A Review of the NHS Atlas of Variation (2011) & Themed Atlases for Children & Young People, Diabetes, Kidney Disease, Respiratory Disease & Liver Disease (2012/13)

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1. Introduction

What is NHS Atlas of Variation?

The NHS Atlas of Variation is a series of maps published by NHS Right Care[1] which highlight variation in the utilisation of health care services across various geographies in England. It aims at offering clinicians and commissioners an opportunity to identify variation and take action to reduce unwarranted variation, defined by Professor John Wennberg as, *"Variation in the utilisation of health care services that cannot be explained by variation in patient illness or patient preferences."*[2] The first Atlas of Variation was published in November 2010 and the second which is the latest in 2011. Four other smaller themed atlases focusing on children and young people and specific conditions (Diabetes, Kidney Disease, Respiratory Disease and Liver Disease) were published over 2012/13 period.

Data Presentation

This report presents review findings from the 2011 Atlas of Variation and the four themed atlases published over 2012/13 period. The atlases contain performance data for specified indicators at mainly PCT and Strategic Health Authority Level. Data presentation is by quintiles (five ranges). Where a PCT is classified as being in quintile 1, this indicates that it belongs to a group of 20% of PCTs nationally with the lowest scores for a particular indicator while quintile 5 indicates 20% of PCTs with highest scores.

I t is acknowledged that the NHS commissioning arrangements have changed since April 2013 with the formation of clinical commissioning groups (CCGs). In East Sussex there are now three CCGs namely: Eastbourne, Hailsham & Seaford (EHS), High Weald Lewes Havens (HWLH) and Hastings & Rother (H&R). Most of the GP Practices in EHS & HWLH CCGs were drawn from the East Sussex Downs & Weald (ESDW) PCT while those in H&R CCG were previously in Hastings & Rother (H&R) PCT. Whereas the review findings for H&R PCT may be directly applicable to H&R CCG, it's expected that ESDW findings will be utilised by EHS & HWLH CCGs for further investigations and analyses to determine specific relevant data and recommendations. This document will be updated as when new atlases of variation expected to be at CCG level are published...

[1] http://www.rightcare.nhs.uk/

[2] Wennberg JE (2010). Tracking Medicine: A Researcher's Quest to Understand Health Care. Oxford University Press.

Please note that for some indicators a high value indicates good performance and in some it indicates poor performance. For others the relationship is not straightforward and requires a combination of indicators to interpret e.g. the rate of urgent GP referrals for suspected cancer may need to be appraised alongside actual cancer referrals conversion rates.

The Diabetes Atlas of Variation data is presented differently. Although presentation is by five quintiles, quintile 1 and 2 indicate statistically significant low values as compared to the national average while four and five indicate statistically significant higher values. Quintile 3 indicates no difference with the national average.

Review of Data
The performance of East Sussex Primary Care Trusts (East Sussex Downs & Weald (ESDW) and Hastings & Rother (H&R)) across various indicators was examined. Only those indicators where performance was below average (either in the lowest or highest quintiles) or in the case of Diabetes where the differences were significantly lower or higher than the national average are reported. To simplify the interpretation of performance data, green, amber and red rag rating has been used as below:

(green)	Good Performance - Above Average
(amber)	Average performance (For Diabetes : No significant difference with national average)
(red)	Poor Performance – Below Average
	Cannot be rated independently

Recommended Actions
For each indicator where performance is below average, the context/rationale for the indicator is included together with the recommended actions.

2. Summary of Findings

Appendices 1-6 provide details of ESDW and H&R PCTs' performance across specified indicators from the 2011 Atlas of Variation and the four themed atlases (Diabetes, Kidney Disease, Respiratory Disease and Liver Disease). Table 1 provides a list of indicators where performances were below average and therefore need attention.

Table1: Indicators where East Sussex PCTs' performance was below average

Section	Indicator	PCT	Page
3.1	**Cancer &Tumours**		
3.1.1	Length of stay in days (mean) for elective breast surgery, 2009/10	ESDW, H&R	11
3.2	**Endocrine, Nutritional & Metabolic Disorders**		
3.2.1	Percentage of people in the National Diabetes Audit (NDA) with Type 1 diabetes receiving all nine key care processes by PCT, 1 Jan 2009 to 31 Mar 2010	ESDW	12
3.2.2	Percentage of people in the National Diabetes Audit (NDA) with Type 1 diabetes whose most recent blood pressure measurement was within target by PCT, 1 January 2009 to 31 March 2010	ESDW	13
3.2.3	Excess length of stay (%) in hospital among people with diabetes when compared with people without diabetes, 2009/10	H&R	14
3.2.4	Insulin total net ingredient cost (£) per patient on GP diabetes registers, 2010/11	H&R	15
3.2.5	Non-insulin anti-diabetic drugs total net ingredient cost (£) per patient on GP diabetes registers, 2010/11	H&R	16
3.2.6	Blood-testing items total net ingredient cost per patient on GP diabetes registers, 2010/11	ESDW, H&R	17
3.2.7	Percentage of children aged 0–15 years with previously diagnosed diabetes in the National Diabetes Audit (NDA) admitted to hospital for diabetic ketoacidosis (DKA) five years prior to the end of the audit period; Audit period: 1 January 2009 to 31 March 2010	H&R	18

3.3	**Mental Disorders**		
3.3.1	Anti-dementia drug items prescribed per weighted population (ADQ per STAR-PU) in primary care, 2009/10	ESDW, H&R	19
3.3.2	Rate (DSR) of inpatient admissions >3 days' duration in children per 100,000 population aged 0–17 years for mental health disorders, 2007/08-2009/10	H&R	20
3.4	**Neurological Problems**		
3.4.1	Parkinson's disease drug items prescribed per weighted population (ADQ per STAR-PU) in primary care, 2009/10	ESDW, H&R	21
3.4.2	Emergency admission Directly Age Standardised Rate (DSR) for children with epilepsy per 100,000 population aged 0–17 years, 2007/08-2009/10	ESDW, H&R	22
3.5	**Problems of Hearing**		
3.5.1	Rate of aural ventilation tube (grommet) insertion in children per population aged 0-17 years by PCT, 2007/08-2009/10	ESDW	23
3.6	**Problems of Vision**		
3.6.1	Percentage of the diabetic population receiving screening for diabetic retinopathy, Jan-Mar 2011	ESDW, H&R	24
3.6.2	Rate per 100,000 population of certificates of visual impairment (CsVI) issued with a main cause of diabetic eye disease, 2008/09-2009/10	H&R	25
3.7	**Problems of Circulation**		
3.7.1	Percentage of transient ischaemic attack (TIA) cases with a higher risk who are treated within 24 hours by PCT, Jan-Mar 2011	ESDW	26
3.8	**Problems of the respiratory system**		
3.8.1	Percentage of patients with COPD with a record of FeV1 in the previous 15 months (with exception-reported patients included), by PCT, 2010/11	ESDW	27
3.8.2	Rate of expenditure (£) on home oxygen therapy per 1000 population, 2010/11	H&R	28
3.8.3	Percentage of patients with COPD who have had a review in the preceding 15 months (with exception-reported patients included), 2010/11	H&R	29
3.8.4	Percentage of emergency COPD re-admissions to hospital within 30 days of discharge, 2010/11	H&R	30
3.8.5	Proportion (%) of patients admitted with COPD receiving non-invasive ventilation (NIV), 2010/11	H&R	31

3.8.6	Rate of sleep studies undertaken per 1,000 population, 2011	ESDW, H&R	32
3.8.7	Percentage of patients with asthma who have had an asthma review in the previous 15 months, by PCT, 2010/11	ESDW	33
3.8.8	Average daily quantity of combination (ICS and LABA) inhalers per 1,000 patients on GP COPD and Asthma registers, 2011	H&R	34
3.8.9	Rate of successful smoking quitters at 4 weeks per 100,000 population of smokers aged 16 years and over, by PCT, 2010/11	ESDW	35
3.9	**Problems of the Gastrointestinal System**		
3.9.1	Admission rate for children for upper and/or lower gastro-intestinal endoscopy per 100,000 population aged 0–17 years, 2007/08-2009/10	ESDW, H&R	36
3.9.2	Emergency admission rate for inflammatory bowel disease (IBD) in children per population aged 0-17 years by PCT, 2007/08-2009/10	ESDW	37
3.9.3	Percentage of elective day-case laparoscopic cholecystectomies per all elective cholecystectomies, 2010/11	ESDW, H&R	38
3.10	**Problems of the Genito-urinary system**		
3.10.1	Proportion (%) of elective Orchidopexy procedures performed before the age of 2 years by PCT, 2007/08-2009/10	ESDW	39
3.11	**Emergency Care**		
3.11.1	Rate (DSR) per 100,000 of conversion from accident and emergency (A&E) attendance to admissions, 2010	ESDW, H&R	40
3.12	**Imaging Services**		
3.12.1	Rate of magnetic resonance imaging (MRI) activity per 1000 weighted population, 2010/11	ESDW, H&R	41
3.12.2	Rate of computed axial tomography (CT) activity per 1000 weighted population, 2010/11	ESDW, H&R	42
3.13	**Prescribing**		
3.13.1	Hypnotics drug items prescribed per weighted population (ADQ per STAR-PU) in primary care, 2009/10	ESDW, H&R	43
3.14	**Children & Young People**		
3.14.1	Rate of expenditure on child community health services per head of population aged 0-17 years, 2008/09	ESDW, H&R	44
3.14.2	Percentage of immunisation completion for routine vaccinations against diphtheria, tetanus, polio, pertussis and	ESDW, H&R	

	Haemophilus influenzae type b (DtaP/IPV/Hib) at 2 years, 2009/10		45
3.14.3	Percentage of immunisation completion for routine vaccinations against pneumococcal disease (PCV) at 2 years by PCT, 2009/10	ESDW	46
3.14.4	Rate of perinatal mortality per all live births, 2007-2009	H&R	47
3.14.5	Proportion (%) of eligible premature babies tested for retinopathy of prematurity (ROP) within the recommended timeframe, 2009/10	H&R	48
3.14.6	Rate of inpatient admissions >3 days' duration in children per population aged 0-17 years for mental health disorders, 2007/08-2009/10	H&R	49
3.14.7	Mean length of emergency inpatient stay (days) for children with epilepsy aged 0-17 years, 2007/08-2009/10	H&R	50
3.14.8	Rate of elective tonsillectomy in children per population aged 0-17 years, 2007/08-2009/10	ESDW, H&R	51
3.15	**Kidney Disease**		
3.15.1	Percentage of patients with diabetes with a diagnosis of proteinuria or micro-albuminuria treated with angiotensin converting enzyme (ACE) inhibitors (or A2 antagonists), 2010/11	ESDW, H&R	52
3.15.2	Percentage of patients on the chronic kidney disease (CKD) register with hypertension and proteinuria treated with an angiotensin converting enzyme (ACE) inhibitor or angiotensin receptor blocker (ARB) by PCT, 2010/11	ESDW	53
3.15.3	Ratio of reported to expected prevalence of chronic kidney disease (CKD), 2010/11	H&R	54
3.15.4	Percentage of respondents in the haemodialysis travel survey with a journey time of 30 minutes or less by PCT, 2010	ESDW	55
3.15.5	Percentage of respondents in the haemodialysis travel survey satisfied with their transport service, 2010	H&R	56
3.15.6	Rate of admissions for acute kidney injury (AKI) per 1,000 emergency admissions to hospital, 2010/11	H&R	57
3.15.7	Median length of stay (days) in admissions with a primary diagnosis of acute kidney injury (AKI) by PCT, 2010/11	ESDW	58
3.16	**Liver Disease**		
3.16.1	Proportion (%) of admissions attributed to liver disease that are emergency admissions, by PCT, 2010/11	ESDW	59

3.16.2	Rate of liver cancer mortality in people aged under 75 years per 100,000 population, 2006-2010	H&R	60
3.16.3	Rate of alcohol specific admissions in people aged under 18 years per 100,000 population, 2008/09-2010/11	H&R	61
3.16.4	Rate of alcohol specific admissions in males per 100,000 population, by PCT, 2010/11	H&R	62
3.16.5	Percentage of hepatitis B vaccination coverage in new prison receptions aged 18 years or older, by responsible PCT, 2011/12	ESDW	63
3.16.6	Percentage of hepatitis C test uptake among people who inject drugs receiving drug treatment by PCT, 2011/12	ESDW	64
3.16.7	Rate of hospital admissions for hepatitis C-related end-stage liver disease per 100,000 population, 2008/09-2010/11	H&R	65
3.16.8	Rate of non-elective admissions to hospital where diagnosis includes paracetamol overdose per 100,000 population, 2010/11	H&R	66

3. Indicators' Context & Recommended Actions

This section includes 62 indicators whose performance was below average. For each indicator the context/rationale, recommended actions and resources are provided.

3.1 Cancer &Tumours

3.1.1 Length of stay in days (mean) for elective breast surgery, 2009/10

Area with below average performance
ESDW and H&R

Context
Most patients undergoing elective breast surgery can be safely managed as day cases or with a single overnight stay. One exception to this is patients who are undergoing immediate breast reconstruction.

Recommended Actions
Commissioners should discuss the issue with the relevant provider organisation(s) and explore:

- The use of day-case surgery
- Whether patients are admitted on the day of surgery
- Reasons for not adopting single overnight stays as the norm for this group of patients.

Resources
Cancer Commissioning Toolkit available at http://www.ncin.org.uk/cancer_information_tools/cct

3.2 Endocrine, Nutritional & Metabolic Disorders

3.2.1 Percentage of people in the National Diabetes Audit (NDA) with Type 1 diabetes receiving all nine key care processes by PCT, 1 Jan 2009 to 31 Mar 2010

Area with below average performance
ESDW

Context
NICE guidance recommends that all people with Type 1 diabetes should receive the following care processes at least once a year: HbA1c measurement, Cholesterol measurement, Creatinine measurement, Micro-albuminuria measurement, Blood-pressure measurement, Body mass index (BMI) measurement, Smoking status recorded, Eye examination and Foot examination. These care processes are essential for the ongoing management of diabetes and early detection of complications. They are incentivised within the Quality and Outcomes Framework (QOF).

Recommended Actions
Commissioners and service providers should ensure robust arrangements are put in place for everyone with Type 1diabetes to receive an annual review covering all nine care processes. Arrangements could include:

- Administrative systems that reliably invite all people with Type 1 diabetes for their annual checks
- Processes to follow-up and remind non-attendees
- Alternative access arrangements
- Ensuring that scheduled checks are undertaken on attendance, and results recorded accurately.

Resources
NICE Guidance Type 1 diabetes. Diagnosis and management of type 1 diabetes in children, young people and adults. http://guidance.nice.org.uk/CG15
NICE Care pathway for diabetes. http://pathways.nice.org.uk/pathways/diabetes

3.2.2 Percentage of people in the National Diabetes Audit (NDA) with Type 1 diabetes whose most recent blood pressure measurement was within target by PCT, 1 January 2009 to 31 March 2010

Area with below average performance
ESDW

Context
Action to lower high blood pressure reduces the risk of developing diabetic complications. For people with diabetes who have eye, kidney or vascular disease, a lower target blood pressure is recommended in NICE guidance than those without. For this indicator, the definition of "within target" is:

- <140/80 mmHg for people with diabetes who do not have eye, kidney or vascular disease
- <130/80 mmHg for people with diabetes who also have evidence of eye, kidney or vascular disease.

Recommended Actions
Commissioners and service providers need to ensure that detailed recommendations on the assessment and treatment of high blood pressure in NICE guidance (CG15; see resources) are implemented locally, including:

- Targeting people with evidence of early complications
- Prescribing anti-hypertensive drugs according to recommended algorithms;
- Providing information on lifestyle changes that could help to lower blood pressure.

Resources
NICE Guidance (2004) Diagnosis and management of type 1diabetes in children, young people and adults (CG15).
http://guidance.nice.org.uk/CG15

3.2.3 Excess length of stay (%) in hospital among people with diabetes when compared with people without diabetes, 2009/10

Area with below average performance
H&R

Context
People with diabetes are more likely than those without to be admitted to hospital. When in hospital, people with diabetes stay for longer periods when compared with people of a similar age who do not have diabetes but are admitted for similar conditions.

Recommended Actions
Evidence (see resources) has shown that the introduction of dedicated inpatient diabetes teams can reduce the length of stay for people with diabetes. In these studies, diabetes specialist nurses provided:

- diabetes training and awareness raising for non-diabetes clinical staff
- protocols for the management of patients with diabetes
- specific input into the management of patients experiencing problems with their diabetes management.

Resources
The Variation in Inpatient Activity: Diabetes (VIA: Diabetes) tool: http://www.yhpho.org.uk/default.aspx?RID=105866
Flanagan D, Moore E, Baker S Wright D, Lynch P (2008).Diabetes care in hospital – the impact of a dedicated inpatient care team. *Diabetic Medicine* 25, 147–151.
Sampson MJ, Crowle T, Dhatariya K et al (2006).Trends in bed occupancy for inpatients with diabetes before and after the introduction of a diabetes inpatient specialist nurse service. *Diabetic Medicine* 23, 1008–1015.
NICE Care pathway for diabetes. http://pathways.nice.org.uk/pathways/diabetes

3.2.4 Insulin total net ingredient cost (£) per patient on GP diabetes registers, 2010/11

Area with below average performance
H&R

Context
Insulin is used to lower the blood glucose level of people with Type 1 diabetes and that of people with Type 2 diabetes when non-insulin drugs are not providing adequate control. In 2010/11 in England, prescriptions for insulin cost £307 million, with an average spend per adult with diabetes of £131.46. The costs of diabetes prescribing are increasing faster than those for any other category of drugs.

Recommended Actions
NICE guidance contains recommended treatment regimens for people with Type 1 and Type 2 diabetes.
Commissioners and providers need to investigate variation in local expenditure on insulin and consider whether local prescribing practice is in line with NICE guidance. The investigation should include: local case-mix and patterns of insulin use among people with Type 2 diabetes.

Resources
NICE Guidance Type 1 diabetes. Diagnosis and management of type 1 diabetes in children, young people and adults.
http://guidance.nice.org.uk/CG15
NICE Guidance Type 2 diabetes (partially updated by CG87). Type 2 diabetes: the management of type 2 diabetes (update).
http://www.nice.org.uk/CG66
NICE Care pathway for diabetes. http://pathways.nice.org.uk/pathways/diabetes

3.2.5 Non-insulin anti-diabetic drugs total net ingredient cost (£) per patient on GP diabetes registers, 2010/11

Area with below average performance
H&R

Context
Non-insulin anti-diabetic drugs (mainly tablets) are used to control blood glucose levels in people with Type 2 diabetes. In 2010/11, prescriptions for non-insulin anti-diabetic drugs in England cost £259 million, and the average spend per adult with diabetes was £110.7

Recommended Actions
NICE guidance contains recommended treatment regimens for people with Type 2 diabetes.
Commissioners and providers need to investigate variation in local expenditure on non-insulin anti-diabetic drugs and consider whether local prescribing practice is in line with NICE guidance. Local investigation of prescribing patterns should include:

- variation among practices in the mix of non-insulin anti-diabetic items prescribed
- practice-based NIC for diabetes drugs versus glucose control in people with Type 2 diabetes
- the association between prescribing for non-insulin anti-diabetic items and HbA1c outcomes.

Resources
NICE Guidance Type 2 diabetes (partially updated by CG87). Type 2 diabetes: the management of type 2 diabetes (update). http://www.nice.org.uk/CG66
NICE Care pathway for diabetes. http://pathways.nice.org.uk/pathways/diabetes

3.2.6 Blood-testing items total net ingredient cost per patient on GP diabetes registers, 2010/11

Area with below average performance
ESDW and H&R

Context
Blood-testing items are required for the self-monitoring of blood glucose mainly in people using insulin. Appropriate blood-ketone testing can identify the early stages of diabetic ketoacidosis, a potentially fatal complication of Type 1 diabetes. Evidence suggests that the degree of variation observed in spending on blood-testing items nationally is related to how local services are organised rather than number of patients

Recommended Actions
Commissioners and service providers need to:

- review the degree of variation in spending on blood-testing items locally and local prescribing practice in relation to recommended actions in the NICE guidance.
- ensure that the recommended actions in NICE guidance for the effective use of blood-glucose monitoring for people with Type 1 and Type 2 diabetes are implemented locally.
- review local policies, education programmes and incentives to change to more cost-effective blood-testing regimens.

Resources
Clar C, Barnard K, Cummins E, Royle P, Waugh N (2010). Self-monitoring of blood glucose in type 2 diabetes: systematic review. Health Technology Assessment 14; (12).
NICE Guidance Type 1 diabetes. Diagnosis and management of type 1 diabetes in children, young people and adults. http://guidance.nice.org.uk/CG15
NICE Guidance Type 2 diabetes (partially updated by CG87). Type 2 diabetes: the management of type 2 diabetes (update). http://www.nice.org.uk/CG66
NICE Care pathway for diabetes.http://pathways.nice.org.uk/pathways/diabetes

3.2.7 Percentage of children aged 0–15 years with previously diagnosed diabetes in the National Diabetes Audit (NDA) admitted to hospital for diabetic ketoacidosis (DKA) five years prior to the end of the audit period; Audit period: 1 January 2009 to 31 March 2010

Area with below average performance
H&R

Context
Diabetic ketoacidosis (DKA) is a preventable cause of mortality and morbidity in children and young people with diabetes. It is the most common cause of diabetes related deaths in children with Type 1 diabetes. Diabetic ketoacidosis is caused by a lack of insulin and results in blood-glucose levels becoming dangerously high. A key management goal of good diabetes care is the prevention of episodes of DKA.

Recommended Actions

- Service providers and commissioners need to work in close collaboration to ensure that the clinical services provided to children and their families are delivered in accordance with NICE guidance.
- Commissioners and providers also need to ensure that patient outcomes are monitored.
- Any commissioned diabetes service for children needs to provide a continuum of care from the hospital to the community, delivered by a specialist paediatric multidisciplinary team.
- Age- and maturity-appropriate, structured, standardised self-management education programmes need to be developed alongside national standards of training for healthcare professionals.

Resources
NICE Guidance (2004) Diagnosis and management of Type 1 Diabetes in children, young people and adults (CG15).
http://guidance.nice.org.uk/CG15
International Society for Pediatric and Adolescent Diabetes (ISPAD) (2009) ISPAD clinical practice consensus guidelines.
http://www.ispad.org/FileCenter.html?CategoryID=5
National Paediatric Diabetes Audit (NPDA). http://www.rcpch.ac.uk/npda

3.3 Mental Disorders

3.3.1 Anti-dementia drug items prescribed per weighted population (ADQ per STAR-PU) in primary care, 2009/10

Area with below average performance
ESDW and H&R

Context
There are two main types of drugs used to treat Alzheimer's disease, the commonest form of dementia: cholinesterase inhibitors, and NMDA receptor antagonists. One possible reason for unwarranted variation in the number of anti-dementia drug items prescribed is variation in the diagnosis of dementia, which could reflect one or more of the following:

- Levels of awareness in primary care
- Availability of training and skills development for primary care providers in the identification and diagnosis of dementia, including Alzheimer's disease
- Access to, and capacity of, memory assessment services
- Case-finding and/or local protocols.

Recommended Actions
Clinicians should review the treatment regimens in place for all patients with Alzheimer's disease and ensure that they comply with the most recent NICE guidance.

Resources
NICE Guidance. Donepezil, galantamine, rivastigmine and memantine for the treatment of Alzheimer's disease.
http://www.nice.org.uk/guidance/TA217
Department of Health (2009) Living well with dementia: A National Dementia Strategy.
http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_094058
NICE Pathway on dementia. http://pathways

3.3.2 Rate (DSR) of inpatient admissions >3 days' duration in children per 100,000 population aged 0–17 years for mental health disorders, 2007/08-2009/10

Area with below average performance
H&R

Context
Approximately 10% of 5-16-year-olds have a mental health disorder diagnosed at some point during childhood. This figure rises steeply in adulthood, to 23% suffering mental ill-health at some point in their lives. The societal cost of mental ill health is estimated at £105 billion annually and predicted to increase. Much of this cost is the consequence of early onset disorders which are recurrent or persistent. Hospital admissions for inpatient psychiatric incur considerable expenditure compared with the cost of ambulatory out-of-hospital care.

Recommended Actions
- Commissioners and clinicians should review local data for case-mix, duration of treatment, and outcomes, and plan inpatient and ambulatory services accordingly.
- Specialist ambulatory care services perform a gate-keeping role for inpatient care. The organisation, level of provision and extent of local services will affect admission rates.
- Partnership working with social care can influence admission rates and lengths of stay.

Resources
Department of Health (2011) No health without mental health: a cross-Government mental health outcomes strategy for people of all ages. http://www.dh.gov.uk/en/Healthcare/Mentalhealth/MentalHealthStrategy/index.htm
The Children and Young Persons Improving Access to Psychological Therapies (CYP IAPT) programme, tracking the care and outcomes of patients in CYP IAPT services in England. http://www.iapt.nhs.uk/children-and-young-peoples-iapt/
CAMHS dataset. http://www.ic.nhs.uk/services/maternityand-childrens-data-set/child-and-adolescent-mentalhealth-services-camhs-secondary-uses-data-set

3.4 Neurological Problems

3.4.1 Parkinson's disease drug items prescribed per weighted population (ADQ per STAR-PU) in primary care, 2009/10

Area with below average performance
ESDW and H&R

Context
Parkinson's disease is a long-term neurological condition affecting around 120,000 people in the UK. Although it is a neurological condition, not everyone with Parkinson's disease is referred to neurology departments. Geriatric medicine services are also skilled in the management of Parkinson's disease because most of the people with the condition are older. The model of care differs across the country.

Recommended Actions

- Practice level research is needed to identify reasons for high prescription rate: whether there is over-diagnosis and over-treatment.
- Commissioners and providers need to review prescribing volumes and costs for drugs for Parkinson's disease to ensure that they meet the needs of the local population.

Resources
NICE Guidance CG35. Parkinson's disease. http://guidance.nice.org.uk/CG35
NHS Choices. Map of Medicine® Parkinson's disease – suspected.
http://healthguides.mapofmedicine.com/choices/map/parkinson_s_disease1.html
Parkinson's UK (formerly The Parkinson's Disease Society) for information on Parkinson's nurses.
http://www.parkinsons.org.uk/

3.4.2 Emergency admission rate (DSR) for children with epilepsy per 100,000 population aged 0–17 years, 2007/08-2009/10

Area with below average performance
ESDW and H&R

Context
Epilepsy is common in children, affecting approximately 48,000 in England. It is about twice as common in children as in adults (about 700 per 100,000 in children under the age of 16 years compared to 330 per 100,000 in adults).Childhood epilepsy encompasses a range of disorders of varying complexity and diagnostic difficulty. Unplanned hospitalisation for epilepsy in children and young people under 19 years is a national quality indicator in the NHS Outcomes Framework.

Recommended Actions
Commissioners should consider the benefits of commissioning the following interventions for children with epilepsy.

- First seizure services to streamline investigation and diagnosis where possible.
- Integrated care pathways, including the development of personal management plans for children and their families.
- Specialist nurses in the epilepsy service, whose roles could include coordination of care pathway, family support, population education, and liaison with primary care and education services.
- Enhanced links with social care and education, including medication policies in schools.
- Specific services to aid the transition of children with epilepsy from paediatric to adult epilepsy services.

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Resources
NICE Guidance. The diagnosis and management of the epilepsies in adults and children in primary and secondary care. Clinical guideline 20.October 2004. http://www.nice.org.uk/nicemedia/live/10954/29532/29532.pdf
British Paediatric Neurology Association runs courses in the UK for health professionals involved in the management of children with epilepsy.
Patient education and support is available from both national and local services.http://www.epilepsy.org.uk/info

3.5 Problems of Hearing

3.5.1 Rate of aural ventilation tube (grommet) insertion in children per population aged 0-17 years by PCT, 2007/08-2009/10

Area with below average performance
ESDW

Context
Otitis media with effusion (OME) is a build-up of fluid in the middle ear resulting in hearing loss. Approximately 80% of children suffer an episode before the age of 5 years. The majority of cases are self-limiting, with recovery of hearing loss. For children in whom there is no resolution over a three-month period, surgical treatment by inserting an aural ventilation tube (grommet) is effective. NICE guidelines recommend surgical treatment for children with bilateral OME, documented over a three-month period, who have a specified level of hearing impairment.

Recommended Actions

- Commissioners need to follow NICE guidelines when commissioning services to ensure equity of access for clinically justified interventions, while reducing unnecessary interventions that divert resource from those who fulfil clinical criteria.
- Commissioners need to work in close collaboration with clinicians to design local services that optimise access, quality and value.
- Clinical leadership is essential to ensure the commissioning process reflects the health needs of the local population, and the constraints on the clinical service.

Resources
NICE Guidance (2008) Surgical management of children with otitis media with effusion (OME). Clinical guidelines, CG60.
http://guidance.nice.org.uk/CG60

3.6 Problems of Vision

3.6.1 Percentage of the diabetic population receiving screening for diabetic retinopathy, Jan-Mar 2011

Area with below average performance
ESDW and H&R

Context
People with diabetes are 25 times more likely than the general population to become blind. The early stages of diabetic eye disease often do not present with any symptoms. The English National Screening Programme for Diabetic Retinopathy is important for the early detection of people with diabetes who should be referred to an ophthalmologist at the point when treatment is most effective and preventable sight loss can be avoided.

Recommended Actions

- Commissioners and providers should ensure that the minimum standard for both the initial and repeat screening tests is met universally.
- Each local screening service should analyse their data annually and benchmark them against the national quality standards.
- Screening services meeting the achievable standard should publish details of their service operation to enable those whose performance is not as good to identify learning points and thereby improve performance.

Resources
English National Screening Programme for Diabetic Retinopathy (ENSPDR). http://www.retinalscreening.nhs.uk/pages/
ENSPDR Commissioning Toolkit. http://www.retinalscreening.nhs.uk/pages/default.asp?id=7&sID=90

3.6.2 Rate per 100,000 population of certificates of visual impairment (CsVI) issued with a main cause of diabetic eye disease, 2008/09-2009/10

Area with below average performance
H&R

Context
Certificates of Vision Impairment (CVI) are issued to patients who meet the criteria of visual impairment as assessed by an ophthalmologist. Certificates are completed with patient consent by a consultant ophthalmologist, and sent to local authority social services. Local authority social services update their vision impairment register and offer the patient additional services.

Recommended Actions

- Commissioners and providers should analyse local data annually and benchmark them against those from other areas. Where there are high numbers of people who are sight-impaired from diabetes but low screening uptake, this should trigger action to improve services.
- For this indicator, the aim should be not only to reduce variation but also to improve the quality and consistency of data collection. Commissioners and providers should investigate how to improve the overall quality and consistency of CVI data collection.

Resources
The identification, referral and registration of sight loss: action for social services departments and optometrists, and explanatory notes. http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_4083553
Form CVI: explanatory notes for consultants ophthalmologists and hospital eye clinic staff.
http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_4083552

3.7 Problems of Circulation

3.7.1 Percentage of transient ischaemic attack (TIA) cases with a higher risk who are treated within 24 hours by PCT, Jan-Mar 2011

Area with below average performance
ESDW

Context
Although people with a suspected TIA may have no neurological symptoms at assessment (within 24 hours), the risk of stroke in the first four weeks after a TIA can be as high as 20%. High-risk TIA patients should be seen, investigated, and treated within 24 hours of referral. For low-risk TIA patients, the time-frame is one week.

Recommended Actions
A clear care pathway should be defined for high and low-risk patients across primary and secondary care to include:

- Streamlined referral route with a single point of contact for all TIA cases
- Formalising relationships between 5-day services and the nearest 7-day service so the out-of-hours patient pathway is clear
- Using limited-sequence MRI brain imaging in TIA

RESOURCES
Department of Health (2007) National Stroke Strategy.
http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_081062
NICE Guidance, CG68 – National Collaborating Centre for Chronic Conditions. Stroke: National Clinical Guideline for diagnosis and initial management of acute stroke and transient ischaemic attack (TIA). Royal College of Physicians, 2008.
NICE Pathway on stroke. http://pathways.nice.org.uk/pathways/stroke
NHS Improvement Stroke Improvement Programme. Going up a Gear: practical steps to improving stroke care.
http://www.improvement.nhs.uk/stroke/NationalProjects/Goingupagear/tabid/133/Default.aspx
NHS Improvement Diagnostics Improvement. Imaging to Support Stroke.
http://www.improvement.nhs.uk/diagnostics/ImagingtoSupportStroke/tabid/97/Default.aspx

3.8 Problems of the respiratory system

3.8.1 Percentage of patients with COPD with a record of FeV1 in the previous 15 months (with exception-reported patients included), by PCT, 2010/11

Area with below average performance
ESDW

Context
There is a gradual deterioration in lung function in patients with COPD. This deterioration accelerates with the passage of time. There are important interventions which can improve quality of life in patients with severe COPD. It is therefore important to monitor respiratory function (FeV1) in order to identify patients who might benefit from pulmonary rehabilitation or continuous oxygen therapy.

Recommended Actions
To increase local population coverage of chronic disease management in COPD, commissioners could consider:

- Identifying the systems to maximise patient-reach used in the best-performing practices
- Support local practices with high exception rates to implement best-practice systems and improve patient outcomes through systematic chronic disease management

Resources
Department of Health (2012) An Outcomes Strategy for COPD and Asthma: NHS Companion Document.
http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_134000
NHS Medical Directorate (2012) COPD Commissioning Toolkit. A Resource for Commissioners.
https://www.wp.dh.gov.uk/publications/files/2012/08/chronic-obstructive-pulmonarydisease-COPD-commissioning-toolkit.pdf
Quality Intelligence East. INHALE – Interactive Health Atlas for Lung conditions in England. http://www.inhale.nhs.uk/
NICE (2011) Chronic obstructive pulmonary disease quality standard.
http://www.nice.org.uk/guidance/qualitystandards/chronicobstructivepulmonarydisease/copdqualitystandard.jsp

3.8.2 Rate of expenditure (£) on home oxygen therapy per 1000 population, 2010/11

Area with below average performance
H&R

Context
Home oxygen therapy is provided to 85,000 people in England, which costs approximately £110 million a year. The most common reason for prescribing long-term home oxygen therapy is chronic obstructive pulmonary disease (COPD). However, it is often prescribed without a clear clinical indication from which the patient will derive no clinical benefit. The Department of Health estimates that about one-third of people prescribed oxygen derive no clinical benefit from it or do not use it. As payment is based on provision not usage, costs are incurred even when oxygen therapy is not used.

Recommended Actions
A home oxygen service should be established with structured clinical assessment and regular review of oxygen requirement. This will ensure that patients receive home oxygen only after appropriate assessment and follow-up using specified criteria (See resources).

Resources
Home Oxygen Service Good Practice Guide for Assessment and Review.
http://www.pcc.nhs.uk/home-oxygen-service-goodpractice-guide-for-assessment-and-review
Improving Home Oxygen Services: Emerging Learning from the National Improvement Projects. http://www.improvement.nhs.

3.8.3 Percentage of patients with COPD who have had a review in the preceding 15 months (with exception-reported patients included), 2010/11

Area with below average performance
H&R

Context
COPD is one of the main causes of preventable death and disability. In England, more than 3 million people are estimated to suffer from COPD, but only around 835,000 have been diagnosed. COPD is the second most common reason for emergency admission to hospital, accounting for one in eight non-elective admissions. It is therefore costly for the NHS.

Recommended Actions
Commissioners should work with providers to ensure the provision of pro-active clinical care and alternatives to admission which include:

- Review of admissions among primary and secondary care providers to identify people experiencing frequent exacerbations who need more pro-active management
- Early discharge schemes and hospital-at-home services to support evidence-based avoidance of admissions
- Pro-active chronic disease management in primary and community care, including clear action plans, optimisation of therapy and support for patient self-management with home provision of standby medication, and referral for pulmonary rehabilitation when indicated
- Prompt support for patients when they develop new or worsening symptoms, with early access to specialist-led integrated care in the community when appropriate

Resources
Department of Health (2012) An Outcomes Strategy for COPD and Asthma: NHS Companion Document.
http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_134000
NHS Medical Directorate (2012) COPD Commissioning Toolkit. A Resource for Commissioners.
https://www.wp.dh.gov.uk/publications/files/2012/08/chronic-obstructive-pulmonary-disease-COPD-commissioning-toolkit.pdf
NICE Guidance (2010) Chronic obstructive pulmonary disease (updated) (CG101) Management of chronic obstructive pulmonary disease in adults in primary and secondary care. http://guidance.nice.org.uk/CG101

British Lung Foundation. http://www.blf.org.uk/Home

3.8.4 Percentage of emergency COPD re-admissions to hospital within 30 days of discharge, 2010/11

Area with below average performance
H&R

Context
Re-admissions are a substantial problem in the treatment of patients with COPD. Of all emergency re-admissions to hospital, COPD is the fifth most common cause. At any one time, around one-third of all people admitted as an emergency with COPD have been treated in hospital for the same condition within the preceding 30 days. Admission and re-admission to hospital are major adverse outcomes for patients, which place considerable demands on NHS resources.

Recommended Actions
Commissioners and providers should work together to ensure that the care provided to patients admitted during a COPD exacerbation is pro-active, integrated and comprehensive. This includes:

- Structured hospital admission
- Assessment within 24 hours by a respiratory specialist
- Comprehensive assessment and management of co-morbid conditions
- Optimisation of medical therapy and support for patient self-management with home provision of standby medication
- Structured discharge planning
- Medical and social support on discharge from hospital and integration with primary and community care

Resources
Department of Health (2011) An outcomes strategy for people with chronic obstructive pulmonary disease (COPD) and Asthma in England. http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_127974
Department of Health (2012) An Outcomes Strategy for COPD and Asthma: NHS Companion Document.
http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_134000
NICE Guidance (2010) Chronic obstructive pulmonary disease (updated) (CG101) Management of chronic obstructive pulmonary disease in adults in primary and secondary care. http://guidance.nice.org.uk/CG101
IMPRESS – Improving and integrating respiratory services. http://www.impressresp.com/

3.8.5 Proportion (%) of patients admitted with COPD receiving non-invasive ventilation (NIV), 2010/11

Area with below average performance
H&R

Context
Acute exacerbation of COPD is one of the commonest reasons for hospital admission and is associated with high mortality in hospital, especially if the patient is admitted with acute type 2 respiratory failure (increased levels of carbon dioxide with acidosis). Beyond treating the underlying infection and clearing sputum, supporting ventilation to reduce the carbon dioxide levels is essential. There is strong evidence to support use of Non-invasive ventilation (NIV) as the treatment of choice.

Recommended Actions
Given the improved survival associated with NIV, it needs to be made available to all patients admitted with acute type 2 respiratory failure.

Resources
British Thoracic Society (2008) Non-invasive ventilation in chronic obstructive pulmonary disease: management of acute type 2 respiratory failure. RCP/BTS Concise guideline.
http://www.brit-thoracic.org.uk/guidelines/nippv-%E2%80%93-niv-inacute-respiratory-failure-guideline.aspx
Department of Health (2012) An Outcomes Strategy for COPD and Asthma: NHS Companion Document.
http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_134000
NHS Medical Directorate (2012) COPD Commissioning Toolkit. A Resource for Commissioners.
https://www.wp.dh.gov.uk/publications/files/2012/08/chronic-obstructive-pulmonarydisease-COPD-commissioning-toolkit.pdf
NICE (2011) Chronic obstructive pulmonary disease quality standard.
http://www.nice.org.uk/guidance/qualitystandards/chronicobstructivepulmonarydisease/copdqualitystandard.jsp

3.8.6 Rate of sleep studies undertaken per 1,000 population, 2011

Area with below average performance
ESDW and H&R

Context
Sleep physiology investigations are conducted to identify abnormal sleep patterns and pathologies, and to assess and provide therapeutic intervention. There has been an increase in the commissioning of sleep studies over the last five years partly because of initiatives to clear waiting list backlogs. Despite this, access to diagnostic assessment for people with sleep disorders remains patchy. Failure to diagnose is common, and intervention rates remain low relative to the prevalence of sleep problems.

Recommended Actions
Commissioners need to review referral and delivery models for sleep services, and consider the following interventions:

- Improve understanding of expected and observed prevalence of sleep-related conditions
- Raise awareness in primary care to promote prompt referral
- Assess the demand for and capacity of local sleep services
- Review provision models for initial diagnostic testing and triage approaches to referral management
- Review funding models (e.g. block contract versus payment by results) to ensure there are no perverse financial incentives to commission inappropriately

Resources
Department of Health – 18 weeks team (2009) Transforming Respiratory and Sleep Diagnostic Services. A Good Practice Guide.
http://www.improvement.nhs.uk/physiologydiagnostics/documents/RespiratoryGoodPractice_060209.pdf
NICE (2008) Sleep apnoea – continuous positive airway pressure (CPAP) (TA139): Continuous positive airway pressure for the treatment of obstructive sleep apnoea/hypopnoea syndrome.
http://publications.nice.org.uk/continuous-positiveairway-pressure-for-the-treatment-of-obstructive-sleepapnoeahypopnoea-ta139/clinical-need-and-practice
Scottish Intercollegiate Guidelines Network (SIGN) – endorsed by the British Thoracic Society (BTS) (2003) Management of Obstructive Sleep Apnoea/Hypopnoea Syndrome in Adults. A national clinical guideline.
http://www.sign.ac.uk/pdf/sign73.pdf

3.8.7 Percentage of patients with asthma who have had an asthma review in the previous 15 months, by PCT, 2010/11

Area with below average performance
ESDW

Context
In the Scottish Intercollegiate Guidelines Network (SIGN) and British Thoracic Society (BTS) guidelines, it is recommended that people with asthma should receive regular clinical review to ensure their symptoms are controlled and thereby minimise disruption to daily life. Patients who are not reviewed or who are excepted from review are unlikely to receive pro-active chronic disease management and are more likely to have poorer outcomes than patients who are reviewed. It is possible that many of the people not attending for regular review are among the high-risk patients in whom control is poor.

Recommended Actions
To increase local population coverage of chronic disease management in asthma, commissioners could consider:

- Identifying systems used by the best-performing practices to maximise patient-reach
- Supporting local practices with high exception rates to implement best-practice systems and improve patient outcomes through systematic chronic disease management

Resources
Scottish Intercollegiate Guidelines Network and British Thoracic Society (2008; revised 2012) British Guideline on the Management of Asthma. A national clinical guideline. http://www.sign.ac.uk/pdf/sign101.pdf
Department of Health (2012) An Outcomes Strategy for COPD and Asthma: NHS Companion Document. http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_134000
Quality Intelligence East. INHALE – Interactive Health Atlas for Lung conditions in England. http://www.inhale.nhs.uk/
British Thoracic Society. http://www.brit-thoracic.org.uk/
The Primary Care Respiratory Society. http://www.pcrs-uk.org/

3.8.8 Average daily quantity of combination (ICS and LABA) inhalers per 1,000 patients on GP COPD and Asthma registers, 2011

Area with below average performance
H&R
Context
In the management of asthma, inhaled corticosteroids (ICS) and long-acting beta-agonists (LABA) have a clearly defined role in improving symptom control and quality of life, and in reducing exacerbations and hospitalisations. The BTS/SIGN asthma guideline offers a clear step-wise approach to initiating these drugs, increasing the dose to achieve symptom control, and decreasing or discontinuing if the drug is ineffective or the patient improves.

Recommended Actions

- Commissioners and providers need to support clinicians in the implementation of evidence-based practice through training and education, local medicines management initiatives and computer prompts.
- Clinicians can improve the clinical effectiveness and cost-effectiveness of respiratory prescribing through responsible guidance-based prescribing.

Resources
Scottish Intercollegiate Guidelines Network and British Thoracic Society (2008; revised 2012) British Guideline on the Management of Asthma. A national clinical guideline. http://www.sign.ac.uk/pdf/sign101.pdf
NICE (2011) Chronic obstructive pulmonary disease quality standard.
http://www.nice.org.uk/guidance/qualitystandards/chronicobstructivepulmonarydisease/copdqualitystandard.jsp
Department of Health (2012) An Outcomes Strategy for COPD and Asthma: NHS Companion Document.
http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_134000
NHS Medical Directorate (2012) COPD Commissioning Toolkit. A Resource for Commissioners.
https://www.wp.dh.gov.uk/publications/files/2012/08/chronic-obstructive-pulmonarydisease-COPD-commissioning-toolkit.pdf

3.8.9 Rate of successful smoking quitters at 4 weeks per 100,000 population of smokers aged 16 years and over, by PCT, 2010/11

Area with below average performance
ESDW

Context
Tobacco-smoking is the principal cause of preventable death and disability in England. It is the main reason for the gap in healthy life-expectancy between higher and lower socioeconomic groups. It is estimated that COPD affects around 3 million people in England: 85% of cases are caused by smoking. For people who already have a respiratory condition, support to stop smoking is a core treatment because it improves lung function, and, in COPD, it increases survival.

Recommended Actions
NICE guidance recommends that GPs and nurses in primary and community care and clinicians in secondary care should routinely advise patients who smoke to quit, and offer referral to smoking-cessation support.

Commissioners and providers should:

- Ensure that local care pathways recommend smoking cessation advice and referral to specialist smoking cessation services at key trigger points in the patient journey: e.g. routine chronic disease management review, outpatient attendance, acute exacerbation, emergency department attendance, hospital admission, and hospital discharge
- Encourage all acute and mental health Trusts to have Trust-wide policies to support smoking cessation in patients and staff, and use initiatives such as smoking cessation champions.
- Ensure that clinical staff in primary and emergency care are trained to deliver brief interventions to support smoking cessation
- Consider population-level social marketing to ensure maximum reach of smoking-cessation interventions

Resources
Department of Health (2012) An Outcomes Strategy for COPD and Asthma: NHS Companion Document.
http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_134000
NICE Guidance (2008) Smoking cessation services: Smoking cessation services in primary care, pharmacies, local authorities

and workplaces (PH10).http://www.nice.org.uk/Guidance/PH10

3.9 Problems of the Gastrointestinal System

3.9.1 Admission rate for children for upper and/or lower gastro-intestinal endoscopy per 100,000 population aged 0–17 years, 2007/08-2009/10

Area with below average performance
ESDW and H&R

Context
Diagnostic gastro-intestinal (GI) endoscopy enables the GI tract to be visualised directly, and for biopsies to be carried out to aid diagnosis. Endoscopy is undertaken in children to diagnose or exclude serious GI disease, such as inflammatory bowel disease, coeliac disease, enteropathy and gastro-oesophageal reflux.

Recommended Actions
At present, there is no national guidance. Commissioners and clinicians should collaborate to agree local criteria for diagnostic GI endoscopies in children based on best available evidence. Criteria need to be outcome- as well as process-based, and should be benchmarked against the agreements made in other local areas to ensure equity of access and high-quality outcomes.

Resources
British Society for Paediatric Gastroenterology,Hepatology and Nutrition (BSPGHAN). Report of the BSPGHAN Working Group to Develop Criteria for DGHGastroenterology, Hepatology and Nutrition Services.
http://www.bspghan.org.uk/document/DGH_SERVICES_BSPGHAN.DOC
British Society for Paediatric Gastroenterology, Hepatology and Nutrition (BSPGHAN). Guide for Purchasers of PGHN Services.
http://www.bspghan.org.uk/information/guides.shtml

3.9.2 Emergency admission rate for inflammatory bowel disease (IBD) in children per population aged 0-17 years by PCT, 2007/08-2009/10

Area with below average performance
ESDW

Context
Inflammatory bowel disease (IBD) is a collective term that encompasses Crohn's disease and ulcerative colitis, two major chronic disorders in which there is inflammation of parts of the gastro-intestinal tract. There are about 250,000 people with IBD in the UK. IBD predominantly affects young people, with peak incidence between 10 and 40 years of age. One-quarter of all people with IBD present to health services for the first time below the age of 18 years. Frequency of IBD exacerbations, particularly when they lead to episodes of unplanned admission to hospital, is one indicator of the quality of the ongoing management of children with IBD. Reducing unplanned admissions for IBD can reduce expenditure and improve outcomes for patients.

Recommended Actions
Commissioners need to work with providers to ensure that:

- A personal treatment plan is in place for all children and young people with IBD
- There is adequate support for children and their families in self-management and early recognition of exacerbations.
- They use the Service Standards developed by the IBD Standards Group (see "Resources") as guidance when assuring the quality of the service they are commissioning.

Resources
UK IBD Working Group on behalf of the British Society for Paediatric Gastroenterology Hepatology and Nutrition (BSPGHAN) (2008) Guidelines for the Management of Inflammatory Bowel Disease (IBD) in Children in the United Kingdom.
http://bspghan.org.uk/working_groups/documents/IBDGuidelines_000.pdf
The IBD Standards Group (2009) Quality Care: Service Standards for the healthcare of people who have Inflammatory Bowel Disease (IBD). http://www.ibdstandards.org.uk/uploaded_files/IBDstandards.pdf

3.9.3 Percentage of elective day-case laparoscopic cholecystectomies per all elective cholecystectomies, 2010/11

Area with below average performance
ESDW and H&R
Context
Day surgery is the management of a surgical procedure in which patient admission, operation and home discharge are completed on the same calendar day according to a planned pathway. The planned pathway commences in the GP's surgery based on good knowledge of the procedures that can be undertaken as ambulatory care. Much of the variation is unwarranted due to suboptimal planning of the day-surgery pathway, conservative inclusion criteria, conservative clinical practices and/or culture.

Recommended Actions

- Providers need to evaluate their care pathways for day surgery, and ascertain what level of transformational work might be needed.
- Providers of day-surgery services could consider a "Default to Day Surgery" ethos as promoted by the NHS Institute for Innovation and Improvement (see Resources)
- Commissioners need to review their specifications for day-surgery services against the BADS guidelines for day-surgery service commissioning (see Resources) and could consider reinforcing a "Default to Day Surgery" ethos using CQUIN payment frameworks (see Resources).
- Commissioners and providers need to collaborate to optimise the care pathway for patients undergoing laparoscopic cholecystectomy using the NHS Institute for Innovation and Improvement guidelines (see Resources).

Resources
British Association of Day Surgery. Commissioning Day Surgery. A Guide for Commissioning Consortia. May 2011.
http://www.daysurgeryuk.org/bads/joomla/images/stories/downloads/CommissioningDaySurgery.pdf
NHS Institute for Innovation and Improvement. Focus On: Cholecystectomy. 2006.
http://www.institute.nhs.uk/option,com_joomcart/Itemid,194/main_page,document_product_info/cPath,71/products_id,186.html
NHS Institute for Innovation and Improvement. Ten High Impact Changes for Service Improvement and Delivery.
http://www.institute.nhs.uk/quality_and_service_improvement_tools/quality_and_service_improvement_tools/day_surgery_-_treat_day_surgery_as_the_norm.html

3.10 Problems of the Genito-urinary System

3.10.1 Proportion (%) of elective Orchidopexy procedures performed before the age of 2 years by PCT, 2007/08-2009/10

Area with below average performance
ESDW

Context
Boys with undescended testes are at risk of undiagnosed testicular torsion, which may result in the loss of the testis, increased risk of testicular cancer and possible loss of fertility. More than 3% of boys have an undescended testis at birth, which resolves during the first year of life in about three quarters of those affected. If the condition persists beyond 12 months of age, children should be referred for orchidopexy. During orchidopexy, an undescended testis, and associated structures, is freed and brought down to the correct position in the scrotum. To reduce the risk of torsion and lifelong risk of malignancy, evidence-based guidelines recommend that treatment for undescended testes be completed before 18 months of age.

Recommended Actions

- Have in place a managed clinical network for general paediatric surgery to improve the quality and safety of surgical services for children by facilitating, integrated care pathways, better staff training and education, benchmarking and meaningful audit to drive service improvements.
- Commissioners need to identify variation in local practice and target interventions to optimise the patient pathway and improve education and training for staff and families.

Resources
NHS Newborn and Infant Physical Examination (NIPE) Programme: guidance on the clinical aspects of the physical screening programme, and resources on standards and local quality assurance processes. http://newbornphysical.screening.nhs.uk/
Children's Surgical Forum (2010) *Ensuring the Provision of General Paediatric Surgery in the District General Hospital: Guidance to commissioners and service planners*. Royal College of Surgeons of England.
http://www.rcseng.ac.uk/publications/docs/generalpaediatric-surgery-guidance/?searchterm=Ensuring%20the%20provision%20of%20general%20paediatric%20surgery

3.11 Emergency Care

3.11.1 Rate (DSR) per 100,000 of conversion from accident and emergency (A&E) attendance to admissions, 2010

Area with below average performance
ESDW and H&R

Context
The majority of conversions of accident and emergency (A&E) attendances to admissions are medical; only a minority are related to major trauma. The conversion of an A&E attendance to an admission has a considerable impact on the cost of care.

Recommended Actions

- Commissioners and providers need to review the case-mix seen at A&E, and the conversion of A&E attendance to admissions, and ascertain the reasons for the rate observed locally. For instance, conversion rates could appear to be high if A&E departments deal with only major cases and minor injuries are dealt with in community hospitals. Conversion rates could appear to be low if minor injuries are dealt with at A&E.
- A key element in the review is to investigate short-stay admissions, and assess whether people are being admitted for assessment rather than being assessed then admitted.
- Commissioners and providers should consider the ways in which unplanned admissions to hospital can be reduced and the role ambulatory emergency care can play in treating patients effectively without the need for hospital admission.

Resources
Ham C (2006) Reducing unplanned hospital admissions. HSMC, University of Birmingham.
http://www.birmingham.ac.uk/Documents/collegesocial-sciences/social-policy/HSMC/publications/2006/Reducing-unplanned-hospital-admissions.pdf
The College of Emergency Medicine. http://www.collemergencymed.ac.uk/

3.12 Imaging Services

3.12.1 Rate of magnetic resonance imaging (MRI) activity per 1000 weighted population, 2010/11

Area with below average performance
ESDW and H&R

Context
Magnetic resonance imaging (MRI) uses magnetism and radio waves to build up a series of cross-sectional images. As MRI pictures can be very precise, they can often provide as much information as looking at the tissues directly, which is why MRI has the potential to reduce the number of diagnostic procedures that need to be performed. The cost of MRI equipment means that it is used primarily at centres where it is kept most busy.

Recommended Actions

- Commissioners and providers should collaborate to review rates of MRI activity in the local area to identify whether there is any unwarranted variation.
- To address unwarranted variation, commissioners and providers need to work together to apply evidence based practice at a local level, including using evidence-based patient pathways for diagnostics, promoting research to understand the benefits and harms resulting from different rates of MRI investigation, and promoting audit to identify both under-use and over-use.
- The Royal College of Radiologists plays a leading role in the education of all clinicians. Providers need to ensure that education and skills development are available to the relevant clinicians.

Resources
Guidelines for diagnostic imaging for commissioners.
http://www.improvement.nhs.uk/CommissioningAWorldClassImagingService/tabid/65/Default.aspx
Royal College of Radiologists (2008). Making best use of clinical radiology Services. 7th edition.
http://www.irefer.org.uk/index.php/guidance-for-commissioners

3.12.2 Rate of computed axial tomography (CT) activity per 1000 weighted population, 2010/11

Area with below average performance
ESDW and H&R

Context
Computed axial tomography (a CAT or CT scan) is an X-ray technique using a scanner that takes a series of pictures across the body allowing a radiologist to view the images in a two- or three-dimensional form. It complements and supplements information obtained from MRI and other imaging modalities such as ultrasound. The cost of CT scan equipment means that it is used primarily at centres where it is kept most busy.

Recommended Actions

- Commissioners and providers should collaborate to review rates of CT activity in the local area to identify whether there is any unwarranted variation.
- To address unwarranted variation, commissioners and providers need to work together to apply evidence based practice at a local level, including using evidence-based patient pathways for diagnostics, promoting research to understand the benefits and harms resulting from different rates of CT investigation and promoting audit to identify both under-use and over-use.

Resources
Guidelines for diagnostic imaging for commissioners.
http://www.improvement.nhs.uk/CommissioningAWorldClassImagingService/tabid/65/Default.aspx
Royal College of Radiologists (2008). Making best use of clinical radiology Services. 7th edition.
http://www.irefer.org.uk/index.php/guidance-for-commissioners

3.13 Prescribing

3.13.1 Hypnotics drug items prescribed per weighted population (ADQ per STAR-PU) in primary care, 2009/10

Area with below average performance
ESDW and H&R

Context
Hypnotics are medications that encourage sleep for people with insomnia, but they are recommended for short-term treatment (up to 4 weeks) only, and tend to be prescribed only after non-drug therapies, such as "sleep hygiene" and cognitive behavioural therapy (CBT), have been tried and failed. There are several concerns about the use of hypnotics: as they tend to prescribed for people with clinical insomnias, most of which are chronic, most hypnotics may be prescribed for periods longer than four weeks, people may also become psychologically dependent on them and the hypnotics may lose effectiveness over time.

Recommended Actions
Tools that would be helpful in primary care include:

- A care pathway on sleep disorders
- Decision support software for people presenting with sleep disorders, including a warning of the risk of becoming dependent on hypnotics;
- Capacity to deliver cognitive and behavioural support for people with sleep disorders over the Internet
- Pubic information and education about good "sleep hygiene".

Commissioners and GPs should collaborate to review the prescribing of hypnotics to ascertain whether it is in accordance with guidance.

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Resources
NICE Guidance TA77. Insomnia – newer hypnotic drugs. Zalepon, zolpidem and zopiclone for the management of insomnia.
http://guidance.nice.org.uk/TA77
Royal College of Psychiatrists. Information for patients.
http://www.rcpsych.ac.uk/mentalhealthinformation/mentalhealthproblems/sleepproblems.aspx

3.14. Children & Young People

3.14.1 Rate of expenditure on child community health services per head of population aged 0-17 years, 2008/09

Area with below average performance
ESDW and H&R

Context
Community child health provides a range of services to children and young people, including those with long-term conditions. Community child health also coordinates health, education and social care for children and their families. However, increased investment does not always guarantee better outcomes; therefore other outcome indicators should be considered.

Recommended Actions

- Investment in ambulatory and community-based services for targeted populations.
- Commissioners need to evaluate local services and policies continuously to ensure expenditure per capita matches population needs.
- Child health commissioners, practitioners, education and local government need to work in partnership in order to improve outcomes in child health.
- Commissioners could link investment in community child health services to a requirement for clinical audit of local services.
- Clinically meaningful indicators need to be agreed locally to identify high-priority community child health outcome measures and allow benchmarking against national comparators.

Resources
British Association for Community Child Health (http://www.bacch.org.uk): information and guidance for clinicians and commissioners about improving the effectiveness and efficiency of community child health service

3.14.2 Percentage of immunisation completion for routine vaccinations against diphtheria, tetanus, polio, pertussis and Haemophilus influenzae type b (DtaP/IPV/Hib) at 2 years, 2009/10

Area with below average performance
ESDW and H&R

Context
The Health Protection Agency has demonstrated the economic benefits of vaccines currently included in the routine childhood immunisation schedule. Despite concerted efforts to promote uptake, opportunities for immunisation are missed. In the UK, infants at 2 years of age should have received doses of vaccination against diphtheria, tetanus, pertussis, polio, *haemophilus influenzae* type b, meningococcal meningitis type C, pneumococcus, measles, mumps and rubella (German measles).

Recommended Actions
NICE recommends that commissioners ensure their information and data collection systems can identify children who have missed immunisations, and offer them the opportunity to receive them in a timely manner.

Commissioners need to increase immunisation rates for at-risk groups, particularly children:

- Who have missed previous immunisations
- Not registered with a GP
- From certain ethnic minority groups or non-English speaking families
- Who are vulnerable, such as children with disabilities or a chronic illness, looked-after children, children who are homeless and children who are asylum seekers.

Resources
NICE Guidance (2009) Guidance on differences in the uptake of immunisations (including targeted vaccines) in people younger than 19 years. Public health guidance, PH21. http://www.nice.org.uk/PH21

3.14.3 Percentage of immunisation completion for routine vaccinations against pneumococcal disease (PCV) at 2 years by PCT, 2009/10

Area with below average performance
ESDW

Context
The Health Protection Agency has demonstrated the economic benefits of vaccines currently included in the routine childhood immunisation schedule. Despite concerted efforts to promote uptake, opportunities for immunisation are missed. In the UK, infants at 2 years of age should have received doses of vaccination against diphtheria, tetanus, pertussis, polio, *haemophilus influenzae* type b, meningococcal meningitis type C, pneumococcus, measles, mumps and rubella (German measles).

Recommended Actions
NICE recommends that commissioners ensure their information and data collection systems can identify children who have missed immunisations, and offer them the opportunity to receive them in a timely manner.

Commissioners need to increase immunisation rates for at-risk groups, particularly children:

- Who have missed previous immunisations
- Not registered with a GP
- From certain ethnic minority groups or non-English speaking families
- Who are vulnerable, such as children with disabilities or a chronic illness, looked-after children, children who are homeless and children who are asylum seekers.

Resources
NICE Guidance (2009) Guidance on differences in the uptake of immunisations (including targeted vaccines) in people younger than 19 years. Public health guidance, PH21. http://www.nice.org.uk/PH21

3.14.4 Rate of perinatal mortality per all live births, 2007-2009

Area with below average performance
H&R

Context
Perinatal mortality comprises all stillbirths (babies born dead after 24 weeks' gestation) and babies born alive but who die within 7 days of birth expressed as a rate per 1000 births. Perinatal mortality is an indicator that highlights the state of maternal health and nutrition, as well as healthcare in the antenatal, obstetric and neonatal period.

Recommended Actions
Commissioners need to ensure that the quality of pre-pregnancy, antenatal, intrapartum and neonatal care is high by:

- Studying local variations in perinatal mortality, down to clinician-level, to identify whether variations in outcomes are warranted or unwarranted
- Ensuring there is adequate capacity and training of community- and hospital-based health professionals to deliver a high-quality antenatal and perinatal service for mothers and babies, including nutritional and other preventative health advice.

Resources
NICE Guidance (2008) Guidance for midwives, health visitors, pharmacists and other primary care services to improve the nutrition of pregnant and breastfeeding mothers and children in low income households. Public health guidance, PH11.
http://guidance.nice.org.uk/PH11
NICE Guidance (2006) Postnatal care: Routine postnatal care of women and their babies. Clinical guidelines, CG37.
http://www.nice.org.uk/CG037
NICE Topic. Gynaecology, pregnancy and birth. http://guidance.nice.org.uk/Topic/GynaecologyPregnancyBirth
NICE (2010) Specialist neonatal care quality standard.
http://www.nice.org.uk/guidance/qualitystandards/specialistneonatalcare/specialistneonatalcarequalitystandard.jsp

3.14.5 Proportion (%) of eligible premature babies tested for retinopathy of prematurity (ROP) within the recommended timeframe, 2009/10

Area with below average performance
H&R

Context
Premature babies are at risk of retinopathy of prematurity (ROP), a disease that threatens the development of vision. If detected early enough, ROP is largely amenable to treatment. Delay in or failure of testing of eligible at-risk babies can lead to increased risk of irreversible vision loss. National guidelines define the eligibility criteria for ROP testing, and contain recommended actions about implementing best practice.

Recommended Actions

- Commissioners and neonatal units need to review the workforce requirements for providing a timely ROP testing service appropriate for the local population of at-risk babies, including: staff training and recruitment, resource allocation, appropriate skill mix, job planning.
- Using the neonatal network model to deliver neonatal ophthalmology care can be beneficial through pooling resources and maximising efficiencies of scale. Data can be analysed and benchmarked against those from other units
- Strong clinical leadership is required to deliver a coherent system that minimises variation in practice and outcome for ROP testing.

Resources
Royal College of Ophthalmologists and Royal College of Paediatrics and Child Health (2008) Guideline for the Screening and Treatment of Retinopathy of Prematurity.
http://www.rcpch.ac.uk/sites/default/files/ROP%20Guideline%20-%20Jul08%20final.pdf

3.14.6 Rate of inpatient admissions >3 days' duration in children per population aged 0-17 years for mental health disorders, 2007/08-2009/10

Area with below average performance
H&R

Context
Approximately 10% of 5- to 16-year-olds have a mental health disorder diagnosed at some point during childhood. This figure rises steeply in adulthood, to 23% suffering mental ill health at some point in their lives. Half of the adults diagnosed with mental illness will have shown symptoms by 14 years of age, and three-quarters by 20 years of age. The societal cost of mental ill health is estimated at £105 billion annually and is predicted to increase. Much of this cost is the consequence of early onset disorders which are recurrent or persistent. There are clinical and financial reasons to provide this patient group with the most effective intervention in as timely a way as possible.

Recommended Actions

- Establishment of specialist ambulatory care services to perform a gate-keeping role for inpatient care.
- Establishment of outreach services for vulnerable groups
- Partnership working with social care
- The child and adolescent mental health (CAMHS) national dataset should be utilised by commissioners to investigate a range of indicators measuring the performance of local services.
- Commissioners and clinicians need to review local data for case-mix, duration of treatment, and outcomes, and plan inpatient and ambulatory services accordingly.

Resources
Department of Health (2011) No health without mental health: a cross-Government mental health outcomes strategy for people of all ages. http://www.dh.gov.uk/en/Healthcare/Mentalhealth/MentalHealthStrategy/index.htm
The Children and Young Persons Improving Access to Psychological Therapies (CYP IAPT) programme, tracking the care and outcomes of patients in CYP IAPT services in England. http://www.iapt.nhs.uk/children-and-young-peoples-iapt/
CAMHS dataset. http://www.ic.nhs.uk/services/maternityand-childrens-data-set/child-and-adolescent-mentalhealth-services-camhs-secondary-uses-data-set

3.14.7 Mean length of emergency inpatient stay (days) for children with epilepsy aged 0-17 years, 2007/08-2009/10

Area with below average performance
ESDW

Context
Frequent or prolonged hospital admissions for children with epilepsy disrupt their education and family life, thereby affecting the well-being of children and their families. The evaluation of cost of care in childhood epilepsy has shown that unnecessary hospital admission is one of the most expensive aspects of epilepsy care.

Recommended Actions

- Commissioners need to ensure local providers have clear guidelines for the management and investigation of first seizures and of epilepsy.
- Commissioners and providers need to investigate hospital processes and patient flows.
- To maximise efficiency and quality of care, individual departments need to determine whether there are differences in clinical practice among individual clinicians.
- Commissioners and providers need to ensure that each child has an individual care plan agreed between the clinician and the child and his/her family and has access to a community based support service including access to a community specialist epilepsy nurse as recommended in NICE guidance.

Resources
NICE Guidance (2012). The epilepsies. The diagnosis and management of the epilepsies in adults and children in primary and secondary care. Clinical guidelines, CG137. http://guidance.nice.org.uk/CG137
British Paediatric Neurology Association (BPNA) runs courses in the UK for health professionals involved in the management of children with epilepsy. These courses help to ensure a consistent clinical approach to the diagnosis and management of epilepsy in children. http://www.bpna.org.uk/pet/
Patient education and support is available from local and national services. http://www.epilepsy.org.uk/info

3.14.8 Rate of elective tonsillectomy in children per population aged 0-17 years, 2007/08-2009/10

Area with below average performance
H&R

Context
The commonest indications for childhood tonsillectomy are recurrent tonsillitis and sleep-related breathing disorders (SRBD), including obstructive sleep apnoea (OSA). Over-use of tonsillectomy increases demand on limited resources, and can lead to unnecessary complications for those children in whom active monitoring might be a more appropriate strategy.

Recommended Actions

- Commissioners need to investigate what proportion of the activity in local rates of tonsillectomy is attributable to recurrent tonsillitis and OSA in order to identify whether there is inappropriate over- or under-activity for each of the indications, and thereby enable interventions to be targeted accordingly.
- Commissioners and clinicians need to apply the SIGN guidance on tonsillectomy for recurrent tonsillitis in service planning, ensuring equity of access for clinically justified interventions, while reducing unnecessary interventions that divert resources from children who fulfil clinical criteria.
- Commissioners and clinicians need to agree local criteria to fund tonsillectomy for SRBD symptoms:
  - based on best available evidence
  - outcome- as well as process-based
  - benchmarked against the agreements made with other local commissioners to ensure equity of access and high-quality outcomes.

Resources
Scottish Intercollegiate Guidelines Network (SIGN)(2010). Management of sore throat and indications for tonsillectomy. A national clinical guideline. http://www.sign.ac.uk/guidelines/fulltext/117/index.html

3.15 Kidney Disease

3.15.1 Percentage of patients with diabetes with a diagnosis of proteinuria or micro-albuminuria treated with angiotensin converting enzyme (ACE) inhibitors (or A2 antagonists), 2010/11

Area with below average performance
ESDW and H&R

Context
Patients with chronic kidney disease (CKD) may experience progressive loss of kidney function. This may require renal replacement therapy in the form of dialysis or a transplant. The most effective treatment to prevent decline of kidney function is to control blood pressure. Angiotensin converting enzyme (ACE) inhibitors and angiotensin receptor blockers (ARBs, also known as A2 antagonists) – drugs that block the action of angiotensin– are effective at reducing the damaging effects of blood pressure on kidney function.

Recommended Actions
For the whole population of people with CKD to benefit from ACE inhibitors and ARBs, the percentage of patients with CKD entered on the CKD registers of general practitioners needs to increase. Patients with CKD can be identified relatively simply from data held by pathology laboratories. To improve population health, it is a priority to make better use of these data. Systematic identification and treatment of patients at high risk of progressive kidney damage has been demonstrated to reduce significantly the numbers of patients starting dialysis.

Resources
NHS Information Centre (2011) National Diabetes Audit Executive Summary 2009–2010.
http://www.ic.nhs.uk/webfiles/Services/NCASP/Diabetes/200910%20annual%20report%20documents/National_Diabetes_Audit_Executive_Summary_2009_2010.pdf

3.15.2 Percentage of patients on the chronic kidney disease (CKD) register with hypertension and proteinuria treated with an angiotensin converting enzyme (ACE) inhibitor or angiotensin receptor blocker (ARB) by PCT, 2010/11

Area with below average performance
ESDW

Context
Patients with chronic kidney disease (CKD) may experience progressive loss of kidney function which may require renal replacement therapy in the form of dialysis or a transplant. The most effective treatment to prevent decline of kidney function is to control blood pressure. Angiotensin converting enzyme (ACE) inhibitors and angiotensin receptor blockers (ARBs, also known as A2 antagonists) – drugs that block the action of angiotensin – are effective at reducing the damaging effects of blood pressure on kidney function.

Recommended Actions
For the whole population of people with CKD to benefit from ACE inhibitors and ARBs, the percentage of patients with CKD entered on the CKD registers of general practitioners needs to increase.
Patients with CKD can be identified relatively simply from data held by pathology laboratories. To improve population health, it is a priority to make better use of these data.
Systematic identification and treatment of patients at high risk of progressive kidney damage has been demonstrated to reduce significantly the numbers of patients starting dialysis.

Resources
NHS Information Centre (2011) National Diabetes Audit Executive Summary 2009–2010.
http://www.ic.nhs.uk/webfiles/Services/NCASP/Diabetes/200910%20annual%20report%20documents/National_Diabetes_Audit_Executive_Summary_2009_2010.pdf

3.15.3 Ratio of reported to expected prevalence of chronic kidney disease (CKD), 2010/11

Area with below average performance
H&R

Context
In the Quality and Outcomes Framework (QOF), general practitioners are required to establish a register of all patients with CKD. Prevalence is highly variable nationally. This is attributed to the variable detection of CKD either due to misdiagnosis or failure to screen all appropriate patients.

Recommended Actions
The key to reducing unwarranted variation in the prevalence of chronic kidney disease is to improve CKD screening. Clinicians should adhere to the NICE guidelines (See resources)

Resources
NICE Guidance (2008). Early identification and management of chronic kidney disease in adults in primary and secondary care (Clinical Guidelines, CG73). http://guidance.nice.org.uk/CG73
MacGregor MS, Taal MW (2011). Detection, monitoring and management of patients with CKD. Renal Association Clinical Practice Guideline. http://www.renal.org/Clinical/GuidelinesSection/Detection-Monitoring-and-Care-of-Patients-with-CKD.aspx
NICE (2011) Chronic Kidney Disease Quality Standard.
http://www.nice.org.uk/guidance/qualitystandards/chronickidneydisease/ckdqualitystandard.jsp
NHS Kidney Care (2012) Kidney Disease QOF Toolkit January 2012.
http://www.kidneycare.nhs.uk/_Resourcestodownload-Toolkits.aspx
NHS Kidney Care (2012) Chronic Kidney Disease Resource Pack.
http://www.kidneycare.nhs.uk/_Ourworkprogrammes-Prevention-Toolstohelpyou.aspx

3.15.4 Percentage of respondents in the haemodialysis travel survey with a journey time of 30 minutes or less by PCT, 2010

Area with below average performance
ESDW

Context
Renal replacement therapy (RRT) is a lifelong treatment for patients with end-stage renal disease. Renal replacement therapy takes the form of either kidney transplantation or dialysis treatment. Dialysis can be divided into two broad modalities:

- Peritoneal dialysis, a home-based therapy, usually administered by a patient with or without a carer
- Haemodialysis, which can also be performed at home, but the majority of approximately 18,000 haemodialysis patients in England have their haemodialysis in a dialysis unit.

Most of the haemodialysis patients attending dialysis units receive dialysis on three days per week, with approximately four hours' treatment during each session. Evidence shows that travel time to dialysis is a predictor of adherence.

Recommended Actions
To address the travel time issue commissioners need to consider:

- Facilitating an increase in the number of patients who can use home-based therapies, including home haemodialysis treatment
- Planning new dialysis units at locations near to where patients live, and which have good transport links and access to parking
- Making journey time a key metric in measuring the quality of the service for patients who rely on the NHS for transport due to medical reasons.

Resources
NHS Information Centre (2011) National Kidney Care Audit. Patient Transport Survey 2010.
http://www.ic.nhs.uk/webfiles/Services/NCASP/audits%20and%20reports/NHS_Patient_Transport_2010_Final_Web_Version_1.pdf
Department of Health (2004) The National Service Framework for Renal Services. Part 1: Dialysis and Transplantation.
http://www.dh.gov.uk/dr_consum_dh/groups/dh_digitalassets/@dh/@en/documents/digitalasset/dh_4137331.pdf

3.15.5 Percentage of respondents in the haemodialysis travel survey satisfied with their transport service, 2010

Area with below average performance
H&R

Context
Patient-reported outcome measures (PROMs) are a powerful means of assessing the quality of care as perceived by the patient. Sixty-five per cent of patients who have haemodialysis at a main renal centre or a satellite unit use hospital-provided transport to travel to and from dialysis sessions. As haemodialysis is normally performed three times a week, this can represent a considerable investment of time on the part of the patient. Difficulties with transport can affect patient experience negatively and have been found to be associated with poor adherence to treatment and poor outcomes.

Recommended Actions
To improve patient experience of transport services to and from the dialysis unit, it is important to involve patients in commissioning those services. Providers of dialysis services need to:

- Ensure that there is adequate planning of transport services to reduce unnecessary delays
- Monitor and audit transport performance regularly
- Ensure that accountability and complaint mechanisms are transparent and easily accessible
- Assess patient perceptions of transport services regularly as part of a wider initiative to assess patients' quality of life and experience of care.

For patients able to take their own transport to the dialysis unit, commissioners and relevant service providers need to consider appropriate means through which these patients can claim travel expenses.

Resources
NHS Information Centre (2011) National Kidney Care Audit. Patient Transport Survey 2010.
http://www.ic.nhs.uk/webfiles/Services/NCASP/audits%20and%20reports/NHS_Patient_Transport_2010_Final_Web_Version_1.pdf
NHS Kidney Care. National Kidney care Audit – Patient Transport Survey Report: ability to view report by Strategic Commissioning Group (SCG). http://www.kidneycare.nhs.uk/_Resources-Reports-PatientTransportSurveyReport.aspx

3.15.6 Rate of admissions for acute kidney injury (AKI) per 1,000 emergency admissions to hospital, 2010/11

Area with below average performance
H&R

Context
Acute kidney injury (AKI), previously known as acute renal failure is a medical emergency characterised by rapid loss of kidney function. It is very common, complicating up to 20% of hospital emergency admissions. Older people and people with long-term conditions, such as chronic kidney disease or heart failure, are at greater risk of developing AKI. Acute kidney injury is not usually the result of illness limited to the kidney. Severe infection, low blood pressure, medications and toxins may all contribute to AKI. Good management of acutely ill patients can prevent AKI in up to 30% of cases. Early recognition and prompt treatment can limit the severity of AKI.

Recommended Actions
- To reduce the degree of variation in AKI admissions, it is necessary to improve awareness of AKI among all healthcare professionals and quality care of acutely unwell patients.
- Commissioners need to consider establishing defined AKI care pathways in every setting where acute illness is managed.
- Also see resources section for detailed guidelines.

Resources
NHS Kidney Care. Acute Kidney Injury Resource Pack (includes audit tools, example protocols, guidelines and CQUIN schemes). http://www.kidneycare.nhs.uk/our_work_programmes/acute_kidney_injury/tools_to_help_you/
National Confidential Enquiry into Patient Outcome and Death (NCEPOD) (2009) *Acute Kidney Injury: Adding Insult to Injury*. http://www.ncepod.org.uk/2009aki.htm
Lewington A, Kanagasundaraman S (2011) Acute Kidney Injury. Renal Association Clinical Guidelines. http://www.renal.org/Clinical/GuidelinesSection/AcuteKidneyInjury.aspx
NICE Guidance (2007). Acutely ill patients in hospital (Clinical Guidelines, CG50). http://www.nice.org.uk/CG50

3.15.7 Median length of stay (days) in admissions with a primary diagnosis of acute kidney injury (AKI) by PCT, 2010/11

Area with below average performance
ESDW

Context
Acute kidney injury (AKI), previously known as acute renal failure is a medical emergency characterised by rapid loss of kidney function. Older people and people with long-term conditions, such as chronic kidney disease or heart failure, are at greater risk of developing AKI. Acute kidney injury may also result from severe infection, low blood pressure, medications and toxins. Early recognition and prompt treatment can limit the severity of AKI and lessen length of stay in hospital.

Recommended Actions
Commissioners need to consider:

- Implementing an acute care CQUIN (see "Resources")
- Establishing defined AKI care pathways in every setting where acute illness is managed

Clinicians can improve care of the acutely unwell through:

- Recognition of illness severity and physiological deterioration
- Prompt resuscitation, timely management of sepsis, safe and effective prescribing
- Monitoring and restoration of adequate fluid balance and nutrition
- Protocols for the referral and safe transfer of patients with AKI to specialist settings.

Resources
NHS Kidney Care. Acute Kidney Injury Resource Pack (includes audit tools, example protocols, guidelines and CQUIN schemes).
http://www.kidneycare.nhs.uk/our_work_programmes/acute_kidney_injury/tools_to_help_you/
National Confidential Enquiry into Patient Outcome and Death (NCEPOD) (2009) *Acute Kidney Injury: Adding Insult to Injury*.
http://www.ncepod.org.uk/2009aki.htm
Lewington A, Kanagasundaraman S (2011) Acute Kidney Injury. Renal Association Clinical Guidelines.
http://www.renal.org/Clinical/GuidelinesSection/AcuteKidneyInjury.aspx

NICE Guidance (2007) Acutely ill patients in hospital (Clinical Guidelines, CG50). http://www.nice.org.uk/CG50

3.16 Liver Disease

3.16.1 Proportion (%) of admissions attributed to liver disease that are emergency admissions, by PCT, 2010/11

Area with below average performance
ESDW

Context
Over the last 10 years, liver disease has become recognised as an increasing cause of morbidity and premature death. Although there are myriad causes, the rapid rise in presentation and death is related to alcohol, obesity and diabetes, hepatitis B and hepatitis C. These are all preventable causes of liver disease, but if prevention strategies are not implemented or are ineffective patients will continue to present to secondary care in increasing numbers.

Recommended Actions
Commissioners, clinicians and providers need to:

- Consider reconfiguration of services and the development of integrated care pathways for liver disease
- Improve care for patients admitted as an emergency to prevent readmissions
- Review emergency admissions to assess methods of prevention and better management in primary care
- Encourage early diagnosis of liver disease with pro-active management in primary and community care
- Review policies and procedures for discharge planning
- Encourage GP follow-up after discharge to improve management in primary care and prevent readmission.

Actions to prevent liver disease

- Early identification of liver disease and early intervention in primary care
- Raising awareness of the scale of the problem of liver disease among professional groups
- Skills development in the identification and management of liver disease for healthcare professionals
- Using digital and multimedia resources to enable people to become more involved in self-management

Resources
NICE (2010) Alcohol-use disorders – physical complications (CG100). http://guidance.nice.org.uk/CG100
NICE Pathways. Alcohol-use disorders overview. http://pathways.nice.org.uk/pathways/alcohol-use-disorders

3.16.2 Rate of liver cancer mortality in people aged under 75 years per 100,000 population, 2006-2010

Area with below average performance
H&R

Context
According to Cancer Research UK, around 3900 people every year are diagnosed with primary liver cancer in the UK, which accounts for about 1% of all cancers in the UK. Risk factors for liver cancer include: chronic hepatitis B and hepatitis C, and excessive alcohol consumption.

Recommended Actions
Commissioners, clinicians and providers need to:

- Review the mortality rates and trends for primary liver cancer in the locality
- Identify whether there are opportunities for improving the early diagnosis of liver cancer
- Include liver cancer in the assessment of strategies for reducing alcohol consumption and improving outcomes for liver disease
- Consider developing registries and surveillance programmes at a local level given that the risk groups for primary liver cancer are known
- Review the clinical management of and configuration of services for primary liver cancer to ensure close collaboration among the different disciplines..

Resources
National Cancer Intelligence Network. http://www.ncin.org.uk/publications/data_briefings/liver_and_gall_bladder.aspx
Cancer Research UK. Liver Cancer Mortality Statistics.
http://info.cancerresearchuk.org/cancerstats/types/liver/mortality/uk-liver-cancer-mortality-statistics
British Liver Trust. Fighting Liver Disease. Liver Cancer.
http://79.170.44.126/britishlivertrust.org.uk/wp-content/uploads/2012/12/Liver-Cancer_lores1.pdf

3.16.3 Rate of alcohol specific admissions in people aged under 18 years per 100,000 population, 2008/09-2010/11

Area with below average performance
H&R

Context
Over the last decade, public concern about the impact of alcohol on health and society has steadily mounted. Particular concern has centred on the level and pattern of drinking among children and young people and the consequences for health, and levels of crime, violence and antisocial behaviour. Professionals from health, education, social care and criminal justice agencies need to identify, assess and appropriately refer young people with alcohol related problems.

Recommended Actions

- Commissioners, clinicians and providers need to follow the framework in the National Treatment Agency for Substance Misuse guidance for an integrated and comprehensive service for young people with substance use problems (see resources).
- Specialist substance misuse services for young people need to be commissioned jointly with agencies such as social services to ensure both health and social care interventions are included.

Resources
HM Government (2012) The Government's alcohol strategy.
http://www.homeoffice.gov.uk/publications/alcohol-drugs/alcohol/alcohol-strategy?view=Binary
Department of Health (2009) Guidance on the Consumption of Alcohol by Children and Young People. A report by the Chief Medical Officer. http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_110258
Britton J, Crompton L (2008) Guidance on commissioning young people's specialist substance misuse treatment services. National Treatment Agency for Substance Misuse. http://www.nta.nhs.uk/uploads/commissioning_yp_final2.pdf
NICE (2010) Alcohol-use disorders – preventing harmful drinking (PH24). http://guidance.nice.org.uk/PH24
NICE Pathway. Alcohol-use disorders overview. http://pathways.nice.org.uk/pathways/alcohol-use-disorders

3.16.4 Rate of alcohol specific admissions in males per 100,000 population, by PCT, 2010/11

Area with below average performance
H&R

Context
In the UK 11 million units of alcohol are consumed in a week by 11–17-year-olds. The majority of these young people associate alcohol consumption with positive outcomes. Particular concern has centred on the level and pattern of drinking among children and young people and the consequences for health, and levels of crime, violence and antisocial behaviour. Professionals from health, education, social care and criminal justice agencies need to identify, assess and appropriately refer young people with alcohol related problems.

Recommended Actions
Commissioners, clinicians and providers need to:

- Follow the framework in the National Treatment Agency for Substance Misuse guidance for an integrated and comprehensive service for young people with substance use problems (see resources)
- Provide, as part of the service, psychosocial interventions, such as CBT, as recommended in NICE guidance (CG115; see resources)
- Ensure that targeted interventions are directed at vulnerable groups, including young people who began drinking regularly at under 15 years of age.

Resources
HM Government (2012) The Government's alcohol strategy.
http://www.homeoffice.gov.uk/publications/alcohol-drugs/alcohol/alcohol-strategy?view=Binary
Department of Health (2009) Guidance on the Consumption of Alcohol by Children and Young People. A report by the Chief Medical Officer. http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_110258
Britton J, Crompton L (2008) Guidance on commissioning young people's specialist substance misuse treatment services. National Treatment Agency for Substance Misuse. http://www.nta.nhs.uk/uploads/commissioning_yp_final2.pdf
NICE (2010) Alcohol-use disorders – preventing harmful drinking (PH24). http://guidance.nice.org.uk/PH24

NICE (2011) Alcohol dependence and harmful alcohol use (CG115). http://www.nice.org.uk/guidance/CG115

3.16.5 Percentage of hepatitis B vaccination coverage in new prison receptions aged 18 years or older, by responsible PCT, 2011/12

Area with below average performance
ESDW

Context
Hepatitis B can cause an acute illness that lasts several weeks. People can take several months to a year to recover from the symptoms. Hepatitis B can also cause a chronic liver infection that can later develop into cirrhosis of the liver or liver cancer.
In the UK, most acute cases of hepatitis B infection are contracted through injecting drug use or sexual intercourse. Vaccinating high-risk individuals in prison is an effective public health measure to prevent cases of acute hepatitis B among people who inject drugs in the community.

Recommended Actions
Commissioners, clinicians and providers need to:

- Review the rates of vaccination to identify reasons for low rates of vaccination and discuss how uptake rates can be improved.
- Review data submission process and identify ways of improving reporting.

Resources
Health Protection Agency. Prison hepatitis B vaccination and hepatitis C testing monitoring.
http://www.hpa.org.uk/Topics/InfectiousDiseases/InfectionsAZ/PrisonInfectionPreventionTeam/PrisonHepBVaccAndHepCTestingProgramme/
Health Protection Agency and Department of Health- Offender Health (2011) Prevention of infection and communicable disease control in prisons and places of detention. A manual for healthcare workers.
http://www.hpa.org.uk/web/HPAweb&HPAwebStandard/HPAweb_C/1309970437635
National AIDS Trust (2011) Tackling Blood-Borne Viruses in Prisons. A framework for best practice in the UK.
http://www.nat.org.uk/Media%20library/Files/Policy/2011/NATBlood%20Borne%20VirusesPrisonsMay2011.pdf

3.16.6 Percentage of hepatitis C test uptake among people who inject drugs receiving drug treatment by PCT, 2011/12

Area with below average performance
H&R

Context
In the UK, people who inject drugs are at greatest risk of hepatitis C infection. Infections are acquired when people share contaminated injecting equipment with infected individuals. Preventing the spread of blood-borne viruses such as hepatitis C is an important public health issue.

Recommended Actions
Commissioners need to work in partnership with the local drug action team(s), clinicians, providers and people who inject drugs to:

- Review the percentage of people receiving drug treatment who are offered and accept hepatitis C testing;
- Ascertain the reasons why the current systems and treatment plans fail to deliver high rates of testing
- Ensure that staff working in drug services understand the importance of and reasons for the offer of testing for hepatitis C

Resources
National Treatment Agency for Substance Misuse. http://www.nta.nhs.uk/
Advisory Council on the Misuse of Drugs (ACMD) (2009).The Primary Prevention of Hepatitis C among Injecting Drug Users. Home Office. http://www.homeoffice.gov.uk/publications/agencies-public-bodies/acmd1/acmdhepcreport2?view=Binary
National Treatment Agency for Substance Misuse (2012)From Access to Recovery: Analysing Six Years of Drug Treatment Data. http://www.nta.nhs.uk/uploads/six-yearstudy.pdf
NICE (2012) Hepatitis B and C – ways to promote and offer testing (PH43). http://guidance.nice.org.uk/PH43
NICE Pathway. Hepatitis B and C testing overview. http://pathways.nice.org.uk/pathways/hepatitis-band-c-testing

3.16.7 Rate of hospital admissions for hepatitis C-related end-stage liver disease per 100,000 population, 2008/09-2010/11

Area with below average performance
H&R

Context
Although hepatitis C virus is a chronic infection, antiviral treatments are available that will successfully clear the virus in the majority of patients. However, unless there is a considerable increase in people receiving effective treatment, the future burden of hepatitis C-related disease will be substantial. Admission to hospital for hepatitis C and end-stage liver disease (ESLD) is an outcome indicator of how successful the identification and care of people with hepatitis C and its prevention have been.

Recommended Actions
Commissioners, clinicians and providers should make available specialised services for:

- Local hepatitis C populations, in order to identify people at risk and offer testing with a view to treatment
- Patients with ESLD, in order to ensure they have access to expert care that will optimise their outcomes.

Commissioners need to work with all clinicians and providers to set up and develop a clinical network, a model of service delivery pivotal to the assessment and treatment of patients with hepatitis C, including helping them to obtain access to accredited laboratory and other services

Resources
Health Protection Agency (2012) Hepatitis C in the UK: 2012 Report.
http://www.hpa.org.uk/webc/HPAwebFile/HPAweb_C/1317135237219
Health Protection Agency (2011) Hepatitis C in the UK: 2011 Report.
http://www.hpa.org.uk/webc/HPAwebFile/HPAweb_C/1309969906418
NICE (2012) Hepatitis B and C – ways to promote and offer testing (PH43).
http://guidance.nice.org.uk/PH43
NICE Pathway. Hepatitis B and C testing overview.
http://pathways.nice.org.uk/pathways/hepatitis-band-c-testing

3.16.8 Rate of non-elective admissions to hospital where diagnosis includes paracetamol overdose per 100,000 population, 2010/11

Area with below average performance
H&R

Context
Paracetamol is the most common drug taken in overdose in the UK. The management of paracetamol overdose is a common problem which can test the linkages within secondary care services and between secondary and tertiary care pathways. In this context, 1 in 500 cases of paracetamol overdose results in liver failure, and potentially 1 in 300 is referred for a liver opinion. Evidence-based treatment pathways can improve the chances of successful recovery from overdose.

Recommended Actions
Commissioners, clinicians and providers need to:

- Review local rates of hospital admission for paracetamol overdose
- Identify whether there are particular age-groups in whom, and localities where, the problem is greatest
- Develop joint approaches with social care agencies to reducing paracetamol overdose in areas of deprivation
- Ensure evidence-based flowcharts in the treatment of paracetamol overdose are used by all providers
- Highlight the consequences of paracetamol overdose on more specialised services and ensure that guidelines and treatment pathways are followed.

Resources
Wallace CI, Dargan PI, Jones AL (2002) Paracetamol overdose: an evidence based flowchart to guide management. *Emerg Med J* 19:202-205 doi:10.1136/emj.19.3.202 http://emj.bmj.com/content/19/3/202.full

Appendix1: NHS Atlas of Variation, 2011

Indicator	ESDW PCT			H&R PCT		
	Value	Quintile	Rating	Value	Quintile	Rating
Cancer &Tumours						
Rate of urgent GP referrals for suspected cancer per 100,000 population by PCT, 2010/11	2211.2	4	Second highest quintile nationally	2590.7	5	Highest quintile nationally
Number of emergency cancer bed-days per new cancer registration by PCT, 2009/10	10.44	2	Second lowest quintile nationally	11.3	3	Average
Length of stay in days (mean) for elective breast surgery by PCT, 2009/10	3.28	4	Second highest quintile nationally	5.12	5	Highest quintile nationally
Endocrine, Nutritional & Metabolic Disorders						
Percentage of people in the National Diabetes Audit (NDA) with Type 1 diabetes receiving all nine key care processes by PCT, 1 Jan 2009 to 31 Mar 2010	26.6	1	Lowest quintile nationally	45.4	5	Highest quintile nationally
Percentage of people in the National Diabetes Audit (NDA) with Type 2 diabetes receiving all nine key care processes by PCT, 1 Jan 2009 to 31 Mar 2010	54.4	3	Average	66.2	5	Highest quintile nationally
Percentage of people in the National Diabetes Audit (NDA) having major lower limb amputations five years prior to the end of the audit period by PCT, 1 Jan 2009 to 31 Mar 2010	0.19	1	Lowest quintile nationally	0.22	3	Average
Excess length of stay (%) in hospital among people with diabetes when compared with people without diabetes by PCT, 2009/10	16.7	3	Average	26.4	5	Highest quintile nationally
Insulin total net ingredient cost (£) per patient on GP diabetes registers by PCT, 2010/11	122.2	1	Lowest quintile nationally	166.4	5	Highest quintile nationally
Non-insulin anti-diabetic drugs total net ingredient cost (£) per patient on GP diabetes registers by PCT, 2010/11	107.7	3	Average	122.8	4	Second highest quintile nationally
Mental Disorders						

Anti-dementia drug items prescribed per weighted population (ADQ per STAR-PU) in primary care by PCT, 2009/10	0.089	1	Lowest quintile nationally	0.047	1	Lowest quintile nationally
Rate (DSR) of inpatient admissions >3 days' duration in children per 100,000 population aged 0–17 years for mental health disorders by PCT, 2007/08-2009/10	12.4	3	Average	14.5	5	Highest quintile nationally
Neurological Problems						
Parkinson's disease drug items prescribed per weighted population (ADQ per STAR-PU) in primary care by PCT, 2009/10	4.79	5	Highest quintile nationally	4.94	5	Highest quintile nationally
Emergency admission rate (DSR) for children with epilepsy per 100,000 population aged 0–17 years by PCT, 2007/08-2009/10	97.3	5	Highest quintile nationally	72.1	4	Second highest quintile nationally
Problem of Vision						
Percentage of the diabetic population receiving screening for diabetic retinopathy by PCT, Jan-Mar 2011	63.9	1	Lowest quintile nationally	67	1	Lowest quintile nationally
Rate per 100,000 population of certificates of visual impairment (CsVI) issued with a main cause of diabetic eye disease by PCT, 2008/09-2009/10	3.6	5	Highest quintile nationally	2.2	1	Lowest quintile nationally
Problems of Circulation						
Percentage of transient ischaemic attack (TIA) cases with a higher risk who are treated within 24 hours by PCT, Jan-Mar 2011	57.14	1	Lowest quintile nationally	85.71	4	Second highest quintile nationally
Percentage of patients admitted to hospital following a stroke who spend 90% of their time on a stroke unit by PCT, Jan-Mar 2011	54.5	1	Lowest quintile nationally	39.8	1	Lowest quintile nationally
Problems of the respiratory system						
Rate of expenditure (£) on home oxygen therapy per 1000 population by PCT	2136.0	3	Average	3160.9	5	Highest quintile nationally
Emergency admission rate (DSR) for children with asthma per 100,000 population aged 0–17 years by PCT, 2009/10	234.3	3	Average	207.7	2	Second lowest quintile nationally

Dental Problems						
Percentage of patients who succeeded in gaining access to NHS dentistry services after requesting an appointment in the last two years by PCT, Oct-Dec 2010	95.4	5	Highest quintile nationally	95.1	5	Highest quintile nationally
Problems of the Gastrointestinal System						
Admission rate for children for upper and/or lower gastro-intestinal endoscopy per 100,000 population aged 0–17 years by PCT, 2007/08-2009/10	117.0	4	Second highest quintile nationally	125.8	5	Highest quintile nationally
Percentage of elective day-case laparoscopic cholecystectomies per all elective cholecystectomies by PCT, 2010/11	21.5	1	Lowest quintile nationally	41.5	4	Second lowest quintile nationally
Conditions of Neonates						
Proportion (%) of full-term babies (≥37 weeks' gestational age at birth) of all babies admitted to specialist neonatal care by PCT, 2010	51%	3	Average	42.1%	1	Lowest quintile nationally
Care of alcohol related conditions						
Rate (DSR) of alcohol-related admissions per 100,000 population by PCT, 2009/10	1417.8	1	Lowest quintile nationally	1506.1	1	Lowest quintile nationally
Emergency Care						
Rate (DSR) of accident and emergency (A&E) attendances per 100,000 population by PCT, 2010	230.61	1	Lowest quintile nationally	253.11	1	Lowest quintile nationally
Rate (DSR) per 100,000 of conversion from accident and emergency (A&E) attendance to admissions by PCT, 2010	93.1	1	Lowest quintile nationally	86.3	1	Lowest quintile nationally
Rate (DSR) of admissions with emergency ambulatory care conditions (EACCs) per 100,000 population by PCT, 2010	22.5	3	Average	22.4	3	Average
End of Life Care						
Percentage of all deaths at usual place of residence	46.6	5	Highest quintile	40.4	4	Highest quintile

by PCT, 2010			nationally			nationally
Percentage of all deaths that occur in hospital for children aged 0-17 years with life-limiting conditions by PCT, 2005-2009	74.1	3	Average	73.7	3	Average
Imaging Services						
Rate of magnetic resonance imaging (MRI) activity per 1000 weighted population by PCT, 2010/11	41.4	4	Second highest quintile nationally	43.7	4	Second highest quintile nationally
Rate of computed axial tomography (CT) activity per 1000 weighted population by PCT, 2010/11	87	5	Highest quintile nationally	114.2	4	Second highest quintile nationally
Rate of dual-energy X-ray (DEXA) scan activity per 1000 weighted population by PCT, 2010/11	0.85	1	Lowest quintile nationally	0.35	1	Lowest quintile nationally
Prescribing						
Hypnotics drug items prescribed per weighted population (ADQ per STAR-PU) in primary care by PCT, 2009/10	6.49	5	Highest quintile nationally	7.51	5	Highest quintile nationally

Appendix 2: NHS Atlas of Variation, Children and Young People, 2012/13

Indicator	ESDW PCT			H&R PCT		
	Value	Quintile	Rating	Value	Quintile	Rating
Resources						
Rate of expenditure on child community health services per head of population aged 0-17 years by PCT, 2008/09	86.1	2	Second lowest quintile nationally	88.4	2	Second lowest quintile nationally
Health Promotion & Disease Prevention						
Percentage of immunisation completion for routine vaccinations against diphtheria, tetanus, polio, pertussis and Haemophilus influenzae type b (DtaP/IPV/Hib) at 2 years by PCT, 2009/10	95.1	2	Second lowest quintile nationally	95.7	2	Second lowest quintile nationally
Percentage of immunisation completion for routine vaccinations against pneumococcal disease (PCV) at 2 years by PCT, 2009/10	88.2	2	Second lowest quintile nationally	88.8	3	Average
Percentage of immunisation completion for routine vaccinations against measles, mumps and rubella (MMR) at 2 years by PCT, 2009/10	87.8	3	Average	88.5	3	Average
Percentage of infants who are totally or partially breastfeeding at 6-8 weeks by PCT, 2010/11	49.3	4	Second Highest quintile nationally	43.2	3	Second Highest quintile nationally
Conditions of Neonates						
Rate of perinatal mortality per all live births by PCT, 2007-2009	5.3	1	Lowest quintile nationally	9.3	5	Highest quintile nationally
Proportion (%) of eligible premature babies tested for retinopathy of prematurity (ROP) within the recommended timeframe by PCT, 2009/10	35.3	3	Average	30	2	Second lowest quintile nationally
Proportion (%) of full-term babies (37 weeks gestational age at birth) of all babies admitted to specialist neonatal care by PCT, 2010	51	3	Average	42.7	1	Lowest quintile nationally

Disorders of Blood						
Number of emergency hospital admissions for sickle cell disease (SCD) per individual patient aged 0-17 years by PCT, 2007/08-2009/10	No data			No data		
Endocrine, Metabolic & Nutritional Problems						
Percentage of children aged 0-15 years with Type 1 diabetes whose most recent HbA1c measurement was 10% (86 mmol/mol) or less by PCT, 1 January 2009 to 31 March 2010	80	3	Average	82.1	4	Second highest quintile nationally
Mental Health Disorders						
Rate of inpatient admissions >3 days' duration in children per population aged 0-17 years for mental health disorders by PCT, 2007/08-2009/10	12.5	3	Average	14.5	4	Second highest quintile nationally
Neurological Problems						
Emergency admission rate for children with epilepsy per population aged 0-17 years by PCT, 2007/08-2009/10	97.3	4	Second highest quintile nationally	72.1	3	Average
Mean length of emergency inpatient stay (days) for children with epilepsy aged 0-17 years by PCT, 2007/08-2009/10	1.5	3	Average	1.71	4	Second highest quintile nationally
Problems of Hearing						
Rate of aural ventilation tube (grommet) insertion in children per population aged 0-17 years by PCT, 2007/08-2009/10	380.4	5	Highest quintile nationally	232.2	3	Average
Respiratory Problems						
Emergency admission rate for children with asthma per population aged 0-17 years by PCT, 2009/10	234.3	3	Average	207.7	3	Average
Rate of admissions for bronchiolitis in children per population under 2 years of age by PCT, 2007/08-2009/10	2099.1	3	Average	2056.5	3	Average

Mean length of stay (days) for bronchiolitis in children under 2 years of age by PCT, 2007/08-2009/10	1.6	1	Lowest quintile nationally	1.8	2	Second lowest quintile nationally
Rate of elective tonsillectomy in children per population aged 0-17 years by PCT, 2007/08-2009/10	350.9	5	Highest quintile nationally	339.6	4	Second highest quintile nationally
Problems of the Gastro-intestinal system						
Admission rate for children for upper and/or lower gastro-intestinal endoscopy per population aged 0-17 years by PCT, 2007/08-2009/10	117.0	4	Second highest quintile nationally	125.8	5	Highest quintile nationally
Emergency admission rate for inflammatory bowel disease (IBD) in children per population aged 0-17 years by PCT, 2007/08-2009/10	318.6	5	Highest quintile nationally	76.9	1	Lowest quintile nationally
Problems of the Genito-urinary system						
Proportion (%) of elective orchidopexy procedures performed before the age of 2 years by PCT, 2007/08-2009/10	31.7	4	Second highest quintile nationally	14	1	Lowest quintile nationally
Emergency Care						
Rate of accident and emergency (A&E) attendances per population under 5 years by PCT, 2009/10	319.4	1	Lowest quintile nationally	378.8	2	Second lowest quintile nationally
End of Life Care						
Percentage of all deaths that occur in hospital for children aged 0-17 years with life-limiting conditions by PCT, 2005-2009	74.1	3	Average	73.7	2	Second lowest quintile nationally

Appendix 3: NHS Atlas of Variation, Diabetes, 2012/13

Indicator	ESDW PCT			H&R PCT		
	Value	Quintile	Rating	Value	Quintile	Rating
Percentage of people in the National Diabetes Audit (NDA) with Type 1 diabetes receiving all nine key care processes by PCT, 1 January 2009 to 31 March 2010	26.6	1	Significantly lower than national average	45.4	5	Significantly higher than national average
Percentage of people in the National Diabetes Audit (NDA) with Type 2 diabetes receiving all nine key care processes by PCT, 1 January 2009 to 31 March 2010	54.4	4	Significantly higher than national average	66.2	5	Significantly higher than national average
Percentage of people in the National Diabetes Audit (NDA) with Type 1 diabetes whose most recent HbA1c measurement was 7.5% (58 mmol/mol) or less by PCT, 1 January 2009 to 31 March 2010	35.5	5	Significantly higher than national average	34.6	4	Significantly higher than national average
Percentage of people in the National Diabetes Audit (NDA) with Type 2 diabetes whose most recent HbA1c measurement was 7.5% (58 mmol/mol) or less by PCT, 1 January 2009 to 31 March 2010	69.9	5	Significantly higher than national average	69.4	5	Significantly higher than national average
Percentage of people in the National Diabetes Audit (NDA) with Type 1 diabetes whose most recent cholesterol measurement was 5 mmol/l or less by PCT, 1 January 2009 to 31 March 2010	75.1	3	No significant difference with national average	76.3	4	Significantly higher than national average
Percentage of people in the National Diabetes Audit (NDA) with Type 2 diabetes whose most recent cholesterol measurement was 5 mmol/l or less by PCT, 1 January 2009 to 31 March 2010	78.6	3	No significant difference with national average	80	4	Significantly higher than national average
Percentage of people in the National Diabetes Audit (NDA) with Type 1 diabetes whose most recent blood pressure measurement was within target by PCT, 1 January 2009 to 31 March 2010	64.3	3	No significant difference with national average	67.6	4	Significantly higher than national average
Percentage of people in the National Diabetes Audit (NDA) with Type 1 diabetes whose most recent blood pressure measurement was within target by PCT, 1 January 2009 to 31 March 2010	45.9	1	Significantly lower than national average	51.7	4	Significantly higher than national average
Percentage of people with previously diagnosed	0.45	3	No significant	0.55	3	No significant

diabetes in the National Diabetes Audit (NDA) admitted to hospital for diabetic ketoacidosis (DKA) at least once by PCT 2009/10			difference with national average			difference with national average
Percentage of people in the National Diabetes Audit (NDA) with diabetes who received renal replacement therapy (RRT) by PCT 2009/10	0.2	1	Significantly lower than national average	0.26	3	No significant difference with national average
Percentage of people in the National Diabetes Audit (NDA) with diabetes admitted to hospital for myocardial infarction (MI) by PCT 2009/10	0.44	2	Significantly lower than national average	0.61	3	No significant difference with national average
Percentage of people in the National Diabetes Audit (NDA) with diabetes admitted to hospital for stroke by PCT 2009/10	0.57	3	No significant difference with national average	0.55	3	No significant difference with national average
Percentage of people in the National Diabetes Audit (NDA) with diabetes admitted to hospital for cardiac failure by PCT 2009/10	1.13	1	Significantly lower than national average	1.64	3	No significant difference with national average
Excess length of stay (%) in hospital among people with diabetes when compared with people without diabetes by PCT 2009/10	16.7	1	Significantly lower than national average	26.4	5	Significantly higher than national average
Excess emergency re-admissions (%) within 28 days among people with diabetes when compared with people without diabetes by PCT 2009/10	66.8	3	No significant difference with national average	66.1	3	No significant difference with national average
Percentage of elective procedures undertaken as day-cases in people with diabetes when compared with people without diabetes by PCT 2009/10	-6.8	3	No significant difference with national average	-25	1	Significantly lower than national average
Insulin total net ingredient cost per patient on GP diabetes registers by PCT 2010/11	122.2	2	Significantly lower than national average	166.4	5	Significantly higher than national average
Non-insulin anti-diabetic drugs total net ingredient cost per patient on GP diabetes registers by PCT 2010/11	107.7	3	No significant difference with national average	122.8	4	Significantly higher than national average
Blood-testing items total net ingredient cost per patient on GP diabetes registers by PCT 2010/11	75.2	5	Significantly higher than national average	80.4	5	Significantly higher than national average
Percentage of people in the National Diabetes Audit (NDA) having major lower limb amputations five years prior to the end of the audit period by PCT; Audit period: 1 January 2009 to 31 March 2010	0.19	3	No significant difference with national average	0.22	3	No significant difference with national average
Percentage of children aged 0–15 years with	22.7	3	No significant	37.3	5	Significantly higher

previously diagnosed diabetes in the National Diabetes Audit (NDA) admitted to hospital for diabetic ketoacidosis (DKA) five years prior to the end of the audit period by PCT; Audit period: 1 January 2009 to 31 March 2010			difference with national average			than national average
Percentage of children aged 0–15 years in the National Diabetes Audit (NDA) with Type 1 diabetes whose most recent HbA1c measurement was 10% (86 mmol/mol) or less by PCT, 1 January 2009 to 31 March 2010	80	3	No significant difference with national average	82.1	3	No significant difference with national average

Appendix 4: NHS Atlas of Variation, Kidney Disease, 2012/13

Indicator	ESDW PCT			H&R PCT		
	Value	Quintile	Rating	Value	Quintile	Rating
Percentage of patients with diabetes with a diagnosis of proteinuria or micro-albuminuria treated with angiotensin converting enzyme (ACE) inhibitors (or A2 antagonists) by PCT, 2010/11	86.8	1	Lowest quintile nationally	87.4	2	Second lowest quintile nationally
Percentage of patients on the chronic kidney disease (CKD) register whose most recent blood-pressure measurement in the previous 15 months is 140/85 mmHg or less by PCT, 2010/11	74.8	4	Second highest quintile nationally	75.2	4	Second highest quintile nationally
Percentage of patients on the chronic kidney disease (CKD) register with hypertension and proteinuria treated with an angiotensin converting enzyme (ACE) inhibitor or angiotensin receptor blocker (ARB) by PCT, 2010/11	89	1	Lowest quintile nationally	90.4	3	Average
Ratio of reported to expected prevalence of chronic kidney disease (CKD) by PCT, 2010/11	0.7	3	Average	0.5	2	Second lowest quintile nationally
Percentage of respondents in the haemodialysis travel survey with a journey time of 30 minutes or less by PCT, 2010	39	1	Lowest quintile nationally	69.6	3	Average
Percentage of respondents in the haemodialysis travel survey satisfied with their transport service by PCT, 2010	92.3	4	Second highest quintile nationally	85	2	Second lowest quintile nationally
Rate of admissions for acute kidney injury (AKI) per 1,000 emergency admissions to hospital by PCT, 2010/11	6.1	3	Average	10	5	Highest quintile nationally
Median length of stay (days) in admissions with a primary diagnosis of acute kidney injury (AKI) by PCT, 2010/11	9	5	Highest quintile nationally	7	3	Average

Appendix 5: NHS Atlas of Variation, Respiratory Disease, 2012/13

Indicator	ESDW PCT			H&R PCT		
	Value	Quintile	Rating	Value	Quintile	Rating
Ratio of reported to expected COPD prevalence, by PCT, 2010/11	0.619	3	Average	0.622	3	Average
Percentage of patients with COPD with a record of FeV1 in the previous 15 months (with exception-reported patients included), by PCT, 2010/11	75.54	1	Lowest quintile nationally	81.36	5	Highest quintile nationally
Percentage of patients with COPD who have had a review in the preceding 15 months (with exception-reported patients included), by PCT, 2010/11	78.4	1	Lowest quintile nationally	80.5	2	Second lowest quintile nationally
Percentage of patients with COPD who have had influenza immunisation in the preceding 1 September to 31 March (with exception-reported patients included), by PCT, 2010/11	80.9	4	Second highest quintile nationally	80	3	Average
Rate (DSR) of COPD emergency admissions to hospital per 100,000 population, by PCT, 2010/11	102.1	1	Lowest quintile nationally	150.8	3	Average
Percentage of emergency COPD re-admissions to hospital within 30 days of discharge, by PCT, 2010/11	10.81	1	Lowest quintile nationally	15.09	4	Second highest quintile nationally
Proportion (%) of patients admitted with COPD receiving non-invasive ventilation (NIV), by PCT, 2010/11	8.83	5	Highest quintile nationally	4.14	2	Second lowest quintile nationally
Rate of expenditure on home oxygen therapy per 1,000 population, by PCT, 2010/11	2136	3	Average	3160.9	5	Highest quintile nationally
Rate of expenditure on home oxygen therapy per patient diagnosed with COPD, by PCT, 2010/11	116.8	2	Second lowest quintile nationally	147.6	4	Second highest quintile nationally
Rate (ISR) of deaths within 30 days of admission for COPD per 100,000 COPD inpatient admissions, by PCT, 2009/10	7369.6	3	Average	6817.4	3	Average
Rate (DSR) of COPD mortality per 100,000 population, by PCT, 2008-10	17	1	Lowest quintile nationally	20.3	1	Lowest quintile nationally
Prevalence (%) of asthma recorded on GP registers, by PCT, 2010/11	6.18	3	Average	5.92	2	Second lowest quintile nationally
Percentage of patients with asthma who have had an asthma review in the previous 15 months, by PCT,	76.58	1	Lowest quintile nationally	78.48	3	Average

2010/11						
Rate (DSR) of emergency admissions to hospital in people aged 18 years and over with asthma, per 100,000 population, by PCT, 2010/11	57.4	2	Second lowest quintile nationally	54.6	2	Second lowest quintile nationally
Emergency admission rate (DSR) for children with asthma per 100,000 population aged 0-17 years, by PCT, 2010/11	194.7	3	Average	222.8	3	Average
Rate (DSR) of pneumonia mortality in people aged under 75 years per 100,000 population, by PCT, 2007-10	4.42	1	Lowest quintile nationally	5.50	2	Second lowest quintile nationally
Rate of sleep studies undertaken per 1,000 population, by PCT, 2011	0.43	1	Lowest quintile nationally	0.15	1	Lowest quintile nationally
Rate of admissions for bronchiolitis in children per 100,000 population under 2 years of age, by PCT, 2008/09 - 2010/11	2156.7	3	Average	2369.6	3	Average
Mean length of stay (days) for bronchiolitis in children under 2 years of age, by PCT, 2008/09 - 2010/11	1.6	1	Lowest quintile nationally	1.3	1	Lowest quintile nationally
Average daily quantity of combination (ICS and LABA) inhalers per 1,000 patients on GP COPD and Asthma registers, by PCT, 2011	116,605	3	Average	130,835	5	Highest quintile nationally
Rate of successful smoking quitters at 4 weeks per 100,000 population of smokers aged 16 years and over, by PCT, 2010/11	3103	1	Lowest quintile nationally	4887	4	Highest quintile nationally

Appendix 6: NHS Atlas of Variation, Liver Disease, 2012/13

Indicator	ESDW PCT			H&R PCT		
	Value	Quintile	Rating	Value	Quintile	Rating
Proportion (%) of admissions attributed to liver disease that are emergency admissions, by PCT, 2010/11	50.46	5	Highest quintile nationally	30.85	2	Second lowest quintile nationally
Rate of Years of Life Lost due to Chronic Liver Disease, persons aged under 75 years	13.48	1	Lowest quintile nationally	18.13	2	Second lowest quintile nationally
Rate of mortality in people aged under 75 years due to chronic liver disease including cirrhosis per 100,000 population, by PCT, 2008-2010	7.12	1	Lowest quintile nationally	8.05	2	Second lowest quintile nationally
Rate of people admitted to hospital at least once for cirrhosis, per 100,000 population, by PCT, 2006/07-2010/11	62.56	1	Lowest quintile nationally	87.45	2	Second lowest quintile nationally
Rate of liver cancer mortality in people aged under 75 years per 100,000 population, by PCT, 2006-2010	1.316	2	Second lowest quintile nationally	1.638	4	Second highest quintile nationally
Rate of liver transplants from all donors per 1,000,000 population, by PCT, 2006/07-2010/11	6.7	1	Lowest quintile nationally	11.2	3	Average
Rate of alcohol related admissions per 100,000 population, by PCT, 2011/12	1.565	1	Lowest quintile nationally	1.824	2	Second lowest quintile nationally
Rate of alcohol specific admissions in people aged under 18 years per 100,000 population, by PCT, 2008/09-2010/11	51.26	3	Average	80.94	4	Second highest quintile nationally
Rate of alcohol specific admissions in males per 100,000 population, by PCT, 2010/11	334	2	Second lowest quintile nationally	539	4	Second highest quintile nationally
Annual dose equivalent of thiamine (100 mg equivalent) per 1,000 population, by PCT, 2011/12	2.558	2	Second lowest quintile nationally	4.29	4	Second highest quintile nationally
Annual dose equivalent of spironolactone (100 mg equivalent) per 1,000 population, by PCT, 2011/12	0.284	2	Second lowest quintile nationally	0.427	4	Second highest quintile nationally
Annual dose equivalent of acamprosate (333mg equivalent) or disulfiram (200 mg equivalent) per 1,000 population, by PCT, 2011/12	0.849	4	Second highest quintile nationally	1.407	5	Highest quintile nationally
Percentage of hepatitis B vaccination coverage in new	23.7	1	Lowest quintile	missing	Missing	

prison receptions aged 18 years or older, by responsible PCT, 2011/12			nationally			
Percentage of infants immunised for hepatitis B by their 1st birthday born to mothers with persistent Hepatitis B infection, by PCT, 2011/12	missing	Missing		missing	Missing	
Percentage of hepatitis C test uptake among people who inject drugs receiving drug treatment by PCT, 2011/12	14.8	1	Lowest quintile nationally	44.6	3	Average
Percentage of hepatitis C test uptake among new adult prison receptions, by responsible PCT, 2011/12	4.064	3	Average	NA		
Rate of hospital admissions for hepatitis C-related end-stage liver disease per 100,000 population, by PCT, 2008/09-2010/11	1.7	2	Second lowest quintile nationally	4.48	4	Second highest quintile nationally
Percentage of children in school reception year classified as overweight or obese, by PCT, 2010/11	20.13	1	Lowest quintile nationally	21.01	1	Lowest quintile nationally
Percentage of children in school year 6 classified as overweight or obese, by PCT, 2010/11	29.98	1	Lowest quintile nationally	33.81	3	Average
Percentage of estimated adult obesity (BMI ≥ 30 kg/m2), by PCT, 2006-2008	24.6	3	Average	24.9	3	Average
Percentage of estimated adult obesity (BMI ≥ 30 kg/m2), by PCT, 2006-2008	106.4	2	Second lowest quintile nationally	97.51	2	Second lowest quintile nationally
Percentage of elective adult day-case laparoscopic cholecystectomy per all elective cholecystectomies, by PCT, 2010/1	21.5	2	Second lowest quintile nationally	41.46	4	Second highest quintile nationally
Rate of Endoscopic retrograde cholangiopancreatography procedures per 100,000 population, by PCT, 2010/11	54.99	2	Second lowest quintile nationally	58.04	3	Average
Percentage of elective ERCP procedures performed as day cases, by PCT, 2010/11	57.1	3	Average	62.9	3	Average
Rate of pancreatic cancer mortality in people aged under 75 years per 100,000 population, by PCT, 2008-2010	5.523	2	Second lowest quintile nationally	5.596	2	Second lowest quintile nationally
Rate of non-elective admissions to hospital where diagnosis includes paracetamol overdose per 100,000 population, by PCT, 2010/11	90.7	2	Second lowest quintile nationally	113.6	4	Second highest quintile nationally
Rate of expenditure on hepatobiliary problems per 1,000 population, by PCT, 2010/11	13,139	3	Average	15,880	5	Highest quintile nationally
Estimated annual rate of use for ALT tests ordered by GPs per 1,000 practice population, by PCT, 2012	292.2	3	Average	349.2	5	Highest quintile nationally