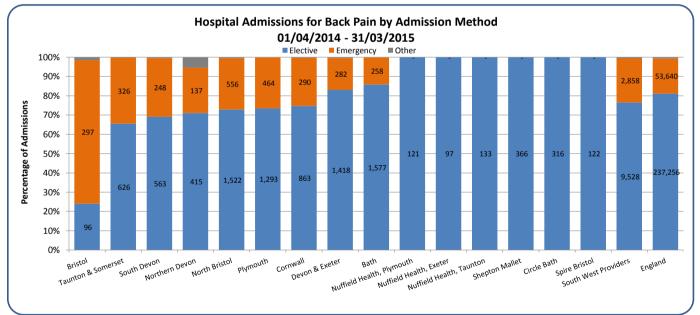
5. Hospital admissions for low back and radicular pain in people aged 16 years and over (April 2014 - March 2015)

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





b. Number of admissions per hospital Trust, by admission method (South West 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 hospital Trust level. Activity for the 13 NHS Trusts is to some degree proportional to the size of the Trust and is spread across the quintile chart.

The proportion of hospital activity for back pain which is classed as elective care for the South West is slightly lower than the England proportion. However at NHS Trust level the proportion varies between 24% at Bristol to 86% at Bath. All NHS activity at the independent 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 (South West Providers only)

	Pain	T	Calical Company	later and see 1			
	Management &	Trauma &	Spinal Surgery	Interventional			
Provider Name	Anaesthetics	Orthopaedics	Service	Radiology	Neurosurgery	Other Functions	Total
North Bristol	664	233	282	-	335	8	1,522
Bristol	86	-	-	-	-	10	96
Bath	1,383	134	<6	-	-	55	1,572
Taunton & Somerset	129	494	-	-	-	<6	623
Northern Devon	181	233	-	-	-	<6	414
Devon & Exeter	527	880	-	<6	-	10	1,417
South Devon	544	-	-	11	-	8	563
Plymouth	479	<6	-	-	796	17	1,292
Cornwall	836	<6	-	-	-	26	862
Spire Bristol	-	122	-	-	-	-	122
Circle Bath	217	99	-	-	-	-	316
Shepton Mallet	364	<6	-	-	-	-	364
Nuffield Health, Taunton	-	31	102	-	-	-	133
Nuffield Health, Exeter	-	-	97	-	-	-	97
Nuffield Health, Plymouth	-	12	107	-	<6	-	119
Total	5,410	2,238	588	11	1,131	134	9,512

## 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?

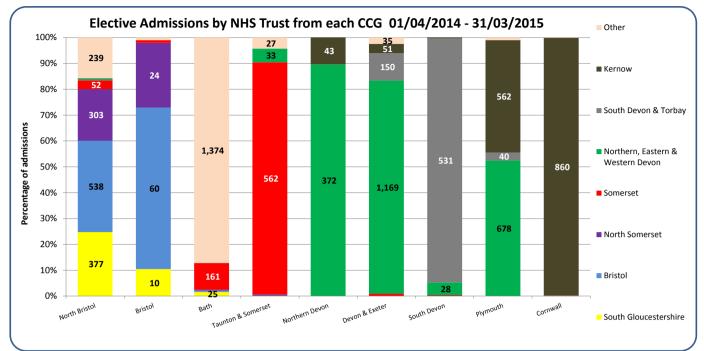
For elective activity the treatment specialty code indicated within the hospital data varies by hospital trust. Overall the most common specialties are Trauma and Orthopaedics and Pain Management/Anaesthetics. However for the Plymouth Trust approximately 62% of activity is recorded against the Neurosurgery code. It is notable that for Bath Trust 88% of the activity is recorded against the Pain Management/Anaesthetics code.

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.

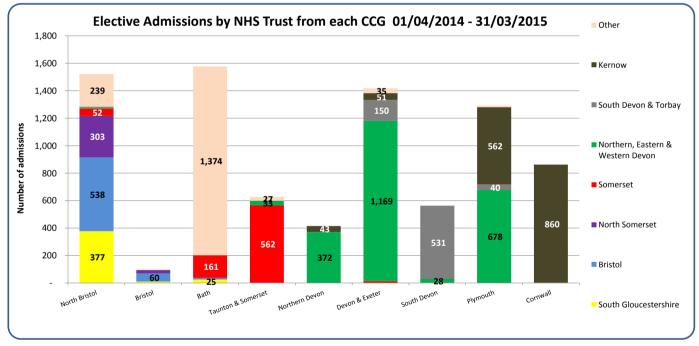
# Hospital Trust activity from CCGs

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?

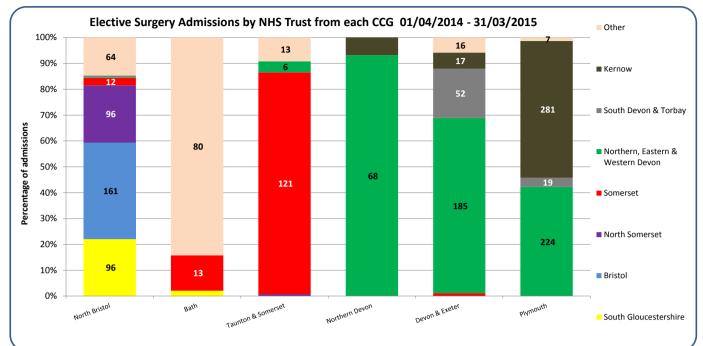
There is variation between hospital trusts in terms of the number of patients from each of the CCGs that are admitted for back and radicular pain.

North Bristol 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 where they are located.

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

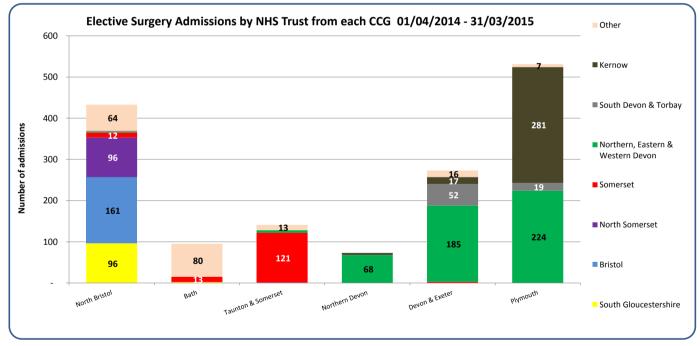
# Hospital Trust activity from CCGs

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



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?

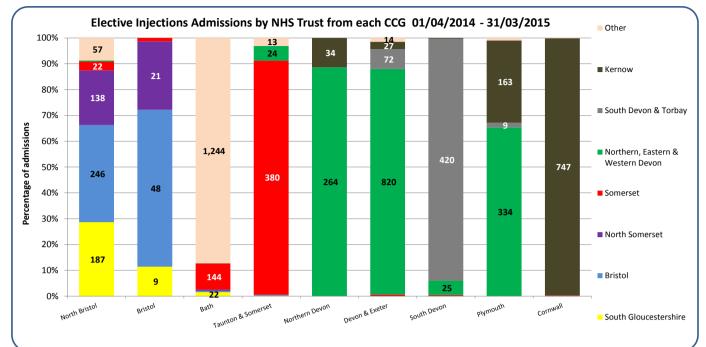
There is variation between hospital trusts in terms of the number of patients from each of the CCGs that are admitted for surgery for back and radicular pain. In the South West, North Bristol and Plymouth do the highest volume of spinal surgery.

North Bristol 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 where they are located.

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

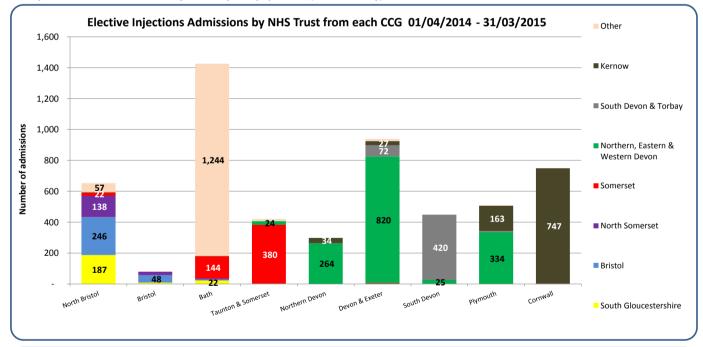
# Hospital Trust activity from CCGs

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?

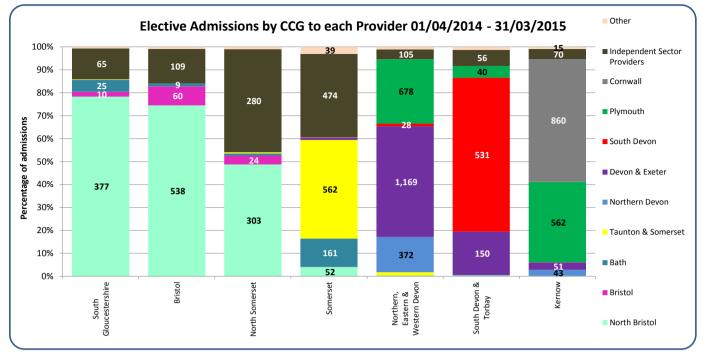
There is variation between hospital trusts in terms of the number of patients from each of the CCGs that are admitted for injections for back and radicular pain. Bath and Devon & Exeter have the highest volume of activity for injections.

North Bristol 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 where they are located.

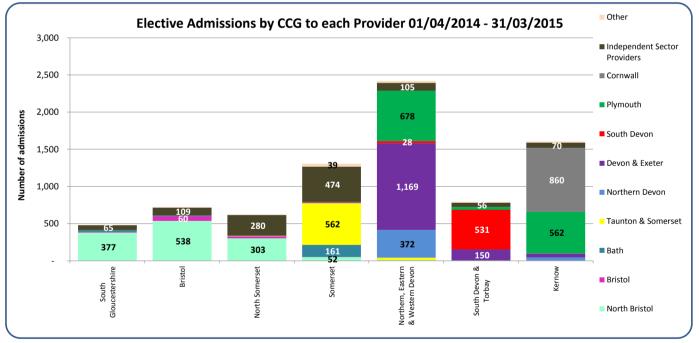
The data is shown in two ways, indicating both the proportion and number of admissions relating to each CCG.

# 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 hospital trusts to which their patients are admitted.

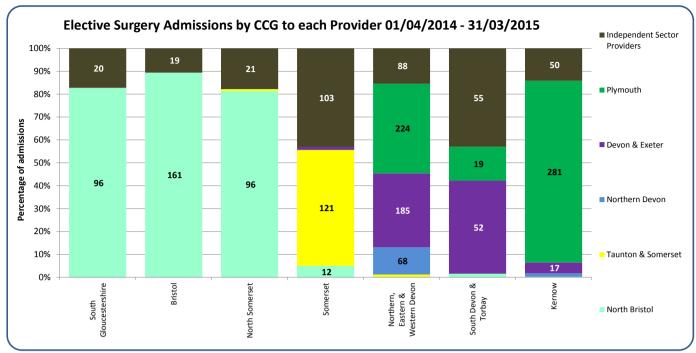
Activity is highest for Northern, Eastern and Western Devon CCG. Patients were admitted to at least three acute hospital trusts as well as independent sector providers compared to South Gloucestershire CCG which almost solely used the north Bristol Trust.

Bristol, North Somerset and Somerset CCGs are the highest users of Independent Sector activity in the South West.

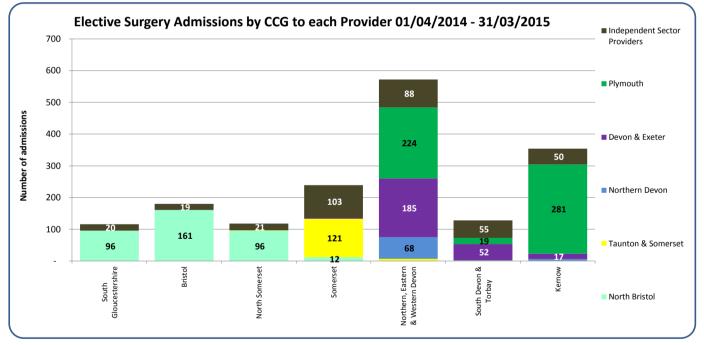
The data is shown in two ways, indicating both the proportion and amount of activity relating to each provider.

# 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 spinal surgery.

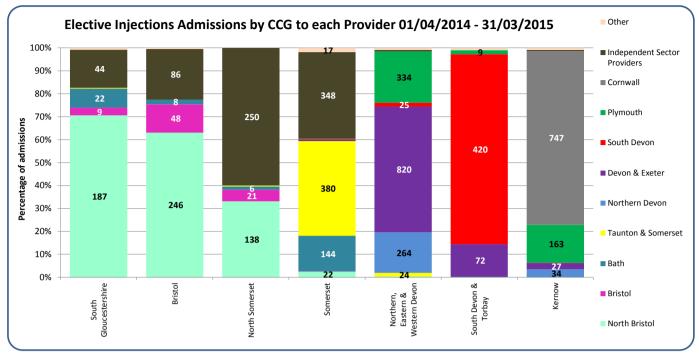
Activity is highest for Northern, Eastern and Western Devon CCG. Patients were admitted to at least three acute hospital trusts as well as independent sector providers compared to South Gloucestershire CCG which almost solely used the north Bristol Trust.

Somerset CCGs is the highest users of Independent Sector activity in the South West.

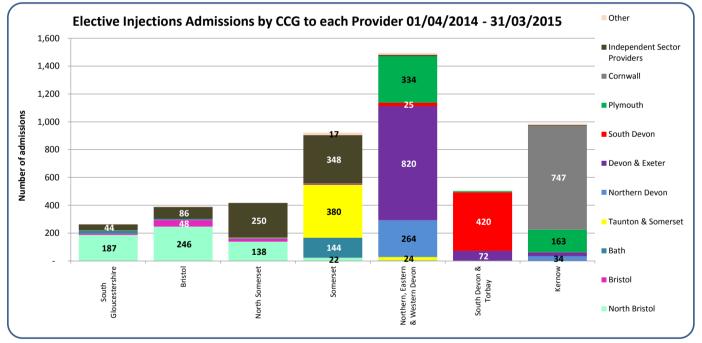
The data is shown in two ways, indicating both the proportion and amount of activity relating to each provider.

# 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) 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.

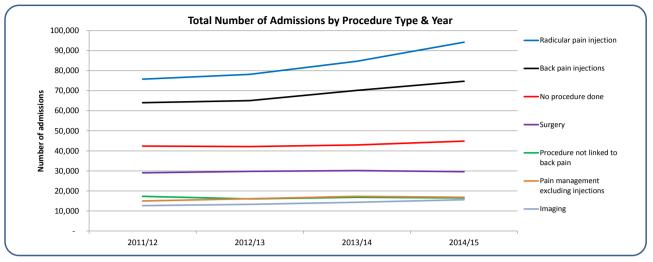
Activity is highest for Northern, Eastern and Western Devon CCG. Patients were admitted to at least three acute hospital trusts as compared to South Gloucestershire CCG which almost solely used the North Bristol Trust.

Bristol, North Somerset and Somerset CCGs are the highest users of Independent Sector activity in the South West for injections.

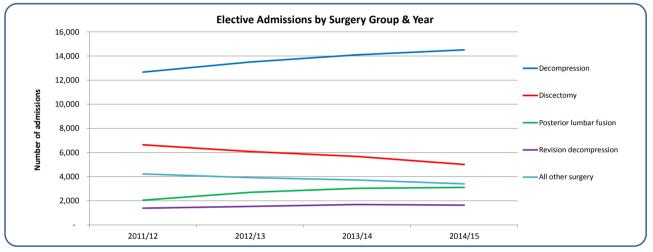
The data is shown in two ways, indicating both the proportion and amount of activity relating to each preovider.

## Hospital Trust activity (national level)

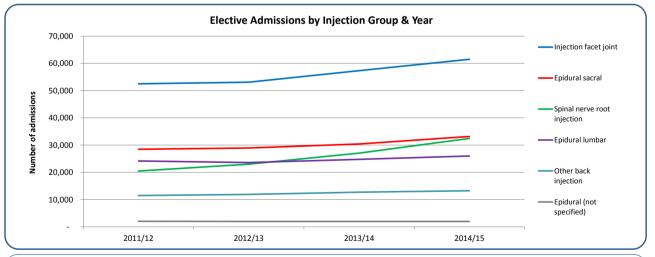
8. Hospital admissions for low back and radicular pain in people aged 16 years and over (1st April 2011 - 31st March 2015) a. Hospital admissions by procedure type over time (all admission types)



#### b. Elective hospital admissions by surgery procedure type over time







#### 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.

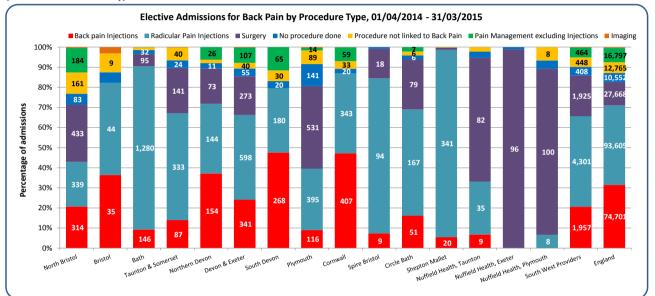
The main procedure type relating to elective admissions are for back and radicular pain injections which has increased from a combined total of just under 140,000 to 170,000 episodes over the four year period. This is in stark contrast to number of admissions related to surgery which has remained relatively 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.

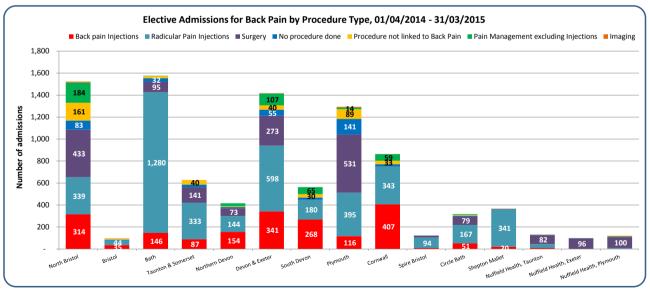
9. Elective hospital admissions for low back and radicular pain in people aged 16 years and over (April 2014 - March 2015) a. Elective hospital admissions by procedure type (national level including all providers)

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	31.59
Surgery	3,925	23,743	27,668	11.79
Pain Management excluding Injections	13,150	3,647	16,797	7.19
Procedure not linked to Back Pain	8,197	4,568	12,765	5.49
No procedure done	6,060	4,492	10,552	4.49
Imaging	712	373	1,085	0.5%
Other Non-Surgical	53	30	83	0.0%
Total	134,448	102,808	237,256	1009

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



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



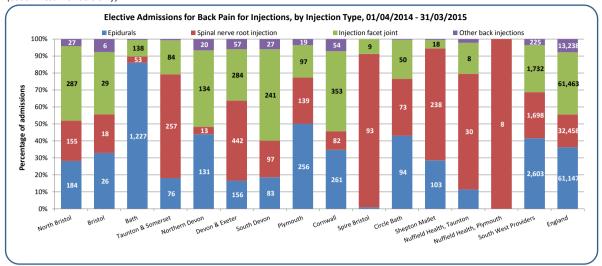
## What is the data telling us?

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 Plymouth Trust.

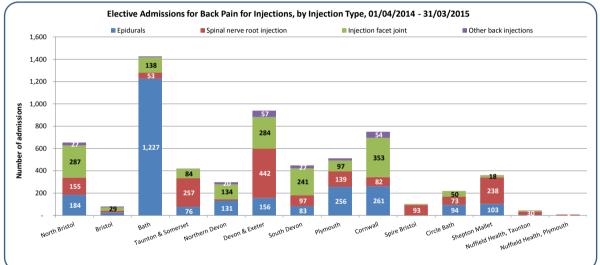
Seven of the South West providers have a higher proportion of elective activity for injections than the England rate (approx. 70%) and it is possible that the variation is due to differences in the point of delivery of care across hospital Trusts (for example it is possible that activity may also take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

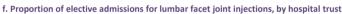
The data is shown in two ways, indicating both the proportion and amount of activity relating to each procedure.

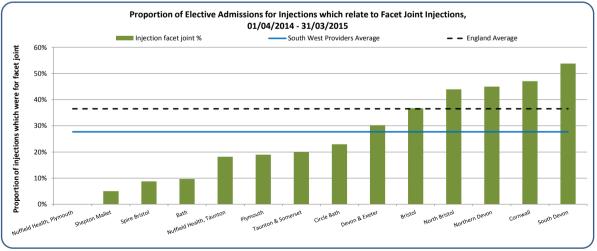
9. Elective hospital admissions for low back and radicular pain in people aged 16 years and over (April 2014 - March 2015) d. Number of elective admissions for injections per hospital Trust, by injection type (percentage of activity) (South West Providers only)



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





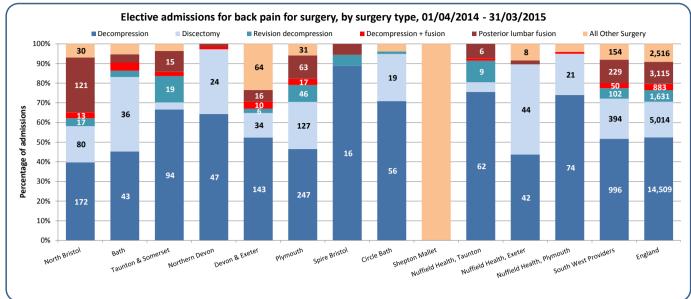


#### What is the data telling us?

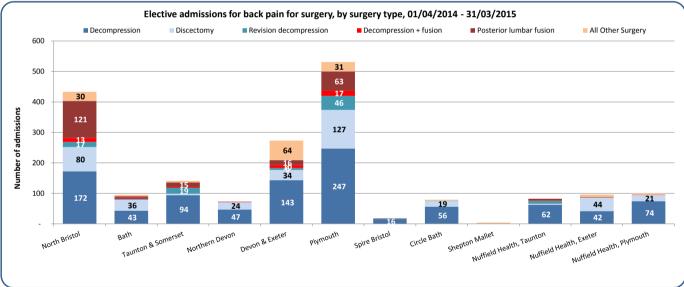
Epidurals are those most frequently done within the South West, constituting almost 42% of injection activity which is higher than the England proportion (36%). Compared to national data, South West providers overall do slightly higher rates of spinal nerve injections (27% vs. 19% nationally) and slightly lower rates of lumbar facet joint injections (28% vs. 37% nationally). The data is shown in two ways, indicating both the proportion of overall activity and number of episodes for each Provider.

Bath Trust does a markedly higher number of epidurals compared to all of the other providers. The proportion of facet joint injections done at Trust level ranges from 5% (Shepton Mallet) to 54% (South Devon) 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) (South West Providers only)



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



#### What is the data telling us?

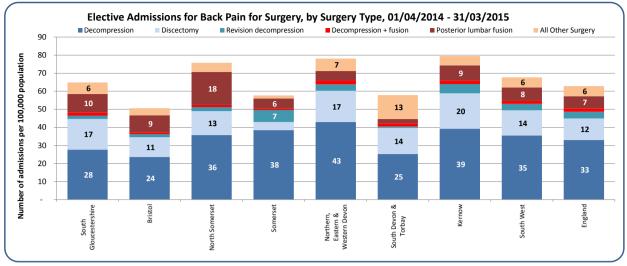
The charts above show the range in activity relating specifically to elective admissions for surgery, by type of surgery, for the South West providers. Although the profile for the South West overall is relatively similar to the England profile, there are wide variations at provider level.

Decompression is the most common surgical procedure for back pain at all providers but there are notably higher numbers of spinal fusions at North Bristol compared to the other South West providers.

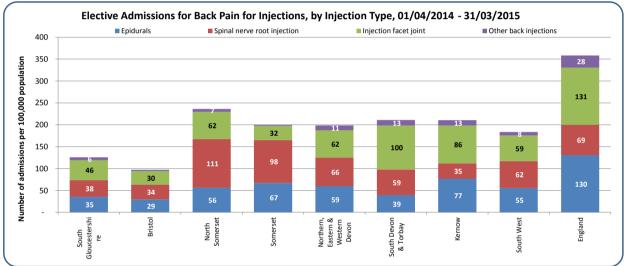
The data is shown in two ways, indicating both the proportion and amount of activity relating to each surgery type.

## CCG activity by back pain procedure group

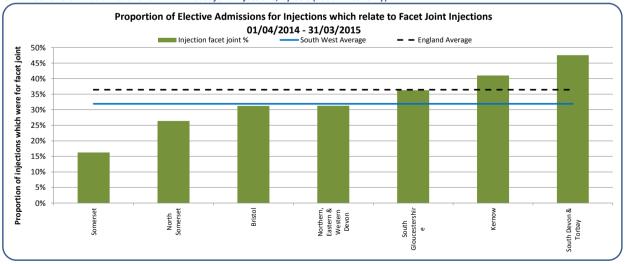
**10.** Elective hospital admissions for low back and radicular pain in people aged 16 years and over (April 2014 - March 2015) a. Number of elective admissions for surgery per CCG, by surgery type (South West only)



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



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

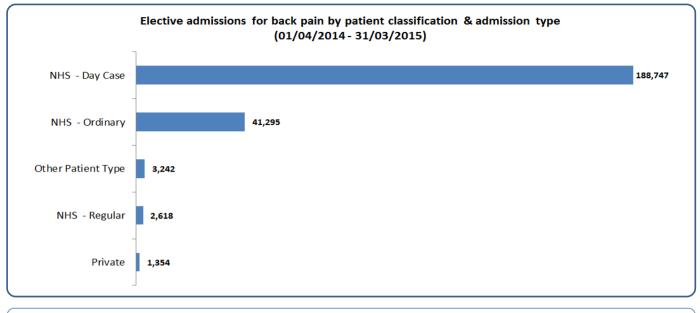


#### What is the data telling us?

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

North Somerset CCG have a notably higher rate of posterior lumbar fusions compared to the England rates (18 vs. 7 per 100,000) and most CCGs have consistently lower rates for all types of injections compared to England rates. The only exceptions are Somerset and North Somerset rates of spinal nerve root injections which are higher than national rates (98 & 111 vs. 69 per 100,000).

**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

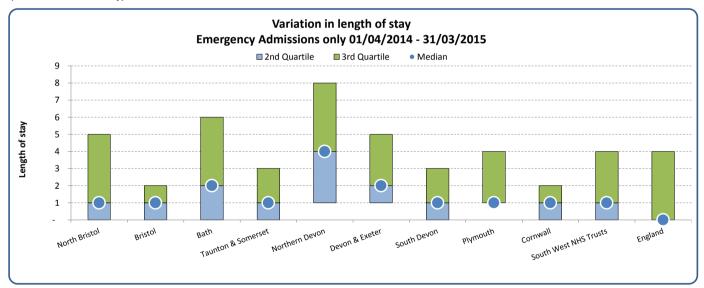


Other Patient Types are Amenity patients and Category II patients, and where the Administrative Category is unknown.

## 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 (South West 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 South West Trusts and shows that all Trusts have a higher median length of stay (ranging from 1 to 4 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 (South West FTs only)

Provider Name	Ele	ective	Em	ergency	Oth	ner	Tot	tal
North Bristol	£	4,326,634	£	1,153,461	£	55,832	£	5,535,926
Plymouth	£	3,197,415	£	716,477	£	10,718	£	3,924,610
Devon & Exeter	£	2,372,485	£	462,171	£	11,569	£	2,846,225
Taunton & Somerset	£	1,064,867	£	414,850	£	9,767	£	1,489,484
Northern Devon	£	491,491	£	270,181	£	146,555	£	908,228
Bath	£	496,774	£	366,399	£	943	£	864,117
Cornwall	£	517,087	£	258,666	£	22,882	£	798,634
South Devon	£	312,058	£	256,969	£	4,319	£	573,346
Bristol	£	65,166	£	313,237	£	13,750	£	392,153
Total	£	12,843,978	£	4,212,409	£	276,335	£	17,332,722

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

													Pain					
										cedure not			Management					
			Radi	icular pain	Bac	k pain	No procedure		linked to back				excluding		Other Non-			
Provider Name	Surg	gery	Injeo	ctions	Inje	ctions	done		pain		Imaging		Injections		Surgical		Tot	al
North Bristol	£	3,141,899	£	256,323	£	205,938	£	391,748	£	1,117,416	£	154,405	£	268,197	£	-	£	5,535,926
Plymouth	£	2,695,621	£	247,257	£	71,067	£	364,324	£	350,423	£	175,668	£	20,248	£	-	£	3,924,610
Devon & Exeter	£	1,510,778	£	375,682	£	198,315	£	245,427	£	300,192	£	114,608	£	101,222	£	-	£	2,846,225
Taunton & Somerset	£	671,338	£	233,074	£	57,268	£	194,876	£	201,780	£	131,147	£	-	£	-	£	1,489,484
Northern Devon	£	297,512	£	90,979	£	81,050	£	315,010	£	37,412	£	71,572	£	14,693	£	-	£	908,228
Bath	£	462,733	£	55,197	£	5,636	£	184,481	£	51,160	£	101,244	£	1,204	£	2,462	£	864,117
Cornwall	£	-	£	205,757	£	222,326	£	229,733	£	38,409	£	36,663	£	65,747	£	-	£	798,634
South Devon	£	-	£	120,135	£	152,053	£	138,688	£	41,237	£	87,980	£	33,252	£	-	£	573,346
Bristol	£	-	£	31,508	£	23,520	£	181,532	£	35,628	£	119,966	£	-	£	-	£	392,153
Total	£	8,779,881	£	1,615,914	£	1,017,174	£	2,245,820	£	2,173,655	£	993,253	£	504,563	£	2,462	£	17,332,722

#### What is the data telling us?

Across all South West Trusts in 2014/15 the total cost to commissioners for back and radicular pain admissions was approximately £17 million, with 74% of the costs attributed to elective activity. Note that these costs are by provider Trust and will include activity for CCGs outside of the South West region.

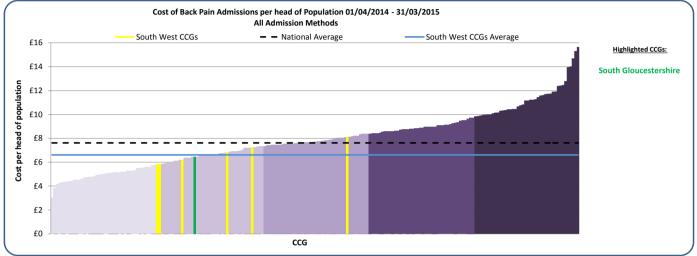
The surgery procedures group accounts for over 50% of the total cost of all procedures, and the cost of injections is an additional 15% of the total.

## **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 Adr	niss	ions		Elective A	۱dm	nissions		Emergency	/ Adı	missions	
													Registered
	Cost	per head			Cos	t per head			Cos	t per head			Population
Responsible CCG Name	of Po	pulation	Tot	al Cost	of F	opulation	Tot	tal Cost	of P	opulation	Tot	al Cost	(Ages 15+)
Somerset	£	5.80	£	2,716,164	£	4.09	£	1,914,816	£	1.57	£	735,805	468,040
Bristol	£	5.81	£	2,386,844	£	3.95	£	1,621,473	£	1.76	£	722,063	410,912
South Devon & Torbay	£	6.20	£	1,501,160	£	4.47	£	1,081,414	£	1.51	£	364,792	242,116
South Gloucestershire	£	6.46	£	1,403,611	£	4.71	£	1,023,655	£	1.70	£	369,814	217,289
Kernow	£	6.83	£	3,206,457	£	5.40	£	2,532,375	£	1.15	£	538,787	469,126
Northern, Eastern & Western Devon	£	7.23	£	5,469,665	£	5.41	£	4,098,758	£	1.53	£	1,156,709	757,011
North Somerset	£	8.11	£	1,456,597	£	6.15	£	1,103,705	£	1.90	£	341,483	179,503
South West Total	£	6.61	£	18,140,499	£	4.87	£	13,376,196	£	1.54	£	4,229,453	2,743,997

#### b. All Admission Methods - Quintile Chart



#### c. Elective Admissions only, by Procedure Type

				•	•		No procedure		Procedure not linked to back				Pain Management excluding Injections		Other Non-		1	Fotal Cost
Responsible CCG Name	Sur	gery	Injec	tions	Inje	ctions	done		pain		Imagir	וg	Inje	ctions	Surgic	al		
Northern, Eastern & Western Devon	£	2,688,992	£	585,396	£	313,954	£	17,311	£	353,882	£	11,622	£	127,602	£	-	£	4,098,758
Kernow	£	1,661,727	£	314,460	£	253,164	£	19,864	£	201,634	£	2,272	£	79,253	£	-	£	2,532,375
Somerset	£	1,140,685	£	405,674	£	82,135	£	17,511	£	244,594	£	4,153	£	20,065	£	-	£	1,914,816
Bristol	£	1,043,638	£	160,101	£	81,634	£	4,120	£	272,297	£	8,400	£	51,283	£	-	£	1,621,473
North Somerset	£	680,353	£	176,439	£	72,524	£	1,227	£	153,153	£	-	£	20,010	£	-	£	1,103,705
South Devon & Torbay	£	647,064	£	143,313	£	153,830	£	1,937	£	95,569	£	-	£	39,700	£	-	£	1,081,414
South Gloucestershire	£	643,155	£	86,457	£	63,527	£	3,760	£	178,362	£	868	£	47,527	£	-	£	1,023,655

#### What is the data telling us?

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

North Somerset CCG has the highest spend per head of population regionally (£8.11) driven mainly by high costs for elective admissions. The neighbouring Somerset CCG has the lowest costs per head for both emergency and elective admissions (£5.80). Despite all South West CCGs having considerably lower elective admission rates, this is not reflected cost per head indicating that costs per admission for these CCGs were higher.

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, and this is consistently seen across all CCGs where there is considerably greater spend on admissions for surgery.

14. Back & Radicular Pain Admissions Breakdown for the South West Region Highlighted Provider Data is included in this report (Red=Complex Spinal Provider, Blue=NHS Trust & Green=Independent Sector Provider)

Code	Provider Name	Surgery	ctive Admissio Injections	Other	Emergency Admissions	Other Admission Types	Total
RVJ	NORTH BRISTOL NHS TRUST	369	596	318	503	6	1,792
RK9 RH8	PLYMOUTH HOSPITALS NHS TRUST ROYAL DEVON AND EXETER NHS FOUNDATION TRUST	524 257	506 925	250 201	447 271	<6 6	1,729 1,660
REF	ROYAL CORNWALL HOSPITALS NHS TRUST	-	749	113	271	<6	1,141
RBA	TAUNTON AND SOMERSET NHS FOUNDATION TRUST	128	407	64	318	<6	920
RA9 RBZ	SOUTH DEVON HEALTHCARE NHS FOUNDATION TRUST	-	448	115	245	<6	811
RA7	NORTHERN DEVON HEALTHCARE NHS TRUST UNIVERSITY HOSPITALS BRISTOL NHS FOUNDATION TRUST	73	298 79	44 16	134 282	32 6	581 383
NTPH1	SHEPTON MALLET NHS TREATMENT CENTRE	<6	358	<6	-	-	363
RD1	ROYAL UNITED HOSPITALS BATH NHS FOUNDATION TRUST	15	182	6	58	-	261
RA3 RA4	WESTON AREA HEALTH NHS TRUST YEOVIL DISTRICT HOSPITAL NHS FOUNDATION TRUST	-	-	<6 <6	138 133	<6 <6	145 139
VT238	NUFFIELD HEALTH, TAUNTON HOSPITAL	81	43	7	-	-	131
NV302	CIRCLE BATH HOSPITAL	40	77	7	-	-	124
NT233 NT302	NUFFIELD HEALTH, PLYMOUTH HOSPITAL SPIRE BRISTOL HOSPITAL	97 18	8 98	13	-	-	118 117
NT215	NUFFIELD HEALTH, EXETER HOSPITAL	96	-	<6 <6	1	-	97
NT206	NUFFIELD HEALTH, BRISTOL HOSPITAL (CHESTERFIELD)	<6	50	6	-	-	59
NT402	BMI - BATH CLINIC	9	47	-	-	-	56
RH5 R1G	SOMERSET PARTNERSHIP NHS FOUNDATION TRUST TORBAY AND SOUTHERN DEVON HEALTH AND CARE NHS TRUST	-	-	<6 6	32 14	17 28	48
NLL01	PENINSULA COMMUNITY HEALTH C.I.C	-	-	<6	17	27	48
NFH01	SOMERSET SURGICAL SERVICES	6	34	<6	-	-	41
NVC09 RJ1	NEW HALL HOSPITAL GUY'S AND ST THOMAS' NHS FOUNDATION TRUST	<6 <6	18 6	- 6	-	-	19 13
NTC01	SHEPTON MALLET NHS TREATMENT CENTRE	-	-	11	-	-	11
RET	THE WALTON CENTRE NHS FOUNDATION TRUST	-	-	10	-	-	10
RNZ	SALISBURY NHS FOUNDATION TRUST	-	<6	<6	<6	<6	10
RTE NR501	GLOUCESTERSHIRE HOSPITALS NHS FOUNDATION TRUST PLYMOUTH COMMUNITY HEALTHCARE (CIC)	<6	<6	-	<6 -	- 7	7
RDU	FRIMLEY HEALTH NHS FOUNDATION TRUST	-	<6	<6	-	-	6
RTH	OXFORD UNIVERSITY HOSPITALS NHS TRUST	<6	-	<6	<6	-	6
RAN RHM	ROYAL NATIONAL ORTHOPAEDIC HOSPITAL NHS TRUST UNIVERSITY HOSPITAL SOUTHAMPTON NHS FOUNDATION TRUST	-	<6	<6	-	-	<6
RD3	POOLE HOSPITAL NHS FOUNDATION TRUST	<6	<6	-	<6 <6	-	<6 <6
RN3	GREAT WESTERN HOSPITALS NHS FOUNDATION TRUST	-	<6	-	<6	-	<6
RRJ	THE ROYAL ORTHOPAEDIC HOSPITAL NHS FOUNDATION TRUST	<6	<6	<6	-	-	<6
AAH RKB	#N/A UNIVERSITY HOSPITALS COVENTRY AND WARWICKSHIRE NHS TRUST	-	<6	<6 <6	- <6	-	<6
RR1	HEART OF ENGLAND NHS FOUNDATION TRUST				<6	-	<6
RRV	UNIVERSITY COLLEGE LONDON HOSPITALS NHS FOUNDATION TRUST	<6	<6	-	-	<6	<6
RVV RYJ	EAST KENT HOSPITALS UNIVERSITY NHS FOUNDATION TRUST IMPERIAL COLLEGE HEALTHCARE NHS TRUST		-6		<6	-	<6
NT202	NUFFIELD HEALTH, BOURNEMOUTH HOSPITAL	-	<6 <6	-	<6 -	-	<6 <6
NT433	BMI - SARUM ROAD HOSPITAL	-	<6	<6	-	-	<6
NVC04	DUCHY HOSPITAL	-	-	<6	-	-	<6
R1H R1K	BARTS HEALTH NHS TRUST LONDON NORTH WEST HEALTHCARE NHS TRUST				<6 <6	-	<6
RDY	DORSET HEALTHCARE UNIVERSITY NHS FOUNDATION TRUST	-	<6	-	-	-	<6
RDZ	THE ROYAL BOURNEMOUTH AND CHRISTCHURCH HOSPITALS NHS FOUNDATION TRUST				<6	-	<6
RF4	BARKING, HAVERING AND REDBRIDGE UNIVERSITY HOSPITALS NHS TRUST	-	<6	-	<6	-	<6
RHW RJ7	ROYAL BERKSHIRE NHS FOUNDATION TRUST ST GEORGE'S UNIVERSITY HOSPITALS NHS FOUNDATION TRUST	<6	-	<6	- <6	-	<6
RJZ	KING'S COLLEGE HOSPITAL NHS FOUNDATION TRUST	-	-	<6	<6	-	<6
RKE	THE WHITTINGTON HOSPITAL NHS TRUST THE ROBERT JONES AND AGNES HUNT ORTHOPAEDIC HOSPITAL NHS FOUNDATION TRUST	<6	<6	-	-	-	<6
RL1 RLQ	WYE VALLEY NHS TRUST	-	<6	-	- <6	<6	<6
RM3	SALFORD ROYAL NHS FOUNDATION TRUST	-	<6	-	-	-	<6
RN5	HAMPSHIRE HOSPITALS NHS FOUNDATION TRUST	-	<6	-	<6	-	<6
RRK RTK	UNIVERSITY HOSPITALS BIRMINGHAM NHS FOUNDATION TRUST ASHFORD AND ST PETER'S HOSPITALS NHS FOUNDATION TRUST	-	<6	-	<6 <6	-	<6
RVR	EPSOM AND ST HELIER UNIVERSITY HOSPITALS NHS TOUNDATION THOST	-	<6	-	-	-	<6
RXK	SANDWELL AND WEST BIRMINGHAM HOSPITALS NHS TRUST				<6	-	<6
RXW	SHREWSBURY AND TELFORD HOSPITAL NHS TRUST				<6	-	<6
NT304 NTPH4	SPIRE SOUTHAMPTON HOSPITAL CIRENCESTER NHS TREATMENT CENTRE		<6 <6		-	-	<6
R1C	SOLENT NHS TRUST		-		<6	-	<6
RA2	ROYAL SURREY COUNTY HOSPITAL NHS FOUNDATION TRUST	-	<6	-	-	-	<6
RAP RAX	NORTH MIDDLESEX UNIVERSITY HOSPITAL NHS TRUST KINGSTON HOSPITAL NHS FOUNDATION TRUST		<6		<6	-	<6
RAX RCD	HARROGATE AND DISTRICT NHS FOUNDATION TRUST		<0	-	- <6	-	<6
RJ2	LEWISHAM AND GREENWICH NHS TRUST				<6	-	<6
RJE	UNIVERSITY HOSPITALS OF NORTH MIDLANDS NHS TRUST				<6	-	<6
RN7 RNS	DARTFORD AND GRAVESHAM NHS TRUST NORTHAMPTON GENERAL HOSPITAL NHS TRUST				<6 <6	-	<6 <6
RNS RP5	DONCASTER AND BASSETLAW HOSPITAL NHS FOUNDATION TRUST				<6	-	<6
RQ6	ROYAL LIVERPOOL AND BROADGREEN UNIVERSITY HOSPITALS NHS TRUST				<6	-	<6
RQM	CHELSEA AND WESTMINSTER HOSPITAL NHS FOUNDATION TRUST	-	-	<6	-	-	<6
RTF	NORTHUMBRIA HEALTHCARE NHS FOUNDATION TRUST DERBY TEACHING HOSPITALS NHS FOUNDATION TRUST				<6 <6	-	<
TP	SURREY AND SUSSEX HEALTHCARE NHS TRUST		<6	-	-	-	<
TR	SOUTH TEES HOSPITALS NHS FOUNDATION TRUST				<6	-	<
TX WF	UNIVERSITY HOSPITALS OF MORECAMBE BAY NHS FOUNDATION TRUST				<6	-	<
RWF RWG	MAIDSTONE AND TUNBRIDGE WELLS NHS TRUST WEST HERTFORDSHIRE HOSPITALS NHS TRUST	-	<6	-	<6 -	-	<
WH	EAST AND NORTH HERTFORDSHIRE NHS TRUST				<6	-	<
WP	WORCESTERSHIRE ACUTE HOSPITALS NHS TRUST				<6	-	<
WW XF	WARRINGTON AND HALTON HOSPITALS NHS FOUNDATION TRUST		-6		<6	-	<
XF XN	MID YORKSHIRE HOSPITALS NHS TRUST LANCASHIRE TEACHING HOSPITALS NHS FOUNDATION TRUST	-	<6	-	- <6	-	<
XP	COUNTY DURHAM AND DARLINGTON NHS FOUNDATION TRUST				<6	-	
XQ	BUCKINGHAMSHIRE HEALTHCARE NHS TRUST	-	<6	-	-	-	<
LX22	THORNBURY HOSPITAL				-	<6	<
IN801	THE SPENCER WING (RAMSGATE ROAD) MOUNT GOULD HOSPITAL	-	-	<6	-	- <6	<
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R527 T418	BMI - THE HAMPSHIRE CLINIC	-	-	<6	-	-	<

DOCUMENT GOVERNANCE				
Document name	Back Pain Report			
Document type	Final			
Version	0.6			
Date	17/06/2016			
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 -			
	Please contact the NEQOS advisory service through this web link for further			
	information or to enquire about NEQOS undertaking similar work.			
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,				
0.1				Liz Lingard				
0.2	Draft V2	15/03/2016	Amendments & Final QA	Adam Fearing,				
0.2			Amenuments & Final QA	Kayoung Goffe				
0.3	Draft V3	15/04/2016	Further minor amendments	Adam Fearing,				
0.5				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	17/06/2016	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?				