NHS

The NHS Outcomes Framework 2012/13

Technical Appendix

DH Department of Health

DH INFORMATION READER BOX

Policy
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For Recipient's Use	

Contents

Introduction

This technical annex sets out the detailed definitions and data sources for each indicator, grouped under the five domains of the NHS Outcomes Framework. Each section has an introduction that describes the domain followed by detailed templates of each indicator, including reference to the latest available data, at the time of writing.

In some cases, the definitions are still under development. In addition, the annex includes tentative lists of the factors (including ‘external drivers’) that affect the performance of an indicator. Such external drivers are summarised in a table at the end of this annex.

Each domain introduction also describes two measurement ‘themes’ which are being considered – inequalities and international comparisons.

For inequalities, we explain potential measures that could be used to support the health inequalities duties proposed in the Health and Social Care Bill.

For international comparisons, we will be considering what information is available that can aid our understanding of how England is performing internationally.

A separate equality analysis has been prepared that updates the previous Equality Impact Assessment (including the assessment of data availability) published with the NHS Outcomes Framework 2011/12[1].

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[1] Available at
http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_122944

Preventing people from dying prematurely

Indicator Structure

1.1 Domain 1, ***Preventing people from dying prematurely***, comprises two *overarching indicators*: “1a *Potential Years of Life Lost (PYLL) from causes considered amenable to healthcare*” and “1b *Life expectancy at 75*”, and seven improvement areas.

1.2 The improvement areas are of two sorts:

- Sub-indicators. The first four improvement areas relate to particular diseases (Under 75 mortality rates from 1.1 cardiovascular disease, 1.2 respiratory disease, 1.3 liver disease; 1.4.i-vi one-and five-year survival from colorectal, breast and lung cancer and under 75 mortality rate from cancer), which account for large portions of the disease burden amenable to health care. Progress in these outcomes therefore provides a useful initial analysis of what accounts for progress in the overarching indicators. Amenable outcomes under indicator 1.5 Excess under 75 mortality rate in adults with serious mental illness, and under the placeholder indicator 1.7 (which will measure excess mortality for people with Learning Disabilities), are also largely captured in overarching indicator 1a. In this case, the reason for inclusion of separate indicators is concern that poor outcomes for these groups may reflect inequity.
- Complementary Indicators. Neonatal mortality up to the age of 28 days is not included in the overarching indicator because cause of death is not classified by ICD-10 code for deaths up to 28 days after live birth. Yet deaths up to 28 days and stillbirths, indicator 1.6.ii (Neonatal mortality and stillbirths), are amenable to healthcare, and therefore complement indicator 1a. Indicator 1.6.i (Infant mortality), a shared indicator with public health, subject to final publication of the Public Health Outcomes Framework, is included to register the important contribution of the NHS to the care of all infants up to one year.

1.3 Deaths from causes considered ‘amenable’ to health care are premature deaths that should not occur in the presence of timely and effective health care. The NHS also contributes to reducing premature deaths from causes not considered ‘amenable’. The inclusion of broader shared indicators, including the mortality indicators for major diseases and infant mortality, reflect the contribution that the NHS can make to outcomes where there is shared responsibility with Public Health, subject to final publication of the Public Health Outcomes Framework. The NHS contribution will include encouraging healthy behaviours and uptake of screening and vaccination options, in addition to providing appropriate diagnosis, care planning and treatment.

1.4 Together, the overarching indicators and the improvement indicators provide a picture of the NHS’s contribution to preventing people from dying prematurely.

Work in Progress

1.5 The main issues pertaining to Domain 1 upon which work is continuing are:

- Isolation of the specific NHS contribution to: outcomes for the over-75s; to outcomes for infants; and towards survival following incidence of major diseases (as well as cancer).
- Work with the cancer registries to obtain data on the stage of disease at which patients are diagnosed, so as to control for sources of bias in estimates of NHS contribution to survival.
- Development of an excess mortality indicator for people with learning disabilities to complement indicator 1.5. (Placeholder indicator 1.7.)

Inequality

1.6 Outcomes for the overarching and complementary indicators should be assessed from an inequalities perspective. One option is to use a Slope Inequality Indicator (see glossary) capturing correlation of outcomes with small-area deprivation, for indicators 1a and 1.6ii.

1.7 Indicators 1.5 and 1.7 referred to above also capture an important aspect of inequality.

NHS vs external drivers of the outcome

1.8 The individual indicator templates set out in this section in broad terms the contribution that the NHS can make to outcomes in contradistinction from external drivers of outcome. The most general such external driver in this domain is the incidence of the diseases themselves. Unfortunately, at the current time estimation of disease incidence is weak, so changes in incidence are not included in definitions. Hence, NHS performance must be assessed in the light of what becomes known about changing trends in disease incidence. Changes in incidence have a double impact:

- Increased incidence increases the number of sufferers from a disease at risk of death.
- Increased incidence dilutes the resources available for their treatment by the NHS.

1.9 Conversely, as incidence declines, outcomes should improve for a given NHS resource envelope for the same two reasons.

1.10 Drivers determining incidence by major disease areas are set out under each indicator below.

1.11 Contributions from public health and social care services are also set down in broad terms. For some such contributions, the impact upon outcomes, particularly disease incidence, is lagged by a number of years, so that at the time of incidence such impacts are beyond the control of the NHS. The NHS nevertheless has a responsibility to support the improvement of public health to ensure better outcomes in future years for people susceptible to or bearing the relevant risk factors.

1.12 For other outcomes, the impact of public health and social care is contemporaneous to that of the NHS (for example, the NHS, public health and social care all contribute to good outcomes through the course of maternity). In such cases, the NHS has a responsibility to engage with social care and public health services to increase the effectiveness of its work.

International Comparisons

1.13 International comparisons for outcomes in this domain are plentiful. However, definitions vary somewhat.

1.14 Generally, international comparisons of premature mortality from defined causes by ICD-10 code are either available or potentially available from datasets published by the Organisation for Economic Co-operation and Development (OECD) and the World Health Organisation (WHO). Recent international comparisons of 5-year cancer survival for breast and colorectal cancer are available in OECD's Health at a Glance bi-annual report, and from ad-hoc academic research. International comparisons of infant and neonatal mortality rates are published by WHO and OECD, but some of the international variation in these rates may be due to variations among countries in registering premature infants (whether they are reported as live births or not). In addition, some variations exist in the definitions of foetal deaths, and care should be taken when making comparisons between countries. There is currently no international comparison of premature mortality in people with serious mental illness.

<table>
<tr><th colspan="2">1a Potential Years of Life Lost (PYLL) from causes considered amenable to health care</th></tr>
<tr><td>Outcome sought</td><td>Reduced PYLL from causes amenable to health care.</td></tr>
<tr><td>Updated definition</td><td>Indicator description: Potential years of life lost (PYLL) rate from causes considered amenable to health care.

Indicator construction: Causes considered amenable to health care are those from which premature deaths should not occur in the presence of timely and effective health care. The concept of 'amenable' mortality generally relates to deaths under age 75, due to the difficulty in determining cause of death in older people who often have multiple morbidities. The Office for National Statistics (ONS) produces mortality data by cause which excludes deaths under 28 days (for which cause of death is not classified by ICD-10 codes). This indicator therefore relates to deaths between 28 days and 74 years of age inclusive.

ONS consulted on a proposed list of causes considered amenable to healthcare in February 2011 and is currently undertaking work to update the list. This is expected to be complete by Spring 2012. ONS's proposed amenable causes are listed below but these are subject to change. ONS's consultation document can be found at: http://www.ons.gov.uk/ons/about-ons/consultations/closed-consultations/2011/definitions-of-avoidable-mortality/index.html

<table>
<tr><th>ICD–10 codes</th><th>Condition group and cause</th><th>Ages included</th></tr>
<tr><td colspan="3">Infections</td></tr>
</table>
</td></tr>
</table>

A00–A09	Intestinal infectious diseases	0–14
A15–A19, B90	Tuberculosis	0–74
A35– A36, A80	Other infections (diphtheria, other tetanus, acute poliomyelitis)	0–74
A37	Whooping cough	0–14
A38–A41, A46, A48.1, B50–B54, G00, G03, L03	Selected invasive bacterial and protozoal infections	0–74
B05	Measles	1–14
Neoplasms		
C18–C21	Malignant neoplasm of colon and rectum	0–74
C43	Malignant melanoma of skin	0–74
C44	Other malignant neoplasms of skin	0–74
C50	Malignant neoplasms of breast	0–74
C53	Malignant neoplasm of cervix uteri	0–74
C54–C55	Malignant neoplasm of corpus uteri and uterus unspecified	0–44
C62	Malignant neoplasm of testis	0–74
C67	Malignant neoplasm of bladder	0–74
C73	Malignant neoplasm of thyroid gland	0–74
C81	Hodgkin’s disease	0–74
C91–C95	Leukaemia	0–44
D10–D36	Benign neoplasms	0–74
Nutritional, endocrine and metabolic		
E00–E07	Disorders of thyroid gland	0–74
E10–E14	Diabetes mellitus	0–49
Neurological disorders		
G40–G41	Epilepsy and status epilepticus	0–74
Cardiovascular diseases		
I01–I09	Rheumatic and other valvular heart disease	0–74
I10–I15	Hypertensive diseases	0–74
I20–I25	Ischaemic heart disease	0–74
I60–I69	Cerebrovascular diseases	0–74
Respiratory diseases		
J00–J08, J20–J39, J47 – J99	Other respiratory	1–14
J09–J11	Influenza (including swine flu)	0–74
J12–J18	Pneumonia	0–74
J40–J44	Chronic Obstructive Pulmonary Disease	0–74
J45– J46	Asthma	0–74
Digestive disorders		
K25–K28	Gastric and duodenal ulcer	0–74
K35–K38, K40–K46, K80–K83, K85–K86, K91.5	Acute abdomen, appendicitis, intestinal obstruction, cholecystitis / lithiasis, pancreatitis, hernia	0–74

<table>
<tr>
<td></td>
<td>
<table>
<tr><td colspan="3">Genitourinary disorders</td></tr>
<tr><td>N00–N07, N17–N19, N25, N27</td><td>Nephritis and nephrosis</td><td>0–74</td></tr>
<tr><td>N13, N20–N21, N35, N40, N99.1</td><td>Obstructive uropathy & prostatic hyperplasia</td><td>0–74</td></tr>
<tr><td colspan="3">Maternal & infant</td></tr>
<tr><td>O00 – O99</td><td>Pregnancy, childbirth and the puerperium</td><td>All</td></tr>
<tr><td>P00–P96, A33</td><td>Complications of perinatal period</td><td>All</td></tr>
<tr><td>Q00–Q99</td><td>Congenital malformations, deformations and chromosomal anomalies</td><td>0–74</td></tr>
<tr><td colspan="3">Unintentional injuries</td></tr>
<tr><td>Y60–Y69, Y83–Y84</td><td>Misadventures to patients during surgical and medical care</td><td>All</td></tr>
</table>
<p>Indicator format: The exact method of calculating PYLL is still to be finalised, but subject to further refinement and consultation with experts it is proposed to monitor the European age-standardised PYLL rate using age-specific life expectancies as weights, rather than the number of years of life remaining up to a selected age limit of, say, 70 (as used by OECD) or 75 (as used by the NHS Information Centre Compendium of Population Health Indicators, formerly NCHOD).</p>
</td>
</tr>
<tr>
<td>Data source</td>
<td>ONS: mortality data by cause and mid-year population estimates:
http://www.ons.gov.uk/ons/publications/re-reference-tables.html?edition=tcm%3A77-199137
http://www.ons.gov.uk/ons/publications/re-reference-tables.html?edition=tcm%3A77-223131</td>
</tr>
<tr>
<td>Reporting schedule for data source</td>
<td>Frequency: Annual (calendar year).
Timing: 2011 data will be available by Autumn 2012.</td>
</tr>
<tr>
<td>Technical issues remaining to be resolved</td>
<td>- Exact list of causes considered amenable to health care.
- Exact methodology for calculating PYLL.</td>
</tr>
<tr>
<td>Changes since December 2010 definition</td>
<td><p>The Department of Health (DH), in consultation with external experts, proposed Potential Years of Life Lost to amenable causes as a more appropriate measure than standardised mortality rates, as it takes account of the extent of prematurity, and is therefore more consistent with benefit assessment techniques for treatment and policy option analysis employed by NICE and by DH. Standardised mortality rates will be used for disease-specific improvement indicators 1.1, 1.2, 1.3 and 1.4iv (premature mortality from cardiovascular, respiratory, liver disease and cancer) lest the use of PYLL rates for specific diseases appears to inappropriately prescribe clinical prioritisation between individual patients according to age.</p>
<p>To the extent that those from disadvantaged backgrounds die earlier</p></td>
</tr>
</table>

	from these illnesses, the PYLL measure will be more sensitive to inequalities.
Historical comparisons	- There are several working lists of amenable causes, for example: • Current working definition, with ICD-10 codes, from Table 10 in Nolte and McKee 2008, *Does Healthcare Save Lives?* www.nuffieldtrust.org.uk/ecomm/files/21404avoidablemortality2.pdf International comparisons using this definition: http://content.healthaffairs.org/content/27/1/58.abstract • The NHS Information Centre Compendium of Population Health Indicators: time series for mortality rates from causes considered amenable to health care available from 1993 to 2009 for England and geographical breakdown: https://indicators.ic.nhs.uk/download/NCHOD/Data/03D_171DRT0074_09_V1_D.xls - Source data available as a continuous time series from at least 1993, enabling the construction of this indicator from that year, once the definition has been agreed.
NHS vs external drivers of the outcome	**Health care contribution:** Preventing premature deaths from causes amenable to health care through improved diagnosis and treatment. The amenable causes included in this indicator are selected on the basis that all or most deaths from a cause (within the age limits given) could be avoided through good quality healthcare. **Public health and social care contribution:** Tobacco use; salt consumption; alcohol consumption; illicit drug use; obesity; 5 a day; high fibre diet; physical activity; screening programmes; prevention, early identification and management of risk factors including: >cholesterol, >blood pressure, >diabetes, >chronic kidney disease, >hepatitis B, >hepatitis C, TIA interventions; vaccination rates; quality of social care in hospital and that supports timely discharge; quality of care received whilst living at home or in residential care (e.g. recognition of the symptoms of stroke), medication compliance; teenage pregnancy; mitigation of social isolation; appropriate use of NSAIDs; statins; HRT; oral contraceptives. **Drivers of the outcome beyond NHS control:** Socio economic status, fuel poverty alleviation, environmental factors (e.g. air quality, radon gas), occupational risk (e.g. carcinogens), prevalence of co-morbidities

1b.i and 1b.ii Life Expectancy at 75, males and females	
Outcome sought	Increased life expectancy at age 75, for males and females separately.

Updated definition	**Indicator description:** Period life expectancy at age 75 for males and females **Indicator construction:** Period life expectancy is the average number of additional years a person can be expected to live for, if he or she experiences the age-specific mortality rates of the given time period for the rest of his or her life. The period life expectancy at age 75 for years to 2010 is based on historical mortality rates for years to 2010. Methodology published by ONS: http://www.ons.gov.uk/ons/rel/lifetables/interim-life-tables/2008-2010/rft-ilt-eng-2008-10.xls **Indicator format:** Number of years
Data source	ONS: mid-year population estimates and deaths by individual age 75 and above for the relevant year: http://www.ons.gov.uk/ons/publications/re-reference-tables.html?edition=tcm%3A77-199137 http://www.ons.gov.uk/ons/publications/re-reference-tables.html?edition=tcm%3A77-223131
Reporting schedule for data source	**Frequency:** Every 2 calendar years. ONS use source data to produce single year Life Expectancy figures for individual ages on a 2-year basis, as part of ONS's 2-yearly population projections. **Timing:** 2011 data will be available by Autumn 2012.
Technical issues remaining to be resolved	None
Changes since December 2010 definition	Life expectancy at 75 for single years will be presented for males and females separately, rather than a three-year average for persons. ONS do not produce and strongly advise against use of persons figures as the mortality experience is significantly different between males and females. 3-year average Life Expectancy figures are published annually by ONS in interim life tables, but figures for single years are considered preferable, even though they are only published every two years, because they convey more information relating to the most recent year, and in alternate years they provide a more timely indicator.
Historical comparisons	- Historical data available from ONS from 1981 to 2010, with projections to 2060: http://www.ons.gov.uk/ons/rel/lifetables/period-and-cohort-life-expectancy-tables/2010-based/rft-engperiod10.xls Latest published data are 2010-based.

	- Source data available as a continuous time series from at least 1993.
NHS vs external drivers of the outcome	**Health care contribution:** Extending life (at age 75 and over) through improved diagnosis and treatment, in particular by improving early diagnosis of long term conditions such as ischaemic heart disease, stroke, cancer, COPD, liver disease and dementia; care planning and treatment for those diagnosed with long-term conditions; and investigation and treatment of patients presenting with acute symptoms, e.g. of heart attack, stroke, hip fracture, pneumonia or with cancer symptoms. **Public health and social care contribution**: Tobacco use; salt consumption; alcohol consumption; illicit drug use; obesity; 5 a day; high fibre diet; continued physical activity; screening programmes; prevention, early identification and management of risk factors including: >cholesterol, >blood pressure, >diabetes, >chronic kidney disease, >hepatitis B, >hepatitis C, TIA interventions; vaccination rates; quality of social care in hospital and that supports timely discharge; quality of care received whilst living at home or in residential care (e.g. recognition of the symptoms of stroke), medication compliance; mitigation of social isolation; appropriate use of NSAIDs; statins **Drivers of the outcome beyond NHS control**: Socio economic status, fuel poverty alleviation, environmental factors (e.g. air quality, radon gas), occupational risk (e.g. carcinogens), cohort effect, prevalence of co-morbidities, underlying prevalence of a long term condition. Changes in the levels of these risk factors, including public health and social care contributors, can have a delayed effect on mortality. The cohort born between 1923 and 1940 have experienced greater rates of improvement in mortality rates than those born on either side over the past 25 years, and there is currently no evidence that these differentials are declining. This cohort effect represents an additional driver of this outcome.

1.1 Under 75 mortality rate from cardiovascular disease	
Outcome sought	Reduced premature mortality from cardiovascular disease.
Updated definition	**Indicator description:** Mortality rate from cardiovascular disease, ages under 75, per 100,000 population. **Indicator construction:**

	Numerator Number of deaths under 75 from cardiovascular disease. Cardiovascular disease is defined in terms of the following ICD-10 codes: All ICD-10 codes in Chapter IX - Diseases of the circulatory system (I00-I99) ***Denominator*** Resident population under 75 years. ONS mortality data by cause excludes deaths under 28 days for which cause of death is not classified by ICD-10 code. This indicator therefore relates to deaths between 28 days and 74 years of age inclusive. **Indicator format** Directly age-standardised rate per 100,000 population (using European Standard Population) – (*numerator/denominator)*100,000* This is a shared indicator with the Public Health Outcomes Framework, subject to final publication of the Public Health Outcomes Framework.
Data source	ONS: mortality data by cause and mid-year population estimates: http://www.ons.gov.uk/ons/publications/re-reference-tables.html?edition=tcm%3A77-199137 http://www.ons.gov.uk/ons/publications/re-reference-tables.html?edition=tcm%3A77-223131
Reporting schedule for data source	**Frequency:** Annual (calendar year). **Timing:** 2011 data will be available by Autumn 2012.
Technical issues remaining to be resolved	None
Changes since December 2010 definition	The definition of cardiovascular disease to be used for this indicator in terms of ICD-10 codes has now been agreed.
Historical comparisons	- Historical time series available from NHS Information Centre Compendium of Population Health Indicators from 1993 to 2009 for England and geographical breakdown: https://indicators.ic.nhs.uk/download/NCHOD/Data/06A_076DRT00++_09_V1_D.xls - Source data available as a continuous time series from at least 1993.

NHS vs external drivers of the outcome	**Health care contribution:** The prompt diagnosis and effective management of cardiovascular conditions and treatments to reduce the re-occurrence of cardiovascular disease events and to prevent or to slow the process of chronic conditions. **Public health and social care contribution:** Tobacco use; salt consumption; alcohol consumption; illicit drug use; obesity; 5 a day; physical activity; prevention, early identification and management of risk factors, including: >cholesterol, >blood pressure, >diabetes, >chronic kidney disease, TIA interventions; vaccination rates; quality of social care in hospital and that supports timely discharge; quality of care received whilst living at home or in residential care (e.g. recognition of the symptoms of stroke), medication compliance; mitigation of social isolation; appropriate use of NSAIDs; statins; HRT. **Drivers of the outcome beyond NHS control**: These include socio-economic status, prevalence of co-morbidities. In general, changes in the external determinants will have a delayed effect on cardiovascular disease mortality.

1.2 Under 75 mortality rate from respiratory disease	
Outcome sought	Reduced premature mortality from respiratory disease.
Updated definition	**Indicator description:** Mortality rate from respiratory disease, ages under 75, per 100,000 population. **Indicator construction:** ***Numerator*** Number of deaths under 75 from respiratory disease Respiratory disease is defined in terms of the following ICD-10 codes: All ICD-10 codes in Chapter X - Diseases of the respiratory system (J00-J99) ***Denominator*** Resident population under 75 years ONS mortality data by cause excludes deaths under 28 days for which cause of death is not classified by ICD-10 codes. This indicator therefore relates to deaths between 28 days and 74 years of age inclusive. **Indicator format** Directly age-standardised rate per 100,000 population (using European Standard Population) – (*numerator/denominator)*100,000*

	This is a shared indicator with the Public Health Outcomes Framework, subject to final publication of the Public Health Outcomes Framework.
Data source	ONS: mortality data by cause and mid-year population estimates: http://www.ons.gov.uk/ons/publications/re-reference-tables.html?edition=tcm%3A77-199137 http://www.ons.gov.uk/ons/publications/re-reference-tables.html?edition=tcm%3A77-223131
Reporting schedule for data source	**Frequency:** Annual (calendar year). **Timing:** 2011 data will be available by Autumn 2012.
Technical issues remaining to be resolved	None
Changes since December 2010 definition	The definition of respiratory disease to be used for this indicator in terms of ICD-10 codes has now been agreed.
Historical comparisons	Source data available as a continuous time series from at least 1993, enabling the construction of this indicator from that year.
NHS vs external drivers of the outcome	**Health care contribution:** Early and accurate diagnosis, optimal pharmacotherapy, physical interventions, prompt access to specialist respiratory care, structured hospital admission and appropriate provision of home oxygen. **Public health and social care contribution:** Tobacco use; illicit drug use; physical activity; vaccination rates; quality of social care in hospital and that supports timely discharge; quality of care received whilst living at home or in residential care (e.g. recognition of symptoms), medication compliance; mitigation of social isolation. **Drivers of the outcome beyond NHS control**: Socio economic status, environmental factors (e.g. air quality, radon gas), occupational risk (e.g. carcinogens), prevalence of co-morbidities, immigration, genetics (especially alpha-1 antitrypsin deficiency). In general, changes in the external determinants will have a delayed effect on respiratory mortality.

1.3 Under 75 mortality rate from liver disease

Outcome sought	Reduced premature mortality from liver disease.
Updated definition	**Indicator description:** Mortality rate from liver disease, ages under 75, per 100,000 population. **Indicator construction:** ***Numerator***

Number of deaths under 75 from liver disease

Definitions of liver disease in terms of the following ICD-10 codes:

K70	Alcoholic liver disease
K71	Toxic liver disease
K72	Hepatic failure, not elsewhere classified
K73	Chronic hepatitis, not elsewhere classified
K74	Fibrosis and cirrhosis of liver
K75	Other inflammatory liver diseases
K76	Other diseases of liver
K77	Liver disorders in diseases classified elsewhere
B15	Acute hepatitis A
B16	Acute hepatitis B
B17	Other acute viral hepatitis
B18	Chronic viral hepatitis
B19	Unspecified viral hepatitis
C22	Malignant neoplasm of liver and intrahepatic bile ducts
I81	Portal vein thrombosis
I85	Oesophageal varices
T86.4	Liver transplant failure and rejection

Denominator
Resident population under 75 years

ONS mortality data by cause excludes deaths under 28 days for which cause of death is not classified by ICD-10 codes. This indicator therefore relates to deaths between 28 days and 74 years of age inclusive.

Indicator format
Directly age-standardised rate per 100,000 population (using European Standard Population) – (*numerator/denominator)*100,000*

This is a shared indicator with the Public Health Outcomes Framework, subject to final publication of the Public Health Outcomes Framework.

Data source

ONS: mortality data by cause and mid-year population estimates:
http://www.ons.gov.uk/ons/publications/re-reference-tables.html?edition=tcm%3A77-199137
http://www.ons.gov.uk/ons/publications/re-reference-tables.html?edition=tcm%3A77-223131

Reporting schedule for data source

Frequency: Annual (calendar year).
Timing: 2011 data will be available by Autumn 2012.

Technical issues remaining to be resolved	None
Changes since December 2010 definition	The definition of liver disease to be used for this indicator in terms of ICD-10 codes has now been agreed. This is a wider and more comprehensive definition of liver disease than that used by the NHS Information Centre Compendium of Population Health Indicators and WHO Health for All, which cover only chronic liver disease and cirrhosis, (ICD-10 K70, K73 and K74). There is no single ICD-10 chapter which encompasses this wider definition of liver disease so a wider set of codes has been assembled for the purposes of describing all liver disease mortality in the NHS and Public Health Outcomes Frameworks.
Historical comparisons	- Similar mortality indicators are published annually in the NHS IC Compendium of Population Health Indicators using the narrower definition of liver disease (Mortality from chronic liver disease including cirrhosis, ICD-10 K70, K73 and K74). Data for 2007-09 were published in March 2011: https://indicators.ic.nhs.uk/download/NCHOD/Data/25A_043DR0074_09_V1_D.xls - Source data available as a continuous time series from at least 1993, enabling the construction of this indicator from that year.
NHS vs external drivers of the outcome	**Healthcare contribution:** Improved diagnosis and treatment. **Public health and social care contribution:** Alcohol consumption; illicit drug use; obesity; 5 a day; physical activity; prevention, early identification and management of risk factors, including: >cholesterol, >diabetes, >hepatitis B, >hepatitis C, quality of social care in hospital and that supports timely discharge; quality of care received whilst living at home or in residential care (e.g. recognition of symptoms), medication compliance; mitigation of social isolation. **Drivers of the outcome beyond NHS control**: Socio economic status, prevalence of co-morbidities, immigration. In general, changes in the levels of these risk factors will have a delayed effect on mortality.

1.4.i-vi Cancer survival	
Outcome sought	Reduced years of life lost from cancer.
Updated definition	**Indicator description:** One-and five-year relative survival from the three major cancers: colorectal, breast and lung, will be reported separately. Relative survival is an estimate of the probability of survival from the

	cancer alone. It is defined as the ratio of the observed survival and the survival that would have been expected if the cancer patients had experienced the same background mortality by age and sex as the general population. Survival is a measure of the number of patients diagnosed with cancer in a year who are still alive a number of years after diagnosis. The methodology used to calculate one-year survival is the ‘classical’ or ‘cohort’ approach. All patients diagnosed in the diagnosis period are followed up for one year. The methodology used to calculate the five-year survival estimates is the 'complete’ approach. Only patients diagnosed in the first year of the diagnosis period are followed up for five years; those diagnosed in later years contribute as many years of follow-up as available. Five-year survival is the cumulative result of having survived during all previous intervals of time since the diagnosis, so one-year survival is implicitly included in the calculation of the five-year survival estimate. This is a robust method, and allows 5-year figures to be calculated timeously. Colorectal, breast and lung cancers are defined in terms of the following ICD-10 codes: Colorectal C18-C20, C21.8; Breast C50; Lung C33-C34 **Indicator format:** One-and five-year age-standardised relative survival percentage for adults (15–99 years).
Data source	ONS: mortality data by cause and mid-year population estimates, cancer registry data: http://www.ons.gov.uk/ons/publications/re-reference-tables.html?edition=tcm%3A77-199137 http://www.ons.gov.uk/ons/publications/re-reference-tables.html?edition=tcm%3A77-223131
Reporting schedule for data source	**Frequency:** Annual for mortality and survival data (calendar years). **Timing:** 2011 mortality data will be available by Autumn 2012. Five-year cancer survival estimates for cancers diagnosed in 2006-2010 and followed up to 2011 will be published in Autumn 2012.
Technical issues remaining to be resolved	None
Changes since December 2010 definition	Colorectal cancer survival data for England are now available and will be published annually alongside data for lung and breast cancer survival.
Historical comparisons	Historical time series available from ONS at: http://www.ons.gov.uk/ons/publications/all-releases.html?definition=tcm%3A77-21521 http://www.ons.gov.uk/ons/rel/cancer-unit/cancer-survival-in-

	england/colorectum-cancer/colorectum-cancer-survival-estimates-in-england.xls
NHS vs external drivers of the outcome	**Healthcare contribution:** Earlier and more accurate diagnosis, making optimal use of referral pathways and available interventions, support after primary treatment for lifestyle changes including changes in diet, smoking and physical exercise. **Public health and social care contribution:** Breast and bowel screening programmes to support the early detection of breast and colorectal cancer; management of risk factors including diet, smoking and physical exercise; quality of social care in hospital and that supports timely discharge; quality of care received whilst living at home or in residential care (e.g. recognition of symptoms), medication compliance, mitigation of social isolation. **Other contributors and/or those beyond NHS control:** Socio economic status, other medical conditions, previous cancer treatment, family history.
Sources of bias	Changes to the indicator may be biased as a representation of change to the outcomes sought due to lead time and length time bias. ***Lead time bias*** may occur when improved screening results in earlier diagnosis: earlier diagnosis will itself prolong measured survival, irrespective of whether death is deferred and premature mortality is reduced. ***Length time bias*** in measuring cancer survival arises because faster-growing tumours generally have a shorter asymptomatic phase than slower-growing tumours, and so are less likely to be detected. Faster-growing tumours are often associated with a poorer prognosis. Slower-growing tumours are hence likely to be over-represented in additional cases found through improved screening.

1.4.vii Under 75 mortality rate from cancer	
Outcome sought	Reduced premature mortality from cancer.
Updated definition	**Indicator description:** Mortality rate from cancer, ages under 75, per 100,000 population **Indicator construction:** ***Numerator*** Number of deaths under 75 from all cancers Cancer is defined in terms of the following ICD10 codes: All ICD-10 codes for Malignant Neoplasms in Chapter II - Neoplasms (C00-C97) ***Denominator*** Resident population under 75 years ONS mortality data by cause excludes deaths under 28 days for

	which cause of death is not classified by ICD-10 codes. This indicator therefore relates to deaths between 28 days and 74 years of age inclusive. **Indicator format** Directly age-standardised rate per 100,000 population (using European Standard Population) – (*numerator/denominator)*100,000* This is a shared indicator with the Public Health Outcomes Framework, subject to final publication of the Public Health Outcomes Framework.
Data source	ONS: mortality data by cause and mid-year population estimates: http://www.ons.gov.uk/ons/publications/re-reference-tables.html?edition=tcm%3A77-199137 http://www.ons.gov.uk/ons/publications/re-reference-tables.html?edition=tcm%3A77-223131
Reporting schedule for data source	**Frequency:** Annual (calendar year). **Timing:** 2011 data will be available by Autumn 2012.
Technical issues remaining to be resolved	None
Changes since December 2010 definition	This is a new indicator. This shared indicator with Public Health has been introduced in addition to indicators of one-and five-year survival from the three main cancers to demonstrate that the NHS can make a contribution to improving preventable as well as amenable cancer mortality.
Historical comparisons	- Historical time series available from NHS Information Centre Compendium of Population Health Indicators from 1993 to 2009 for England and geographical breakdown: https://indicators.ic.nhs.uk/download/NCHOD/Data/11B_075DRT0074_09_V1_D.xls - Source data available as a continuous time series from at least 1993.
NHS vs external drivers of the outcome	**Healthcare contribution:** Earlier and more accurate diagnosis, making optimal use of referral pathways and available interventions, support after primary treatment for lifestyle changes including changes in diet, smoking and physical exercise. **Public health and social care contribution:** Screening programmes, tobacco use; alcohol consumption; illicit drug use; obesity; 5 a day; high fibre diet; physical activity; breastfeeding incidence; prevention, early identification and management of risk factors, including:

	>cholesterol, >diabetes, >chronic kidney disease, >hepatitis B, >hepatitis C, quality of social care in hospital and that supports timely discharge; quality of care received whilst living at home or in residential care (e.g. recognition of symptoms), medication compliance; mitigation of social isolation; appropriate use of NSAIDs; statins; HRT; oral contraceptives. **Drivers of the outcome beyond NHS control**: Socio economic status, environmental factors (e.g. air quality, radon gas), occupational risk (e.g. carcinogens), prevalence of co-morbidities, previous cancer treatment, family history.

1.5 Excess under 75 mortality rate in adults with serious mental illness	
Outcome sought	Reduced premature mortality in adults with serious mental illness.
Updated definition	**Indicator description:** Excess mortality rate in adults with serious mental illness, ages under 75, per 100,000 population **Indicator construction:** Premature mortality in adults with serious mental illness (SMI) will be compared to premature mortality in adults in the general population. 'Adults with serious mental illness' are defined as those aged 18 and over listed in the Mental Health Minimum Dataset (MHMDS) for the current and previous two years. The MHMDS covers those adults receiving secondary health care for a mental illness. It is proposed to exclude those aged 75 and over to align with the other premature mortality indicators in Domain 1, and those aged under 18. Children under 18 are not covered by the main data source (MHMDS). There is no evidence that children with SMI are at particularly high risk of death by disease. The exact method of calculating the indicator is still to be finalised by DH in consultation with ONS and the Information Centre for Health and Social Care (NHS IC). **Indicator format:** To be finalised. This is a shared indicator with the Public Health Outcomes Framework, subject to final publication of the Public Health Outcomes Framework.
Data source	- ONS: mortality data by cause and mid-year population estimates; - IC: Mental Health Minimum Dataset (MHMDS): http://www.ons.gov.uk/ons/publications/re-reference-

	tables.html?edition=tcm%3A77-199137 http://www.ons.gov.uk/ons/publications/re-reference-tables.html?edition=tcm%3A77-223131 http://www.mhmdsonline.ic.nhs.uk/
Reporting schedule for data source	**Frequency:** Annual for MHMDS (financial year), mortality and population data (calendar years). **Timing:** 2011/12 MHMDS data will be available by January 2013. 2011 mortality and population data will be available by Autumn 2012.
Technical issues remaining to be resolved	The method for linking ONS mortality data with MHMDS data is still to be finalised. The method for comparing the premature mortality rate in people with SMI with the premature mortality rate in the general population is still to be finalised. The standardisation method is still to be determined.
Changes since December 2010 definition	Mortality from all causes, not just from preventable or amenable causes, will be examined as all excess premature mortality in this particular group could potentially be improved through better quality of care, and through joint working between the NHS, Public Health and Social Care.
Historical comparisons	MHMDS data are not available for years before 2006/07, so the first year of the time series will relate to deaths in the year 2008/09.
NHS vs external drivers of the outcome	**Healthcare contribution:** Improving mental health care and/or the care of co-morbidities often associated with these conditions, such as cardiovascular disease and stroke, respiratory disease and diabetes. **Public health and social care contribution:** Tobacco use; alcohol consumption; illicit drug use; obesity; physical activity; prevention, early identification and management of risk factors including: >cholesterol, >blood pressure, >diabetes, >hepatitis B, >hepatitis C quality of social care in hospital and that supports timely discharge; quality of care received whilst living at home or in residential care (e.g. recognition of symptoms); medication compliance; mitigation of social isolation; suicide prevention interventions. Health care also has a vital contributory role in reducing the incidence of these risk factors for these diseases for those with serious mental illness. In general, changes in the levels of these risk factors will have a

	delayed effect on mortality. **Drivers of the outcome beyond NHS control**: Socio economic status, prevalence of co-morbidities, immigration.
Sources of bias	Changes to the criteria for inclusion in the MHMDS over time could change the risk of death for patients included in the indicator and bias the indicator as a representation of the outcome sought.

1.6i Infant mortality	
Outcome sought	Reduced infant mortality.
Updated definition	**Indicator description:** Infant mortality rate, per 1,000 live births. **Indicator construction:** ***Numerator*** Number of deaths at ages under one year ***Denominator*** Live births **Indicator format** Crude rate per 1,000 live births – *(numerator/denominator)*1,000* This is a shared indicator with the Public Health Outcomes Framework, subject to final publication of the Public Health Outcomes Framework.
Data source	ONS: Mortality Statistics childhood, infant and perinatal (formerly series DH3): http://www.ons.gov.uk/ons/rel/vsob1/child-mortality-statistics--childhood--infant-and-perinatal/2009/child-mortality-statistics--2009-stats-bulletin.pdf
Reporting schedule for data source	Data for calendar years are updated annually. Source data for 2011 will be available in Autumn 2012.
Technical issues remaining to be resolved	None
Changes since December 2010 definition	None
Historical comparisons	Source data available from 1927: http://www.ons.gov.uk/ons/publications/re-reference-

	tables.html?edition=tcm%3A77-213277
NHS vs external drivers of the outcome	**Healthcare contribution:** Care across the maternity and early years pathway, including ante-natal, intrapartum and post-natal care. **Public health and social care contribution:** While public health factors, such as mitigation of smoking, maternal obesity and poor maternal and infant nutrition, are important determinants of this outcome, health care also has a particularly significant responsibility in addressing these risk factors during pregnancy and in the home during the post-natal period. **Drivers of the outcome beyond NHS control**: This indicator may also be affected by social factors beyond the influence of the NHS, including socio economic status, numbers of teenage mothers and/or older mothers (whose babies are at higher risk), and immigration (given that there have been shown to be higher rates of infant mortality in babies of mothers born abroad). Trends and variations in multiple birth rates and the incidence of lethal congenital anomalies and the extent to which women choose to have a termination or continue with the pregnancy until term will also have an impact on mortality rates.

1.6.ii Neonatal mortality and stillbirths	
Outcome sought	Reduced neonatal mortality and stillbirths.
Updated definition	**Indicator description:** Stillbirth and neonatal mortality rate per 1,000 live births and stillbirths. **Indicator construction:** ***Numerator*** Number of neonatal deaths and stillbirths Neonatal deaths are defined as deaths 0-27 days after live birth. Stillbirths are defined as deaths in babies born after 24 or more weeks completed gestation and which did not, at any time, breathe or show signs of life. ***Denominator*** Live births and stillbirths **Indicator format** Crude rate per 1,000 live births and stillbirths – *(numerator/denominator)*1,000*
Data source	ONS: Mortality Statistics childhood, infant and perinatal (formerly series DH3): http://www.ons.gov.uk/ons/rel/vsob1/child-mortality-statistics--childhood--infant-and-perinatal/2009/child-mortality-statistics--2009-stats-bulletin.pdf

Reporting schedule for data source	Data for calendar years are updated annually. Source data for 2011 will be available in Autumn 2012.
Technical issues remaining to be resolved	None
Changes since December 2010 definition	For completeness, we are including all deaths 0-27 days after live birth, not just those 0-6 days after live birth, so that all amenable deaths are covered by Domain 1. (Indicator 1a excludes deaths under 28 days as these are not classified by ICD-10 codes.) Expert advice suggests that the small number of deaths between 7 and 28 days are increasingly amenable to health care due to the development of neonatal care.
Historical comparisons	Source data available from 1927: http://www.ons.gov.uk/ons/publications/re-reference-tables.html?edition=tcm%3A77-213277
NHS vs external drivers of the outcome	**Healthcare contribution:** Care across the maternity and early years pathway, including ante-natal, intrapartum and post-natal care. **Public health and social care contribution:** While public health factors, such as mitigation of smoking, maternal obesity and poor maternal and infant nutrition, are important determinants of this outcome, health care also has a particularly significant responsibility in addressing these risk factors during pregnancy and in the home during the post-natal period. **Drivers of the outcome beyond NHS control**: This indicator may also be affected by social factors beyond the influence of the NHS including socio economic status, numbers of teenage mothers and/or older mothers (whose babies are at higher risk) and immigration (given that there have been shown to be higher rates of infant mortality in babies of mothers born abroad). Trends and variations in multiple birth rates and the incidence of lethal congenital anomalies and the extent to which women choose to have a termination or continue with the pregnancy until term will also have an impact on mortality rates.

1.7 An indicator needs to be developed	
Outcome sought	Reduced premature mortality in people with learning disabilities.

Domain 2

Enhancing quality of life for people with long-term conditions

Indicator Structure

1.15 Domain 2, ***Enhancing quality of life for people with long-term conditions,*** comprises: one overarching indicator, “2. *Health related quality of life for people with long-term conditions*”, and six improvement areas.

1.16 The improvement areas are of two sorts:

- Sub-indicators. The first three improvement area indicators, (2.1 Proportion of people feeling supported to manage their condition, 2.2 Employment of people with long-term conditions, 2.3 Unplanned admissions for (i) chronic ambulatory care sensitive conditions and for (ii) asthma, diabetes and epilepsy in under 19s, relate to particular aspects of outcome for those suffering from long-term conditions. Progress in these indicators therefore provides a useful initial analysis of what accounts for progress in the overarching indicator. 2.5 Employment of people with mental illness is included in indicator in 2.2. It is nonetheless monitored separately as poor outcomes for this group may reflect inequity.
- Complementary Indicators. 2.4 Health related quality of life for carers is not included in the overarching indicator. Yet, the health of carers is greatly influenced by the extent and sensitivity of NHS and social care. Quality of life for those with dementia (placeholder indicator 2.6) is unlikely to be properly represented in the overarching indicator given the nature of the condition.

1.17 Together, the overarching indicator and the complementary improvement indicators provide a picture of the NHS’s contribution to improving the quality of life for those affected by long-term conditions.

Work in Progress

1.18 The main issues pertaining to Domain 2 upon which work is continuing are:

2 Development of a methodology to capture the NHS’s contribution to preventing incidence of long-term conditions, as well as improving quality of life for those suffering from such conditions.

3 Development of a methodology to distinguish genuine improvements in outcome from spurious effects of changes in casemix; this might involve estimation of the mix of patients with different conditions according to the period since incidence of disease or condition.

4 Development of indicators for particular conditions and groups that are not well represented in the survey responses, including in particular:

  - Quality of life for older people with dementia, for which a placeholder indicator is specified.

- Preliminary work to fill other recognised gaps:
    - quality of life for those with learning disabilities
    - functional ability of children with long term conditions
    - quality of life for children and young people with mental illness.

Inequality

4.6 Inequality in outcomes attributable to NHS care in Domain 2 may best be captured by reference to a Slope Inequality Indicator (see glossary) capturing correlation of outcomes (possibly using indicator 2) with small-area deprivation. This option is subject to developmental work.

4.7 Inequalities are also captured by indicator 2.5, as mentioned.

NHS vs external drivers of the outcome and sources of bias

4.8 See discussion relating to indicator 2.

International Comparisons

4.9 International comparisons of Domain 2 indicators on a strictly comparable basis are not available from WHO or OECD. However, the OECD collects internationally comparable data on ‘avoidable admissions’ for asthma, COPD, hypertension, congestive heart failure, uncontrolled diabetes and diabetes complications for its Health Care Quality Indicators project. Many of these indicators are published in the Quality chapter of the OECD’s two-yearly report, Health at a Glance. The most recent issue was published in November 2011.

2 Health related quality of life for people with long-term conditions	
Outcome sought	Improved health-related quality of life for people with long-term conditions.
Updated definition	**Indicator description:** Average health status score for individuals aged 18 and over reporting that they have a long-term condition. **Indicator construction:** Case-mix adjusted average health status (EQ-5D*) score for individuals aged 18 and over reporting that they have a long-term condition. It assesses whether health-related quality of life is increasing over time for the population with long-term conditions, while controlling for measurable confounders (age, gender, disease mix, etc.). Health status is derived from responses to Q34 on the GP Patient Survey, which asks respondents to describe their health status using the five dimensions of the EuroQuol 5D (EQ-5D) survey instrument: • Mobility • Self-care • Usual activities

	• Pain/discomfort • Anxiety/depression *EQ-5D™ is a registered trademark of EuroQol. Further details are available from http://www.euroqol.org. Long-term condition status for individuals is obtained from ‘yes’ responses to Question 30 in the GP Patient Survey: **Do you have a long-standing health condition?** Response options: Yes, No, Don’t know/can’t say Responses to Question 30 may be influenced by responses to Question 31 in the same survey asking about which medical conditions the respondent has. **Question 31: Which, if any, of the following medical conditions do you have? Please x all the boxes that apply to you:** • Alzheimer’s disease or dementia • Angina or long-term heart problem • Arthritis or long-term joint problem • Asthma or long-term chest problem • Blindness or severe visual impairment • Cancer in the last 5 years • Deafness or severe hearing impairment • Diabetes • Epilepsy • High blood pressure • Kidney or liver disease • Learning difficulty • Long-term back problem • Long-term mental health problem • Long-term neurological problem • Another long-term condition • None of these conditions • I would prefer not to say **Indicator format:** Number Case-mix adjustment will take these responses into account – this is likely to comprise factors covering age, certain long-term conditions, level of deprivation, smoking status and severity of illness, although we are still evaluating research by the University of Sheffield School of Health and Related Research aimed at identifying an appropriate method.
Data source	- GP Patient Survey (GPPS) The most recent GP Patient Survey covering 2010, is available on www.gp-patient.co.uk/download/Questionnaires/Y6Q1%20GP%20Patient%20Survey%20questionnaire.pdf From 2011-12, health status (EQ-5D) and the questions required for case-mix adjustment have been included in the GPPS (www.gp-

	patient.co.uk/). - Health Survey for England (HSE) An alternative source that can be used to corroborate this indicator is the Health Survey for England (http://www.dh.gov.uk/en/Publicationsandstatistics/PublishedSurvey/HealthSurveyForEngland/index.htm) (Data from the annual Health Survey for England is available between 12 to 15 months after the end of each calendar year.)
Reporting schedule for data source	**Frequency:** Bi-annually from the GPPS approximately three months after the end of each data collection period. **Timing:** Data for 2011/12 will therefore be available in the Summer of 2012.
Technical issues remaining to be resolved	Further evaluation of research conducted on case-mix adjustment method by University of Sheffield School of Health and Related Research.
Changes since December 2010 definition	Details of the specific GP Patient Survey question to identify those with long-term conditions have been added to the definition outlined above.
Historical comparisons	The EQ-5D question was included in the GP Patient Survey for the first time in 2011. The question was also asked in the HSE from 2003 but this is not directly comparable with the GP Patient Survey.
NHS vs external drivers of the outcome	**Healthcare contribution:** Palliating symptoms and mitigating the progression of disease. **Public health and social care contribution:** Public health interventions that may mitigate disease progression such as reducing salt consumption, tobacco, alcohol and illicit drug abuse, obesity, encouraging physical activity. Prevention, early identification and management of risk factors, including high cholesterol and blood pressure, diabetes and chronic kidney disease. Other contributions include the quality of support received from social care. The NHS has a responsibility to engage with social care and public health services to increase the effectiveness of its work for people who suffer from long-term conditions. **Drivers of the outcome beyond NHS control:** The underlying prevalence of long-term conditions, socio-economic status and prevalence of co-morbidities
Sources of bias	Changes to the indicator may be biased as a representation of change to the outcomes sought due to unmeasured changes in: • The average period that the surveyed individuals have suffered a long-term condition, a major determinant of stage and severity of disease, and hence of health status. If the average period since incidence of the sampled population decreases,

	for example through earlier diagnosis, the measured health related quality of life of the sample will improve without genuine improvement of outcome. Conversely, if the period since incidence increases, for example as improvements in care defer mortality, the measured health related quality of life will decline without genuine deterioration of outcome. • Readiness to diagnose or report a "long standing health condition", which might reflect change in tolerance of conditions by different age cohorts. For example, if a current cohort considers itself to suffer from a "long-term back problem" which an earlier cohort would have considered a normal part of ageing, the average casemix of the sample population will lighten.

2.1 Proportion of people feeling supported to manage their condition	
Outcome sought	A greater proportion of people aged 18 and over suffering from a long-term condition feeling supported to manage their condition.
Updated definition	**Indicator description:** The proportion of people feeling supported to manage their long-term condition. **Indicator construction:** The indicator will be based on responses to questions in the GP Patient Survey as follows: ***Numerator*** For people who answer yes to the Question 30 "Do you have a long-standing health condition" (cited in template for indicator 2). The numerator is the total number of 'Yes, definitely' or 'Yes, to some extent' answers to GPPS **Question 32: In the last 6 months, have you had enough support from local services or organisations to help you manage your long-term condition(s)?** *Please think about all services and organisations, not just health services* • Yes, definitely • Yes, to some extent • No • I have not needed such support • Don't know/can't say Responses will be weighted according to the following 0-100 scale: "No" = 0 "Yes, to some extent" = 50 "Yes, definitely" = 100 ***Denominator*** The denominator is the total number of 'Yes, definitely', 'Yes, to some extent' and 'No' answers to question 32 above. **Indicator format** Percentage (weighted numerator/denominator)

Data source	GP Patient Survey (www.gp-patient.co.uk/)
Reporting schedule for data source	**Frequency:** Bi-annual in future. **Timing:** Will be approximately three months after the end of each data collection period in future, so 2011/12 data is expected to be available from Summer 2012.
Technical issues remaining to be resolved	Possible case mix adjustment, using same techniques being investigated for indicator 2, and responses to indicator 2.1 where appropriate.
Changes since December 2010 definition	Following discussions with the DH's analytical team supporting this policy area, it has been agreed to weight responses as set out in the updated definition above.
Historical comparisons	Series from GPPS available from Q3 2009/10. Summaries of quarterly data are available from: http://www.gp-patient.co.uk/results/results/annualsummary
NHS vs external drivers of the outcome	**Healthcare contribution:** Improving the extent to which those with long-term conditions are able to manage their condition through the quality of the support offered. **Public health and social care contribution:** Public health interventions that may mitigate disease progression such as illicit drug abuse. Other contributions include TIA interventions, screening programmes, prevention, early identification and management of risk factors, including high cholesterol and blood pressure, diabetes and chronic kidney disease. Support for those with long-term conditions includes that received from social care, such as supporting timely discharge from hospital, quality of care received whilst living at home or in residential care (e.g. recognition of the symptoms of stroke), medication compliance, mitigation of social isolation. The NHS has a responsibility to engage with social care to increase the effectiveness of its work for people suffering from long-term conditions. **Drivers of the outcome beyond NHS control:** the prevalence of co-morbidities**.**

2.2 Employment of people with long-term conditions	
Outcome sought	Improved functional ability, and ability to work, in people with long-term conditions.
Updated definition	**Indicator description:** Percentage of respondents in the Labour Force Survey (LFS) who have a long-term condition who are classed as employed using the International Labour Organisation (ILO) definition of employment, compared to the percentage of all respondents classed as employed.

Indicator construction:
For respondents in England,
Numerator

1. Employment rate of people with a long term-condition
Number of people with a health problem or disabilities that they expect will last for more than a year

AND

who are in employment – *either an Employee, Self-employed, in Government employment & training programmes or an unpaid family worker (this is the ILO definition of Basic economic activity)*

AND

are of working age (ages 16-64)

2. Employment rate of population
Number of people who are in employment – *either an Employee, Self-employed, in Government employment & training programmes or an unpaid family worker (this is the ILO definition of Basic economic activity)*

AND

are of working age (ages 16-64)

Denominator

1. Number of people with a long- term condition of working age
Number of people with a health problem or disabilities that they expect will last for more than a year

AND

are of working age (ages 16-64)

2. Working age population
Number of people who are of working age (ages 16-64)

(For further details on the LFS variables, consult Volume 3: 2010 Details of LFS variables, http://www.ons.gov.uk/ons/guide-method/user-guidance/labour-market-statistics/index.html.)

Indicator format: Percentage points gap between the employment rate for those with a long-term condition and the working-age population.

LFS sample adjusted to estimate the difference in employment of people with long-term conditions and employment of people in the population as a whole.

Data source	Labour Force Survey (For information on the survey, consult http://www.esds.ac.uk/government/lfs/)
Reporting schedule for data source	**Frequency:** Quarterly. **Timing:** Datasets are made available by the Economic and Social Data (ESDS) service approximately two months after the end of the quarter. See http://www.esds.ac.uk/findingData/snDescription.asp?sn=6715 for further details
Technical issues remaining to be resolved	None
Changes since December 2010 definition	The broad concept of the definition has not changed, but details have been updated of the LFS questions from which the indicator is to be constructed as outlined above. The questions included relate to people identifying themselves as being of working age, whether they have a long-term condition and whether they are in employment according to the ILO definition.
Historical comparisons	For comparable ten year series derived from LFS, see Department for Work and Pensions: Secretary of State Report on Disability Equality, December 2008 (see table 'Employment rate of disabled people in comparison to the overall rate' on page 29 of the report, http://www.dwp.gov.uk/docs/sos-report-on-disability-equality.pdf).
NHS vs external drivers of the outcome	**Healthcare contribution:** Mitigating the progression of disease, and supporting capability to manage their condition, specifically to facilitate realisation of aspirations for employment. **Public health and social care contribution:** Public health interventions that may mitigate disease progression such as reducing tobacco, alcohol and illicit drug abuse, obesity, encouraging physical activity. Other contributions include the prevention, early identification and management of risk factors, including high cholesterol, blood pressure, and diabetes; the quality of social care including supporting timely discharge from hospital; the quality of care received whilst living at home or in residential care (e.g. recognition of the symptoms of stroke), medication compliance, mitigation of social isolation. The NHS has a responsibility to engage with social care and public health services to increase the effectiveness of its work for people who suffer from long term conditions. **Drivers of the outcome beyond NHS control**. Socio-economic status, prevalence of co-morbidities. The level of unemployment in the overall population is allowed for in the definition of the indicator, in that it considers only the gap in employment between those with long-term conditions and the overall population. However, it is possible that the

	buoyancy of the labour market has a disproportionate impact upon the employment of those with long-term conditions. Independent changes in the suitability of work available may also affect the chances for a person with a long-term condition to find and retain employment.
Sources of bias	Change in the indicator may be biased as a representation of the outcome sought by changes in the overall number and case-mix of those identifying themselves has having a long-term condition, see discussion on indicator 2. In addition, this indicator may be biased as a reflection of the ability to gain work of the population with long-term conditions by changes in financial incentives (including those implicit in the benefits system).

2.3.i Unplanned hospitalisation for chronic ambulatory care sensitive conditions	
Outcome sought	Reduced serious deterioration in people with ambulatory care sensitive (ACS) conditions
Updated definition	The proportion of persons aged over 18 with chronic conditions admitted to hospital as an emergency admission. This definition is based on the NHS IC Compendium of Population Health indicator: *Emergency hospital admissions: chronic conditions usually managed in primary care*. ***Numerator:*** The number of finished and unfinished continuous inpatient spells (CIPS), excluding transfers, for patients with an emergency method of admission and with any of the primary diagnoses listed below (DIAG_01 in the 1st episode of the spell, ICD-10 codes). B18.0 Chronic viral hepatitis B with delta-agent B18.1 Chronic viral hepatitis B without delta-agent J45 Asthma J46X Status asthmaticus I11.0 Hypertensive heart disease with (congestive) heart failure I50 Heart failure J81X Pulmonary oedema I13.0 Hypertensive heart and renal disease with (congestive) heart failure E10 Insulin-dependent diabetes mellitus E11 Non-insulin-dependent diabetes mellitus E12 Malnutrition-related diabetes mellitus E13 Other specified diabetes mellitus E14 Unspecified diabetes mellitus J20 Acute bronchitis J41 Simple and mucopurulent chronic bronchitis J42X Unspecified chronic bronchitis

	J43 Emphysema J44 Other chronic obstructive pulmonary disease J47X Bronchiectasis I20 Angina pectoris I25 Chronic ischaemic heart disease D50.1 Sideropenic dysphagia D50.8 Other iron deficiency anaemias D50.9 Iron deficiency anaemia, unspecified D51 Vitamin B12 deficiency anaemia D52 Folate deficiency anaemia I10X Essential (primary) hypertension I11.9 Hypertensive heart disease without (congestive) heart failure G40 Epilepsy G41 Status epilepticus F00 Dementia in alzheimers F01 Vascular dementia F02 Dementia in other diseases F03 Unspecified dementia I48X Atrial fibrillation and flutter ***Denominator:*** Resident adult population estimate **Indicator format:** rate per 100,000 population
Data source	- Hospital Episode Statistics (HES) (NHS Information Centre, www.ic.nhs.uk/statistics-and-data-collections/hospital-care/hospital-activity-hospital-episode-statistics–hes); and - Population statistics (Office for National Statistics, http://www.ons.gov.uk/ons/publications/all-releases.html?definition=tcm%3A77-22371)
Reporting schedule for data source	**Frequency:** HES reports provisional data monthly, annual data by financial year is available in the autumn/winter after the end of the period. ONS population estimates available annually (calendar year). **Timing:** Latest HES monthly data is for July 2011, annual refresh for 2010/11 was published in November 2011. ONS population estimates for 2011 available in autumn 2012.
Technical issues remaining to be resolved	None
Changes since December 2010 definition	The list of ambulatory care sensitive conditions has been updated following a review by clinical experts.
Historical comparisons	HES time series available back to 1991, adjusting for data quality and coding changes. However, direct comparisons may be difficult to make.

NHS vs external drivers of the outcome	**Healthcare contribution:** Earlier and more accurate diagnosis, making optimal use of referral pathways and available interventions, support after primary treatment. Better support to people to self-manage their condition. **Public health and social care contribution:** Public health interventions that may mitigate disease progression including reducing tobacco use, alcohol consumption, illicit drug use, obesity, increasing physical activity. Other contributions include prevention, early identification and management of risk factors, including high cholesterol and blood pressure, diabetes and chronic kidney disease; the level and quality of support received from social care; TIA interventions; the quality of care received whilst living at home or in residential care e.g. recognition of the symptoms of stroke, medication compliance, mitigation of social isolation. The NHS has a responsibility to engage with social care and public health services to increase the effectiveness of its work for people who suffer from these chronic conditions. **Drivers of the outcome beyond NHS control**: Socio economic status, prevalence of co-morbidities.

2.3.ii Unplanned hospitalisation for asthma, diabetes and epilepsy in under 19s	
Outcome sought	Reduced unplanned time spent in hospital by children with specific long-term conditions that should be managed outside hospital.
Updated definition	**Indicator description:** Rate of emergency admissions episodes in people under 19 (0 – 18 years) for asthma, diabetes or epilepsy per 100,000 population **Indicator construction:** ***Numerator*** Total number of emergency admissions for people under 19 (0 – 18 years) where asthma, diabetes or epilepsy was the primary diagnosis. ***Denominator*** Mid-year population estimates for under 19s. Indicator format: rate per 100,000 population
Data source	- Hospital Episode Statistics (NHS Information Centre, www.ic.nhs.uk/statistics-and-data-collections/hospital-care/hospital-activity-hospital-episode-statistics–hes); and - Population statistics (Office for National Statistics, http://www.ons.gov.uk/ons/publications/all-releases.html?definition=tcm%3A77-22371)
Reporting schedule for data source	**Frequency:** HES reports provisional data monthly, annual data by financial year is available in the autumn/winter after the end of the period. ONS population estimates available annually (calendar year). **Timing:** Latest HES monthly data is for July 2011, annual refresh for 2010/11 was published in November 2011. ONS population estimates for 2011 available in autumn 2012

Technical issues remaining to be resolved	None
Changes since December 2010 definition	Under previous definition, rates for the three conditions were considered separately.
Historical comparisons	HES time series available back to 1991, adjusting for data quality and coding changes. However, direct comparisons may be difficult to make.
NHS vs external drivers of the outcome	**Healthcare contribution:** Earlier and more accurate diagnosis, making optimal use of referral pathways and available interventions, support after primary treatment. Better support to people to self-manage their condition. **Public health and social care contribution:** Public health interventions that may mitigate disease progression including reducing tobacco use, alcohol consumption, illicit drug use, obesity, increasing physical activity. Other contributions include prevention, early identification and management of risk factors, including high cholesterol and blood pressure, diabetes and chronic kidney disease. The level and quality of support received from social care. The quality of care received whilst living at home or in residential care e.g. recognition of the symptoms of stroke, medication compliance, mitigation of social isolation The NHS has a responsibility to engage with social care and public health services to increase the effectiveness of its work for people who suffer from these chronic conditions **Drivers of the outcome beyond NHS control:** Socio economic status, prevalence of co-morbidities.

2.4 Health-related quality of life for carers	
Outcome sought	Improving health-related quality of life for carers.
Updated definition	**Indicator description:** Case-mix adjusted health status EQ-5D* score for individuals reporting that they are carers. **Indicator construction:** This indicator assesses whether health-related quality of life is increasing over time for this population, controlling for measurable confounders (age, gender, etc.). Health status is derived from responses to Q34 on the GP Patient Survey, which asks respondents to describe their health status using the five dimensions of the EuroQuol 5D (EQ-5D) survey instrument: • Mobility • Self-care • Usual activities • Pain/discomfort • Anxiety/depression

	*EQ-5D™ is a registered trademark of EuroQol. Further details are available from http://www.euroqol.org The last GP Patient Survey is available on www.gp-patient.co.uk/download/Questionnaires/Y6Q1%20GP%20Patient%20Survey%20questionnaire.pdf The carer status is obtained from those answering “Yes…” to Question 56 in the GP patient survey: **Do you look after, or give any help or support to family members, friends, neighbours or others because of either** - **long-term physical or mental health/disability, or** - **problems related to old age?** *Do not count anything you do as part of your paid employment* No Yes, 1-9 hours a week Yes, 10-19 hours a week Yes, 20-34 hours a week Yes, 35-49 hours a week Yes, 50+ hours a week **Indicator format:** Number
Data source	GP Patient Survey The most recent GP patient survey covering 2010, is available on www.gp-patient.co.uk/download/Questionnaires/Y6Q1%20GP%20Patient%20Survey%20questionnaire.pdf From 2011-12, health status (EQ-5D) and the questions required for case-mix adjustment have been included in the GP Patient Survey(www.gp-patient.co.uk/)
Reporting schedule for data source	**Frequency:** Bi-annually. **Timing:** Approximately three months after the end of each data collection period in future, so 2011/12 data is expected to be available from Summer 2012.
Technical issues remaining to be resolved	Further evaluation of research conducted on case-mix adjustment method by University of Sheffield School of Health and Related Research. The sample size for carers may be relatively small.
Changes since December 2010 definition	Details of the specific GP Patient Survey question to identify carers have been added to the definition outlined above
Historical comparisons	Time series data not yet available as this is a new indicator.
NHS vs external	**Healthcare contribution:** Palliating symptoms and mitigating the progression of disease for those cared for.

drivers of the outcome	**Public health and social care contribution:** Public health interventions that may mitigate disease progression such as reducing salt consumption, tobacco, alcohol and illicit drug abuse, obesity, encouraging physical activity. Prevention, early identification and management of risk factors, including high cholesterol and blood pressure, diabetes and chronic kidney disease. Other contributions include the quality of support received from social care. The NHS has a responsibility to engage with social care and public health services to increase the effectiveness of its work for people who suffer from long-term conditions. **Drivers of the outcome beyond NHS control**: Prevalence of co-morbidities; socio-economic status.
Sources of bias	Changes to the indicator may be biased as a representation of change to the outcomes sought due to unmeasured changes in: • the average case-mix of the people cared for, as this will not be apparent from the survey responses (so case-mix adjustment will not be possible as it is for indicator 2). • readiness to report a “long standing health condition” borne by those for whom care is provided, which might reflect change in tolerance of conditions by different age cohorts.

2.5 Employment of people with mental illness	
Outcome sought	Improved functional ability, through employment, in people with mental illness.
Updated definition	**Indicator description:** Percentage of respondents in the Labour Force Survey (LFS) who have a mental illness who are classed as employed using the International Labour Organisation (ILO) definition of employment compared to the percentage of all respondents classed as employed. **Indicator construction:** For respondents in England, ***Numerator*** ***1. Proportion of people with a mental illness in employment*** Number of people with mental illness in employment are those where *the respondent has a health problem or disabilities that they expect will last for more than a year* AND *has Depression, bad nerves or anxiety or Severe or specific learning difficulties (mental handicap), or Mental illness, or suffer from phobia, panics or other nervous disorder*

	AND is in employment – either an *employee , self-employed, in, Government employment & training programmes, or and unpaid family worker (this is the ILO definition of Basic economic activity)* AND is of working age (ages 16-64) ***2. Proportion of the general population in employment*** Number of people who are in employment – either an *employee , self-employed, in, Government employment & training programmes, or and unpaid family worker (this is the ILO definition of Basic economic activity)* AND is of working age (ages 16-64) ***Denominator*** ***1. Number of people with a mental illness of working age*** Number of people with *a health problem or disabilities that they expect will last for more than a year)* AND *has Depression, bad nerves or anxiety (12) Severe or specific learning difficulties (mental handicap) (14) or Mental illness, or suffer from phobia, panics or other nervous disorders (15))* AND is of working age (ages 16-64) ***2. Working age population*** Number of people of working age (ages 16-64) (For further detail on the LFS variables, consult Volume 3: 2010 Details of LFS variables, www.ons.gov.uk/ons/guide-method/user-guidance/labour-market-statistics/index.html). **Indicator format** Percentage points – gap between the employment rate for those with a long-term condition and the working-age population.
Data source	Labour Force Survey (LFS)
Reporting schedule for data source	**Frequency:** Quarterly. **Timing:** Datasets are made available by the Economic and Social Data (ESDS) service approximately two months after the end of the

	quarter. See http://www.esds.ac.uk/findingData/snDescription.asp?sn=6715 for further details.
Technical issues remaining to be resolved	None
Changes since December 2010 definition	None
Historical comparisons	Ten year series from 2001 can be derived from the LFS dataset.
NHS vs external drivers of the outcome	**Healthcare contribution:** Improving the employment rate of people with mental illness in relation to that of the overall population, either by palliating their symptoms or mitigating the progression of their disease. Changes in average severity could result from the quality of care, which the indicator is intended to capture, as quality of care determines the speed of progress of a disease. **Public health and social care contribution:** Public health interventions that may mitigate disease progression such as reducing salt consumption, tobacco, alcohol and illicit drug abuse, obesity, encouraging physical activity. Prevention, early identification and management of risk factors, including high cholesterol and blood pressure, diabetes and chronic kidney disease. Other contributions include the quality of support received from social care. The NHS has responsibility to engage with social care and public health services to increase the effectiveness of its work for people who suffer from long-term conditions. . **Drivers of the outcome beyond NHS control:** Overall rate of unemployment, which could conceivably affect the gap between the two employment rates. The quality of working conditions can be a driver of both severity and prevalence of mental illness. However, it may also affect the chances for a person with a mental illness to find and retain employment. Sick leave rate statistics can be a proxy for the quality of working conditions and therefore could be used to take account of this effect.
Sources of bias	Change in the indicator may be biased as a representation of the outcome sought by changes in the overall number and case-mix of those identifying themselves has having a mental illness or disability Average period that the surveyed individuals have suffered a long-term condition, readiness to diagnose and/or report a "long standing health condition", changes in the overall number and case-mix of those identifying themselves as having a long-term condition. In addition, this indicator may be biased as a reflection of the ability to

	gain work of the population with long-term conditions by changes in that population’s willingness to work, which in turn is affected by changes to financial incentives (including those implicit in the benefit system).

2.6 An indicator needs to be developed	
Outcome sought	Improved quality of life for those with dementia.

Domain 3

Helping people to recover from ill-health or following injury

Indicator Structure

4.10 Domain 3, ***Helping people to recover from episodes of ill-health or following injury***, comprises indicators both of adverse outcomes and indicators of the effectiveness of care.

4.11 The three measures of adverse outcomes are:
5 The overarching indicators, *3a Emergency admissions for acute conditions that should not usually require hospital admission* and
6 3b Emergency readmissions within 30 days of discharge from hospital, together with one of the improvement area indicators,
7 3.2 Emergency admissions for children with lower respiratory tract infections

7.6 These outcomes may reflect failures in the effectiveness of care in the total care system. (They contrast with Domain 5 outcomes, which are designed to reflect adverse outcomes attributable to the care itself.)

7.7 These indicators are complemented by indicators in five improvement areas, which attempt to capture the extent of improvement in health following ill-health or injury:
8 3.1 Patient Reported Outcome Measures (PROMs) for elective procedures
9 3.3 An indicator on recovery from injuries and trauma
10 3.4 Proportion of stroke patients reporting an improvement in activity/lifestyle on the Modified Rankin Scale(mRS) at 6 months
11 3.5 The proportion of patients with a fragility fracture recovering to their previous levels of mobility at i. 30 days and ii. 120 days
12 3.6 The proportion of older people (65 and over) who were still at home 91 days after discharge from hospital into rehabilitation services

12.6 Together, the overarching indicators and the complementary improvement indicators, combining indicators showing progress in reducing cases in which recovery has been interrupted by emergency admissions with those that measure positive progress in recovery provide a picture of the NHS's contribution to minimising the adverse impact of ill-health and injury upon the quality of life of those affected.

Work in Progress

12.7 The main issues pertaining to Domain 3 upon which work is continuing are

1. Development of the PROMs programme – we intend to expand the number of procedures and conditions for which PROMS data are collected. For example, a pilot for coronary revascularisation should start at the end of 2011.
2. Injuries and trauma – at the time of the first NHS Outcomes Framework there were no indicators to measure this outcome. There is work ongoing in the DH with a number of stakeholders to develop a new indicator to measure outcomes from trauma using data within the Trauma Audit Research Network (TARN). A new Best Practice Tariff is currently in development using the TARN dataset to

demonstrate quality of care. In the next phase, existing outcome measures will be tested for their feasibility in the trauma population.

3. A new indicator to measure improving recovery from stroke continues to be developed. The indicator to fill this placeholder was chosen as part of the Innovation in Outcomes Competition that we ran in spring 2011. It will be a mRS (measured at the time of the stroke and at 6-months follow-up) as part of a new stroke audit (SSNAP). Data for the first year of collection is expected in April 2013.

Inequality

12.8 Inequality in outcomes attributable to NHS care in Domain 3 will be explored using a variety of methodologies, according to the availability of disaggregated data.

NHS vs external drivers of the outcome

12.9 The principal external driver of outcomes is the volume and severity of incidents of ill health and injury. Not only will changes in the volume of incidents directly affect outcomes for indicators 3a and 3.2 for a given level of NHS effectiveness, volume will also affect outcomes for all Domain 3 indicators by its impact upon the availability of resources relative to case load.

International Comparisons

12.10 International comparisons of Domain 3 indicators or similar are not available from WHO or OECD. England is leading the field in the collection and publication of pre- and post-operative procedure data in the NHS. There have been PROMs trials in Canada, Germany, Slovenia and Sweden.

3a Emergency admissions for acute conditions that should not usually require hospital admission	
Outcome sought	Preventing conditions from becoming more serious.
Updated definition	**Indicator description:** Emergency admissions to hospital of persons with acute conditions (ear/nose/throat infections, kidney/urinary tract infections, heart failure) usually managed in primary care. **Indicator construction:** The indicator is defined as the proportion of persons in England aged 19 years and above with acute conditions (ear/nose/throat infections, kidney/urinary tract infections, heart failure) admitted to hospital as an emergency admission. The list of conditions included in the definition has been reviewed for the purposes of the NHS Outcomes Framework. Therefore, it is considered the most up-to-date and comprehensive list available. The review process took account of the views of expert clinicians. The indicator is standardised by age and sex.

Numerator

The number of spells, excluding transfers, for patients with an emergency method of admission and with any of the following primary diagnoses.

ICD-10 codes:

J10	Influenza due to identified influenza virus
J11	Influenza, virus not identified
J13X	Pneumonia due to Streptococcus pneumoniae
J14	Pneumonia due to Haemophilus influenzae
J15.3	Pneumonia due to streptococcus, group B
J15.4	Pneumonia due to other streptococci
J15.7	Pneumonia due to Mycoplasma pneumoniae
J15.9	Bacterial pneumonia, unspecified
J16.8	Pneumonia due to other specified infectious organisms
J18.1	Lobar pneumonia, unspecified
J18.8	Other pneumonia, organism unspecified
A36	Diphtheria
A37	Whooping cough
B05	Measles
B06	Rubella [German measles]
B16.1	Acute hep B with delta-agent (coinfectn) without hep coma
B16.9	Acute hep B without delta-agent and without hepat coma
B26	Mumps
M01.4	Rubella arthritis
I24.0	Coronary thrombosis not resulting in myocardial infarction
I24.8	Other forms of acute ischaemic heart disease
I24.9	Acute ischaemic heart disease, unspecified
E86	Volume depletion
K52	Other noninfective gastroenteritis and colitis
A02.0	Salmonella enteritis
A04	Other bacterial intestinal infections
A05.9	Bacterial foodborne intoxication, unspecified
A07.2	Cryptosporidiosis
A08	Viral and other specified intestinal infections
A09	Diarrhoea and gastroenteritis of presumed infectious origin
N10	Acute tubulo-interstitial nephritis
N11	Chronic tubulo-interstitial nephritis
N12	Tubulo-interstitial nephritis not spec as

	acute or chronic
N13.6	Pyonephrosis
N15.9	Renal tubulo-interstitial disease, unspecified;
N39.0	Urinary tract infection, site not specified;
N30.0	Acute cystitis
N30.8	Other cystitis
N30.9	Cystitis, unspecified
K25.0-K25.2, K25.4-K25.6	Gastric ulcer
K26.0-K26.2, K26.4-K26.6	Duodenal ulcer
K27.0-K27.2, K27.4-K27.6	Peptic ulcer, site unspecified
K28.0-K28.2, K28.4-K28.6	Gastrojejunal ulcer
K20	Oesophagitis
K21	Gastro-oesophageal reflux disease
L03	Cellulitis
L04	Acute lymphadenitis
L08.0	Pyoderma
L08.8	Other spec local infections of skin and subcutaneous tissue
L08.9	Local infection of skin and subcutaneous tissue, unspecified
L88	Pyoderma gangrenosum
L98.0	Pyogenic granuloma
I89.1	Lymphangitis
L01	Impetigo
L02	Cutaneous abscess, furuncle and carbuncle
H66	Suppurative and unspecified otitis media
H67	Otitis media in diseases classified elsewhere
J02	Acute pharyngitis
J03	Acute tonsillitis
J06	Acute upper respiratory infections multiple and unsp sites
J31.2	Chronic pharyngitis
J04.0	Acute laryngitis
A69.0	Necrotizing ulcerative stomatitis
K02	Dental caries
K03	Other diseases of hard tissues of teeth
K04	Diseases of pulp and periapical tissues
K05	Gingivitis and periodontal diseases
K06	Other disorders of gingiva and edentulous alveolar ridge
K08	Other disorders of teeth and supporting structures
K09.8	Other cysts of oral region, not elsewhere classified

K09.9	Cyst of oral region, unspecified
K12	Stomatitis and related lesions
K13	Other diseases of lip and oral mucosa
R56	Convulsions, not elsewhere classified
O15	Eclampsia
G25.3	Myoclonus

Denominator
The resident population from ONS mid-year population estimates.

Indicator format: Age-standardised rate per 100,000 population

Data source	- Hospital Episode Statistics (HES): www.hesonline.nhs.uk. Data for 2011-12 will be published autumn/winter 2012. - ONS mid-year population estimates – data are based on the latest revisions of estimates for the respective years, current as at 29 September 2011: (http://www.ons.gov.uk/ons/taxonomy/index.html?nscl=Population+Estimates). For further details on revisions to ONS mid-year population estimates, and their availability, see the comments in the specification for the 'Estimates of resident population' indicator (IC Indicator Portal – Compendium of Health Indicators, https://indicators.ic.nhs.uk/webview/ - previously available on the Clinical and Health Outcomes Knowledge Base website, also known as NCHOD).
Reporting schedule for data source	**Frequency:** HES reports provisional data monthly, annual data by financial year is available in the autumn/winter after the end of the period. ONS data is available annually (calendar year) **Timing:** Latest HES monthly data is for July 2011, annual refresh for 2010/11 was published in November 2011. ONS mid-year population estimates were published on 30 June 2011 for 2010.
Technical issues remaining to be resolved	None
Historical comparisons	HES time series available back to 1991, adjusting for data quality and coding changes. ONS source data is available from 1999.
Changes since December 2010 definition	Previous definitions are published by NHS IC Compendium of Population Health Indicators (https://indicators.ic.nhs.uk/webview/) and NHS Comparators (www.nhscomparators.nhs.uk – user account required). The definition has been updated to reflect current clinical thinking, in consultation with external and internal DH clinical experts, around the conditions that should be treated outside the hospital environment.

NHS vs external drivers of the outcome	**Healthcare contribution:** Ensuring that the appropriate level of care is provided for these conditions in the community and unnecessary hospital admissions are avoided. **Public health and social care contribution:** Public health contributions to encouraging healthy behaviours, including reduced use of tobacco, alcohol and illicit drugs, quality of social care at home and in care homes, mitigation of social isolation. **Drivers of the outcome beyond NHS control:** Fuel poverty, prevalence of long-term conditions and co-morbidities.
Sources of bias	Quality of coding, this is particularly pertinent to this indicator.

3b Emergency readmissions within 30 days of discharge from hospital	
Outcome sought	Effective recovery from illnesses and injuries requiring hospitalisation.
Updated definition	**Indicator description:** Emergency readmissions within 30 days of discharge from hospital. **Indicator construction:** Percentage of emergency admissions to any hospital in England occurring within 30 days of the last, previous discharge from hospital after admission. ***Numerator*** The number of finished and unfinished continuous inpatient (CIP) spells that are emergency admissions within 0-29 days (inclusive) of the last, previous discharge from hospital (see denominator), including those where the patient dies, but excluding the following: those with a main specialty upon readmission coded under obstetric; and those where the readmitting spell has a diagnosis of cancer (other than benign or in situ) or chemotherapy for cancer coded anywhere in the spell. ***Denominator*** The number of finished CIP spells within selected medical and surgical specialties, with a discharge date up to March 31st within the year of analysis. Day cases, spells with a discharge coded as death, maternity spells (based on specialty, episode type, diagnosis), and those with mention of a diagnosis of cancer or chemotherapy for cancer anywhere in the spell are excluded. Patients with mention of a diagnosis of cancer or chemotherapy for cancer anywhere in the 365 days prior to admission are excluded. **Indicator format:** Standardised percentage.
Data source	Hospital Episode Statistics (HES) An existing definition is published on the NHS IC's Indicator Portal (http://indicators.ic.nhs.uk/webview/). Details here are for that definition: http://indicators.ic.nhs.uk/download/NCHOD/Specification/Spec_03N_523ISP4AP_09_V1.pdf

Reporting schedule for data source	**Frequency:** HES reports provisional data monthly, annual data by financial year is available in the autumn/winter after the end of the period. **Timing:** Latest HES monthly data is for July 2011, annual refresh for 2010/11 was published in November 2011.
Technical issues remaining to be resolved	None
Changes since December 2010 definition	The existing NCHOD definition for this indicator was reviewed in light of more recent research by RAND. This research lead to the following changes: - Mental health admissions are no longer excluded (cancer and obstetric admissions continue to be excluded). - The indicator will measure readmissions within 30 days instead of 28 days, to align it with approximately 1 month. - Children are included in this indicator.
Historical comparisons	HES time series available back to 1991, adjusting for data quality and coding changes.
NHS vs external drivers of the outcome	**Healthcare contribution:** Providing high quality care, only discharging patients when clinically appropriate to do so. **Public health and social care contribution:** Public health contributions to encouraging healthy behaviours, including reduced use of tobacco, alcohol and illicit drugs, quality of social care at home and in care homes, mitigation of social isolation. **Drivers of the outcome beyond NHS control:** Socio economic status, fuel poverty, prevalence of long-term conditions and co-morbidities.

3.1 Patient Reported Outcome Measures (PROMs) for elective procedures	
Outcome sought	Effective recovery following elective procedures.
Updated definition	**Indicator description:** Patient Reported Outcome Measures (PROMs) for selected elective procedures (procedures detailed below) reported separately. Patient's reported improvement in health status following elective procedures, currently covering groin hernia, hip replacement, knee replacement and varicose veins. The questionnaires provided to patients measure their health status before the procedure and 3-6 months after (depending on the procedure). A comparison of these measurements shows whether, and to what extent, the procedure has improved their health status. **Indicator construction:** For the purposes of the NHS Outcomes Framework: • EQ-5D – a generic health status measure (see www.euroqol.org/)

	There are four sets of procedures for which PROMs are collected and these will be reported as the EQ-5D index case-mix adjusted average health gain only for the four separate indicators for the purposes of the NHS OF. These are: i. Unilateral Hip Replacements (Primary and Revisions), ii. Unilateral Knee Replacements (Primary and Revisions), iii. Groin Hernia Surgery, iv. Varicose Vein Surgery. All patients receiving one of the relevant Procedures from an NHS-funded Provider are eligible to participate and should be invited to complete PROMs questionnaires. PROMs data is collected for patients aged 15 years and above. **Indicator format:** The average health gain adjusted for case-mix. The responses to the pre- and post-operative PROMs questionnaires are converted into pre- and post-operative health status measurements by the application of scoring algorithms, where appropriate. The difference between the pre- and post-operative health status scores is a measure of the outcome of the procedure. The risk adjustment model takes into account variables such as patient characteristics, age, sex and the presence of comorbidities. For further information on the case-mix adjustment model please see http://www.northgate-proms.co.uk/docs/PROMS_risk_adjustment_methodologies_SEPT_10.pdf
Data source	NHS Information Centre's PROMs data publication and dataset, part of the Hospital Episode Statistics dataset (see – http://www.ic.nhs.uk/proms)
Reporting schedule for data source	**Frequency:** Monthly. **Timing:** Data published in various ways – from April 2009 monthly on a cumulative basis. Last publication is up to June 2011 (at November 2011) – around a 5-month time lag for publication. In terms of annual data, the 2009/10 final data is available now. Data for 2010/11 are currently provisional. Provisional quarterly data will become available for 2011/12- Q1 in Nov (Q2 in Feb etc). Annual data is published along with Q4.
Technical issues remaining to be resolved	It is intended in due course to include a fuller range of elective procedures. The DH is working presently with the National Cardiac Benchmarking Collaborative to pilot the collection of PROMs for CABG and Angioplasty. Subject to positive results, Outcome Framework indicators will be developed for these areas. Further testing of PROMs for other procedures is expected to be initiated incrementally thereafter.
Changes since	The PROMs stakeholder reference group, made up of external experts and internal DH officials, advised that the EQ-5D index case-

December 2010 definition	mix adjusted average health gain should be reported for the current four PROMs separately (hip, knee, varicose veins, groin hernia).
Historical comparisons	The first annual publication for April 2009 – March 2010 came out in August 2011 and shows annual PROMs figures by month and organisation.
NHS vs external drivers of the outcome	**Healthcare contribution:** Effective interventions and appropriate care following discharge. **Public health and social care contribution:** Encouragement of healthy behaviours that support recovery, including reduced use of tobacco, alcohol and illicit drugs, quality of social care at home and in care homes, mitigation of social isolation. **Drivers of the outcome beyond NHS control:** Socio economic status, prevalence of co-morbidities.

3.2 Emergency admissions for children with lower respiratory tract infections (LRTIs)	
Outcome sought	Preventing lower respiratory tract infections in children from becoming more serious.
Updated definition	**Indicator description:** Emergency admissions to hospital of children with selected types of lower respiratory tract infections (bronchiolitis, bronchopneumonia and pneumonia). This definition is based on that used for an NHS IC Compendium of Population Health indicator on children and LRTIs. **Indicator construction:** The indicator is defined as the proportion of children aged up to 19 years of age admitted to hospital as an emergency admission for LRTIs. ***Numerator*** The number of finished and unfinished continuous inpatient (CIP) spells, excluding transfers, for patients aged 0-18 years with an emergency method of admission and with any of the following primary diagnoses (DIAG_01 in the 1st episode of the spell, ICD-10 codes) in the respective period: Bronchiolitis, bronchopneumonia and pneumonia**:** • J10.0 Influenza with pneumonia virus identified; • J11.0 Influenza with pneumonia, virus not identified; • J11.1 Influenza with other respiratory manifestations, virus not identified (bronchiolitis with influenza); • J12.- Viral pneumonia nec; • J13 Pneumonia due to Streptococcus pneumoniae; • J14 Pneumonia due to Haemophilus influenzae;

	- J15.- Bacterial pneumonia nec; - J16.- Pneumonia due to other infectious organisms nec; - J18.0 Bronchopneumonia, unspecified; - J18.1 Lobar pneumonia; - J18.9 Pneumonia unspecified; - J21.- Acute bronchiolitis. ***Denominator*** The denominator is the resident population. Data are based on the latest revisions of ONS mid-year population estimates for the respective years, current as at September 2011. For further details on revisions to ONS mid-year population estimates, and their availability, see http://www.statistics.gov.uk/hub/population/population-change/population-estimates/index.html. **Indicator format:** Age standardised rate per 100,000.
Data source	- Hospital Episode Statistics (www.hesonline.nhs.uk) -ONS mid-year population estimates (http://www.ons.gov.uk/ons/taxonomy/index.html?nscl=Population+Estimates)
Reporting schedule for data source	**Frequency:** Monthly (provisional), quarterly for HES data, annual for population estimates **Timing:** Latest HES data is for July 2011, annual refresh for 2010/11 was published in November 2011. ONS mid-year population estimates as at June 2010 (published June 2011).
Technical issues remaining to be resolved	None
Changes since December 2010 definition	The original definition was taken from NCHOD (now the NHS IC Compendium of Population Health Indicators) and included children aged 0-15 years. Following some research with clinical experts in DH and externally, the definition has been extended to children 0-18 years for the purposes of the NHS Outcomes Framework, this also aligns with the NSF for children.
Historical comparisons	HES time series available back to 1991, adjusting for data quality and coding changes.
NHS vs external drivers of the outcome	**Healthcare contribution:** (i) Reducing the incidence and severity of these conditions through preventing complications in vulnerable children and (ii) improving the management of the conditions in the community. **Public health contribution:** Tackling exposure to tobacco smoke, illicit drug use, vaccination and breastfeeding rates, which have been

	shown to affect incidence and severity. Quality of social care in hospital that supports timely discharge. **Drivers of the outcome beyond NHS control:** Socio economic status, prevalence of co-morbidities.

3.3 An indicator on recovery from injuries and trauma (to be developed)

Outcome sought	Effective recovery following injury or trauma.
Updated definition	Further work is required on the definition for this indicator.
Data source	Trauma Audit Research Network (TARN). See http://www.tarn.ac.uk for further details.
Reporting schedule for data source	Monthly
Technical issues remaining to be resolved	This indicator requires extensive development. The work is planned in two phases: *Phase 1*: Indicators embedded in new Best Practice Tariff (BTP) to be implemented for 2012/13 (see below). *Phase 2*: Functional and quality of life measures of Extended Glasgow Outcome Scale (GOS-E) and the European Quality of Life (EuroQoL) are being feasibility tested for this patient population. The development of a Best Practice Tariff for Major Trauma Centres (MTCs) will ensure: - Consultant led trauma team to receive patients - Full set of TARN audit data within 40 days of discharge - A completed rehabilitation prescription at discharge - Non-urgent patients are transferred to MTC within 48 hours TARN are currently establishing internal processes for collection and validation of data for eligible patients. Precise definitions of the best practice criteria are in development.
Changes since December 2010 definition	There is an ongoing programme of work to provide a new indicator to measure progress against this outcome (see above).
Historical comparisons	Existing TARN data can be used as a baseline. The data has been collected for over 25 years, with differing levels of data completeness for individual Trusts.
NHS vs external drivers of the	**Healthcare contribution:** The establishment of regional trauma networks to ensure patients receive definitive care in a timely fashion.

outcome	**Public health and social care contribution:** Encouragement of healthy behaviours that support recovery, including reduced use of tobacco, alcohol and illicit drugs, physical activity, quality of social care at home and in care homes. **Drivers of the outcome beyond NHS control:** Socio economic status, prevalence of co-morbidities.

3.4 Proportion of stroke patients reporting an improvement in activity/lifestyle on the Modified Rankin Scale at 6 months	
Outcome sought	Effective recovery following a stroke.
Updated definition	This indicator was selected as part of the Innovation in Outcomes Competition and the following definition continues to be developed. The Modified Rankin Scale (mRS) is a commonly used scale for measuring the degree of disability or dependence in the daily activities of people who have suffered a stroke. The mRS score will be taken at diagnosis and at 6-months post stroke at a regular review. This could take place in primary care, elsewhere in the community, or in a hospital clinic. The method of this follow-up will vary but could be done in person at a 6-month review visit, via a postal questionnaire or by phone. It will cover adults with stroke aged 18 and over. The mRS consists of the following scores – **Modified Rankin Scale** **Score** **Description** 0 No symptoms at all 1 No significant disability despite symptoms; able to carry out all usual duties and activities 2 Slight disability; unable to carry out all previous activities, but able to look after own affairs without assistance 3 Moderate disability; requiring some help, but able to walk without assistance 4 Moderately severe disability; unable to walk without assistance and unable to attend to own bodily needs without assistance 5 Severe disability; bedridden, incontinent and requiring constant nursing care and attention 6 Dead
Data source	Sentinel Stroke National Audit Programme (SSNAP). A weblink should be available for this new audit from April 2012.
Reporting schedule for data source	**Frequency:** Annual (financial year)**.** **Timing:** First year of collection 2012/13.

Technical issues remaining to be resolved	The SSNAP audit is due to replace the Stroke Improvement National Audit Programme (SINAP – http://www.rcplondon.ac.uk/resources/stroke-improvement-national-audit-programme-sinap) and the biannual National Sentinel Stroke Audit (https://audit.rcplondon.ac.uk/SentinelStroke/page/page.aspx?pc=welcome) from April 2012. Final details of the audit will continue to be worked up until this time.
Changes since December 2010 definition	There was no indicator for this improvement area in the first NHS Outcomes Framework. The DH ran a competition to find a suitable indicator to fill this gap (see further detail in overview text). This is the winning entry selected and awarded in October 2011. The indicator is to be developed further in the coming months. The definition is largely agreed, however, development is ongoing and the audit will be piloted in April 2012 with an intention to start data collection in June 2012, data should be available from April 2013.
Historical comparisons	None
NHS vs external drivers of the outcome	**Healthcare contribution:** Direct access to a specialist stroke unit, effective rehabilitation and community stroke care aligned with joint health and social care working. **Public health and social care contribution:** Encouragement of healthy behaviours that support recovery, including reduced use of tobacco, alcohol and illicit drugs, physical activity, quality of social care at home and in care homes. Improving public awareness of the need for prompt treatment is critical, awareness of the need to seek urgent medical help after TIA (which influences preventable stroke), local authority provision of re enablement services. **Drivers of the outcome beyond NHS control:** Prevalence of co-morbidities.

3.5 The proportion of patients with a fragility fracture recovering to their previous levels of mobility at i. 30 days and ii. 120 days	
Outcome sought	Effective recovery of mobility following a fragility fracture.
Updated definition	The definition for this indicator continues to be developed. However, it will be based on the following. Five reporting categories will form the basis for this indicator, measured at 30 and 120 days following a fragility fracture (hip only initially, vertebral and wrist also subsequently), as follows – 1. Freely mobile outdoors without aids 2. Mobile outdoors with one aid 3. Mobile outdoors with two aids or frame 4. Some indoor mobility, but never goes outdoors without help (i.e.

	effectively housebound) 5. No functional mobility (bed/chair; wheelchair, etc) 6.
Data source	The National Hip Fracture Database (NHFD) (see – http://www.nhfd.co.uk/)
Reporting schedule for data source	**Frequency:** Annual (national clinical audit report) financial year data. **Timing:** Latest data published in July 2011 for the period 1 April 2010 to 31 March 2011. Data for this indicator is likely to be a bespoke extraction and could be available more frequently than annual, e.g. quarterly.
Technical issues remaining to be resolved	Data completeness for part ii of this indicator for follow-up at 120 days needs further work. Publication as part of the NHS OF is expected to increase completeness. In the future, as data quality improves, it may be possible to focus on 120 day follow-up and drop indicator 3.5i (30 days). The NHFD currently only includes questions on hip fractures, and not the other two common fragility fractures – vertebral and wrist. However, from March 2012, the NHFD audit is set to merge with the RCP's falls audit and expand to cover the other forms of fracture suffered by elderly patients in a re-titled 'Falls and fragility fractures audit'. Data from this newly constructed audit will provide a better basis for this indicator going forward.
Changes since December 2010 definition	The definition for this indicator has been refined following consultation with clinicians, British Orthopaedic Association, British Geriatric Association, Age UK, National Osteoporosis Society, Fragility Fracture Programme Board.
Historical comparisons	Data is available from 2007 for hip fractures only.
NHS vs external drivers of the outcome	**Healthcare contribution:** Operating with 36 hours, admitted and assessed under the joint care of a consultant geriatrician and a consultant orthopaedic surgeon, postoperative geriatrician-directed multi-professional rehabilitation team. **Public health and social care contribution:** Encouragement of healthy behaviours that support recovery, including reduced use of tobacco, alcohol and illicit drugs, physical activity, quality of social care at home and in care homes. **Drivers of the outcome beyond NHS control:** Socio economic status, prevalence of co-morbidities.

3.6 The proportion of older people (65 and over) who were still at home 91 days after discharge from hospital into reablement / rehabilitation services

i. The proportion still at home 91 days after discharge into rehabilitation
ii. The proportion offered rehabilitation following discharge from acute or community hospital

Outcome sought	Helping older people to recover their independence after illness or injury.
Updated definition	**Indicator description:** i) The proportion of older people (65 and over) who were still at home 91 days after discharge from hospital into rehabilitation services. ii) The proportion of older people aged 65 and over offered rehabilitation services following discharge from acute or community hospital. **Indicator construction:** This will be a two-part measure which reflects both the effectiveness of rehabilitation services (i), and the coverage of the service (ii). i) The proportion of older people aged 65 and over discharged from hospital to their own home or to a residential or nursing care home or extra care housing for rehabilitation, with a clear intention that they will move on/back to their own home (including a place in extra care housing or an adult placement scheme setting) who are at home or in extra care housing or an adult placement scheme setting three months after the date of their discharge from hospital. Those who are in hospital or in a registered care home (other than for a brief episode of respite care from which they are expected to return home) at the three month date and those who have died within the three months are not reported in the numerator. The collection of the denominator will be from 1 October 2011 to 31 December 2011, with a 91-day follow-up for each case included in the denominator to populate the numerator. ii) The proportion of older people aged 65 and over offered rehabilitation services following discharge from acute or community hospital. This measure will take the denominator from part i) as its numerator (the number of older people offered rehabilitation services). The new denominator will be the total number of older people discharged from acute or community hospitals based on Hospital Episode Statistics (HES). **Indicator format:** Percentage of patients. Indicator replicated in the Adult Social Care Outcomes Framework

Data source	*Adult Social Care Combined Activity Return (ASC-CAR)*, *Hospital Episode Statistics* Guidance for 2011/12 onwards can be found via the generic social care collection page at http://www.ic.nhs.uk/services/social-care/social-care-collections by clicking on the year. Guidance for HES data can be found at http://www.hesonline.nhs.uk
Reporting schedule for data source	**Frequency:** Annual (financial year). **Timing:** Data for i) has been published by the NHS IC. This was previously NI125 in CLG's National Indicator List and the latest data (along with historical data) are available at http://www.ic.nhs.uk/statistics-and-data-collections/social-care/adult-social-care-information/social-care-and-mental-health-indicators-from-the-national-indicator-set-2010-11-provisional-release. It will continue to be available annually. Data for ii) has not yet been published. It will be published in Autumn 2012 for the period 2011-12 (relating to the 3-month period to which the collection relates – Oct-Dec, with follow-up 91 days later), and annually thereafter.
Technical issues remaining to be resolved	Work is continuing to expand the measure to include individuals assessed only on health needs. Over time, we will aim to measure the success of all whose condition is such that they would benefit from reablement/ rehabilitation services, rather than restricting measurement to those discharged from hospital only.
Changes since December 2010 definition	This indicator has changed into a two-part measure, the rationale for this is to capture the volume of rehabilitation offered as well as the success of the rehabilitation service offered. This will avoid a situation such as has occurred in the past with the previous indicator where an area scores well on the measure having offered rehabilitation to only a very small number of people. The current measure has been expanded to include social care-only placements as well. Previously, there was a requirement for someone to have received a joint multi-disciplinary assessment prior to or following their discharge from hospital before going on to receive a rehabilitation service. However, those that were assessed just on social care needs would now be included in the data collection. The rationale for this change is that we should be interested in outcomes for individuals irrespective of whether or not they have had a joint assessment of need.
Historical comparisons	None

NHS vs external drivers of the outcome	**Healthcare contribution:** Working with social care to ensure that, where appropriate, relevant and good quality rehabilitation services are commissioned for individuals on discharge from hospital. In some cases the NHS, social care or both will be directly responsible for providing the rehabilitation service. **Public health and social care contribution:** Encouragement of healthy behaviours that support recovery, including reduced use of tobacco, alcohol and illicit drugs, physical activity, quality of social care at home and in care homes. **Drivers of the outcome beyond NHS control:** Socio economic status, prevalence of co-morbidities.
Sources of bias	Part i) is biased by the need/age of the individuals entering rehabilitation services. However, part ii) of the measure is designed to provide some context on this.

Domain 4

Ensuring people have a positive experience of care

Indicator Structure

12.11 Domain 4, ***Ensuring people have a positive experience of care***, comprises thirteen indicators based on patients' responses to surveys covering both their experience of care in different settings and two measures of access to care in primary care settings.

Overarching Indicators

13 4a Patient experience of primary care:
  - *4a.i GP services*
  - *4a.ii GP Out of Hours Services*
  - *4a.iii NHS Dental Services*

14 4b Patient experience of in-patient hospital care

Improvement Areas

15 4.1 Outpatient care
16 4.2 Inpatient care
17 4.3 A&E services
18 4.4 Access to i) GP and ii) NHS Dental services
19 4.5 Maternity services
20 4.6 End of life care
21 4.7 Mental health services
22 4.8 Children's experience of care

22.6 Together, the overarching indicators and the complementary improvement area indicators provide a picture of the NHS's contribution to improving the experience of care, including reducing frustration and anxiety of not having ready access.

Work in Progress

22.7 The Patient Experience Policy Programme, a collaboration between the Department of Health and NHS Northwest, has adopted an approach to short term indicator development that uses data sources from existing national surveys (where available), and been guided by academic research to focus upon dimensions of care identified as important to patients. The approach to Domain 4 indicator development is evolutionary.

22.8 Future work will involve refining surveys and developing new questions and measures to allow existing indicators to be replaced over time as necessary. The aim of this work is:

- to achieve better alignment of local and national initiatives
- to ensure the overall architecture delivers accountability, transparency and improvement

- to ensure patients are asked about the breadth of issues that are important to them
- to ensure that indicators of the quality of patient experience adequately embody any evidence of differential importance to patients of different aspects of their experience

22.9 The Department of Health and NHS Institute for Innovation and Improvement recently commissioned research from the Kings Fund and King's College London to establish what matters to patients, review what is currently measured and provide examples of how feedback is used to improve the quality and productivity of health care services. Once published, the DH will consider the findings of this research, alongside other inputs in the development of: new models for assessing patient experience along pathways; future NICE patient experience Quality Standards; and the use of a common patient experience framework as supported by the National Quality Board.

22.10 The DH will consider approaches to measurement both for the specific purpose of assessment of national level progress over time (including handling any remaining issues of changing gratitude bias and changing patient expectations) and to ensure that indicator development is informed by reasoned analysis of what matters to patients.

Inequality

22.11 Patient experience surveys are specifically designed to capture the directly-reported experience of patients and service users, as opposed to capturing qualitative measures of satisfaction or perception. All the surveys used in this domain are based on simple random sampling and are conducted using the highest of professional statistical and research standards. This includes careful processes for issuing reminders and checking response rates from different demographic groups in order to avoid any response bias in the results.

22.12 Inequality in outcomes attributable to NHS care can therefore be evaluated across the indicators proposed for Domain 4, although it is necessary to consider the size of any confidence interval or 'margin of error' on survey based measures.

Possible sources of bias

22.13 There is potential for results to be influenced by changes in gratitude bias and patients' and service users' sense of engagement and involvement with the system. Where appropriate and possible (as set out in individual indicator definitions) this is reflected in the methodology, for example standardising results to take account of the slight tendency for older patients to give more positive responses.

International Comparisons

22.14 International comparisons of patient experience were published by the Commonwealth Fund in 2007 and 2010 (http://www.commonwealthfund.org/Content/Surveys/2007/2007-International-Health-Policy-Survey-in-Seven-Countries.aspx; http://www.commonwealthfund.org/Content/Surveys/2010/Nov/2010-International-Survey.aspx). The number of countries surveyed has increased from 7 in 2007 to 11 in 2010. The measures used are not exactly comparable to the patient experience measures in the NHS Outcomes Framework, but they can provide a useful context for analysing the relative position of the UK.

4a Patient experience of primary care **i. GP services** **ii. GP Out of Hours services** **iii. NHS Dental services**	
Outcome sought	Improvement in patients' experiences of GP services, GP Out of Hours services and NHS Dental services.
Updated definition	**Indicator description:** These will be presented as separate indicators derived from the GP Patient Survey (GPPS) measuring experience of GP Services, GP Out of Hours services and NHS Dental Services. The indicators are based on the percentage of people responding Good or Very Good to each of the following questions: • Overall, how would you describe your experience of your GP Surgery? • Overall, how would you describe your experience of out-of-hours GP Services? • Overall, how would you describe your experience of NHS Dental Services? **Indicator construction:** ***Numerator*** 3 separate numerators, one for each part of the indicator. Each is the number of people answering Very Good or Good to the questions above. ***Denominator*** 3 separate denominators, one for each part of the indicator. Each is the total number of people answering the questions above. Data will be weighted based on demographic data to ensure results are representative of the national population. This weighting will be based on a new approach developed by Ipsos MORI which will incorporate elements such as age and gender of the respondent as well as factors from the area where the respondent lives such as level of deprivation, ethnicity profile, ACORN classification and so on, which have been shown to impact on non-response bias within the GPPS. The GPPS is sent to adults 18 years and above. **Indicator format:** This indicator will take values between 0-100.
Data source	GP Patient Survey from 2011-12 onwards (www.gp-patient.co.uk).
Reporting schedule for data source	**Frequency:** The indicator will be based on aggregated data from two collections each year. Although from June 2012 onwards data will be published on a rolling six-monthly basis, the indicator will only be

	produced annually based on data for the full financial year. Producing the indicator on a six-monthly basis will mean that data will overlap with the previously calculated score. **Timing:** The 2011-12 survey will provide the first data, to be published in June 2012.
Technical issues remaining to be resolved	Approaches to removing sources of bias (see below) are being investigated. See introduction to Domain.
Changes since December 2010 definition	The GPPS has been redesigned for the 2011-12 survey, this was lead by the Primary Care team in DH, in consultation with internal and external stakeholders and ministers. It was decided to separate out the elements of primary care (GP, out of hours and dental services) into three separate indicators, since they could not be combined sensibly. This was done in consultation with stakeholders and ministers.
Historical comparisons	Data do not currently exist in a directly comparable format, however, patient experience of primary care services has been measured through the GPPS before it was redesigned this year (see – http://www.gp-patient.co.uk/)
Sources of bias	The indicator may be biased as an indicator of the outcome sought by shifts in gratitude bias and/or patient expectations.

4b Patient experience of hospital care	
Outcome sought	Improvement in patients’ experiences of NHS inpatient care.
Updated definition	No changes to the definition published December 2010. **Indicator description:** This Overall Patient Experience score is the average (mean) of five domain scores, and each domain score is the average (mean) of scores from a number of selected questions in the CQC Inpatient Services Survey. **Indicator construction:** ***Access & Waiting domain***: Q9: How do you feel about the length of time you were on the waiting list before your admission to hospital? (Scores: “I was admitted as soon as I thought was necessary” 100; “I should have been admitted a bit sooner” 50; “I should have been admitted a lot sooner” 0.) Q11: Was your admission date changed by the hospital? (Scores: “No” 100; “Yes, once” 67; “Yes, 2 or 3 times” 33; “Yes, 4 times or more” 0.) Q12: From the time you arrived at the hospital, did you feel that you had to wait a long time to get to a bed on a ward? (Scores: “No” 100; “Yes, to some extent” 50; “Yes, definitely” 0.)

***Safe, high quality co-ordinated care domain*:**
Q40: Sometimes in a hospital, a member of staff will say one thing and another will say something quite different. Did this happen to you? (Scores: “No” 100; “Yes, sometimes” 50; “Yes, often” 0.)
Q59: On the day you left hospital, was your discharge delayed for any reason? (Scores: “No” 100; “Yes 0”. Exception: Records are excluded where the answer to Q60 “What was the main reason for the delay?” is “Something else” and not “I had to wait for medicines”, “I had to wait to see the doctor” or “I had to wait for an ambulance”.)
Q67: Did a member of staff tell you about any danger signals you should watch for after you went home? (Scores: “Yes, completely” 100; “Yes, to some extent” 50; “No” 0.)

***Better information, more choice domain*:**
Q41: Were you involved as much as you wanted to be in decisions about your care and treatment? (Scores: “Yes, definitely” 100; “Yes, to some extent” 50; “No” 0.)
Q63: Did a member of staff explain the purpose of the medicines you were to take at home in a way you could understand? (Scores: “Yes, completely” 100; “Yes, to some extent” 50; “No” 0; “I did not need an explanation” and “I had no medicines” are excluded.)
Q64: Did a member of staff tell you about medication side effects to watch for when you went home? (Scores: “Yes, completely” 100; “Yes, to some extent” 50; “No” 0; “I did not need an explanation” are excluded.)

***Building closer relationships domain*:**
Q31: When you had important questions to ask a doctor, did you get answers that you could understand? (Scores: “Yes, always” 100; “Yes, sometimes” 50; “No” 0; “I had no need to ask” are excluded.)
Q33: Did doctors talk in front of you as if you weren’t there? (Scores: “No” 100; “Yes, sometimes” 50; “Yes, often” 0.)
Q35: When you had important questions to ask a nurse, did you get answers that you could understand? (Scores: “Yes, always” 100; “Yes, sometimes” 50; “No” 0; “I had no need to ask” are excluded.)
Q37: Did nurses talk in front of you as if you weren’t there? (Scores: “No” 100; “Yes, sometimes” 50; “Yes, often” 0.)

***Clean, friendly, comfortable place to be domain*:**
Q20 & Q21: Mean average of “Were you ever bothered by noise at night from other patients?” and “Were you ever bothered by noise at night from hospital staff?” (Scores for both: “No” 100; “Yes” 0.)
Q22: In your opinion, how clean was the hospital room or ward that you were in? (Scores: “Very clean” 100; “Fairly clean” 67; “Not very clean” 33; “Not at all clean” 0.)
Q28: How would you rate the hospital food? (Scores: “Very good” 100; “Good” 67; “Fair” 33; “Poor” 0.)
Q46: Were you given enough privacy when being examined or treated? (Scores: “Yes, always” 100; “Yes, sometimes” 50; “No” 0.)
Q48: Do you think the hospital staff did everything they could to help control your pain? (Scores: “Yes, definitely” 100; “Yes, to some extent” 50; “No” 0.)

	Q72: Overall, did you feel you were treated with respect and dignity while you were in the hospital? (Scores: “Yes, always” 100; “Yes, sometimes” 50; “No” 0.) **Indicator format:** Number. Individual questions are scored according to a pre-defined scoring regime that awards scores between 0-100. Therefore, this indicator will also take values between 0-100. Only the overall score is being proposed to be used as the high level outcome measure. However, performance can be disaggregated by each of the domains, and then again at the level of each individual survey question that makes up the indicator. Confirmation of the methodology used to construct the indicator is available on the DH website: www.dh.gov.uk/en/Publicationsandstatistics/PublishedSurvey/NationalsurveyofNHSpatients/DH_087516 The 2011 questionnaire is on the Picker Institute site: www.nhssurveys.org/survey/1093
Data source	The Care Quality Commission’s Adult Inpatient Survey – from the CQC nationally coordinated patient survey programme. The latest adult inpatient survey (2010) was published in April 2011 by CQC and the updated Overall Patient Experience measure, presenting results as used for this indicator, was published in May 2011 by DH at the following websites, respectively: http://www.cqc.org.uk/aboutcqc/howwedoit/involvingpeoplewhouseservices/patientsurveys/inpatientservices.cfm; http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsStatistics/DH_126772 Guidance material for this survey (covering inclusion and exclusion criteria for compiling the sample frame) is available on the NHS national patient survey coordination centre website: www.nhssurveys.org.
Reporting schedule for data source	**Frequency:** Annual (calendar year). **Timing:** 2010 data published April 2011. 2011 data available around April/May 2012. The national data for this measure are published annually on the DH website in accordance with national statistics guidelines (see the first link below). Detailed results for each provider, presented question by question, are also published on the CQC website (see second link below). http://webarchive.nationalarchives.gov.uk/+/www.dh.gov.uk/en/Publicationsandstatistics/PublishedSurvey/NationalsurveyofNHspatients/DH_087516; http://www.cqc.org.uk/aboutcqc/howwedoit/involvingpeoplewhouseservices/patientsurveys.cfm

Technical issues remaining to be resolved	None
Changes since December 2010 definition	None
Historical comparisons	Data are available for 2001-02, 2003-04, 2005-06, and yearly from 2007-08 to 2010-11. Source: DH, Overall patient experience measure updated to include results from the 2010 Inpatient Survey, www.dh.gov.uk/en/Publicationsandstatistics/PublishedSurvey/NationalsurveyofNHSpatients 2003-04, 2005-06 and yearly from 2007-08 to 2009-10: Patient experience scores published in May 2010. 2007-08 to 2010-11: Patients experience scores published in May 2011
Sources of bias	Potential biases of the indicator as a representation of the outcome sought include gratitude bias and changing expectations. However, these potential drivers of patient responses are controlled for as far as possible by selecting objective style 'experience' survey questions rather than overall satisfaction type measures. This is complemented by standardisation to adjust for age and gender.

4.1 Patient experience of outpatient services	
Outcome sought	Improving patients' experiences of NHS outpatient care.
Updated definition	**Indicator description:** The indicator seeks to measure important elements of experience across the three stages of the care pathway: pre-visit; during the visit to the Outpatients department; and the transition/post-visit period. **Indicator construction:** The indicator is a composite, calculated as the average of five survey questions. ***Pre visit*** Q7: Before your appointment, did you know what would happen to you during the appointment? (Scores: "Yes, definitely" 100; "Yes, to some extent" 50; "No" 0.) ***During visit*** Q32: Did doctors and/or other staff talk in front of you as if you weren't there? (Scores: "Yes, definitely" 0; "Yes, to some extent" 50; "No" 100.) Q35: Sometimes in a hospital or clinic, a member of staff will say one thing and another will say something quite different. Did this happen to you? (Scores: "Yes, definitely" 0; "Yes, to some extent" 50; "No" 100.) Q36: Were you involved as much as you wanted to be in decisions about your care and treatment? (Scores: "Yes, definitely" 100;

	“Yes, to some extent” 50; “No” 0.) ***Post visit/transition*** Q48: Did hospital staff tell you who to contact if you were worried about your condition or treatment after you left hospital? (Scores: “Yes” 100; “No” 0; “Don’t know / Can’t remember” are excluded.) The Outpatient Questionnaire is for patients aged 16 and over. **Indicator format:** Individual questions are scored according to a pre-defined scoring regime that awards scores between 0-100. Therefore, this indicator will also take values between 0-100. Scores are standardised by age and gender. The mean of the scores for each question is calculated for each trust to give the trust indicator score. The mean of the trust scores is calculated to give the national indicator score. Missing responses are presented in the survey but not included in the base number of respondents for percentages.
Data source	The Outpatient Survey is coordinated nationally by the Care Quality Commission as part of the NHS patient survey programme. Results from the last survey (2009) are published on the CQC website: www.cqc.org.uk/public/reports-surveys-and-reviews/surveys/outpatient-survey-2009
Reporting schedule for data source	**Frequency:** The survey is conducted on an ad hoc, rolling basis. **Timing:** Data for the specific NHS Outcomes Framework indicator are not currently published in this form, although scored results for each individual question are routinely calculated. The underlying data source is published in similar form as an existing National Statistic composite indicator, but this indicator is designed to capture the whole of patient experience rather than those areas specifically requiring improvement. Source data are from the 2009 survey, data from the 2011 survey are envisaged to be available by March 2012.
Technical issues remaining to be resolved	None
Changes since December 2010 definition	The questions from the Outpatient Survey used to form this indicator have been selected in consultation with internal and external stakeholders according to an established indicator assurance process defined by NHS Northwest (see glossary).
Historical comparisons	Data for Q7 (numbered Q3 in 2009) and Q48 (Q44 in 2009) are available for 2004 and 2009; data for the other three questions (Q32, Q35 and Q36 in 2009) are available for 2003, 2004 and 2009. See: Care Quality Commission Outpatient services survey 2009, www.cqc.org.uk/public/reports-surveys-and-

	reviews/surveys/outpatient-survey-2009
Sources of bias	Potential biases of the indicator as a representation of the outcome sought include gratitude bias and changing expectations. However, these potential drivers of patient responses are controlled for as far as possible by selecting objective style 'experience' survey questions rather than overall satisfaction type measures. This is complemented by standardisation to adjust for age and gender.

4.2 Responsiveness to in-patients' personal needs	
Outcome sought	Improved responsiveness to patients' personal needs.
Updated definition	**Indicator description:** Responsiveness to in-patients' personal needs. **Indicator construction:** The indicator is a composite, calculated as the average of 5 survey questions. Each question describes a different element of the overarching theme, "*responsiveness to patients' personal needs".* Q41: Were you involved as much as you wanted to be in decisions about your care and treatment? (Scores: "Yes, definitely" 100; "Yes, to some extent" 50; "No" 0.) Q44: Did you find someone on the hospital staff to talk to about your worries and fears? (Scores: "Yes, definitely" 100; "Yes, to some extent" 50; "No" 0; "I had no worries or fears" are excluded.) Q45: Were you given enough privacy when discussing your condition or treatment? (Scores: "Yes, definitely" 100; "Yes, to some extent" 50; "No" 0.) Q64: Did a member of staff tell you about medication side effects to watch for when you went home? (Scores: "Yes, completely" 100; "Yes, to some extent" 50; "No" 0; "I did not need an explanation" are excluded.) Q69: Did hospital staff tell you who to contact if you were worried about your condition or treatment after you left hospital? (Scores: "Yes" 100; "No" 0; "Don't know / Can't remember" are excluded.) **Indicator format:** Individual questions are scored according to a pre-defined scoring regime that awards scores between 0-100. Therefore, this indicator will also take values between 0-100. This indicator was developed as part of a national CQUIN goal for acute providers in 2009/10. Further information is available on the DH and the NHS Institute for Innovation and Improvement websites (www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_091443).
Data source	The Care Quality Commission's Adult Inpatient Survey – from the CQC nationally coordinated patient survey programme. The latest adult inpatient survey (2010) was published in April 2011 by

	CQC at the following website: http://www.cqc.org.uk/aboutcqc/howwedoit/involvingpeoplewhouseservices/patientsurveys/inpatientservices.cfm Guidance material for this survey (covering inclusion and exclusion criteria for compiling the sample frame) is available on the NHS national patient survey coordination centre website: www.nhssurveys.org
Reporting schedule for data source	**Frequency:** Annual (calendar). **Timing:** 2010 data published April 2011. 2011 data available around April/May 2012. The underlying data source is currently published (Adult Inpatient survey), and scores for this indicator are available and are shared with SHAs, Trusts and PCTs, but no national level indicator is currently published. This indicator is currently being used as a national CQUIN goal for patient experience, covering acute providers. Further details are available on the website of the NHS Institute for Innovation and Improvement: www.institute.nhs.uk/world_class_commissioning/pct_portal/cquin.html
Technical issues remaining to be resolved	None
Changes since December 2010 definition	None
Historical comparisons.	Data for each question are available for 2003-04, 2005-06, and yearly from 2007-08 to 2010-11. Source: Care Quality Commission Inpatient Services Survey http://www.cqc.org.uk/aboutcqc/howwedoit/involvingpeoplewhouseservices/patientsurveys/inpatientservices.cfm
Sources of bias	Potential biases of the indicator as a representation of the outcome sought include gratitude bias and changing expectations. However, these potential drivers of patient responses are controlled for as far as possible by selecting objective style ‘experience’ survey questions rather than overall satisfaction type measures. This is complemented by standardisation to adjust for different age and gender.

4.3 Patient experience of accident and emergency services	
Outcome sought	Improvement in patients’ experiences of Accident and Emergency (A&E) departments.
Updated definition	**Indicator description:** Patient experience of A&E services

	Indicator construction: The indicator is a composite measure, calculated as the average score of the 5 survey questions below. Each question describes a different element of the overarching theme: Improving people’s experiences of Accident and Emergency services. The questionnaire is for patients aged 16 and over. Q12: While you were in the Emergency department, did a doctor or nurse explain your treatment in a way you could understand? (Scores: “Yes, completely” 100; “Yes, to some extent” 50; “No” 0; “I did not need an explanation” are excluded. Q15: Did you have confidence and trust in the doctors and nurses examining and treating you? (Scores: “Yes, definitely” 100; “Yes, to some extent” 50; “No” 0.) Q21: Were you involved as much as you wanted to be in decisions about your care and treatment? (Scores: “Yes, definitely” 100; “Yes, to some extent” 50; “No” 0; “I was not well enough to be involved in decisions about my care” are excluded.) Q27: Do you think the hospital staff did everything they could to help control your pain? (Scores: “Yes, definitely” 100; “Yes, to some extent” 50; “No” 0; “Can’t say / Don’t know” are excluded.) Q39: Overall, did you feel you were treated with respect and dignity while you were in the Emergency department? (Scores: “Yes, all of the time” 100; “Yes, some of the time” 50; “No” 0) **Indicator format:** Individual questions are scored according to a pre-defined scoring regime that awards scores between 0-100. Therefore, this indicator will also take values between 0-100). The scores are standardised by age and gender. The mean of the scores for each question is calculated for each trust to give the trust indicator score. The mean of the trust scores is calculated to give the national indicator score. Missing responses are presented in the survey but not included in the base number of respondents for percentages.
Data source	The A&E survey is coordinated nationally by the Care Quality Commission as part of the NHS patient survey programme.
Reporting schedule for data source	**Frequency**: The survey is run on an ad hoc rolling basis. **Timing**: The A&E Survey is next due to run in 2012, with data available in 2013. Data from the 2008 survey will be used to form this indicator in the interim. Results from the last survey (2008) are published on the Picker Institute website: www.nhssurveys.org/surveys/392

Technical issues remaining to be resolved	None.
Changes since December definition	The questions from the A&E Survey used to form this indicator have been selected in consultation with internal and external stakeholders according to an established assurance process set out by NHS Northwest.
Historical Comparisons	Results are available for 2003, 2004 and 2008 (see – www.nhssurveys.org/surveys/392)
Sources of bias	Potential biases of the indicator as a representation of the outcome sought include gratitude bias and changing expectations. However, these potential drivers of patient responses are controlled for as far as possible by selecting objective style ‘experience’ survey questions rather than overall satisfaction type measures. This is complemented by standardisation to adjust for different age and gender.

4.4 Access to i. GP services ii. NHS Dental services	
Outcome sought	Improvement in patients’: - access to GP services; and - access to NHS dental services
Updated definition	This will be two separate indicators: **i) Indicator description:** Access to GP Services **Indicator construction:** This indicator will be based on responses to a single question within the GP Patient Survey (GPPS): Overall, how would you describe your experience of making an appointment? ***Numerator*** The number of people responding ‘Very Good’ or ‘Fairly Good’. ***Denominator*** All respondents to the question. Responses are measured on a 5 point scale: Very good, Fairly good, Neither good nor poor, Fairly poor and Very poor. This is a new question in the redeveloped GPPS. **ii) Indicator description:** Access to Dental Services for those who have tried to get an NHS dental appointment in the last two years. **Indicator construction:** This indicator will be based on the single question:

	Were you successful in getting an NHS dental appointment? ***Numerator*** The numerator will be all respondents stating ‘Yes’. ***Denominator*** All respondents who state ‘yes’ or ‘no’ to the success question (so it excludes those who state they ‘can’t remember’). Therefore, the indicator is the % of patients who have tried to get an NHS appointment in the last 2 years and were able to, the last time they tried. The GPPS is sent to adults 18 years and above. **Indicator format:** For both indicators data will be weighted for non-response bias based on demographic data to ensure results are representative of the national population. This weighting will be based on a new approach developed by Ipsos MORI, which will incorporate elements such as age and gender of the respondent as well as factors from the area where the respondent lives, such as level of deprivation, ethnicity profile, ACORN classification and so on which have been shown to impact on non-response bias within the GPPS.
Data source	GP Patient Survey from 2011-12 onwards (www.gp-patient.co.uk).
Reporting schedule for data source	Access to GP Services data do not currently exist. **Frequency:** Data will be published on a rolling six-monthly basis from June 2012 onwards **Timing:** The 2011-12 survey will provide the first data, to be published in June 2012. The indicator will be based on aggregated data from two collections each year. For NHS Dental Services data are not aggregated across the year, therefore there is no overlap between December and June publications. The first data that this indicator can be based on will be published in December 2011. Access to Dental Services data currently exists, however due to the change in weighting (mentioned above) it would not be possible to compare the current data with the data to be published from December 2011 onwards.
Technical issues remaining to be resolved	Following the re-design of the GPPS, there have been discussions on which questions should be used to form the basis for this indicator. These have now been agreed as detailed above in the definition. The question that underpins indicator 4.4i on Access to GP services is a single generic ‘how was your overall experience...’ question. In order to add granularity to this indicator and explain variation in responses, further analysis will take place of the GPPS questions that

	may be most closely related to patient experience; statistical analyses will be used to determine the key drivers of performance in the generic question. The technical details of the analyses are being determined in conjunction with the survey provider, Ipsos MORI.
Changes since December 2010 definition	The questions from the GPPS to form this indicator have been selected in consultation with internal and external stakeholders according to an established assurance process set out by NHS Northwest (see glossary).
Historical comparisons	For GP Access this indicator is based on new questions in the survey, therefore direct historical comparisons cannot be made. For NHS Dental Access the weighting methodology has changed for 2011-12, therefore, again direct historic comparisons cannot be made as this would not be comparing like with like. Despite no historical comparisons available on a directly comparable basis, patient experience of primary care services has been measured through the GPPS before it was redesigned this year (see – http://www.gp-patient.co.uk/).
Sources of bias	The indicator may be biased as an indicator of the outcome sought by shifts in gratitude bias and/or patient expectations. See discussion above under “technical issues to be resolved”.

4.5 Women’s experience of maternity services	
Outcome sought	Improving women’s experience of maternity services.
Updated definition	**Indicator description:** Women’s experience of maternity services focusing on the whole maternity pathway. **Indicator construction:** This indicator will be the average (mean) score from a composite of questions from the 2010 CQC survey of women’s experience of maternity services focusing on the whole maternity care pathway (antenatal, intrapartum and postnatal). ***Antenatal*** B6: Did you get enough information from a midwife or doctor to help you decide where to have your baby? (Options: “Yes, definitely” 100; “Yes, to some extent” 50; “No” 0; “No, but I did not need this information”; “Don’t know / Can’t remember”.) B24: Thinking about your antenatal care, were you involved enough in decisions about your care? (Options: “Yes, always”; “Yes, sometimes”; “No”; “I did not want / need to be involved”; “Don’t know / Can’t remember”.) ***Intrapartum (labour and delivery)*** C14: Were you (and/or your partner or a companion) left alone by midwives or doctors at a time when it worried you? (Options: “Yes, during labour”; “Yes, shortly after the birth”; “Yes, during labour and

	shortly after the birth”; “No, not at all”.) C16: Thinking about your care during labour and birth, were you involved enough in decisions about your care? (Options: “Yes, always”; “Yes, sometimes”; “No”; “I did not want / need to be involved”; “Don’t know / Can’t remember”.) ***Postnatal*** D4: Thinking about the care you received in hospital after the birth of your baby, were you treated with kindness and understanding? (Options: “Yes, always”; “Yes, sometimes”; “No”; “Don’t know / Can’t remember”.) E5: Did you feel that midwives and other carers gave you active support and encouragement? (Options: “Yes, always”; “Yes, generally”; “No”; “Don’t know”; “I didn’t want or need this”.) **Indicator format:** Individual questions are scored according to a pre-defined scoring regime that awards scores between 0-100. Therefore, this indicator will also take values between 0-100. Individual questions are measured in terms of scores ranging from 0-100. A mean of these is taken and aggregated to form the indicator. Women who have had a live birth and are aged 16 years and older are included in this survey. **Standardisation** Responses are standardised by maternal age, parity (number of previous births) and response rate.
Data source	The CQC’s Maternity Survey (http://www.cqc.org.uk/public/reports-surveys-and-reviews/surveys/maternity-services-survey-2010)
Reporting schedule for data source	**Frequency:** The survey is currently run on an ad hoc rolling basis. **Timing:** Results from the latest maternity survey (2010) are published on the CQC website: www.cqc.org.uk/aboutcqc/howwedoit/involvingpeoplewhouseservices/patientsurveys/maternityservices.cfm
Technical issues remaining to be resolved	None
Changes since December 2010 definition	The questions from the Maternity Survey to form this indicator have been selected in consultation with internal and external stakeholders according to an established assurance process defined by NHS Northwest (see glossary).
Historical comparisons	The underlying data source is currently published (see above), but no composite indicator yet exists.

	The survey was conducted in 2007 and 2010. See – http://www.cqc.org.uk/aboutcqc/howwedoit/involvingpeoplewhouseservices/patientsurveys/maternityservices.cfm
Sources of bias	Potential biases of the indicator as a representation of the outcome sought are controlled for as far as possible by selecting objective style ‘experience’ survey questions rather than overall satisfaction type measures. This is complemented by standardisation to adjust for mother’s age and parity.

4.6 Survey of bereaved carers

Outcome sought	Improving the experience of care for people at the end of their lives.
Updated definition	The definition for this indicator continues to be finalised through the assurance process set out by NHS Northwest (see glossary). It will be a national indicator to measure the quality of care experienced by adults caring for those in the final three months of life. It is derived from a new national survey of people who have been bereaved, which has already been piloted. The questions to form this indicator are still under consultation, but will centre on one or more questions from the survey. The survey is for people aged 18 and over. The number of responses in each category will form the numerator, while the denominator will be the total number of responses.
Data source	VOICES survey of bereaved adults (see - www.southampton.ac.uk/voices/).
Reporting schedule for data source	**Frequency:** To be annual. VOICES has been in use extensively in a range of locations but this is the first time it has been used nationally. Data from the pilot have been published on the DH website (http://www.dh.gov.uk/en/Publicationsandstatistics/publications/publicationsPolicyAndGuidance/DH_128787. **Timing:** Not yet known.
Technical issues remaining to be resolved	The selection of questions from the VOICES survey to form this indicator continue to be selected in consultation with internal and external stakeholders according to an established assurance process defined by NHS Northwest.
Changes since December 2010 definition	The pilot of the VOICES survey has been completed successfully and it is now being implemented as a national survey. It has been agreed that this is the appropriate source of data for this indicator. The choice of question or questions to be used for this measure is currently being finalised, as detailed above in the definition.
Historical comparisons	VOICES has been in use since 1993, both in England and abroad, and is internationally recognised as a valid tool for obtaining feedback

	on people's experience at the end of life, as well as that of the bereaved person. This is the first time VOICES has been used for a national survey and data published.
Sources of bias	Potential biases of the indicator as a representation of the outcome sought should be controlled for as far as possible by selecting objective style 'experience' survey questions rather than overall satisfaction type measures. There is a particular concern to be addressed with respect to this indicator to ensure that views of carers adequately reflect the experience of patients at the end of their lives. Furthermore, the representativeness of carer assessment may vary with case-mix in ways that need to be explored.

4.7 Patient experience of community mental health services	
Outcome sought	Improving the experience of adult (18 years and above) mental health patients.
Updated definition	The definition for this indicator continues to be finalised through the assurance process set out by NHS Northwest (see glossary). The questions to form this indicator are still under consultation, but will centre a composite of survey questions from the CQC's Community Mental Health Services Survey. Each question will describe a different element of the overarching theme of the patient experience. Individual questions scored according to a pre-defined scoring regime that awards scores between 0-100. Therefore, this indicator will also take values between 0-100. The mean of the scores for each question is calculated for each trust to give the trust indicator score. The mean of the trust scores is calculated to give the national indicator score.
Data source	The Care Quality Commission's Community Mental Health Services Survey – from the CQC nationally coordinated patient survey programme.
Reporting schedule for data source	**Frequency:** Annual. **Timing:** The latest Community Mental Health Survey (2010/11) was published in August 2011 by CQC at the following website: www.cqc.org.uk/aboutcqc/howwedoit/involvingpeoplewhouseservices/patientsurveys/communitymentalhealthservices.cfm The 2011/12 survey will be published around August 2012.
Technical issues	The selection of questions from the Community Mental Health Services Survey to form this indicator continue to be selected in

remaining to be resolved	consultation with internal and external stakeholders according to an established assurance process defined by NHS Northwest .
Changes since December 2010 definition	The choice of question or questions to be used for this measure is currently being finalised, as detailed above in the definition.
Historical comparisons	The Community Mental Health Services Survey has been run annually since 2003/04. The underlying data source is currently published (see – www.cqc.org.uk/public/reports-surveys-and-reviews/surveys/community-mental-health-survey-2011), but no composite indicator yet exists.
Sources of bias	Changes in gratitude bias/expectations may be an influence on patient responses, however, these potential drivers of the outcome are controlled for as far as possible by selecting objective style ‘experience’ survey questions rather than overall satisfaction type measures. A combination of questions will be used as the basis of the indicator to understand the experiences of both client groups in contact with Mental Health Services, i.e. patients on care programme approach (CPA) and those who are not on CPA.

4.8 Children and young people’s experience of healthcare	
Outcome sought	Improving children and young people’s experience of healthcare.
Updated definition	This indicator will be constructed from questions (to be decided) from a Children’s Patient Experience Questionnaire. It is in the very early stages of development and the exact definition will be decided in the coming months.
Data source	Children’s Patient Experience Questionnaire
Reporting schedule for data source	To be decided.
Technical issues remaining to be resolved	This Children’s Patient Experience indicator is in the very early stages of development. When the first NHS Outcomes Framework was published there was no children’s indicator to measure their experience of healthcare. This indicator is the result of the Innovations in Outcomes competition that the DH ran to fill this gap in the framework. Therefore, although the title and source have been determined, largely the detail of the definition, collection and reporting is yet to be resolved. Further development of children’s patient experience surveys are planned, this will be focussed separately on the major points of contact they have with the health system.

Changes since December 2010 definition	As explained above, there was no indicator for this improvement area in the first NHS Outcomes Framework. The DH ran a competition to find a suitable indicator to fill this gap (see further detail in overview text). This is the winning entry selected and awarded in October 2011. The indicator is to be developed further in the coming months.
Historical comparisons	None
Potential sources of bias	Through the work that is being undertaken to establish a mechanism by which this indicator can be measured we will seek to ensure that potential drivers of the outcome (including potential changes in gratitude bias and expectations) are controlled for as far as possible by selecting objective style ‘experience’ survey questions rather than overall satisfaction type measures.

Treating and caring for people in a safe environment and protecting them from avoidable harm

Indicator Structure

22.15 Domain 5, ***Treating and caring for people in a safe environment and protecting them from avoidable harm***, comprises two overarching indicators and six improvement areas.

22.16 The overarching indicators (*5a Patient Safety incidents reported* and *5b Safety incidents involving severe harm or death)* measure, respectively, the readiness of the NHS to report harm and so to learn from it, and the number severe incidents of harm.

22.17 Given that there is room for improving levels of reporting of safety incidents, for the time being overarching indicator *5a Patient safety incidents reported*, will be seen as a positive indicator of outcome – reflecting increased willingness to recognise and to address safety problems. It had been intended that this would be complemented by an indicator of reduction in incidents in each safety category in which incidents are reported. (This was marked by a development indicator *5c Number of similar incidents* in the 2011/12 NHS Outcomes Framework*).*

22.18 However, this aspiration is instead embodied in the overall level of patient safety incident reporting, measured by 5a, in conjunction with the development of a number of complementary indicators for each safety area in which incident recording is more robust – see below.

22.19 It is understood that reporting of incidents of severe harm as a proportion of total incidents is largely reliable, so the outcome sought for overarching indicator *5b Safety incidents involving severe harm or death,* is a reduction in the number of incidents recorded.

22.20 Indicators in the improvement areas are of two sorts:

23 Sub-indicator. Indicator *5.4 Incidence of medication errors causing serious harm and death,* is a sub-indicator of indicator *5b.* Progress in this indicator therefore provides a useful initial analysis of what accounts for progress in the overarching indicator.

24 Complementary Indicators. In several areas of poor practice, data collection is sufficiently systematic (or plans to make it so are in hand) to generate reliable information regarding incidence even when little harm may have resulted. These practices represent cases in which patients have been exposed to risk, whether or not it has materialised. Reduction in the number of such cases is sought.

These practices are measured by the following indicators :

- *5.1 Incidence of hospital-related venous thromboembolism*
- *5.2 Incidence of healthcare associated infection: i MRSA bacteraemia; ii* C.difficile
- *5.3 Incidence of newly-acquired category2, 3 and 4 pressure ulcers*
- *5.5 Admission of full-term babies to neonatal care*
- *5.6 Incidence of harm to children due to "failure to monitor"*

24.6 Together, the overarching indicators and the complementary indicators provide a picture of the safety of patients in the care of the NHS from iatrogenic and other avoidable harm.

Work in Progress

24.7 The main issues pertaining to Domain 5 upon which work is continuing are

25 Improvement in the reporting of relevant types of incident, so that a more comprehensive measure of harm done can be constructed, including particularly harm arising in primary care settings.

26 The potential use of indicators being employed by the NHS Safety Thermometer (see Glossary) are under review. Two of the four harms captured by this source are venous thromboembolism (VTE) and pressure ulcers – which are already covered by indicators 5.1 and 5.3. Two further harms are captured by the NHS Safety Thermometer – falls and urinary catheter infections. However, identifying the extent to which cases can be attributed to poor quality care, and avoiding perverse incentives, is problematic.

27 A proposed definition for indicator 5.6, which captures 'failure to monitor' for children treated in acute care, by the National Patient Safety Agency is under methodological review.

Inequality

27.6 Inequality in outcomes attributable to NHS care in Domain 5 will be explored using a variety of methodologies, according to the availability of disaggregated data for different indicators.

27.7 The domain as a whole addresses pertinent issues for a cross-section of client groups through indicators which are of particular relevance to those groups. For instance:

28 **Children – indicator 5.6**

29 **Babies and women cared for by maternity services – indicator 5.5**

30 **Elderly – indicators 5.1 and 5.3**

NHS vs external drivers of the outcome and sources of bias

30.6 The principal external driver of outcomes is the volume and severity of need to be addressed by the NHS. Volume will affect outcomes for all Domain 5 indicators by its impact upon the likelihood of engagement with the healthcare services and upon the availability of resources relative to case load. Increased severity of need (consequent for example upon success in reducing mortality from chronic conditions) will increase the likelihood that an individual will need care and complicate the delivery of safe care. Conversely, improved public health could reduce demands on the healthcare system, resulting in fewer safety incidents.

30.7 However, no attempt is made to adjust for changes in the amount of care activity taking place in different settings, as the NHS is expected to take into account safety when determining appropriate care settings for different patients.

30.8 The indicators (other than 5a) may be biased to the extent that recording of incidents varies over time: although the indicators selected are sourced from reliable data, there is a perverse risk that improving the culture of reporting in general may result in some spurious increases in incident numbers even for these indicators.

30.9 Other drivers and sources of bias are listed in the relevant sections of the individual indicator templates.

International Comparisons

30.10 This year for the first time the OECD published international comparisons of indicators of patient safety in their Health at a Glance 2011 publication (published in November 2011). These indicators are based on AHRQ indicators developed in the USA and are not directly comparable to the NHS OF indicators. However, there are some areas of overlap, e.g. rates of postoperative pulmonary embolism or deep vein thrombosis

5a Patient safety incidents reported	
Outcome sought	Improved readiness of the NHS to report harm and to learn from it.
Updated definition	**Indicator description:** Patient safety incidents reported to the National Reporting and Learning Service (NRLS) by provider organisations in England, per 100,000 population **Indicator construction:** ***Numerator*** The number of incidents as described above A patient safety incident (PSI) is defined as ‘any unintended or unexpected incident(s) that could have or did lead to harm for one or more person(s) receiving NHS funded healthcare’. ***Denominator*** Mid-year population estimate for all persons, year in question or latest year available **Indicator format:** rate per 100,000 population
Data source	Data are taken from: - National Reporting and Learning Service - NRLS (National Patient Safety Agency), http://www.nrls.npsa.nhs.uk; and - Population statistics (Office for National Statistics, http://www.ons.gov.uk/ons/publications/all-releases.html?definition=tcm%3A77-22371)

Reporting schedule for data source	**Frequency:** Quarterly for NRLS data, annual for population data. **Timing:** NRLS Quarterly Data Summaries are published five months after the end of the period. Data to June 2011 is due in November 2011. 2011 population data will be published around autumn 2012.
Technical issues remaining to be resolved	None
Changes since December 2010 definition	Following discussions with the National Patient Safety Agency and the NHS Information Centre, the indicator denominator is now proposed as population-based rather than hospital activity (bed-day) based, since reported incidents are not limited to acute care, and since the NHS should ensure that its case load is restricted to that which can be handled safely.
Historical comparisons	The National Reporting and Learning System was established in 2003.
NHS vs external drivers of the outcome	**Healthcare contribution:** Improving the culture of recognising and reporting safety incidents. **Drivers of the outcome beyond NHS control:** The overall need for healthcare in the population and the volume of health care delivered by health services
Sources of bias	This indicator may be biased by changes in the underlying volume of safety incidents, giving a spurious impression of change in the willingness of the service to report such incidents.

5b Safety incidents involving severe harm or death	
Outcome measured	Reduced extent of severe harm or death caused or contributed to by the NHS.
Updated definition	**Indicator description:** Patient safety incidents reported to the National Reporting and Learning Service (NRLS), where degree of harm is recorded as “severe harm” or “death” by provider organisations in England, per 100,000 population. **Indicator construction** ***Numerator*** the number of incidents recorded as causing severe harm/death as described above. A patient safety incident (PSI) is defined as in indicator 5a. The ‘degree of harm’ for PSIs is defined as follows: ‘severe’ – the patient has been permanently harmed as a result of the PSI, and ‘death’ -- the PSI has resulted in the death of the patient.

	Denominator Mid-year population estimate for all persons, year in question or latest year available. **Indicator format:** Rate per 100,000 population
Data source	Data are taken from: - National Reporting and Learning Service - NRLS (National Patient Safety Agency), http://www.nrls.npsa.nhs.uk; and - Population statistics (Office for National Statistics, http://www.ons.gov.uk/ons/publications/all-releases.html?definition=tcm%3A77-22371)
Reporting schedule for data source	**Frequency:** Quarterly for NRLS data, annual for population data. **Timing:** NRLS Quarterly Data Summaries are published five months after the end of the period. Data to June 2011 is due in November 2011. 2011 population data will be published around autumn 2012.
Technical issues remaining to be resolved	None
Changes since December 2010 definition	Following discussions with the National Patient Safety Agency and the NHS Information Centre, the indicator denominator is now proposed as population-based rather than hospital activity (bed-day) based, since reported incidents are not limited to acute care, and since the NHS should ensure that its case load is restricted to that which can be handled safely.
Historical comparisons	The National Reporting and Learning System was established in 2003.
NHS vs external drivers of the outcome	**Healthcare contribution:** Improving the safety of care. **Public health and social care contribution:** Alcohol dependency and illicit drug dependency amongst population receiving care and reducing obesity. Prevention, early identification and management of risk factors including diabetes and chronic kidney disease. TIA interventions and the quality of social care in support of timely discharge from hospital. **Drivers of the outcome beyond NHS control:** Co-morbidities amongst population receiving care, fragility of the population receiving care, which in turn may be related to average age of population treated.
Sources of bias	This indicator may be biased by changes in the underlying volume of safety incidents, giving a spurious impression of change in the willingness of the service to report such incidents.

5c Number of similar incidents – This indicator has been removed, see introduction to Domain.

5.1 Incidence of healthcare-related venous thromboembolism	
Outcome sought	Reduced harm from failure to prevent venous thromboembolism (VTE) in a health care setting
Updated definition	**Indicator description:** Incidence of VTE. **Indicator construction:** Still in development – options include incidence rate based on: (i) NHS Safety Thermometer ***Numerator*** Number of patients surveyed during the month with VTE. ***Denominator*** Total number of patients admitted during the month period. (ii) HES data ***Numerator*** Number of admissions with a secondary or subsequent diagnosis of VTE. *Proposed summary of ICD codes for VTE* <u>Pulmonary Embolism - PE (aggregate these codes for PE)</u> I26 Pulmonary embolism <u>Deep Vein Thrombosis - DVT (Aggregate these codes for DVT)</u> I801 Phlebitis and thrombophlebitis of femoral veinno I802 Phlebitis/thrombophlebitis of deep vessels or extremities I808 Phlebitis and thrombophlebitis of other sites I809 Phlebitis and thrombophlebitis of unspecified site I81 Portal vein thrombosis I821 Thrombophlebitis migransno I822 Embolism and thrombosis of vena cava I823 Embolism and thrombosis of renal vein I828 Embolism and thrombosis of other specified veins I829 Embolism and thrombosis of unspecified vein This list of codes requires further review by experts. ***Denominator*** The denominator is the resident population. Data are based on the latest revisions of ONS mid-year population estimates for the respective years, current as at September 2011). For further details on revisions to ONS mid-year population estimates, and their availability, see

	http://www.statistics.gov.uk/hub/population/population-change/population-estimates/index.html. **Indicator format:** Age standardised rate per 100,000. **Indicator format** – (i) percentage (numerator/denominator) *100 (ii) Age standardised rate per 100,000.
Data source	Proposed data sources include: - NHS Safety Thermometer (subject to on-going development) OR - Hospital Episode Statistics (NHS Information Centre, www.ic.nhs.uk/statistics-and-data-collections/hospital-care/hospital-activity-hospital-episode-statistics–hes); and - Population statistics (Office for National Statistics, http://www.ons.gov.uk/ons/publications/all-releases.html?definition=tcm%3A77-22371)
Reporting schedule for data source	**Frequency:** NHS Safety Thermometer data is collected monthly. HES reports provisional data monthly, annual data by financial year is available in the autumn/winter after the end of the period. ONS population estimates available annually (calendar year). **Timing:** NHS Safety Thermometer data are not yet publicly available. Latest HES monthly data is for July 2011, annual refresh for 2010/11 was published in November 2011. ONS population estimates for 2011 available in autumn 2012
Technical issues remaining to be resolved	Whether the NHS Safety Thermometer is the appropriate source of this indicator – including the collection method and sampling frame. Whether HES data provide a sufficiently accurate picture of hospital-acquired VTE.
Changes since December 2010 definition	Alternative data sources for this indicator are being considered. Discussions with the NHS Information Centre and the QIPP Safe Care Workstream Steering Group have identified the possible indicators available through HES data and the NHS Safety Thermometer, including the potential advantages and disadvantages of the two alternatives.
Historical comparisons	NHS Safety Thermometer data available from January 2011. HES time series available back to 1991, adjusting for data quality and coding changes, however, direct comparisons may be difficult to make.
NHS vs external drivers of the outcome	**Healthcare contribution:** Ensuring that people are risk-assessed and if necessary given appropriate prophylaxis for VTE **Public health and social care contribution:** Reducing illicit drug dependency amongst population receiving care, encouraging physical activity and reducing obesity. Prevention, early identification and management of risk factors such as diabetes. TIA interventions and the quality of social care in support of timely discharge from hospital. **Drivers of the outcome beyond NHS control:** The overall volume of need for health care, including the extent of co-morbidities.

5.2.i Incidence of healthcare associated infection: MRSA bacteraemia

Outcome sought	Reducing the incidence of healthcare associated infections (HCAI)
Updated definition	**Indicator description:** Overall number of cases of MRSA bacteraemia. **Indicator construction:** Based on mandatory surveillance of MRSA through the HPA Data Capture System. **Indicator format:** Number.
Data source	Mandatory surveillance of MRSA bacteraemia (Health Protection Agency – HPA)
Reporting schedule for data source	**Frequency:** Monthly, quarterly and annual summaries of surveillance data. **Timing:** Monthly data are published around two months following the period covered - data for October 2011 will be published on 7 December. The next annual summary for financial year 2011/12 is due around July 2012.
Technical issues remaining to be resolved	None
Changes since December 2010 definition	The HCAI Objectives, which seek to move the NHS towards a zero tolerance approach to avoidable infections, have always been expressed as a number – this approach has been validated by an External Reference Group involving: • British Infection Association • Department’s expert advisory committee for Antimicrobial Resistance and Healthcare Associated Infections (ARHAI) • Health Protection Agency (HPA) • Healthcare Infection Society • Infection Prevention Society • Royal College of Nursing • Royal College of Pathologists • Royal College of Physicians (RCP) • Royal College of Surgeons • Strategic Health Authorities • Together Everyone Achieves More (Patient Groups).
Historical comparisons	Source data are available back to 2001/02.
NHS vs external drivers of the outcome	**Healthcare contribution:** The consistent implementation of evidence based effective infection prevention and control practices. **Drivers of the outcome beyond NHS control:** Community onset infections and general colonisation rates.

5.2.ii Incidence of healthcare associated infection: *C. difficile*	
Outcome sought	Reducing the incidence of healthcare associated infection (HCAI)
Updated definition	**Indicator description:** Overall number of cases of *C. difficile* **Indicator construction:** Based on mandatory surveillance of *C. difficile* as reported to the Health Protection Agency Data Capture System. **Indicator format:** Number.
Data source	Mandatory surveillance of *C. difficile* (Health Protection Agency – HPA)
Reporting schedule for data source	**Frequency:** Monthly, quarterly and annual summaries of surveillance data **Timing:** Monthly data are published around two months following the period covered - data for October 2011 will be published on 7 December. The next annual summary for financial year 2011/12 is due around July 2012.
Technical issues remaining to be resolved	None
Changes since December 2010 definition	The HCAI Objectives, which seek to move the NHS towards a zero tolerance approach to avoidable infections, have always been expressed as a number – this approach has been validated by an External Reference Group involving: • British Infection Association • Department's expert advisory committee for Antimicrobial Resistance and Healthcare Associated Infections (ARHAI) • Health Protection Agency (HPA) • Healthcare Infection Society • Infection Prevention Society • Royal College of Nursing • Royal College of Pathologists • Royal College of Physicians (RCP) • Royal College of Surgeons • Strategic Health Authorities • Together Everyone Achieves More (Patient Groups). •
Historical comparisons	Source data are available back to 2007/08.
NHS vs external drivers of the outcome	**Healthcare contribution:** The consistent application of implementation of evidence based effective infection prevention and control practices. **Drivers of the outcome beyond NHS control:** Community onset cases and general colonisation rates.

5.3 Incidence of newly-acquired category 2, 3 and 4 pressure ulcers	
Outcome sought	Reducing harm associated by preventing serious pressure ulcers in healthcare
Updated definition	**Indicator description:** Incidence of newly-acquired category 2, 3 and 4 pressure ulcers **Indicator construction:** Still in development – options include incidence rate based on: (i) Hospital Episode Statistics (HES) ***Numerator*** Number of patients who develop a new pressure ulcer (count all ulcers and those Category 2or greater) after admission ***Denominator*** Number of all patients admitted during the time period (ii) NHS Safety Thermometer ***Numerator*** Number of patients with any pressure ulcer (count all ulcers and those Category 2 or greater) ***Denominator*** Number of patients on the (care) unit of in the (care) facility during the time period **Indicator format** – for both (i) and (ii) – percentage (numerator/denominator) *100
Data source	Proposed data sources include: - Hospital Episode Statistics (NHS Information Centre) OR - NHS Safety Thermometer (subject to on-going development)
Reporting schedule for data source	**Frequency:** Both sources are available quarterly (although monthly provisional data are available from HES). **Timing:** NHS Safety Thermometer data are not yet publicly available. Latest HES data is for July 2011.
Technical issues remaining to be resolved	Whether the NHS Safety Thermometer is the appropriate source of this indicator – including the collection method and sampling frame. Whether HES data provide a sufficiently accurate picture of healthcare acquired pressure ulcers.
Changes since December 2010 definition	Alternative data sources for this indicator are being considered. Discussions with the NHS Information Centre and the QIPP Safe Care Workstream Steering Group have identified the possible indicators available through HES data and the NHS Safety Thermometer, including the potential advantages and disadvantages of the two alternatives. The NHS Safety Thermometer records category 2 pressure ulcers, which are considered sufficiently serious to warrant inclusion in the definition.

Historical comparisons	NHS Safety Thermometer data available from January 2011. HES time series available back to 1991, adjusting for data quality and coding changes, however, direct comparisons may be difficult to make.
NHS vs external drivers of the outcome	**Healthcare contribution:** Ensuring that people are given appropriate nursing care. **Public health and social care contribution:** Reducing illicit drug dependency amongst population receiving care and reducing obesity. Prevention, early identification and management of risk factors such as diabetes. The quality of social care in support of timely discharge from hospital. **Drivers of the outcome beyond NHS control:** The overall volume of need for health care and the prevalence of co-morbidities

5.4 Incidence of medication errors causing serious harm	
Outcome sought	Reducing serious harm caused by medication errors.
Updated definition	**Indicator description:** Patient safety incidents reported to the National Reporting and Learning Service (NRLS), where degree of harm is recorded as severe harm/death, and incident type is ‘medication’ by provider organisations in England, per 100,000 population. **Indicator construction:** ***Numerator*** The number of medication error incidents recorded as causing severe harm/death as described above. A patient safety incident (PSI) is defined as any unintended or unexpected incident(s) leading to actual harm for one or more person(s) receiving NHS funded healthcare. This indicator will filter for incidents identified as being of type ‘medication error’. The ‘degree of harm’ for PSIs reported relates to the following: ‘severe’ – when the patient has been permanently harmed as a result of the PSI, and ‘death’ when the PSI has resulted in the death of the patient. The term ‘serious’ is used here as an umbrella term to denote the total for PSIs resulting in ‘severe’ harm or ‘death’. ***Denominator*** – Mid-year population estimate for all persons, year in question or latest year available. **Indicator format:** Rate per 100,000 population.

Data source	Data are taken from: - National Reporting and Learning Service - NRLS (National Patient Safety Agency), http://www.nrls.npsa.nhs.uk; and - Population statistics (Office for National Statistics, http://www.ons.gov.uk/ons/publications/all-releases.html?definition=tcm%3A77-22371)
Reporting schedule for data source	**Frequency:** Quarterly for NRLS data, annual for population data. **Timing:** NRLS Quarterly Data Summaries are published five months after the end of the period. Data to June 2011 is due in November 2011. 2011 population data will be published around autumn 2012.
Technical issues remaining to be resolved	None
Changes since December 2010 definition	Following discussions with the National Patient Safety Agency and the NHS Information Centre, the indicator denominator is now proposed as population-based rather than hospital activity (bed-day) based, since reported incidents are not limited to acute care, and since the NHS should ensure that its case load is restricted to that which can be handled safely.
Historical comparisons	The National Reporting and Learning System was established in 2003.
NHS vs external drivers of the outcome	**Healthcare contribution:** Care in prescribing, improving the culture of recognising and reporting safety incidents. **Public health and social care contribution:** Reduction in alcohol and illicit drug dependence. Prevention, early identification and management of risk factors including diabetes and chronic kidney disease; quality of social care in hospital, in care homes and at home. **Drivers of the outcome beyond NHS control:** Overall volume of need for health care including and the prevalence of co-morbidities, all of which increase susceptibility to harm.
Sources of bias	This indicator may be biased by changes in the underlying volume of safety incidents, giving a spurious impression of change in the willingness of the service to report such incidents.

5.5 Admission of full term babies to neonatal care	
Outcome sought	Safe delivery of babies
Updated definition	**Indicator description:** Proportion of all term babies (>=37 weeks gestation) admitted to neonatal care. **Indicator construction** ***Numerator***

	Number of admissions of a term baby to neonatal care. ***Denominator*** Number of term births. The denominator will be collected from birth notification records. **Indicator format –** Percentage (numerator/denominator)*100
Data source	Hospital Episode Statistics (HES) For further information on HES, consult the NHS Information Centre website on www.ic.nhs.uk/statistics-and-data-collections/hospital-care/hospital-activity-hospital-episode-statistics--hes
Reporting schedule for data source	**Frequency:** Monthly (provisional), quarterly for HES data, annual for population estimates. **Timing:** latest HES data is for July 2011. ONS mid-year population estimates as at June 2010 (published June 2011).
Technical issues remaining to be resolved	None
Changes since December 2010 definition	None
Historical comparisons	HES time series available back to 1991, adjusting for data quality and coding changes, however, direct comparisons may be difficult to make.
NHS vs external drivers of the outcome	**Healthcare contribution:** Improvements in the quality and safety of ante-natal and intrapartum care. **Drivers of the outcome beyond NHS control:** Numbers of older mothers, multiple births, incidence of lethal congenital abnormalities, extent to which women choose to terminate pregnancies.
Sources of bias	This indicator may be biased as a representation of the outcome sought to the extent that babies brought to term require planned admission to neonatal care. Low birth weight is a key determinant of this outcome for which public health factors such as smoking, alcohol and illicit drug use, nutrition and obesity in the mother are significant risk factors.

5.6 Incidence of harm to children due to ‘failure to monitor’	
Outcome sought	Harm from failing to monitor children properly in an acute setting.
Updated definition	**Indicator description:** The definition is still under development, but the proposed definition is set out below. Total number of Patient Safety incidents reported in England to the National Patient Safety Agency (NPSA) via the National Reporting and Learning Service (NRLS) where age of the patient at the time of the incident is less than eighteen, and incident categories are associated with ‘failure to monitor’. **Indicator construction:** NRLS data are filtered to obtain reported incidents of ‘failure to monitor’ as follows: Care Setting is “Acute” AND Age at time of the incident is under 18 AND Degree of harm is reported as “Low” OR “Moderate” OR “Severe” OR “Death” AND EITHER Incident Category level 1 = “Implementation of care and ongoing monitoring / review” AND Incident Category level 2 = “Delay or failure to monitor” OR Incident Category level 1 = “Treatment, procedure” and Incident Category level 2 = “Treatment / procedure - delay / failure” OR Incident Category level 1 = “Treatment, procedure” and Incident Category level 2 = “Treatment / procedure - inappropriate / wrong” OR Incident Category level 1 = “Clinical assessment including diagnosis, scans, tests, assessments” and Incident Category level 2 = “Assessment - lack of clinical or risk assessment” **Indicator format:** Number.
Data source	National Reporting and Learning Service
Reporting schedule for data source	**Frequency:** Quarterly – to be confirmed (new indicator). **Timing:** To be confirmed.
Technical issues remaining to be resolved	This is a proposed new definition subject to methodological review.
Changes since	The previous definition set out a proposed broad definition related to the delay in acting on deterioration in an infant of child aged less than

December 2010 definition	18 years, where the child died or suffered severe harm. The new proposal from the NPSA identifies the appropriate filters to extract the data from the NRLS relating to care setting, age at time of incident, degree of harm and incident categories
Historical comparisons	This is a new indicator – it may be possible to extract historical data from the NRLS – to be investigated.
NHS vs external drivers of the outcome	**Healthcare contribution:** Improvements in the quality and safety of care of children requiring monitoring.. **Drivers of the outcome beyond NHS control:** The extent of healthcare need amongst children (which in turn will be determined by a number of NHS, public health and external drivers).
Sources of bias	This indicator may be biased as a representation of the outcome sought to the extent that changes in the willingness of the service to report such incidents gives a spurious impression of change in the number of incidents occurring.

Summary of public health and social care contributions to outcomes, of other external drivers of the outcomes beyond NHS control, and of sources of bias. Domains 1, 2, 3, 5 only.

The following tables provide an overall summary of a range of external drivers, as set out in the indicator templates, that may have a bearing on change in the indicators over time. Each table lists all the potential drivers that have been identified so far, and for each domain describes which indicators may be affected by them (therefore, not all drivers appear in every domain). For ease of comparison, all drivers appear in every domain, notwithstanding that in some domains for some drivers there are no affected indicators. Only domains in which external drivers beyond NHS control have been identified have been included.

Domain 1 – Preventing people from dying prematurely

Public health and social care											
tobacco use		1a	1b.i-ii	1.1	1.2			1.4.iv	1.5	1.6i	1.6ii
salt consumption		1a	1b.i-ii	1.1							
alcohol consumption		1a	1b.i-ii	1.1		1.3		1.4.iv	1.5	1.6i	1.6ii
illicit drug use		1a	1b.i-ii	1.1	1.2	1.3	1.4.i-iii	1.4.iv	1.5	1.6i	1.6ii
obesity		1a	1b.i-ii	1.1		1.3		1.4.iv	1.5	1.6i	1.6ii
5 a day		1a	1b.i-ii	1.1		1.3		1.4.iv			
high fibre diet		1a	1b.i-ii					1.4.iv			
physical activity		1a	1b.i-ii	1.1	1.2	1.3		1.4.iv	1.5		
maternal and infant nutrition										1.6i	1.6ii
breastfeeding incidence								1.4.iv			
screening programmes		1a	1b.i-ii				1.4.i-iii	1.4.iv			
prevention, early identification and management of risk factors, including:	>cholesterol	1a	1b.i-ii	1.1		1.3		1.4.iv	1.5		
	>blood pressure	1a	1b.i-ii	1.1					1.5		
	>diabetes	1a	1b.i-ii	1.1		1.3		1.4.iv	1.5		
	>chronic kidney disease	1a	1b.i-ii	1.1				1.4.iv			
	>hepatitis B	1a	1b.i-ii			1.3		1.4.iv	1.5		
	>hepatitis C	1a	1b.i-ii			1.3		1.4.iv	1.5		
TIA interventions		1a	1b.i-ii	1.1							
vaccination rates		1a	1b.i-ii	1.1	1.2						
quality of social care in hospital and that supports timely discharge		1a	1b.i-ii	1.1	1.2	1.3	1.4.i-iii	1.4.iv	1.5		
quality of care received whilst living at home or in residential care e.g. recognition of the symptoms of stroke, medication compliance		1a	1b.i-ii	1.1	1.2	1.3	1.4.i-iii	1.4.iv	1.5		
teenage pregnancy		1a									
mitigation of social isolation		1a	1b.i-ii	1.1	1.2	1.3	1.4.i-iii	1.4.iv	1.5	1.6i	1.6ii
appropriate use of NSAIDs		1a	1b.i-ii	1.1				1.4.iv			
statins		1a	1b.i-ii	1.1				1.4.iv			
HRT		1a	1b.i-ii	1.1				1.4.iv			
oral contraceptives		1a						1.4.iv			
Other external											
socio economic status		1a	1b.i-ii	1.1	1.2	1.3	1.4.i-iii	1.4.iv	1.5	1.6i	1.6ii
fuel poverty alleviation		1a	1b.i-ii								
number of older mothers										1.6i	1.6ii
environmental factors (e.g. air quality/ radon gas)		1a	1b.i-ii		1.2			1.4.iv			
occupational risk (incl carcinogens)		1a	1b.i-ii		1.2			1.4.iv			
cohort effect			1b.i-ii								
multiple birth rates										1.6i	1.6ii
prevalence of co-morbidities		1a	1b.i-ii	1.1	1.2	1.3	1.4.i-iii	1.4.iv	1.5	1.6i	1.6ii
previous cancer treatment							1.4.i-iii	1.4.iv			
incidence of lethal congenital anomalities										1.6i	1.6ii
immigration					1.2	1.3			1.5	1.6i	1.6ii
underlying prevalence of LTC			1b.i-ii								
extent to which women choose to have a termination or continue with the pregnancy until term										1.6i	1.6ii
suicide prevention interventions									1.5		
changes in the suitability of work available											
changes to DWP policy, in particular Employment and Support Allowance											
average age of population treated											
extent of need for healthcare in the population											
general colonisation rates											
Bias											
lead time bias							1.4i-iii				
length time bias							1.4i-iii				
changes to the criteria for inclusion in the MHMDS over time									1.5		
average period that the surveyed individuals have suffered a long term condition											
readiness to diagnose and/or report a "long standing health condition" (incl consequences in change to DWP policy)											
changes in the overall number and case mix of those identifying themselves has having a long term condition											
changes in that population's willingness to work											
need/age of the individuals entering reablement services											
gratitude bias											
rising expectations											
improving the culture of recognising and reporting safety incidents											
volume of safety incidents occurring											
a change in the rate of appropriate or planned admissions to neonatal care											
low birth weight											

Domain 2 – Enhancing quality of life for people with long-term conditions

List of drivers	2	2.1	2.2	2.3i	2.3ii	2.4	2.5
Public health and social care							
tobacco use				2.3i	2.3ii		
salt consumption	2						
alcohol consumption	2		2.2	2.3i	2.3ii	2.4	2.5
illicit drug use	2	2.1	2.2	2.3i	2.3ii	2.4	2.5
obesity	2			2.3i	2.3ii	2.4	
5 a day							
high fibre diet							
physical activity	2			2.3i	2.3ii	2.4	
maternal and infant nutrition							
breastfeeding incidence							
screening programmes		2.1					
prevention, early identification and management of risk factors, including: >cholesterol	2	2.1	2.2	2.3i	2.3ii	2.4	
>blood pressure	2	2.1	2.2	2.3i		2.4	
>diabetes	2	2.1	2.2	2.3i	2.3ii	2.4	
>chronic kidney disease	2	2.1		2.3i		2.4	
>hepatitis B							
>hepatitis C							
TIA interventions	2	2.1		2.3i			
vaccination rates							
quality of social care in hospital and that supports timely discharge	2	2.1	2.2			2.4	2.5
quality of care received whilst living at home or in residential care e.g. recognition of the symptoms of stroke, medication compliance	2	2.1	2.2	2.3i	2.3ii	2.4	2.5
teenage pregnancy							
mitigation of social isolation	2	2.1	2.2	2.3i	2.3ii	2.4	2.5
appropriate use of NSAIDs							
statins							
HRT							
oral contraceptives							
Other external							
socio economic status	2		2.2	2.3i	2.3ii	2.4	2.5
fuel poverty alleviation				2.3i			
number of older mothers							
environmental factors (e.g. air quality/ radon gas)							
occupational risk (incl carcinogens)							
cohort effect							
multiple birth rates							
prevalence of co-morbidities	2	2.1	2.2	2.3i	2.3ii	2.4	2.5
previous cancer treatment							
incidence of lethal congenital anomalities							
immigration							
underlying prevalence of LTC	2						
extent to which women choose to have a termination or continue with the pregnancy until term							
suicide prevention interventions							
changes in the suitability of work available			2.2				2.5
changes to DWP policy, in particular Employment and Support Allowance			2.2				2.5
average age of population treated							
extent of need for healthcare in the population							
general colonisation rates							
Bias							
lead time bias							
length time bias							
changes to the criteria for inclusion in the MHMDS over time							
average period that the surveyed individuals have suffered a long term condition	2		2.2				2.5
readiness to diagnose and/or report a "long standing health condition" (incl consequences in change to DWP policy)	2		2.2				2.5
changes in the overall number and case mix of those identifying themselves has having a long term condition			2.2				2.5
changes in that population’s willingness to work			2.2				2.5
need/age of the individuals entering reablement services							
gratitude bias							
rising expectations							
improving the culture of recognising and reporting safety incidents							
volume of safety incidents occurring							
a change in the rate of appropriate or planned admissions to neonatal care							
low birth weight							

Domain 3 – Helping people to recover from episodes of ill-health of following injury

List of drivers	3a	3b	3.1	3.2	3.3	3.4	3.5	3.6
Public health and social care								
tobacco use	3a	3b	3.1	3.2	3.3	3.4	3.5	3.6
salt consumption	3a							
alcohol consumption	3a	3b	3.1		3.3		3.5	3.6
illicit drug use	3a	3b	3.1	3.2	3.3	3.4	3.5	3.6
obesity	3a	3b	3.1		3.3	3.4	3.5	3.6
5 a day								
high fibre diet								
physical activity	3a	3b	3.1		3.3	3.4	3.5	3.6
maternal and infant nutrition								
breastfeeding incidence				3.2				
screening programmes								
prevention, early identification and management of risk factors, including: >cholesterol	3a	3b						
>blood pressure	3a	3b						
>diabetes	3a	3b	3.1		3.3	3.4	3.5	3.6
>chronic kidney disease	3a	3b						
>hepatitis B								
>hepatitis C								
TIA interventions	3a	3b	3.1			3.4		3.6
vaccination rates				3.2				
quality of social care in hospital and that supports timely discharge				3.2		3.4	3.5	3.6
quality of care received whilst living at home or in residential care e.g. recognition of the symptoms of stroke, medication compliance	3a	3b	3.1		3.3	3.4	3.5	3.6
teenage pregnancy								
mitigation of social isolation	3a	3b			3.3	3.4	3.5	3.6
appropriate use of NSAIDs						3.4		3.6
statins								
HRT								
oral contraceptives								
Other external								
socio economic status		3b	3.1	3.2	3.3		3.5	3.6
fuel poverty alleviation	3a	3b						
number of older mothers								
environmental factors (e.g. air quality/ radon gas)								
occupational risk (incl carcinogens)								
cohort effect								
multiple birth rates								
prevalence of co-morbidities	3a	3b	3.1	3.2	3.3	3.4	3.5	3.6
previous cancer treatment								
incidence of lethal congenital anomalities								
immigration								
underlying prevalence of LTC								
extent to which women choose to have a termination or continue with the pregnancy until term								
suicide prevention interventions								
changes in the suitability of work available								
changes to DWP policy, in particular Employment and Support Allowance								
average age of population treated								
extent of need for healthcare in the population								
general colonisation rates								
Bias								
lead time bias								
length time bias								
changes to the criteria for inclusion in the MHMDS over time								
average period that the surveyed individuals have suffered a long term condition								
readiness to diagnose and/or report a "long standing health condition" (incl consequences in change to DWP policy)								
changes in the overall number and case mix of those identifying themselves has having a long term condition								
changes in that population's willingness to work								
need/age of the individuals entering reablement services								3.6
gratitude bias								
rising expectations								
improving the culture of recognising and reporting safety incidents								
volume of safety incidents occurring								
a change in the rate of appropriate or planned admissions to neonatal care								
low birth weight								

Domain 5 – Treating and caring for people in a safe environment and protecting them from avoidable harm

List of drivers	5a	5b	5.1	5.2i	5.2ii	5.3	5.4	5.5	5.6
Public health and social care									
tobacco use									
salt consumption									
alcohol consumption							5.4		
illicit drug use		5b	5.1			5.3	5.4		
obesity		5b	5.1			5.3			
5 a day									
high fibre diet									
physical activity			5.1						
maternal and infant nutrition									
breastfeeding incidence									
screening programmes									
prevention, early identification and management of risk factors, including: >cholesterol									
>blood pressure									
>diabetes		5b	5.1			5.3	5.4		
>chronic kidney disease		5b					5.4		
>hepatitis B									
>hepatitis C									
TIA interventions		5b	5.1						
vaccination rates									
quality of social care in hospital and that supports timely discharge		5b	5.1			5.3	5.4		
quality of care received whilst living at home or in residential care e.g. recognition of the symptoms of stroke, medication compliance							5.4		
teenage pregnancy									
mitigation of social isolation									
appropriate use of NSAIDs									
statins									
HRT									
oral contraceptives									
Other external									
socio economic status									
fuel poverty alleviation									
number of older mothers									
environmental factors (e.g. air quality/ radon gas)									
occupational risk (incl carcinogens)									
cohort effect									
multiple birth rates									
prevalence of co-morbidities		5b	5.1			5.3	5.4		
previous cancer treatment									
incidence of lethal congenital anomalities									
immigration									
underlying prevalence of LTC									
extent to which women choose to have a termination or continue with the pregnancy until term									
suicide prevention interventions									
changes in the suitability of work available									
changes to DWP policy, in particular Employment and Support Allowance									
average age of population treated		5b							
extent of need for healthcare in the population	5a	5b	5.1	5.2i	5.2ii	5.3	5.4		5.6
general colonisation rates				5.2i	5.2ii				
Bias									
lead time bias									
length time bias									
changes to the criteria for inclusion in the MHMDS over time									
average period that the surveyed individuals have suffered a long term condition									
readiness to diagnose and/or report a "long standing health condition" (incl consequences in change to DWP policy)									
changes in the overall number and case mix of those identifying themselves has having a long term condition									
changes in that population's willingness to work									
need/age of the individuals entering reablement services									
gratitude bias									
rising expectations									
improving the culture of recognising and reporting safety incidents		5b					5.4		5.6
volume of safety incidents occurring	5a								
a change in the rate of appropriate or planned admissions to neonatal care								5.5	
low birth weight								5.5	

Glossary

A&E survey (Emergency department survey)
The A&E survey is coordinated nationally by the Care Quality Commission (CQC) as part of the NHS patient survey programme. It asks about the experiences of people who have visited an emergency department. The A&E survey was conducted in 2003, 2004 and 2008. Almost 50,000 people aged 16 and over who had attended emergency departments in January, February or March 2008 responded to the 2008 survey, a response rate of 40%.
From: www.nhssurveys.org/results

ACORN classification
"ACORN is a geodemographic segmentation of the UK's population which segments small neighbourhoods, postcodes, or consumer households into 5 categories, 17 groups and 56 types."
From: www.caci.co.uk/acorn-classification.aspx

Adult Inpatient Survey
The Adult Inpatient Survey is coordinated nationally by the Care Quality Commission (CQC) as part of the NHS patient survey programme. The survey is conducted annually between October and January for a sample of patients who had an inpatient episode between July and August. It uses a postal self-completion survey approach, and is conducted among a sample of recent patients who spent at least one night in hospital. The survey covers both elective and emergency care patients, but does not include maternity, mental health patients or patients under the age of 16. The annual survey typically achieves responses from around 70,000 patients across England (a total response rate of around 50%). To reduce non-response bias, if patients do not respond initially or to a reminder after a few weeks, they receive another copy of the questionnaire after a further few weeks.
From:
www.cqc.org.uk/aboutcqc/howwedoit/involvingpeoplewhouseservices/patientsurveys/inpatientservices.cfm

Age cohort
An age cohort is a group of people in the same age group who are assumed to have experienced similar events and share a common history – e.g., the 'baby boomers'. Cohort analysis can investigate the effect of age cohorts, particularly in health outcomes.

Age UK
Age UK's aim is to "improve later life for everyone through their information and advice, campaigns, products, training and research". Age UK was formed on 1 April 2009, when Age Concern England and Help the Aged joined to create a new charity "dedicated to improving later life for everyone".
From: www.ageuk.org.uk

Agency for Healthcare Research and Quality (AHRQ)
AHRQ is one of twelve agencies within the U.S. Department of Health and Human Services. Its mission is to "improve the quality, safety, efficiency and effectiveness of health care for all Americans". AHRQ's focus areas are comparing the effectiveness of

treatments, quality improvement and patient safety, health information technology, prevention and care management and health care value.
From: www.ahrq.gov

Arm’s length bodies (ALBs)
ALBs are stand-alone national organisations sponsored by the government to carry out specific functions.
The DH works with three kinds of ALBs: executive agencies who have responsibility for particular business areas - the agencies are still part of, and accountable to, the DH; special health authorities which are independent bodies, but can be subject to ministerial direction like other NHS bodies; and thirdly, non-departmental public bodies that have a role in the process of national government, but are not part of government departments.
ALBs operate in three areas: regulating the health and social care system and workforce, establishing national standards and protecting patients and the public and providing central services to the NHS.
From:
www.dh.gov.uk/en/Aboutus/OrganisationsthatworkwithDH/Armslengthbodies/index.htm

Best practice tariff
Best practice tariffs represent one of the enablers for the NHS to improve quality, by reducing unexplained variation and universalising best practice. With best practice defined as care that is both clinical and cost-effective, these tariffs will also help the NHS deliver the productivity gains required to meet the tough financial challenges ahead. The aim is to have tariffs that are structured and priced appropriately both to incentivise and adequately reimburse for the costs of high quality care.
From: www.dh.gov.uk/en/Managingyourorganisation/NHSFinancialReforms/DH_105080

Care Quality Commission (CQC)
The CQC is the health and social care regulator for England. Their job is to “make sure that care provided by hospitals, dentists, ambulances, care homes and services in people’s own homes and elsewhere meets government standards of quality and safety”. All health and social care service providers in England need to register with the CQC.
From: www.cqc.org.uk

Case-mix adjustment
Patients are usually different in their clinical and demographic characteristics and these differences should be considered when assessing processes of health care. Case-mix adjustment is the statistical process of allowing for differences among patients' clinical and demographic characteristics when comparing outcomes of health care between areas, organisations or periods.

Children’s Outpatient Experience Questionnaire
The Children’s Outpatient Experience Questionnaire was developed by the Picker Institute Europe to measure the recent hospital outpatient experience of children aged 8 to 17 years. This questionnaire was a winning entry in the Innovation in Outcomes competition run by the DH.
From: www.dh.gov.uk/health/2011/10/winners-of-innovation-in-outcomes-competition-announced/

Commissioning for Quality and Innovation (CQUIN)
The CQUIN framework was introduced in April 2009 as a national framework for locally agreed quality improvement schemes. It enables commissioners to reward excellence by

linking a proportion of English healthcare providers' income to the achievement of local quality improvement goals. The framework aims to embed quality goals in contracts between healthcare commissioners and providers.
From:
www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_091443
www.institute.nhs.uk/world_class_commissioning/pct_portal/cquin.html

Commonwealth Fund
The Commonwealth Fund is a private American foundation that aims to "promote a high performing health care system that achieves better access, improved quality, and greater efficiency, particularly for society's most vulnerable, including low-income people, the uninsured, minority Americans, young children, and elderly adults".
The Fund carries out this mandate by supporting independent research on health care issues and making grants to improve health care practice and policy. An international program in health policy is designed to stimulate innovative policies and practices in the United States and other industrialised countries.
From: www.commonwealthfund.org

Community Mental Health Services Survey
The Community Mental Health Services Survey is coordinated nationally by the Care Quality Commission (CQC) as part of the NHS patient survey programme. This survey has been run annually since 2003/04 and assesses the care experience of patients receiving community mental health services. The 2011 survey took the views of more than 17,000 people who received specialist care or treatment for a mental health condition, including those who received care co-ordinated under the Care Programme Approach (CPA), but excluding patients under the age of 16, between July and September 2010, achieving a response rate of 33%.
From: www.cqc.org.uk/public/reports-surveys-and-reviews/surveys/community-mental-health-survey-2011

Compendium of Population Health Indicators, formerly NCHOD
"A wide-ranging collection of over 1,000 indicators designed to provide a comprehensive overview of population health at a national, regional and local level. These indicators were previously available on the Clinical and Health Outcomes Knowledge Base website (also known as NCHOD)."
From: https://indicators.ic.nhs.uk/webview/

Continuous Inpatient (CIP) Spell
A CIP spell is a continuous period of hospital care within the NHS from admission to discharge, regardless of any transfers which may take place. It can therefore be made up of one or more episodes and/or involve more than one hospital provider.
A CIP spell starts when a decision has been made to admit the patient, and a consultant has taken responsibility for their care. The spell ends when the patient dies or is discharged from hospital.
From: www.hesonline.nhs.uk/Ease/servlet/ContentServer?siteID=1937&categoryID=1072

Employment and Support Allowance
Employment and Support Allowance is a benefit managed by the Department for Work and Pensions (DWP) which provides financial help to people who are unable to work because of illness or disability. It also provides personalised support to those who are able

to work. For new clients, it has replaced Incapacity Benefit and Income Support paid because of an illness or disability from 27 October 2008.
From:
www.direct.gov.uk/en/MoneyTaxAndBenefits/BenefitsTaxCreditsAndOtherSupport/Illorinjured/DG_171894

Episode
The Healthcare Commission defines an episode as a single period of hospital care under one consultant, e.g. treatment of Patient A in hospital by Consultant A for a broken leg (see further example under “spell”).
From: www.hesonline.nhs.uk/Ease/servlet/ContentServer?siteID=1937&categoryID=1072

EQ-5D
EQ-5D™ is a standardised instrument for use as a measure of health status or health-related quality of life developed by the EuroQol Group. It is used internationally and is applicable to a wide range of health conditions and treatments, providing a simple descriptive profile for health status.
EQ-5D is primarily designed for self-completion by respondents and is suited for use in postal surveys, in clinics and face-to-face interviews. It is cognitively simple, taking only a few minutes to complete. Instructions to respondents are included in the questionnaire.
From: www.euroqol.org/eq-5d/what-is-eq-5d.html

EQ Visual Analogue Scale (EQ VAS)
The EQ VAS is part of the EQ-5D (see above) self-report questionnaire. It is a standard vertical 20 cm visual analogue scale (similar to a thermometer) for recording an individual’s rating for their current health-related quality of life state (often referred to as page 3 of the EQ-5D questionnaire).
From: www.euroqol.org/eq-5d/what-is-eq-5d/eq-5d-nomenclature.html

Extended Glasgow Outcome Scale (GOS-E)
The GOS-E is an extended version of the Glasgow Outcome Scale (GOS), which is a widely used measure of outcome after traumatic brain injury. The GOS-E has 8 categories, rather than 5 as in the GOS, as follows: Death, Vegetative State, Lower Severe Disability, Upper Severe Disability, Lower Moderate Disability, Upper Moderate Disability, Lower Good Recovery and Upper Good Recovery.
From: Sander, A. (2002). The Extended Glasgow Outcome Scale. The Center for Outcome Measurement in Brain Injury. www.tbims.org/combi/gose

GP patient survey (GPPS)
The GPPS is a DH survey, run by Ipsos MORI, that assesses patients’ experiences of local NHS services. The survey was first conducted in 2006. The questionnaire is sent to a random selection of around 2.8 million people aged 18 or older who are registered with a GP in England.
From: www.gp-patient.co.uk

Gratitude bias in patient experience surveys
Gratitude bias may occur when feelings of gratitude for the treatment received by the patient cause them to be less critical of the healthcare professionals who cared for them and of the quality of care received. The feelings of gratitude may inhibit negative evaluations and promote positive evaluations.

Health at a Glance
The OECD’s Health at a Glance publication provides the latest comparable data and trends on different aspects of the performance of health systems in OECD countries. It provides evidence of variations across countries in indicators of health status and health risks, as well as in the inputs and outputs of health systems.
From: www.oecd-ilibrary.org/social-issues-migration-health/health-at-a-glance_19991312

Healthcare Associated Infections (HCAI)
HCAI are infections resulting from medical care or treatment in hospital, nursing homes or the patient’s own home.
From: www.hpa.org.uk/Topics/InfectiousDiseases/InfectionsAZ/HCAI

Health Care Quality Indicators (HCQI) project
The OECD HCQI project, initiated in 2002, aims to measure and compare the quality of health service provision in different countries. An expert group has developed a set of quality indicators at the health systems level, which allows the impact of particular factors on the quality of health services to be assessed. The OECD’s Health at a Glance publications include a chapter on quality of care which presents indicators from the HCQI project considered suitable for international comparison.
From:
www.oecd.org/document/34/0,3746,en_2649_37407_37088930_1_1_1_37407,00.html

Health outcome
A health outcome is a change in the health status of an individual, group or population, which is attributable to an intervention or series of interventions.

Health Protection Agency (HPA)
The HPA's role is to “provide an integrated approach to protecting UK public health through the provision of support and advice to the NHS, local authorities, emergency services, other ALBs, the DH and the Devolved Administrations”. The Agency was established as a special health authority in 2003. In England, it provides local health protection services, which in the rest of the UK are delivered by the three other lead health protection bodies; the National Public Health Service Wales; Health Protection Scotland HPS; the Department of Health, Social Services and Public Safety, Northern Ireland. The Agency works closely with all these organisations.
From: www.hpa.org.uk/default.htm

Health Survey for England (HSE)
The HSE survey is designed to provide regular information on various aspects of the nation's health, and is now commissioned and published by the NHS IC. It comprises a series of annual surveys that began in 1991 and covers the adult population aged 16 and over living in private households in England. Children have been included every year since 1995.
From:
www.dh.gov.uk/en/Publicationsandstatistics/PublishedSurvey/HealthSurveyForEngland/index.htm

Hospital Episodes Statistics (HES)
HES is the national statistical data warehouse for England of the care provided by NHS hospitals and for NHS hospital patients treated elsewhere. HES is the data source for a wide range of healthcare analysis for the NHS, government and many other organisations and individuals.

From: www.hesonline.nhs.uk/Ease/servlet/ContentServer?siteID=1937&categoryID=537

Index of Multiple Deprivation
The English Indices of Multiple Deprivation identify the most deprived areas across the country. They combine a number of indicators, chosen to cover a range of economic, social and housing issues, into a single deprivation score for each small area in England. The Indices are used widely to analyse patterns of deprivation, identify areas that would benefit from special initiatives or programmes and as a tool to determine eligibility for specific funding streams. The Index of Deprivation for 2010 was published in March 2011
From:
www.communities.gov.uk/corporate/researchandstatistics/statistics/subject/indicesdeprivation

Indicator Assurance Pipeline Process (IAPP)
The IAPP has been developed by the NHS IC on behalf of the National Quality Board (NQB). Its purpose is to offer a transparent and structured process for assuring indicators for use across the NHS.
From:
http://www.ic.nhs.uk/webfiles/Services/Clinical%20Innovation%20Metrics/CIM_sustainable_process_report.pdf

Infant mortality
Infant mortality refers to deaths under one year of age, expressed as a rate per 1000 live births.
Neonatal mortality refers to deaths under 28 days, expressed as a rate per 1,000 live births.
Perinatal mortality refers to stillbirths and deaths at ages up to six completed days of life (early neonatal deaths), expressed as a rate per 1,000 stillbirths and live births.

Innovation in Outcomes Competition
The Innovation in Outcomes Competition was run by the DH in 2011 to invite people to suggest new, innovative indicators for the NHS Outcomes Framework, both where gaps existed in the framework at that time and in broader areas for future frameworks.
From:
www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_124920

Inpatients survey
The Inpatient Survey is coordinated nationally by the Care Quality Commission (CQC) as part of the NHS patient survey programme. Patients who were admitted to hospital with at least one overnight stay, excluding those who were treated for maternity or psychiatric reasons, are eligible to complete the survey. The last inpatient services survey was conducted between September 2010 and January 2011. Over 66,000 inpatients aged 16 and over responded to the survey, a response rate of 50%.
From:
www.cqc.org.uk/aboutcqc/howwedoit/involvingpeoplewhouseservices/patientsurveys/inpatientservices.cfm

Inspiration North West (Inspiration NW)
Inspiration NW’s mission is to “raise the profile and importance of patient's experience, develop patient experience measures, understand what makes a good experience by

inviting the public to share their insights, identify and celebrate 'brilliant basics and magic moments' and pilot new approaches and methodologies to support best practice”.
From: www.inspirationnw.co.uk

Institute of Medicine (IOM)
The IOM is an independent, non-profit American organisation that works outside of the American government to “provide unbiased and authoritative advice to decision makers and the public”. Their mission is to “serve as advisor to the nation to improve health”.
From: www.iom.edu

International Classification of Diseases (ICD)
The ICD is published by the World Health Organisation (WHO). It is the international standard diagnostic classification for all general epidemiological and many health management purposes and clinical use. It is used to classify diseases and other health problems recorded on many types of health and vital records including death certificates and health records. In addition to enabling the storage and retrieval of diagnostic information for clinical, epidemiological and quality purposes, these records also provide the basis for the compilation of national mortality and morbidity statistics by WHO Member States.
ICD-10 was endorsed by the Forty-third World Health Assembly in May 1990 and came into use in WHO Member States as from 1994. The classification is the latest in a series which has its origins in the 1850s.
From: www.who.int/classifications/icd/en

International Labour Organization (ILO)
The ILO is the international organisation responsible for drawing up and overseeing international labour standards. It is the only 'tripartite' United Nations agency that brings together representatives of governments, employers and workers to jointly shape policies and programmes promoting Decent Work for all.
From: www.ilo.org/global/lang--en/index.htm

Ipsos MORI
Ipsos MORI, part of the Ipsos Group, is a leading UK research company with global reach. They specialise in researching advertising (brand equity and communications); loyalty (customer and employee relationship management); marketing (consumer, retail & shopper and healthcare); mediaCT (media and technology), social & political research and reputation research.
From: www.ipsos-mori.com

King’s Fund
The King’s Fund is a charity that seeks to understand how the health system in England can be improved. Using that insight, they help to “shape policy, transform services and bring about behaviour change”.
From: www.kingsfund.org.uk

Labour Force Survey (LFS)
The LFS is a quarterly sample survey of households living at private addresses in the UK. Its purpose is to provide information on the UK labour market that can then be used to develop, manage, evaluate and report on labour market policies. It is conducted by the Office for National Statistics.
From: www.esds.ac.uk/government/lfs

Lower layer super output areas (LSOAs)
A LSOA is a geographic area. It is part of an ONS geographic hierarchy designed to improve the reporting of small area statistics in England and Wales.
LSOAs are built from groups of contiguous Output Areas and have been automatically generated to be as consistent in population size as possible, and typically contain from four to six Output Areas. The minimum population is 1000 and the mean is 1500.There is a LSOA for each postcode in England and Wales.
From:
www.datadictionary.nhs.uk/data_dictionary/nhs_business_definitions/l/lower_layer_super_output_area_de.asp?shownav=1 (see also www.ons.gov.uk/ons/guide-method/geography/products/names--codes-and-look-ups/names-and-codes-listings/names-and-codes-for-super-output-area-geography/index.html)

Maternity Patient Experience Survey
The Maternity Patient Experience Survey is co-ordinated nationally by the Care Quality Commission (CQC) as part of the NHS patient survey programme. The maternity survey was conducted in 2007 and 2010. Over 25,000 women who had given birth in January or February 2010 responded to the 2010 survey between April and August 2010, a response rate of 52%. All women aged 16 and over who received care from any of the 144 NHS Trusts in England, and who had either given birth in a hospital, birth centre, maternity unit or at home were eligible to take part.
From: www.cqc.org.uk/public/reports-surveys-and-reviews/surveys/maternity-services-survey-2010

Mental Health Minimum Dataset (MHMDS)
The MHMDS contains “record level data about NHS services delivered to over a million people with severe and enduring mental health problems each year between 2003 and 2010”. It does not cover the services for people with common mental health problems that are provided in primary care, e.g. through GP surgeries, specialist mental health services delivered by independent hospitals or through specialist services for children and adolescents.
From: www.mhmdsonline.ic.nhs.uk

Modified Rankin Scale (mRS)
The mRS measures the overall independence of stroke patients in daily life and, in this modified version, accommodates language disorders and cognitive defects. It also refers to previous activities, which could be important because patients may be independent but experience restrictions in comparison to their former lifestyle and feel dissatisfied with this.
From: van Swieten J, Koudstaal P, Visser M, Schouten H, et al. (1988). Interobserver agreement for the assessment of handicap in stroke patients. Stroke 19 (5): 604–607. http://stroke.ahajournals.org/content/19/5/604.full.pdf

National Adult Social Care Intelligence Service (NASCIS)
NASCIS provides “an array of analytical and information resources allowing effective and timely analysis of Social Care data to aid activities such as planning, performance management and service improvement”. It holds data on the primary adult social care collections, providing data going back to 2005/2006 for Councils with Adult Social Services Responsibilities (CASSRs). It is owned and delivered by the NHS IC and has been developed through close working with Local Authorities, the DH, the Association of Directors of Adult Social Services (ADASS) and others.
From: nascis.ic.nhs.uk

National Centre for Health Outcomes Development (NCHOD) - Compendium of Clinical and Health Indicators
See glossary entry ‘Compendium of Population Health Indicators, formerly NCHOD’

National Hip Fracture Database (NHFD)
The NHFD is a joint venture of the British Geriatrics Society and the British Orthopaedic Association, and is designed to facilitate improvements in the quality and cost effectiveness of hip fracture care. As a national audit project, the NHFD is supported by NHSIC’s National Clinical Audit Support Programme (NCASP).
The NHFD is intended to “focus attention on hip fracture both locally and nationally, benchmark its care across the country, and use continuous comparative data to create a drive for sustained improvements in clinical standards and cost effectiveness”.
From: www.nhfd.co.uk

National Osteoporosis Society
The National Osteoporosis Society is a UK wide charity dedicated to improving the diagnosis, prevention and treatment of osteoporosis.
From: www.nos.org.uk/page.aspx?pid=183&srcid=235

National Quality Board (NQB)
The NQB is a multi-stakeholder board established to “champion quality and ensure alignment in quality throughout the NHS”. The Board is a key aspect of the work to deliver high quality care for patients.
From:
www.dh.gov.uk/en/Healthcare/Qualityandproductivity/Makingqualityhappen/NationalQualityBoard/index.htm

National Reporting and Learning Service (NRLS)
The NRLS is one of three divisions of the National Patient Safety Agency (NPSA). The NPSA is an arm's length body of the DH. It was established in 2001 with a mandate to identify patient safety issues and find appropriate solutions. The NRLS manages a national safety reporting system. It receives confidential reports of patient safety incidents from healthcare staff across England and Wales. Clinicians and safety experts analyse these reports to identify common risks to patients and opportunities to improve patient safety. They work with organisations providing NHS care, colleges and professional groups to set priorities and develop and disseminate actionable learning.
From: www.nrls.npsa.nhs.uk

National Reporting Safety Agency (NPSA)
The NPSA lead and contribute to “improved, safe patient care by informing, supporting and influencing organisations and people working in the health sector”. They are an arm’s length body of the DH and through their three divisions (National Reporting and Learning Service, National Clinical Assessment Service and National Research Ethics Service) cover the UK health service.
From: www.npsa.nhs.uk

National Sentinel Stroke Audit
The National Sentinel Stroke Audit is conducted by The Royal College of Physicians on behalf of the Intercollegiate Stroke Working Party and is centrally funded by the Healthcare Quality Improvement Partnership (HQIP). It monitors the rate of progress in stroke care services in England, Wales and Northern Ireland in a two year cycle. The audit consists of

two components which focus on the organisation of care (Organisational Audit) and the process of care (Clinical Audit).
From: www.rcplondon.ac.uk/resources/national-sentinel-stroke-audit

National Service Framework (NSF)
NSFs are national strategies that set clear quality requirements for care in a range of clinical areas. These are based on the best available evidence of what treatments and services work most effectively for patients.
From: www.nhs.uk/nhsengland/NSF/pages/Nationalserviceframeworks.aspx

NHS Commissioning Board (NHSCB)
Nationally accountable for the outcomes achieved by the NHS, the NHSCB will provide leadership for the new commissioning system. It will provide the support and direction necessary to improve quality and patient outcomes and safeguard the core values of the NHS.
The Board's central role is to drive improvement in outcomes for patients, ensuring a fair and comprehensive service across the country. It will also promote the NHS Constitution and champion the interests of patients, using choice and information to empower people to improve services.
Accountable to the Secretary of State via an annual mandate, the NHSCB will be an independent, statutory body, free to determine its own organisational shape, structure and ways of working.
From: healthandcare.dh.gov.uk/the-role-of-the-nhs-commissioning-board

NHS Information Centre for Health and Social Care (NHS IC)
The NHS IC provides a national source of health and social care information, including data and statistical information, and works to co-ordinate and streamline the collection and sharing of data about health and adult social care.
For further information, consult: www.ic.nhs.uk

NHS Institute for Innovation and Improvement
The NHS Institute for Innovation and Improvement is a special health authority under the National Health Service Act 1977 and is an arm's length body sponsored by the DH. It supports the NHS to "transform healthcare for patients and the public by rapidly developing and spreading new ways of working, new technology and world class leadership".
From: www.institute.nhs.uk/

NHS Safety Thermometer
The Safety Thermometer is a local improvement tool that is used to collect baseline information and measure outcomes and progress over time for each of the four harms being focussed on by DH's QIPP Safe Care work stream (Safety Express). It is an Excel tool that was co-produced by frontline teams, the NHS Information Centre, the Chief Nursing Officer's office (Energising for Excellence and High Impact Actions) and the Safety Express steering group. Safety Thermometer data is collected by teams across the health economy on a monthly or quarterly basis.
From:
www.patientsafetyfirst.nhs.uk/Content.aspx?path=/interventions/relatedprogrammes/safety-thermometer

Office for National Statistics (ONS)
The ONS is the Executive Office of the UK Statistics Authority and its main responsibilities, within the context of the Statistics and Registration Service Act 2007, include:
- the collection, compilation, analysis and dissemination of a range of economic, social and demographic statistics relating to the UK that serve the public good and meet their legal obligations (both domestic and international);
-in conjunction with the National Statistician providing statistical leadership and methodological advice for the benefit of UK official statistics, undertaking various representational roles in an international context and the development and maintenance of definitions, methodologies, and classifications of statistics.
From: www.ons.gov.uk

Organisation for Economic Co-operation and Development (OECD)
The OECD is an international organisation with 34 member countries. Its mission is to promote policies that will improve the economic and social well-being of people around the world. It provides a forum in which governments can work together to share experiences and seek solutions to common problems, working to understand what drives economic, social and environmental change. They measure productivity and global flows of trade and investment, analyse and compare data to predict future trends and set international standards on a wide range of policies. The OECD also looks at issues that directly affect the lives of ordinary people. Drawing on facts and real-life experience, they recommend policies designed to make the lives of ordinary people better. They work with business and with labour, and have active contacts with other civil society organisations. The common thread of their work is a shared commitment to market economies backed by democratic institutions and focused on the wellbeing of all citizens.
From: www.oecd.org

Outpatient survey
The Outpatient Survey is coordinated nationally by the Care Quality Commission (CQC) as part of the NHS patient survey programme. It assesses patients' experiences of their most recent visit to an outpatient department. The survey was conducted in 2003, 2004 and 2009. The last outpatient services survey was conducted between July and October 2009. Over 72,000 outpatients aged 16 and over responded to the survey, a response rate of 53%.
From:
www.cqc.org.uk/aboutcqc/howwedoit/involvingpeoplewhouseservices/patientsurveys/outpatientservices.cfm

Patient-reported outcome measures (PROMs)
PROMs are measures of a patient’s health status or health-related quality of life. They are typically short, self-completed questionnaires, which measure the patients’ health status or health related quality of life at a single point in time.
The health status information collected from patients by way of PROMs questionnaires before and after an intervention provides an indication of the outcomes or quality of care delivered to NHS patients. Changes in health status as measured by PROMs, controlling for variation in patient characteristics and the influence of other factors, are attributed to the healthcare delivered to the patient by the provider and the wider healthcare system. This outcomes data can be used in a variety of ways to assess the quality of care delivered to NHS patients by providers.
From: DH (6 February 2009), Guidance on the routine collection of Patient Reported Outcome Measures (PROMs),

www.dh.gov.uk/prod_consum_dh/groups/dh_digitalassets/@dh/@en/documents/digitalasset/dh_092625.pdf

Period life expectancies
Period life expectancy at a given age for an area is the average number of years a person would live, if he or she experienced the particular area's age-specific mortality rates for that time period throughout his or her life. It makes no allowance for any later actual or projected changes in mortality. In practice, death rates of the area are likely to change in the future so period life expectancy does not therefore give the number of years someone could actually expect to live. In addition, people may live in other areas for at least some part of their lives.
From: www.gad.gov.uk/Demography%20Data/Life%20Tables/Period_and_cohort_eol.html

Picker Institute Europe
Picker Institute Europe is a not-for-profit organisation that "makes patients' views count in healthcare". In Europe and the UK they research and gather patients' views of healthcare using surveys, focus groups and other methods, develop new surveys and other ways to gather patients' views and measure their experiences, carry out quality improvement activities using patient feedback, work with professional bodies and others to set standards for high quality patient-centred care, ask the public their views on what's important to them in healthcare and campaign for high standards of patient-centred care with those who influence policy and practice.
From: www.pickereurope.org

Quality Information Committee
The National Quality Board (NQB)'s Quality Information Committee was established to advise the DH (on behalf of the NQB) on strategic priorities for work in quality information and implementation of the Government's Information Strategy, which includes providing support and advice to the NHS Information Centre on the implementation of the indicator pipeline process, among other responsibilities.
From:
www.dh.gov.uk/en/Healthcare/Qualityandproductivity/Makingqualityhappen/NationalQualityBoard/DH_123775

RAND
The RAND Corporation is a global not-for-profit institution that "helps to improve policy and decision making through research and analysis". It focuses on issues such as health, education, national security, international affairs, law and business, and the environment, among others.
From: www.rand.org

Resident population
The estimated resident population of an area includes all people who usually live there, whatever their nationality. Members of UK and non-UK armed forces stationed in the UK are included and UK forces stationed outside the UK are excluded. Students are taken to be resident at their term time address.
From: www.ons.gov.uk/ons/rel/pop-estimate/population-estimates-for-uk--england-and-wales--scotland-and-northern-ireland/2009/index.html

School of Health and Related Research (SCHaRR), University of Sheffield
ScHARR specialises in health services and public health research, and the application of health economics and decision science to the development of health services and the improvement of the public's health.
From: www.shef.ac.uk/scharr

Slope Inequality Indicator (SII)
The SII summarises the inequality in a specific outcome across England that is thought to be attributable to social inequality. It represents the gap in the outcome in question between the least and most deprived areas in England, to the extent that this reflects the relationship between the specific outcome and deprivation scores (the latter relationship being established by a statistical analysis of small area data for the whole population). It is also assumed in general that the relationship is linear (so that linear regression is the appropriate estimation technique).
The use of the SII to measure social inequality (i.e. inequality attributable to social circumstances) relies upon an assumption that correlation with deprivation implicates deprivation as a causal factor behind inequality of outcome. In general, the extent to which improvement can be achieved by NHS interventions (through more equal access or through levelling up quality of care) or through public health interventions or through wider social interventions will vary from outcome to outcome.

Special health authorities
Special health authorities are health authorities that provide a health service to the whole of England, not just to a local community, e.g. the National Blood Authority.
They have been set up to provide a national service to the NHS or the public under section 9 of the NHS Act 1977. They are independent, but can be subject to ministerial direction in the same way as other NHS bodies.
From: www.nhs.uk/NHSEngland/thenhs/about/Pages/authoritiesandtrusts.aspx

Spell
In general, a patient's entire stay in hospital is a spell. A spell can contain one episode (see glossary entry "Episode"), or several episodes. For example, if Patient A is admitted for a broken leg, but while still in hospital is diagnosed and treated for diabetes by Consultant B, there would be two episodes (one for the broken leg under Consultant A, and one for diabetes under Consultant B). If the patient is transferred to another hospital, dies or is discharged, the episode and the spell end. The vast majority of spells contain only one episode.
From: www.hesonline.nhs.uk/Ease/servlet/ContentServer?siteID=1937&categoryID=1072

Standardised mortality rates (for age or gender)
Populations differ in their demographic composition and these differences should be considered when comparing mortality rates or other health indicators. Age- or gender-specific rates for an event (e.g. deaths) are the proportion of events in a specific age group or for each gender. To compare populations, age- or gender-specific rates are applied to a single population structure. There are two approaches to such standardisation: direct and indirect, both of which use a standard population structure, such as that of the WHO European standard population.
For further details, consult: APHO Technical Briefing 3: Commonly Used Public Health Statistics and their Confidence Intervals
www.apho.org.uk/resource/item.aspx?RID=48457

Stroke Improvement National Audit Programme (SINAP)
SINAP is a national clinical audit, run by the Stroke Programme at the Royal College of Physicians. SINAP collects information from hospitals about the care provided to stroke patients in their first three days in hospital. The aim for SINAP is that data will be submitted to the audit for all new stroke admissions across all relevant hospitals, and that the information and results from the audit are used to improve care for stroke patients.
From: www.rcplondon.ac.uk/resources/stroke-improvement-national-audit-programme-sinap

Trauma Audit & Research Network (TARN)
The TARN’s aim is to collect clinical and epidemiological data in order to provide a statistical base to support clinical audit, aid the development of trauma services and inform the research agenda.
From: www.tarn.ac.uk

Views of Informal Carers – Evaluation of services (VOICES)
VOICES is a questionnaire on the experiences of care provided at the end of life developed by a research team based in the University of Southampton. There are several versions of VOICES including a version designed specifically for hospice and specialist palliative care services, developed in conjunction with St Christopher’s Hospice (VOICES-SCH), a stroke version, a heart disease version and a VOICES short-form.
From: www.southampton.ac.uk/voices

WHO European Health for All (HFA-DB)
The HFA-DB is WHO/Europe’s prime data source for international comparisons. It offers a set of more than 600 indicators of health and its wider determinants, covering 53 Member States, with time series from 1970.
From: data.euro.who.int/hfadb

WHO European standard population
The European Standard population is a notional population of 2 million, which is commonly used to standardise rates of morbidity and mortality.
From: http://www.wmpho.org.uk/localprofiles/metadata.aspx?id=META_EUROSTD

World Health Organisation (WHO)
The WHO is the directing and coordinating authority on international health within the United Nations’ system. WHO experts produce health guidelines and standards, and help countries to address public health issues. WHO also supports and promotes health research.
From: http://www.who.int/about/en/

World Health Organisation (WHO/Europe)
The WHO Regional Office for Europe (WHO/Europe) is one of WHO’s six regional offices around the world. It serves the WHO European Region, which comprises 53 countries, covering a vast geographical region from the Atlantic to the Pacific oceans. WHO/Europe collaborates with a range of public health stakeholders in the Region and globally, to ensure that coordinated action is taken to develop and implement efficient health policies and to strengthen health systems. It compiles, disseminates and grants easy access to both health data and research evidence.
From: www.euro.who.int

Weblinks: All links were checked for functionality in October/November 2011.