ABCD Spring Meeting

What is the evidence that QOF has improved the lives of people with diabetes?

Brian Karet MSc MRCGP DMJ Former Chief Medical Adviser (Primary Care) Diabetes UK and RCGP Clinical Lead for Diabetes.

Independent Commissioning Consultant

Doctors get 20% pay rise just for doing their jobs

DOCTORS are getting 20 per cent pay rises for doing simple tasks "they should always have done," it was claimed but night.

Brailly economists, including Generations advisors, say that under their new contracts GPs are being paid huge bonases to ment "easy" targets that do little to improve patients' lives.

Such is the level of concern over the value for tampayers that ministers are already meeting ductors' leaders in order to set tougher guain.

The move counts just weeks after the Government boasted how most GPs had not the largets for performance related pay.

But Alan Maynard, professor of brailth economics at York University, said perturbing, "It's quite rationaleus. The Government's

By Michael Day

spent all this money and has press GPs 20 per cent rises just in by and get them to do what they should always have done.

"Now they're being paid entra to look out for people with high blood pressure, which causes heart attacks and strakes, and to monitor and breat them - but they should have been doing that all along, it's not rocket account."

There have already been two Whitehall meetings after the discievare has month that, or average, GP practices achieved H per cent of the available performance-related because under the new contrast.

After achieving besuters, and age cornings of a practice surged by \$25,000 while the salary of the preraje GP pariner role is full-fot a year. The first meeting to set imagher largets came within a week of the announcement. The second was hold but week.

Cree EMAA negotiator: Leeds GP Richard Vautrey, sold "We are looking at making amendments, but at present we're not in the position to say exactly what these are

"We would expect the revised transport to be ready by the end of the year."

Apart from blood pressure, other target areas have been sitgied out as too modent. Chris Ram, proincor of beath policy and management at Birmingham University said. "By view is that, is principle, the new GP contend is a good thing - GPs are being paid in the beats of how well they treat patients and tot just according to how large their lot size is.

"But the fact so many of them met the targets in the first year suggests they were too cary."

A BMAL spokesworus denied the targets were too cars. They demonstrate the wast majority of doctors are already providing high-quality care for their priority," she said.

Simon William, director of poliny at the Patients' Ansociation, said, however: "The BMA would trampet the CPS' performance. It's a trade union, it's there to represent doctors not patients."

A speakesman for the Department of Health said: "These excedent results show the new esstiract is giving GPs a real incentive to improve the quality of care."

GP on home visits



Good care should look like this

Safe Timely Efficient Effective Equitable **Evidenced-based** Patient-centered



And not this...





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

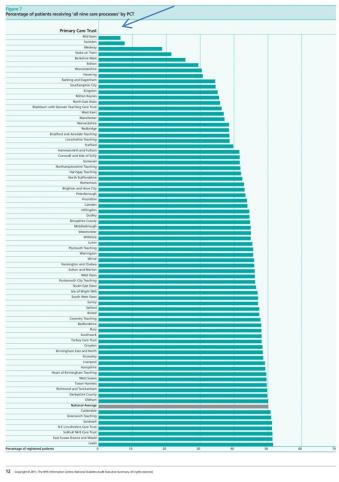
offered the full series of tests in some areas of England.

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



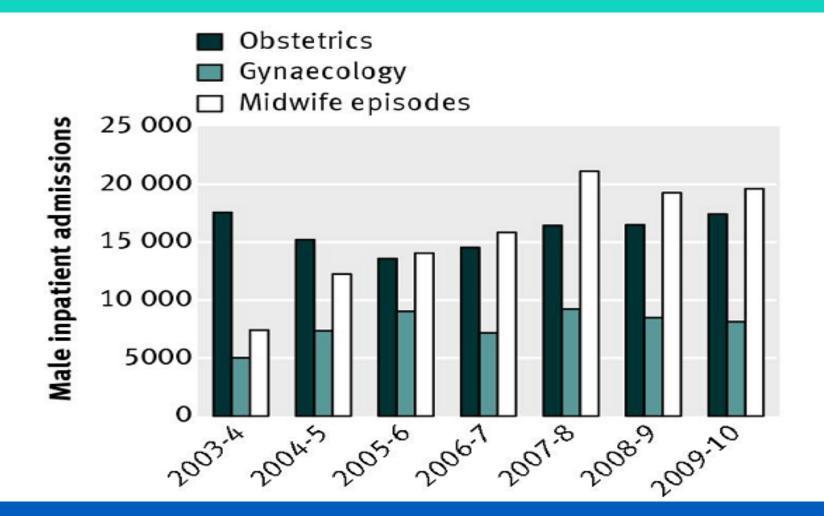
At least its measurable!

Mid Essex

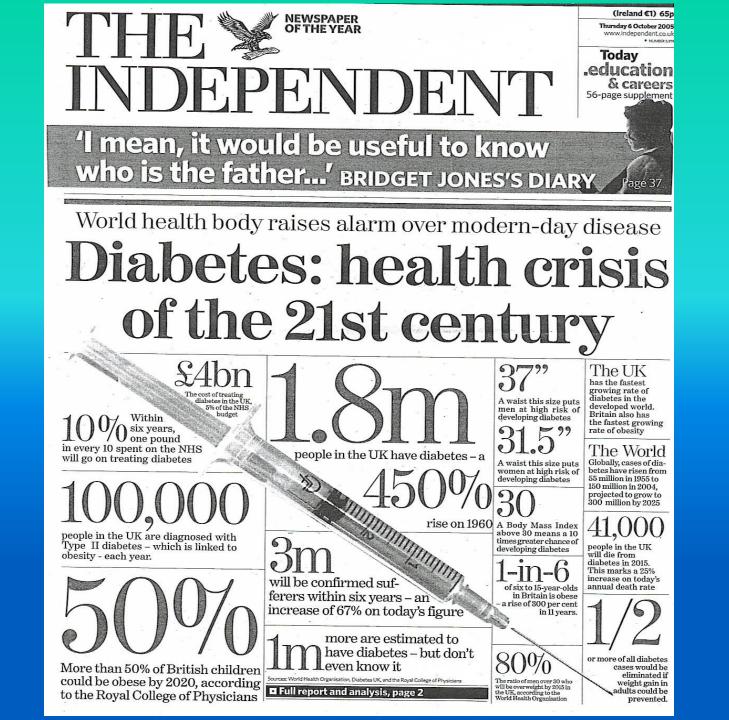


Primary Care Trust					1			
Sheffield	10							
City and Hackney Teaching		p a						
Ashton Leigh and Wigan Waltham Forest								
Buckinghamshire	- Y			101				
Heywood Middleton and Rochdale East Lancashire Teaching				Week				
Central Lancashire								
Telford and Wrekin	1		-					
Lewisham								
Lambeth North Tyneside		- 11 22						
Barnsley	1							
Hertfordshire Berkshire East								
Tameside and Glossop			- Mi	10				
Oxfordshire								
Cumbria Teaching Eastern and Coastal Kent				10,000	0			
Eastern and Coastal Kent Hull Teaching		ula.						
Wandsworth								
Ealing Halton and St Helens								
Halton and St Helens								
Kirklees								
Leicester City Cambridgeshire				100	and the second			
Cambridgeshire Barnet			- A					
South Birmingham	1	ola.						
Bromley								
Sefton Brent Teaching								
Gloucestershire	J.	wite.	1	in the second second				
Bassetlavy								
Great Yarmouth and Waveney		1997.04	1			-		
Wolverhampton City						2		
South Staffordshire Walsall Teaching		1.4		1. Contraction of the		24		
Walsall Teaching North Lincolnshire								
Western Cheshire								
Newham Bath and North East Someries								
Central and Eastern Cheshire				12				
Nottingham City								
Dorset South Tyneside					and the second second second			
Bexley Care Trust		line -						
Darlington	ale	- 65		The second s				
Redcar and Cleveland						_		
Nottinghamshire County Teaching	1					-		
North Lancashire Teaching			10					
Devon County Durham			10	1				
Wakefield District	1			1				
South Gloucestershire								
Stockport Norfolk								
Newcastle								
Blackpool								
Hartlepool Stockton-on-Tees Teaching								
Leicestershire County and Rutland	1							
Harrow						and the second se		Gateshe
Bournemouth and Poole Teaching North Yorkshire and York								Catesne
East Riding of Yorkshire	1							
Northumberland Care Trust				and the second second	and the second sec			
North Somenset Doncaster								
Hastings and Rotherham			2				/	
Herefordshire				1000		and the second		
Sunderland Teaching Gateshead			4. A				K	
ntage of registered patients 0	10	20	10	40	50	60	70	

We all make mistakes !



Brennan L et al BMJ2012;344:e2432



So what are the big questions

- Has QOF increased the quality of care (or just the quantity)?
- Does QOF make diabetes care too rigid?
- Do practitioners make inappropriate clinical decisions to attain QOF targets?
- Exception reporting. Is there too much?
- Could QOF be used to improve the quality of care further?
- What other areas might be useful in the diabetes domain of QOF?

Lets look at QOF

- New contract introduced 1 April 2004¹
- Voluntary¹
- Significant proportion of income related to performance (pay for performance)¹
- Promoting and rewarding better quality care¹
- In 2009/10, 8486 practices in England took part, covering 99.5% of NHS-registered patients²
- Costs £1 billion per annum³

1. The NHS Information Centre (2005) Introduction to QOF. Available at: http://

The NHS Information Centre (2005) National Quality and Outcomes Framework Statistics for England 2004/05. Available at: <u>http://tiny.cc/celho</u>
NICE (2010) NICE indicator programme – frequently asked questions. Available at: <u>http://www.nice.org.uk/aboutnice/gof/goffaq.jsp</u>

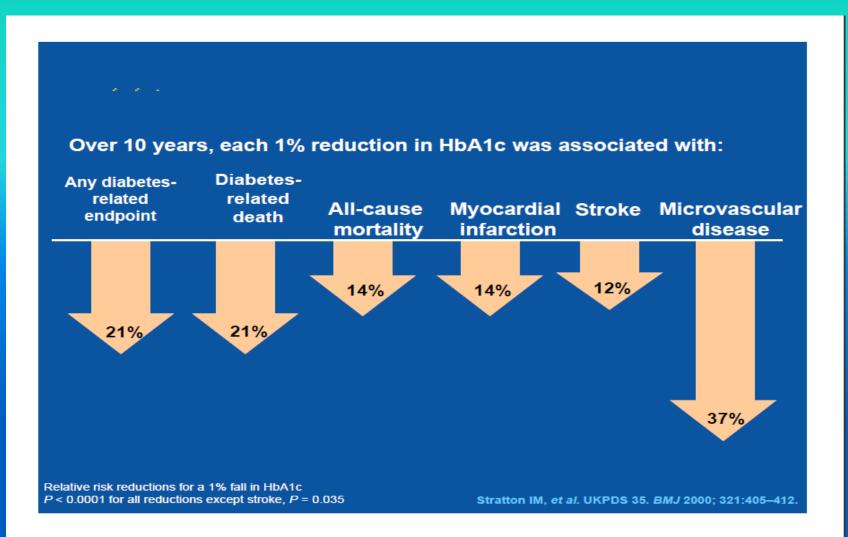
Diabetes indicators recorded in last 15 months

	Indicator	Points	Target
•	Practice register (type) ¹	6	
•	% record BMI ¹	3	90%
•	% HbA _{1c} ≤7.0%¹ (≤53 mmol/mol)	17	50%
	(<59 for 2011/12)		
•	% HbA _{1c} ≤8%¹ (≤64 mmol/mol)	8	70 %
	% HbA _{1c} ≤9%¹ (≤75 mmol/mol)	10	
	% retinal screen ¹	5	90%
	% microalbumin checks	3	90%
•	% record neuropathy testing ¹	3	90%
•	% of patients who have recorded	4	90%
	foot risk classification		

Total diabetes points 92/803.5 (11.4%) Priced @ £130.51 per point

^{1.} NHS Employers (2011) *Quality and Outcomes Framework guidance for GMS contract 2011/12*. Available at: <u>http://tiny.cc/hs4a0</u> Department of Health, Social Service and Public Safety – Detailed List of All Indicalors. Available at: <u>http://www.dhsspsni.gov.uk/qof-indicators.pdf</u> (accessed 10.4.12)

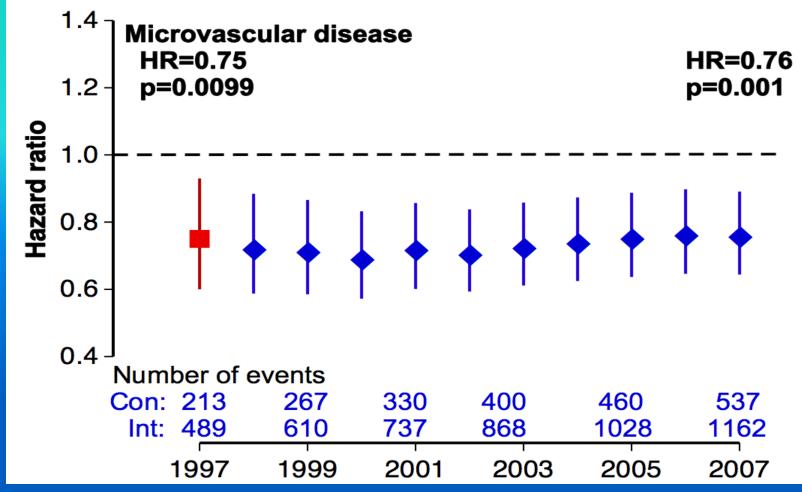
Why do we bother reducing HbA1c?



Microvascular Disease Hazard Ratio

(photocoagulation, vitreous haemorrhage, renal failure)

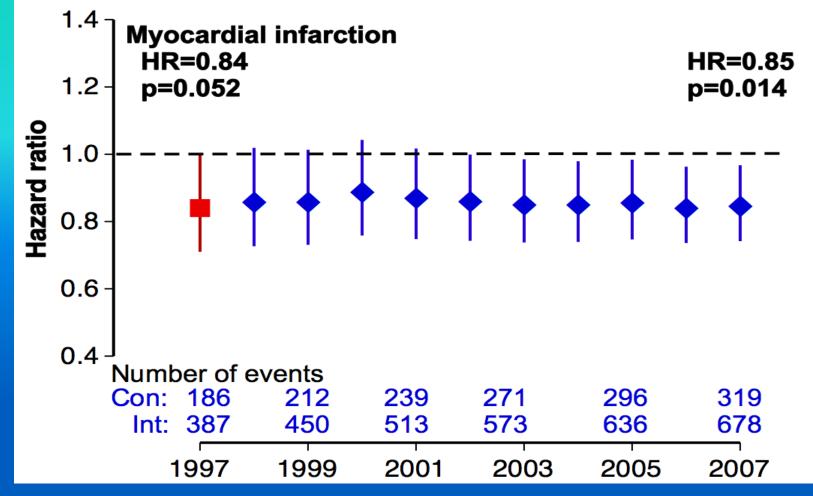
Intensive (SU/Ins) vs. Conventional glucose control



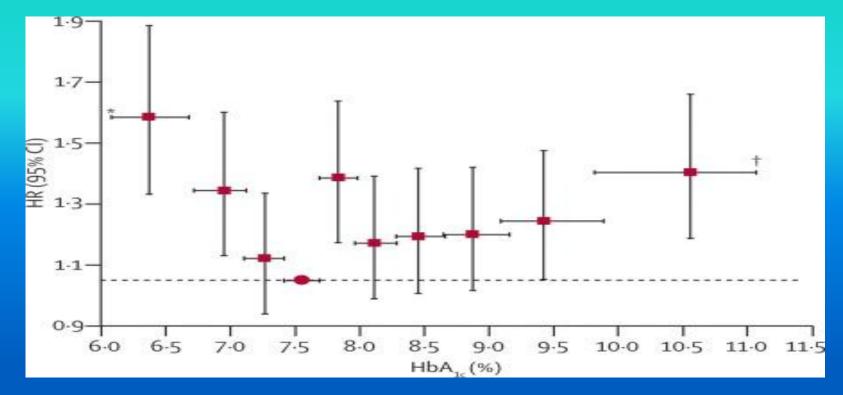
Myocardial Infarction Hazard Ratio

(fatal or non-fatal myocardial infarction or sudden death)

Intensive (SU/Ins) vs. Conventional glucose control



But.....Recent data...



Hazard ratios for progression to first large-vessel disease event by $\ensuremath{\mathsf{HbA}_{1c}}$

What NICE says

- Involve the person in decisions about their individual HbA_{1c} target level, which may be above that of 6.5% set for people with type 2 diabetes in general.
- Encourage the person to maintain their individual target unless the resulting side effects (including hypoglycaemia) or their efforts to achieve this impair their quality of life.
- Offer therapy (lifestyle and medication) to help achieve and maintain the HbA_{1c} target level.
- Inform a person with a higher HbA_{1c} that any reduction in HbA_{1c} towards the agreed target is advantageous to future health.
- Avoid pursuing highly intensive management to levels of less than 6.5%.

Risks of low HbA_{1c} in the elderly

- Major vascular events:
 - Stroke
 - Myocardial infarction
 - Acute cardiac failure
 - Ventricular arrhythmia
- Impaired consciousness and convulsions
- Falls and bone fracture
- More likely to have hypo-unawareness (diabetic autonomic neuropathy)

Legacy Effect of Earlier Glucose Control

After median 8.5 years post-trial follow-up

Aggregate Endpoint		1997	2007
Any diabetes related endpoint	RRR:	12%	9%
	P:	0.029	0.040
Microvascular disease	RRR:	25%	24%
	P:	0.0099	0.001
Myocardial infarction	RRR:	16%	15%
	P:	0.052	0.014
All-cause mortality	RRR: P:	6% 0.44	

RRR = *Relative Risk Reduction, P* = *Log Rank*

Quality and Outcomes Framework

"...an initiative to improve the quality of primary care that is the boldest such proposal on this scale ever attempted anywhere in the world"

Shekelle P BMJ 2003;326:457-8.

Quality and Outcomes Framework (2004)

- Incentives to improve quality and reflect workload
- Up to 25% of practice income linked to performance
- 156 indicators with graduated scales
 - **76 for chronic disease**
 - 15 for diabetes
- 'Evidence-based'

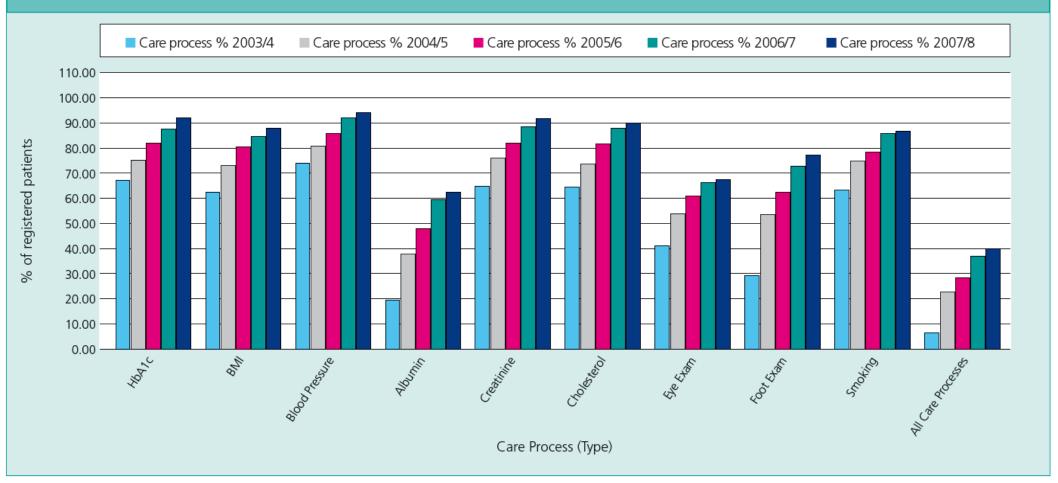
QOF effectiveness

• Care for people with diabetes improved more rapidly when QOF was introduced Campbell S et al NEJM 2009;361:368-378

• QOF reduced the inequality gap between practices in areas of high and low deprivation Doran et al Lancet 2008;372:728-736

Has care Improved too?

Figure 5: Percentage of people with diabetes in England achieving key care processes, over the 5 audit periods



Has QOF worked in Practice ?

• Observational study in 26 South London General Practices 2000–2005 (n = 1441)

	Median practice-specific % achieving target				
Clinical indicator	2000	2001	2002	2003	(QOF) 2005
HbA _{1c} recorded	60	72	80	78	95
HbA _{1c} ≤7.4% (≤57 mmol/mol)	22	32	37	38	57
BP recorded	75	84	87	89	98
BP ≤145/85mmHg	38	40	47	50	70
Chol recorded	50	65	71	77	93
Chol ≤5.0mmol/l	23	34	36	47	72

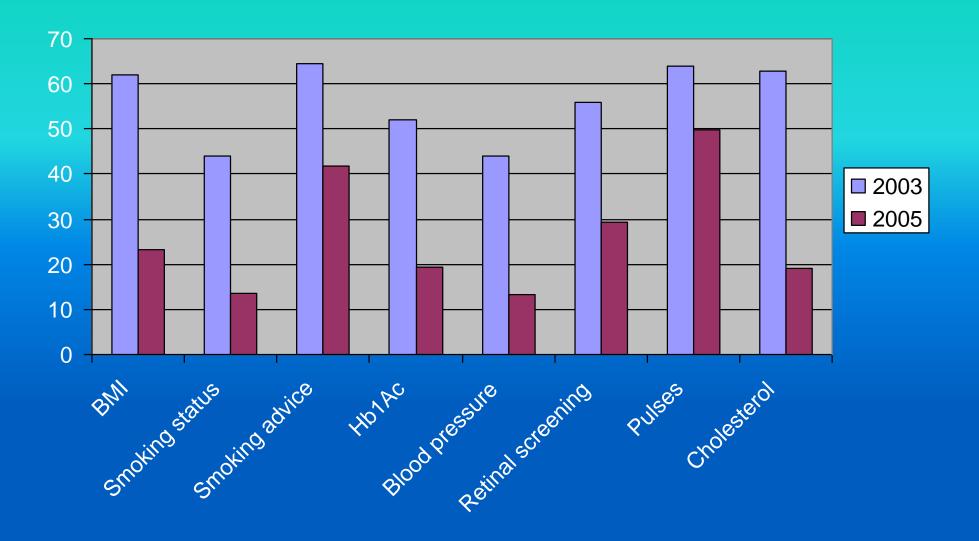
And more data

•Observational study in thirteen Nuneaton General Practices 2004-2005

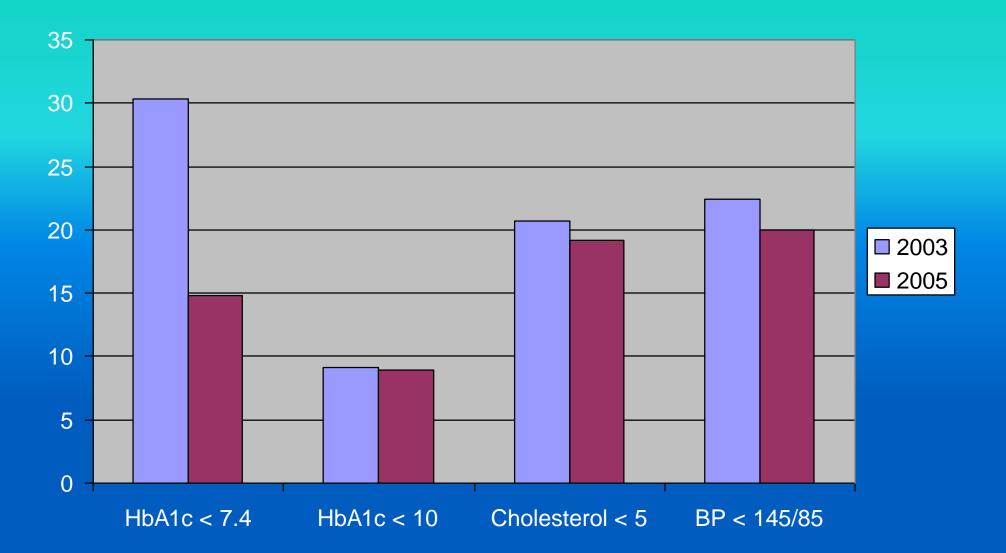
	% of patients for achiev		
Clinical Indicator	2004 (n~3200)	2005 (n=3200)	P-value
HbA _{1c} recorded	85	91.6	0.049
$HbA_{1c} \leq 7.4\%$	43.9	65.8	<0.0001
BP recorded	79.9	96.1	0.009
$BP \leq 145/85mmHg$	50.2	65.9	0.001
Chol recorded	74.5	89.1	0.001
Chol \leq 5.0mmol/l	47	68	<0.0001

Jaiveer PK et al. Br J Diabetes Vasc Dis 2007;6:45

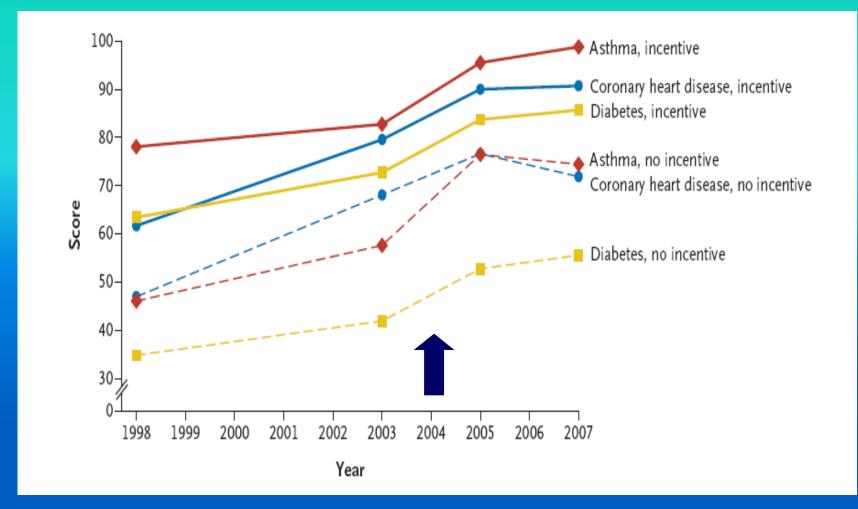
GMS quality indicators (process) - 10th/90th centile range



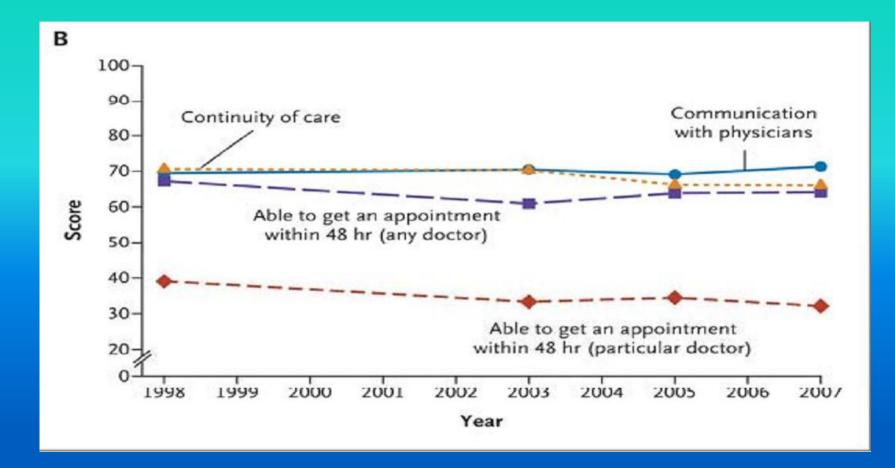
GMS quality indicators (outcomes) - 10th/90th centile range



Adverse impact



But compare this



Campbell SM, et al N Engl J Med 2009; 361:368-378

US vs NHS process and outcome of care

	US Commercial (Mean)	US Commercial (Best)	NHS
HbA1c in 12 months	87.5	92.1	95.6
HbA1c <9%	70.4	79.0	81.0
Retinal screening in last 12 months	54.7	73.2	73.7
BP ≤130/80	29.9	42.2	30.1

What about patients?

- QoF data for England has been available for patients to search since September 2005 via a <u>patient-friendly site</u> produced by the Information Centre (IC). The site enables patients to access their own practice's results, compare them with last year's results and compare both against other practices in the local area and against national scores.
- Overall, visitors to the centre's website increased by almost 100% in the year to January 2007, with the site now attracting more than 1000 hits per day and 48,000 visits in January

Exception reporting in England

Effective exception rate for diabetes

6.01%	2005/06 ¹
6.34%	2006/07 ¹
6.00%	2007/08 ²
5.65%	2008/09 ²
6.44%	2009/10 ³

- Effect of exception reporting likely to be small
- QOF monitoring process practice visits by QOF teams

1. The Information Centre (2007) National Quality and Outcomes Framework Exception Reporting Statistics for England 2006/07.

2. The Information Centre (2009) Quality and Outcomes Framework Exception Data 2008/09.

3. The Information Centre (2010) Quality and Outcomes Framework Exception Data 2009/10

NICE Quality standards in diabetes

- **1. Structured Education**
- 2. Advice on nutrition and Physical Activity
- 3. Care Planning
- 4. Personalised HbA1c target 48-58mmol/mol
- 5. Regular medication reviews
- 6. Structured support for insulin management

- 7. Contraception and preconceptual advice
- 8. Annual risk and complication review
- 9. Annual psychological review
- 10. At risk foot assessment and referral
- 11. Inpatient care
- 12. DKA follow up
- 13. Hypo follow up

Whats next

- New title- *QOF Quality and Productivity (QP) Indicators*
- Peer review (initially for prescribing)
- Care pathways
- Improvement plans
- Reduce unscheduled admissions
- *COF*

The Commissioning Outcomes Framework to set direction and accountability

Organised around 5 national outcome goals / **domains** covering the breadth of NHS activity

These will help the public and Secretary of State for Health to track:



How **EFFECTIVE** the care provided by the NHS is What the patient **EXPERIENCE** is like How **SAFE** the care provided is

Domain 1	Preventing people from dying prematurely	
	Enhancing quality of life for people with long-term conditions	Effectiveness
	Helping people to recover from episodes of ill health or following injury	
	Ensuring people have a positive experience of care	Patient experience
Domain 5	Treating and caring for people in a safe environment and protecting them from avoidable harm	- Safety

And the indicators for Diabetes are..

- 7 on structured education
- 2 on DKA
- 1 on amputation rates
- 1 on complications
- 1 on hypo admission rates
- 1 on all 9 care processes

Incentives work!

Prof Martin Rowland (N Engl J Med 2004;351:1448-54)



- Better data collection
- More practice nurses
- Increased specialisation in primary care
- Increased biomedical orientation
- Improved health outcomes

QOF is a multi-faceted intervention

"Multifaceted professional interventions and organisational interventions that facilitate structured and regular review of patients are effective in improving the process of care."

Limitations of QOF

- Still some variations in care
- Target gaming by government
- Incrementally small benefits
- Areas not in QOF may be ignored
- Continuity of care may be affected.
- Not evenly applied

Other countries considering adopting QOF

- US
- New Zealand
- Australia
- European countries (France, Spain)

Even the Consultants support it!

BMJ 2005;331:1340 (3 December), doi:10.1136/bmj.331.7528.1340-a

Letter

Diabetes and the quality and outcomes framework

Integrated care is best model for diabetes

EDITOR—The Association of British Clinical Diabetologists (ABCD) welcomes Kenny's editorial on the impact of the quality and outcomes framework on diabetes management and supports his plea for supporting and strengthening secondary (specialist) care diabetes services.¹

The implementation of the updated contract for general medical services (GMS2) has resulted in a welcome increase in the monitoring of patients, especially those with type 2 diabetes, who have been comparatively neglected in the past. However, the need to improve glycaemic control to meet the target value of 7.5% for HbA_{1c} has had some unforeseen consequences. In most specialist centres, referrals of patients treated with tablets for consideration of insulin treatment have increased, and many general practices do not feel confident with this. Simultaneously, it is not only extremely difficult for secondary care to attract additional resources, but there is actual "downsizing" of some specialist units by local primary care trusts, in line with the government's desire to transfer most, if not all, of chronic disease management from secondary to primary care.

This is one of the main reasons for the increasing frustration and discontent among diabetologists, which has led to a decline in recruitment into the specialty and many unfilled consultant posts. If as a result specialist services

In summary....

- At a time of increasing prevalence of diabetes
- Evidence of large variations in care and poor quality prior to QOF
- QOF has improved proxy outcomes for most but not all
- Proved the value of targeted incentivisation
- Increasingly aligned with care standards
- Patient experience is included
- Evidence led
- Evolving after 8 years
- Other opportunities
 - Sampling frame for:

clinical trials epidemiological & genetic studies health policy & health services research supporting health economics

So.. Has QOF improved the lives of people with diabetes?



Simples!

Thanks for listening !