

## The Calman–Hine report: a personal retrospective on the UK’s first comprehensive policy on cancer services

Robert A Haward

*Lancet Oncol* 2006; 7: 336–46

Arthington House, Cookridge Hospital, Leeds, LS16 6QB, UK (Prof R A Haward MB ChB)

Correspondence to: Prof Robert A Haward 10 Wheatlands Road East, Harrogate, North Yorkshire, HG2 8PX, UK bob.haward@doctors.org.uk

Calman–Hine was the first comprehensive cancer report to be produced in the UK, and set out principles for cancer care and the clinical organisation for service delivery. It advocated a change from a generalist model (eg, care given by general surgeons and physicians) that was supported by specialists to a fully specialist service. The process of policy development was innovative and the report was accepted widely throughout the UK. However, implementation, which began at a time of organisational change across the UK National Health Service (NHS), was not addressed sufficiently in the years immediately after publication. Consequently, change was more variable both geographically and within a single location and took longer than necessary. Evidence from research, routine data, and external assessments suggest that the policy was eventually successful and a worthwhile change. Well thought out and sustained mechanisms for policy implementation are as crucial as well-designed policies, and government health reforms can conflict with specific policies for quality improvement.

### Introduction

The soberly entitled *Policy framework for commissioning cancer services*—a report by the Expert Advisory Group on Cancer to the chief medical officers of England and Wales was published 11 years ago.<sup>1</sup> The report rapidly acquired the shorthand title of the Calman–Hine report, after the two chief medical officers who led its development. In the circular<sup>2</sup> that accompanied the report, the Secretary of State accepted its recommendations and welcomed the aim of delivering a high level of cancer care throughout the region. So was it all worthwhile? Did anything valuable happen as a result?

There are grounds for a positive view. Proponents see the report as a genuinely ground-breaking document that has greatly affected cancer care in the UK (figure 1), providing the impetus, ideas, and service framework for a more patient-centred approach to cancer services. The report defined the principles for modern clinical organisation and for better decision-making. For the first time

the structures and clinical processes necessary to improve operational relations between different components of the health-care system were defined. The Calman–Hine report was innovative because it was the first health policy to cover such a large and complex disease area, and it led to **National service frameworks**<sup>3</sup> for other diseases.

However, application of this policy within the National Health Service (NHS) was flawed. These drawbacks reduced the effect of the policy, lengthened the time that the changes took, and exposed difficulties in manpower and facilities. Some important changes were implemented inconsistently (eg, establishing cancer centres that were too small, not following guidance properly in service reconfiguration, constitution of multidisciplinary teams, role of key posts), perpetuating variations in service quality despite the report’s aims. Retrospective assessment of the relevance and effectiveness of the Calman–Hine report leads inevitably to judgments about its implementation.

This review of the Calman–Hine report asks five questions: how did the policy come about? What did it try to achieve? Was it implemented? Has it worked? and can lessons be learned for future health policy?

Assessment of the Calman–Hine report is difficult. Although the report clearly initiated change that continues to the present day, many later initiatives, such as the NHS cancer plan in England<sup>4</sup> and the explicit development of cancer network organisations, were products of later decisions made after the change of government in 1997. These later actions were not linked directly with the original report, although some people argue that the Calman–Hine report created the conditions and shaped the context for what came later. Thus, I do not deal with all the efforts to improve cancer services over the past 11 years; rather I highlight those most obviously related to the original report.

### How did the policy come about?

This question has several features: the context at the time; why a cancer policy was felt to be necessary; and how the task of its development was addressed.

**National service framework** Long-term strategies for improving specific areas of care with measurable goals set over a specific time frame.



Figure 1: The Calman–Hine report aimed to improve cancer services

The only previous policy initiative in cancer<sup>5</sup> had little discernable effect on health systems at the time, and few people will be aware that it ever existed. Concerns about cancer at that time tended to focus on specifics such as radiotherapy or breast screening. The NHS of the early 1990s was dominated by implementation of health reforms in which power was devolved to hospitals and general practices and coupled with separate responsibility for the commissioning and provision of services; features of these changes were controversial.

At the same time, inadequacies in cancer services were being recognised and commented on more frequently. Particular attention was paid to breast cancer, although the concerns were equally or more valid for most cancer types. Breast cancer, as is so often the case, provided the political vehicle to raise the profile of concerns from both patients and professionals. Breast cancer was used partly because improvements in clinical organisation for patients whose cancer was detected through screening contrasted sharply with the lack of equivalent progress in organisation of services for patients who were symptomatic: population screening<sup>6</sup> was introduced within each region from 1988 to 1991. The case for specialist teams was made more clear in this specialty than other specialties, especially by the British Breast Group.<sup>7</sup> An unrelated, but nonetheless active, issue at that time was pressure from women who had had adverse effects after radiotherapy for breast cancer through the Radiotherapy Action Group Exposure (RAGE).<sup>8</sup>

Public and political perceptions, as portrayed by the media, centred on what was described as the cancer lottery. Although this term is usually associated with differential access to expensive services (typically new drugs) depending on place of residence, the meaning of this term was different in the run up to the Calman–Hine report. At that time, the term described a state of affairs in which the chances of positive or negative outcomes for an individual patient were determined by their access to cancer specialists.<sup>9,10</sup> The initial referral to hospital was the key to this lottery, in that patients referred to specialists in the type of cancer they had were more likely to receive good and appropriate management than were those who were referred to non-specialists. Those referred to non-specialists (in oncology), ie, general surgeons or physicians who manage quite small numbers of patients with any given cancer type every year, were less likely to be managed actively and to receive the best care. Descriptive reports<sup>11–15</sup> from this time all showed substantial variability in services for which there was no obvious justification.

Variability in outcome was also crucial. The first products of the European cancer registry-based study of survival and care of cancer patients initiative (EUROCARE)<sup>16</sup> were population-based systematic comparisons of survival between different European countries, which allowed more objective international comparisons of outcomes than had been possible previously. In general, outcomes were worse in the UK

for most types of cancer compared with other countries, although the few exceptions were the types of cancer for which the UK had already achieved substantial clinical specialisation (eg, testicular cancer and lymphoma).

These issues on their own might not have led to a coherent national response without serendipity. The chief medical officers of England and Wales both had backgrounds in cancer and had worked with patient groups. They were well placed to make judgments about the issues in cancer care and the solutions that might be effective, which equipped them to put the case for change to government. The shared determination of Calman and Hine to take this issue on, and their success in obtaining the necessary political mandate was crucial, although political support was unlikely to have been reluctant in either England or Wales. Scotland<sup>17</sup> and Northern Ireland<sup>18</sup> adopted similar policies.

The chief medical officers used an unusual mechanism to develop their cancer policy. Although a committee already existed—a subcommittee of the standing medical advisory committee called the standing subcommittee on cancer (the only standing subcommittee)—the chief medical officers elected not to use it, perhaps because it had produced the previously ineffective Bagshawe report.<sup>5</sup> In disbanding this committee, Calman and Hine risked negative reactions from medical organisations, nonetheless they established a new group, the expert advisory group on cancer, specifically for their purposes. This group was unusual in that it reported to the two chief medical officers rather than to the Departments of Health, or to ministers. The expert advisory group on cancer was small, with only 12 members apart from the chief medical officers plus support staff. Membership was personal not representative, not all relevant professions or medical disciplines were included, and people selected were skilled in their areas. The only input from patients occurred shortly after the group had begun its work. The group had a wide mandate and had freedom to devise an appropriate policy, which was shaped by the members with support from the civil service.

The policy-development process included a serious attempt to assess evidence on topics identified by the group, which was acknowledged in a short annex to the report; an account of the evidence was published separately.<sup>19</sup> Although not evidence-based in the modern sense of the use of explicit methods to search for and assess studies, it marked a genuine attempt to introduce and assess key evidence. The expert advisory group on cancer recognised the need to both build the case for change and support for its main recommendations if the report was to change practice. Thus, the recommendations of the expert advisory group on cancer rested on specific strands of evidence, which, although not necessarily conclusive, were consistent with the suggested way forward.

### What did the policy aim to achieve?

The Calman–Hine report began with seven principles to govern the provision of cancer care (panel). These principles placed concerns for the patient and their needs at the heart of policy in response to many accounts of unsatisfactory experiences from patients with cancer. The first principle has been quoted widely and remains an ambitious statement of the goals of policy. “All patients should have access to a uniformly high quality of care in the community or hospital wherever they live to ensure the maximum possible cure rates and best quality of life. Care should be provided as close to the patient’s home as is compatible with high-quality, safe, and effective treatment.” The other principles covered important issues such as early identification of cancer, availability of national screening programmes, centrality of primary care, and monitoring of incidence, management, and outcomes through cancer registration; the report did not cover prevention.

The recommendations dealt in broad terms with the structures and processes needed for the safe and effective delivery of diagnostic, treatment, and palliative services for patients with all types of disease. The recommended structure concentrated on equipping local district hospitals (to be called cancer units) to deal effectively with referrals from primary care and with the diagnosis, staging, and management of patients with common cancers. Furthermore, for the first time in the UK, the policy set out clear roles for cancer centres, over and above the provision of radiotherapy services. These roles centred on patients with intermediate frequency cancers and rare cancers or those who needed complex interventions.

The interactions between components of the new system envisaged for cancer care were dealt with in recommendations on communication and clinical networking. The Calman–Hine report described processes for linkage of hospital services at different levels and ensuring that these services were well connected to primary and palliative care. A clear vision was formed for different parts of the NHS, which included many institutions that would collaborate to deliver the overall cancer service in which all have specific roles: a theme picked up in the subsequent development of national service frameworks for other diseases. Although networks were referred to as organisational entities, particularly in relation to drawing clinicians together across networks to decide matters of clinical policy and direction, they did not have the substance and clarity that eventually characterised the modern cancer network organisation after the NHS Cancer Plan. Nonetheless, the emphasis on close collaborative interactions between hospitals was an important theme within the Calman–Hine report, particularly because the competitive behaviours dictated by market-style NHS reforms were working in the opposite direction. The Calman–Hine report also highlighted the importance of

#### Panel: The Calman–Hine report: seven principles to govern the provision of cancer care

- Access to uniform high-quality care in the community or hospital
- Early identification of cancer and availability of national screening programmes
- Patients to be given clear information at all stages
- Services to be patient centred
- Centrality of primary care and effective communications
- Psychosocial aspects of care are important
- Cancer registration and monitoring of treatment and outcome are essential

links between service delivery and clinical research, anticipating the development of the national cancer research network<sup>20</sup> in 2001.

The most radical and far-reaching feature of the policy was its challenge to the way many NHS clinical services had previously been organised. Calman–Hine required a fundamental shift from a substantially general service model, backed by specialist oncologists, into an overtly specialist cancer service.

The model proposed that all patients with cancer were seen by specialists in their cancer type. These specialist surgeons or physicians were required to work closely with colleagues in multidisciplinary teams composed of diagnostic disciplines, surgical and non-surgical oncologists, and nurse specialists. The intention was that team members, and the team as a whole, were to be specialists in the type of cancer concerned and to jointly decide on management of individual patients. Thus, the policy sought a double transformation from patient access direct to specialists rather than generalists; and from clinicians working individually (who choose whether to refer patients on to colleagues) to an overtly multidisciplinary model.

The report was broad in scope, with few numbers and no costs specified. Explicit references to new money might have posed serious risks to its publication in view of the political climate of the day. Its importance lay in the extent to which its recommendations departed from previous assumptions about the organisation and delivery of services, particularly in hospitals. Although the ideas expressed were in themselves neither new nor revolutionary, setting them out so clearly marked a substantial departure from much that had been done before. What was new and revolutionary was that these changes were made the centrepiece of cancer policy.

The Calman–Hine report was not detailed. The stated intention was to follow the policy framework with detailed policies for each cancer type. Thus, the accompanying circular<sup>2</sup> announced the Department of Health’s intention to instigate a rolling programme to prepare evidence-based guidance that covered services for specific types of cancer, starting with common cancers. This process

began soon after publication of the report, and reported initially to the newly established clinical outcomes group, cochaired by the chief medical and nursing officers of England. Consequently, the project initially attracted the epithet of clinical outcomes group guidance, although it is now referred to as the improving outcomes guidance. These publications provided essential detail about services for every type of cancer (such as personnel, facilities, clinical organisation, and diagnostic and therapeutic modalities), and published detailed summaries of the research evidence. For every new topic, the multidisciplinary approach to delivery of care was amplified in detailed recommendations. The improving outcomes guidance series was a vital extension to the original report, with fresh topics being published steadily over the ensuing decade, coming under the UK National Institute for Health and Clinical Excellence in 2000. The improving outcomes guidance series provided the NHS with the service models for each type of cancer and provided the missing detail to implement the intentions of the Calman–Hine report.

### Was the policy implemented?

The context for implementation of the new policy turned out to be mixed, with forces acting for and against. The general attitude was more favourable than expected, encouraging change to clinical practice, and including requirements for clinicians to participate in audit, an important initiative in NHS research and development and a rising interest in evidence-based medicine. The movement towards clinical governance was under way, with growing acceptance that clinicians needed to look more carefully at their practice.

The prevailing general model with low caseloads for many complex procedures (individual or institutional) invited the challenge that in many situations such procedures were inherently undesirable and sometimes unsafe. Although some evidence supported this view at the time,<sup>21,22</sup> the evidence increased substantially over the next decade and at least five systematic reviews have now been done.<sup>23–27</sup> These reviews showed consensus in some important areas such as upper gastrointestinal surgical oncology.

The practical tasks of implementing the new policy began in a less favourable climate. Although the NHS executive were thought to welcome the thrust of the new policy, continuing reforms were the priority. Thus, few if any mechanisms were available through which to promote implementation: it could be argued that the policy succeeded despite, rather than because of, early efforts at implementation. Two examples illustrate the point. Restructuring after NHS reforms left tensions between different organisational levels. Between 1994 and 1996, regional roles diminished as they became outposts of the NHS executive. Devolved commissioning at health authority and primary care levels was intended to rise to the challenge of shaping services and allocating resources.

The implementation of clinical policies was therefore seen in concept as a devolved matter, despite the untested nature of these systems. The separation and lack of coterminosity between those who commissioned and those who managed cancer services added to the practical difficulties. In short, no effective management processes were available to ensure that such a complex clinical change agenda was implemented. Overt national leadership of changes in cancer services would have seemed inconsistent with this context. An early half-hearted attempt was made to allocate a lead role for cancer to one region, hoping that this region would develop approaches that others could adopt. This allocation had no positive consequences and might have held other regions back initially. The movement towards specialist care advocated in the Calman–Hine report could not be achieved without some human-resource consequences, most likely increased demand for trained site-specialists. This anticipated pressure on manpower supply required training numbers to be expanded. Members of the expert advisory group attempted to stimulate action from the NHS executive. On the basis of crude assumptions, they proposed additional one-holder training posts in key disciplines and areas with particular shortage until long-term training numbers had been determined. No action resulted. Had additional specialists in key medical disciplines and other professions emerged within 5 years, the outcome might have been more favourable. Instead, 5 years later, the NHS cancer plan had to address the resulting serious manpower constraints. Progress was therefore much slower than it could have been.

So did implementation move forward? After the Secretary of State launched the policy, movement in England was achieved more through advocacy and professional leadership than through the management process. The chief medical officers, members of the expert advisory group on cancer, and other influential figures who recognised the importance of the recommendation introduced the argument to professional organisations, clinical colleagues, and managers. They also involved patients and patient groups. This approach increased support for the principles and for Calman–Hine and generated a sense of momentum, challenging the status quo. Translation of this momentum into practical progress at operational level was the biggest difficulty initially. One region, the West Midlands, responded quickly to the new policy, creating local mechanisms to encourage and support implementation, although they had a different approach to networks compared with those that emerged later in other parts of the country.

In 1996, 1 year after publication; a circular<sup>28</sup> was published that set out (for the first time) a more ordered approach. Most of this proposal was expressed generally, more exhortation than concrete requirement, with no explicit targets. Objectives were defined loosely and whether, or how, objectives would be monitored and organisations held to account was unclear. The focus was



on the need for health organisations to identify and designate their cancer units and centres and promote movement towards clinical specialisation—a welcome but modest step that did not address the larger issues of manpower or resources. In fact, the move offered no commitment to funding obvious shortfalls in manpower and facilities and did not introduce a central structure or management process to drive forward implementation.

This circular was followed closely by the first improving outcomes guidance for breast cancer.<sup>29</sup> Because many public concerns were in this area, publication of detailed recommendations for development of breast services was essential. For the first time local arrangements could be compared directly with the service model needed. The improving outcomes guidance was an important force for change, providing a sound basis for local planning.

These two initiatives increased activity, particularly from regional offices of the Department of Health, which showed much greater engagement with the issues. Various new mechanisms were initiated to promote implementation of Calman–Hine in every part of the country, and many health authorities began to use their commissioning roles to engage with the cancer agenda.

By contrast, the position in Wales after publication was handled differently. The first year or so was dominated by moves to establish a dialogue with clinicians and wider health-service interests about the future of Welsh cancer services rather than by immediate moves to implement Calman–Hine. The Welsh Office commissioned a review of cancer services in Wales, the Cameron report,<sup>30</sup> which formed the basis for their implementation strategy. This report had three important features. It put particular stress on the formation and development of

multidisciplinary teams and on the development within Wales of their own standards for cancer services, beginning with breast and colorectal cancer<sup>31,32</sup> (published in 1998; this set of documents now covers nine types of cancer and palliative care). A new organisation, the cancer services coordinating group, was established to oversee the changes and to advise the Welsh Office—later the Welsh Assembly Government—on cancer policy.

After a change of national government in 1997, the Department of Health allocated £10 million in England for breast cancer as specific ring-fenced funds.<sup>33</sup> Although that figure seems modest in retrospect, it was replicated for bowel cancer<sup>34</sup> and lung cancer<sup>35</sup> when each new improving outcomes guidance report was published. These resources were crucial to move implementation into the managerial mainstream. The combination of cancer guidance and ring-fenced resources stimulated clinicians, hospital managers, and commissioners to start development of shared plans that were based on agreed local priorities. Equivalent funds were made available in Wales for breast cancer and colorectal cancer, but not for lung cancer.

The political change in 1997 could have disrupted momentum, with new ministers bringing fresh priorities. However, it did not disrupt it, suggesting that the logic underlying the Calman–Hine report was compelling. The task of improving cancer services was endorsed by the incoming government, made easier perhaps by the fact that the Calman–Hine report had been professionally rather than politically driven. However, the pace of change remained slow and public concern about outcomes and investment continued.

The government responded with the Downing Street cancer summit of 1999, which resulted in the creation of a new post of national cancer director in 1999, followed in 2000 by publication of the first national cancer plan.<sup>4</sup> This plan took the Calman–Hine report as its starting point and extended its scope in many areas. It was a practical document that set out what needed to be done: it had numbers and costs. In particular, it attempted to deal systematically with shortfalls in manpower and facilities, set some clear objectives, identified resources, and adopted specific targets. These plans focused on waiting times and delays in access to diagnostic and treatment services. Implementation of the series of improving outcomes guidance reports became an explicit requirement for the NHS. The programme of work to assess new cancer drugs through the National Institute of Health and Clinical Excellence was expanded. The other UK countries also appointed cancer directors, although the Welsh post was announced somewhat later than in England, in 2002.

One key mechanism to drive implementation was national external peer review, which had already been used successfully in some English regions (figure 2) between 1997 and 2002. The first regions to use this technique extensively were the West Midlands and



Victor Habbick Visions/Science Photo Library

Figure 2: National external peer review had been successful in some regions of England

Northern and Yorkshire, both of which undertook peer review to stimulate action and chart progress. These peer reviews were large-scale exercises based on the Calman–Hine report and improving outcomes guidance recommendations. Peer review achieved its most developed form in the Trent region where a formal peer-review-based accreditation system was established by use of explicit standards written for the purpose. This system was the forerunner for the national system. The first national cancer standards for peer review (developed from the Trent experience) were published early in January, 2001, and used for the first round of nationwide peer review later that year. The process was managed regionally and central coordination was limited, resulting in more variability than was desirable. It was nonetheless a huge advance.

Peer review offered several benefits. Notably, it raised the profile of cancer services within organisations and it identified serious issues thus ensuring safety of services and showing other weaknesses in services that could be addressed. The processes of visiting and being visited provided development and learning for all involved, encouraging dissemination of good practice, and improving the quality and effectiveness of care. The focus on the totality of care was felt to lead to improved patient and carer experiences.

Evaluation of the first round of the national scheme<sup>36</sup> suggested that these goals were realistic. The process stimulated the right changes and was an effective means of monitoring.

### Has it worked?

Assessment of whether the policy worked could be made by looking for evidence of improvements in the way care is delivered and in the outcomes experienced by patients. The policy was innovative raising a further issue as to whether the report had any effect beyond cancer care.

The decade since the Calman–Hine report has seen much activity and many changes in the way cancer services are organised and delivered in the UK. Patient groups, cancer clinicians, and health-service managers would agree with the proposition that, taken overall, the changes are a substantial improvement. However, such assertions need justification.

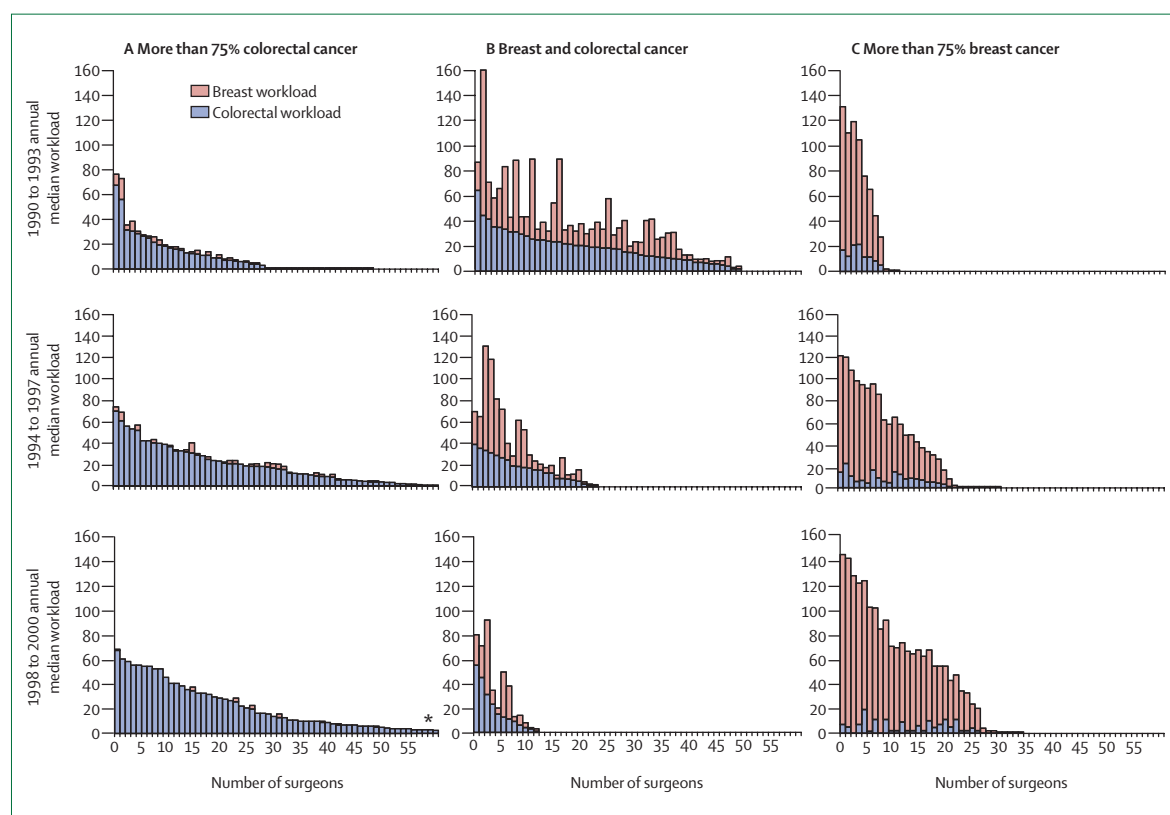
The Calman–Hine report is difficult to assess because it had so many facets. Other forces also shaped health-care delivery at that time. Therefore, the extent to which specific changes can be attributed to cancer policy rather than other effects such as local pressure, is hard to ascertain reliably. Calman–Hine promoted change on a broad front including raising public awareness and promoting patient involvement, referral policies, clinical teams, specialisation, advances in diagnosis and treatment, and improved facilities. These shifts have many potential markers in the structures or processes of care, for example figure 3 shows the pace of movement towards surgical site-specialisation after Calman–Hine

for one part of the UK. Taken together, any or all of these changes could have affected the quality and effectiveness of cancer care, leading to better outcomes. Peto and colleagues<sup>37</sup> commented on the rapid decline in mortality from breast cancer in the UK, concluding that it could not be credited to one or two advances. They attributed it to many small changes, which cumulatively caused a far larger effect than any one factor could achieve. These changes might also describe improvements in cancer outcomes more generally.

Several studies<sup>38–41</sup> have assessed cancer mortality trends in Europe. All these reports show the UK more positively compared with the survival comparisons before the Calman–Hine report. Improvements in UK mortality in the 1990s have been greater than those in many other countries in the European Union. Boyle and co-workers<sup>38</sup> assessed mortality up to 2000 for member states of the European Union and concluded that the UK was one of the top four countries in the proportionate reduction in cancer mortality. Such comparisons are affected by changes in the incidence of smoking-related cancers, which has a fairly large effect on trends, which are very different in France compared with the UK.<sup>40</sup> High mortality in women with lung cancer (smoking-related) and breast cancer (not smoking-related) in the UK determined the comparative position of the UK in a European study covering 25 countries.<sup>41</sup> The relative position of men was affected less.

Attribution of improvements in mortality to improvements in cancer services is therefore difficult. Doll and Boreham<sup>40</sup> analysed cancer mortality trends by exclusion of lung cancer for a small group of socioeconomically comparable countries (France, Netherlands, Sweden, Italy, and the UK) for periods of between 20 and 50 years up to either 2001 or 2002. They regarded cancer mortality as the best criterion to judge the success of any system of care and treatment of patients with cancer. They concluded that the death rates from cancer in the UK were not generally worse than those in other economically comparable European countries, and were in some cases better. Crucially for the assessment of cancer policy, they showed that this had not been the case for breast and colorectal cancer before 1990 and the recent decline in mortality from both these diseases could, in their view, have resulted from improvements in treatment and consequently in survival.<sup>40</sup> The resulting standardised cancer mortality rates and trends showed the UK to be in a favourable position for both men and women. For colorectal cancer, the UK's position was generally in the mid-range: the rate of decline in mortality between 1990 and 2000 was the greatest of the five countries. For testicular cancer and Hodgkin's lymphoma, selected for their relevance to treatment services, all five countries had similar trends for both diseases.

Such observations on improvements in mortality are consistent with the aims of the Calman–Hine report and



**Figure 3:** Yearly median workloads of surgeons operating on patients with breast and colorectal cancer

Yorkshire region, UK, population 3·6 million 1990–2000. \*This graph truncated at surgeon number 60. A further 29 surgeons had median workloads of less than two operations a year.

support the implication that worthwhile changes were made in the delivery of cancer services. However, they cannot be regarded as conclusive proof that the initiative had a positive outcome.

The Commission for Health Improvement and Audit Commission<sup>42</sup> attempted to assess the Calman–Hine report more broadly in 2001, concluding that the report was important “in developing good practice and bringing cancer to the forefront of the health agenda”. Their review credited the Calman–Hine report as having an important effect on the development of multidisciplinary working and in causing staffing and equipment issues to be faced. They acknowledged the importance of the improving outcomes guidance. However, they criticised the slow and patchy way in which the policy had been implemented and thought that patient involvement had a long way to go.

The national audit office did a series of assessments covering the decade since the Calman–Hine report, focusing on implementation of the NHS cancer plan.<sup>43</sup> Their review concentrated on England because the cancer plan was restricted to that part of the UK, covering cancer incidence, mortality, and survival<sup>44</sup> for the 30 years leading up to 2000. They gave a cautiously positive assessment. “England is continuing to improve on past performance in tackling the major cancers . . .”; and

“England’s position in terms of the proportion of people who die from cancer is improving relative to other comparable countries . . .”<sup>43</sup>

The assessment of national cancer peer review<sup>36</sup> highlighted important advances in establishment of multidisciplinary teams and in progress towards greater specialisation that arose from the Calman–Hine report. Some researchers assessed specific changes promoted by the Calman–Hine report, such as progress on the target in the report for more oncology sessions in local hospitals,<sup>45</sup> early moves to develop cancer networks,<sup>46</sup> surgical subspecialisation,<sup>47,48</sup> and the outcomes achieved by different kinds of service.<sup>49</sup> All the researchers showed changes consistent with the specific aims of cancer policy.

The development of a multidisciplinary team working in Yorkshire for the common cancers was assessed critically,<sup>50</sup> showing that surgical site-specialisation and the development of multidisciplinary teams had changed substantially. Because changes in breast services were evident before publication of the Calman–Hine report, Morris<sup>50</sup> concluded that colorectal cancer had benefited most clearly from the policy and that the policy had led to improved services, site-specialisation, and multidisciplinary working, and has led to “superior care and reduced risk of death”.

Patient-centred care is difficult to assess objectively because few repeat studies of groups or populations using comparable methods are done and both the methods used, and the context for particular pieces of work, vary greatly. The first national patient surveys on cancer was done in 2000 and a smaller repeat survey in 2004 showed that changes were in the right direction. The NHS cancer plan tackled many themes such as patient satisfaction more systematically than previously; indeed the first survey of patients with cancer can be interpreted as if it had been intended as a baseline study for the NHS cancer plan. The national audit office assessment<sup>51</sup> of patients was positive, but concentrated on the period after 2000.

Patients with cancer and their carers are involved much more extensively in the work of the NHS than they had been in the past, as shown by their formal inclusion in cancer networks, in the production of National Institute of Health and Clinical Excellence guidance, and in involvement in cancer research through the national cancer research network. None of these applied in 1995. The only feature of patient involvement to have been assessed externally was cancer partnerships within the 34 cancer networks in England.<sup>52</sup> This study reported that partnership groups were making a difference and that the range and depth of activities was impressive.

The introduction after the Calman–Hine report of a new structure for the delivery of cancer services, greater specialisation by individual clinicians treating patients with cancer, and formation of explicit evidence of greater involvement in multidisciplinary cancer teams, has transformed the clinical organisation of cancer services within the UK. Rational divisions of responsibility between locally and more centrally delivered services have gradually been implemented after publication of improving outcomes guidance for the intermediate frequency cancers such as upper gastrointestinal and gynaecological malignant diseases. These have been very positive achievements.

### Was there any effect beyond cancer care?

An indirect consequence of the Calman–Hine report was its effect on health policy more generally. 1 year into a new government (1998), the Secretary of State announced that a new blueprint for care would be developed to provide uniformly high standards of care in heart disease and mental health. This announcement anticipated the national service frameworks, not just for these topics, but for many others. The press release<sup>3</sup> showed that the blueprints drew directly on the experience of the Calman–Hine framework for cancer services and that the success attributed to the Calman–Hine report helped to make the decision to extend the ideas into other complex disease areas: an important development in health policy.

### Are there lessons for future health policy?

Two important themes emerged from the Calman–Hine report and both transcend cancer as a topic. The first is

implementation. Complex long-term policies do not implement themselves, and cannot safely be left to the usual operational arrangements within the NHS. Implementation of complex changes needs a strategy that is as well thought out as the policy itself, and needs to be led and managed by those who understand the intricacies of the issues. The second theme lies in the interaction between different sorts of health policy: notably policies for improvement of specific service quality and outcomes (as in cancer) on the one hand, and systemic NHS reforms on the other.

The Calman–Hine report showed the importance of building the case for change as well as getting the recommendations right. Cancer services had clearly not been working well, and fundamental change was necessary. The many weaknesses in cancer services were compounded by shortfalls in staff and facilities. Promoting a radical policy at a time when the Department of Health was unwilling to contemplate allocation of new resources took much political skill and included the risk of failure. The supportive response from within the NHS was undoubtedly crucial in creation of the momentum that ultimately led to substantial improvements in UK cancer care. The Calman–Hine report was unusually successful in building a broad coalition of support including clinicians from many professions and disciplines, patients, and managers.

Despite its success in building support, the success of the Calman–Hine report was constrained and delayed by weaknesses in implementation. A well-founded strategy for implementation at the outset would have made a substantial difference to the pace and extent of change over the first 5 years. Initiatives to improve clinical quality inevitably take time to achieve long-term shifts in the nature of services. This improvement usually necessitates careful management of resources, including changes in the use of facilities, and often needs new investment. Services for complex health or disease problems such as cancer require many separate elements to work in combination. These will commonly be the responsibility of different NHS organisations or of external organisations, all of which have their own priorities and internal constraints that affect their freedom of action. These constraints frequently prevent various parties from agreeing on and delivering necessary changes without concerted mechanisms to maintain the thrust of policy and affect the decisions of many health organisations. Otherwise the chances of success are limited.

Health organisations should be persuaded and often reminded of their responsibilities to support efforts to improve the quality of services over a long time. Such a strategy includes putting in place and maintaining the necessary operational clinical policies across different provider institutions and aligning facilities and staff (clinical and support) across many health organisations.



Cancer services have a natural geography that is defined by the location of specialised and centralised elements of service and the associated clinical links to community services, primary care, and other hospitals, which together define local patient pathways and established lines of referral. These are functional entities for operational purposes and thus define cancer networks. Individual (managers and clinicians) and institutional self-interest should be subordinated to securing and delivering the wider pattern of service necessary to achieve the best outcomes for patients. Maintenance of the primacy of this approach can seem an unequal struggle, and fresh efforts are needed regularly to ensure that the requirements of running such a complex clinical system of care are monitored carefully and performance assessed regularly.

Cancer networks have played a vital role in achieving the aims of the Calman–Hine report despite being non-statutory and having little direct control over mainstream NHS resources. National coordination of their efforts has provided important support on many issues. Although all types of statutory NHS organisation have contributed, none have had the mandate to carry the overall agenda for cancer forward in the way that cancer networks have done. Their durability, despite the difficult environments in which they have had to operate, has been essential to the development and implementation of local plans, monitoring progress, and accountability.

The NHS is undergoing a further bout of radical structural reform similar in design to that of the internal market reforms that provided the backdrop to the Calman–Hine report a decade ago. If anything, the present environment seems less stable than during the earlier reforms and is potentially more hazardous in its consequences for the safe and effective delivery of cancer services. Experience of repeated organisational changes within the UK health-care system invites the conclusion that such changes do not necessarily lead to the gains that were hoped for.<sup>33</sup>

The systemic reforms of the NHS has an obvious conflict with the need for specific changes in clinical organisation and resources designed to deliver improvements in service quality and outcome in a speciality such as cancer. These different types of policy worked against each other when the Calman–Hine report was originally introduced, and some people thought that NHS reforms would generate similar difficulties, including the overload of management systems distracted from their core responsibilities by the demands and uncertainties of organisational change. Difficulties could also arise if the objectives of organisational change contrasted fundamentally with the conditions necessary for the careful development of complex clinical services to patients, which exist within different paradigms. Difficulties could also be a product of the nature of the organisational changes themselves. For example, three potential consequences of present

#### Search strategy and selection criteria.

References were searched via PubMed by use of several search terms, each used independently before Nov 8, 2005. The terms were “Calman–Hine”, “cancer policy”, “cancer policy implementation”, and “cancer lottery”. Grey literature (papers and documents produced by organisations) was also searched through Department of Health and key government agency websites, and hand searching of bibliographies in official publications (where these are supplied).

systemic reforms include, reduction of opportunities for diagnostic disciplines to take a specialist interest in cancer and to work closely with clinical colleagues in multidisciplinary teams; fragmentation of clinical roles and organisational responsibilities for different elements of cancer care; and decreasing incentives for health organisations to play a specified part within a wider system of service delivery.

These consequences could threaten the effective delivery of some cancer services because the organisational attributes intended to be the result of structural change are not consistent with those needed to achieve and enable complex clinical service models. Although some changes to services could be sufficiently well rooted to adapt and continue their functionality, others might not be sufficiently secure to withstand further challenges to the delivery of diagnostic and elective surgical procedures. The integrated service philosophy within the Calman–Hine report is at odds with some thinking, such as introduction of new providers with limited remits and breaking down of complex systems of care into manageable pieces so that these can then be delivered by fresh providers in different settings. The Calman–Hine report looked for continuity in clinical involvement (staff and health organisations)—a model that might now seem secondary to speed of access or choice of provider.

Alternatively, the above assessment may be too pessimistic. The organisational context built up over the last 5 years could provide an effective counterbalance to the potential issues arising from wider health reform. There is no compelling reason to believe that the roles held by cancer networks cannot continue successfully in an NHS populated by foundation hospitals, new treatment facilities, fewer primary-care trusts and changes in strategic health authority numbers and responsibilities. In particular, the established system of peer review based on detailed and comprehensive measures has a strong track record, and seems to enjoy support within the service and the approval of the health-care commission. The peer-review system is precisely the type of mechanism needed to monitor services and generate improvements in a plural provider environment. Therefore, continuation of the use of this system beyond the present planned review programme (ending in 2007) is crucial. Multidisciplinary teams of specialists are

central to the measures used in cancer peer review and the established model for clinical decision making. They are now well established in many settings and robust enough to survive present insecurities.

The fact that cancer services have developed since the Calman–Hine report and after the NHS cancer plan, means that most of the desired clinical structures are now in place, or planned for the near future, and better processes of care are under way in most places. This development was the result of a sustained effort by many people, sometimes through the established systems of NHS management and control, sometimes despite them. Much still remains to be done to consolidate past policy and plans, apart from addressing newer issues needing attention. The climate created by NHS reforms will make that difficult, if for no other reason than the confusion engendered by yet more structural upheaval. This climate could put past achievements at risk unless the unintended adverse consequences of reforms are identified and addressed successfully.

An up-to-date recast of the NHS cancer plan is needed, and should have two main aims. The first aim would be to plan for continued development of cancer services that are consistent with the aims of cancer policy. The second would be to address the changing NHS environment and express the plans in terms that facilitate maintenance and development of services in the new context, taking into account how power will be exercised and resources controlled.

Politically, more attention is needed to answer the question as to how rational service models for complex clinical fields such as cancer fit into wider systemic reform of the NHS. To have two types of policy in play and simply hope their aims can coexist successfully is not good enough. If cancer and other complex services development is to be enabled rather than disabled by present and future political reforms, then the conditions necessary to operate these policies effectively should be incorporated into the development of a future NHS model. Otherwise, and despite apparently genuine political support for the cancer agenda over the past 10 years from both main parties when in government, a fear remains that political fascination with health-care reform means that the practical and often mundane tasks necessary to improve the quality and outcomes of complex services will always come second.

#### Conflicts of interest

I declare no conflicts of interest.

#### References

- Department of Health. A policy framework for commissioning cancer services: a report by the Expert Advisory Group on Cancer to the Chief Medical Officers of England and Wales. London: Department of Health, 1995.
- NHS Executive. A policy framework for commissioning cancer services. Circular EL(95)51. London: Department of Health, 1995.
- Department of Health. New care blueprints to provide uniformly high standards of NHS cardiac, cancer, and mental health care. Press release June 26, Department of Health, 1998.
- Department of Health. The NHS cancer plan, 2000. [www.doh.gov.uk/home/fs/en](http://www.doh.gov.uk/home/fs/en) (accessed Feb 16, 2006).
- Bagshawe KD on behalf of the Standing Medical Advisory Committee. Acute services for cancer: report of a Working Group. London: Standing Medical Advisory Committee, 1984.
- Department of Health. Cancer screening. Circular DA (87)9. London: Department of Health, 1987.
- Report of a working party of the British Breast Group. Provision of breast services in the UK: the advantages of specialist breast units. London: British Breast Group, 1994.
- Radiotherapy Action Group Exposure (RAGE). [http://www.guidance-information.org.uk/search\\_index\\_detail.lasso?RecID=G30370](http://www.guidance-information.org.uk/search_index_detail.lasso?RecID=G30370) (accessed March 13, 2006).
- BBC News. <http://news.bbc.co.uk/1/hi/uk/30277.stm>. (accessed March 6, 2006).
- Health Which. Best care for breast cancer. London: Consumers' Association, 1996: 126–29.
- Sainsbury R, Rider L, Smith A, MacAdam A. Does it matter where you live? Treatment variation for breast cancer in Yorkshire. *Br J Cancer* 1995; **71**: 1275–78.
- Harries SA, Lawrence RN, Scrivener R, et al. A survey of the management of breast cancer in England and Wales. *Ann R Coll Surg Engl* 1996; **78**: 197–202.
- Richards MA, Wolfe CD, Tilling K, et al. Variations in the management and survival of women under 50 years with breast cancer in the South East Thames region. *Br J Cancer* 1996; **73**: 751–57.
- Chouillet AM, Bell CMJ, Hiscox JG. Management of breast cancer in Southeast England. *BMJ* 1994; **308**: 168–71.
- Morris J. Regional variation in the surgical treatment of early breast cancer. *Br J Surg* 1992; **79**: 1312–13.
- Berrino F, Sant M, Verdecchia A, et al. Survival of cancer patients in Europe: the EURO CARE Study. *IARC Sci Publ* 1995; **132**: 1–463.
- Scottish Office. Commissioning cancer services in Scotland: a report by the Scottish Cancer Co-ordinating and Advisory Committee to the Chief Medical Officer. Edinburgh: Scottish Office Department of Health, 1996.
- Campbell H. Cancer services: investing for the future. Belfast: Northern Ireland Department of Health and Social Services, 1996.
- Selby P, Gillis C, Haward R. Benefits from specialised cancer care. *Lancet* 1996; **348**: 313–18.
- Department of Health. New cancer research co-ordinating centre, Leeds. Press Release, Department of Health, Nov 17, 2000.
- Sainsbury R, Haward B, Rider L, et al. Influence of clinician workload and patterns of treatment on survival from breast cancer. *Lancet* 1995; **345**: 1251–52.
- Gillis CR, Hole DJ. Survival outcome of care by specialist surgeons in breast cancer: a study of 3786 patients in the west of Scotland. *BMJ* 1996; **312**: 145–48.
- Halm EA, Lee C, Chassin MR. Is volume related to outcome in health care? A systematic review and methodologic critique of the literature. *Ann Intern Med* 2002; **137**: 511–20.
- National Cancer Policy Board, Institute of Medicine. Division on Earth and Life Studies, National Research Council. Interpreting the volume-outcome relationship in the context of cancer care. Washington DC: National Academy Press, 2001.
- Tiesberg P, Hansen F, Hotvedt R, et al. Patient volume and quality: a methodologically based international evidence review. Oslo: Foundation for scientific and Industrial Research at the Norwegian Institute of Technology (SINTEF Unimed), 2001.
- Hillner BE, Smith TJ, Desch CE. Hospital and physician volume or specialisation and outcomes in cancer treatment: importance in quality of cancer Care. *J Clin Oncol* 2000; **18**: 2327–40.
- NHS Centre for Reviews and Dissemination, Centre for Health Economics on behalf of the York Health Economics Consortium. Concentration and choice in the provision of hospital services: report 8. York: NHS Centre for Reviews and Dissemination, 1997.
- NHS Executive. A policy framework for commissioning cancer services. (Circular) EL(96)15. London: Department of Health, 1996.
- Cancer Guidance sub-group of the Clinical Outcomes Group. Improving outcomes in breast cancer. Manual Cat.Nos.96 CC0021 & Research Evidence 96 CC0022. London: Department of Health, 1996.
- NHS Wales. Cancer services in Wales: volume1. A report by the Cancer Services Expert Group (Cameron Report). Cardiff: Welsh Office, 1996.

- 31 Cancer Services Co-ordinating Group. All Wales minimum standards for breast cancer services. Cardiff: Welsh Office, 1998.
- 32 Cancer Services Co-ordinating Group. All Wales minimum standards for colorectal cancer services. Cardiff: Welsh Office, 1998.
- 33 NHS Executive. Changing the internal market: annex E investing in breast cancer services. (Circular) EL(97)33. London: Department of Health, 1997.
- 34 NHS Executive. Improving outcomes in colorectal cancer: guidance on commissioning cancer services. (Circular) EL(97)66. London: Department of Health, 1997.
- 35 NHS Executive. Improving outcomes in lung cancer: guidance on commissioning cancer services. (Circular) HSC 1998/114. London: Department of Health, 1998.
- 36 Scrivens E, Coleman L, Levy D, et al. Evaluation of national peer review. Keele: Health Care Standards Unit, Keele University, 2001.
- 37 Peto R, Boreham J, Clarke M, et al. UK and USA breast-cancer deaths down 25% in year 2000 at ages 20–69 years. *Lancet* 2000; **355**: 1822.
- 38 Boyle P, d'Onofrio A, Maisonneuve P, et al. Measuring progress against cancer in Europe: has the 15% decline targeted for 2000 come about? *Ann Oncol* 2003; **14**: 1312–25.
- 39 Quinn MJ, d'Onofrio A, Møller B, et al. Cancer mortality trends in the EU and acceding countries up to 2015. *Ann Oncol* 2003; **14**: 1148–52.
- 40 Doll R, Boreham J. Recent trends in cancer mortality in the UK. *Br J Cancer* 2005; **92**: 1329–35.
- 41 Levi F, Lucchini F, Negri E, La Vecchia C. Trends in mortality from major cancers in the European Union, including acceding countries, in 2004. *Cancer* 2004; **101**: 2843–50.
- 42 Commission for Health Improvement and the Audit Commission. National service framework assessments no 1. London: NHS Cancer Care in England and Wales, 2001.
- 43 National Audit Office. The NHS cancer plan: a progress report HC 343 2004–2005. London: National Audit Office, 2004.
- 44 National Audit Office. Tackling cancer in England: saving more lives HC 364 2003–04. London: National Audit Office, 2004.
- 45 Haward R, Amir Z. Progress in establishing non-surgical oncology within English cancer units. *Br J Cancer* 2000; **83**: 284–86.
- 46 Kewell B, Hawkins C, Ferlie L. Calman-Hine reassessed: a survey of cancer network development in England, 1999–2000. *J Eval Clin Pract* 2002; **8**: 303–11.
- 47 Golledge J, Wiggins JE, Callum MJ. Effect of surgical subspecialisation on breast cancer outcome. *Br J Surg* 2000; **87**: 1420–25.
- 48 Jolly K, Parry J, Rouse A, Stevens A. Volumes of surgery for breast, colorectal and ovarian cancer 1992–97: is there evidence of increasing sub-specialisation by surgeons. *Br J Cancer* 2001; **84**: 1308–13.
- 49 Stockton D, T Davies. Multiple cancer site comparison of adjusted survival by hospital of treatment: an East Anglian study. *Br J Cancer* 2000; **82**: 208–12.
- 50 Morris E. The impact of the Calman-Hine report on the processes and outcomes of care for Yorkshire's breast, colorectal and lung cancer patients. PhD thesis, University of Leeds, 2004, 247.
- 51 National Audit Office. Tackling cancer: improving the patient journey HC 288 2004–05 National Audit Office, 2005.
- 52 Sitzia J, Cotterell P, Richardson A. Formative evaluation of the cancer partnership project. London: Macmillan Cancer Relief, 2004.
- 53 Fulop N, Protosaltis G, Hutchings A, et al. Process and impact of mergers of NHS trusts: multicentre case study and management cost analysis. *BMJ* 2002; **325**: 246.