

Cancer research in the UK: areas of optimism and concern

**Summary of the third Annual Forum Lecture
delivered by Professor Alex Markham FMedSci,
Chief Executive of Cancer Research UK, on 7 March 2005
to an audience of Forum Members, Academy Fellows and guests**

There are some serious concerns about the current impact of cancer. In the developed world, cancer is the number one killer, recently replacing cardiovascular disease, partly as a result of developments in cardiovascular care. 1 in 3 of the population will be affected by cancer, and 1 in 4 will die as a result. The incidence of cancer is rising, partly as a consequence of our increased longevity. At present there are 270,000 new cases diagnosed in the UK every year with 160,000 deaths. However 5 year survival is rising, currently at a rate of around 1% a year.

There is a history of under-funding of cancer treatment in this country, and the rate of survival in the UK is significantly lower than that of other developed nations, including other countries on the European continent. However, this is in part due to the fact that many people present to a doctor at a more advanced stage of the disease. In addition, a serious social inequality also exists in cancer, `a patient in social class 1 who is diagnosed with breast cancer has around 8% better chance of survival than a patient in social class 5.

There are, however, many reasons for optimism. The publishing of the Calman/Hine report in 1995, the appointment of Mike Richards as National Cancer Director in 1999, and the development of the NHS Cancer Plan in 2000, are a paradigm for clear thinking, promising and delivering investment and setting performance targets – and it is important that these goals are achieved.

The medical profession often react to targets with alarm, but this needs to change. A more assertive role should be taken, whereby the profession begins to tell the Department of Health what it can deliver, and how much it will cost. **The NHS Cancer Plan** sets out some very clear targets: to save more lives; to get the right care to patients, for example tackling postcode prescribing; to set targets for how soon patients with suspected cancer should be seen, diagnosed and treated; and to tackle inequalities in treatment. The plan also sets out some examples of how to organise training, particularly in the area of cancer research.

Many of the commitments in the Plan have been delivered. The UK's annual spend on cancer has been increased by £0.5 billion to £4 billion (though this can be a difficult figure to quantify, as it is hard to determine how much of the spend on aspects such as surgery which are involved in the treatment of cancer should be included). However, this figure is still around 2.5 times lower than the US per capita spend on treatment.

Smoking was also targeted in the Plan, and it is disappointing that the Secretary of State for Health did not commit to ban smoking in public places in this year's White Paper, particularly given the number of other countries that have done so. The Cancer Plan will be judged on its success in 2010. Without serious action on smoking, however, it is unlikely that the targets set for the reduction of smoking will be met.

One of the most important recommendations set out in the Plan was the need for a **National Cancer Research Institute** (NCRI), to coordinate cancer research in the UK and to document activities to avoid duplication, both within the UK and internationally. In 2001/02 the process of mapping the portfolio of the NCRI was completed, and as a result five Strategic Planning Groups were created. These groups have now reported back; one result of this has been the creation of two major national projects on prostate cancer. Other outcomes include: a major effort to rebuild research in British radiotherapy; an initiative for palliative care, resulting in £5million in funding for this 'orphan' area; and work to define a strategy for lung cancer research. Another major project is the Cancer Informatics Initiative, which will act to pull together all of the information produced in these various research projects.

The National Cancer Research Network (NCRN) is a real success story. The Department of Health now provides £20 million in funding each year, which is used to fund around 400 nurses and data managers in the various networks, who work to recruit patients into research programmes. In 2002, the goal of increasing patient accrual rates to 7% from 3% in 2001 was set - the figure for 2004/05 has actually risen to 12% of newly diagnosed patients, and in some leading centres, 20% of patients are going into clinical trials. The success of the NCRN has led the government to propose setting up networks of this type for all other diseases, so that the success with cancer can be replicated.

Cancer Research UK has now existed in its current form for 3 years, and will spend £220 million on research in 2005/06. The original 'vision' of CRUK has been useful, but this needs to be revised to ensure that it provides the driving force that is needed. It is important for CRUK to set tough targets to maintain funding from its stakeholders, particularly given the aim to increase spending to £350 million by 2009.

CRUK is somewhat different to the other funding bodies. It has a Council of Trustees, but no-one with substantial funding from CRUK can be a trustee. As a result, most cancer researchers in this country are excluded, and so an external board of experts must be brought in, which makes setting strategy a more complicated process. Historically, CRUK has always funded research on a year-on-year-basis, as annual income is variable, which makes it difficult to commit to longer-term investment. This is a far from ideal situation, and makes it difficult to spend money flexibly.

Cancer Research Technology (CRT) is the technology transfer arm of CRUK, which aims to maximise cancer patient benefit from research funded by CRUK. CRT has taken 100 compounds into Phase I trials over the past 20 years, and with a 6% rate of conversion, this has been more successful than the average for the pharmaceutical industry. Each year around 10 compounds now enter clinical trials and there are plans to increase this activity. Currently CRT has 2 compounds in Phase III trials, 2 compounds entering Phase III, 10 compounds in Phase II and 9 in Phase I.

But some concerns remain. The European Clinical Trials Directive is likely to cause major problems - the current assessment is that it could double the cost of academic clinical trials, and thus cause serious financial difficulties. NHS Trust R&D departments, which are often the cause of delays in starting clinical trials, problems with NHS Research Ethics Committees, and the implementation of the Human Tissue Bill are all part of a general drift towards increased bureaucracy that threatens the progress of research in this country.

A final set of challenging targets: to achieve a state where there is no increase in age-adjusted incidence of cancer; 60% 5 year survival by 2020; and 100,000 extra Quality Life Years for cancer patients. These are all possible if we are prepared to refocus parts of the Cancer Research UK portfolio.

Jenny Steere, May 2005

Notes:

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The presentation slides that accompany this lecture are available on the Forum website http://www.acmedsci.ac.uk/f_forum.htm

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