Reforming health care systems: relevant insights from the UK and New Zealand

Nicholas Mays
Professor of Health Policy
Department of Public Health & Policy
London School of Hygiene & Tropical Medicine
University of London

Bauhinia Foundation Research Centre International Conference on Health Care Reform, Hong Kong Academy of Medicine, 17 January 2009

Outline

- Focus of reform – coverage versus provider incentives (payment)
- NZ primary health care payment reforms since 2001
  - main focus coverage, followed by modest P4P
- UK primary health care payment reforms since 2004
  - main focus ambitious P4P within universal, free PHC based on patient enrolment with a general practice
- Conclusions and lessons

The focus of reform: three key dimensions of health care in tension

- Cost
- Quality
- Access
  - achievement of system goals requires changes to both how patients access services (demand side, coverage) and, particularly, which services are provided by whom (supply side, micro-incentives)
  - i.e. not just about removing financial barriers or spending more
  - must include incentives on practitioners

NZ Primary Health Care Strategy, 2001- and Primary Health Organisation Pay-for-Performance Programme

Funding for primary health care before the NZ PHCS

- Public subsidies targeted on low income patients, high users and children for GP visit fees and pharmaceutical charges
  - subsidised patients still paid a co-payment to practitioners either out of pocket or via private insurance
  - majority of adults paid full costs of GP visits
  - patient fees for GP visits above the subsidy level were unregulated
- GPs paid fee-for-service by government (40%) and patients (60%)

Access problems due to cost

In past 2 yrs, did not due to cost:	AUS	CAN	NZ	UK	US
Take up prescription	23	19	20	10	35
Get medical care	16	9	26	4	28
Get test, treatment, or follow-up	16	10	15	5	26
Get dental care	44	35	47	21	40

Source: 2002 Commonwealth Fund International Health Policy Survey of Adults with Health Problems

New primary health organisations (PHOs)

- Needs-weighted capitated public funding
- Non-profit, not government-owned, with significant community input to governance
- Voluntary patient enrolment and provider affiliation
- Providers mostly sub-contracted by PHOs
  - paid by capitation plus other more service-specific funding

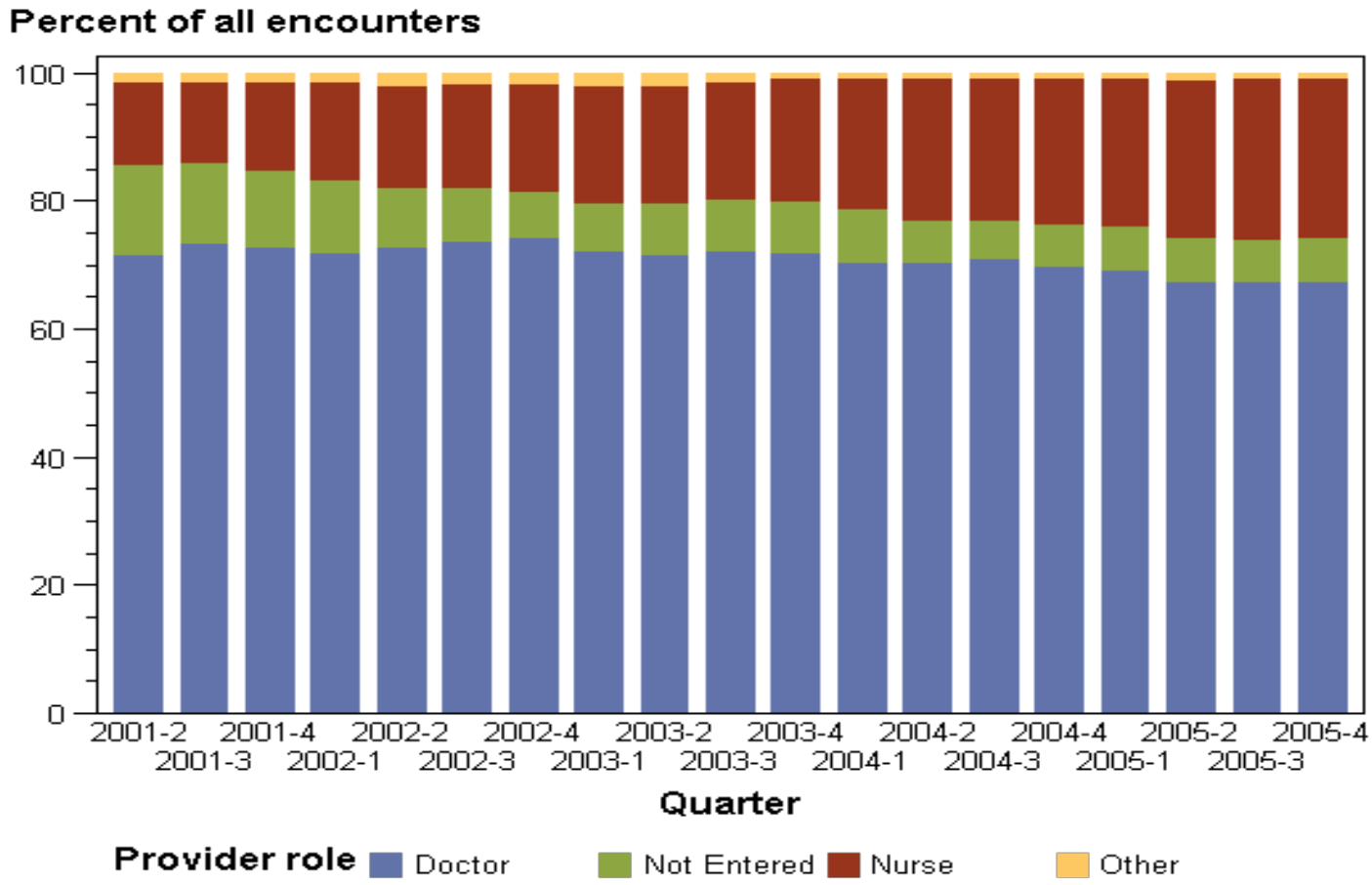
Increase in public (tax) funding

- Increase public share of funding, 2002-07
  - so that government becomes majority funder
- New money only to PHOs
  - more per capita to ‘high need’ PHOs
- Reduced reliance on individual targeted subsidies
- Practitioner co-pays remain, but limited by local negotiation with health authority/PHO

Trends in user fees and consultations rates, 2001-2005 (Cumming et al, 2008)

- Average GP visit fee paid by higher need practice patients fell in all age groups, especially >6s (20% drop); only modest rises in lower need practice patients
- GP consultation rates increased in in all age groups in higher need practice patients, especially >65s
  - average of 1-1.5 extra consultations per year
- Similar pattern in lower need practice patients
- Greater proportion of total consultations with nurses

Proportion of consultations undertaken by practice nurses



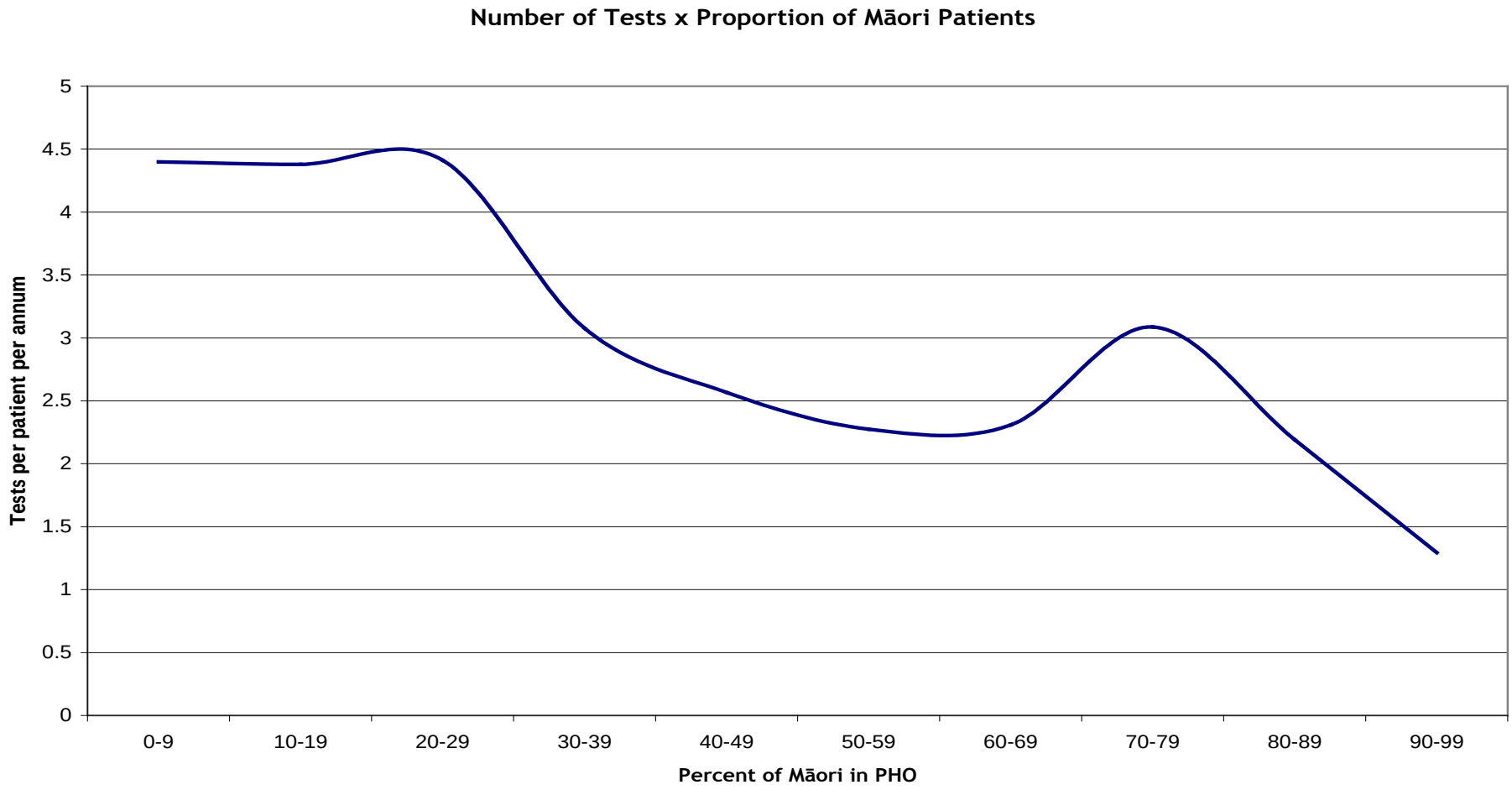
Source: Cumming, Mays and Gribben, 2008

NZ PHO performance management programme, 2006-

Reasons for PHO performance management programme

- variations in PHC quality
- variation in resource use not related to need or best practice
- supplement to incentives of capitation

Number of lab tests per year by % of Māori in the PHO population



Aim

To improve the health of enrolled populations and reduce disparities in health outcomes through supporting clinical governance and continuous quality improvement processes within volunteer PHOs

Components

- Clinical, expenditure and process performance measures
- Educational review and feed back to volunteer PHOs on their relative service use
  - feed back also available to individual practices
- Payment for performance to encourage meeting of national performance standards
  - required to make larger gains to get paid the farther the PHO is from the target

Clinical Indicators		Max %
Inhaled Corticosteroids	Total Population	4.00%
Measurement of acute phase response	Total Population	4.00%
Investigation of thyroid function	Total Population	4.00%
Flu Vaccine coverage for 65+ (annual)	Total Population	4.00%
Flu Vaccine coverage for 65+ (annual)	High Needs	8.00%
Cervical cancer screening coverage	Total Population	4.00%
Cervical cancer screening coverage	High needs	8.00%
Age appropriate vaccinations for 2 year olds	Total Population	4.00%
Age appropriate vaccinations for 2 year olds	High needs	8.00%
Breast cancer screening coverage	Total population	4.00%
Breast cancer screening coverage	High needs	8.00%
Total Clinical Indicators		*60%*
Process Indicators		
% valid NHI on register	Total Population	3.33%
Utilisation by high need enrolees	Total population	3.33%
Achievement of Performance Plan objectives (annual)	Total Population	3.33%
Total Process Indicators		*10%*
Financial Indicators		
GP referred laboratory expenditure	Total Population	15%
GP referred pharmaceutical expenditure	Total Population	15%
Total Financial Indicators		*30%*
TOTAL		**100%**

Weight given to each of the indicators

A typical performance report

REPORTING PERIOD	Qtr One 2005 (Calendar Year)
INDICATOR	Cervical Screening - Coverage Rate Total Population
AGE GROUPS	20 - 69
GENDER	Female Only

ORGANISATION	TOTAL SCREENS	TOTAL IN TARGET GROUP	COVERAGE RATE	DIF
NATIONAL	622,053	1,225,202	50.77	
A DHB	66,072	145,324	45.47	-5.31
A PHO	4,071	9,994	40.73	-4.73
A Family Doctor	357	782	45.65	-5.12
B Medical Centre	287	893	32.14	-18.63
C Medical Centre	631	1,516	41.62	-9.15
Dr Surgery	81	287	28.22	-22.55
E Medical Practice	220	729	30.18	-20.59

Points to note about the PHO performance management programme

- Payments to PHOs not practitioners and to be used for improved services
  - only indirect incentives for practices to hit targets
  - no contract between funder and practices
- Payments are a small percentage of PHO income
- Small number of PIs
- PIs not directly based on professional or patient priorities (government priorities)

Conclusions on NZ PHC reform

- Reducing financial barriers does increase use and likely to be broadly in line with needs
  - capitation encourages more use of nurses, etc.
- Next challenge is to improve quality and value for money on an equitable basis
- PHO P4P programme is modest and at an early stage

UK NHS 2004 general practice contract Quality and Outcomes Framework (QoF)

Quality and outcomes framework

‘ …a proposed new contract …contains an initiative to improve the quality of primary care that is the boldest such proposal on this scale attempted anywhere in the world.’

Shekelle (2003) BMJ 326: 458-9

Objectives of the QoF

- To improve the general quality of primary health care
- To eliminate variation between providers by resourcing and rewarding ‘best practice’ based on evidence
  - clinical aspects largely focused on secondary prevention

Design of the Quality and outcomes framework

- Voluntary
- Rewards practices for quality of clinical care and organization – typically ~ 25% of income
- Practices awarded points for achieving certain standards (not improvement)
- Total of ~1000 points available (~£130k per practice, 05/06)
- Four domains (>150 indicators, able to be altered)
  - Clinical (65 indicators)
  - Organisational
  - Additional services
  - Patient experience

‘Exceptions’ reporting

- To reduce risk of inappropriate treatment or practice refusing ‘difficult’ patients, patients can be taken out of the calculation of achievement rates, if
  - patient refuses offer of screening, FU, etc
  - clinically inappropriate (specific reasons)
  - newly diagnosed/recently registered
  - no scope for improved care

Clinical domain: ten chronic conditions (points)

- Coronary heart disease (121)
- Hypertension (105)
- Diabetes (99)
- Asthma (72)
- COPD (45)
- Mental health (41)
- Stroke or transient ischaemic attacks (31)
- Epilepsy (16)
- Cancer (12)
- Hypothyroidism (8)

2006/07 indicators can be seen at
http://www.bma.org.uk/ap.nsf/Content/qof06

Example of clinical indicator and points

- The percentage of patients with coronary heart disease, in whom the last blood pressure reading (measured in the last 15 months) is ≤150/90 (max 19 points)
- A proportion of the points score awarded in a direct linear relationship to achievement between the minimum (25%) and the maximum (70%)

Practices' responses to the QoF

- By year 3, almost all practices had opted in
- Increased activity, more income and more staff, especially nurses (uncovering unmet need with some knock-on costs for the rest of the system)
- Average achievement 959 points (91%) 05/06, 96% in 06/07, ~ 25% gross income

Some concerns and risks raised by the QoF

- ‘Gaming’
  - practices only partly altruistic?
- Impact on quality of care
  - overall and risk of widening quality ‘gaps’
  - quality already improving so why pay more?

Limited ‘gaming’ of reported prevalence and ‘exceptions’ (median rate, 5.3%, 05/06)

Source: Doran et al *NEJM* 2008; 359: 274-84

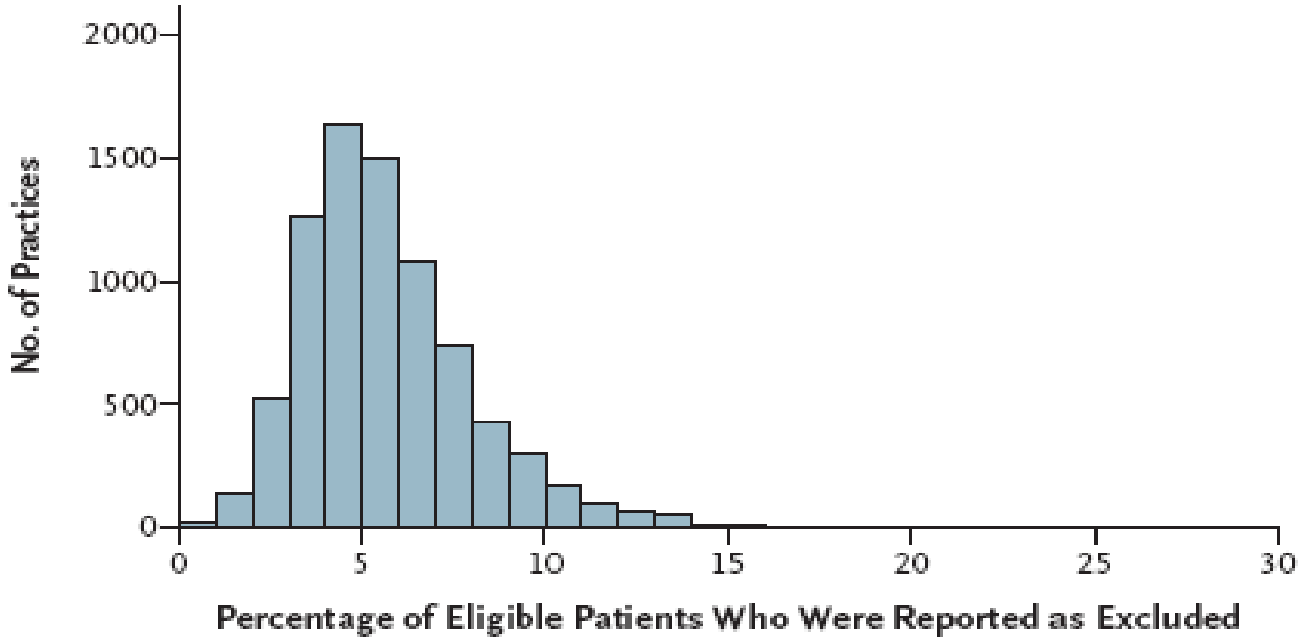


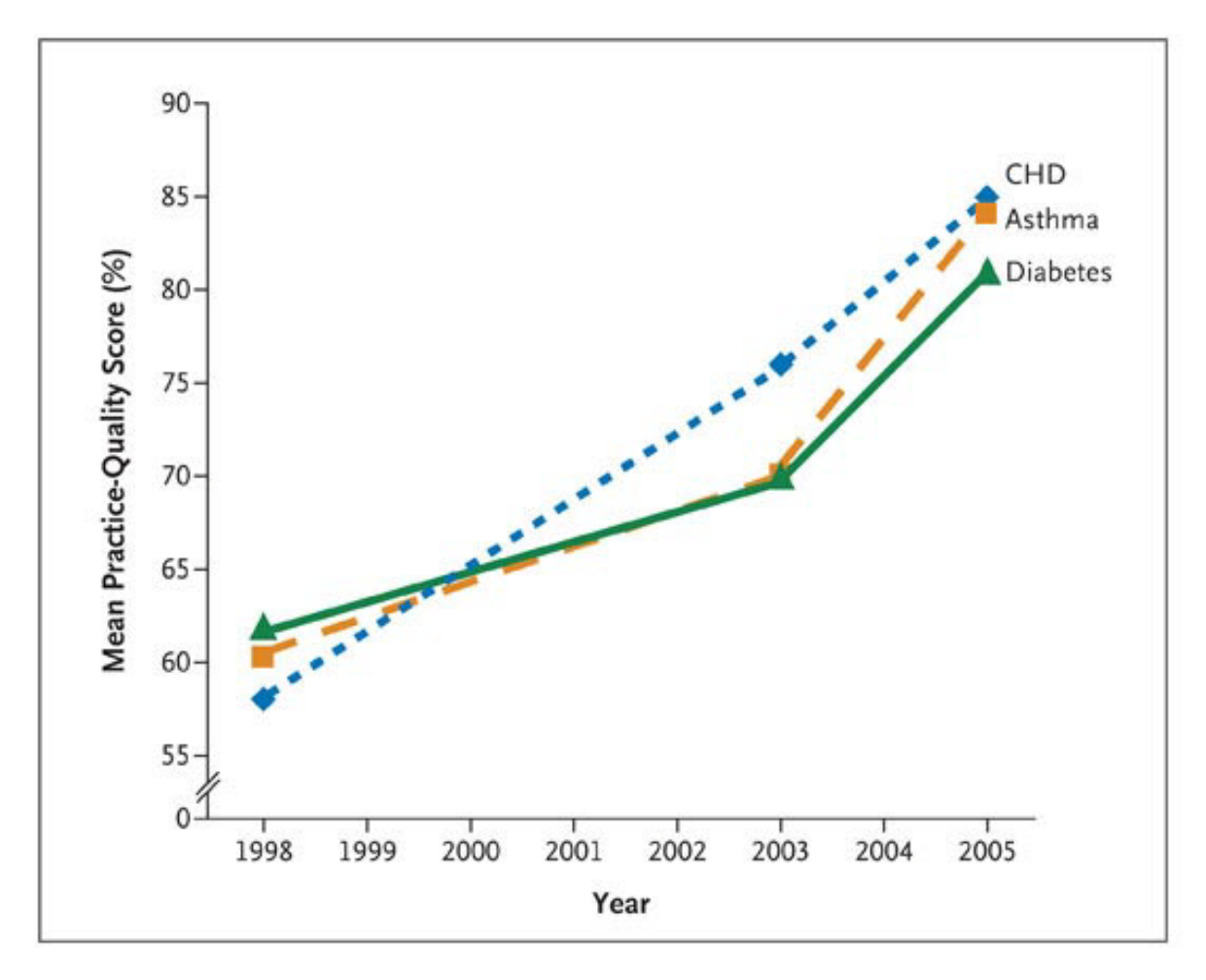
Figure 1. Overall Rates of Exception Reporting by 8105 Family Practices in England.

From April 2005 through March 2006, physicians excluded a median of 5.3% of patients (interquartile range, 4.0 to 6.9) from quality calculations in the pay-for-performance program (mean [±SD], 5.3±2.5). The percentages of exclusion reporting in the practices ranged from 0% to 28.3%.

Impact of QoF on independently assessed clinical performance (Campbell et al, 2007)

- Representative sample of English practices in 1998, 2003 & 2005; chart review
- Continued improvements in quality post-QoF despite improving trend pre-QoF
- Rate of improvement has accelerated post-QoF for asthma & diabetes
- Local studies corroborate these findings

Mean scores for clinical quality at practice level for coronary heart disease, asthma, and type 2 diabetes, 1998, 2003 & 2005



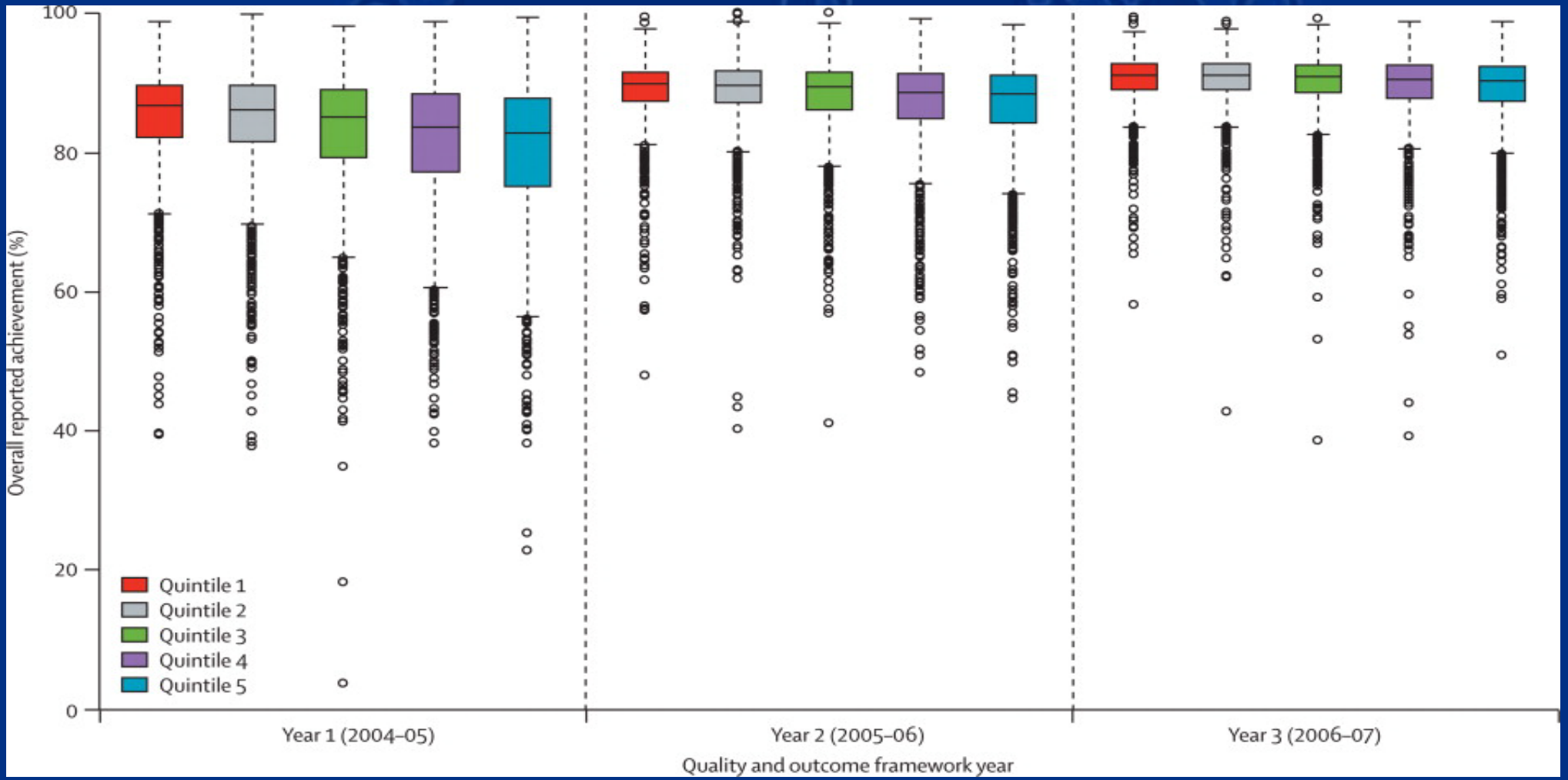
Source: Campbell et al
NEJM 2007; 357: 181-90

Distribution of QoF reported performance

- Practices in more deprived areas had lower QoF scores initially, though differences were small (Doran et al, 2006 & 2008; Wright et al, 2006)
- But clear evidence of QoF ‘catch up’ among practices in more deprived areas (Doran et al, 2008)

Distribution of overall reported achievement by deprivation quintile, year 1 (04/05) to year 3 (06/07)

Doran et al. *Lancet* 2008; 372: 728-36



How have improvements been accomplished?

- Changes in practice organization, especially more systematic care and better record keeping
  - Better call/recall systems
  - Risk profiling of enrolled patients
  - Protocol-driven care
  - Templates for recording actions in electronic patient record
  - Greater ‘managerialism’
- Building on past investment in IM&T
  - Almost all GPs use computers for clinical care
- Increased workload for nurses and health care assistants

Conclusions: significance of the QoF

- Revolution in GP payment methods though some previous experience
- Innovative, world first (largest scheme globally)
- Established P4P principle with GPs because largely consistent with pre-existing professional activities/role

Conclusions: significance of the QoF

- Shows that financial incentives can contribute to improved quality without producing major disparities
  - likely reduced inequalities in care quality related to area deprivation
- Shows that it is critical to incentivize valuable activities since incentives shape behaviou
- Changes inter-professional relations, but major risks identified have largely not occurred in practice
  - nurses have led on risk factor management, leaving GPs to diagnose and handle complex cases
- r

Learning from UK and NZ experience

Lessons

- Improving coverage and access is necessary but not sufficient to improve quality and value for money
  - hence interest in P4P programmes with more specific incentives for particular activities
- But P4P incentives are complex
  - targets must align with values and priorities of providers and patients as well as funders to avoid harming intrinsic motivation of professionals
  - need to establish clear baselines, design the many features of schemes with care (e.g. allowing ‘exceptions’), pilot P4P schemes and adapt them in light of evaluation

Lessons

- Ascertain through pilots what is the minimum incentive necessary to motivate improvement
- Budget for higher than expected performance and thus cost (because of behavioural impacts)
- Try to avoid paying for improvements already in train or which would have happened anyway
- Anticipate negative effects and take steps to minimise them
  - e.g. ‘gaming’ is a sign that incentives are being taken seriously but has to be reduced