

# nature medicine

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## Is the UK ready for an NCI?

Cancer is perhaps the number one disease focus in Britain today. When he came to power in 1997, Prime Minister Tony Blair promised to deliver the best cancer service in the world. He vowed to cut deaths from the disease by 100,000 a year, and has appointed a 'cancer czar' to modernize cancer treatment within the National Health Service. Now it seems that cancer research, both basic and clinical, is under the re-vamp spotlight. A parliamentary inquiry has begun into how research is organized within and between the major research organizations (see page 360). The outcome of the inquiry may well see new directives for cancer research and possibly even the formation of a National Cancer Institute (NCI) with a 'cancer research czar' to run it. But is meddling with a research base that is still highly regarded throughout the world—despite the fact that it operates on a shoestring—the best way to solve the UK's abysmal record on the prevention, diagnosis and treatment of cancer?

The issue of creating a centralized cancer institute is very complex, and not surprisingly, the cancer community is divided on the subject. The partition falls roughly between those from smaller research groups, who favor it, and those from the biggest research organizations, such as the Imperial Cancer Research Fund (ICRF), the Cancer Research Campaign and the government's Medical Research Council, who mostly oppose it. The former group questions why most developed countries—the US, Canada, Italy, France, Spain and Germany—have a national center to coordinate clinical trials, basic research and teaching, whereas Britain does not. The latter operate most research 'centers of excellence' in the UK and might perceive the creation of a single institute as a threat to their independence and resources.

The UK's existing centers of excellence provide a strong argument against the creation of a UK NCI. They have a long track

record of research of the highest quality on an international scale. This research is scrutinized regularly by outside reviewers and through site visits. Because of its concentration of specialized institutes—the Institute of Cancer Research, the Royal Marsden Hospital, Imperial College, the Hammer-smith Hospitals and the ICRF—London might be considered the most likely location for a UK NCI. But this could be to the detriment of the centers of excellence, as many of them exist outside London (in Birmingham, Edinburgh, Glasgow and Manchester), and it is inevitable that funding and talented researchers will be siphoned off from these already underfunded centers to build a 'mega-research unit'. On the flip side, London might never achieve its full potential, as the best researchers from around the country might balk at the thought of relocating from their parochial idylls to the capital city.

But could the UK benefit from a national center as long as it did not reduce the influence or independence of the existing top centers? The Parliamentary Select Committee is to mount a fact-finding tour to the US NCI and the Toronto Sunnybrook Regional Cancer Centre in Canada. The US NCI is not just a single institution but consists of an intramural program with its own research, and a much larger extramural program that funds university-based research. The split is around 15% intramural and 85% extramural. The benefit here is that the NCI has considerable influence on projects, without stifling America's numerous and prestigious regional centers. Plus, it brings a certain direction and long-term strategy to the scene, which is particularly important when dealing with the most applied side of research and clinical policies and for establishing national guidelines for practice.

So given that centers of excellence remain, a UK NCI should attempt to serve as a coordinating unit, and the advocate for

cancer research and care within the national government. Ideally, it should have a small but potent intramural component aligned with local universities, which would help keep its administrators in touch with contemporary research problems. Moreover, an intramural program could attract good people to administer central funds by allowing them to also participate in primary research. It could also focus on research topics that are not well developed in the rest of the UK cancer community, such as health services research, or the management of a national clinical trials.

One thing that the community does agree on is that the real problem is money. Cancer charities are the largest supporters of research in the UK, spending around £150 million (US\$ 235 million) per annum, yet the government spends only £90 million or so. So although cancer kills one-quarter of the British population, research is funded at only £4 per head. Efforts such as the £1 million spending on prostate cancer, announced last month, are only a token gesture. This sum is the result of four years of pressure on the government and it amounts to only £100 for every death from prostate cancer in the UK. The US National Institutes of Health has set aside \$240 million for prostate cancer research for FY00.

Unfortunately, this reflects the UK's general attitude towards investing its wealth on health. According to latest World Bank figures, the UK's annual health expenditure as a percentage of its GDP is 6.8%. This is compared with 7.1% for Japan, 8.4% for Australia, 9.6% for France, 10.7% for Germany and 13.9% for the US.

So unless the parliamentary inquiry can persuade government of the need for substantial investment—Waxman estimates at a minimum cost of £300 million—there is no point in arguing over whether or not to centralize cancer research, and survival rates from cancer in the UK are unlikely to improve.