Cancer Control Strategies in Eleven OECD Countries

James A. Bennett, B.A., B.Ed., M.Ed.
Cynthia Brewer, B.Sc.
Sandy Beyko, B.Sc.
Steffany A.L. Bennett, Ph.D.

Department of Biochemistry, Microbiology, and Immunology
University of Ottawa, Ottawa, Ontario, Canada

Funded by the Canadian Cancer Society/ National Cancer Institute of Canada as part of the Canadian Strategy for Cancer Control.

© HER MAJESTY THE QUEEN IN RIGHT OF CANADA (1999) as represented by the Minister of Health
1. Scope of Report

This report identifies the national cancer control strategies planned or underway in eleven countries of the Organization of Economic Cooperation and Development (OECD). For the purposes of this report, only those programs that fall under a national jurisdiction and are directed by the federal government are considered national strategies. Thus, our analysis is confined to existing and planned strategies that are achieved through a federally coordinated effort implemented by provincial and national/regional non-governmental organization (NGO) partners. In this report, we summarize the programs initiated in each of the countries and critically analyze the success or failure of these programs based on self-assessment documents published by federal authorities. We do not purport to have first-hand knowledge of the strengths and weaknesses inherent to the organizations implementing the strategies or of the success of federal/regional partnerships beyond those indicated in the published documents. Thus, this report does not seek to address whether a country is capable of realizing the goals set out in the national cancer strategy. Rather, we attempt to highlight lessons learned by other nations in the development of overall cancer control strategies. Specifically, we focus on issues that might prove useful in the development of a Canadian Cancer Control Strategy. In Appendix A, we provide detailed synopses (in English only) of the national strategies and URL links to the documents used in this report (available online). In Appendix B, we have compiled a database of 129 NGOs actively involved in realizing the national strategies and have categorized the involvement of these NGOs under eleven different cancer control frameworks (prevention, screening, diagnosis, treatment, rehabilitation, palliation, research, education, surveillance, advocacy, and infrastructure). The information provided in this database can be used to directly contact relevant organizations and thus detail strengths and weaknesses inherent to organizations implementing the strategies as well as identify conflicts between cancer control partners. This information may prove useful during the implementation of a Canadian Cancer Control Strategy in that obstacles that arise may have precedents in other countries.
Table I. Summary of cancer control strategy development in 11 OECD countries

<table>
<thead>
<tr>
<th>Countries analyzed</th>
<th>National Cancer Control Strategy</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No national strategies identified</td>
</tr>
<tr>
<td>Australia</td>
<td>√</td>
</tr>
<tr>
<td>Belgium</td>
<td>√</td>
</tr>
<tr>
<td>France</td>
<td>√</td>
</tr>
<tr>
<td>Germany</td>
<td>√</td>
</tr>
<tr>
<td>Ireland</td>
<td>√</td>
</tr>
<tr>
<td>Italy</td>
<td>√</td>
</tr>
<tr>
<td>Japan</td>
<td>√</td>
</tr>
<tr>
<td>New Zealand</td>
<td>√</td>
</tr>
<tr>
<td>Sweden</td>
<td>√</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>√</td>
</tr>
<tr>
<td>United States</td>
<td>√</td>
</tr>
</tbody>
</table>

**Australia**

The Australian national cancer control policy is part of a larger National Health Priority initiative addressing cancer control, cardiovascular health, diabetes mellitus, injury prevention and control, mental health, and asthma. Strategy is in the late planning stage with federal funds allocated to the Ministry of Health to define specific cancer control strategies by June 2000. Thus far, target cancers (lung, skin, colon/rectum, prostate, cervix and breast) have been identified and funds allocated to (a) identify strategies dedicated to prevent, treat, and manage target cancers and (b) establish the infrastructure and baseline data required to monitor the success of these initiatives. Significant progress has been made on the infrastructure priority. Innovations are being tested, notably mechanisms to ensure reliable and consistent data collection. It is implied within the existing documentation that the prime obstacle to achieving a cancer control strategy in Australia is the disparity between regional services providers. Consequently, considerable effort has gone into
(a) establishing a nationally recognized “honest broker” of data analysis to identify priorities and barriers to strategy implementation based on statistical indicators, (b) mandating and funding an “arms-length” national organization to devise and coordinate solutions, and (c) promising funding to the NGOs identified by the national advisory committee to implement the required changes. This organization will serve to highlight regional disparities, to identify service providers that require additional funding and advisory input, and to objectively draw attention to service provision issues that must be addressed prior to the realization of cancer targets.

**Belgium**

A national cancer control strategy has not been identified in Belgium based on our analysis of online and available print documentation. This is likely because consensus for a national program is extremely difficult to achieve given that each linguistic community (Flemish, French, and German) has an agency(ies) for the prevention of specific health-related diseases. These agencies are involved in the coordination of local prevention workers, development of programs and strategies, organizing training programs, and, where existent, operating a telephone information system. The linguistic orientation complicates coordination between national organizations.

**France**

A national cancer control strategy was introduced in 1992 as part of an overall health initiative by the federal government. Target cancers were defined (lung, colon/rectum, prostate, cervix, and breast) with measurable percent reductions in mortality specified by gender for the years 2000 and 2010. Strategic funding was allocated to (a) publication campaigns designed to promote a healthy anti-cancer lifestyle in the population, (b) working groups mandated to address the viability of establishing anti-smoking legislation, (c) quality assurance programs to ensure ‘best-practice’ in cancer care, (c) training initiatives to improve medical education and update current physicians in current cancer diagnosis and treatment, and (d) reorganization of existing screening programs. Research funds were allocated to (a) develop a national registry and baseline data collection system, (b) determine why current screening programs were unsuccessful in obtaining compliance among target populations, (c) identify the reasons for significant treatment delays, and (d) advance scientific understanding of the cause and treatment of cancer. Implementation of all of these objectives, as well fiscal management of national cancer control funds, was entrusted to a single coordinating body, the Association pour la Recherche sur le Cancer (ARC). In 1998, the federal government published a follow-up report detailing the devastating failure of the national cancer control strategy as implemented and addressing the 1991-1995 fiscal mismanagement and embezzlement scandal involving the board members of ARC. As a result of the scandal, the health system in France is currently under complete reconstruction and a new cancer control strategy is being planned for the 21st century.
Germany

The principal initiative for national German health policy in the new millennium is to establish a national health care and research system that will standardize a system of social insurance, statutory and private health insurance policies, health care provision, and federal research funding mechanisms across the former East and West Germany. Thus, an explicit cancer control strategy has yet to be addressed in the German government. It is, however, noteworthy, that an overall cancer control goal is identified in the National Health Reform Plan but it is recognized that this goal will not be developed until the national health care system is in place. Specifically, the German cancer control strategy will focus on developing a national infrastructure to improve cancer prevention, detection, patient care, research, and education. Once an overall health care system is in place, the infrastructure will be refined to target specific disease priorities. It is also explicitly stated that initiatives dealing with cancer will address the development of a national breast screening program and the definition of treatments and screening programs that will be covered by statutory versus voluntary health insurance programs. Working groups are being established to study and recommend additional cancer-related goals in areas of palliative care, best practice, research targets, and health administration.

Ireland

Cancer control is recognized as one of the priorities by the Irish Ministry of Health for reform in the new millennium. Development of a national cancer control strategy is in the early planning stage and is considered to be one of the first steps in realizing the government’s health care goals for the 21st century. The objectives of the emerging plan are to (a) provide an equitable and uniform cancer service throughout Ireland and (b) reduce cancer-related deaths in persons under the age of 65 by the percentage defined in the World Health Organization’s (WHO) Health for All Strategy paper. To this end, the Irish government has decided to (a) target those cancers for which a cause is known or suspected, (b) increase public and professional awareness about what can be done for these cancers according to established standards of best practice, (c) ensure every Irish citizen has access to the same quality of cancer treatment, (d) prolong and improve the quality of life of persons diagnosed with cancer, and (e) coordinate cancer services ranging from research, primary care, hospital care, rehabilitation, through to palliative care in an effective and costefficient manner. To achieve these goals, the federal government is in the process of identifying an expert national advisory committee that will define the overall national cancer control strategy and choose the administrative steering groups/project teams that will direct the strategies once identified.

Italy

We have been unable to locate the Italian National Health Plan (1998-2000) document that
discusses the Italian health priorities. However, our analysis of a number of other federal oncology-related documents published on the WWW and limited discussions with NGO representatives confirm that Italy does have a national cancer control strategy. The objectives of this plan are to reduce or stabilize target cancer mortality rates in men and women by the year 2000. We have not determined whether this mandate has been renewed. However, we have established that a National Oncology Commission was created in 1997 made up of representatives of the federal Ministry of Health, leading research institutes, and NGOs, as well as select physicians, clinicians, psychologists, social workers, and volunteers involved in the care of cancer patients. The mandate of this commission is to provide leadership to the regions and local health units in combatting cancer and to recommend proposals for cancer prevention, care, research, and epidemiology.

Japan

A national cancer control strategy has not been identified based on our analysis of online and available print documentation. However, the documents we have analyzed suggests that a national body may exist and that this organization may provide the impetus for a strategy should the need be recognized. To this end, the National Cancer Centre was established in 1962 to serve as a focal point for treatment, research, education and training of medical personnel, and collection and distribution of information related to cancer. In 1984, a “10 yr Strategy for Cancer Control” was initiated by the National Cancer Centre that focuses cancer control strategies entirely on research. This mandate was renewed in 1994 for a second 10 yr term with additional federal funds allocated to a wide variety of research initiatives in cancer control.

New Zealand

The New Zealand Cancer Control strategy was established in 1993 and a new five year mandate was reconfirmed in 1997. The overall objective of the strategy is to reduce illness, disability, and death rate from cervical, skin, breast and lung cancers. Specific targets for identifiable subpopulations defined as Pacific people/Māori/Iwi, children, young people, adults, and older people have been established. Each group is further subdivided by gender. Age standardized mortality rates have been established for each priority group and target reductions for 2005 have been set. Strategies that have been implemented to realize these targets include the development of regional registry systems that feed into a single centralized national database designed to (a) increase the volume of data collected, (b) reduce duplication, (c) improve tracking of patients who move between regions, (d) improve the quality of screening test evaluations by providing laboratories with previous test results and case histories of individual patients, and (d) generate assessment data for national monitoring and evaluation. Data protection has been a contentious issue for the Pacific people/Māori/Iwi and a number of safeguards have been built into the registry system to address this problem and protect against potential misuse of ethnicity data. Strategies
currently implemented to realize the cancer-specific targets include (a) national screening programs, (b) legislated smoking and air pollution control measures and drug regulation quality control acts, (c) national education programs designed to promote public awareness of cancer prevention, (d) protocols to ensure rapid tumour assessment and referral procedures between health care providers, and (e) renewed research initiatives in cancer cause and cancer management. Current cancer screening programs were assessed in 1997 and improvements were recommended including establishing new target reductions for 2005 based on the success (or lack thereof) of existing initiatives.

**Sweden**

The WHO Health for All Strategy has had significant impact on the Swedish health program partly because Sweden has not yet developed its own national health targets and ‘provinces’/counties are independently responsible for provision and determination of their own health issues. A Parliamentary Committee has been appointed to consider development of national health targets and a Ministerial Public Health Council is being established to coordinate national initiatives. As part of this organization, the federal government has confirmed Sweden’s commitment to the WHO targets with the statement that cancer-related mortality should be reduced in people under 65 and that the quality of life of people with cancer should be significantly improved. The first step towards realizing this goal is the development of a nationally coordinated system by which county health care provision is integrated between regions.

**United Kingdom**

Cancer is targeted as one of four priority areas in the 1999 federal action plan for health care. The overall goal of the program is to improve the health of United Kingdom citizens with emphasis on disadvantaged members of the population. Specifically, the federal cancer control strategy will focus on increasing the lifespan of the population at large and the number of years people spend free from cancer. The overall strategy will also prioritize the need to improve the health of the ‘worst-off’ in society and thus narrow the health gap between rich and poor. Target cancers (lung, cervix, and breast) have been set with the possibility of extending this list to include prostate and ovarian cancers depending upon the outcome of current research initiatives. An overall reduction in cancer-related mortality is delineated with specific targets set at the local level to achieve national cancer control priorities in concert with addressing particular local health issues and inequities. Ongoing national strategies include (a) public awareness campaigns designed to prevent cancer onset, (b) legislation to ban tobacco advertising and sponsorship, (c) funds to establish new smoking cessation clinics with resources to ensure access to nicotine replacement therapy, (d) funds to primary and secondary schools to undertake health education programs promoting an anti-cancer lifestyle, (d) breast and cervical screening programs, (e) prostate and ovarian cancer research initiatives, (f)
advocacy and information infrastructure development, (g) improvement of existing strategies, (h) establishment of a national institute for clinical excellence to define best-practice, and (i) implementation of a strategic approach to cancer research to link cancer science to cancer care with recommendations to be published in January 2000. Target reductions for 2010 have been redefined based on the recent assessment of existing cancer control strategies.

**United States**

The American cancer control strategy falls under the Healthy People 2010 health initiative which is an assessment and re-evaluation of the existing Health People 2000 program. The new strategy is in its final stages of development and the program is due to be released in its entirety in January 2000. The goal of the initiative is to (a) increase the quality and years of healthy life for the American population with emphasis on health status, nature of life, and longevity and (b) eliminate disparities in health status, health risks, and use of preventative interventions among distinct population groups. Within the strategy planned for the Cancer Focus area of Healthy People 2010, the primary objective is to reduce the burden of cancer on the American population by 2010 by decreasing cancer incidence, morbidity, and mortality. Target cancers have been identified (lung, breast, cervix, colon/rectum, oral cavity/pharynx, prostate and skin). Fifteen specific targets for these cancers have been defined as measurable outcomes for the entire population. While admirable infrastructure is in place to organize, develop, refine, and assess the cancer control targets (led by the National Cancer Institute of the National Institute of Health), successful screening programs have been implemented, and well-equipped state of the art research institutions and cancer care centres (both hospital- and clinic-based) exist, it is recognized in Healthy People 2010 that the privatized United States medicare system makes it difficult if not impossible to reach the targets for cancer control in people who lack adequate medical insurance coverage. Thus, there is considerable discussion as to whether age-adjusted and ethnic-adjusted baseline data should be factored into the national averages to assess the success of programs covered by private insurance systems (and to explicitly identify and document health care disparities in people lacking adequate insurance coverage).

3. **National Advisory Committee on Cancer Control**

In all of the countries studied, development and implementation of a national cancer control strategy is only achieved through a coordinated effort of federal, provincial, and national/regional NGOs. Our research has demonstrated that this coordination is essential to the success of a cancer control strategy and it is clear that no one organization is capable of initiating and realizing a national strategy on its own. While we do not discuss the evolution of this collaboration, it is noteworthy that, in countries for which the federal governments have officially recognized a need for a national cancer control strategy, the impetus underlying this federal statement is invariably
attributed to (a) the influence of one or more national NGO cancer organizations (usually affiliated with the World Health Organization) and (b) their ability to rally regional affiliates prior to federal involvement. These agencies often set in place the nascent infrastructure that will be used and improved by federal initiatives during the development of a national strategy. For example, in Germany, national education programs aimed at promoting public awareness and cancer prevention have been initiated in the absence of a formal cancer control strategy, primarily against smoking. The bulk of the existing strategies have been designed and implemented by the German Cancer Aid (GCA) organization, a national NGO, that is receiving increasing amounts of funding from federal and provincial sources as it makes its presence known in the political forum. The GCA has established treatment and out-patient clinics throughout east and west Germany, is actively organizing the first national breast screening program, has created and administers all of the sporadic regional cancer registries within the country, and, is one of the primary research funding agencies for cancer-related research in Germany.

Conversely, once a national cancer control strategy is initiated, the program is not led by the national NGO responsible for the strategy’s genesis. Rather, the federal ministry responsible for health in each country assumes the ultimate responsibility for the program’s implementation, success, and funding (or funding coordination). The leading NGO becomes one of a number of stakeholders composing a national advisory committee tasked with defining the overall cancer control strategy and advising the federal government on its implementation. The one notable exception to this pattern (with disastrous results) is found in the French initiative of 1992-1998 in which realization of the national cancer control objectives was entrusted to the ARC administration alone in the absence of any other stakeholder advisory involvement.

Composition

As reviewed above, in countries for which a strategy has been identified, the National Advisory Committee is invariably composed of all of the major stakeholders among whom consensus must be obtained prior to implementation of national cancer objectives. This committee is composed of representatives of (a) the Federal Ministry(ies) of Health, (b) the primary federal medical research funding agency of the country, (c) organizations involved in current national screening programs, (d) national research and advocacy-oriented NGOs, (e) provincial Departments of Health, (f) regional government-funded hospitals, (g) private clinics, (h) representatives of health insurance providers (in countries lacking universal health care systems), and (i) scientific and medical experts in cancer research, cancer care, and/or epidemiological analysis (with adequate representation of each group). These latter members are expected to provide a non-partisan voice with respect to organizational affiliation but are also balanced to ensure that one aspect of cancer control (research, surveillance, clinical treatment, etc) is overrepresented. Regional NGOs are only included if national affiliates are lacking. Significantly, in countries for which a strategy has been
undertaken and has failed (or required substantial reevaluation), the National Advisory Committee has been composed of only a few of the stakeholders listed above and does not represent all of the bodies required to achieve consensus for a nationally accepted/respected cancer control strategy. Consequently, recommendations made by such a body are often mistrusted and actively blocked by the NGOs and provincial organizations asked to contribute funds towards and responsible for realizing their implementation.

The Irish Model

In the Irish “Working for Health and Well-being,” the responsibilities of the national advisory committee are clearly differentiated from those of project teams chosen to implement the national cancer control strategy. This model is a careful synthesis of existing international cancer control committee mandates.

The national advisory committee is expected by the Ministry of Health to:

(a) Set the terms of reference for and suggested membership of the project team/steering committee(s) chosen to lead each cancer control initiative.

(b) Review staffing and capital requirements recommended by the project team.

(c) Investigate the best location for the program and propose regional pilot studies.

(d) Advise of structures necessary to ensure quality assurance.

(e) Advise and assist in health promotion/awareness campaigns that must accompany a strategy.

Project teams, mandated by the Ministry of Health (on the advice of the National Advisory Committee), are expected to implement individual strategies by:

(a) Recommending staffing and capital requirement necessary to implement the strategy (reporting to the National Advisory Committee).

(b) Making available free of charge appropriate screening programs (if these programs fall within the purview of the strategy) with funds provided by federal, provincial, and partner NGOs.

(c) Recommending mechanisms to ensure equal access to remote locations.

(d) Establishing a call/recall system within the target population (screening programs).

(e) Acting as an expert advisory committee to oversee implementation and monitoring of the program.

(f) Managing the capital investment to ensure regional compliance and providing fiscal reports to the National Advisory Committee.
(g) Recommending improvements to the National Advisory Committee and implementing these improvements.

Research initiatives are considered an unique case in that the membership of the project team will not be recommended by the National Advisory Committee but will be the existing Health Research Board provided with funds above and beyond that of the national research budget to:

(a) Provide infrastructure to foster a multidisciplinary approach combining basic and clinical research.

(b) Focus clinical research on target cancers (once defined).

(c) Foster collaborative basic and clinical research ventures between Irish investigators and medical researchers/organizations in other countries.

**Evolution of the National Advisory Committee**

Once implementation of nationally-defined strategies are underway, the national advisory committee is commonly reorganized on an ongoing basis to include representatives of (a) the data collection/analysis infrastructure (ie, in Australia, the Australian Institute of Health and Welfare (AIHW); in Ireland, Data Protection Commissioner; in New Zealand, Health Funding Authority; in the United Kingdom, Commission for Health Improvement and the Audit Commission; in the United States, the National Cancer Institute’s (NCI) Surveillance, Epidemiology and End Results (SEER) program), (b) the project teams, (c) NGOs mandated by the project teams to be directly involved in implementing strategies, (d) NGOs interested in becoming involved in the strategies (or being recruited by the project teams), (e) additional research funding agencies, (f) a revised panel of research scientists directly involved in studying target cancer cause, prevention, and diagnosis, front-line clinicians, and epidemiologists, and (g) advocacy groups interested in improving and assessing strategies.

**4. Critical Evaluation of Strategies: Lessons learned from the International Community**

*Step One: Define who is responsible*

As indicated above, in all of the countries studied, a successful national cancer control strategy is mandated by the federal ministry of health under advisement of a representative national advisory committee composed of members of all of the major stakeholders. In the most successful programs, duties for implementation, data collection, and data analysis are performed by separate steering committees/project teams overseen by the National Advisory Committee with careful delineation of fiscal reporting measures. Once a strategy is underway, the makeup of this committee evolves. Strategy implementation is most successful when coordinated by project teams or steering committees as recommended in the Irish strategy described above. For example, in Australia, the national breast cancer screening program is overseen by the National Breast Cancer Centre (NBCC).
The centre receives its own funding from the federal government to coordinate treatment activities, monitor outcomes and disseminate information to women and health care professionals throughout Australia. While the overall success of the screening initiative is evaluated by the AIHW, implementation of regional breast screening programs is carried out by the NBCC. Furthermore, the NBCC is extremely proactive in recommending improvements to the existing system to the ministry of health. There are exceptions. In New Zealand, screening programs for cervical cancer are managed by clinicians and caregivers under the auspices of a national coordinator rather than a project team. The coordinator ensures the reliability and consistency of information forwarded through the fourteen regional registries to the national data collection service. However, in New Zealand, one of the cancer control mandates is to monitor the success of cancer prevention strategies in subpopulations of the New Zealand population. To this end, a project team representing the interests of Māori women has been established to manage cervical cancer data collection and screening initiatives for this specific subgroup.

Step Two: Establish baseline data and a respected data collection agency

The lessons learned by the failure of the French initiative underline the importance of ensuring reliable and consistent data collection and analysis, not only to address the success of an initiative but also to achieve consensus among the stakeholders. Data collection is linked to a national registry system with success or failure of the cancer control strategy in general often depending upon the accuracy and honesty of this system. In most of the countries analyzed, a single federally mandated unit is responsible for data analysis. This unit should, however, kept at arms length from federal and provincial influences and should be easily accessible to NGOs and researchers to assess the validity of data independently of the conclusions drawn by the federally mandated data collection institute. In Australia, the national collection agency is the AIHW. However, it is noteworthy that the data forwarded to the AIHW is first monitored by the Australian Cancer Society, a national NGO. Thus, in practice in Australia, cancer registration is required by law in each province. Both incidence and mortality rates are recorded. Incidence of target cancers is reported for men and women by clinicians, hospitals, and nursing homes and forwarded to a central provincial repository. Mortality for each target cancer is collected for men and women in a given evaluation period by the provincial Registrars of Births, Deaths, and Marriages. The provincial registries then forward the data to the Australian Cancer Society (ACS), an arms-length, federally funded organization composed of representatives of community based NGOs. The ACS ensures consistency and reliability between different reporting sources. The ACS compiles statistics on a national level and forwards these data to the AIHW. The mandate of the AIHW is discussed below in the Surveillance framework with a mission statement of being “an honestbroker service of the Commonwealth government, the State and Territory governments, and nongovernment clients in collecting analyzing and disseminating national health and services data.” In the United States, this
mandate is accomplished by the Centre of Disease Control and Prevention (CDC), the National Centre for Health Statistics (NCHS) and the National Cancer Institute’s (NCI) Surveillance, Epidemiology, and End Results (SEER) program. In Ireland, the data collection system is under development with specific mandates to be addressed by the National Screening Project team (discussed below).

**Step Three: Establish national cancer control priorities**

Prior to the definition of specific strategies, the majority of countries analyzed have set a ‘horizon’ for cancer control which will then be addressed by specific strategies. This horizon is the unique statement of a nation’s overarching objective for cancer control. The horizon identifies not only the goals but also the obstacles to cancer control in the nation. In the United States, the horizon is to increase the quality and length of life and eliminate disparities in health status among various population groups. In the United Kingdom, the horizon is to increase the length of life, the number of years people spend free from cancer, and to improve the health of the “worst-off” in society thus narrowing the health gap between rich and poor. In Sweden, the WHO target to reduce cancer-related mortality and significantly improve the quality of life of all people with cancer has been confirmed by all counties with a specific Swedish horizon under discussion. In New Zealand, the horizon is to improve and protect the health of Pacific people/Māori/Iwi, children, young people, adults, and older people. In Japan, although a national strategy has not been identified in this report, a strong, cancer research-oriented mandate is evident. In Italy, we have inferred that the horizon is the promotion of cancer prevention-related lifestyles. In Ireland, the horizon is to establish an equitable, uniform, high quality, integrated, national cancer service. In Germany, the horizon is to improve cancer prevention, detection, patient care, research, and education following a complete reconstruction of the German health care system. In Australia, the horizon is to improve the continuum of cancer care in prevention, treatment, and management.

**Step Four: Identify target cancers**

Target cancers are set on the basis of accurate assessment of baseline data. In the majority of countries surveyed, the most successful means of targeting individual cancers has relied upon a national surveillance system established to collect and monitor the incidence of cancer and cancer-related mortality in the population (i.e. national registries). In all countries, prevalence was determined by gender and, in the majority of countries, by age (i.e. pediatric cancer, early adult onset, and late adult onset). Regional disparities in health care (resulting from logistics and/or financial disparities in health care provisions) were often collected and highlighted. In all of the countries analyzed, common target cancers are lung, skin, cervix and breast. Prostate and colon/rectal cancers are included in the Australian, French, and American targets. Oral cavity/larynx/pharynx disorders are additionally included in the French and American targets. In Ireland, the goal
is to prevent cancers for which a cause is known or suspected; it is assumed that the target list will expand as baseline data is collected and assessed. As an aside, it was noted that hematopoietic cancers were excluded from the cancer targets in all of the countries with the exception of Germany.

*Step Five: Set baseline indicators and target reductions in mortality and incidence*

In each of the countries analyzed, the national advisory committee accepts baseline indicators and defines target reductions in terms of a percent reduction in incidence and/or mortality from a target cancer within a given period of time for a defined population (based on age, gender, ethnicity, or region of habitation). These targets are established on the advice of the national data collection agency. In countries for which a national data collection/dissemination agency has not been developed, the WHO reduction targets are often adopted. It is important to note that the wording of these targets is essential to assessing the success of individual strategies. For example, if national targets are set for the entire population there is a tendency to standardize these indicators for subpopulations in which the strategy is ineffective or impossible to implement (i.e. The United States). However, this tendency often masks inequities in cancer care provision in the assessment of strategy success while, arguably, it does demonstrate that the national advisory committee recognizes these inequities. Conversely, if specific targets for subpopulations of society are explicitly defined, then consensus must be achieved within these targeted groups to ensure not only successful implementation but also appropriate data protection (i.e. New Zealand).

*Step Six: Define cancer control strategies to achieve target reductions*

The means by which national strategies can be defined and developed are clearly stated in the nascent Irish Cancer Control strategy. A strategy group will be established by the Minister of Health under advisement of the national advisory committee. This group is charged with outlining the epidemiology of cancer in Ireland and the international community, assessing the impact of cancer on the Irish people and on existing health services, examining the current provision of cancer services, and recommending the future organization of these services. It is suggested that the strategy group will be expanded from a single entity to a number of working groups to address different aspects of a cancer control framework (i.e research, diagnosis, prevention, etc). The groups are encouraged to consult the advice of professional bodies, NGOs, cancer specialists, and patients and to solicit oral and written submissions to be included in their reports. These reports will form the basis by which the national advisory committee will set the terms of reference and suggested membership of the national steering committee/project teams for each program. With respect to screening initiatives, the project team should be able to use these targets to specify steps to ensure compliance maximizing the potential for reducing mortality, to include protocols for screening, follow-up, and referral ensuring quality assurance, and to document results in a way that assists in (a) evaluation of the effectiveness of the program, (b) account for client satisfaction in the design/
evaluation of programs, the communication process around it, and the psychological impact of false positive results, (c) contain a population register enumerating each individual in the target population, (d) recommend parameters for a computerized information system with a call/recall facility, (e) recommend “best-practice” procedures in priority areas, and (f) address means of ensuring equal access to cancer care.

Step Seven: Monitor and refine each initiative at defined endpoints

Once strategies are recommended, regional pilot studies are often conducted to determine the feasibility and practical implications of the initiative. Results are then disseminated to comparable groups in other regions for discussion prior to national implementation. This practice appears to be more successful than imposing a national strategy. It also permits testing the ability of the data collection/dissemination infrastructure to monitor interim strategy effectiveness and thereby refine protocols as needed (both those of the data collection agency and of the strategy itself).

5. Cancer Control Strategies by Theme

Prevention

All of the countries studied explicitly recognize that prevention depends upon research, lifestyle, and environment. To that end, the United States, United Kingdom, Australia and Japan (as well as other countries to a lesser fiscal extent) have committed funding to basic research targeting the priority cancers and to improving institutional cancer research infrastructures.

With respect to specific prevention initiatives, the majority of countries studied have implemented or are planning anti-smoking campaigns. France and the United Kingdom are backing these public awareness initiatives by federal legislation to regulate tobacco prices, limit or prevent tobacco companies from advertising, and restrict the ability of teens to purchase tobacco products. Many of these initiatives are also in place in the United States albeit at the regional rather than the federal level although the US is establishing national objectives/targets in the Tobacco Use Focus Area. Healthy lifestyle campaigns involving appropriate nutritional guidelines have been approved by the United Kingdom, United States, and Ireland to be implemented in schools and community education programs that (in the Irish example) will be monitored by a national Nutrition Surveillance System.

Partnerships often develop between NGOs and federal/provincial government bodies to implement health promotion initiatives in smoking and sun exposure. For example, in Belgium, the only national initiatives we were able to identify were federal/NGO partnerships supporting (a) anti-asbestos legislation banning the use of asbestos as a fire retardant in buildings and (b) an initiative to reduce sun-tanning salon patronage.
Screening

National breast cancer screening and cervical screening initiatives occur in the majority of the countries surveyed. Identification of target populations vary across countries but, in most cases, women aged 50-69 (breast screening) and aged 20-60 (cervical screening) are actively recruited by direct mailouts to participate in the national programs every 2 or 3 years. Cervical screening is somewhat controversial. Many countries are re-evaluating the success of their ongoing programs with respect to issues of compliance and consistency of staging reports. New programs are being tested through limited pilot projects. A screening program for melanomas is being piloted in Australia while a similar initiative is emphasized in New Zealand where targets for reduction of the melanoma mortality rate have already been established. Colorectal screening studies have the shortest history and have not been adequately assessed. Prostate screening is generally contraindicated following cost-benefit analysis. Skin cancer screening has been discussed in some of the working groups/project teams charged with recommending screening initiatives but it is usually concluded that funds are better directed to mass education programs.

Three recurrent issues in screening assessment are noted. These include problems of (a) ensuring equal access to people in remote areas, (b) ensuring equal health care screening and treatment options to economically disadvantaged people, and (c) ensuring compliancy in the target population. The remote access issue is primarily evident in countries with universal health care and reflects the fiscal problems in (a) servicing remote areas and (b) staffing remote centres. In countries with privatized health care systems, gross disparities in screening programs are evident in economically disadvantaged members of a target population. This disparity apparently reflects the reluctance of private health care providers to offer health care options to patients lacking insurance coverage without the assurance of fiscal return. This reality is often accompanied by the statistical standardization of national indicators within target supopulations to ensure that the national baseline/success rate is not substantially affected. A third recurrent issue is the problem of ensuring 100% compliancy in the target population (as well accurately recording participation). Assessments of national screening programs repeatedly conclude that the success or failure of the program can only be carried out in programs that have a high (accurate) incidence of compliancy. Compliancy is noted to be dependent upon the population’s perception of the program and thus is intimately associated with educational aspects of cancer control.

Diagnosis

Many of the national project teams leading implementation of screening initiatives are also concerned with diagnostic strategies (i.e. Australia’s National Breast Cancer Centre). These committees are tasked with the development of ‘best-practice’ and quality assurance protocols for diagnostic procedures. Staging consistency is a major issue. In New Zealand, the Health Funding Authority and the College of GPs encourages doctors and pathologists to develop skills in accurately
diagnosing tumour thickness. To assist in this process, the Swedish MARS database project - Medical Result and Access System - is an example of a ‘high tech’ system that provides decision-makers with state-of-the-art information on health care information including diagnostic procedures for various cancers. In the United Kingdom, the government’s New Opportunities Fund finances equipment projects to diagnose, detect, and treat cancer. In France, funding initiatives will be provided to physicians and oncologists to study abroad to learn and import ‘best practice’ in clinical staging and specimen evaluation.

Treatment

Key to the success of a national cancer control treatment strategy is the existence of a coordinated body of high-quality treatment service providers. The existence of such a group is not trivial. In many of the countries studies, treatment is provided by regional organizations acting independently of each other with very little communication between organizations (i.e. France). Efforts are ongoing in Italy, Germany, and Ireland (where a Irish National Forum on Cancer Services has been established specifically to address this issue) to develop an integrated model of primary, regional, and supra-regional cancer treatment services.

In addition to establishing a nationally linked system of regional health care providers, treatment steering committees/project teams are often asked to recommend ‘best of best’ cancer treatment practices/guidelines and drug therapeutic assessments. Examples of these guidelines are issued by the National Institute of Clinical Excellence (United Kingdom), National Oncology Commission (Italy), and the Council of Technology Assessment in Health Care (Sweden). To further improve cancer treatment, in Germany (German Cancer Aid), Italy, and the United States (University of Texas Centre for Alternative Medicine), unconventional methods of cancer treatment are being assessed prior to national acceptance. On the basis of these and other studies, treatment project teams are responsible for recommending whether such treatments should be provided to the population at large. In other more conventional examples, the National Health Services of the United Kingdom has decided to invest in the treatments provided by Smoking Cessation Clinics while the United States will attempt to increase to 100% the proportion of health plans that offer treatment for nicotine addiction (for those who have access to health insurance).

Finally, the treatment steering committee/project teams also seeks to regulate the speed at which a cancer patient is given access to effective treatment. Thus, one of the United Kingdom treatment targets is to ensure that anyone suspected to have cancer will be (b) able to see a specialist within 2 weeks of their general practitioner requesting an appointment and (b) given information packs on their specific cancer when they are informed of their test results.

Rehabilitation

We have not identified any comprehensive rehabilitation strategies although the need to
develop such strategies are often acknowledged in the federal documents studied. For example, in the Irish documents, rehabilitation is recognized to take such forms as self-care, caregiver support, psychological support, physiotherapy, occupational therapy, dietics, speech therapy, patient education and health promotion, appliance fitting, nursing services, and community liaison. However, a strategy to support these aspects has not been elaborated. We have identified federal support for proactive NGOs providing ongoing programs in rehabilitation. These agencies are often being recruited to participate in a rehabilitation strategic group. For example, the Swedish Cancer Society receives government funding used to support training schemes in rehabilitation while the German Cancer Aid NGO funds a national system of Oncology Aftercare Centres established by the Association of Panel Doctors of Lower Saxony aimed at improving the scope and quality of outpatient care.

**Palliation**

Palliation is infrequently addressed in the documents analyzed in this report. Ireland has established a National Advisory Committee on Palliative Care that will provide detailed advice on the development of palliative care services at the regional level and addressing the need for specialized key personnel. Two other specific programs have been identified in Germany and the United Kingdom. For seriously ill cancer patients, German Cancer Aid have invested in psychosocial aftercare centres in hospitals and have established palliative wards that are becoming models for numerous other German palliative institutions. In the United Kingdom, a national Expert Patients program helps people with long term illness take control over their lives, manage their illnesses, and share experiences and knowledge with others.

**Research**

As indicated above, cancer prevention depends upon a clear scientific understanding of the causes of the various cancers and of the means by which a benign condition progresses through to metastasis. Each country has an individual approach to encouraging cancer research. The United States and Japan have elaborated the most extensive national research programs with significant funds allocated to support individual researchers, collaborative team efforts, and development of ‘state of the art’ research facilities. In Japan, funds are also directed towards inviting foreign researchers to Japan and allowing Japanese researchers to spend time in other international laboratories. Japan is the main funding proponent of the Human Science Frontiers program encouraging international level collaborations and exchanges. Strategic initiatives often include enhanced funding to specific programs. In the United States, the cancer control indicators planned in Healthy People 2010 take into consideration anticipated lag times for current and future interventions in the treatment and prognosis of specific cancers that are expected to develop from basic research initiatives. To assure that these improvements will indeed occur, a 65% increase in
the National Institute of Health’s budget for cancer research (1999-2003) has been promised and additional funding programs will be announced aimed at prevention and early detection of target cancers. In the United Kingdom, a Cancer Priority review committee has been mandated to review existing research and development funding and a Modernization and New Opportunities Fund has been established to encourage purchase of new equipment for research in diagnosis, detection, and treatment of cancer. In Sweden, funds are being made available to research projects in health promotion and evaluation of implemented programs. In Ireland, part of the developing national cancer control strategy is to establish a Cancer Clinical Research Unit to (a) provide an infrastructure for a multi-disciplinary, multi-institutional approach to clinical cancer research, (b) focus clinical research in a way that contributes to the knowledge and treatment of the most common cancers in Ireland, and (c) encourage participation in collaborative clinical research between Irish researchers and scientists/physicians from other countries.

Education

Once priority cancers are identified, funding is provided on the federal level (on the advice of the national advisory committee) through project teams/steering committees to individual NGOs promoting grass-roots education programs aimed at influencing public opinion. For the most part, these programs have targeted high-risk groups and advocated participation in screening programs. Federal funding is also provided to support regional information services (telephone information services) and to mass media campaigns usually directed against smoking and use of other tobacco products. Often these campaigns are targeted at teen smoking. Professional education receives considerable attention in France, Ireland, and Japan with medical researchers and clinicians encouraged to seek training in other countries to expand existing conceptions of ‘best-practice’.

Surveillance

Of the countries surveyed, the Australian documents provide the most detail describing the development of national surveillance system to collect and monitor changes in the incidence of cancer and cancer-related mortality. In Australia, cancer registration is required by law in each State/Territory and data are recorded as (a) incidence of each target cancer in males and females and (b) mortality from each target cancer in males and females in a given evaluation period. Incidence data is derived from clinical and demographic data determined by clinicians, hospitals, and nursing homes and provided to a state/provincial central repository. Mortality figures are collected by the state Registrars of Births, Deaths, and Marriages. The provincial registrars forward the data to the Australian Cancer Society, a national NGO made up of representatives of community-based cancer organizations. The ACS ensures consistency and reliability between different reporting sources, compiles statistics on a national levels, and forwards these data to the Australian Institute of Health and Welfare (AIHW). The mandate of the AIHW is to (a) identify and meet the information needs of
governments and the community enabling them to make informed decisions on improving the health of Australians and on improving their health and community services, (b) provide an ‘honest broker’ service for the Commonwealth Government, the State and Territory governments, and non-government clients in collecting, analyzing and disseminating national health and community services data, and (c) develop, maintain and promote information standards for health and community services to ensure that national, State and Territory data can be directly compared and recommendations based on these data can be made on the prevention and treatment of diseases and on the promotion of health and health awareness in Australia.

It is apparent, however, that the difficulty in relying upon registry information to assess the success of cancer control strategies lies in the problem of ensuring consistency between different reporting sources. To address this concern, the AIHW established the National Health Information and Management Group (NHIMG), an organization composed primarily of expert epidemiologists and statisticians, to provide guidelines and an universal set of monitoring indicators to be used by individual reporters, provincial registries and the ACS. Compliance with these reporting procedures will be encouraged on the regional level by including NHIMG guidelines in the national accreditation standards for hospitals, cancer centres, and nursing homes.

Advocacy

All of the cancer societies in the countries studied fund NGOs to provide advice and information to cancer patients and their families by brochure, telephone, and the internet and encourage these NGOs to constantly monitor, initiate and recommend strategies that will improve the scope and quality of cancer treatment/care to local, provincial and national governments. More specifically, to improve linkages between the voluntary and statutory sectors, NGOs in Ireland will be represented on Health Boards. Finally, in France, a patient’s Bill of Rights will be developed.

Infrastructure

The issue of infrastructure has been discussed in some detail above. In each of the countries analyzed, the need for an accurate, efficient, respected data collection service, for a network of well-equipped and efficient cancer care providers, for a fair and universal health care system that permits all members of society access to cancer care facilities and options, and for ‘state of the art’ research institutes are strongly indicated in the success of a national cancer control strategy.

6. Acknowledgements

The authors would like to thank Bryce Bates, Christine Bischof, Anne Bjornfjord, Paula Bullock, Maria Busa for expert translation and technical assistance. This report was funded by the Canadian Cancer Society and the National Cancer Institute of Canada as part of the Canadian Strategy for Cancer Control.
Abbreviations:
Australian Cancer Society (ACS)
Australian Institute of Health and Welfare (AIHW)
Australian Department of Health and Aged Care (DHAC)
Cancer Council of New South Wales (NSWCC)
National Breast Cancer Centre (NBCC)
National Health and Medical Research Council (NHMRC)
National Health Information Management Group (NHIMG)
National Health Priority Area (NHPA)
Non-Government Organizations (NGOs)
World Health Organization (WHO)

1. National cancer control initiative
1.1 The National Health Priority Areas (NHPA) Initiative is a collaborative effort between the Commonwealth (Federal) and State/Territory Governments (Provincial) of Australia targeting public attention and health policy on six key areas: cardiovascular health, cancer control, diabetes mellitus, injury prevention and control, mental health, and, pending in 2000, asthma.

1.2 The initiative is part of the larger World Health Organization (WHO) strategy ‘Health for All by the Year 2000’ with the Cancer Control priority linked to the WHO ‘Programme on Cancer Control’.

2. Strategies and goals planned or under way
Funds have been allocated to the Australian Department of Health and Aged Care (DHAC) in the 1999 Australian budget to develop a national framework, strategy, and action plan for the Cancer Control by June 2000 with emphasis on

• Improving the continuum of cancer care in prevention, treatment, and management
• Establishing baseline data and organization infrastructure to monitor changes in the incidence, prevalence, morbidity, and mortality associated with cancer.

3. Progress to date
3.1 Initiative#1: Improving the continuum of cancer care in prevention, treatment, and management
While the national action plan/strategy is currently under construction, priority cancers have been
Identified: lung, skin, colon/rectum, prostate, cervix, breast. Preliminary initiatives by the National Health and Medical Research Council (NHMRC) have committed funding to individual researchers for basic research into the prevention, diagnosis, treatment, and cause of these cancers and have provided institutional block funding to the Queensland Institute of Medical Research, the Garvan Institute, and the Walter and Eliza Hall. Furthermore, the 1999 Federal budget has renewed and expanded its financial commitment to the National Breast Cancer Centre with emphasis on breast cancer diagnosis, treatment, education, and advocacy.

Initiative #2: Establish baseline data and organization infrastructure to monitor changes in the incidence, prevalence, morbidity, and mortality associated with cancer.

More tangible progress has been made on Initiative #2 and this progress will influence the development of Initiative #1:

- A national surveillance system has been established to collect and monitor the incidence of cancer and cancer-related mortality in Australian men and women (see 7. Implementation and improvement). The data provided by this system has been used to set the types of cancers to be targeted by Initiative #1 - lung, skin, colon/rectum, prostate, cervix, breast.

- The surveillance infrastructure will be also used to monitor the success of specific Cancer Control strategies set in Initiative #1. This ability is being tested and refined as the DHAC uses the new infrastructure to assess the efficacy of previous cancer screening programs in preventing cancer and cancer-related mortality (see 7. Implementation and improvement).

- In the course of this assessment, the DHAC is polling local non-government organizations to determine the current standard of “best practice” in both cancer treatment and data collection (registries) and is requesting input on means of improving these standards. These data will influence the implementation of Initiative #1.

4. Coordinating body

The Commonwealth (Federal government) sets the broad policy framework (ie establishes the Cancer Control strategies) and funds/purchases both the action plan and the means to its implementation. The federal coordinating body is the DHAC.

5. Partnerships

The NHPA Initiative draws on expert advice from the Australian National Health and Medical Research Council (NHMRC), the Australian Institute of Health and Welfare (AIHW), non-government organizations (NGOs), clinicians, and local communities (see 8. NGO Partners). Active
recruitment of non-government organizations in the development of Cancer Control strategies is explicitly defined in the DHAC mandate and is deemed essential to establish a action plan for Cancer management and prevention (Initiative#1).

6. Evaluation
6.1 Cancer Control strategies (as well as the strategies set in the 5 other health priority areas) are monitored by the National Health Priority Committee (NHPC), a federal body whose mandate is to evaluate actual health gains, estimate the impact of health programs, and adjust or revise indicators and strategies in each of the six Australian Health Priorities. The NHPC has commissioned the AIHW to monitor and report progress on the specific indicators set for each priority.

6.1 As of 1999, the indicators for Cancer Control are:
• Incidence of each target cancer in males and females in a given evaluation period
• Death rate from each target cancer in males and females in a given evaluation period (see Appendix 1 in AIHW report). These indicators are expected to reflect the continuum of Cancer Control, from illness prevention to treatment, support services, and palliative care.

6.3 The first AIHW report was published in 1999 reporting on the incidence and mortality from breast cancer in the years 1996-1997. Based on these AIHW findings, the Australian Health Ministers will prepare a national report providing an overview of the impact of target cancers on Australians and subsequent reports evaluating the success of the National Strategies (once defined) every two years. The reports rely on the trend analysis for the agreed indicators (incidence and mortality rates by gender) provided by the AIHW in their report(s) to evaluate strategy success.

7. Implementation and improvement
The DHAC has begun significant surveillance into both the incidence of cancer and the frequency of cancer-related mortality (Initiative#2) and is using these statistics to assess the efficacy of earlier cancer screening programs in preventing cancer (Initiative#1). The mechanics of these programs and improvements in ongoing policy are summarized below:

7.1 Surveillance: Registration of Cancer
To assist in establishing baseline data, the registration of cancer is required by law in each State and Territory (Provincial). Data is collected by provincial governmental and non-governmental cancer registries using clinical and demographic records provided by hospitals, pathologists, radiation oncologists, cancer treatment centres, and nursing homes about patients with newly diagnosed cancer. Data related to cancer mortality is collected by the Registrars of Births, Deaths, and Marriage. By combining information from these sources, the provincial cancer registries produce
statistics of cancer incidence and mortality and forward these figures to the national collection of cancer data maintained by the National Cancer Statistics Clearing House at the AIHW. An example of this exchange of information is the Cancer Council of New South Wales (NSWCC) which manages the NSW and ACT Hereditary Bowel Cancer Registries and the NSW PAP Test Register. Epidemiological data is forwarded to the Australian Cancer Society, a national federation of community based cancer organizations, who, in turn, compiles statistics on a national level and forwards these data to the AIHW. Consistency and reliability between registry reports is ensured by the National Health Information Management Group (NHIMG), established by AIHW. The NHIMG continues to develop a set of monitoring indicators and supporting data definitions for use in all jurisdictions to ensure that each registry provides comparable statistics. Indicator definitions currently under development include participation and detection rates, screening sensitivity, incidence and mortality. These definitions (and corresponding statistics) will eventually form part of the National Health Priority Areas monitoring system and national accreditation standards.

7.2 Prevention and Surveillance: Assessment of Cancer Screening Initiatives

The efficacy of four screening programs are currently being assessed using the registry statistics compiled by the AIHW for 1996-1997. These programs are:

7.21 BreastScreen Australia: The major objective of BreastScreen Australia 1991-1996 was to achieve a 70% participation in the national program for early cancer detection that provides universal mammography services to women in the target group (50-69 years) and access on request to the mammography services to women aged 40-49 years and 70 years or more. 1991-1996 success is being evaluated. The program is currently still active. Women in the target group are actively recruited by direct mailouts based on the electoral role, advertising campaigns, brochures, and through health care providers. Women are recommended for routine 2-year rescreening if no cancer is detected, for further assessment if the results are inconclusive, or for additional testing if a mammographic abnormality is suspected. BreastScreen Australia does not provide treatment if tests are positive but refers patients back to their family physician.

A recurrent problem evident in the ongoing assessment of BreastScreen Australia was the issue of ensuring access for women in remote rural areas to breast screening centres and treatment options. Monies in the 1999 Federal budget were allocated to address this issue. Funding to the National Breast Cancer Centre, established in 1995, was expanded in the 1999 Federal budget to coordinate treatment activities, monitor outcomes, and disseminate information to women and health care professionals throughout Australia. In response to the recommendations of NBCC and the preliminary assessment of BreastScreen Australia 1996, the federal government has established a fly-in fly-out female general practitioner program in conjunction with the Royal Flying Doctor
Service for women who do not have access to a female general practitioner. This service, in addition to funding promised in the 1999 budget for support services for women diagnosed with breast cancer, is an attempt to ensure primary health care interventions, such as cervical cancer screening, breast and skin examination, to women living in remote, rural areas.

7.22 National Cervical Screening Program: Introduced in 1991 as a joint initiative of the federal and provincial governments, the objective of the National Cervical Screening Program was to reduce the incidence of cervical cancer by up to 90% through universal screening (every 2 years) of all women between the ages of 18 and 70 years. Provincial health agencies actively recruit women by health promotion activities and direct mailouts based on local electoral rolls. Women over 70 years of age are screened on request but are not actively targeted. In remote areas, the Cervical Cancer Prevention Program is conducted by female Aboriginal Health Care Workers with the idea that personal invitations are more appropriate than mailed reminders. In all cases, reminder notices/invitations are issued for women who do not otherwise attend for re-screening and additional testing provided for women with significantly abnormal smears. Registration in cervical screening registers is voluntary, and in all States and Territories there is an ‘opt-off’ option for women who participate in the National Cervical Screening Program.

7.23 Protocol for Melanoma Screening Trial and Pilot: A consortium involving Queensland Health, the University of Queensland (affiliated with the Queensland Institute for Medical Research funded with an Institutional Block grant by the NHMRC), and the Queensland Cancer Fund has designed a protocol for an initial pilot and a full trial of screening for melanoma. The Queensland Cancer Fund has agreed to fund a large-scale pilot project to assess the efficacy of melanoma screening in cancer prevention. This information will be transmitted to the DHAC.

7.24 Colorectal Genetics Pilot and Colorectal Cancer Screening Development: From 1997-2000, a management group comprised of the Victorian Council of Genetic Services, the Anti-Cancer Council of Victoria, and the Royal Melbourne Hospital will manage and evaluate a pilot for screening of familial adenomatous (FAP) and hereditary non-polyposis colorectal cancer.

7.25 Summary: Thus, implementation of and ongoing improvements to the Australian Cancer Control strategy are achieved by

- The identification of priority areas (and of barriers to ongoing strategy implementation) based on statistical indicators provided by registries
- Mandating and funding an ‘arm’s-length’ national organization to devise and coordinate solutions
- Providing additional funding to the NGOs identified by the coordinating group to implement the required changes.
Belgium (Population - 10.2 million)

Cancer Control Strategy

A national cancer control strategy has not been identified in Belgium based on our analysis of online and available print documentation at this time. Consensus for a national program is extremely difficult to achieve given that each linguistic community (Flemish, French, and German) has an agency(ies) for the prevention of specific health-related diseases. These agencies are involved in the coordination of local prevention workers, development of programs and strategies, organizing training programs, and, where existent, operating a telephone information system. Linguistic barriers, however, make coordination between the organizations unlikely at present.
France (Population - 58.9 million)

Cancer Control Strategy

Abbreviations:
Agence Nationale d’Accréditation et Evaluation en Santé (ANAES)
Agences Régionales de l’Hospitalisation (ARH)
Association pour la Recherche sur le Cancer (L’ARC)
Caisse Nationale d’Assurance Maladie des Travailleurs Salaries (CNAMTS)
Centre Hospitalier Universitaire (CHU)
Centres de Lutte Contre le Cancer (CLCC)
Fédération Nationale des Centres de Lutte Contre le Cancer (FNCLCC)
Fédération de Cancérologie Centre Hospitalier Universitaire (FCCHU)
Haut Comité de la Santé Publique (HCSP)
Programme de Médicalisation des Systèmes d’Information (PMSI)
Schemas Regionale d’Organization Sanitaire (SROSS)
Union Nationale Hospitalière Privée de Cancérologie (UNHPC)

1. National cancer control initiative:
1.1 In 1992, a report - Strategy for a Policy of Health (Stratégie pour une politique de santé) - was delivered by the Haut Comité de la Santé Publique (HCSP) defining overall health strategies, the key areas, and the main targets for health promotion for adults and adolescents. Reducing cancer mortality rates by addressing risk factors contributing to cancer (e.g tobacco/alcohol use) was one of 4 areas (accidents, cardiovascular disease, cancer, drug abuse) addressed.

2. Strategies and goals planned or under way:
2.1 Targets established for the cancer control area are:
• By 2000, reduce colo-rectal cancer deaths to a rate no more than 20.7 per 100,000 people - a 10% improvement - and stabilize the rate of skin cancer deaths to a rate no more than 1.7 per 100,000 people.
• By 2010, reduce lung cancer deaths to a rate no more than 28 per 100,000 people- a 15% improvement, reduce oral cavity/pharynx cancer deaths to a rate no more than 11.2 per 100,000 people - a 30% improvement, reduce breast cancer deaths among women 50 to 75 years of age to a rate no more than 34.3 per 100,000 people - a 30% improvement, and reduce uterine cancer deaths to a rate no more than 4.6 per 100,000 people - a 30% improvement.
2.2 To attain the targets outlined in 2.1, the following measures were adopted:
- The widespread publication of the European Code of Cancer by the Ministry of Solidarity/Employment and NGOs urges French citizens to adopt a lifestyle that helps prevent cancer and to participate in screening methods that detect early indications of cancer.
- The implementation of legislation that reinforces actions to reduce the number of adult smokers, the number of smokers aged 12 - 18 years, and the quantity of tobacco sold is underway.
- Programs to reduce alcohol intake, particularly in demographic areas where consumption is elevated, are being encouraged.
- Quality assurance measures in diagnostic and therapeutic cancer procedures, particularly radiotherapy, are being introduced.
- The training and professional development of doctors and dental surgeons to diagnose early indications of skin, colorectal, oral cavity/pharynx cancer are being revised.
- The reorganization of the breast screening program by mammography establishes conditions whereby 60% of the women aged 50 - 70 are involved.
- Women, particularly those from disadvantaged backgrounds and those more than 50 years of age, are encouraged to become involved in screening programs that detect uterine cancer.

2.3 Research studies that focus on cancer control attempt to:
- Develop a national system/organization that regularly provides data on the incidence and mortality rate of cancers at the national level.
- Discover the reasons outlining why women accept and/or reject screening programs designed to discover breast or uterine cancer in early stages.
- Identify the causes related to the significant delay in patients receiving the results of examinations for cancers: colorectal, skin, oral cavity/pharynx, cervix.
- Evaluate the impact of screening programs for colorectal and cervical cancer.
- Evaluate methods and protocols used in the treatment of various cancers.
- Advance knowledge of the genetic risk factors and environmental hazards that may lead to cancer.
- Evaluate the efficacy of retinoids (tumour cell differentiation agents derived from vitamin A) in preventing (a) relapse from disease remission and (b) the malignant transformation of precancerous lesions in the oral cavity and larynx.
- Identify clinical ‘best-practice’ procedures, notably in the treatment of breast, cervical, and colorectal cancer.

3. Progress to Date
The health system in France is undergoing reform. Although cancer is the primary cause of death, the expenditures devoted to the fight against cancer are unknown. The ARC scandal has
initiated an examination of the financing and organization of the cancer control strategy. The French initiative - La politique de lutte contre le cancer - issued in October 1998, outlines the inadequacies of the cancer control policy suggesting an absence of significant results correlate with:

- inadequate treatment procedures.
- unsuccessful publicity campaigns focussed on reducing health risk.
- insufficient patient awareness of health system.
- variations in pricing of similar services.
- faulty billing procedures.
- partitioning of cancer control facilities into public vs private units.
- inequalities in access to treatment on a regional basis.
- outdated and unjustified screening methods.
- increase in incidence of cancer.
- elevated operating costs.

4. Coordinating body

A mandate is to be re-established for the National Cancer Council so that this body, composed of representatives that include the CLCC, CHU, private hospitals, clinics, and others in the field of oncology, becomes the lead organization that advises the Ministry of Health on appropriate government policies and regulations to combat cancer.

5. Partnerships

5.1 Cancer treatment/care is provided by the CLCCs - Les centres de lute contre le cancer (20-25%), public university hospital centres (20-25%), and private hospitals/clinics (50-60%). The lack of shared information between public and private cancer treatment centres as well as the absence of precise codes to identify pathologies has led to a situation where it is not possible to easily document national cancer incidence and mortality rates.

5.2 Few multi-disciplinarian committees in cancer care exist in the university hospital centres to coordinate therapeutic protocols or promote training in cancer care methods.

5.3 Although a 1995 cooperation agreement between the UNHPC - Union National Hospitalière Privée de Cancérologie (private cancer clinics) and the FNCLCC (National Federation of Centres Fighting Cancer) created a common surveillance unit, limited cooperation exists between university and private hospitals.
5.4 In 1998, the university hospital centres (CHU) formed a Federation of Cancerology (FCCHU) that is attempting to develop common medical practices.

6. Evaluation
6.1 Initiatives of the FNCLCC, CNAMTS, and private clinics to establish quality control standards in cancer care are ongoing. Quality control measures are being developed for national screening programs.

6.2 The accreditation procedures established by ANAES and FNCLCC are being implemented.

6.3 To restore the confidence of donors who contribute funds to NGOs following the ARC scandal, research institutes will use public accounting procedures that can be scrutinized by the NGO awarding funds.

7. Implementation and improvement

The French initiative - La politique de lutte contre le cancer - issued in October 1998, outlines strategic initiatives to combat cancer. Prepared by a Finance Commission, after the 199195 French Cancer Research Association scandal (Le scandale de L’ARC), the report delineates current problems in French cancer control and recommends a corrective course of action that should be undertaken in conjunction with the financial overall of the health system currently under review.

The overall goal of the cancer control recommendations, as inferred from this report, are to (a) restore public confidence in the administration of monies available to fight cancer and (b) lower the incidence and mortality rates for all cancers so that targets in 2.1 can be realized.

Recommendations include:

7.1 New Health Ministry accounting methods, similar to the financial procedures established to combatting HIV, will delineate how public funds are spent to fight cancer. At the annual National Health Conferences, the government will discuss the financial implications of cancer-related policies with all stakeholders.

7.2 The Medical Information System (PMSI) should be upgraded to account for the invisible costs associated with cancer care.

7.3. Epidemiological studies of the Regional Health Observatories should also focus on tumour
pathologies under an increased budget to determine regional disparities.

Also, the regional technical committees in oncology, should collect cancer-related statistics on a regional basis to assist in the elaboration of the SROSS (Schemas Regionale d’Organization Sanitaire) The work of these committees should be coordinated with the analyses prepared by the Agences Regionales de l’Hospitalization.

7.4 The nomenclature used in chemotherapy treatment should be harmonized in the acts and regulations to provide for standardization in billing practices.

7.5 National screening programs, established in 1999 for breast and cervix cancer after numerous pilot programs, will be 100% reimbursed by medicare. All screening programs will be established jointly by ANAES and CNAMTS in order to maximize benefits and minimize costs. Frequent screenings (yearly or multiple visits per year) will be discouraged and will not be covered by health insurance.

7.6 Cancerology networks should be established similar to ONCOLOR (in Lorraine) and ONCORA (in the Rhone-Alps). Exemplary practices and protocols in cancer treatment, prevention, and care should be identified. The GP will have access to all network databases.

7.7 A multi-disciplinarian approach to cancer care is made compulsory. A patient bill of rights will be established. Regulations state that one doctor cannot be the sole provider or decision-maker in a cancer patient’s care.

7.8 NGO’s who wish to contribute to cancer research should follow guidelines that meet the public health objectives of the government and are similar to the type ARC has begun to negotiate. Pilot clinical research on therapeutic strategies for cancer care will be stressed.

7.9 National campaigns against tobacco and alcohol abuse should be intensified through budget increases. Regulations promulgated in the Evin law should be strictly enforced. Tobacco prices should be increased by taxation to make the purchase of tobacco, especially for youth, unattractive.

7.10 Health education should be globalized since a healthy lifestyle reduces mortality rates from all diseases.

7.11 General medical education in oncology for health professionals, often split between various disciplines, should be updated, increased, and introduced as a body of knowledge.
7.12 Since the GP may only diagnose 2 cancer cases per year, training in the screening process must be ongoing. The GP must have access to new diagnostic methods in cancer. Continuous medical training will be obligatory.

7.13 Policies regarding the therapeutic class of anti-cancer medications and corresponding reimbursement programs covered under health insurance should be revised to add new drugs and remove redundant/obsolete ones.

7.14 To restore the confidence of NGO donors following the ARC scandal, research institutes should use proper public accounting procedures that are scrutinized by the NGOs awarding the funds.
Germany (Population - 82.1 million)
Cancer Control Strategy

Abbreviations:
Federal Institute for Drugs and Medical Devices (BfArM)
Federal Centre for Health Education (BZgA)
Federal Institute for Sera and Vaccines (PEI)
German Cancer Aid (DKV)
German Cancer Research Centre (DKFZ)
German Institute for Medical Documentation and Information (DIMDI)
Health Monitoring Agency (GBE)
Robert-Koch Institute (RKI)
World Health Organization (WHO)

1. National cancer control initiative:
1.1 Health Reform 2000, the proposed German health initiative for the 21st Century, aids in creating the conditions for medical and scientific research organizations, social security insurance carriers, statutory and private health insurance, Deutsche Krebshilfe e.V (German Cancer Aid), and other NGOs to continue their contributions to fighting cancer in Germany.

1.2 In general terms, the goal of the German cancer program is to improve in the areas of cancer prevention, detection, patient care, research, and education.

2. Strategies and goals planned or under way:
2.1 Contribution rates in the statutory health insurance system will be stabilized.

2.2 Chronically ill patients, including cancer patients, will be exempt from co-payments in the health insurance system.

2.3 The health care system will respect the right of cancer patients to self-determination in respect to health system demands for double and multiple examinations.

2.4 Health insurance companies will offer integrated forms of care between GPs and specialists, between medical and non-medical professionals, and between in-patient and out-patient areas of care.
2.5 GPs will organize and coordinate the various treatment measures for chronically ill cancer patients by medical and non-medical specialists.

2.6 Criteria for quality control will be established by the development and expansion of guidelines for cancer treatment.

2.7 Cancer patients will be consulted for quality of service, quality of medical care, and treatment results.

2.8 To optimize patient care, a registry for prescription drugs, including drugs for special types of cancer therapy, covered by compulsory health insurance will be established by independent drug experts.

2.9 The introduction of mammography screening for early detection of breast cancer will be tested in three regions beginning in 1999-2000 financed by health insurance plans. At present, under compulsory health insurance, women are entitled to a yearly early detection examination (a) for cancer of the reproductive organs (if they are 20 years of age) (b) for breast and skin cancer (if they are 30 years of age) and (c) for colon and rectum cancer (if they are 45 years of age). For men compulsory health care covers the cost of yearly early detection exams for cancer of the rectum, colon, prostate, skin, and testes.

2.10 The Federal Ministry of Health will (a) promote a ‘Coalition against Smoking’ in an effort to coordinate individual actions and NGO campaigns being carried out at different levels, and (b) renew an interfactional initiative for a law on protection for non-smokers.

2.11 Chronically ill persons, including those in cancer self-help groups, will be included as experts in the planning and execution of health-related issues in areas of after-care and health administration.

2.12 The Federal Ministry of Health will continue support for the free Cancer Telephone Information Service at the German Cancer Research Centre in Heidelberg.

2.13 The Cancer Registry Law of Germany (KRG) came into effect in 1995 providing for a network of provincial cancer registries to be established by 1999. These regulations re-establishing cancer registries provide data on the incidence, chronological developmental trends, and survival time analyses of cancers.
A Population Based Cancer Registry Study Group for Germany was established in 1996 to attain a general methodical uniformity through internal standards that will be pursued with state governments and the medical profession. Through this group, all existing and newly created epidemiological German cancer registries as well as the “Dachdokumentation Krebs” (general cancer documentation) of the Robert Koch Institute are coordinated together.

Since 1991, a National German Children’s Cancer Registry, established by combining data from East and West Germany, conducts research on the most common German children’s cancers - leukaemia, central nervous system tumours, and lymphoma.

2.14 The Federal Minister of Education and Research will fund three competence networks in cancer specific themes of paediatric oncology, leukaemia, and malignant lymphoma that have fulfilled funding competition requirements of horizontal and vertical networking involving scientists and practitioners from different disciplines enabling a faster transfer of research results into health care practice.

3. Progress to Date
3.1 Deutsche Krebshilfe (German Cancer Aid), a non-profit organization that relies on donations, inheritances, and legacies has provided much of the impetus for advances in Germany’s battle against cancer for over two decades. Providing funding for a limited period of time on measures to combat cancer, many of their exemplary projects now are fully financed by the federal and state governments. Examples of initiatives taken by German Cancer Aid are:

• German Cancer Aid stresses the increased use of cancer early detection services, focussing presently on early detection of breast cancer.

• German Cancer Aid and The German Dermatology Society joined forces in 1989 to promote campaigns - “How to Protect Against Sun”, “Caution Sun”, and “Child and Sun”. In 1996, a campaign “Save your Skin” funded in cooperation with Ministries of Labour, Health, and Social Affairs and German Cancer Aid supported by health insurance companies provided screenings in public health offices reducing fear and motivating people to changes in behaviour.

• To improve cancer control and care of cancer patients, five comprehensive cancer “tumour” centres were funded by German Cancer Aid between 1976-1981. In 1982, The federal government took over financing of the centres and today support numerous comparable institutions. Since 1991, German Cancer Aid supports 9 tumour centres in the five new federal states to offer the population a replacement for old tumour counselling offices.
• The Association of Panel Doctors of Lower Saxony has developed a nation-wide system of Oncological Aftercare Centres with the financial support of German Cancer Aid aimed at improving the scope and quality of cancer outpatient care.

• In 1983 and 1992 palliative wards were established by German Cancer Aid for the most seriously ill cancer patients in Germany and have become the guiding focus for numerous palliative institutions in Germany.

• Dr. Mildred Scheel Academy for Research and Education offers training and seminar courses to members of post-cancer self-help groups, family members and relatives of cancer patients, nurses and carers, social workers, psychologists, spiritual advisers, students, doctors, and the public. A Cancer Prevention Symposium, staged every two years, is directed at teachers and other opinion leaders in the area of health training.

• German Cancer Aid supports 90 departments and institutions (DM 95 million) in paediatric oncology and funds all paediatric oncology therapy studies in Germany.

• Six federal states, Federal Ministry of Health, the private health schemes, and the Mainz children’s cancer register are involved in a pilot project funded by German Cancer Aid in the early detection of neuroblastoma in children between 10 and 14 months.

• In 1991, German Cancer Aid established the first German Bone Marrow Donors’ Database (DKMS) that is currently funded by the Federal Ministry of Health. DM 21 million is allocated by German Cancer Aid to sponsor bone marrow transplant centres in 5 centres in partnership with the respective federal state.

• German Cancer Aid sponsors 12 Deep Hyperthermia research projects that use heat in the therapy of malignant tumours in two university hospitals.

• A working group, funded by German Cancer Aid and integrated into a 120 bed oncology haematology clinic, scientifically examines and evaluates unconventional and alternative methods of cancer treatment.

• The Hardship Fund of German Cancer Aid offers grants, tied to family income, to cancer patients who have financial difficulties as a result of their illness.

• German Cancer Aid provides 19 clinics in the new federal states with mammography equipment.
• Psycho-social aftercare cancer centres and teams established at tumour centres by German Cancer Aid attempts to find individual solutions to counter changes in the cancer patient’s life brought on by the disease.

• German Cancer Aid’s financial and conceptual assistance supports over 630 German cancer self-help groups.

• Dr Mildred Scheel Foundation for Cancer Research, an independent organization of German Cancer Aid, funds individual cancer research projects and organizes international cancer experts conference in Bonn every two years. DM 220 million has financed 460 initiatives to date. The foundation also offers grant programs for further education and training of physicians and scientists specializing in oncology on an international level.

3.2 Deutsches Krebsforschungszentrum (DKFZ) Heidelberg, the German Cancer Research Centre, established in 1964, engages in multidisciplinary cancer research as a national German research centre funded by Federal Ministry for Research and Technology (90%) and the Minister for Research and Sciences (10%) in 50 divisions and working groups focussing in 8 fields:

• Cell differentiation and carcinogenesis
• Tumour cell regulation
• Cancer risk factors and prevention
• Diagnostics and experimental therapy
• Radiological diagnostics and therapy
• Applied tumour virology
• Tumour immunology
• Genome research and bioinformatics

4. Coordinating body

The Federal Ministry for Health is responsible for shaping the central elements of consumer health protection, including cancer control. Cancer control follows under the jurisdiction of five institutes that work on behalf of the Federal Ministry of Health:

• Robert-Koch Institute (RKI) - the central institution of the Federal Government in the public health field responsible for the detection, prevention, and control of diseases, including cancer. It evaluates, analyzes, and investigates diseases of outstanding public or health policy importance.
• Federal Institute for Drugs and Medical Devices (BfArM) that includes amongst its main tasks the licensing of medical products, registration of homeopathic medicines, risk assessment of medicinal
products and medical devices and supervision of the trade in narcotics and precursor substances.
• Federal Institute for Sera and Vaccines (PEI) responsible for the licensing and regular testing of vaccines, sera, immunodiagnostics, and blood products as well as relevant test-related research.
• German Institute for Medical Documentation and Information (DIMDI) that makes accessible information in data banks on life sciences for use by medical research and practice, the public health care system, and the interested public.
• Federal Centre for Health Education (BZgA) that runs national campaigns and, through quality assurance measures, increases citizens’ willingness to make use of the public health care system

5. Partnerships
5.1 Cooperative ties exist with the states as a result of the German federal structure. The federal states are central partners in health education campaigns of nationwide importance. Cooperation with partners within the healthcare system (e.g. Doctors, pharmacists, health insurance carriers, work and leisure sectors, NGOs (German Cancer Aid)) is the basis for implementation and propagation of health programs, including cancer control.

5.2 The Federal Centre for Health Education (BZgA) acts a Collaborating Centre for the World Health Organization (WHO)

6. Evaluation
In November 1998, the German Federal Statistics Office published the first Health Report for Germany that evaluated the health care system in Germany. The Health Report is a joint analysis by more than 170 experts and institutions that establishes the main issues for the organization (Gesundheitsberichterstattung - GBE) that will begin monitoring and evaluating health programs (including cancer control) of the German Federation. In the future, the Robert Koch Institute (RKI) will update the Health Report in cooperation with the Federal Statistics Office.

7. Implementation and improvement
7.1 The German states have few long term current population-based cancer registries. In 1996, a Population Based Cancer Registry Study Group was established to coordinate all existing and newly created epidemiological cancer registries at the Robert Koch Institute (RKI). The Cancer Registry (KRG) law, introduced in 1998, provides a basis for a systematic inventory of new cancer cases.

7.2 In Health Reform 2000, government efforts are being focussed on:
• strengthening Statutory Health Insurance to reduce the need for persons, including cancer patients, to make additional co-payments for drugs and dressings, medicine and aids, hospital treatment, and rehabilitation that are fixed partly as a set DM-amount and partly as a percentage proportion of the costs.

• integrating out-patient and in-patient care to prevent duplication in examinations and to reduce frequency of patient referrals due to inadequate information flow.

• re-examining the doctors’ compensation system in order to meet the requirements of care that is fair to the patient.

• removing the hospital emergency levy of 20 marks per insured person.

7.3 Evaluations of German Cancer Aid’s program of:
• “Save your Skin’ indicate that local screening in public health offices, where personal direct advice was given, helped persons deal with the sun more carefully and increased the demand for information.
• “aftercare centres” suggest that cancer patient care is intensified and valuable contributions are made to cancer epidemiology.
Ireland (Population - 3.7 million)
Cancer Control Strategy

Abbreviations:

Department of Health and Children (DOHC)
Health Development Agency (HDA)
National Health Services (NHS)
Non-governmental organization (NGO)
World Health Organization (WHO)

1. National cancer control initiative:
1.1 ‘Working for health and well being,’ the strategy statement of the Irish Department of Health and Children, identifies six priorities for 1998-2001. Priority#3 is the development and implementation of integrated strategies in relation to cardiovascular disease, cancer, and accidents. Defining a cancer control strategy is one of the first steps in realizing the government’s health care objectives outlined in ‘An Action Programme for the Millennium.’

1.2 The Irish National Cancer Strategy, adopted in 1997, is being phased in by the Department of Health and Children.

2. Strategies and goals planned or under way:
2.1 *The principal objectives of the Irish National Cancer Strategy are:*
• To provide for an equitable and uniform high quality integrated cancer service throughout Ireland
• To reduce cancer deaths in people under 65 by 15% by 2004.

2.2 *The specific goals in relation to these objectives are:*
• To prevent cancers for which a cause is known or suspected.
• To increase awareness and improve knowledge of the cause of cancers among professionals and the public, so as to provide patients and their families with clear information on all treatment options available.
• To provide screening services of proven value in prevention and early detection.
• To ensure that all patients have access to an equitable, effective service with a uniformly high quality of care, wherever they live.
• To prolong and improve quality of life of those diagnosed with cancer in a manner that is sensitive to their needs and fears.
• To ensure that treatments are provided appropriately and administered safely in accordance with established best practice.
• To ensure coordination of all cancer services including primary care, hospital care, rehabilitation, and palliative care.
• To ensure that all services are provided in a cost-effective manner.
• To promote arrangements for appropriate research and education among staff providing cancer services.

2.3 Health Promotion
The Irish National Cancer Strategy builds on current health promotion policies by:
• Placing further emphasis on multi-sectoral coordination.
• Developing information systems for the monitoring and evaluation of health promotion programs.
• Taking a series of initiatives in areas such as smoking, alcohol and nutrition.

The following strategies and initiatives currently in place will be sustained and improved:

2.31 European Union
The Department of Health and Children endorses the EU’s ‘European Code Against Cancer’.

2.32 Department of Health and Children
Cancer becomes a key issue of the National Consultative Committee on Health Promotion led by the initiatives of Irish Cancer Society (see Section 2.35) and chaired by the Minister of State at the Department of Health and Children.

2.33 Health Boards
Health Boards, with the support of the Department of Health and Children, will continue to develop:
• Anti-smoking policies and programs.
• Community nutrition programs.
• Nutrition programs integrated into general practice units.
• Health education materials in cancer prevention at primary and secondary school levels.

2.34 General Practitioners
General Practitioners take a proactive role in:
• Maintaining smoking clinics.
• Promoting awareness of self-examination for breast and testicular cancer.
• Advising on risk avoidance for patients with a family history of cancer.

2.35 Non Governmental Agencies (NGOs)
The Department of Health and Children in partnership with the Irish Cancer Society develops health
promotion initiatives targeted at cancer prevention in:
• Smoking.
• Sun exposure.
• Early detection of cancers.

2.36 Smoking
The action plan to reduce the incidence of smoking continues by:
• Extending the environmental controls over tobacco.
• Reducing budgets for advertising of tobacco products and sponsorship by tobacco manufacturers and distributors.
• Intensifying multi-media anti-tobacco campaigns and health education programs.
• Launching a Voluntary Code of Smoking in the Workplace.
• Continuing action by doctors and other health professionals to encourage a decrease in smoking.

2.37 Diet
The Nutrition Health Promotion - Framework for Action’ white paper encourages Irish citizens to increase fibre intake, reduce fat, drink alcohol in moderation, and maintain appropriate weight through healthy eating and regular exercise by:
• Promotion of Healthy Eating Guidelines.
• Promotion of the Annual Healthy Eating Week.
• Development of Nutrition Education Programs for specific target groups.
• Development of Healthy Catering Policy in workplaces.
• Maintenance of the national Nutrition Surveillance System.
• Support for national conferences in nutrition.

2.4 Screening and Early Detection
2.41 Breast Cancer
A project team, established by The Department of Health and Children, advises on the implementation of breast screening for women in the 50-64 age group. The project team:
• Consults with government and non-government agencies on the question of establishing a national population register in cooperation with the Data Protection Commissioner.
• Sets the terms of reference and suggested membership of the national steering committee for the program.
• Reviews staffing and capital requirements.
• Investigates the best location for the programs.
• Advises on the structures necessary to assure quality assurance.
• Advises on health promotion/awareness campaign that must accompany a program.
2.42 Cervical Cancer
The main recommendations of the Chief Medical Officer for Ireland are:
• To establish a national cervical screening program based on an age/sex register and screening to be offered to women in the 25-60 age group in order to reduce the prevalence of and morbidity from cervical cancer.
• To make available free of charge cervical smear services under the General Medical Service.
• To ensure that the minimum interval between screenings is 5 years, but to allow for 2 screenings within 12 months for women entering the program if they have not previously been tested.
• To establish a call/recall system to communicate with the target population and to aid in evaluating the success of the screening program.
• To establish an expert advisory committee to oversee the establishment, implementation, and monitoring of the cervical screening program.
• To confer overall responsibility for implementing and evaluating the cervical cancer screening program to the director of public health in each health board area.

2.43 Other cancers
The scope and advisability of further screening initiatives will be kept under review. Research on bowel and prostate cancer screening through pilot programs will continue. Population screening for skin cancer is not recommended.

2.5 Development of cancer treatment services
An integrated model of primary and hospital care reorganizes cancer treatment services. A structured network of regional and supra-regional services with close links to primary care is under development. A National Forum on Cancer services provides the focal point for communication and coordination of services.

Preliminary suggestions of the National Forum of Cancer are:

2.51 Primary Care
• GPs/cancer specialists agree on guidelines for management, referral, and discharge of cancer patients.
• Clear procedures enable speedy referral by GPs to most appropriate diagnosis/treatment point.
• Closer links develop between hospitals and community-based services.
• Greater coordination and integration of community-based cancer services develops.

2.52 Regional Services
• Regional groups of hospitals organize cancer treatment service for region.
• Regional Director develops a cancer plan for region for Health Board approval
• Regional Director organizes and audits cancer services in region and develops protocols with GPs for referrals to hospitals and palliative care.
• Each hospital draws its cancer services together in one entity (not necessarily on same campus) under a Coordinator.

2.53 Supra-Regional Services
• Supra-regional services (in Cork, Dublin, and Galway) provide the full range of cancer services but with provision for concentration in fewer centres for radiotherapy and rare cancers.
• Directors of supra-regional services have responsibility for coordination of services and communication.
• Multidisciplinary coordinating group represents all hospitals in the supra-regional service.

2.6 Rehabilitation
Under the existing cancer strategy the following principles guide the approach to rehabilitation services:

2.61 Rehabilitation is an integral part of patient care taking and includes self care, career support, psychological support, physiotherapy, occupational therapy, dietics, speech therapy, patient education and health promotion, appliance fitting, nursing services, and community liaison.

2.62 Rehabilitation is proactive, instituted at the onset of treatment and forms part of both initial and continuing programs.

2.63 GPs are integrated into the role of the hospitals in the provision of rehabilitation services.

2.64 Health agencies support NGOs and ensure, through evaluation, that these agencies meet health needs and support implementation of the cancer strategy.

2.7 Palliative Care
Palliative care services will be developed by:

2.71 A National Advisory Committee on Palliative Care is to provide detailed advice on the development of national palliative care services including addressing the need for the training of specialized key personnel.

2.72 The proposed supra-regional cancer services, outlined in 2.53, will have consultant-led
palliative care service.

2.73 Phasing in of specialist palliative care services will occur at the regional level in consultation with Health Boards and NGOs.

2.74 Health Boards will prepare a set of priorities for the development of palliative care services in their area.

2.8 Cancer Research
The Health Research Board will establish a Cancer Clinical Research Unit to:

• Provide an infrastructure for a multi-disciplinary, multi-institutional approach to clinical cancer research.
• Focus clinical research in a way that contributes to the knowledge and treatment of the most common cancers in Ireland.
• Assist participation in collaborative clinical research with other EU countries and cooperative groups.

3. Progress to Date
3.1 Research is ongoing into the causes of apparent variations in rates of cancer morbidity and mortality between different parts of the country. A National Disease Surveillance Unit was established in the 1998 budget. The cancer focus is on eight main common cancers: lung, colorectal, breast, prostrate, cervix, skin, oesophagogastric, and blood.

3.2 Health promotion forms a key element of the integrated approach to the nascent Cancer Control Strategy. A series of initiatives in such areas as smoking, alcohol, and nutrition are being phased into policy. A 1999 advertising and promotional campaign, ‘Breaking the Habit for Good’, developed by the Minister for Health and Children in cooperation with the Irish Cancer Society and the eight regional health boards provides support to assist those attempting to quit smoking. The plan also emphasizes the need to encourage and support voluntary support groups in each region and to develop comprehensive information and consumer feedback with patients and their families.

3.3 Screening and early detection programs continue to form a critical part of the drive to combat cancer mortality and morbidity. Screening programs are targeted towards cancer types where early detection is possible. A pilot cervical screening programme, introduced in 1998 is overseen, monitored, and evaluated on an ongoing basis in the Mid-Western Health Board area. In 2001, a national cervical screening program will be introduced. A national screening programme for breast cancer is being developed.
3.4 Cancer treatment services are being reorganized using an integrated model of primary and hospital care. A structured network of regional and supra-regional services with close links to primary care is being developed (see Section 2.5).

4. Coordinating body
4.1 A National Forum on Cancer Services:
• Acts as a unifying link across all levels of cancer services for planning and delivery.
• Helps ensure coordination of services.
• Acts as a focal point for best practice and the development/implementation of protocols.
• Promotes evaluation of the effectiveness and quality of cancer services.
• Promotes good communication at all levels of cancer services in Ireland.
• Helps co-ordinate research into cancer in conjunction with the Health Research Board

4.2 Membership in the Forum is multidisciplinary and representative of all levels of service including the Department of Health and Children, hospitals, NGOs, consumers, community representatives, Health Boards, and Regional/Supra-Regional Directors of Cancer Services.

4.3 The Forum meets on a quarterly basis to review developments in services and to agree on a common approach to implementing national issues in Cancer Control.

5. Partnerships
5.1 In 1995, The Minister of Health established a Cancer Strategy Group to:
• Outline the epidemiology of cancer in Ireland and internationally.
• Assess the impact of cancer on the Irish people and on the health services.
• Examine the current provision of cancer services.
• Make recommendations for the future organization of the service

Professional bodies, NGOs, cancer specialists were consulted and encouraged to make oral and written submissions to the Cancer Strategy Group. The consultative process on Women’s Health contributed to the Cancer Strategy Group. In 1997, ‘Cancer Services in Ireland: A National Strategy’ was released as the initial Irish federal government cancer control strategy.

6. Evaluation
6.1 National Screening Programs, under development, will explicitly:
• State clearly aims and objectives and include targets for compliance and reduction of mortality.
• Specify steps to ensure compliance and therefore maximize the potential for reducing mortality.
• Include protocols for screening, follow-up, and referral to ensure quality assurance.
• Document results in a way that assists evaluation of the effectiveness of the screening program.
• Account for client satisfaction in the design/evaluation of screening programs, the communications process around it, and the psychological impact of false positive results.
• Contain a population register enumerating each individual in the target population and a computerized information system with a call/recall facility.

6.2 The Irish National Cancer Registry - a population-based surveillance system - collects cancer data and is an essential database for evaluating outcomes of cancer screening programs.

6.3 Each of the eight Irish Health Boards, as required by the Department of Health and Children, produces an annual service plan that acts as a benchmark for measuring the achievement of health objectives and publishes an annual report. The plan and report addresses the implementation of the national cancer strategy.

7. Implementation and improvement
7.1 An extra £264 million has been allocated in the 1999 budget for various medical services such as the phased implementation of the preliminary Irish Cancer Control Strategy.

7.2 A joint executive agency for the Health Boards will be established on a statutory basis to allow the Health Boards to co-operate and co-ordinate their activities on national issues such as the Cancer Control Strategy.

7.3 The Office for Health Management, involving Health Boards, unions, professional bodies, and education providers, is implementing the federal government’s agenda to strengthen management capacity throughout the health service in areas such as recruitment, selection and initial training, performance measurement, managerial effectiveness, career development, and health services management education.

7.4 As part of the development of the performance management program, feedback mechanisms will be established enabling the Department of Health and Children to monitor progress in achieving health objectives that include cancer control.

7.5 Non governmental health organizations will no longer receive funding directly from the Department of Health and Children but in the future will receive funding from the Health Boards to which they will become accountable for the public funds they receive. The larger NGOs will have service agreements with the Health Boards that will link funding by the Boards to agreed levels of
service to be provided by NGOs. Health Boards will include representation from NGOs to improve linkages between the voluntary and statutory sectors.
Italy (Population - 56.7 million)

Cancer Control Strategy

Abbreviations:
National Oncology Commission (CON)

1. National cancer control initiative:
Based on an exhaustive search of existing internet-based health documents, we have been unable to locate the actual Italian National Health Plan (1998-2000) document that encompasses the health of all Italians and that includes cancer as one of the focus areas. However, our analysis of a number of other federal oncology-related documents published on the WWW and our limited discussions with informed sources confirm that Italy does have a national cancer control strategy in place. We have been able to determine:

1.1 The following targets were established for the cancer focus area (1998-2000) referenced to 1993 mortality rates:

• Reduce by 10% for males and 5% for females the mortality rate for all cancers
• Reduce by 10% for men and stabilize for women the mortality rate for lung cancer
• Reduce by 5% the mortality rate for breast cancer
• Reduce by 10% the mortality rate for stomach cancer
• Stabilize the mortality rate for colon cancer
• Reduce by 10% the mortality rate for cervix cancer.

1.2 National screening programs were established for breast and cervix cancer targeting:

• Women aged 50-69 years receive a mammogram every 2 years
• Women aged 25-64 years receive a pap test every 3 years.

1.3 A national cancer registry will be developed to collect data on incidence and mortality rates for all cancers.

1.4 Programs/legislation to reduce smoking and improve dietary habits was introduced.

1.5 A National Oncology Commission (1997 -1999), established by the Minister of the Dipartimento della Prevenzione, includes oncology representatives from government departments, research institutes, and NGOs as well as GPs, medical specialists, clinicians, psychologists, social workers,
and volunteers involved in the care of cancer patients. This commission (CON) provides leadership
to the regions and local health units in combatting cancer by producing guidelines for cancers such
as lung, breast, colon, and cervical in addition to recommending proposals for cancer prevention/
care, research, and epidemiology
National cancer control initiative

A comprehensive national cancer control strategy has not been identified in Japan based on our analysis of available online and print documentation. There is some suggestion that a national body exists that may provide the impetus for a national strategy should the need be recognized. To this end, a National Cancer Centre was established in 1962 to serve as a focal point for treatment, research, education/training of medical personnel, and the collection/distribution of information related to cancer.

In 1984, under the direction Cabinet Council for Cancer Control and with the cooperation of related ministries/agencies, a “Comprehensive Ten-Year Strategy for Cancer Control” that focussed research at the Japan National Cancer Centre on understanding the mechanism of developing cancer was established.

A national project for a “Second Term Comprehensive 10-year Strategy for Cancer Control” has been promoted since 1994 at the Japan National Cancer Centre where research focusses on

(a) Project Research
   • Molecular Mechanisms of Carcinogenesis
   • Invasion, Metastasis and Characteristics of Cancer Cells
   • Cancer Susceptibility and Immunity
   • Cancer Prevention
   • New Methods for Cancer Diagnosis
   • New Methods for Cancer Therapy
   • Quality of Life of Cancer Patient

(b) Research Support System
   • Program to invite Foreign Scientists to Japan
   • Research Resident Fellowship
   • Program to Send Japanese Scientists Abroad and Research Fund for Foreign Research Institutes
   • International Symposia Program and Lectureship Program

(c) Total Support System for Cancer Diagnosis and Therapy
   • Cancer Information Network Project
New Zealand (Population - 3.8 million)
Cancer Control Strategy

Abbreviations:
Health Funding Authority (HFA)
Hospital and Health Service (HHS)
Ministry of Health (MOH)
National Breast Cancer Screening Program (NBCSP)
National Cancer Registry (NCR)
National Cervical Screening Program (NCSP)
National Cervical Screening Register (NCSR)
New Zealand Health Information Service (NZHIS)
Non-governmental organizations (NGOs)
Public Health Commission (PHC)
Royal New Zealand College of General Practitioners (RNZCGP)

1. National cancer control initiative:
1.1 The 1997 document, ‘Strengthening Public Health Action: The Strategic Direction to Improve, Promote, and Protect Public Health’ shapes the policy, funding, and provision of health services in New Zealand for 5 years. It retains and extends the ‘Strategic Direction for Public Health’ developed in 1993 by the Public Health Commission. Specific public health goals are:
(1) To ensure a social and physical environment that improves, promotes, and protects public health and whānau public health.
(2) To improve, promote, and protect Māori health status so in the future Māori will have the opportunity to enjoy at least the same level of health as non-Māori.
(3) To improve, promote, and protect the health of Pacific people.
(4) To improve, promote, and protect the health of children/tamariki.
(5) To improve, promote, and protect the health of young people/rangatahi.
(6) To improve, promote, and protect the health of adults/pakeke/matua.
(7) To improve, promote, and protect the health of older people/kaumātua.

1.2 In relation to Goal #6, national objectives with targets have been established for cervical, melanoma, breast, and lung cancers.

2. Strategies and goals planned or under way
One of the principal objectives established to improve, promote, and protect the health of adults/
pakeke/matua (Goal #6) is to reduce illness, disability, and death rates from cancers - cervical, melanoma, breast, lung.

2.1 Cervical Cancer
2.11 Targets for cervical cancer

• To reduce the age-standardized mortality rate from cervical cancer in all New Zealand women to 3.5 per 100,000 or less by year 2005.
• To reduce the age-standardized incidence of cervical cancer in all New Zealand women to 8.6 per 100,000 or less by year 2005.
• To reduce the proportion of invasive cervical cancers beyond Stage 1 at the time of detection to 30% or less by year 2000.
• To reduce the age-standardized mortality rate from cervical cancer in Māori women to 9.4 per 100,000 or less by year 2000 and to 6.6 per 100,000 or less by year 2005.
• To reduce the age-standardized incidence rate of cervical cancer in Māori women to 11.0 per 100,000 or less by year 2005.
• To increase the proportion of eligible women enrolled and screened in the previous 5 years to 85% or more by year 2000.

2.12 Strategies for cervical cancer
(a) National Cervical Screening Program (NCSP)
The NCSP, established in 1990, is a population-based cancer screening program that provides national co-ordination of screening services managed and delivered at the local level by GPs, nurses, lay smear-takers, health educators, and laboratories. The NCSP target population is all women aged 20-69 years who have had sexual intercourse and have not undergone a total hysterectomy for a benign condition. Priority groups are women who have never had a cervical smear, women aged over 35 years, and Māori/Pacific women.

(b) National Cervical Screening Register (NCSR)
Fourteen local sites provide regional access to one centralized NCSR database that allows for an increased volume of data, reduces duplication, improves tracking of women who move to different areas, and improves the quality of smear test readings by providing laboratories with a women’s previous cytology and histology case history. The NCSR facilitates access to data for national monitoring and evaluation.

(c) Protection of data
The Health Act 1956 was amended in 1993 to allow regulations to be made to provide additional protection to any class or classes of women. In 1995 the Health (Cervical Screening-Kaitiaki)
regulations were enacted to allow establishment of a National Kaitiaki Group. The Kaitiaki provides guardianship for wāhine Māori summary data stored on the NCSR reassuring wāhine Māori that their data are protected and will only be used for their benefit.

(d) Ethnicity data
A Pacific women’s Data Management Group oversees the release of aggregated data for women identified as Pacific on the NCSR.

2.2 Melanoma Cancer
2.21 Targets for melanoma cancer
• To reduce the age-standardized melanoma mortality rate to 7 per 100,00 or less among males, and 3 per 100,000 or less among females by year 2005.
• To reduce the age-standardized incidence of thick melanomas (≥1.5 mm) to 6 per 100,000 or less by year 2005.

2.22 Strategies for melanoma cancer
(a) Policies
• New Zealand is a signatory to the Montreal Convention on protection of the ozone layer and prohibits importation of CFCs under the Ozone layer Protection Act 1996.
• Local authorities continue to develop district plans (required under the Resource Management Act 1991) that require the provision of tree shade at beaches, swimming pools, and other recreational areas.
• The New Zealand Cancer Society’s Shady Schools Program encourages school board trustees to adopt policies encouraging sunsmart behaviour, such as: wearing of hats and use of sunscreens, appropriate timing of sports events, provision of shady environments through tree planting and other shade construction, and the teaching of sunsmart awareness in the curriculum.
• The Ministry of Health is working to bring sunscreens under the proposed Therapeutic Products Bill to ensure compliance with standards for effectiveness.
• The 1993 Cancer Registry Act improves the accuracy and completeness of melanoma registration including depth distribution data.

(b) Behavioural change/Early intervention
• The New Zealand Cancer Society promotes yearly a Melanoma Awareness Week with a focus on sun avoidance. Local public health services, local authorities, and other agencies organize local activities to coincide with Melanoma Awareness Week and run local sun-avoidance programs throughout the summer. The Order of St. Lazarus targets a Be Safe in the Sun Program at children and operates skin cancer clinics for early detection of melanoma. Many GPs, dermatologists, and
HHSs operate spot-check clinics in association with Melanoma Awareness Week.
• Industrial Research Limited, under contract to the Ministry of Health, provides UV rates to radio and television stations for inclusion in weather forecasts seeking to increase public awareness of sun exposure in summer months.
• Primary health care providers include sun avoidance in parent and antenatal education, and in preventative care for children and young people.
• The Cancer Society and Royal New Zealand College of General Practitioners promote awareness of early signs of melanoma by stressing self examination - a regular and systematic self-performed skin check.
• GPs detect an important minority of melanomas while doing routine skin examinations for other reasons. An Auckland skin cancer centre offers a ‘mole-mapping’ service to monitor changes in high-risk moles through computer-assisted photography.
• The HFA and the RNZCGP encourage GPs to develop expertise in the recognition and excision of suspicious skin lesions and ensure biopsy facilities and referral mechanisms.
• The HFA seeks to ensure that all patients referred by a GP with suspected melanoma are seen by a specialist dermatologist within one week.
• The HFA encourages pathologists to develop skills to accurately and consistently report tumour thickness.
• Health education resources produced by the Cancer Society and other voluntary agencies are available for GPs, local public health services, and local branches of the Cancer Society.
• The Cancer Society conducts community surveys of sun exposure behaviour designed to (a) remove confounding climate variables, (b) build a time series that will provide data on behaviour trends, and (c) allow a sunburn target to be set and tracked. The Cancer Society also periodically surveys sun tanning attitudes, sun protection behaviours, and melanoma awareness of Fourth Form adolescent students.

2.3 Breast Cancer

2.31 Targets for breast cancer
• To reduce the age-specific mortality rate among New Zealand women aged 55-69 years to 64 per 100,000 or less by year 2005.

2.32 Strategies for breast cancer
In December, 1998, the federal government launched a National Breast Cancer Screening Program (BreastScreen Aotearoa) that provides free mammograms to women every 2 years from age 50 to 64 in 25 fixed site clinics and 6 mobile units that visit rural towns. Women call BreastScreen Aotearoa, a national toll free number, to obtain information and enrol in the program. An assessment service that includes further diagnostic and treatment services is available to women with abnormal results.
in main centres. Expectations are that 70% of the women in the age range will be screened in 1999-2000 as part of the national program. Incidence and mortality rates are recorded in the New Zealand National Cancer Registry

2.4 Lung Cancer

2.41 Targets for lung cancer

• To reduce the age-standardized mortality rate from lung cancer in males to 35.0 per 100,000 or less by year 2020.
• To prevent the age-standardized mortality rate from lung cancer in females rising above the 1990 rate of 18.4 per 100,000 beyond year 2020.

2.42 Strategies for lung cancer

• The 1997 amendments to the Smoke-free Environments Act 1990 raises the age at which people may be legally sold tobacco products from 16 years to 18 years, bans the sale of single cigarettes, sets minimum pack sizes for tobacco products, restricts the location and use of cigarette vending machines, restricts tobacco price advertising in retail outlets, and strengthens health warnings on tobacco-product packaging.
• Tobacco excise rates are equalized across all tobacco products, increased, and indexed to the Consumer Price Index.
• A multimedia ‘Why Start’ campaign attempts to reduce smoking uptake among young people, Māori, and pregnant women.
• The Health Sponsorship Council that promotes healthy lifestyle messages through an association with sporting and cultural events is no longer required by law to provide funding for tobbacosponsored events and can apply its funding on a discretionary basis.
• The Health Funding Authority produces and distributes smokefree health education materials free of charge through a network of health education resource providers based in public health services.
• The Health Funding Authority purchases programs aimed at educating retailers on their legal responsibilities to enforce legislation that disallows illegal underage sales. The Ministry of Health produces guidelines for regional smokefree enforcement services, trains officers, and administers a fund used to prosecute retailers who sell illegally to underage buyers.
• The Ministry of Health produces the Healthy Schools - Kura Waiora guidelines that include a section for smokefree schools programs.
• The Health Funding Authority funds a national free phone quit-line for the public to call to seek advice on the health effects of smoking and means of quitting. Self-help cessation material is available in association with the quit-line and the phone number is placed on tobacco products. Pilot trials by Pharmac and the Health Funding Authority test the effectiveness of nicotine replacement therapies and quit-counselling.
3. Progress to Date

The sixth annual report, ‘Progress on Health Outcome Targets 1998’, focuses on monitoring progress toward specified public health targets that include cervix, melanoma, breast, and lung cancers. The report states that for:

3.1 Cervical Cancer
- The decline in incidence and mortality rates for cervical cancer has accelerated since 1991 and is related to improvements in cervical screening since mid-1980s.
- The cervical cancer incidence and mortality targets for the total population, based on current trends in New Zealand, are likely to be achieved by year 2005.
- The Māori women’s cervical cancer incidence target for year 2005 may be achieved by 2005 if reductions that have occurred since 1991 continue.
- As of December, 1997, 83% of eligible women (20-69 years) were enrolled on the National Cervical Screening Program and had a smear in the previous 5 years.
- The cervical screening coverage target of 85% of eligible women being enrolled in the National Cervical Screening Program and having had a smear in the previous 5 years is likely to be achieved.

3.2 Melanoma Cancer
- The numbers of new melanoma registrations and deaths are stable, especially in people less than 50 years old.
- Favourable trends reflect safer sun behaviours, especially in recent birth cohorts. Any trend towards earlier surgical intervention for melanomas remains to be confirmed.
- Outcome targets for melanoma incidence and mortality, developed by age/period/cohort modelling are to be reset.
- An intermediate outcome target for sunburn is being developed.

3.3 Breast Cancer
A National Breast Cancer Screening Program was introduced in December, 1998. A 16% decline in age-specific breast cancer mortality for women aged 55-69 years from 1991-1996 has occurred. The reason for the steady decline of 9% per annum over the last 5 years is unknown but may be due to the effect of pilots that began in 1991, the growing awareness of breast cancer, availability of screening in the private sector, and advances in treatment.

3.4 Lung Cancer
- Female age-standardized lung cancer rates are constant around 17/18 deaths per 100,000
population since 1987.
• Male age-standardized lung cancer rates dropped from 48 to 37 deaths per 100,000 population since 1987.

4. Coordinating body

The Public Health Group of the Ministry of Health sets the strategic direction for public health in New Zealand and consults the public, those involved in the provision of public health services, and other appropriate persons. The HFA receives strategic advice on its national screening programs through a multidisciplinary external advisory group of health professionals and consumers.

4.1 The national coordinator of the NCSP and the NCSR and its staff are under the jurisdiction of the Health Funding Authority.

4.2 Strategic planning for melanoma prevention is developed through
(1) a joint Cancer Society - Department of Health working group.
(2) development of policy advice to the Minister of Health by the Public Health Commission.

4.3 National co-ordination for the NBCSP resides within the HFA. Selected providers deliver the program at the local level.

5. Partnerships

The New Zealand public health strategy was revised in 1997, after 152 written submissions and comments were received from regional health authorities, Crown health enterprises, academic departments, local government, independent service providers, ministries and government departments, individuals/groups with an interest in public health, non-government organizations and statutory bodies, Pacific people’s groups, Māori and Iwi groups. Nineteen consultation meetings were held throughout New Zealand.

6. Evaluation

The Public Health Group of the Ministry of Health publishes an annual report that focuses on monitoring progress towards specified public health targets, including cervical, melanoma, breast, and lung cancer targets. In addition to reporting annually on public health outcome targets, the Ministry of Health’s ‘State of the Public Health’ reporting cycle includes five-yearly reports on
population health status, and on the major determinants of health outcomes.

6.1 Cervical cancer
(1) Target derivation
The current 1996 National Cervical Screening Program Policy updates 1991 and 1993 cervical screening targets established by the Ministry of Health.

(2) Indicators
Age-standardized cervical cancer mortality rate (a) for all women (b) for Māori women.
Age-standardized cervical cancer incidence rate (a) for all women (b) for Māori women.
Proportion of invasive cervical cancer detected at stage 2 or 3 of the disease.

(3) Data sources
Cancer mortality data and cancer registration data stored as part of the National Minimum Dataset from the New Zealand Health Information Service.

6.2 Melanoma cancer
(1) Target derivation
The targets set by the Public Health Commission in 1993 were based on projections of the melanoma epidemic. In 1997, these targets were converted from cumulative incidence to population incidence rates for consistency with other targets, the target date was reset to 2005, and the target for thick melanoma incidence was changed from a relative to an absolute rate.

(2) Indicators
Melanoma mortality rate.
Melanoma incidence (registration) rate by thickness.

(3) Data sources
Mortality data extracted from the NZHIS Mortality Database.
Incidence and thickness distribution data extracted from the National Cancer Registry.

6.3 Breast cancer
(1) Target derivation
The 1997 National Monitoring and Evaluation Plan for Breast Cancer Screening establishes national objectives and targets for breast cancer. The target represents a 20% reduction in mortality from the baseline age-specific rate for 1996 of 80 per 100,000. The target for mortality is given for women aged 55-69 years rather than the screening population of 50-64 years due to the delayed
benefit in mortality reduction in association with screening.

(2) Indicator
Age-specific mortality rate for women aged 55-69 years for breast cancer.

(3) Data source
Mortality data held on the NZHIS National Minimum Dataset

6.4 Lung cancer
(1) Target derivation
The 1994 Public Health Commission’s document, ‘Tobacco products: the Public Health Commission’s advice to the Minister of Health’, sets baseline levels from 1990 data and sets targets based on the understanding that male lung cancer risks were declining and female lung cancer risks were rising.

(2) Indicator
Age-standardized mortality rate due to lung cancer for (a) men and (b) women.

(3) Data source
Mortality data are from the NZHIS

7. Implementation and improvement
7.1 Cervical cancer
• Studies are being considered to assess the quality of cervical cancer data on the NZHIS cancer register and cervical cancer mortality data since some cervical cancer deaths and registrations are coded to other sites being classified as “malignant neoplasm of uterus, part unspecified.
• 1996 will be the start of a new time series for ethnic-specific cervical cancer data since, in 1995, methods used for recording ethnicity for mortality data changed from a system of biological classification to one of self-identification, thereby having a significant impact on the relative rates of mortality for Māori and non-Māori and making comparisons with previous years misleading.
• The Cancer Registry Act 1993 makes registration of all cancers compulsory and enhances the reporting of stage of disease information in accordance with the international (FIGO) classification system.
• Alternative stage-of-disease coding systems are being considered to improve staging detail.
• The HFA injected $1.4 million into the NCSP in 199 targeted at (a) better information for women and training for health educators, (b) upgrade of information systems to support the program, (c)
independent program monitoring, evaluation, and guidelines, (d) improved coordination between providers, and (e) minor enhancements to services.

7.2 Melanoma cancer

• Cause-of-death coding is considered accurate for melanoma.
• The number of registrations of incident melanoma has increased by 65% from 1993 to 1995 since the Cancer Registry Act 1993 took effect improving under-ascertainment.
• Procedures are being developed to reduce to 10% or less (as international experience suggests) the number of melanoma registrations that lack data on thickness distribution.
• The New Zealand Cancer Society’s three-yearly community sun survey will be modified by the University of Otago to provide an indicator of sunburn that can be related to sun protection behaviours and attitudes, and will be used to track an appropriate sunburn indicator as a marker of melanoma risk.
• The Ministry of Health will seek expert advice on new targets that are based on current incidence rates and that consider changes in sun protection behaviour and early intervention.

7.3 Breast cancer

• Breast cancer deaths are accurately diagnosed. Trends are being monitored with the change in ethnicity coding to determine if there is a need to have separate targets for Māori women.
• It is expected additional targets will be set for the National Breast Cancer Screening Program (established in December, 1998) as soon as data become available.

7.4 Lung cancer

• Targets levels for men are being revised, since current targets are being met.
• Information is being gathered to confirm whether there has been a change in the trend for females since the age-standardized mortality rate for lung cancer in females has levelled out since 1994.
National cancer control initiative:

1.1 The WHO HFA (Health for All) Strategy has a significant impact on Swedish health programs, particularly at the County Council level, partly because Sweden has not yet developed its own national health targets. However, a Parliamentary Committee has been appointed to consider national health targets and a Ministerial Public Health Council is being established.

1.2 Currently, the WHO targets are incorporated into Swedish medical care. Guiding Swedish policy formulation in Cancer Control is Target 10 of the WHO “Health For All” strategy that states:

• By the year 2000 mortality from cancer in people under 65 should be reduced by at least 15% and the quality of life of all people with cancer should be significantly improved.

2. Strategies and goals planned or under way:

2.1 The principle guideline of the Swedish health care system is the Health Care Act of 1983 that gives prevention the same status as treatment.

The 1995 Health Act on Primary Care and Private Specialist moves the health care focus from hospital care to primary care, from the individual primary care doctor to the primary health care team organization accentuating the patients’ rights to get information and to influence the care. Every person has the right and possibility to choose a personal doctor (1 GP per 2000 inhabitants) in
primary care that by definition becomes a separate care level and the basis on which County Councils (regional health authorities) organize and prioritize primary health care development. The County Councils are urged to incorporate private specialists outside the hospitals into their health care organizations to be used as complementary resources.

County Councils (see 4.1 for clarification of role in Swedish health system) in Uppsala and Stockholm have special preventative health programs that include HIV/AIDS, diabetes, psychic illnesses, tobacco, and cancer.

2.2 Current national legislation puts restrictions on smokers in the sense that workplaces, except for special areas, should be kept free from smoking. Retailers may no longer sell any tobacco products to people under the age of 18. Advertising tobacco products is forbidden. A National Institute of Public Health program has been developed aimed at the reduction of tobacco consumption.

2.3 For occupational cancer hazards, the National Board of Occupational Safety and Health issues ordinances regarding the use of certain substances in three groups:
- Group A List - comprises substances that may not be handled at all.
- Group B List - enumerates substances that may be only be handled by permission of the Labour Inspectorate.
- Group C List - comprises substances that are classified as carcinogens and for which limit values are specified.

Asbestos has been banned from use in Sweden since 1975.

2.4 The Medical Products Agency publishes Treatment Recommendations such as ‘Pharmacological Treatment of Prostatic Cancer’ (1993).

2.5 The National Board of Health and Welfare (NBHW), the National Institute of Public Health (NIPH), and other national institutions and bodies on the local and regional level initiate and encourage activities that may reduce chronic diseases, including cancer. For example, recommendations regarding health check-ups with mammography for early detection of breast cancer have been issued by the National Board of Health and Welfare. The recommendations address the frequency of check-ups in various age intervals.

2.6 For several chronic diseases, State-of-the-Art (SOTA) documents and National Clinical Guidelines including information to patients have been or will be produced by the NBHW in cooperation with representatives of specialities and various organizations (i.e. The Federation of County Councils, NGOs). This work takes place within the Medical Access and Result System project (MARS, see 6.4). The SOTA documents address diabetes, cardiovascular, and
cerebrovascular diseases, arthritis, arthrosis of the hip/knee as well as various cancers.

3. Progress to Date
3.1 The WHO’s goals of health politics for Europe influence Swedish county councils in their efforts to develop regional health programs. Swedish local and regional preventative measures in cancer control have adopted and modified some strategies outlined in the European program “Europe against Cancer”.

3.2 The National Institute of Public Health (NIPH) has launched national campaigns aimed at reduction of the load of life-style factors associated with the incidence and mortality of cancer. Following the increase of the incidence of melanomas, campaigns have been initiated where medical personnel offer free skin examinations at the same time as they inform people about the risk associated with sun-bathing specifically on the beaches of the sea and lakes.

3.3 The Swedish Institute for Health Services Development (SPRI) and the Swedish Medical Research Institute (MFR) organize national consensus conferences that have included ‘malignant melanomas of the skin’ as a topic. SPRI also produces relevant reports and evaluations.

3.4 The Swedish Cancer Society supports research regarding etiology and treatment in the following ways:
• More than 400 research projects, comprising 75% of all Swedish cancer peer-reviewed research initiatives involving about 900 scientists, receive support annually.
• Publications such as “Radda Livet” (Save Life) and the science journal “Forskning Nu” (Research Today) contains articles on cancer research and a Yellow Pages Directory of all research projects financed by the Society.
• Specific information for cancer patients is also provided through special brochures ordered directly from the Society or available at doctors’ surgeries and cancer-care clinics.
• Experienced nurses provide advice and information to cancer patients and their relatives by phone via the Society’s information centre where an extensive database of cancer information exists.
• Special projects to improve the cancer patients’ psychosocial situation and scholarships for nursing staff attempt to improve the quality of care afforded cancer patients.
• Working with patients’ organizations, the Society provides support to training schemes in rehabilitation and pain-relief matters as well as to initiatives testing new forms of treatment.

3.5 Overall cancer mortality has decreased by 10% since 1980 explained, to some extent, by early detection due to screening for certain cancers. Statistical evidence of trends indicates that, in
accordance with HFA Target 10, overall Swedish cancer mortality will not have decreased by 15% by the year 2000.

4. Coordinating body

4.1 In Sweden, the three self-governing political and administrative levels - national, regional, and local - have different roles in general and also in terms of public health, including cancer control.  
• The National Level: The Ministry of Health and Social Affairs formulates policy and facilitates the political process in the Parliament and the relevant Standing Committees. The main policy instruments at the ministerial level are legislation, funding, and policy direction development, including setting priorities for national boards, agencies, and institutes funded by the State. The role of the state in public health is to:  
  (a) Formulate national policy, both in the form of legislation (such as the responsibility of the County Councils for disease prevention, equal access to care, etc) and in terms of policy guidelines (such as equity in health).  
  (b) Facilitate/coordinate intersectoral action at the national level.  
  (c) Promote the development of public health initiatives at all levels of society.  
  (d) Be responsible for specific issues that (at certain stages) are best handled by national agencies, like HIV/aids, drug/alcohol, tobacco, and injury prevention activities.
• The Regional Level: Delivery of health and medical care is the responsibility of the County Councils (26 regional units). About 80% of the overall expenditures in the County Councils are spent on health and medical care. Most City Councils have comprehensive health plans/programs and issue public health reports. The national government supports County Councils’ disease prevention and health promotion work though an annual transfer of 48 SEK (about $9 CAD) per capita.
• The Local Level: The County Councils operate at both regional and local levels. Locally, their health promotion and disease prevention programs, are organized and implemented at local Primary Health Care Centres. The municipalities are responsible for the social care of children/families and long term care of the elderly/disabled.

4.2 The Swedish National Board of Health and Welfare (NBHW), under the authority of the Ministry of Health and Social Affairs, is the central advisory administrative agency for matters concerning health and medical care, including cancer control. The NBHW represents the executive level of the central government and is responsible, under 1997 government legislation, for:  
• Supervising and evaluating the quality, safety, and individual rights in health, medical and dental care, and public hygiene.  
• Supervising the work of County Councils in these areas.
• Evaluating the County Councils with respect to allocation of resources, safety, quality, efficiency, and legal security.

As a regional organization with six units, NBHW’s supervisory and evaluation role is becoming preventive and supportive of self-assessment through quality improvement systems such as Total Quality Management (TQM) and ISO 9000 standards.

4.3 The Swedish Council of Technology Assessment in Health Care (SBU) contributes to the efficient utilization of the resources allocated to health services by evaluating new and established methods from medical, social, and ethical perspectives. Reviews of current knowledge in the field and syntheses of existing scientific material is disseminated to central and local government officials and medical staff to provide data for decision-making.

5. Partnerships
5.1 At the national level, contributing to government policy formulation, are other actors such as the 26 County Councils and 288 municipalities that are represented by the Federation of County Councils and the Swedish Association of Local Authorities. Also, professional organizations, with explicit formulated policies based on the European HFA (Health for All) targets, and associations for social medicine, occupational health, public health and community medicine, epidemiology, and health systems research are involved in national policy and program development.

5.2 Local health planners - a function already in existence within most County Councils - are also beginning to play an important role in local governments. Intersectoral public health communities exist in 60% of all Swedish municipalities. A national network, modified after the WHO “Healthy Cities” model, has more than 60 local government members. Separate networks have been established between Sweden’s 3 largest cities (i.e. Stockholm, Gothenburg, Malmo with a population of 100,000+) and medium sized cities (i.e with a population of 50,000+).

6. Evaluation
6.1 The possibilities for monitoring and evaluation have been improved through the creation of new registers in addition to the National Cancer Registry, the National Register of Deaths, and the regional cancer registries. Among new registers are Quality Registers (36 in number), such as the National Bladder Cancer Register and the National Register for Rectal Cancer Surgery that are financially and methodologically supported by the National Board of Health and Welfare (NBHW) in cooperation with the Federation of County Councils (FCC). The NBHW and FCC agree on minimum requirements that have to be fulfilled by registers to receive financial support. Strong
indications suggest that the establishment of a register implies that new methods are evaluated efficiently and when accepted that they are adopted sooner by clinics concerned than would have been if the register had not existed. The aims of the quality registers are to:
• Describe any differences in the use of various methods and treatment results.
• Follow-up and evaluate the efficiency of various methods.
• Extend follow-up of treatment to include patients’ perception of change of life quality and to elucidate patient’s perception of treatment through a hospitalization episode.

6.2 The Centre for Epidemiology at the NBHW has during the last few years increased its activities addressing cancer incidence and produced several reports describing the survival of cancer patients in relation to the year of diagnosis, cancer incidence in relation to occupation, etc.

6.3 The National Commission, HSU 2000, on the future financing and organization of the health sector proposes that the Act of Health and Medical Care legislates that County Councils produce public health reports based on data from national and regional cancer registers, surveys, and other sources. Results in reports are generally to be presented for the county (region) in comparison with Sweden as a whole and at the municipal level in comparison with other municipalities in the same county.

6.4 The MARS project - Medical Result and Access System - under the jurisdiction of the NHWB supports the development of a cost-effective, rational, information system to achieve better access to and capacity of health care. Measures, being taken, are to:
• Provide local policy makers and purchasers of care with appropriate medical information.
• Improve clinicians’ access to relevant reviews of medical literature.
• Speed up the dissemination of information of good clinical practice and give support to local outcome assessment and quality assurance.
• Ensure better access for patients to available medical methods and care with good quality.

Modern information technology is utilized to gain and disseminate new knowledge according to two main approaches: register-based follow-up and State of the Art (SOTA, see 2.5 above) information. The project also involves Clinical Guidelines and National Programs. MARS will be available on the Internet and CD-ROMS. The database is intended to provide information on medical management and current practice and up-to-date information on diagnoses and procedures, and statistics on volumes, indications, procedures, and treatment outcomes in different medical specialities as well as information on various diseases. MARS will serve as a basis for decision-making by politicians and administrators.

6.5 The National Institute of Public Health (NIPH) has established a unit for evaluation and several
universities have developed methods and trained professionals to support evaluation processes of public health on different levels.

6.6 Primary health care centres are now computerized to 90% allowing access to local patient registers as an instrument for follow-up, quality assurance, and directive preventative measures. Most city councils are building up activity report systems in primary care based on data accumulated from local sources. On the county level the data are used for comparison between health centres.

7. Implementation and improvement

7.1 The incidence and mortality from tobacco-related cancers in females and from melanomas of the skin are increasing rapidly. It is recognized that economic resources are needed at the national level:
• to develop preventive and curative information for the public regarding the importance of lifestyle factors.
• to gather data that could be used in attempt to ascertain any changes over time in the life quality of people who have developed cancer.

7.2 National research councils, especially the Social Research Council, are increasing funding of research in health promotion and evaluation of implemented programs. A 1996 government report:
• emphasizes the health effects of unemployment and lack of equality that require attention.
• proposes an amendment to the Act of Health and Medical care that would make compulsory the financing, planning, and implementing of research in the clinical and public health fields at the County Council and local authority level.

7.3 Recently, the focus of public health, including cancer control, at the municipal level is shifting to structural determinants of health such as economics, education, employment, demographics, environment, and sustainable development. The Swedish process of developing a local WHO Agenda 21 has increasingly integrated public health and health promotion work with environmental issues.
United Kingdom (Population - 58.3 million)
Cancer Control Strategy

Abbreviations:
National Health Services (NHS)
National Institute for Clinical Excellence (NICE)
Non-governmental organization (NGO)
World Health Organization (WHO)

1. National cancer control initiative:
1.1 ‘Saving Lives: Our Healthier Nation’ is the health care action plan established by the UK federal government for the new millennium. Released in 1999, the overall goal of the white paper is to improve the health of THE UNITED KINGDOM citizens with emphasis on disadvantaged members of English society. Specific aims are:
(1) to improve the health of the population as a whole by increasing the length of people’s lives and the number of years people spend free from illness
(2) to improve the health of the ‘worst off’ in society and thus narrow the health gap between rich and poor.
These twin aims are consistent with Health 21 - the World Health Organization (WHO)’s program for the 21st Century - and the European Community’s developing strategy for public health.

1.2 Cancer is targeted as one of four priority areas (Cancer, Coronary Heart Disease and Stroke, Accidents, and Mental Health).

2. Strategies and goals planned or under way:
The specific target for the Cancer Priority Area is to reduce the annual death rate in people under 75 years by at least a fifth (from 69,000 in 1997 to 55,000 by 2010) saving up to 100,000 lives in total. Targets set at the local level are directed to reflect the national priorities in cancer while identifying particular local health issues and inequalities. The following strategies relating to cancer control will be pursued:

2.1 Reducing risk and staying healthy
2.11 Smoking - The 1998 White Paper (Smoking Kills):
• Establishes new targets to reduce smoking among adults from 28% to 24%, among children from 13% to 9%, and among pregnant women from 23% to 15% by 2010.
• Bans tobacco advertising and sponsorship by December, 1999.
• Invests in anti-smoking public education (£56 million from 1999-2002).
• Invests in treatment (£63 million from 1999-2002) providing for new National Health Services (NHS) including smoking cessation clinics and promotion of nicotine replacement therapy.
• Initiates discussions with the private enterprise to improve access to smoke-free venues and to develop an approved Code of Practice on Smoking in the workplace.

2.12 Diet and Nutrition
• Provides guidance on food and nutrition to primary teacher training programs.
• Funds schools to undertake health education programs promoting healthy lifestyles within school communities (Healthy Schools Program).
• Establishes a policy action team to improve grocery shopping access for people in deprived areas.

2.13 Healthy living and working
• Funds the Health Education Authority to set up Healthy Living centres promoting information on healthy diets, cooking skills, and advice on maintaining appropriate body weight.
• Funds (and directs) health education campaigns encouraging safer sex (reducing risk of cervical cancer).
• Funds a Sun Know How Campaign to reduce excessive exposure to the sun.
• Enforces regulations that provide worker protection against asbestos by implementing the National Air Quality Strategy.

2.2 Early Recognition
2.21 Reviews and reorganizes the National Screening Programs in Breast and Cervical Cancers by December, 1999 to (a) improve quality, (b) introduce automated techniques in cervical screening (if feasible), and (c) find ways to have women from ethnic minority groups or deprived inner city areas respond to the call/recall invitations for screening. The following policies will be implemented:

• Cervical screening will be stopped in laboratories that screen fewer than 15,000 smears a year and do not achieve expected results.
• All laboratories undertaking cervical screening will be required to apply for external accreditation.
• All health authorities will be required to achieve 80% coverage rates for cervical screening by March 2002.
• All health authorities will be required to achieve three-yearly breast screening calls/recalls by March 2002.

2.22 Mandates the National Screening Committee to continue to give expert, evidence-based advice to federal policy makers as to which screening programs should be introduced. Studies are ongoing into the feasibility of screening for colorectal cancer (£6 million) with the results of two pilot studies
to be made available in 2002. Population screening for prostate cancer, based on present evidence, is not justified but remains under review.

2.23 Continues research priorities in prostate and ovarian cancer.

2.24 Mandates implementation (by end of year 2000) of NHS Direct, the nurse-led helpline available 24 hours a day, 365 days a year, providing information about early symptoms of different cancers. Establishes NHS Direct On-Line Service facilitating online access to accredited information about cancer and its symptoms, cancer self-help groups, and other websites such as CancerBacup that provide detailed cancer information. Establishes a National Expert Patients program to help people with long term illnesses take control over managing their illness and to share their experience and knowledge with others.

2.3 More Effective Treatment

2.31 Adopts Five Point Action Plan to combat cancer (developed at 20 May, 1999 Prime Minister’s Summit Meeting on Cancer):

- The organization and coordination of cancer research in the THE UNITED KINGDOM will be reviewed.
- The Commission for Health Improvement, in conjunction with the Audit Commission, will review and report on progress made by the NHS in implementing improvements to cancer services across the country as set out in the Calman/Hine Report - A Policy Framework for Commissioning Cancer Services so that every patient with cancer, wherever they live will have prompt access to high-quality care, whether in community or hospital.
- The series of guidance documents setting out the best practice in the care of individual types of cancer will be extended. Guidance on gynaecological and stomach cancers will be published in 1999, followed by further documents in 2000.
- A national survey of the experiences of cancer patients will be conducted in 1999.
- A Cancer Action Team, working with the NHS, will have a mandate to raise the standard of cancer care in all hospitals to the optimal level currently achieved.

2.32 Approves a new National Institute for Clinical Excellence that will advise and issue guidelines to the NHS and the public on best clinical practice and will assess the case for introducing new medicines and treatments.

2.33 Ensures that anyone with suspected cancer will be able to see a specialist within 2 weeks of their GP urgently requesting an appointment. Targets established are April, 1999 for breast cancer
and 2000 for other cancers.

2.4 Integrated Action
2.41 Coordinates public awareness action to attack the risk factors that cause cancer concentrating on sustained reductions in smoking and improvements in diet.

2.42 Accelerates the Five Point Action Plan, outlined above, to improve service quality of cancer treatment services and unequal service patterns.

2.43 Implements a strategic approach to research into cancer so that the practice of cancer care (prevention and treatment) is linked to the science of cancer.

2.44 Invests new money in cancer treatment. The Modernization Fund and the New Opportunities Fund are to finance equipment projects to diagnose, detect, and treat cancer, as well as collaborative palliative care schemes thereby enhancing local fundraising and building partnerships with cancer charities, non-governmental organizations, NHS, local government, and the business sector in the delivery of local health improvements.

2.45 Increases the number of training places for 400 new specialist cancer doctors and 15,000 extra nurses over 1998-2000 under the federal human resources strategy, Working Together.

3. Progress to Date
3.1 Priority identification: Cancer was established as one of four health priority areas in the White Paper ‘Saving Lives: Our Healthier Nation’ (August, 1999) as a result of round-table discussion of the following reports: (a) A Policy Framework for Commissioning Cancer Services, (b) Challenging Cancer, and (c) The Health of the Nation.

3.2 As part of the priority-making process, 8 consultative days (1 in each NHS region) were held around the country in 1998. Individuals from health authorities, local authorities, and other backgrounds discussed their views on the Green Paper (Our Healthier Nation: A Contract for Health) with Ministers from various Government Departments. Other meetings were held with Health Authority CEOs. The federal government received more than 5000 public input responses from a cross-section of individuals and organizations. An Independent Inquiry into Inequalities in Health (Acheson Report) identified inequalities in the NHS noting that cancer attacks the population unevenly. Reducing Health Inequalities: An Action Report (the Department of Health (DOH)) response to the Acheson Report) identified cancer risk and treatment inequities in disadvantaged
regions.

3.3 On 20 May, 1999 the Prime Minister hosted a summit meeting on cancer, bringing together THE UNITED KINGDOM’s cancer experts - patient representatives, policy makers, charity leaders, and health professionals - to announce the target 10 year action plan and funding mechanisms of the Cancer Priority Area in ‘Saving Lives: Our Healthier Nation’.

3.4 Actions currently initiated include:

(a) A Cancer Action team is being set up to help implement improvements to cancer services across the NHS.
(b) Eight NHS Cancer Beacons - cancer services in THE UNITED KINGDOM with exceptional expertise and good practice to be shared throughout the NHS - have been announced.
(c) £60 million has been made available to improve services for breast, colorectal, and lung cancer.
(d) A further £150 million for equipment and innovative cancer projects will be made available from 1999-2001 from the National Lottery New Opportunities Fund.
(e) Guidance on treating breast, colorectal, and lung cancers have been published.
(f) The Commission for Health Improvement, working with the Audit Commission, is beginning the review of cancer services.
(g) Breast and cervical screening programs are being reviewed.
(h) The Medical Research Council has been invited to convene a group to examine how best to coordinate research in cancer.
(i) Under the Cancer Information Strategy, patients will be given full information packs on their specific cancer.
(j) The National Institute for Clinical Excellence will assess breast cancer drugs.

4. Coordinating body

4.1 The Health Development Agency (HDA), a statutory body that advises and supports the Secretary for Health will be established to raise the standard of the quality of public health function (beginning January 2000) and to provide the infrastructure to implement ‘Saving Lives: Our Healthier Nation.’ Existing resources of the Heath Education Authority will be used to form the core of the new agency that will supersede the Health Education Authority. The HDA will work with the members of the DOH including the NHS Executive and its Regional Offices, Government Offices for the Regions, Regional Development Agencies, local authorities, and other key players in the field, including the proposed Food Standards Agency.
4.2 In the Cancer Priority Area, a Cancer Action team will work with the NHS to raise the standard of care in all hospitals to “best of the best”.

4.3 The Central Research and Development Committee of the NHS has established a review group for the Cancer Priority Area. This review group, to report at the end of 1999, will recommend any necessary alignment of research and development spending in Cancer to ensure effective contribution to ‘Saving Lives: Our Healthier Nation’.

5. Partnerships
5.1 The THE UNITED KINGDOM health strategy was developed by input from 11 governmental departments, numerous non-governmental organizations (NGOs) (listed in 8. NGO Partners), local authorities/communities, and individuals.

5.2 The NHS is mandated to integrate health improvement into the local delivery of health care:

- The role of the health authorities is emphasized to improve the health of local people.
- Primary Care Groups and Primary Care Trusts are identified as responsible for public health.

Local authorities are to work in partnership with the NHS to plan for health improvement:
- Health Action Zones will be established to break down barriers in providing services.
- Healthy Living Centres must provide help for better health.

5.3 Health authorities, local communities, Primary Care Groups, and Primary Care Trusts are expected to make use of NGOs in delivering programs. The national government will establish a national Forum of Non-Governmental Public Health Organizations (including cancer organizations) to offer expertise and advice.

6. Evaluation
6.1 The technical supplement for the Priority Areas (including cancer), setting out the scientific basis for target setting and indicators for assessing progress, is to be published in Autumn, 1999.

Assessment of progress, outlined in this upcoming report, will include:
- The cancer target itself - reduction in mortality rate.
- Improvement in the cancer risk factor that has a direct bearing on the cancer target.
- Movement in underlying factors (social, environmental, and economic change) that the evidence
shows has an influence on health and inequality.

- Effectiveness of cancer programs - a range of mechanisms including health improvement programs, local authorities’ community plans and Best Value Regimes will be used to monitor aspects of progress.

6.2 Health authorities and their partner local authorities as well as other local agencies will be required to set out in their health improvement programs in cancer how they plan to achieve the national priorities through cancer targets at the local level. Additional local targets to address local needs and inequalities in cancer treatment will be strongly requested.

6.3 Performance managers of NGOs are directed to take pride in reaching targets in the Cancer Programs they deliver.

6.4 NHS bodies will be held to account through the NHS Performance Assessment Framework. The NHS Executive Regional Offices will set realistic/demanding targets in the Cancer Priority Area for local achievement and will monitor their performance. A body’s objectives may be benchmarked by comparing them with the plans of other bodies in similar circumstances. Local government will be subject to the “Best Value” regime. External auditors will check on the information provided by authorities in local performance plans and management systems. An objective and independent process of regular inspection will occur. An Audit Commission will develop ways of auditing joint working between agencies at the local level, using its experience of carrying out local value for money studies.

7. Implementation and improvement

7.1 To complement continuous monitoring, the national government will review and publish changes at the national level every 3 years in (a) expectation of life, (b) healthy life expectancy, and (c) health inequality.

7.2 A Review of National Sources of Public Health Information is to be carried out to strengthen the Government’s ability to assess and track progress in achieving goals of the four Priority Areas (including cancer).

7.3 Public Health Observatories will be established in each NHS region. They are to work with NHS bodies, local authorities, NHS Executive Regional Offices, the Government Offices for the Regions and Regional Development Agencies as well as the Health Development Agency. Linked together, all Public Health Observatories will form a national network of knowledge, information, and
surveillance in public health and a resource for local bodies working in public health. With connections to the academic rigour of universities, the tasks of the Public Health Observatories are:

- Monitor health and disease trends and highlight areas for action.
- Identify gaps in health information.
- Advise on methods for health and health inequality impact assessments.
- Bring together information from different sources in new ways to improve health.
- Carry out projects to highlight particular health issues.
- Evaluate progress by local agencies in improving health and cutting inequality.
- Look ahead to give early warning of future public health problems.

7.4 Disease Registers, complementing the existing disease registers for cancer, are to be set up in different parts of the country to strengthen the information base on chronic diseases. Their purpose is to act as a base for investigation into disease causes, for evaluating new ways of delivering services, and for tracking changes in disease occurrence over time.

7.5 A common set of standards will be established for the annual reports by Directors of Public Health so that the reports are relevant to local health authorities and can be used as a source of information as well as a basis for health improvement programs.

7.6 Health Authorities must make available on the internet an annual core health statement enabling experts from around the world to offer advice on the effectiveness of the approach taken.

7.7 All available public health research will be mapped so that an R&D strategy for public health can be developed thereby ensuring that programs of work tackle the four Priority Areas (including cancer).

7.8 A fast track development program for young public health academics is to be set up.

7.9 Major new government policies are to be assessed nationally and locally for their impact on health.
United States (Population - 274.4 million)

Cancer Control Strategy

Abbreviations:
Centre of Disease Control and Prevention (CDC)
Department of Health and Human Services (HHS)
National Cancer Institute (NCI)
National Centre for Health Statistics (NCHS)
National Institute for Health (NIH)
Non-governmental organizations (NGOs)
Surveillance, Epidemiology, and End Results Program (SEER)
World Health Organization (WHO)

1. National cancer control initiative

Healthy People 2010 is a national prevention initiative of the federal government that is in final development, scheduled to be released in January 2000. The goals of Healthy People 2010 are (1) to increase the quality and years of healthy life with emphasis on health status, nature of life, and longevity and (2) to eliminate disparities in health status, health risks, and use of preventative interventions among various population groups. Focus areas, 26 in all, are grouped under 4 enabling goals. The Cancer Control Focus Area is aligned with a specific enabling goal - Prevention and Reduction of Disease and Disorders. Healthy People 2010 is the US contribution to the World Health Organization’s (WHO) “Health for All” strategy.

2. Strategies and goals planned or under way

The specific strategy for the Cancer Focus Area is to reduce the burden of cancer on the US population by the year 2010 by decreasing cancer incidence, morbidity, and mortality rates. Seven types of cancers - lung, breast, cervix, colon/rectum, oral cavity/pharynx, prostate, skin - have been identified. Specific targets and objectives (summarized below) have been designed and are both measurable (thereby providing quantifiable direction for action) and developmental (thereby providing a vision for a desired outcome/health action).

Target development

Targets were determined based on an assumption set related to evidence-based effects of intervention (e.g., 20-33% benefit of mammography ) and are expressed as a percentage of the population at risk. Target percentages take into consideration:
1. Clinical reporting: An arbitrary mid-point was chosen as the absolute outcome for 2010 because it is recognized that the effects of intervention are imprecise and are described as range of effects.

2. New treatments: Anticipated lag times for current and future interventions for specific cancers are incorporated.

3. Compliance/activity by partner organizations: Projections are based on a moderate level on non-governmental organization (NGO) participation specifically directed towards the cancer control targets.

**Proposed Objectives and Targets for the Cancer Control Focus Area:**

1. Reduce cancer deaths to a rate of no more that 103 per 100,000 people - a 21% improvement.
2. Reduce lung cancer deaths to a rate of no more than 33 per 100,000 people - a 14% improvement.
3. Reduce breast cancer deaths to no more than 16.6 per 100,000 females - a 7% improvement.
4. Reduce uterine cervix cancer deaths to no more than 1 per 100,000 women - a 60% improvement.
5. Reduce colorectal cancer deaths to no more than 8.8 per 100,000 people - a 31% improvement.
6. Reduce oral cavity and pharynx cancer deaths to no more than 9 per 100,000 men aged 45 through 74 and 3 per 100,000 women aged 45 through 74 - baseline data not available.
7. Reduce prostate cancer deaths to 17.1 per 100,000 - a 1% improvement.
8. Increase to at least 75% the proportion of people of all ages who limit sun exposure, use sunscreens and protective clothing when exposed to sunlight, and avoid artificial sources of ultraviolet light (e.g. sun lamps, tanning booths - a 134-168% improvement).
9. Increase to at least 85% the proportion of primary care providers who routinely counsel patients about tobacco use, diet modification, and cancer screening.
10. Increase to at least 95% the proportion of women aged 18 and older who have ever received a Pap test and to at least 85% those who received a Pap test within the preceding 3 years.
11. Increase to at least 75% the proportion of people aged 50 and older who have received a colorectal screening examination (fecal occult blood testing within the preceding 1-2 years) and to at least 50% those who have ever received proctosigmoidoscopy - 150% improvement for fecal occult and 50% improvement for proctosigmoidoscopy.
12. Increase to at least 50% the proportion of people aged 50 and older who have received oral, skin, and digital rectal examination in the preceding year.
13. (Developmental) Better the proportion of women aged 40 and older who have received a breast examination and a mammogram within the preceding 2 years (better the best reported percentage).
14. (Developmental) Increase to at least 40% the proportion of physicians who appropriately counsel or refer their genetically high-risk patients.
15. (Developmental) Increase to at least 40% the number of states that operate a statewide population-based cancer registry capturing case information on at least 95% of the expected numbers of reportable cancers and publishes incidence data annually within 18 months of the close of the diagnosis year.
16. (Developmental) Increase the number of cancer survivors who are living 5 years or longer after diagnosis.

Objectives from other Focus Areas related to Cancer Control:

Nutrition Focus Area
1. Fat intake: Increase to at least 75% the proportion of people aged 2 and older who meet the Dietary Guidelines average daily goal of no more than 30% of calories from fat.
2. Vegetable and fruit intake: Increase to at least 75% the proportions of people aged 2 and older who meet the Dietary Guidelines minimum average daily goal of at least five servings of vegetables and fruit.

Tobacco Use Focus Area
1. Adult tobacco use: Reduce to 13% the proportion of adults (18 and older) who use tobacco products.
2. Adolescent tobacco use: Reduce the proportion of young people in grades 9 to 12 who have used tobacco products.
3. Smoking cessation: Increase to 75% the proportion of cigarette smokers aged 18 and older who stopped smoking cigarettes for a day - 50% higher than target for Healthy People 2000.
4. Advice to quit smoking: Increase to 95% the proportion of patients who received advice to quit smoking during the reporting year from a health care provider - a 55% improvement.
5. (Developmental) Treatment of nicotine addiction: Increase to 100% the proportion of health plans that offer treatment of nicotine addiction (e.g. tobacco use cessation counselling by health care providers, tobacco use cessation classes, prescriptions for nicotine replacement therapies, and other cessation services) - retain year 2000 target
6. Providers advising smoking cessation: Increase to at least 75% the proportion of health care providers who routinely advise cessation and provide assistance, follow-up, and documents for all tobacco-using patients. Providers to include physicians, dentists, nurses, dental hygienists, mental health professionals, social workers, psychologists, pharmacists, medical assistants, physician assistants, and home health care aides.

Oral Health Focus Area
1. Stage 1 oropharyngeal cancer lesions (adults): Increase to at least 50% the proportion of oropharyngeal cancer lesions detected at stage 1 - a 30% improvement.
2. Screening for oropharyngeal cancer: Increase to 50% the number of adults aged 18 years and older who, in the last year, report having had an oropharyngeal cancer examination - 614% of baseline.

3. Progress to date

Development of the year 2010 objectives began with the users of Healthy People 2000 Objectives - a second generation set of national health targets. In 1996, The Healthy People 2000 Consortium met as focus groups to suggest improvements for Healthy People 2010. In September 1997, the Secretary’s Council on National Disease Prevention and Health Promotion released “Developing Objectives for Healthy People 2010” for public comment by private citizens, Consortium members, congressional representatives, State agencies, and other organizations. In November 1997, the Consortium met to address the theme, “Reducing Disparities”. Focus work groups drafted new objectives that were refined and reviewed by operational heads within the Department of Health and Human Services. The Healthy People 2010 Objectives: Draft for Public Comment was released in September 1998 and followed by regional meetings. In 1999, the Healthy People 2010 Steering Committee of the Secretary’s Council is finalizing 2010 objectives and developing companion documents. The document, Healthy People 2010, containing objectives/targets for cancer control, will be released in January 2000 at a Consortium meeting.

4. Coordinating body

The Secretary’s Council on National Disease Prevention and Health Promotion Objectives for 2010 advises the Department of Health and Human Services (HHS) in the development of national health objectives. The Healthy People Steering Committee is an internal committee of HHS that coordinates work on the Healthy People 2010 initiative for the Assistant Secretary for Health. It is composed of staff representatives from HHS agencies. Also represented are the staff offices of the Office of Public Health and Science - the Office of Minority Health, the Office on Women’s Health, the President’s Council on Physical Fitness and Sports, the Office of Population Affairs, and the Office of the Assistant Secretary for Planning and Evaluation. The Office of Disease Prevention and Health Promotion is the overall coordinator of Healthy People 2010.

The lead organization in developing and refining the objectives and targets for the Cancer Focus Area is the National Cancer Institute of NIH.

5. Partnerships

The Healthy People Consortium - alliance of 350 national membership organizations and
300 State health, mental health, substance abuse, and environmental agencies - is involved on the development of the year 2010 objectives in Cancer (and other focus areas). Mechanisms, including written comments (paper or electronic), public hearings, and regional meetings solicited input on the draft objectives from private citizens and states for incorporation into Healthy People 2010. The states are expected to develop their own Healthy People plans in the Cancer Focus Area that emulate national objectives but tailor them to their specific needs. State Healthy People Action Contacts work with community coalitions to frame their own versions.

A Healthy People Business Advisory Council, sponsored by the Partnership for Prevention (a Consortium member) and funded by Robert Wood Johnston Foundation, engaged the interest and active participation of the US corporate structures in planning Healthy People 2010.

6. Evaluation

The Assistant Secretary for Health has designated the National Cancer Institute (NCI) of NIH to be the lead agency accountable for the achievement of Healthy People 2010 targets in the Cancer Focus Area. The NCI is responsible for monitoring, tracking, and reporting the nation’s progress on the cancer objectives/targets. NCI has designated a work group coordinator to assume day-to-day responsibility for the cancer objectives.

Information on current health status, risks to health, and use of health services, with age adjustments updated to year 2000 will serve as the baseline for the 2010 objectives in the Cancer Focus Area. Objectives are to be measured with national systems that build on or are comparable with State and local data systems. Proxy data may be used when national data are not available or where regional data provide better measurability. Among the primary sources of data are the Centre of Disease Control and Prevention (CDC), National Centre for Health Statistics (NCHS) and the NCI’s Surveillance, Epidemiology, and End Results (SEER) program.

Periodic updates of the measurable objectives in the Cancer Focus Area will occur through the decade with regularly scheduled progress reviews by the Assistant Secretary of Health and the Surgeon General. The “Healthy People Review”, published by CDC/NCHS will also provide information on the objectives.

Healthy People objectives are specified by the US Congress as the metric for measuring the progress of the Indian Health Service, the Maternal and Child Health Block Grant, and the Preventative Health and Services Block Grant. Also the National Committee on Quality Assurance incorporate many Healthy People objectives into its Health Plan Employer Data and Information Set - a set of standardized measures for health care purchasers and consumers to use in measuring performance of managed care organizations in the areas of mammography screening and other clinical preventive services.
7. Implementation and Improvement

In reviewing the success of Healthy People 2000 to establish targets for Healthy People 2010, it was noted that, for all cancers, the mortality rate in 1995 reached the targets set in Healthy People 2000. However, targeted improvement was not observed in all population subgroups for specific cancers. Healthy People 2010 has an overarching goal to eliminate disparities in health status, health risks, and use of preventative interventions among population groups such as racial and ethnic minority groups, women, people with low incomes, people with disabilities, and specific age groups (i.e., children, adolescents, and the elderly). Although evaluation of the success of Healthy People 2010 will not depend on the target goals being met in each subpopulation, specific age-adjusted baselines have been established in the Cancer Focus Area for 5 easily identifiable population subgroups: African American, American Indian/Alaska Native, Asian/Pacific Islander, Hispanic, White. The NCI, as the lead organization in the Cancer Focus Area, has identified these five ethnic groups to monitor specific measurable cancer objectives with the intent of determining whether specific targets should be adjusted for these and other population subgroups in subsequent Cancer Control Strategies. To implement this intent, the federal standards for reporting racial and ethnic data will issue new reporting requirements to insist that Asian/Pacific Islander category be separated no later than 2003. With respect to baseline data, current draft objectives use 1940 age adjustments. However, CDC/NCHS will update the age adjustment to the year 2000. The new baselines will be used in the final set of objectives released in 2000 and the 2010 targets will be proportionally adjusted. Developmental objectives that do not currently have baseline data are to be placed on the national agenda for data collection.

As the target percentages defined in 2. Strategies and goals planned or underway specifically assume new treatments will improve prognosis in specific cancers, the NIH budget for cancer research will be increased by 65% from 1999-2003 and additional research programs aimed at prevention and early detection of cancer will be introduced to assist in reducing the number of new cancer cases and mortality in line with Healthy People 2010 objectives.
Footnotes

1 For the purposes of this report, a “Strategy” is defined as a coordinated set of actions and plans geared towards one or more cancer-related objectives or goals.

2 For the purposes of this report, the term provincial will be used to define state (United States), provincial (Australia), territorial (Australia), county (Sweden), and departmental (France) jurisdictions and related terminology.

3 For the purposes of this report, the term Ministry of Health will be used to identify any federal ministry responsible for a health portfolio in the countries identified. The actual department title(s) is provided in Appendix A for each country.