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National Institute for Clinical Excellence: NICE works

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Summary

The National Institute for Clinical Excellence was established in 1999. Its original remit was to undertake technology appraisals of (mainly) new interventions and to develop clinical guidelines. In providing both forms of guidance, it was required to take into account both clinical and cost effectiveness. After a difficult first few months, it gained the confidence and trust of the professions. It subsequently gained additional responsibilities with a commensurate increase in its staffing and budget. It is, moreover, the only one of the National Health Service organisations established in the late 1990s and early 2000s to have not only survived but grown. This paper describes not only the National Institute for Clinical Excellence's early years but also, in the author's view, the features of its guidance programmes that led to its success and (in retrospect) some things it could have done differently.

Keywords

National Institute for Health and Care Excellence, technology appraisals, clinical guidelines, cost effectiveness

In 1997, the incoming Labour administration was clearly concerned about the variable quality of care provided to some National Health Service patients.[1] These concerns took various forms.

First, during the mid-1990s, individual National Health Service hospitals had started to restrict the availability of expensive new medicines. This so-called 'post code lottery'[2] particularly involved the beta-interferons used for the treatment of relapsing-remitting multiple sclerosis as well as some new antipsychotics and anticancer agents. The public and the media found this practice unacceptable. In a healthcare system funded by general taxation, individual pharmaceutical products must be available to all or to none.

Second, inappropriate variation in the quality of care was also manifest in the practice of medicine more generally. For example, several studies conducted in the mid-1990s showed serious inadequacies in the diagnosis and treatment of hypertension, especially among the elderly.[3–5]

The incoming Blair government also had a financial problem. In the run-up to the 1997 election, the Labour party had committed itself to maintaining the spending plans of the Tory administration. In their search for improving the quality of National Health Service care, incoming health ministers were aware that making additional resources available to the service was not an option – even if they could be targeted in an appropriate manner.

In December 1997, the government stated its intention[1] to establish a 'National Institute for Clinical Excellence'. The new organisation was expected 'to give a strong lead on clinical and cost effectiveness – drawing up new guidelines – and ensuring they reach all parts of the health service'.[1] Details about the functions of the new Institute – already known as NICE – were published nine months later in *A First Class Service*.[6] The National Institute for Clinical Excellence was to advise the National Health Service on the use of individual or groups of similar pharmaceuticals and devices ('technology appraisals') and to develop clinical guidelines so that healthcare professionals were able to provide National Health Service patients with the highest attainable quality of care. In developing both forms of guidance, however, the new Institute was expected to take account of both clinical and cost effectiveness.

The emerging institute

I was appointed chairman-designate of the National Institute for Clinical Excellence in November 1998 and the Institute became a legal entity on 1 April 1999. We started with a Board of non-executive directors, a chief executive, a laptop borrowed from St George's Hospital, temporary offices but little else. The processes and methods that the National Institute for Clinical Excellence should adopt in developing its guidance had not been specified, but we already had a rich heritage on which to draw.

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In the early 1990s, two developments had a significant impact on the National Institute for Clinical Excellence's evolving technology appraisals programme. In order to support its local National Health Service commissioners, the then Wessex Region established a Development and Evaluation Committee to advise on the use of new technologies.[7] A few other regions followed suit, creating their own Development and Evaluation Committees. Around the same time, the National Health Service's new Research and Development Programme had set up Health Technology Assessment Centres in several UK Universities. Their mission was to undertake evaluative research into the effectiveness of both new and existing healthcare interventions. These Centres were, and have remained, immensely helpful to the Institute.

In the 1990s, important advances in the methodology of clinical guideline development were occurring. Specialist societies, royal colleges, other organisations and individuals had been producing clinical guidelines since the early 1950s. When appropriately constructed and implemented, they were known to improve the quality of care. However, the methods used in their construction were too often poorly evidence-based, were inappropriately constructed and, as a consequence, had an overall quality that was extremely variable.[8] Moreover, due to their exclusive membership of the bodies involved in their construction, their guidelines often had little traction with the professions at large. And virtually no guideline developers took account of cost effectiveness in formulating their recommendations.[8] In response to these limitations, development tools[9,10] had been published. These helped guideline developers ensure that their guidelines, and the consequential recommendations, were evidence-based, robust and implementable.

The new Institute was therefore able to establish its technology appraisals and clinical guidelines programmes by adapting the processes and methods that had already been tried and tested. And although over the years the National Institute for Clinical Excellence's processes and methods have evolved much further, in its early days the Institute benefited substantially from these pathfinder programmes.

The National Institute for Clinical Excellence was given a lukewarm welcome in April 1999, by the *BMJ*.[11] Its editor, Richard Smith, criticised me in an article I had written for the *Lancet*[12] for avoiding the term 'rationing' in my description of what the National Institute for Clinical Excellence planned to do. I had emphasised the term 'prioritisation'. Smith was correct. I had deliberately and, in retrospect rather feebly, avoided using the 'R-word' which carried so many negative connotations. The pharmaceutical industry was also very cautious in their welcome but their attitude would soon change. The first few months were spent recruiting staff, assembling our advisory bodies, equipping our small offices and starting to develop our processes and methods.

Relenza (zanamivir)

Our progress was interrupted in June 1999, when Relenza (zanamivir), manufactured by GlaxoWellcome (now part of GSK), was licensed for the treatment of influenza. There were concerns in the Department of Health, and echoed by many general practitioners, that the costs of providing Relenza for the National Health Service during an influenza season would be substantial. During an epidemic, they would soar massively! Frank Dobson, then Secretary of State, asked us informally if we would be prepared to appraise Relenza in time for the forthcoming winter influenza season and to advise the National Health Service on its use. He said that if we were not ready to embark on such a 'rapid appraisal', he would quite understand. But the chief executive Andrew Dillon and I both felt that this was precisely the sort of problem that the National Institute for Clinical Excellence had been set up to sort out. We agreed without hesitation.

We drew up a 'Rapid Appraisal Process'. GlaxoWellcome were invited to submit evidence on the clinical and cost effectiveness of Relenza, which they did. We established an *ad hoc* 'Rapid Appraisal Committee' to consider the evidence on the clinical and cost effectiveness of Relenza. We emphasised that our guidance would only be for the forthcoming (1999–2000) 'flu season'. We would review our advice for the following (2000–2001) year.

The Institute's advice,[13] after two meetings of its *ad hoc* Rapid Appraisal Committee and a direct appeal by GlaxoWellcome to the Board, was that the National Health Service should not use Relenza, at least in the forthcoming influenza season. The reasons were three-fold:

1. The company's clinical trials had shown that the benefits of Relenza were confined to limiting the duration of influenza symptoms from six days to five days. There no evidence that it reduced complications in high-risk groups such as the elderly.
2. At the price proposed, the use of Relenza was not cost-effective. In the event, we estimated that the cost to the National Health Service in an epidemic might be close to £100 million.

3. The broader impact on primary care, trying to make Relenza widely available, would be disproportionate to any discernable benefits.

GlaxoWellcome issued veiled threats to the media that ranged from seeking Judicial Review of our decision to withdrawing the entire company from the UK. The medical[14,15] and lay media though were broadly supportive. *The Times* published a leading article with the headline: 'Nicely does it: Dobson is right to resist Glaxo's threats'.[16] The professions too were supportive. The British Medical Association appreciated that the effects on primary care, of providing Relenza for such little obvious benefit, would seriously interfere with routine clinical care.

GlaxoWellcome continued their campaign against our advice by appealing to the Prime Minister. They demanded that Tony Blair instruct us to withdraw our guidance. Tony Blair and Alan Milburn (who by then had replaced Dobson as Secretary of State) backed us saying (in effect) that the National Institute for Clinical Excellence had been set up to make these difficult decisions and it was not for politicians to interfere. The National Institute for Clinical Excellence's guidance on the use of Relenza, though, was purely advisory. General practitioners could still prescribe it if they wished. GlaxoWellcome, realising this, placed advertisements in the medical press, during November and December, urging general practitioners to prescribe it for patients with influenza. In the event, only 212 National Health Service prescriptions were dispensed between September 1999 and January 2000 compared to the many hundreds of thousands of prescriptions that might have been issued in the absence of National Institute for Clinical Excellence guidance.[17]

It was an uncomfortable few weeks for the fledgling Institute. In retrospect, though, we could not have had a better start. We had issued our first piece of guidance. The professions and the media were generally supportive of us; and general practitioners had implemented our advice. Just as importantly, the industry and others learned that there was to be no political interference in our decisions even when they involved a major UK company threatening to leave the UK.

Principles underpinning the development of National Institute for Clinical Excellence guidance

The National Institute for Clinical Excellence published its first full technology appraisal in March 2000 and its first full guideline in March 2003. In developing guidance, the National Institute for Clinical Excellence, from the beginning, adopted five fundamental principles that continue to the present day. These were that all National Institute for Clinical Excellence guidance should be:

- Robust
- Inclusive
- Transparent
- Independent
- Contestable.

Robust

All National Institute for Clinical Excellence guidance is based on an exhaustive review of the available evidence. This usually involves, for each piece of guidance, one or more systematic reviews of the available literature. Where appropriate, relevant unpublished data are also included. In developing a clinical guideline, a dozen or more systematic reviews may be required to ensure that all the appropriate evidence has been considered.

At an oral hearing before the Health Select Committee, in 2002, the then chairman of the British National Formulary Committee alleged[18] that our Technology Appraisal guidance was not well evidence-based. The Select Committee recommended that an outside body be invited to review our processes and methods.[18] We invited the World Health Organization's European office to undertake such a review. Its report, published in 2003, stated[19,21] that 'National Institute for Clinical Excellence has developed a well-deserved reputation for innovation and methodological developments that represent an important model for technology appraisals internationally'. This verdict from the World Health Organization, together with the findings of a later review of our guidelines programme,[20] deflected criticisms about the robustness of our approach.

Inclusiveness

From the outset we recognised that in order to be truly successful as an organisation, we needed to actively involve all our stakeholders. These include clinical specialists, patient organisations as well as industry. All these groups are encouraged to engage with our programmes. We invite them to submit written evidence as well as to provide oral evidence at meetings of the relevant decision-making committees. We explain that all stakeholders are entitled to 'have their say – but not necessarily their way'.

Independence

From the very start, the National Institute for Clinical Excellence has valued its independence from both government as well as inappropriate vested interests. But the National Institute for Clinical Excellence's guidance is not developed by the Board or the Institute's staff but rather by the independent members of its advisory bodies drawn primarily from the National Health Service and academia.

The staff of the Institute services its Technology Appraisals Committees. The conclusions and advice are the Committee's alone. Some suggest that political or other external pressures might influence the committees' guidance but this has never happened

The National Institute for Clinical Excellence's clinical guidelines are developed by its Collaborating Centres based on the Royal Colleges. They are co-productions with the National Institute for Clinical Excellence. The Institute defines the particular topics, the methodological approaches to be used in construction, and ensures the quality of the end product. The guidelines themselves, however, are developed by the Collaborating Centres.

We instituted this arrangement for two reasons. First, we wanted our guidelines to have the backing of the professions and its leadership. We appreciated that it would not necessarily mean that all the National Institute for Clinical Excellence's clinical guidelines would be free from controversy. It would, though, provide some reassurance to the professions that the guidelines carried the *imprimatur* and approval of the relevant professional bodies.

The second reason was more practical. Since the late 1980s, central government had provided funding to the Royal Colleges for 'clinical effectiveness research'. Precisely how this money was to be used was never specified. When the National Institute for Clinical Excellence was established, money was very tight. We only had additional funding to perform Technology Appraisals. Funding for our guideline programme must be found from the sums previously allocated to the Royal Colleges for 'clinical effectiveness research'. Our first task, therefore, was to meet with the College Presidents. We explained that we were replacing their clinical effectiveness grants with funds for guideline development. They were surprisingly understanding about it and were pleased to be involved with a programme that could lead to true clinical improvement for patients.

Independence also means that the members of all our advisory bodies do not have inappropriate interests of either a financial or a reputational nature. All potential interests are required to be declared. Where individuals do have an interest, and depending on its nature, they either take no part in the proceedings or absent themselves.

Contestability

All National Institute for Clinical Excellence guidance is published in draft form to give stakeholders the opportunity to comment. There may be as many as 2000 comments on a single clinical guideline. The Institute requires guideline development groups to respond, appropriately, to each one. Although this is time consuming, it means that stakeholders at least 'Have their say' and sometimes they 'Have their way' when guidance is changed as a result of their interventions.

For Technology Appraisals, stakeholders may also seek an oral hearing before an Appeal Panel drawn from a combination of Board members and external experts. In about one-third of instances, appeals are upheld resulting in reconsideration by the relevant Appraisal Committee. There are also appeals mechanisms for the National Institute for Clinical Excellence's other programmes.

This process is not necessarily the end of 'contestability'. Stakeholders may seek Judicial Review of the Institute's guidance in the High Court. They have done so on four occasions, out of the more than 1000 pieces of National Institute for Clinical Excellence guidance that have now been published. Although in two instances their Lordships have required the National Institute for Clinical Excellence to reconsider some element of the guidance, the High Court has never quashed the Institute's advice.

Decision-making

However fine these core principles are, and however well they are adhered to, decisions have to be made and decision-making is ultimately about judgements. For the National Institute for Clinical Excellence, these judgements fall into two types – scientific judgements and social value judgements.[21]

Scientific judgements

Scientific judgements have to be made about the underpinning science.[22] These include matters such as: What biases are unaccounted for? Which potential confounders are unaccounted for? And does it matter? What about the subgroup analyses? And, critically, are the results of the trials generalisable to the real world of likely patients? These are just some of the scientific judgements that the National Institute for Clinical Excellence expects its advisory bodies to

make in interpreting the evidence and in formulating their recommendations.

Social value judgements

There are also social value judgements that have to be taken into account. These are, to a large extent, concerned with what is known as 'distributive justice'.[23] Distributive justice is concerned with the nature of a socially just allocation of goods in a society. It has been discussed by political philosophers since the time of Plato. In the allocation of resources for healthcare – three broad approaches have proposed:[25]

- Libertarianism
- Utilitarianism
- Egalitarianism.

Libertarianism is based on the premise that individuals and their families should be able, indeed expected, to finance their healthcare through their own efforts; and that market forces should enable them to do so at a reasonable price. With the commitment of the National Health Service to social solidarity, it has little to offer to the provision of healthcare in the UK.

Utilitarianism in its purest form considers distributive justice to be best served by maximising social utility. Utilitarians expect expenditure on health to be distributed in a manner that maximises the welfare of the population as a whole. The principle is often expressed as 'the greatest good for the greatest number' and has unquestionable attractions. It places a premium on the efficiency of a healthcare system and asserts that using ineffective or costly interventions in one area of medical practice will displace cost-effective interventions in another. Utilitarianism, though, has disadvantages. It can allow the interests of minorities to be overridden by the majority and it offers nothing to the eradication of health inequalities.

Egalitarianism is about fairness either in equality of opportunity or in equality of outcome. What is sometimes known as 'qualified egalitarianism' seeks for resources to be distributed so that each can have a fair share of the opportunities available in a particular society. Egalitarianism also has its problems. The definition of 'adequate' healthcare, the distinction between what is fair and unfair, and the distinction between what is unfair and what is unfortunate all lack clarity.

The tensions between utilitarianism and egalitarianism can be overstated.[23] Many utilitarians accept that social values should be incorporated into their approach to distributive justice. Qualified egalitarians accept the concept of 'opportunity costs' with all its moral implications.

No satisfactory formal synthesis of these approaches has been successful. All clash at some point with the convictions of many people, but each articulates ideas that most would be reluctant to relinquish.

We recognised, early on, that the National Institute for Clinical Excellence needed to develop social values and that these should be incorporated into our decision-making processes. The types of social values that were, and still are, important to the Institute include problems such as: Should the National Health Service spend more to prolong the life of a child by a year compared to its parents or grandparents? Should the National Health Service provide very expensive drugs to treat very rare diseases? Should the National Health Service be prepared to spend more on avoiding harms to patients than in treating them for naturally occurring diseases?

These social value judgements are ones that the members of our advisory bodies have no greater legitimacy to make than the man or woman in the street. Opinion polls were not, we felt, an appropriate approach because they merely capture individuals' opinions at a single moment of time without having the opportunity to learn about the issues and deliberate with others. We were, though, impressed by the work of Citizens Juries[24] both in the US and the UK but felt they needed to be modified for our purposes. In particular, we believed that participants should have more time to deliberate (two days rather than 4 h); that there should be more participants than the conventional dozen used in Citizens Juries; and that we should maintain some continuity of membership, rather than discharging juries after each meeting.

We established a Citizens Council with 30 members (to keep it manageable) drawn from a cross-section of the public. We advertised nationally for members and had 35,000 expressions of interest! We randomly selected a membership which was stratified to ensure it was demographically representative with respect to age, gender, geography, ethnicity and disability. The topic for discussion is carefully selected by the Institute; and after each meeting, a draft report is prepared by a professional writer and circulated to members to ensure the conclusions are acceptable. The reports are widely circulated in draft form for public comment but have rarely evoked any disagreement in either the lay or professional media.

The Citizens Council has produced 17 reports since its establishment in 2002 (Table 1).

Table 1. Topics considered by the National Institute for Clinical Excellence's Citizens Council.

Year of publication	Topic
2002	*Clinical Need:* What should the National Institute for Clinical Excellence take into account when making decisions about clinical need?
2003	*Age:* Are there circumstances in which the age of a person should be taken into account when the National Institute for Clinical Excellence is
2004	*Confidential Enquiries:* The National Institute for Clinical Excellence's Citizens Council were asked about their views on the use of patient information obtained from medical records by the National Confidential Enquiries (13–15 May 2004)
2004	*Ultra orphan Drugs:* The National Institute for Clinical Excellence's Citizens Council were asked to advise on whether or not the National Health Service should be prepared to pay premium prices for drugs to treat patients with very rare diseases (18–19 November 2004)
2005	*Mandatory public health measures:* The National Institute for Clinical Excellence's Citizens Council were asked to suggest principles that should govern the imposition of public health measures on the UK population
2006	*Rule of rescue:* Is there a preference to save the life of people in imminent danger of dying?
2006	*Health inequalities:* Which of two broad health inequality strategies would be more appropriate for the National Institute for Clinical Excellence to follow?
2007	'Only in research': In what circumstances is it justified for the National Institute for Clinical Excellence to recommend that an intervention is used only in the context of research?
2007	*Patient safety:* How should solutions be developed to reduce or prevent harm to patients while under the care of the National Health Service?
2008	*Quality adjusted life years (QALYs) and severity of disease:* Should the National Institute for Clinical Excellence and its advisory bodies take into account the severity of a disease when making decisions?
2008	*Departing from the threshold:* In what circumstances should the National Institute for Clinical Excellence recommend interventions where the cost per QALY is above the threshold range of £20–30,000?
2009	*Innovation:* The National Institute for Clinical Excellence's Citizens Council met to discuss innovation in healthcare
2009	*Smoking and harm reduction:* The National Institute for Clinical Excellence's Citizens Council met to discuss smoking and harm reduction
2010	*Incentives:* In what circumstances are incentives to promote individual behaviour change an acceptable way of promoting the health of the public?
2011	*Discounting:* How should the National Institute for Clinical Excellence assess future costs and health benefits?
2013	*Social Care:* What aspects of benefit, cost and need should the National Institute for Clinical Excellence take into account when developing social care guidance?
2014	*Societal values:* Societal values in trade-offs between equity and efficiency

It has discussed, and provided advice on, a wide range of topics. The Council's conclusions have been drawn together to form a guideline on social value judgements for the use of our advisory bodies.

What should we have done differently?

What should, or could, have the National Institute for Clinical Excellence done differently over the years? The true answer is 'many things' but I focus on three.

In 1999, the pharmaceutical industry persuaded us that the draft Technology Appraisal guidance was 'share-price sensitive'. They argued that it should be circulated to stakeholders 'In confidence'. We unwisely accepted this but it was immediately obvious that it was hopeless. Stakeholders, especially patient organisations who did not like the Institute's draft conclusions, 'leaked it' to Members of Parliament and the media.

So we did what we should have done at the outset and consulted Sir Howard Davies, the then Director of the London Stock Exchange. He was courteous but told us we were making a mistake. He explained that what we were doing was perfectly legal but that we were in danger of creating 'a false market'. Those 'in the know' could trade their shares to their own advantage. He explained that if our actions created such a false market he would criticise us very publicly. The only solution, he explained, was to make our draft guidance publicly available.

The language of health economics is frequently complex and sometimes impenetrable, even to those (non-economists) who have to use it in their work. For most people working in the National Health Service, and to the public, it can, at best, make it very difficult to understand the basis of some of our recommendations. At worst, our decisions might make it seem as if it is just the cost of the treatments that matter. We could, and should, have found ways to convert the language of health economics into ordinary concepts, familiar to everyone who has to make choices with the money they have available, in their personal lives as well as at work. The National Institute for Clinical Excellence should consider how to do this as its role evolves.

A third 'regret' is that we largely failed to take account of co-morbidities in our guideline development programme. During the first 14 years of its existence, almost all the National Institute for Clinical Excellence's guidelines described the optimal management of individual conditions such as hypertension, heart failure, chronic obstructive pulmonary disease and so on. Many, indeed most, patients over the age of 65 years have two or more co-morbidities.[25] Those of us who are fortunate enough to reach the age of 80 are likely to have an average of five co-morbidities.[25]

The idea of trying to manage individual patients, especially those with chronic diseases, according to the advice in five guidelines is obviously impractical. On the other hand, producing a single guideline, covering all possible co-morbidities, is equally unhelpful. I am unaware of any guideline developers who have resolved this critical problem, but the National Institute for Clinical Excellence has now taken up the challenge and is developing practical approaches to covering co-morbidities in its guideline programme.

But has the National Institute for Clinical Excellence really worked? In one sense the Institute must have done something useful as evidenced by the fact that, of all the various new bodies established in and around 1999, it is the only one that still exists! Indeed, its guidance programmes now include not only Technology Appraisals and clinical guidelines but also:

- Interventional procedures
- Public health
- Medical technologies
- Diagnostics
- Quality standards
- Social care guidelines and most recently
- Safe staffing levels.

To meet these expanded responsibilities, the National Institute for Clinical Excellence's staffing has risen from three on 1 April 1999 – to just under 600 full-time equivalent staff today. Moreover, its annual budget has increased 10-fold to provide the resources for this expansion. But in one sense none of that really matters. The critical question is whether the National Institute for Clinical Excellence has made a real difference to National Health Service patients? We believe it has.

The National Institute for Clinical Excellence's Technology Appraisals programme had a profound impact on the availability of new pharmaceuticals. It has largely, though admittedly not entirely, eradicated 'postcode prescribing' and there is a legal requirement on the National Health Service to provide those products recommended by the National Institute for Clinical Excellence where a patient's doctor believes it to be appropriate. I accept that some maverick Clinical Commissioning Groups[26] sometimes play 'fast and loose' with this requirement but is nevertheless largely observed.

The National Institute for Clinical Excellence's clinical guidelines are having a very real impact on the care of National Health Service patients. It was estimated in 2005 that 25,000 people died each year from preventable pulmonary emboli. In January 2010, the National Institute for Clinical Excellence published a guideline[27] on the prevention of venous thromboembolic disease in hospitalised patients. A major component was the advice that all inpatients should undergo a risk assessment for venous thromboembolism and, where appropriate, be offered prophylaxis.

At the time of the publication of the guideline, surveys showed that less than 40% of patients

underwent a risk assessment for venous thromboembolism. Two years later, more than 95% of patients underwent venous thromboembolism risk assessment – with prescribing data showing a marked increase in the use of anticoagulants. Estimates suggest that the annual mortality from pulmonary emboli has fallen by 7000.

Another guideline, published in 2008, advised against the routine use by dentists of antimicrobial chemoprophylaxis, for patients at risk of infective endocarditis.[28] Again it was controversial, but dentists largely accepted the advice and prescribing fell by over 80% during the next 12 months – with no excess increase in the incidence of bacterial endocarditis.[29] The basis of this advice was less to do with cost – antimicrobials are relatively inexpensive – but because of the absence any evidence of effectiveness in this indication. It has been well documented that indiscriminant use of antimicrobials increases the chance of rendering patients sensitive to the agent used. It also increases the likelihood of antimicrobial resistance in the community.

The future

And what of the National Institute for Clinical Excellence's future? Some commentators have expressed concerns, at least privately, that the National Institute for Clinical Excellence should avoid 'mission creep'. I have no such fears[30] and, indeed, would like it to have other programmes including responsibility for guidance on:

- Immunisation and vaccination
- National screening programmes
- Clinically effective and cost-effective safety solutions; and of course
- The 'Cancer Drugs Fund'.

My final support for the thesis that the National Institute for Clinical Excellence Works comes from a comment made by Richard Smith some five years or so after its establishment and when he was still editor of the *BMJ*.[31] Initially, he had been skeptical of the National Institute for Clinical Excellence. Five years later he wrote enthusiastically under the headline, 'The Triumph of NICE' that 'NICE may prove to be one of Britain's greatest cultural exports along with Shakespeare, Newtonian physics, the Beatles, Harry Potter, and the Teletubbies'. I must confess to being more than flattered for the National Institute for Clinical Excellence to be in the company of Shakespeare, Newton and Milton and the Beatles – although I rather wish he had not included the Teletubbies.

Declarations

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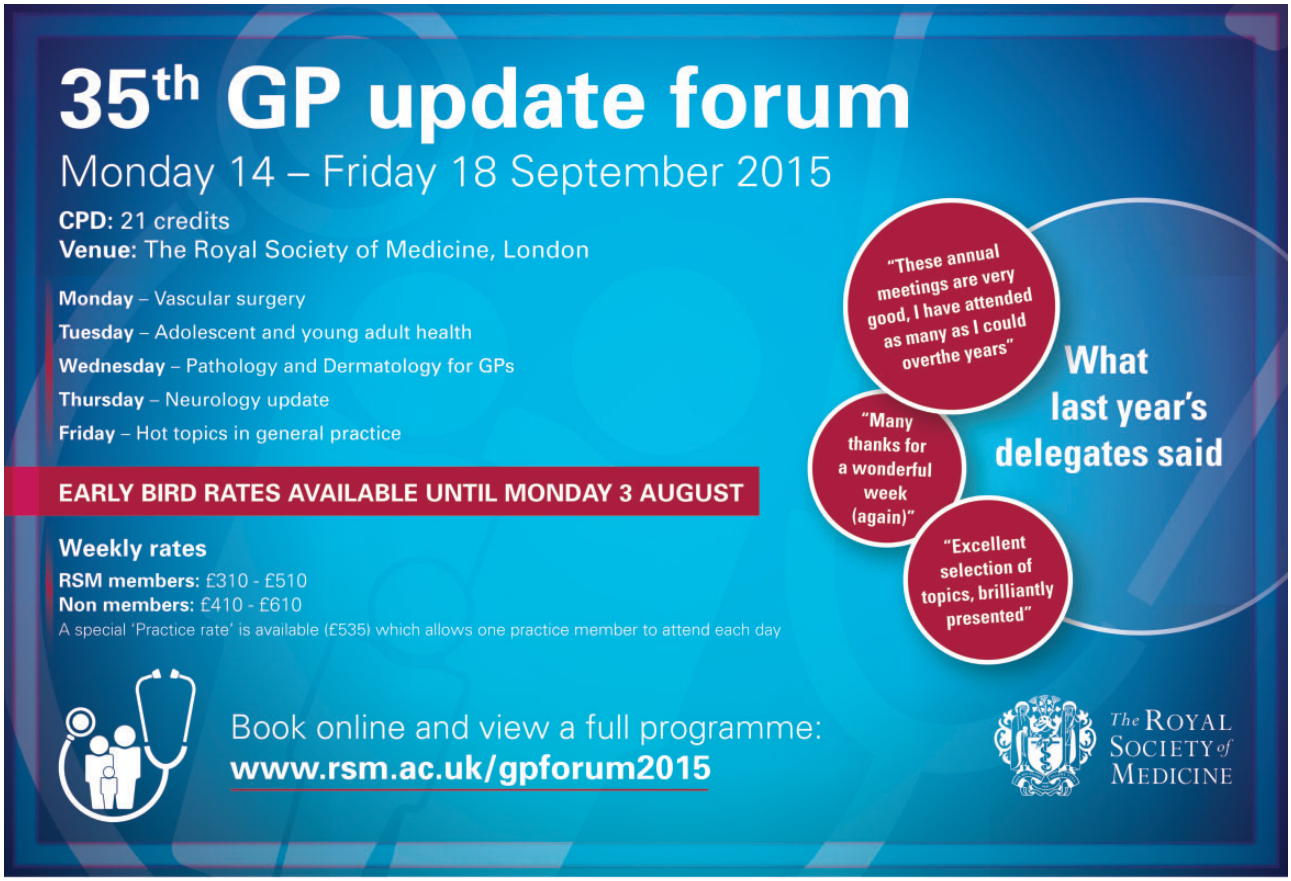
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