Paying for Quality
Experiences from the English National Health Service

Kalipso Chalkidou, MD, PhD,
Director, NICE International

World Bank
Washington, DC,
March 2013
Source: http://www.bbc.co.uk/news/health-19674838
“Quality standards, developed by NICE, will inform the commissioning of all NHS care and payment systems. Inspection will be against essential quality standards.”

“The standards will… extend beyond NHS care, informing the work of Local Authorities, Social Care and the Public Health Service.”

“We will pay drug companies according to the value of new medicines…”

Copyright © 2010 - 2011 NICE
### CCG Outcomes Indicator Set 2013/14

#### at a glance

**NOTES & LEGEND**
- NHS OF: indicator derived from NHS Outcomes Framework
- * NHS OF indicator that is also measurable at local authority level
- ** NHS OF indicator complementary with Adult Social Care Outcomes Framework
- Other indicators are developed from NICE quality standards or other existing data collections.

#### 1. Preventing people from dying prematurely

**Overarching Indicator**
- Potential years of life lost from causes considered amenable to healthcare: adults, children and young people (NHS OF 1a & 1b)**

**Improvement areas**
- Reducing premature mortality from the major causes of death:
  - Under 75 mortality from cardiovascular disease (NHS OF 1.5)**
  - Cardiac rehabilitation completion
  - Myocardial infarction, stroke & stage 5 kidney disease in people with diabetes
  - Mortality within 30 days of hospital admission for stroke
  - Under 75 mortality from respiratory disease (NHS OF 1.2)**
  - Under 75 mortality from liver disease (NHS OF 1.3)**
- Emergency admissions for acute conditions that should not usually require hospital admission (NHS OF 3a)**
- Emergency readmissions within 30 days of discharge from hospital (NHS OF 3b)**

**Improving outcomes from planned treatments**
- Increased health gain as assessed by patients for elective procedures:
  a) hip replacement  b) knee replacement  c) groin hernia  d) varicose veins (NHS OF 3.1-iv)

**Improving recovery from injuries and trauma**
- NHS OF Indicator in development. No CCG measure at present

**Improving recovery from stroke**
- People who have had a stroke who are admitted to an acute stroke unit within four hours of arrival at hospital
- Are discharged from hospital with a joint health and social care plan
- Receive a follow-up assessment between 4-8 months after initial admission

#### 2. Enhancing quality of life for people with long-term conditions

**Overarching Indicator**
- Health-related quality of life for people with long-term conditions (NHS OF 2)**

**Improvement areas**
- Improving functional ability in people with long-term conditions
  - People with COPD & Medical Research Council Dyspnoea scale ≤3 referred to a pulmonary rehabilitation programme
  - People with diabetes who have received nine care processes
  - People with diabetes diagnosed less than one year referred to structured education

**Reducing time spent in hospital by people with long-term conditions**
- Unplanned hospitalisation for chronic ambulatory care sensitive conditions (adults) (NHS OF 2.3)**
- Unplanned hospitalisation for asthma, diabetes and epilepsy in under 19s (NHS OF 2.3)i
- Complications associated with diabetes including emergency admission for diabetic ketoacidosis and lower limb amputation

**Enhancing quality of life for carers**
- No CCG measure at present

**Enhancing quality of life for people with mental illness**
- Access to community mental health services by people from BME groups
- Access to psychological therapy services by people from BME groups
- Recovery following talking therapies (all ages and older than 65)

**Enhancing quality of life for people with dementia**
- Estimated diagnosis rate for people with dementia (NHS OF 2.6i)
- People with dementia prescribed anti-psychotic medication

**NHS OF Indicator in development. No CCG measure at present

#### 3. Helping people to recover from episodes of ill health or following injury

**Overarching indicators**
- Emergency admissions for acute conditions that should not usually require hospital admission (NHS OF 3a)**
- Emergency readmissions within 30 days of discharge from hospital (NHS OF 3b)**

**Improving outcomes from planned treatments**
- Increased health gain as assessed by patients for elective procedures:
  a) hip replacement  b) knee replacement  c) groin hernia  d) varicose veins (NHS OF 3.1-iv)

**Improving recovery from injuries and trauma**
- NHS OF Indicator in development. No CCG measure at present

**Improving recovery from stroke**
- People who have had a stroke who are admitted to an acute stroke unit within four hours of arrival at hospital
- Are discharged from hospital with a joint health and social care plan
- Receive a follow-up assessment between 4-8 months after initial admission

#### 4. Ensuring that people have a positive experience of care

**Overarching indicators**
- Patient experience of primary and hospital care
- Patient experience of GP out of hours services (NHS OF 4a)**
- Patient experience of hospital care (NHS OF 4 b)
- Friends and family test for acute inpatient care and A&E (NHS OF 4c)

**Improvement areas**
- Improving people's experience of outpatients care
  - Patient experience of outpatient services (NHS OF 4.1)
- Improving hospitals' responsiveness to personal needs
  - Responsiveness to in-patients' personal needs (NHS OF 4.2)
- Improving people's experience of accident and emergency services
  - Patient experience of A&E services (NHS OF 4.3)
- Improving women and their families' experience of maternity services
  - Women's experience of maternity services (NHS OF 4.5)
- Improving the experience of care for people at the end of their lives
  - No CCG measure at present
- Improving experience of healthcare for people with mental illness
  - Patient experience of community mental health services (NHS OF 4.7)
- Improving children and young people's experience of healthcare
  - NHS OF Indicator in development. No CCG measure at present

**Improving people's experience of integrated care**
- NHS OF Indicator in development. No CCG measure at present

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

**Overarching indicator**
- Patient safety incidents reported (NHS OF 5a)

**Improvement areas**
- Reducing the incidence of avoidable harm
  - Incidence of venous thromboembolism (VTE) (NHS OF 5.1)
  - Incidence of healthcare associated infection: MRSA (NHS OF 5.2)i
  - Incidence of healthcare associated infection: C difficile (NHS OF 5.2ii)

**Improving the safety of maternity services**
- No CCG measure at present

**Improving the safety of maternity services**
- No CCG measure at present

**Delivering safe care to children in acute settings**
- No CCG measure at present
Why NICE?

Technical
- Selection of priority topics
- Critical appraisal and synthesis
- Economic analysis (costing, incentive ceiling, CEA)

Clinical
- Clinical input: evidence base and baselines
- Feasibility assessment and field testing
- Buy-in and implementation

Process
- Stakeholder engagement, QA, contestability, independence of vested interests
- Institutional and operational platforms
Health and Social Care Act 2012: NICE’s Quality Standards

• “The Secretary of State must…secure continuous improvement in the quality of services provided to individuals…In discharging the duty…the Secretary of State must have regard to the quality standards prepared by NICE under section 234 of the Health and Social Care Act 2012.”
An evolutionary process

- Medical education and professional training
- Performance management
- Budget management
- Provider payment mechanisms incl. case-based payment
- Communication of entitlement to patients and their families
- Clinical audit and provider benchmarking
- Provider regulation and accreditation
Quality statement for stroke

In a high quality service for patients with stroke ...

Quality Statement 2 (Stroke)

*Patients with acute stroke receive brain imaging within 1 hour of admission if they meet any of the indications for immediate imaging*

Directly based on NICE clinical guideline recommendation.
Quality measure for stroke

- **Structure:** Evidence of local arrangements to ensure patients with acute stroke receive brain imaging within 1 hour of arrival at the hospital if they meet any of the indications for immediate imaging.

- **Process:** Proportion of patients with acute stroke who meet any of the indications for immediate imaging who have had brain imaging within 1 hour of arrival at the hospital. [Numerator & Denominator defined]
Target audiences

• **Service providers** ensure facilities and protocols are available for patients to receive brain imaging within 1 hour of arrival at the hospital if they meet any of the indications for immediate imaging.

• **Health care professionals** ensure that patients under their care with acute stroke receive brain imaging within 1 hour of arrival at the hospital if the criteria for immediate imaging are met.

• **Commissioners** ensure that services they commission enable patients to receive brain imaging within 1 hour of arrival at the hospital if they meet any of the indications for immediate imaging.

• **Patients** with acute stroke with any of the indications for immediate brain imaging can expect to receive this within 1 hour of arrival at the hospital.
Data Sources

Stroke Improvement

NHS Improvement - Stroke
Supporting the development of stroke care networks

Main Menu

Stroke Home
Accelerating Stroke Improvement
Stroke Data and Audit
Stroke Networks
Transient Ischaemic Attack (TIA)
Acute Stroke
Rehabilitation
Community Stroke Resource

Stroke data and audit

An effective system for capturing and analysing information about a service is essential to understand how well it functions and to establish the impact of changes and proposed improvements. This page is a resource for understanding national data and using data at a local level. From December 2012 the assortment of national stroke data requirements originating from several national organisations will be merged into a single national minimum data set to be collected for every stroke patient. This data set will be administered by the Royal College of Physicians (RCP) and is known as the Sentinel Stroke National Audit Programme (SSNAP). NHS Trusts are required to participate in national audit as part of their terms and conditions, so whilst not mandatory this audit is likely to be one which most or all stroke services will be involved in. The audit is likely to be the route through which the NHS Commissioning board obtains the NHS outcomes framework indicator 'Modified Rankin Score at 6 months' and institutionalisation rate.
NICE Quality Standards from guidelines, technology appraisals and other accredited sources

Commissioning Outcomes Framework

Commissioning for Quality and Innovation

Hospitals

Payers

Quality Outcomes Framework

Family doctors
Process matters

“Quality Standards are not policy statements, nor produced by the Government. The potential power of quality standards to drive improvement stems from the collaborative, evidence-based process that NICE uses to develop them.”
Quality Incentives in Hospitals

- NHS Standard Contract
- Quality Premium
- Commissioning for Quality and Innovation
- Best Practice Tariff
Standard NHS Contract: 2013/14
SCHEDULE 4: QUALITY REQUIREMENTS

• Operational Standards
  – Ambulance response times
  – 7-day follow-up post discharge from in-patient psychiatric institution

• National Quality Requirements
  – 2nd cancelation of emergency operation
  – Published drugs formulary

• Local Quality Requirements
  – Locally negotiated and adapted, across 5 domains; capped @ 1% of annual contract value

• Never Events
  – Wrong side surgery
  – Wrong route of chemotherapy administration
  – Maternal death due to PPH following C-section
Standard NHS Contract: 2013/14
SCHEDULE 4: QUALITY REQUIREMENTS (cont.)

• Commissioning for Quality and Innovation: @ 2.5% of Actual Annual Value
  – Friend and Family test
  – NHS Safety Thermometer
  – Dementia
  – VTE

• Local Incentive Scheme

• 18 Weeks
  – Referral to treatment standard: sliding scale, up to 5% deduction from annual revenue

• Clostridium difficile
  – Based on number of cases adjusted for baseline rate, inpatient bed days for all patients, ambition rate (in 2013: 13 per 100,000 bed days)
Components of Quality Premium

- Reducing avoidable emergency admissions (25%)
- Preventing healthcare associated infections (12.5%)
- Local measure (12.5%)
- Local measure (12.5%)
- Local measure (12.5%)
- Improving patient experience of hospital services (12.5%)
- Reducing potential years of life lost from amenable mortality (12.5%)
Illustrative assumptions:
• a CCG has a population of 160,000
• value of quality premium is £51 per head of population (hypothetical)
• the CCG manages within its total resources for 2013/14
• the CCG achieves two of the three local measures
• the CCG achieves all the national measures with the exception of Domain 4
• the CCG meets two out of the four NHS Constitution measures

<table>
<thead>
<tr>
<th>Measure</th>
<th>Percentage of quality premium</th>
<th>Value for illustrative CCG</th>
<th>Measure achieved</th>
<th>Eligible quality premium funding²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Domain 1</td>
<td>12.5%</td>
<td>£100,000</td>
<td>Y</td>
<td>£100,000</td>
</tr>
<tr>
<td>Domains 2 &amp; 3</td>
<td>25%</td>
<td>£200,000</td>
<td>Y</td>
<td>£200,000</td>
</tr>
<tr>
<td>Domain 4</td>
<td>12.5%</td>
<td>£100,000</td>
<td>N</td>
<td>£0</td>
</tr>
<tr>
<td>Domain 5</td>
<td>12.5%</td>
<td>£100,000</td>
<td>Y</td>
<td>£100,000</td>
</tr>
<tr>
<td>Local Measure 1</td>
<td>12.5%</td>
<td>£100,000</td>
<td>Y</td>
<td>£100,000</td>
</tr>
<tr>
<td>Local Measure 2</td>
<td>12.5%</td>
<td>£100,000</td>
<td>Y</td>
<td>£100,000</td>
</tr>
<tr>
<td>Local Measure 3</td>
<td>12.5%</td>
<td>£100,000</td>
<td>N</td>
<td>£0</td>
</tr>
<tr>
<td>TOTAL</td>
<td>100%</td>
<td>£800,000</td>
<td></td>
<td>£600,000</td>
</tr>
</tbody>
</table>

NHS Constitution rights and pledges

<table>
<thead>
<tr>
<th>Measure achieved</th>
<th>Adjustment to funding</th>
<th>Quality premium funding</th>
</tr>
</thead>
<tbody>
<tr>
<td>Referral to treatment times (18 weeks)</td>
<td>Y</td>
<td>-</td>
</tr>
<tr>
<td>A&amp;E waits</td>
<td>N</td>
<td>25%</td>
</tr>
<tr>
<td>Cancer waits – 62 days</td>
<td>Y</td>
<td>-</td>
</tr>
<tr>
<td>Category A Red 1 ambulance calls</td>
<td>N</td>
<td>25%</td>
</tr>
<tr>
<td>Total adjustment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>REVISED TOTAL</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Commissioning for Quality and Innovation

• @2.5% value of all healthcare services commissioned through NHS Standard Contract.
• 1/5th linked to the national CQUIN goals; rest, locally negotiated using national and local evidence (e.g. NICE Quality Standards)
• Locally agreed: payment thresholds, baselines and improvement targets; ~25% paid upon successful data collection
• Prequalification of providers based on *Innovation, Health and Wealth* national policy
  – Telehealth/telecare: [www.3millionlives.co.uk](http://www.3millionlives.co.uk)
  – Intraoperative fluid management
  – Mobility services for children
  – International and commercial activity – Academic Health Science Networks
  – Digital First to reduce unnecessary face-to-face interactions
  – Dementia care in hospital – care continuity (CQUIN)
National CQUINs

• Friends and Family Test – where commissioners will be empowered to incentivise high performing Trusts;
• Improvement against the NHS Safety Thermometer (excluding VTE), particularly pressure ulcers, falls and urinary tract infection in patients with a catheter;
• Improving dementia care, including sustained improvement in Finding people with dementia, Assessing and Investigating their symptoms and Referring for support (FAIR); and
• Venous thromboembolism (VTE) – 95 per cent of patients being risk assessed and achievement of a locally agreed goal for the number of VTE admissions that are reviewed through root cause analysis.
An estimated 25,000 people die from DVT each year. Ministers said trusts that fail to act on the guidelines are likely to face financial penalties. Hospitals that fail to screen at least 90% of their patients will be penalised by withholding payments. From 1 April 2010, a hospital could stand to lose 0.3% of its income through the new Department of Health commissioning for quality and innovation framework.
VTE impact assessment: mandatory quarterly data collection by all acute care providers

There has been a steady increase in the proportion of adult admissions risked assessed for VTE in all providers of NHS funded acute care, from 47% in July 2010 to 94% in December 2012.
Best Practice Tariff in the NHS

- Adult renal dialysis
- Cholecystectomy
- Transient ischaemic attack (mini-stroke)
- Hip and knee replacement
- Fragility hip fracture and stroke
- Paediatric diabetes
- Interventional radiology
- Home haemodialysis and assisted automated peritoneal dialysis
- Major trauma
- Cataract (non-mandatory)
- Same Day Emergency Care (TIA, community acquired pneumonia, COPD, urinary retention, abdominal pain, anaemia, minor head injury…)
- Setting of care: hysteroscopy, tympanoplasty (day case), pleural effusion (day cases)
- Endoscopy linked to provider accreditation

Evidence-based
# Best practice tariff and HRG adjustment

<table>
<thead>
<tr>
<th>Scheme</th>
<th>Incentive mechanism</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Payment by Results (PbR)</strong> – “tariff uplift” across all activity</td>
<td>Tariff for Healthcare Resource Group amended up or down to include cost of NICE recommendation. <strong>Tariff uplift due to NICE guidance (excluding cancer drugs) ~ 1.5% pa (2002-2009); currently frozen</strong></td>
<td>Percutaneous Coronary Intervention tariff adjusted downwards based on NICE guidance restricting Drug Eluting Stent use to narrow and/or long lesions and recommending wider use of Bare Metal Stents (NICE TA 152, 2008). <strong>Result</strong>: Financial risk of over-use of DES passed on to providers – rates of DES over BMS use drop.</td>
</tr>
<tr>
<td><strong>Best practice tariff - for select interventions</strong></td>
<td>Normative tariffs to promote best-practice such as day-case surgery, fewer A&amp;E admissions…</td>
<td>Tariff for Radical Hysterectomy for heavy menstrual bleeding is adjusted downward (once it crosses a threshold activity rate) and tariff for Uterine Fibroid Embolisation becomes more competitive for hospital providers (NICE CG 44, 2007). <strong>Result</strong>: Financial risk of over-activity in hysterectomies passed on to providers – rates drop.</td>
</tr>
</tbody>
</table>
2013/14: Linking Best Practice Tariff to NICE

- Emphasis on management of NCDs and reducing avoidable admissions:
  - Paediatric epilepsy
  - Early inflammatory arthritis
  - Parkinson’s disease
  - Diabetic ketoacidosis and hypoglycaemia for adults

Despite the existence of NICE guidance, which recommends that patients should start treatment within 3 months of symptom onset, there is wide variation in treatment and outcomes across the country.

To encourage consistent and high quality clinical care for people with early inflammatory arthritis, BSR and Arthritis Research UK have worked with the Department of Health in England to develop a Best Practice Tariff (BPT) for early inflammatory arthritis.

As of April 2013, people who develop inflammatory arthritis should expect:
- To be seen by a rheumatologist within three weeks of a GP referral
- To receive their diagnosis and start treatment within six weeks of a GP referral
- To have regular review appointments with their rheumatologist until their arthritis is adequately controlled.
Best Practice Tariff – does it work?

BPTs have had a variable impact. Although we found the concept has strong support, NHS organisations told us that BPTs were not themselves the driving force for local improvement. Providers in particular consider that they do not provide much financial incentive. But they can focus attention on an area of clinical practice and, when aligned with a strong clinical drive nationally and locally, can help bring about significant improvement as shown by progress on fragility hip fractures.

BPT and their impact, NAO, Nov 2012
The introduction of pay for performance in all NHS hospitals in one region of England was associated with a clinically significant reduction in mortality. As compared with a similar U.S. program, the U.K. program had larger bonuses and a greater investment by hospitals in quality-improvement activities. Further research is needed on how implementation of pay-for-performance programs influences their effects. (Funded by the NHS National Institute for Health Research.)
## Commissioning Outcomes Framework

### Diabetes
- 2.52 Single marker of all nine basic care processes performed
- 2.53 People with newly diagnosed diabetes who are offered structured education within 3 months of diagnosis
- 2.54 People with reinforced views
- 2.55 People on Care Programme Approach (CPA) followed-up within 7 days of discharge from psychiatric inpatient stay
- 2.56 People on Care Programme Approach (CPA) followed-up within 7 days of discharge from psychiatric inpatient stay
- 2.57 People on Care Programme Approach (CPA) followed-up within 7 days of discharge from psychiatric inpatient stay
- 2.58 People on Care Programme Approach (CPA) followed-up within 7 days of discharge from psychiatric inpatient stay
- 2.59 People on Care Programme Approach (CPA) followed-up within 7 days of discharge from psychiatric inpatient stay
- 2.60 Readmission following discharge
- 2.61 Rates of failure to follow-up
- 2.62 Rates of failure to follow-up
- 2.63 Emergency readmissions: people who have been admitted following an exacerbation of chronic obstructive pulmonary disease
- 2.64 Emergency readmissions: people who have been admitted following an exacerbation of chronic obstructive pulmonary disease
- 2.71 Age-shift with chronic open angle glaucoma

### Mental Health
- 2.79 People on Care Programme Approach (CPA) followed-up within 7 days of discharge from psychiatric inpatient stay
- 2.80 Number of Home Treatment episodes carried by Crisis Resolution / Home Treatment Teams
- 2.81 Percentage of inpatient admissions that were gatekept by Crisis Resolution / Home Treatment Teams

### Chronic Obstructive Pulmonary Disease
- 3.7 People admitted to hospital with an exacerbation of COPD who are under the care of a respiratory consultant within 48hrs of admission until discharge

### Cancers
- 4.10 Deaths at home: all cancers

### Diabetes
- 4.18 Patient experience of diabetes services

### Mental Health
- 4.19 Patient experience of IAPT (improved access to psychological therapies) services
- 4.20 Access to community mental health services by BME (black and minority ethnic) groups
- 4.21 Access to IAPT services by BME groups

### Urgent and Emergency Care
- 4.22 Attendees leaving without being seen
- 4.23 High risk re-attenders reviewed by consultant before being discharged
The British Quality and Outcomes Framework

- The quality and outcomes (QOF) framework came into effect in 2004 as part of the new GP contract
- QOF is a voluntary programme for all GP surgeries. It is designed to resource and reward good practice in all GP surgeries
- It is estimated that QOF accounts for up to 20% of the average practice funding/income – approx. £1.1 billion pa
- QOF consists of 4 domains: clinical; organisational; patient experience; and added-services
- Clinical is the largest domain in terms of number of indicators and achievable points
QOF objectives

• Aimed to embed preventive medicine and ‘disease management’ into primary care
• Also hoped to increase number of GPs, particularly in deprived/under-doctored areas
• Development involved engagement of relevant professionals in expert led working groups
• Focus on process activities which GPs can have direct control (and which there is some evidence of subsequent benefits to patients)
• According to the National Audit Office (2008), average income of GPs increased by 34% in two years
QOF indicators

• In 2009/10 QOF measured achievement against 134 indicators
  – practices scored points on the basis of achievement against each indicator, up to a maximum of 1,000 points.
  – For 2009/10, practices were paid on average, £126.77 for each point they achieved

• Clinical care: the domain consists of 86 indicators across 20 clinical areas (e.g. coronary heart disease, heart failure, hypertension) worth up to a maximum of 697 points.
# The 4 domains of the QOF

<table>
<thead>
<tr>
<th>Domain</th>
<th>Example indicator</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clinical</td>
<td>The percentage of patients with hypertension in whom there is a record of the blood pressure in the previous 9 months</td>
</tr>
<tr>
<td>Organisational</td>
<td>The practice meets with the primary care organisation prescribing advisor at least annually, has agreed up to 3 actions related to prescribing and subsequently provided evidence of change in prescribing rates</td>
</tr>
<tr>
<td>Patient experience</td>
<td>The % of patients who, in the national survey, indicate they were able to obtain a consultation within 2 working days.</td>
</tr>
<tr>
<td>Additional services</td>
<td>The % of patients aged from 25 to 64 whose notes record that a cervical smear has been performed in the last 5 years.</td>
</tr>
</tbody>
</table>
Data collection for indicators:

The principles agreed for the indicators are that:

- indicators should, where possible, be based on the best available evidence
- the number of indicators in each clinical condition should be kept to the minimum number compatible with an accurate assessment of patient care
- data should never be collected purely for audit purposes
- only data which are useful in patient care should be collected. The basis of the consultation should not be distorted by an over-emphasis on data collection. An appropriate balance has to be struck between excess data collection and inadequate sampling
- data should never be collected twice i.e. data required for audit purposes should be data routinely collected for patient care and obtained from existing practice clinical systems.

From: NHS Primary Care Commissioning, QOF Management Guide
Impact and evaluation of the QOF (1)

• Early evidence that the NHS quality and outcomes framework in primary care quickly reduced variation in practice activities…but

• QOF is costly: “The health outcomes may not have been sufficient to justify the substantial opportunity cost of the system.” (Bloor and Maynard, February 2010)…

• Stephen Martin and colleagues (University of York and Imperial College) found an association between achievement of QOF indicators and some (limited) measurable reduction in costs for hospital care and mortality outcomes (July 2010)
  – This association is stronger for some QOF indicators than others and particularly strong for stroke care
Impact and evaluation of the QOF (2)

• Doran et al 2011 → Longitudinal analysis of achievement rates for 42 activities (428 identified indicators of quality of care)
  – “substantial improvements in quality” for all indicators between 2001 and 2007” (a resource rich ‘golden age’ for the NHS?)
  – BUT…Quality of primary care was generally improving in England in the early 2000s → introduction of an incentive scheme seemed to accelerate this trend for incentivised activities, but quality quickly reached a plateau; some detrimental effects on non incentivised activities in the longer term
Also…

performance leveling off
In 2009, Ministers ask NICE to:

• Develop **new and review/retire** existing indicators
• Focus on health outcomes and underpinning **evidence** base, including burden of disease
• Ensure indicator activity and accompanying monetary incentive are **cost-effective**
• Offer **procedurally fair**, transparent and effective engagement platform for key stakeholders
• Ensure GP practices and local NHS have **greater flexibility** to select quality indicators from a national menu, reflecting local health priorities
• **Reduce number of organisational and process indicators** to target more resources on health outcomes and quality improvement
The NICE criteria for selecting indicators (2009 onwards)

Criterion 1: relevance to primary medical care
Criterion 2: disease severity
Criterion 3: healthcare priority area and timeliness
Criterion 4: health inequalities
Criterion 5: clinical effectiveness (evidence)
Criterion 6: clinical effectiveness (health outcomes)
Criterion 7: healthcare delivery
Criterion 8: feasibility
Results for all (patients, GPs, payers, government) to see...

Welcome | Search for practice results
---|---

Search for the QOF results for your GP practice

SEARCH FOR GP PRACTICE: NW8 9XA

PRACTICES FOUND IN: LONDON (4)

Results summary | Practice results summary | Underlying achievement details
---|---|---

2: ST JOHN'S WOOD MEDICAL PRACTICE, LONDON

Domain: Clinical | Group: Diabetes Mellitus (Diabetes)

Display results for latest year: 2009/10

CLINICAL INDICATOR GROUPS: THE 17 DIABETES MELLITUS (DIABETES) INDICATORS: UNDERLYING ACHIEVEMENT DETAILS

Display options

Results domains:
- Clinical
- Organisational
- Patient Experience
- Additional Services

Prevalence:
• Less logistical support/management
• Nationally run
• Access to national queries
• Audit facilitation
• Support for research
• Public health surveillance function
• Incorporation of NICE standards
• Monitoring of non-active QOF indicators
• Coming in 2012/2013
## Types of indicator

<table>
<thead>
<tr>
<th>Percentage of patients from register</th>
<th>10%</th>
<th>20%</th>
<th>30%</th>
<th>40%</th>
<th>50%</th>
<th>60%</th>
<th>70%</th>
<th>80%</th>
<th>90%</th>
<th>100%</th>
</tr>
</thead>
<tbody>
<tr>
<td>The percentage of patients with diabetes who have a record of the blood pressure in the previous 15 months</td>
<td>97.2%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The percentage of patients with diabetes in whom the last blood pressure is 145/85 or less</td>
<td>79.0%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The percentage of patients with diabetes with proteinuria or micro-albuminuria who are treated with ACE inhibitors (or A2 antagonists)</td>
<td>100.0%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The percentage of patients with diabetes who have a record of retinal screening in the previous 15 months</td>
<td>91.2%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The percentage of patients with diabetes in whom the last HbA1c is 7 or less (or equivalent test/reference range depending on local laboratory) in the previous 15 months.</td>
<td>63.4%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- **Structure**
- **Outcome (proxy)**
- **Process**
- **Structure**
- **Outcome (proxy)**

Copyright © 2010 - 2011 NICE
Adjusting by prevalence and practice size

**CLINICAL PREVALENCE:**

<table>
<thead>
<tr>
<th>Percentage of practice list size</th>
<th>10%</th>
<th>20%</th>
<th>30%</th>
<th>40%</th>
<th>50%</th>
<th>60%</th>
<th>70%</th>
<th>80%</th>
<th>90%</th>
<th>100%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diabetes Mellitus (Diabetes)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3.11%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Prevalence in England: 5.4%

St John Wood practice size: patients

Average practice size in England: 11,010 patients

Adjust number of points by: prevalence (3.11/5.4) and practice size (x/11,010)
The Department of Health (DH) is asking NICE to review the relevant QOF indicators and promotion of primary care liaison with local authorities, the third sector and PHE to ensure optimal provision of prevention services, including secondary prevention.

NICE guidelines (and quality standards) provide evidence for what is the right treatment and clinical commissioning groups (CCGs) will wish to use these to help inform their commissioning intentions in this area.
Government proposals for QOF changes in 2013:

• “…all NICE recommendations for new and improved indicators to the Quality and Outcomes Framework (QOF) will be implemented in full

• QOF reward thresholds will be increased so that more patients benefit from the best evidenced care that can help to save lives

• organisational QOF payments will be discontinued releasing £164m which will be used to help fund improvements in patient care through the implementation of all the NICE recommended changes and the commissioning of extra services from GP practices…”

The Minister proposes: “…to end points for organisational tasks such as good record keeping and staff training. Instead, GPs would earn points for meeting a number of new targets based on NICE advice. There would also be higher thresholds for achieving QOF points and funds. The government wants new measures to help patients with long-term conditions and to cut down on unnecessary emergency admissions.”
Thank you!

kalipso.chalkidou@nice.org.uk
www.nice.org.uk/niceinternational

@nice_intl
ADDITIONAL MATERIAL
Sir David said providers would lose the entire 2.5 per cent Commissioning for Quality and Innovation payment if they did not comply with nationally specified “high impact innovations”.

“We expect individual organisations to meet that [Nice rules] or explain why. But the emphasis is on complying,” he added. *NHS Chief Executive*
Compliance regime… (cont.)

Date: 9 August 2012

Gateway reference: 17879

To: SHA Cluster Chief Executives
PCT Cluster Chief Executives
CCG Leaders

INNOVATION HEALTH AND WEALTH
Publication of NHS Formularies

Dear Colleague,

• “I want to see all NHS organisations publish information which sets out which NICE Technology Appraisals are included in their local formularies…Clinical Commissioning Groups will need to take the lead in working towards publication by 1st April 2013 at the very latest. It will be important that the publications are online, and are clear, simple and transparent, so that patients, the public and stakeholders can easily understand them. From 1st April 2013, I also intend to make this a standard term and condition in NHS contracts.”
NHS Safety Thermometer

**OUR DRIVING FORCE**

To Deliver ‘Harm Free’ Care

Defined by the absence of pressure ulcers, harm from falls, urine infections* & VTE.

In 95% of patients by December 2012

* in patients with a catheter

---

**NHS National Institute for Health and Clinical Excellence**

Find guidance  NICE Pathways  Quality standards  Into practice  QOF

Home > About NICE guidance > Guidance by type > Clinical guidelines > Pressure ulcer management

**CG29 Pressure ulcer management (CG29)**

Pressure ulcer management pathway
Fast, easy summary view of NICE guidance on ‘pressure ulcer management’

Pressure ulcers: The management of pressure ulcers in primary and secondary care

---

**NHS National Institute for Health and Clinical Excellence**

Find guidance  NICE Pathways  Quality standards  Into practice  QOF

Home > About NICE guidance > Guidance by type > Clinical guidelines > Venous thromboembolism - reducing the risk

**CG92 Venous thromboembolism - reducing the risk (CG92)**

Venous thromboembolism pathway
Fast, easy summary view of NICE guidance on ‘venous thromboembolism’

Reducing the risk of venous thromboembolism (deep vein thrombosis and pulmonary embolism) in patients admitted to hospital

VTE prevention (QS3)
Specific, concise statements that act as markers of high-quality, cost-effective patient care.

---

Guideline formats

- Web format
- Quick reference guide (PDF)
- NICE Guideline (PDF)
- Full Guideline
Criteria for retiring indicators

• High reported achievement
  – High average levels
  – Low variation
  – Historical trends levelling off

• Low exception reporting

And then what…adverse impact?

- No empirical evidence from UK. To minimise impact consider:
  - Gradual reduction of the payments
  - Initial removal of half of paired indicators (remove process but keep linked intermediate outcome indicator)
- Continue monitoring removed indicators (GP Extraction Service)
QOF process

Collation of clinical and cost information

Prioritisation of evidence-based recommendations

Indicator development, pilot process and consultation

Validation and publication

Changes to QOF indicators negotiated using the NICE menu

NICE Managed (NPCRDC/YHEC)

DH, GPC and NHS employers

24 Months
The following criteria have been agreed for exception reporting:

A. patients who have been recorded as refusing to attend review who have been invited on at least three occasions during the preceding twelve months

B. patients for whom it is not appropriate to review the chronic disease parameters due to particular circumstances e.g. terminal illness, extreme frailty

C. patients newly diagnosed within the practice or who have recently registered with the practice, who should have measurements made within three months and delivery of clinical standards within nine months e.g. blood pressure or cholesterol measurements within target levels

D. patients who are on maximum tolerated doses of medication whose levels remain sub-optimal

E. patients for whom prescribing a medication is not clinically appropriate e.g. those who have an allergy, another contraindication or have experienced an adverse reaction

F. where a patient has not tolerated medication

G. where a patient does not agree to investigation or treatment (informed dissent), and this has been recorded in their medical records

H. where the patient has a supervening condition which makes treatment of their condition inappropriate e.g. cholesterol reduction where the patient has liver disease

I. where an investigative service or secondary care service is unavailable
Selecting the indicators: a public debate

Anger at NICE plans to drop QOF depression indicators

UK NEWS | AUGUST 04, 2011
LYNNE TAYLOR
Negotiating…

• “The final list of indicators to be included in the 2012-13 QOF will be decided by NHS Employers (NHSE), on behalf of the UK health departments, and the General Practitioners Committee (GPC) of the British Medical Association (BMA).” NICE, 2011
Dozens of indicators will be scrapped including those that NICE has identified as part of routine GP care.

Instead GPs will be incentivised through ‘quality and productivity indicators’ that aim to reduce referrals to secondary care and create efficiency savings through more effective prescribing.

- 92.5 points-worth of indicators 'retired', including two patient experience indicators.
- 24 points stripped from depression and BP domains.
- New indicators for learning disability, epilepsy and dementia.
- 96.5 points reassigned to a new quality and productivity domain.
- Indicators worth 131 points re-defined following NICE advice.
Are monetary incentives cost-effective?

1. Is the activity/intervention described by the indicator cost effective?

2. What is the current baseline?

3. What level of payment is economically justifiable to increase the activity?

\[
\text{Net benefit} = \text{Monetised benefit} - \text{Delivery cost} - \text{QOF payment}
\]

- **Monetised benefit** = expected QALY gain
- **Delivery costs** = all NHS and social care costs estimated to arise from increase in uptake
- **QOF payment** = additional to delivery cost as an incentive to increase best practice
Quality Adjusted Live Years gained or lost because of intervention, based on clinical trials and modelling

![Graph showing QALYs gained and lost]
Monetised benefit

• Generic measure of health outcome: Quality Adjusted Life Year: 1 year in full health
• NICE threshold range (or willingness to pay for 1 QALY): £20,000-£30,000 (£25,000)
• Monetised benefit = Number of QALYs x threshold
Net Benefit will increase for:

• Lower incremental cost of intervention per patient
• Higher incremental health benefit of intervention per patient
• Lower baseline achievement (as payment is allocated across all eligible patients)
• Higher % eligible population (practice prevalence)
• Higher practice size
Requires strong institutional capacity

Institutional home: process, methods and quality assurance

Informational capacity: rigorous collection and analysis

Payer-driven

Professional buy-in

Long-term political support

Independent high-quality academic support
Exception reporting and gaming

“…to allow practices to pursue the quality improvement agenda and not be penalised, where, for example, patients do not attend for review, or where a medication cannot be prescribed due to a contraindication or side-effect.” 2003 Contract

- 5-6% across England…but is it necessary?
  - Yes: to avoid penalising practices and encourage honest reporting; to allow clinical flexibility
  - No: top payment threshold less than 100%; recorded variation over statistical tolerance; highest recorded exception rates linked to outcomes and interventions (lowest for structural metrics); increase in performance correlates with concurrent increase in exception rates; most deprived areas only 0.67% higher exception rates than least deprived
Verifying QOF results...

1. QOF annual assessment/review
2. Prepayment verification (PPV)
3. Random 5% checks (post payment verification)

The GMS contract guidance in 2003-4 stated

...The practice quality review will be founded on the development of a relationship between the practice and the PCO based on the principles of high trust, evidence base, appropriate progression and development within the practice context, minimising bureaucracy, and ensuring compliance with the statutory responsibilities of the PCO. The PCO’s role will be given appropriate underpinning in legislation.
Offering feedback: QMAS

• The Quality Management and Analysis System, known as QMAS, is a national IT system which gives GP practices and Primary Care Trusts (PCTs) objective evidence and feedback on the quality of care delivered to patients.

• QMAS shows how well each practice is doing, measured against national QOF achievement targets. It allows practices to analyse the data they collect about the number of services and the quality of care they deliver, such as the services provided to patients with the chronic diseases that are included in the QOF. Access to the system is also provided to PCTs so that practices and PCTs can share information on achievement throughout the year.
Constant calibration between current and forecast
Introducing a new indicator

Indicator area: Secondary prevention of coronary heart disease (myocardial infarction)

Indicator ID: NM07

The percentage of patients with a history of myocardial infarction from 1 April 2011 currently treated with an ACE inhibitor (or ARB if ACE intolerant), aspirin or an alternative anti-platelet therapy, beta-blocker and statin (unless a contraindication or side effects are recorded)
The development of a NICE indicator: secondary prevention of MI

Prioritisation
- Ambulatory setting; evidence of clinical and cost effectiveness; UK burden of disease; national policy priority
- Currently not incentivised

Evidence base
- NICE Clinical Guideline CG48 (2007); patients following acute MI should be offered combination treatment with aspirin, ACE-inhibitor, b-blocker and statin

CEA
- Incremental cost: £514; incremental benefit: 0.049 QALYs; CPQ: £10,816
- Baseline achievement: 11.3%; prevalence: 0.75%
- Cost-effective indicator even for double cost of delivery (sensitivity analysis)

Budget impact
- Weighted annual cost of all four combinations: £195.6 per year per patient
- Current cost: £9.2m; estimated cost: £9.5-11.3m; net cost impact: £0.3-2.1m pa;
- Potential savings: acute MI: £3,500 (uncomplicated); cardiac ICU: £1,045 per day

Recommendation
- The % of patients with a history of MI (from April 2011) currently treated with an ACE inhibitor (or ARB, if intolerant), aspirin, b-blocker and statin (unless recorded contraindication or side-effects).
Improving quality and efficiency of diabetes care

Set evidence based, appropriately costed quality standards

Identify high burden/hi

Measure: national and regional audits

Incentivise: regulation; education; publicity; peer pressure; contracts; accreditation; P4P…
Identify high priority disease area: diabetes care

• **Disease Burden:** Diabetes mellitus is a chronic complex metabolic disorder characterised by high levels of blood glucose and caused by defects in insulin secretion and/or action. As of 2009, nearly 2 million people in the UK were registered as having diabetes, and it is estimated that by 2025 more than 4 million people will have diabetes.

• **Cost:** It is estimated that the annual NHS cost of the direct treatment of diabetes in the UK will increase from £9.8 billion to £16.9 billion over the next 25 years, equal to 17% of total NHS spending, up from about 10% today. The cost of treating diabetes complications (including kidney failure, stroke, blindness and amputation) is expected to double from £7.7 billion currently to £13.5 billion in the same period.

Identify high priority disease area: diabetes complications

- There is poor performance against expected levels of care, low achievement of treatment standards and high numbers of avoidable deaths: diabetes services in England are not delivering value for money.
- Up to 24,000 people die each year from avoidable causes related to their diabetes.
- There is significant variation in the quality of care received by people with diabetes.
- Through better management of people with diabetes, the NHS could save £170 million a year.
Set Standards: map key steps in the patient pathway

Structured education
- QS1: Structured education
- QS2: Nutrition and physical activity advice
- QS3: Care planning

Lifestyle and self care
- QS4: Glycaemic control
- QS5: Medication
- QS6: Insulin therapy
- QS7: Preconception care

Blood glucose control and insulin therapy
- QS8: Complications
- QS9: Psychological problems
- QS10: ‘At risk’ foot

Management of complications
- QS5: Medication
- QS8: Complications
- QS9: Psychological problems
- QS10: ‘At risk’ foot

Hospital and emergencies
- QS10: ‘At risk’ foot
- QS11: Inpatient care
- QS12: Diabetic ketoacidosis
- QS13: Hypoglycaemia
Set standards: NICE standard on preventing complications

Quality Statement

- People with diabetes receive an annual assessment for the risk and presence of the complications of diabetes, and these are managed appropriately.

Quality Measure

- **Structure**: Evidence of local arrangements to ensure that people with diabetes are assessed annually for the risk and presence of complications, and these are managed appropriately.
- **Process**: Proportion of people with diabetes who are assessed annually for the risk and presence of complications of diabetes, and these are managed appropriately.
- **Outcome**: Reduction in the incidence of complications associated with diabetes.
Measure: the National Diabetes Audit

The National Diabetes Audit (NDA) is considered to be the largest annual clinical audit in the world. It provides an infrastructure for the collation, analysis, benchmarking and feedback of local clinical data to support effective clinical audit across the NHS. The NDA supports the implementation of the diabetes NSF and aims to improve the quality of patient care by enabling NHS organisations to:

• compare the processes and outcomes of care with similar NHS organisations
• identify and share good practice
• identify gaps or shortfalls in commissioning services
• support identification of progress in meeting NICE guidelines
Measure: Four ‘simple’ questions

1. Registrations: Is everyone with diabetes diagnosed and recorded on a practice diabetes register?

2. Care Processes: What percentage of people registered with diabetes received the nine key processes of diabetes care (Measure: Weight, Blood Pressure, HbA1c, Urine Albumin Creatinine Ratio, Serum Creatinine, Serum Cholesterol; Assess: Eyes, Feet, Smoking)? [based on NICE Guidelines]

3. Treatment Targets: What percentage of people registered with diabetes achieved NICE defined treatment targets for glucose control, blood pressure and blood cholesterol?

4. Complications: For people with registered diabetes what are the rates of acute and long term complications: ketoacidosis, amputation, ESRF, MI, stroke, retinopathy, cardiac failure, angina (disease outcomes)?

The NICE Quality Standard for Diabetes defines optimal care of adults with diabetes and the NDA provides much of the data to measure compliance with the Quality Statements.
Half those with Type 2 diabetes and less than a third of those with Type 1 diabetes receive all nine processes of care [recommended by NICE], in 2008/09.

This is up from 10% and 12% respectively in 2002/03.

We need to make sure every person with diabetes receives all of the nine NICE care processes is essential to risk evaluation, and selection of treatment to reduce complications at the earliest opportunity. UK National Clinical Director for
Incentivise: publicise!

More than 1.3 million diabetes patients not offered vital tests

By Julian O'Halloran
Reporter, BBC File on 4

An estimated 1.3 million diabetes patients are missing out on vital and potentially life-saving health checks, the BBC has learned.

NHS figures reveal fewer than 10% of patients are offered the full series of tests in some areas of England.

Health Minister Paul Burstow said the situation was "outrageous" and "unacceptable".

Diabetes patients should undergo nine different health checks every 12 months.
Incentivise: Pay-for-Performance

There is a 35-fold variation in the percentage of people with diabetes receiving nine NICE key care processes.

The actions that need to be taken to reduce this variation are listed in the Primary Care Quality and Outcomes framework (QoF).
Chapter 21: “Although it is acceptable for fundamental standards to be identified by the Government in consultation with the public and stakeholders, the practical underpinning of the route to compliance can be more effectively provided by a body widely accepted as the authority in evidence-based, consensus-driven standards, NICE. Their task in developing clinical standards should be broadened and accelerated to identify the general and particular procedures required to comply with fundamental safety and quality standards in as many spheres of activity as possible. These standards should include both outcome and process-based standards, the sole criterion being whether the available evidence indicates that compliance with them protects patients from harm and ensures the minimum level of acceptable quality. All such standards should include evidence-based means of measuring compliance, as far as possible building on information already available within the system or on readily observable behaviour.”

Recommendation 22: “The National Institute for Health and Clinical Excellence should be commissioned to formulate standard procedures and practice designed to provide the practical means of compliance, and indicators by which compliance with both fundamental and enhanced standards can be measured. These measures should include both outcome and process based measures, and should as far as possible build on information already available within the system or on readily observable behaviour.”
NHS outcomes framework

Domain 1
- Preventing people from dying prematurely

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

Domain 3
- Helping people recovering from episodes of ill health or following injury

Domain 4
- Ensuring people have a positive experience of care

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

Quality standards developed to support the delivery of outcomes in these domains

Effectiveness

Patient experience

Safety