Mission
Interministérielle pour la Lutte contre le Cancer
Introduction

Cancer: a nation-wide mobilization plan

The cancer plan’s 70 steps

Cancer in figures
Cancer is a disease which concerns us all.
Which is why we’ve developed a nation-wide mobilization plan to fight it.
The stakes are high – human-high.
Because the stake is life itself.

Launched by the President of the French Republic, this plan to combat cancer aims to involve all those concerned: women, men, patients, health care professionals, scientists, and administrators.

I urge you to join us in this venture, so that together we may combat this scourge.

Jean-François Mattei
ministre de la santé, de la famille
et des personnes handicapées

For all of us who may develop cancer, or who have already had to contend with the disease, research is tantamount to hope.
Hope that we may better understand what causes cancer, and thereby better prevent its occurrence.
Hope that we may be able to detect it sooner, and thereby make full recoveries more likely.
Hope that therapies will become more effective, and more bearable, and thereby give life expectancy its full meaning.

The plan’s main asset stems from the fact it relies on the close cooperation of physicians, scientists, patients, and players from the pharmaceutical industry so that, together, we can combat this disease and make our hope come true.

I know we can rely on research.

Claudie Haigneré
ministre déléguée chargée de la recherche
et des nouvelles technologies
Cancer:
a nation-wide mobilization plan
All of our fellow citizens well know what “having cancer” means, or feel the threat of this disease. Many millions have survived the ordeal. They have drawn from this personal, painful and overwhelming experience in-depth, first-hand knowledge of the qualities and the drawbacks of our health care system. Currently, several hundred thousand individuals are undergoing treatment, and they are legitimately expecting to receive the very best care available; but they also want to take an active role in fighting the disease. For the fighting is not solely technical, it cannot simply be equated with what health care professionals provide; it is the fighting of several, side by side, taking part in a human combat. For when despair sets in, when science does not seem to deliver, what patients crave, first and foremost, is attention, and warmth. Many more among us are experiencing or have experienced – as spouses, or parents, relatives, friends or colleagues from work – cancer “once removed” and are also well aware of the limitations inherent to society’s response to the disease. Luckily the chances of beating the disease, of being cured, are regularly increasing, thanks to progress in research, treatment, and prevention. Today, over half of all cancers in women can be cured, and about three in four child cancers as well. There is consequently a tremendous expectation that more cancers will be fought more effectively, so as to entail less suffering, and lead to more cases of complete cure, so that in time, our perception of cancer may finally change. Such is the rationale for France’s nation-wide mobilization plan. The stakes are high, they are human-high, for what is at stake is life itself.

Launched on 14 July 2002 at the initiative of President Jacques Chirac, this plan to combat cancer involves women, men, patients, health care professionals, scientists, and administrators. All must now join in this venture, to combat this scourge.

A steering committee on cancer has been set up by Jean-François Mattei, Minister for Health Care, Family Affairs and the Handicapped, and by Claudie Haigné, Minister for Research and New Technologies. Chaired by the Director general in charge of Public Health Care Delivery, this committee filed its report on 16 January 2003. It benefited from the input of patients, health care professionals, associations involved in the field, as well as more generally of all those who wished to contribute to the development of this plan.
A nation-wide mobilization plan to combat cancer

“Cancer is a genuine nation-wide tragedy, which calls for considerable efforts to be made, in research, in prevention and screening, in therapy, both physical and psychological, to support patients.”

France’s nation-wide mobilization plan to combat cancer aims to implement President Chirac’s policy statement. It is a strategic program for the five coming years.

The plan has six operational and priority chapters designed to take us to the year 2007 – covering prevention, screening, treatment, support, teaching, and understanding and discovering – with a single goal, that of successfully combating the disease and fighting for life.

The plan’s goal is to bring cancer-caused mortality down by 20% in the next five years.

The plan’s provisions have been designed so as to become the concrete elements of a modern public health care policy aiming to fight cancer, and cancer-related pathologies.

The plan aims to impact our whole health care system with a renewed vision, where the fight against cancer is fought by patients, their families and friends, and the medical and nursing teams alike.

Prevention: Making up for lost time

A very significant number of cancers can be avoided by limiting the aggressions our bodies are subjected to. A number of these forms of aggression derive from our life-styles: they involve smoking, consuming excessive amounts of alcoholic beverages, exposing young children to sunshine without adequate protection, not eating enough fruit and vegetables.

But other factors may also stem from our environment: think passive smoking, or inhaling air pollutants which are potentially carcinogenic…

These forms of aggression may lead to very serious forms of cancer: lung cancer, cancers of the mouth and the larynx, melanoma, stomach and other digestive tract cancers, mesotheliomas… These cancers are a leading cause of death among the young. And yet, in many cases, they can be avoided: the plan’s preventive measures aim to do just that.

A change in culture is required today in a country where treatment has up till now been favored, and risk prevention all too often overlooked. Doing everything that can be done to avoid developing cancer involves mobilization in four main areas:

- Improving knowledge on how cancer develops (steps 1 to 3)

  The plan inter alia aims to set up a nation-wide data base to include close to 10 million people through specialized registers, and to set up three new urban area registers (for the Nord, Aquitaine, and Ile-de-France regions).

- Waging a war against smoking (steps 4 to 12)

  First of all, the plan focuses on helping smokers quit through deliberate health education campaigns and through broader dissemination of special aids. Priority efforts are needed to target young people, and pregnant women.

- Fighting harder against work- and environment-related cancers (steps 13 and 14)

  Fighting harder against this type of cancer means that occupational health services need to become more involved in cancer prevention programs.

  The plan provides for:

  - systematic epidemiological monitoring of all individuals exposed to carcinogenic risk, as well as improved identification of work-related cancers;
  - more stringent control mechanisms for carcinogenic substances used in the workplace, as well as for lagged risks.

  The plan also aims to improve data collection relative to the carcinogenic impact of environmental pollutants.

- Developing prevention in other fields, and promoting pro-health attitudes (steps 15 to 20)

  The plan stresses the need to further develop programs aiming to promote food hygiene and nutrition and to inform people as to risks deriving from the consumption of excessive amounts of alcoholic beverages. It also aims to prevent melanoma through the dissemination of information on sunburn risk in small children.

- Improving screening (steps 21 to 28)

  Too many patients are currently diagnosed too late. They would stand a far better chance of recovering had they benefited from regular screening and earlier diagnosis. Furthermore, with early cancer diagnosis, therapy can be less painful and devastating.

  The point of preventive screening is however not necessarily well understood by people who are convinced they are healthy, and do not regularly go in for medical checkups. Furthermore, cancer is still frightening, and screening all too often means entertaining the possibility of developing the disease.

  The plan aims to develop screening for those types of cancer where screening has been proved to be truly useful, by making it easier for all to access the required testing.
To this end, the plan sets five goals:
- encouraging individual screening for cervical cancer
- facilitating the development of screening systems for colon cancer
- improving early detection of melanoma
- guaranteeing access to genetic testing for hereditary forms of cancer.

Improving quality of care and focusing care on patients

Patients and their friends and families who have had to contend with cancer know this from experience: being told you have cancer is traumatic. This “breaking of bad news” must no longer be abrupt and impersonal, as it sometimes still is, but should on the contrary take the whole individual into account. It should provide support to individuals, rather than view them simply as patients.

Patients have to be given the best possible chances of recovery, regardless of where they are treated. This involves coordinating care around the patient, complying with good clinical practices, available in oncology for nearly all types of cancer, and ensuring maximum access to innovative equipment and therapies.

Patient nursing must be made more humane. A new balance has to be found in relationships between physicians and patients, and patients have to be provided with all the information they need better to find their way round complex health care delivery systems.

The plan aims radically to change the way cancer treatment is currently provided in France. In this respect, it focuses on four main areas:

Systematically coordinating home and hospital care around the patient (steps 29 to 38)

All new patients diagnosed with cancer will be the focus of interdisciplinary concertation and a “customized treatment program”. Cancer coordination centers (3Cs) shall be identified in all institutions providing care to cancer patients. In this framework, all patients will be assigned a physician, who shall be their main contact point within the system, and their special interlocutor.

Genuinely “communicative” file transfer systems shall be developed for cancer patients. The plan aims to develop regional cancer networks all over France, so as to coordinate all the players involved, for both home and hospital treatment, by 2007. All referral establishments providing cancer care shall be coordinating their expertise and services by the end of 2004, within a set of regional Cancer Poles. Decisions regarding the siting or deployment of major new equipment to be used on a region-wide basis shall systematically be reached through coordination among the main centers concerned (Centres Hospitaliers Universitaires – teaching hospitals-, oncology clinics, other institutions). Local networks shall be developed to meet the needs for local coordination.

Regarding children and the elderly, specific efforts are called for. The plan provides for:
- defining certification / approval procedures for centers specializing in the care of children with cancer;
- developing support to families of children with cancer;
- carrying out research aimed at developing specific treatment for child cancers.

The plan also provides for the setting up of a special task force in oncogeriatrics, to promote and coordinate work in epidemiology, prevention, as well as therapies and clinical trial adaptation to the needs of the elderly.

Finally, quality criteria to be met for specific certification / approval procedures shall be defined for oncology practice, in both private and public sector institutions.

Providing access to information to patients who wish to be proactive in their fight against cancer (steps 39 to 41)

All the necessary information shall be made available to patients close to where they live, using all means of communication: phone, Internet, information centers. “Breaking the bad news” consultations shall be improved, so as to better take into account patients’ needs.

Paying greater attention to people with cancer and their expectations (steps 42 and 43)

The plan shall facilitate at-home chemotherapy, and more generally at-home care, in particular through local networks. Patients shall be entitled to complementary care, for better pain control and improved psychological support.

Palliative care development, 80% of which concerns cancer patients, shall be actively supported.

Providing maximum access to diagnostic and therapeutic innovation (steps 44 to 53)

The number of diagnostic and monitoring facilities available to oncology (MRI, CT scanners, PET scanners) shall be significantly increased. Equal access to expensive and innovative drugs and facilities in the private and public sectors shall be made possible through converging funding modalities.
Providing more humane and more comprehensive social support structures (steps 54 to 60)

Cancer is not only a disease, but also a difficult time for individuals engaged in a fight for their life, a time where the presence of friends and family can be essential to keep patients’ spirits up and help them contend with therapy which is still all too often devastating. During such times, social problems need not compound physical hardships and psychological vulnerability. Everything must be done so that patients can go on leading as normal as possible a work and family life.

With this in mind, the plan provides for a number of concrete steps:
• mechanisms to keep cancer patients and patients suffering from other debilitating diseases in their jobs or help them return to the workforce shall be improved;
• keeping patients at home shall be made easier through increased at-home health care and service provision;
• patients’ access to loans and insurance shall be broadened;
• measures allowing parents to stay in close proximity to their hospitalized children shall be improved, as they do not currently seem to be up to par;
• patient and user support groups which can provide significant psychological help to patients, as well as entertainment and help, shall be allowed greater access to hospitals.

Developing research and the hope for a cure (steps 66 to 70)

Hope, for people with cancer, lies in research: in understanding causes, coming up with earlier diagnosis, providing more effective treatment.

Medical research relies on knowledge concerning the basic mechanisms of cancer, as developed mainly in the INSERM and CNRS labs, as well as on clinical research for therapeutic assessment. Today, increasing the pace of knowledge transfer from basic science to therapeutic applications which can benefit patients is the main challenge in cancer research. This is where research facilities and staff must work together so as to provide a seamless continuum between research and care, bringing together physicians, scientists and patients.

New avenues opened by the deciphering of the human genome now mean that scientists involved in research in both public and private sector laboratories must work together and that better coordination has to be effected nationally, and more often than not, internationally as well.

The plan provides for five sets of steps:
• Firstly, new impetus must be given to research in oncology, focusing on a priority basis on the three following areas:
  - epidemiological research and research in the social sciences;
  - biology and functional genomics;
  - clinical research.

Adapting training (steps 61 to 65)

Cancer professionals work in a wide range of fields and specialties: among physicians, some are general practitioners, others specialize in oncology or radiation therapy, other care providers are nurses, technicians, laboratory staff… There is considerable need for initial and ongoing training of all those concerned. Cancer basics must be taught early on in medical and nursing curricula, not only to increase knowledge regarding the disease, but also to raise awareness regarding a condition which requires that special support be provided to patients.

The plan provides for more and better skilled professionals, as well as for professional experience assessment and recognition. It also involves patient representatives in the training process.

The plan’s proposals cover four areas:
• initial training in oncology shall be overhauled so as to become more attractive to students and lead to the training of more skilled specialists;
• training capacity in oncology shall be increased;
• on-going training in oncology for physicians shall be re-organized and improved;
• training of paramedics in cancer patient care shall also be strengthened.
• Guidelines for research policy shall in the future be presented in program form. The plan intends to provide cancer research with strong impetus, through the definition of a nation-wide research strategy, with supporting funding mechanisms. This should contribute to better research coordination, as work today is all too fragmented.

• Cancer Poles will be set up at the regional and interregional levels. These will link referral & best practices hospitals to research units, so as to guarantee a patient-to-patient care-to-research continuum. Their aim is to develop transfer structures, from upstream research to industrial innovation.

• Transfer of technology and cooperative efforts linking private and public sector research shall also be encouraged.

• This should lead to the emergence of a number of world class sites, and international cooperation shall be further developed, particularly within the European framework.

The National Cancer Institute

Today, both patients and health care professionals agree that information and command lines in oncology are overly fragmented. The plan proposes to set up a National Cancer Institute, a key to better coordination of all players involved in the fight against cancer. This new and emblematic institution is intended as a center for both expertise and resources, as well as the locus for coordination. The new Institute's remit shall be perfectly linked and complementary to that of various extant bodies.

The National Cancer Institute shall work in very close connection to scientists, health care professionals and patient representatives so as to facilitate the implementation of the cancer plan.

In the field of care, the Institute shall uphold a global vision of the fight against cancer, from epidemiological surveys and the monitoring of carcinogenic risk to the setting up of networks and health care provision centers. The Institute shall be a watchful player in the implementation of the cancer plan. It shall give impetus to provisions aiming to improve care quality and coordination, as well as patients' equality of access to the best care available, regardless of their place of residence, and monitor their implementation.

In the field of research, the National Cancer Institute shall not aim to stand in for existing research bodies (INSERM, CNRS, CEA…). Its specific remit shall involve setting goals and defining means, identifying a global research strategy and corresponding programs of action in biology and genomics, clinical research and social science research. The National Cancer Institute shall fund and steer the implementation of theme-based programs. It shall also develop strong and transparent partnerships with industry.

Working under the authority of the Ministry of Public Health Care and the Ministry of Research, the Institute shall be publicly funded. It shall also raise private sector funding, under sponsorship and patronage programs. It shall develop external partnerships, and shall have the right to engage in commercial ventures.

Private institutions with research programs such as ARC or the Ligue shall work in close association with the National Cancer Institute, as shall other significant bodies such as the Fédération nationale des centres de lutte contre le cancer (National federation of anti-cancer centers) and the Fédération nationale de Cancérologie des CHU (National teaching hospital oncology federation).

In the medium term, the National Cancer Institute may help steer public research in France towards a new structure, featuring a number of goal-based, autonomous agencies and large, specialized centers.

Funding

The plan focuses primarily on organizational methods. It however includes some measures specifying means and resources, in particular in the following areas:

• upgrading technical infrastructure in hospitals and clinics;
• improving access to innovative and expensive therapies;
• strengthening medical and paramedical teams;
• stepping up efforts in prevention and screening;
• giving new impetus to coordination in research.

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<thead>
<tr>
<th>Expenditure Breakdown</th>
<th>%</th>
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<tr>
<td>Prevention and screening</td>
<td>13</td>
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<tr>
<td>Care coordination and patient support</td>
<td>21</td>
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<tr>
<td>Facilities and care upgrades</td>
<td>16</td>
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<tr>
<td>Access to innovative treatment</td>
<td>32</td>
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<tr>
<td>Research and training</td>
<td>18</td>
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<tr>
<td><strong>Total</strong></td>
<td><strong>100</strong></td>
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New measures included in the plan shall total 100 million euros as of 2003, and are forecast to reach 640 million euros in 2007. This considerable effort shall be funded by an increase in levies on tobacco, in view of the significance of smoking as a cause of cancer.

As regards prevention and screening, this level of funding corresponds to an increase in expenditure of close to 70% over a five-year period.

These new means will be reflected in close to 3900 new jobs, of which 1700 for nursing and technical staff, 500 for physicians, 400 for patient support staff, and 660 for other categories.
Plan implementation

An ambitious plan, the cancer plan combines 70 quite different steps. These require the setting up of a specific steering mechanism. Many of the steps included in the plan are to impact health care delivery modes and will involve health care professionals and patients, working in close connection to re-engineer a number of processes. Some steps shall further require adapting existing legislation: this is scheduled to be done with a new draft bill on health care policy to be submitted to Parliament in June 2003. The plan thus provides for the setting up of a national project task force, bringing together experts from central government, as well as leading representatives from the medical professions, research and science, and civil society associations. The task force will be designed to coalesce expertise in a responsive structure, as removed as possible from institutional and administrative constraints.

The setting up of this body to coordinate and monitor plan implementation is also germane to efforts currently being made generally to overhaul public management.

Appointed by the Prime minister and working under the authority of the Minister for Public Health Care, the task force, a multi-disciplinary body, will guarantee strict compliance with agreed commitments and timelines. It shall very regularly report on plan implementation. It shall also set up close concertation with health care professionals as well as with patient and patient family representatives, in order to make sure that plan provisions are indeed understood by all and effectively implemented. The national project task force shall furthermore be entrusted with preparatory work for the setting up of the National Cancer Institute, in order to make sure it can, upon opening, start work seamlessly and promptly and perform its role as a hub for information and dialogue with patients, health care professionals, and scientists.

Regional and national monitoring mechanisms will be defined. These will first of all involve identifying quantitative goals at the national level, and making sure that all relevant information does indeed percolate upwards towards the regional steering bodies (ARHs). Information on activities, the use of supplemental resources provided for by the plan, and compliance with goals by hospitals and other relevant players at the regional level will help ensure proper plan implementation. Within institutions, cancer coordination centers, working with the regional networks, their regional relays, will be the basic elements of this monitoring mechanism. The national project task force will undertake the national consolidation of the information thus collected, and present it in a set of easy-to-read tables, with a limited number of indicators. At the regional level, a “cancer correspondent” will be identified within each and every regional hospitalization agency, to be the national project task force’s contact person locally.

The plan shall be implemented with the support of the National Cancer Council, which represents all players concerned by cancer. The National Cancer Council shall be consulted on a regular basis regarding the plan’s main provisions, and shall carry out expert consultations at the behest of the national project task force.

Finally, the National Cancer Institute shall publish annual reports on plan implementation.

The plan is being monitored, from the very onset, by a public policy assessment mechanism. This mechanism aims to measure plan impact in terms of public health, to assess plan perception by patients and health care professionals, as well as to analyze cultural and organizational developments brought about by plan implementation, in particular regarding the provision of health care. The project will bring together experts specializing in organizational issues, economics, sociology, and medicine. It shall initially be coordinated by the national project task force, and subsequently by the National Cancer Institute.

Implementation Timelines

Plan implementation is going to cover a number of years. The implementation timeline to date goes from April 2003 to December 2007:

• In 2003
  - The national project task force is set up
  - A phone hotline and a dedicated web site providing information on cancer go live
  - Initial steps are taken to strengthen the national cancer epidemiology system
  - New legislation strengthening anti-smoking provisions and setting up the National Cancer Institute is passed
  - Systematic screening for breast cancer becomes the rule nation-wide
  - Financial aid programs for hospitals are put into place, to enhance access to therapeutic innovation
  - The upgrading of imaging and radiation therapy facilities begins
  - The first “cancer poles” are identified

• In 2004
  - Public health education is strengthened
  - Regional cancer poles are set up
  - Specifications are finalized for oncology networks, cancer coordination centers, “breaking the bad news” consultations, and customized health care programs
  - Home hospitalization and palliative care are developed
  - Funding for therapeutic innovations is adapted in the framework of new activity-based pricing systems
  - Measures to help patients rejoin the work force are developed
  - The National Cancer Institute is set up
  - Training in oncology evolves
• In 2005
- Comprehensive information on structures involved in cancer patient care are disseminated to the general public
- Customized health care programs are implemented
- Regional cancer networks are set up
- Cancer coordination centers are set up
- New “breaking the bad news” consultation procedures are implemented
- Certification specifications for oncology departments are finalized
- Certification procedures for cancer poles come to a close

• In 2006 and 2007
- Certification for oncology departments is implemented
- National coverage by oncology networks is achieved
- All patients are enrolled in customized care programs
- All patients may access cancer coordination centers
- Upgrade of MRI, CT scan, PET scan, and radiation therapy facilities is completed
- Initial research programs in tumor genomics are assessed
- The cancer plan is assessed and if necessary, redirected

The plan’s key indicators
The nation-wide cancer mobilization plan identifies a number of quantitative indicators, corresponding to outcome goals in five years time, ie in 2007. These indicators will be monitored on a yearly basis.

1. Prevention
The goal is to achieve the following: smoking should drop by 30% among the young, by 20% in the adult population, and there should be a 20% drop as well in the number of alcohol-dependent adults.

2. Screening
Consistent screening strategies shall be deployed throughout the country. For breast cancer, 80% of all women aged 50 to 74 will be screened. For cervical cancer, the screening goal is 80% of all women aged 25 to 69. For colorectal cancer, the goal is to develop an experimental screening strategy which could subsequently be implemented on a larger scale.

3. Health care
100% of all patients must gain access to customized care programs, with multidisciplinary care provided in the framework of a health care network.

4. Support
All patients must have access to quality information on support structures for cancer patients in their region. Procedures for “breaking the bad news” consultations and psychological support have to be upgraded for all patients.

5. Research
The main goal in this respect is to develop a cancer monitoring system which truly covers the whole population. French research in oncology must achieve levels of international excellence. One of its goals, in particular, is to ensure that at least 10% of all patients are included in clinical trials in reference centers. Cancer-specific genomic research must be carried out on a large scale: the goal here is to develop tumor libraries comprising up to 100,000 samples for clinical and biological analysis.
### Cancer Plan Implementation Timelines

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<th>2003</th>
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<td><strong>PREVENTION</strong></td>
<td>Upgrading France’s national epidemiological system</td>
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<td>Anti-smoking measures</td>
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<td>Public health education measures</td>
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<td>Breast cancer screening</td>
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<td><strong>ORGANIZATION OF HEALTH CARE</strong></td>
<td>Regional Poles</td>
<td>Customized health care programs</td>
<td>Oncology networks / (3C) / Customized health care programs</td>
<td>“Breaking the bad news” consultation procedures</td>
<td>Certification / approval of institutions</td>
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<td>Upgrading of MRI, CT scan, PET scan, and radiation therapy facilities</td>
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<td>Access to innovation</td>
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<td>Social aid measures and employment-related aid schemes</td>
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<td><strong>RESEARCH TRAINING</strong></td>
<td>Internet site and phone hotline “Cancer Information Service”</td>
<td>N.C.I. is set up</td>
<td>The Institute identifies its care and Research program</td>
<td>Cancer Poles</td>
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<tr>
<td>Setting Up</td>
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<td>INCA</td>
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<td>Developments in cancer-specific medical and nursing training</td>
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The cancer plan’s 70 steps
Prevention

Taking what steps are necessary significantly to reduce high risk behavior among the general population, so as to avoid those cancers which are indeed avoidable

Gaining better knowledge of disease development

1. Supporting cancer registers and developing the national epidemiology system set up by the Institut National de Veille Sanitaire (InVS – National Institute for the Monitoring of Public Health)
   - The plan aims to cover 15% of the French population via general registers, and more specifically through the development of three new urban registers (for the Nord, Aquitaine, and Ile-de-France regions)
   - Supplemental sources of information shall be used to improve coverage and register responsiveness, such as the PMSI program. A pilot phase will focus on thyroid cancer.
   - PMSI coding for private sector-performed radiation therapy shall be implemented by 2005, in order to achieve comprehensive coverage, within PMSI, of cancer therapies

2. Developing within the InVS framework, regional epidemiological analysis and support to regional health care policies

3. Developing the InVS - CIRC partnership by focusing on international initiatives and programs: for monitoring, comparing, data collection
Developing a comprehensive anti-smoking strategy

Making access to tobacco increasingly difficult

• Significantly and regularly increasing the sales price of tobacco-based products by reducing the gap between specific and proportionate taxes (“ad valorem” levies) so that price hikes impact all product categories, including those that are currently the cheapest, until significant deterrence is achieved. A special inter-departmental task force will bring together staff from the Ministry of Finance and the Ministry for Health to consider how to overhaul tobacco-product taxation.
• Banning the sale of specially-sized cigarette packs (containing 10, 15 or over 20 cigarettes) in order to avoid circumvention of the measure detailed above.
• Banning the sale of tobacco-based products to children under the age of 16, mirroring regulations currently applicable to alcohol.

Ensuring compliance with no-smoking rules applicable to public places

• Developing a “non-smoking company” certification with sponsorship from the Ministries of Labor and of Health, to honor companies who have made their premises a totally smoke-free environment.
• Promptly reminding companies, via a DGS/DRT circular, of their duties in terms of anti-smoking regulations, highlighting the significance of in-house rules stating the need to respect non-smokers and recalling the risks of passive inhalation.
• Strengthening staff compliance with existing legislation in public transportation (subways, airlines, trains…).
• Strengthening compliance with non-smoking rules in designated areas of hotels and restaurants.

Launching “No-smoking in Schools” Campaigns

• Implementing prevention and health education campaigns in partnership with school medical staff, teachers, school administrators, and DRASS.
• Ensuring compliance of students and staff with smoking bans inside schools, including in outside areas; smoking lounges could be set up for staff. Regional academic inspectors shall ensure that principals comply with these provisions.
• Training school nurses and allow them to hand out nicotine substitutes.

Ensuring compliance with the ban on tobacco-product advertising

• Mobilizing customs officials (to cover bars and points of sale).
• Authorizing suits against legal entities in the event of illegal advertising.
• Increasing potential sanctions.

Mobilizing civil society associations

• Allowing all associations registered for at least five years to seek remedies at law in cases of non-compliance with existing anti-smoking legislation (for the time being, only associations the stated purpose of which is the enforcement of non-smoking environments are allowed to do so).
• Mobilizing associations active in this field by involving them in training programs for professionals, and ensuring their funding by central government or by national health care schemes.
Launching pro-active health education programs

- Experimenting with and assessing the value of partial welfare system reimbursement for nicotine substitutes in the framework of quit-smoking programs
- Taking steps so that in two years time all “départements” (local territorial entities) have specialized units to help smokers quit (to date, 16 départements do not have such units)
- Introducing into the compulsory curriculum for first year medical students a special program on prevention and health education, focusing inter alia on smoking
- Including similar approaches into the preventive medicine advisory consultations provided for by recent public health legislation

Urging pregnant women to quit smoking (through information campaigns in maternity wards, sensitization of health care staff, access to special detox programs)

Funding campaigns targeting the general public and defining “good behavior charters” with youth-oriented media

- In order to increase the perception of smoking as inappropriate behavior, partnerships will be sought with TV media in order to ban smoking altogether from broadcasting studios

Using increased tax revenue to fund cancer prevention and cancer patient care

Strengthening the fight against work- and environment-related cancers

Improving the involvement of occupational health services in cancer prevention

- Developing a framework agreement between the Public Health and the Employment Ministries focusing on a number of shared goals in the field of public health;
- Locally, giving the framework agreement substance through contractual arrangements between the DRASS, CRAM, and the DRTEFP structures, with one-off arrangements for companies involved in field work;
- Developing epidemiological monitoring mechanisms for people exposed to carcinogenic risks in the workplace, and improving work-related cancer diagnosis:
  - Requesting that InVS publish regular reports on work-related cancer risk;
  - Developing, on a pilot basis, in three to five “départements” covered by a general cancer register, an evaluation of risks linked to work-related exposure, supported cooperatively by InVS, companies, and cancer registers;
- Developing long term monitoring of work-related exposure.
- Strengthening carcinogenic substance control mechanisms in private sector companies, by reducing several exposure thresholds:
  - Bringing ionizing radiation exposure thresholds down from 50 to 20 mSv per year;
  - Bringing benzene exposure thresholds down from 3 to 1 ppm;
  - Setting exposure thresholds for sawdust;
  - Strengthening measures currently applicable to hazardous chemicals.
• Stepping up controls in all private sector companies through priority mobilization of labor inspectors focusing on delayed-impact exposure, targeting most frequently used carcinogenic substances, starting off with sawdust and asbestos. These controls shall be implemented in conjunction with the relevant industrial federations.
• Striving for greater involvement of occupational health staff in anti-smoking campaigns in the workplace:
  - Setting up a “smoke-free company” certification;
  - Disseminating educational materials vetted by INPES;
  - Participating in “say no to smoking” campaigns through facilitated access to nicotine substitutes, to be provided in special kits.

Improving knowledge as to the carcinogenic impact of environmental pollutants
• Providing for the explicit inclusion of cancer risk evaluation in industrial site impact studies
• Within the InVS’s national cancer monitoring mechanism, providing for specific studies allowing insight into environmental determinants of cancer
• Commissioning studies on risk factors (dioxin, lead, particulates, benzene, radon, arsenic, electromagnetic radiation, low doses of ionizing radiation, etc.), in particular to AFSSÉ
• Identifying and treating sites contaminated by one or more substances with known carcinogenic effects, and monitoring the exposed populations

Strengthening the fight against alcohol abuse

Changing labeling requirements so as to provide consumers with more legible and more useful health warnings
• Including messages stating that “alcohol abuse can cause cancer”, with the phone number of an information hotline

Helping people put an end to alcohol abuse
• Training physicians and nurses at university level in the early identification of patients suffering from alcohol abuse, and in support and orientation techniques.
• Including these support and orientation techniques in the procedures provided for by France’s public health policy legislation
• Involving hospital-based liaison teams in the care of patients suffering from alcohol abuse.

Launching a new campaign to inform the general public as to health risks stemming from alcohol abuse
Developing the prevention of other risks and promoting pro-health attitudes

Developing, throughout the educational system, from grade schools to university, prevention and educational programs focusing on risk factors, focusing more particularly on risk factors for cancer

• Setting up a framework agreement between the Public health and Public education ministries focusing on a number of shared public health goals
• Developing local contracts between and among universities, schools and DRASS, under the national-level contract, focusing on specific health education initiatives to be included in the curriculum.

Developing, within the framework of the national nutrition and health program (PNNS – Programme national nutrition santé) specific initiatives to promote nutritional health

• Launching a campaign to increase fruit and vegetable intake, by providing information as to the protection such foods provide against cancer.
• Developing target-based contracts with townships in order to improve the nutritional quality of meals provided by canteens.
• Improving foodstuff labeling in supermarkets, through compulsory marking of fat content values, saturated/unsaturated fat ratios, and calorie counts
• Setting up water fountains in primary and secondary schools.

Developing melanoma prevention initiatives through information campaigns focusing on sunburn risks in small children

Screening

Setting up early screening mechanisms for the most frequently occurring cancers

Generalizing nation-wide systematic breast cancer screening by the end of 2003 and ensuring access to genetic testing for hereditary forms of cancer

Complying with the commitment to generalize nation-wide breast cancer screening by the end of 2003, by involving physicians in private practice and general practitioners

• Defining, at central government level, screening programs and providing for regional coordination, as well as stronger centralized steering of the whole process
• Supporting the existing “département”-level organizations, through contracts with local elected authorities and management associations.
• Assessing mechanism quality and performance at the “département” and regional levels.
Supporting access to genetic testing for hereditary forms of breast cancer (BRCA 1 and 2), of colon cancer, and for rare diseases, through the development of a network of specially qualified laboratories.

Strengthening the network of oncogenetics units, so as to provide the whole population with equal access.

**Fostering the development of colon cancer screening**

Further experimenting with systematic screening for colorectal cancer in twenty “départements” and assessing results, with a view to defining a national strategy in four years’ time.

**Fostering the use of Hemoccult**

**Encouraging individual, non-compulsory screening for cervical cancer**

Stepping up efforts to screen for cervical cancer in high-risk women:

- Extending the ability to offer pab-tests to new, local players (family planning centers, occupational health centers, etc.) in order better to cover women who do not regularly consult a gynecologist.
- Developing information initiatives targeting women
- Improving access to papillomavirus testing

**Improving conditions for early detection of melanoma**

Developing information campaigns on melanoma detection targeting the general public.

Sensitizing professionals to the need for early detection (physical therapists, hairdressers, cosmeticians, etc.)
Care

Very deliberately enforcing change in patient care: making the health care system more transparent, coordinating health care institutions and departments, providing equal access to information, therapeutic innovation, and general and customized health care.

Developing conditions for systematic coordination of all health care players – hospital-based or not – through the generalization of oncology networks, and through regulated grading of health care institutions.

Making sure that in four years time all French regions will be covered by regional oncology networks coordinating all care providers.

Coordinating players involved in cancer patient care, both in hospital settings and elsewhere, is a central concern of this plan, as coordination is felt to be a pre-condition for quality care and for equal access to care throughout the country. Beyond the obvious need for grading institutions providing such care, the plan aims to develop coordinated care networks in oncology. These care networks shall include both private practitioners and institutions, so as to allow for proper coordination of medical care and its customization to patients’ requirements.

Throughout the country, the networks shall provide a response to the coordination needs of health care institutions and private practitioners. The networks shall be designed to provide patients with multidisciplinary care, as well as to guarantee care continuity, from the time a cancer diagnosis is announced to the time the patient returns home.

All patients, regardless of the place where they receive care – clinics, general hospitals, university hospitals (CHUs – Centres hospitaliers universitaires) or oncology centers (CLCC – Centres de lutte contre le cancer) – shall be the focus of networking care. Health care institutions specializing in oncology shall have special responsibility in this respect, either directly through a regional network, or through the setting up of a special oncology care network in their professional field.

In some cases, “local” care networks may have to implement a number of provisions of the national cancer plan which cannot systematically be implemented in all local care delivery institutions: cancer coordination centers, mobile oncology support units, mobile palliative care units, “breaking the bad news” consultations procedures. Local networks are not necessarily organized exclusively around cancer care considerations.

At the regional level, the plan shall implement throughout the country a set of regional cancer networks including regional cancer poles. These regional networks shall aim to:

- coordinate players at the regional level. Ultimately, the goal is to integrate all private sector establishments and physicians working with cancer patients into these regional networks;
- federate existing local networks;
- organize tools used jointly by all regional players in oncology: information systems and patient file sharing tools, best practices documentation, referral registers;
- organize member evaluation;
- become first-line correspondents for ARH.

In four years’ time, oncology shall systematically be practiced within these network structures. All physicians caring for cancer patients shall have to work within multidisciplinary teams making up networks. Special certification / approval procedures for oncology networks shall be defined.

Legal and financial aspects of network coordination shall be addressed so as to improve effectiveness and sustainability. Steps shall be taken in particular to replace temporary funding currently provided by FAQSV with long term provisions.

New training schemes shall be provided for network coordinators, so as to meet the requirements for medical coordination within health care networks.
Ensuring that all regions set up regional cancer poles

Within each and every region, institutions performing referral care shall be called upon to regroup and set up by the end of 2004 special reference and referral poles known as regional cancer poles. Such poles shall be either large, existing regional institutions, or groupings of institutions; they may also take the form of contractual coordination among a group of institutions.

In any event, these regional cancer poles shall become the hubs of their regional cancer network. They shall be given special mandates in research and in teaching. Institutions working as regional poles can be cancer centers, teaching or university hospitals with clearly identified oncology departments, as well as hospitals and/or clinics highly specialized in the care of cancer patients.

Within these regional cancer poles, institutions shall harmonize their medical strategies and the organization and use of their technical facilities. Ultimately, this harmonization should lead to a joint medical plan. A pole structure template shall be identified, describing both aims and means: teaching, research, technical facilities, equipment and specialized or costly activities. This template shall be vetted by the regional hospitalization agency (ARH – Agence régionale de l’hospitalisation).

Major technical facilities shall systematically be sited and deployed at the pole level, so as to combat inconsistencies in supply. They shall be available to all other players in the network, regardless of whether they are private or public sector operators.

Access pathways to this referral center shall be defined within the regional network, in accordance with oncology SROS, and in conjunction with the ARH.

Ensuring that all new cancer patients benefit from multidisciplinary input into their case. Formalizing the forward-looking therapeutic program thus developed into a “customized care program”, to be provided to all patients.

These programs shall be defined on the basis of a multidisciplinary input procedure, and then given and explained to patients. The programs need to be perfectly understandable by patients.

Pending the development of a genuinely communicative file transfer system, these programs should help develop the transmission of information between health care professionals, and in particular enhance communication with general practitioners, during non-hospital care phases of therapy (which account for about 90% of total therapy time). The programs shall furthermore identify the network and institutions involved in any given patient’s care, state the identity of the patient’s referral physician, and mention contact information for a patient representative at the hospital.

Identifying Cancer Coordination Centers (3Cs) in all institutions providing care to cancer patients

These coordination centers shall be given a number of different tasks to perform:
• medical coordination of oncology within the institution (or the network), and more specifically, organizing multidisciplinary meetings in oncology;
• quality assurance for the customized care programs provided to individual patients
• individual monitoring of patients, with provision of help and support;
• within their institutions, these centers shall also be in charge of implementing the cancer plan, and producing quantitative data on activities and quality of care.

Individual patients shall thus be empowered, either directly or indirectly through their physician, to contact the coordination center for information regarding their care. Referral physician identification shall be performed in the framework of these centers, so that patients may have a single physician as their contact person. Similarly, the centers shall identify a patient contact, by choosing among associations with a history of working with the hospital. Individual patients’ customized care programs shall mention the names and contact information for both referral physician and patient contact.
Improving care quality and local monitoring of patients through better involvement of general practitioners in oncology care networks

• Developing a flat-fee system for patient monitoring by general practitioners to cover phases where patients are not in hospital, but require both home treatment and post-therapy monitoring. This flat fee remuneration shall be funded by the national fund for the development of health networks, and shall cover care provided within the network setting.
• Organizing the involvement of general practitioners in the network-based multidisciplinary concertation process, and providing them with access to the medical files of the patients concerned.

Ensuring the development by 2007 of a genuinely communicative file transfer system within each and every oncology network

These files shall be designed with a single template for all networks, and shall allow for the transmission of data relative to patient care, regardless of where individual patients receive treatment. Individual patient files should include at the very least a patient data sheet, indicating cancer type and stage, with information regarding all hospital stays, in summary form. Access to such files shall need to be provided both to private sector physicians involved in the network, and obviously to the patients. Developing these files will come under the responsibility of the regional oncology networks. Cancer patient files shall be developed within the framework of a broader scheme which aims gradually to develop a system for medical data interchange among health care professionals. It may actually be viewed as a pilot phase of this scheme, which should ultimately cover all ailments. Furthermore, new information and communication technologies shall be implemented (conference calls, videoconferencing, etc.), in particular to enhance the ability of networks to set up multidisciplinary concertation meetings focusing on given patients’ files, as well as more generally to develop exchanges among and between private and public sector physicians.

Encouraging broader dissemination and generalized implementation of recommendations relative to clinical practice, while ensuring their availability to patients

Dissemination of reference material shall be entrusted to the National Cancer Institute (Institut National du Cancer), who shall take all necessary steps to this end. Dissemination will use all possible media: hard copy publication, digital and internet posting. The National Cancer Institute shall also disseminate summary documents and documents adapted to patients’ needs, so that both health care professionals and patients may access the same information regarding cancer and best clinical practices in formats suited to their levels of prior technical knowledge. Information material shall also be disseminated by health care networks, associations, as well as by various information resources used by patients (family general practitioners, pharmacies, health care centers, etc.)

Defining certification / approval criteria for oncology practice in public and private institutions

Quality in oncology involves a number of different fields, such as:
• activity types and quality (environment, training, etc.), in particular for cancer surgery;
• facilities available, in particular for biological and anatopathology testing, as well as for chemotherapy and radiation therapy, and use modalities;
• internal and external organization of the institution, with respect to patient care.

The National Cancer Institute shall be in charge of defining specifications for the identification of quality criteria. The ANAES shall be in charge of vetting the methodological soundness of the approach used as well as of validating in fine specifications from the point of view of process quality.
The criteria thus defined shall provide the necessary grounding to a certification procedure, to be implemented at the regional level, under the authority of the ARHs. Regional oncology networks shall be involved in the implementation of the certification procedure, in particular through the evaluation of their member institutions. The National Cancer Institute shall consolidate at the national level conclusions stemming from the certification procedure, in conjunction with the Public Health Ministry. Institutions not meeting the aforementioned criteria shall nevertheless be allowed to register with the oncology networks. Thus, surgeons working in small clinics shall be allowed to perform surgery on their patients in larger institutions, so as to benefit from a more appropriate general environment.

Improving care provided to children with cancer through adapted care provision

• Defining benchmarks for oncopediatrics, and implementing certification procedures for centers specializing in the care of children with cancer. Identifying, within such specialized centers, centers of excellence or of national interest and boosting the means at their disposal.
• Developing, within oncopediatrics departments, support to families as well as to caregivers, with the help of parents’ associations, mobile units for support in oncology and mobile palliative care teams.
• In the framework of the missions given to the National Cancer Institute, enhancing the development of specific therapies for children with cancer, through appropriate funding and research programs. Developing such initiatives within a European framework in partnership with other institutions and programs working in oncopediatrics and focusing on developing orphan drugs.

Better adapting care and therapy to the specific needs of the elderly

• Identifying within the National Cancer Institute a special task force to deal with issues in oncogeriatrics, to promote and coordinate work in epidemiology, prevention, treatment adaptation and clinical trials conducted on the elderly.
• Developing special benchmarks and references for the care of the elderly.

Meeting the expectations of patients and their families through more humane therapies and support structures, providing improved information, so that patients who wish to play an active role in their own care may do so

Ensuring that cancer care systems are transparent and understandable to patients by developing local information windows

• Providing patients, at the regional level, with information as to how to find sites and networks certified in oncology, and indicating, if necessary, their field of specialization, and publishing this information as a cancer information bulletin.
• Opening cancer information kiosks in various cities, “départements” and regions, in the framework of public health contracts bringing together central government and local authorities. Other contact points to be developed are pharmacies and hospitals.
• Developing public hotlines in this field, using an 800 number along the lines of the system set up for “cancer info service”. This additional service shall be implemented by the National Cancer Institute. It shall help the public gain access to information regarding cancer, medical coverage, as well as welfare and support structures available.
• Providing access to multiple information via the Internet. This service shall also be implemented by the National Cancer Institute. It shall include technical information on cancer, providing knowledge about the disease, the therapies used, and all other topics the public would expect to find information about when consulting a public sector information service. The site shall in particular provide patients with access to best clinical practices compendia, identify all clinical trials currently recruiting in France, with indications of where such trials are being conducted, and shall furthermore present information on the epidemiology of cancer, and its developments.

The goal is to make patients and their families and friends better understand the health care system as applied to cancer.
Providing patients with improved “breaking the bad news” consultations

- Defining the conditions to be met for improved information of patients being handed a diagnosis of cancer, including the possible provision of psychological support and additional information (specifications).
- Introducing flat fee remuneration for these special consultations, to be paid to the health care institution, so as to collect funding for patient support structures, and for physician pay.

Facilitating at-home chemotherapy, and more generally, at-home care

- Eliminating ratios currently in use to convert beds into slots for the HAD schemes (HAD – Hospitalisation à domicile – at-home hospital care), in the framework of the “Hôpital 2007” program. Providing for a 2000-slot increase in the HAD program over the next five years, through outright creation or conversion.
- Defining rules for at-home chemotherapy, and more generally for at-home care, to guarantee care quality and safety.
- Opening up hospital pharmacies to at-home care procedures, with respect to specific chemotherapies.
- Specifying the legal framework governing at-home chemotherapy, in particular from the point of view of forensic ramifications.
- Ensure that expensive-molecule-based chemotherapy protocols have the same insurance coverage when administered in patients’ homes as they do in hospital settings. Ensuring that similarity in coverage is paralleled by prescription and administration traceability.
- Setting up charge-back mechanisms for oral chemotherapy in hospitals and clinics, within a legal and financial framework to be defined in conjunction with professionals.

These measures aim gradually to develop at-home care, so as to allow patients to lead more “normal” lives, despite their disease, among their friends and families.

Ensuring that patients get support as individuals by providing not only for technical protocols, but also for additional and palliative care development

Increasing the availability to patients of supportive care, in particular in terms of pain control and psychological and social support

- Setting up mobile oncology support care units, in particular in specialized centers, as well as within the network structures: physicians specializing in pain mitigation, social workers, psychologists, physical therapists, nutritionists, etc.
- In hospitals which do not specialize in oncology, these teams should be made available to other patients as well, in order to meet the need for other forms of care, in all hospital departments.
- As do the cancer coordination centers, these teams shall contribute to taking up part of the burden currently borne by clinicians, who have to deal with increasing numbers of patients in a context of demographic scarcity. Smaller institutions must be in a position to steer patients towards support teams working within their networks.
- Making it increasingly possible for patients to access psychological support care specific to oncology patients. This could be achieved through two alternative channels:
  - increasing the number of psychologists and psychiatrists working within mobile support units, in DGF-funded hospitals and in clinics (about 150 posts). These professionals would receive special training in psychological support to oncology patients before taking on their position within the support teams.
  - Funding, within the network care system, packages of 3 to 5 sessions with private sector psychologists trained in oncology patient support, and working in association with the network.
- Training nursing staff and clinicians in the psychological support of oncology patients.
- Improving support provided to the families of patients, and in particular to children, by involving them in associations.
Supporting the development of palliative care, 80% of which is devoted to cancer patients, under the national program to develop palliative care

The main goal here is to sensitize all nursing and medical staff to the specific needs and expectations of terminal patients:

- Training and supporting providers of medical care in oncology. This can be achieved by mobile palliative care teams, as well as by institutions specializing in palliative care. Training shall also rely on increased exchanges between identified palliative care units and oncology or internal medicine departments.
- Encouraging events and exchanges in hospitals and oncology clinics focusing on the end of life, to sensitize caregivers and care providers to the expectations of patients and their families;
- Involving palliative care associations, which can make a very positive contribution to this process.

The second goal is to significantly increase care-giving capacity, by encouraging all sorts of structures, in institutions and at patients’ homes:

- Setting up additional networks for palliative care at home so as to have at least one network available in each “département”
- Converting, as necessary, MCO beds into beds earmarked for palliative care, in hospitals or private clinics (currently, there are 316 beds earmarked within non-specialized MCO units)
- Setting up mobile palliative care units (at least 100), with at least one team attached to each regional cancer pole, teaching hospital or CLCC (there are currently 291 teams in all).

Working with professionals on the pricing and funding of these various solutions aiming to strengthen palliative care, focusing in particular on devising a pricing scheme for this activity.

Helping health care centers provide patients with innovative diagnostic and therapeutic tools, by overhauling funding mechanisms and deliberating increasing investment

Significantly boosting the number of oncology-specific diagnostic and monitoring facilities (MRI, CT scans, PET scans) through increases in the levels of human and financial resources available, so as to reduce wait times and increase early diagnosis, in particular for child cancers and rapidly progressing cancers

- 1 PET scan machine per million population, of which 1 at least per CLCC or CHU. Relevant operating costs shall be taken into account in the forthcoming stages of the PET scan funding plan initiated in 2002
- 2 CT scans or MRI facilities more per region, dedicated to oncology, i.e., 40 more facilities in total for oncology.

These facilities shall be sited or deployed in both private and public sector institutions. Their funding shall be provided for in the framework of the Hôpital 2007 plan for DGF-funded hospitals, and through current nomenclatures, for profit-making private institutions.

Overhauling radiation therapy facilities, so as to make up for significant lost time, and make new, more effective and less invalidating techniques available to patients

- Moving forward with the plan to grant 55 authorizations nationally
- Eliminating by 2005 all cobalt facilities still in operation
- Replacing 50 accelerators by 2007
- Providing the human resources needed (both medical and paramedical) so that the facilities can operate according to standards.

The facilities will be sited within both public and private institutions. They shall be deployed in accordance with criteria identified by the relevant professionals, with a view to developing centers with adequate critical mass, so as to enhance both
quality and efficiency. Funding shall be handled within the framework of the Hôpital 2007 plan for DGF-funded hospitals, and through current nomenclatures, for profit-making institutions.

Funding for additional human resources shall be the focus of a special facility, for DGF-funded institutions.

This program should allow for significant upgrading of both capacities and performance, and for the development of new technologies such as conformational radiation therapy.

- Implementing a radiation therapy development program with developing countries, which could be underpinned by the transfer of machinery being replaced in France (cobalt therapy facilities, in particular), which will prove useful in the local context.

Aligning private and public sector funding modes for expensive and innovative medication and facilities so as to guarantee patients’ equal access to such resources

This step shall be included in the general framework of measures designed to implement new activity-based pricing principles. Within this new pricing system for hospitals, specific funding mechanisms shall be identified for expensive and innovative medication and facilities used in oncology and in other specialized fields of medicine as well. The mechanism shall specify rules for access to such funding, as well as relevant prescription monitoring and regulation modes.

The new funding modes should comply with rules concerning usefulness, best practices, and prescription cost control. The mechanism shall aim to ensure:

- that user departments do comply with specifications
- that individual prescription notifications comply with best practices and with medication approval regulations (AMM)
- that prescriptions and individual impacts are monitored on a regular basis
- that molecule prices are acceptable.

Regarding cancer, the National Cancer Institute (INCa) shall be the focal point for all data collected with a view to assessing, rationally, patients’ access to innovative therapies, and the dissemination of such therapies in the country. The INCa shall participate in the ongoing evaluation of the new mechanism so as to make all necessary adjustments and improvements.

The STIC (Soins techniques innovants et coûteux —innovative and costly care technology) program shall in any event be further implemented and refocused on the cost-benefit evaluation of innovative mechanisms, so as to provide groundwork for the possible future health care coverage of these technologies and medication. The STIC program may also cover some of the ATU programs.

Developing the evaluation of new molecules in oncology, via public follow-up of post-AMM studies

Fast-track approval procedures (AMM) for some new cancer medications are justified by the fact that it is in some patients’ best interest that they should have access to such treatment. Such procedures are however generally insufficiently detailed to allow for full evaluation of the molecule’s potential benefits for all patients concerned, and of the conditions under which it must / can be prescribed. Furthermore the fast-track approval procedures do not allow for an assessment of the medical and economic impact of the molecule in cost terms, and therefore preclude public health qualification. Two possible responses are suggested:

- setting up public-sector follow-up of post-AMM studies for molecules used in oncology, which would be steered by the transparency committee, in conjunction with the National Cancer Institute
- setting up, within the National Cancer Institute, an independent task force to assess new molecules used in oncology both during their temporary use phase (ATU – Autorisation d’utilisation temporaire – Authorization for temporary use) and after they have obtained their AMM vetting. The task force shall work in close connection with the AFSSAPS and with pharmaceutical laboratories and shall on occasion propose that further studies be undertaken, or formalize experts’ opinions regarding conditions of use and patients concerned.

Dealing with the current overburden of health care institutions specializing in oncology by providing medical and nursing staff with more medical time

Health care professionals working with cancer patients are currently faced with difficult demographics, in terms of physicians, nurses and paramedicals available (including technical operators). Furthermore, staff must contend with steadily
growing needs in oncology care. Under the circumstances, the cancer plan has given priority ranking to three complementary responses, which aim to reclaim medical time for health care professionals:

• developing coordinated care, networks, and support teams;
• providing human resources to undertake newly defined activities as well as activities which are being extended under the cancer plan;
• boosting initial training, so as to make oncology more attractive to students and ultimately train more specialists in the field.

Developing anatomopathology and biological hematology by encouraging hospitals to adopt validated innovations in diagnostics

• Urging changes in nomenclatures used for anatomopathological investigations and biological testing, so as to take greater account of changing technology
• Providing within the National Cancer Institute for the systematic monitoring of developments in diagnostics technology and taking steps to enhance the speedy adoption of innovative technology in pilot programs with specific funding.

Further developing the hospital-based tumor libraries program, to enhance treatment options

With current and expected developments in medical treatment for cancer increasingly focusing on customized care, knowledge of individual patients’ genomic parameters is increasingly required. Health care institutions need facilities to store tumor samples appropriately, so as to make new therapies available to patients. The goal here is to develop an additional 50 tumor libraries in 2003-2004-2005 to reach a target number of about 80 in all.

Overhauling the current classification of medical acts and care procedures, where it is inadequate, so as to encourage best practices

In the framework of CCAM implementation, improving the classification of a number of medical acts and care procedures of relevance to private sector oncology:

• moving away from chemotherapy monitoring, and towards supervision of chemotherapy protocols, with pricing incentives for multidisciplinary practice;
• replacing remuneration for ALD listing with remuneration for participation in multidisciplinary consultations in the framework of oncology network care. Defining, in conjunction with other partners concerned, the best solutions for performing multidisciplinary concertation.

In DGF-funded hospitals, upgrading valuations for radiation therapy sessions, so as to allow for proper funding of new equipment and medical and paramedical teams. This shall be achieved in the framework of new activity pricing, and in particular through modulated pricing for radiation therapy session blocks.

In the framework of oncology network care, remuneration of private nursing staff shall also require attention, and reimbursement nomenclature may need to be modified accordingly, so as to take greater account of the actual nature of the technology used.

Encouraging the adoption of measures adapted to the specificities of French territories overseas (DOM TOM)

• Developing in the DOM, special care structures for cancer patients based on the networking of existing structures: an inter-regional oncology program will be formalized to strengthen local care complementarity, develop access to local or vicinity care for cancer patients, as well as to more specialized, but local, care centers, while defining the conditions for transfers to metropolitan France or neighboring countries. These provisions shall apply to the Caribbean islands, Guyana, La Réunion, and to Mayotte.
• Implementing the recently designed territorial development plan for St Pierre et Miquelon, which provides for the development of complementary care in oncology with neighboring Canada.
The general, theme-based, provisions of the cancer plan provide for upgraded health care in the DOM. These provisions cover major equipment acquisition and use, palliative care development, costly molecules, and networked care.

Concerning TOM, where health care policy is the subject of local devolution, fostering the setting up of specific structures for cancer patient care, so as to ensure that care is provided as close as possible to patients’ homes.

**Defining a funding mechanism for cancer care to encourage best practices, through a pilot pricing project based on individual pathologies and oncology network care**

Experimenting with flat-fee pricing for primary care, to be provided by one or several institutions working in a network, with moneys paid to the network. This pilot project may start in 2005, once activity-based pricing has been implemented in all member institutions. The pilot project will help evaluate the feasibility and rationale of this type of patient-based funding, which might prove an incentive from a best clinical practices point of view. It shall help assess the extent to which networks can actually perform as care providers, managing the full range of services and care to be provided to individual patients.

**Social Issues**

**Providing patients with all they need to lead as normal a life as possible, so as not to compound the trials of cancer with those of social exclusion**

**Improving patient access to loans and insurance**

**Improving patients’ and patients’ families’ access to provisions deriving from the Insurance convention (also known as the “Belorgey Convention”)**

- Informing the general public as to the rights set forth in the Belorgey Convention, and extending the scope of these rights in the framework of future negotiations (with coverage for invalidity, and elimination of the “aggravated risk” provision for patients suffering from certain types of cancer who have been recurrence-free for 10 years).
- Getting insurance professionals actually to implement the convention, and urging them to inform their clients as to its contents.

**Improving mechanisms allowing patients to retain their jobs, to recover their jobs, and to take leave to support a friend or relative.**

**Encouraging job-based integration, job retention, and job recovery for patients suffering from cancer or other invalidating diseases**

- Extending existing job reintegration timelines (in particular in the public sector) for patients with long medical leave, along the lines of provisions for maternity leave.
- Improving and introducing greater flexibility into medical leave provisions applicable to long-lasting diseases such as cancer, by allowing patients to benefit from a second three-year indemnification period if they have worked, continuously or discontinuously, for twelve months during the three previous years.
- Developing information dissemination on AGFIPH-funded job-retention schemes for patients whose professional
capacity has been reduced by cancer. Providing care networks, patients’ associations, etc. with specifically designed information formats, focusing in particular on contact points for employment-related services.

Helping patients stay at home by developing at-home care and support services

- Providing access to SSIAD services to patients with cancer or other chronic diseases, during their intermediate care phases (in-between chemotherapy or radiation therapy cycles)
- Setting up, with associations, “département”-level information and coordination units to disseminate information on existing at-home support structures and other forms of support available to patients. Setting up, over the next five years, 20 such units and assessing their performance.

Making it easier for parents to stay with their sick child through improved support mechanisms, as current provisions are not satisfactory

Improvements in this field shall strive for greater ease of access, greater flexibility, and adequate reimbursement levels, so that all parents with a sick child can have time off, without running risks either professionally or financially. The way forward might involve adapting an existing mechanism, ie the APP (Allocation de presence parentale – special grant for parental presence).

Improving coverage for specific medical or cosmetic expenditure

Involving compulsory health care insurance bodies and personal insurance schemes in the setting up of new mechanisms to cover specific expenses

Two complementary solutions could pave the way to improved coverage for medical expenses which are currently poorly covered or not covered at all by compulsory health care insurance:
- coverage, regardless of income, of certain expenses above the maximum threshold defined by compulsory health care insurance;
- negotiation of an agreement with personal insurance schemes providing coverage additional to that of compulsory health care insurance, as well as with insurance companies and other institutions providing coverage, with a view to developing additional coverage adapted to this type of risk.

Encouraging patients and user groups to participate in hospital life by defining the scope of such participation

Boosting the role of patients’ and parents’ associations in clinical research

Increasing patient involvement in the design of clinical trials via the setting up of patients’ committees authorized to provide advice on draft research protocols, in all clinical research bodies funded by the National Cancer Institute. In due course, generalizing the consultative process to all research protocols. This item concerns all clinical research trials, for both adults and children.
Acknowledging and supporting the involvement of volunteers and patients’ and parents’ associations in health care institutions

• Setting up model contracts for association-hospital cooperation, with possible local variations
• Authorizing volunteers’ enrolment in ongoing training schemes currently open only to professionals. Conversely, relying on the experience of associations to train and inform medical and nursing professionals.
• Identifying, within individual institutions, local in-house contact points to deal with patients’ associations, and providing for their names and contact numbers to be given to patients, on their customized care programs
• Encouraging patients’ associations to develop information and support windows or counters inside hospitals, for patients, their families and friends.

Training

Within the framework of basic or ongoing training schemes, implementing reform so as to train more professionals with expertise in cancer care

Strengthening basic training in oncology so as to increase the potential number of physicians with expertise in cancer care

Overhauling basic training in oncology, in order to make the field more attractive, and to train more specialists with relevant expertise

The idea is to respond to the currently disquieting demographics of cancer care, by ensuring the necessary complementarity between and among physicians working in oncology (oncologists, hematologists, radiotherapists) and physicians specializing in specific organs, but with training in oncology. Both types of training have to be encouraged, equally:
• by developing specific streams within medical schools, and in particular by developing hemato-oncology, so as to increase the number of physicians trained, when quotas currently limiting the number of physicians trained are lifted.
• by further overhauling the graduate DES curriculum in oncology, to make it more consistent with training in other European countries, and by giving increased weight to modules focusing on networked care, the psychological dimensions of cancer, and complementary care
• by overhauling the DESC curriculum, so as to make it more accessible to specialists with skills useful in cancer care (in particular surgeons, but also organ specialists, pathologists, geneticists, cell biologists, etc.)
• by providing for at least one compulsory, albeit short, internship in an oncology department, before the last segment of medical studies, so that students may choose to go for oncology after they pass the “internat” competitive examination
• by setting up qualifying and accreditation procedures for organ specialists who have been active in oncology, in the framework of the new medical qualification system to be set up in 2003.

Increasing staffing in departments training oncologists

• Overhauling certification procedures and criteria for departments providing training at the DEC and DECS levels, in order to increase the number of departments providing internships, with special attention to those departments that have set up mentoring systems providing genuinely good training
• Increasing the number of slots open to “internes” (residents who have passed a special competitive examination). Doing away with the “numerus clausus” quota system, so as to increase by about 50% the number of slots available to “internes” in oncology, radiation therapy, and medical oncology (currently the number of slots available is 140).
• Offering slots for “assistants”, “assistants chefs de clinique”, and for “chefs de clinique” in departments certified for the training of oncologists (medical oncology, radiation therapy, other specialties for which there is an oncology DECS course), as well as in oncological surgery and pathology. Offering slots for “assistants” including in general hospitals. The goal is to offer at least 50 additional slots over a five year period, ie 10 additional slots a year, by filling on a priority basis current gaps in geographical coverage of training institutions.
• Increasing the number of posts available to faculty in teaching hospitals for oncology and other related fields, in both CHU and CLCC institutions. The goal is to offer 3 to 5 new slots a year, ie 25 openings over a five year period, of which 10 in oncology.
• Allowing some cancer centers with significant research and teaching potential to engage in teaching, in close association with the university system, so that universities may enter into direct contracts with such institutions, as well as with CHU teaching hospitals, to develop teaching and training in oncology.

Improving the organization of retraining and continuing training in oncology

The idea here is to meet the needs for regular knowledge upgrading of all physicians, including those working in local oncology centers.

Strengthening paramedical training schemes for cancer care staff through more focused training

Fostering the development of paramedical training, and in particular of training in nursing, for cancer care in both the public and the private sectors

• Including in paramedical training curricula modules devoted to the care of cancer patients
• Developing on-the-job training in oncology for larger numbers of paramedical professionals.

Better identifying and recognizing new jobs in oncology

• Reviewing the need for developing new training in dosimetry, to be included in the existing training schemes for radiation therapy technicians
• Reviewing the need for developing post-graduate training in oncological care (at masters level), to be based on prior professional achievements and experience, and supplemented by the acquisition of further medical knowledge in the field of cancer therapies, so as to provide some relief to over-worked medical teams
• Improve the attractiveness of training in radio-physics by providing stipends for residents in this field.
Providing oncology research with new impetus and improved coordination. Ensuring it meets the highest international standards, in particular in new fields stemming from the genomic revolution as well as in social sciences and economics.

**Identifying “Cancer Poles” at the regional or inter-regional level, to ensure a care-to-research continuum from patient back to patient, linking reference hospitals to certified research units**

Regional oncology poles (mainly the CHU and CLCC structures) with significant research and innovation potential may decide to set up a Cancer Pole, eventually with one or several external partners.

The Cancer Pole concept is that of an operating structure bringing together approved research teams working in a given place with care delivery services keen on implementing innovation, and shared technology and infrastructure. Cancer Poles are designed for close interaction between upstream research teams (INSERM, CNRS, CEA, academia) and clinical research professionals so as to foster transfer of knowledge, and in so doing, patients’ access to innovative treatment. Certification / approval shall be provided by the National Cancer Institute, following nation-wide calls for tender. Cancer Poles shall be priority recipients of support funding allocated by the National Cancer Institute.

Cancer Poles shall aim to develop genuine steering mechanisms for their action programs through the appointment of project managers, committed to specific goals, and provided with a budget. This structure is designed to allow for far more effective coordination among and between the various units and hospital departments involved in any given program. Within the Cancer Pole structure, scientists and physicians (regardless of whether they are public service employees or not) shall equally participate in program achievements. They shall develop research topics promoted by the National Cancer Institute and shall be eligible for funding in this framework.

Cancer Poles aim to mobilize the critical mass needed for research in oncology, in particular in the four following fields:

- Developing large tumor libraries structured for research in genomics; (the goal set for tumor libraries involves making available by 2006 some 100,000 tumor samples to Cancer Poles; these samples have to meet genomic analysis criteria, so that French academic research can regain strong standing in this strategic field)
- Developing research platforms for large scale genomic and proteomic analyses, focused on goal-based disease decoding programs, linked to diagnostic and therapeutic target identification.
- Promoting clinical trials for new therapeutic strategies;
- Promoting studies in economics and the social sciences.

Cancer Poles shall develop partnerships with industry, and foster the commercial and industrial development of research results.

The Paris Metropolitan Area Cancer Pole could, in view of its critical mass, implement a number of special projects.

Furthermore, as activity-based pricing is gradually implemented, hospitals which have developed structures for the transfer of knowledge from research to clinical practice (in particular in the framework of Cancer Poles) allowing patients prompt access to diagnostic and therapeutic innovation shall benefit from global, ear-marked funding, provided that they comply with a number of identified conditions and undergo performance evaluation.
Developing, in particular through the National Cancer Institute, a program-based research policy encouraging partnerships between public and private sector research

Providing cancer research with new and strong impetus, through the definition of a national research strategy and the identification of funding to support this strategy

New challenges, deriving in particular from the genomics revolution, require changes in the structures and the organization of medical research. Regional Cancer Poles shall be set up to achieve critical size and allow for adequate coordination among players. Defining a nationally coordinated strategy, to be embodied in a variety of goal-oriented programs, should help better to organize front line work, and provide the means to achieve significant progress in the more promising fields. Defining a strategy should moreover lead to developing research in the social sciences, which has up till now lagged in oncology. This research strategy shall be supported by the National Cancer Institute, which shall be provided with a fund allowing it to implement the programs to be derived therefrom. The programs shall be open to all players in the science community, through a number of different arrangements:

- theme-based calls for tender;
- co-funding (seed money) for projects submitted by research teams and positively vetted by the National Cancer Institute;
- ear-marking, within the Programme Hospitalier de Recherche Clinique (PHRC – Hospital-based Clinical Research Program) general appropriation, of a “cancer” component, the scientific management of which shall be entrusted to the National Cancer Institute.

These national programs shall bring together major research institutions such as INSERM, CNRS, and CEA, and a number of current players in oncological research who have been implementing cooperative approaches, such as the Ligue, ARC, FNCLCC, EORTC, UICC, etc.

Program implementation and follow-up indicators shall be systematically constructed and implemented. Cancer research shall be developed mainly in the three following directions:

- biology and functional genomics: in this field of cognitive research and knowledge transfer, the goal is to identify goal-oriented programs of considerable scope, which can rely on Cancer Poles, working singly or in association with other Cancer Poles, cooperating groupings and public and private sector institutions. Programs shall aim to perform genomic and proteomic analyses for tumor genotyping, with a view to better targeting therapy and to identifying new therapeutic and diagnostic targets. Genomics should develop quite considerably, and help France become a world class player through the cooperation of approved research teams, clinicians, and tumor library managers.

- clinical research: evaluating strategies for therapy, medicine, surgery, radiation therapy, and population studies:
  - The goal is to develop nationally coordinated clinical research through the identification of programs agreed by various cooperating groups. Ultimately, the idea would be to cover 10% of all patients included in the regional oncology poles and to target 5% in other institutions, while reconciling study quality consistent with international standards and accessibility of protocols to all patients wishing to consult them. In this framework, major cooperating groupings shall, for reasons of efficiency, be considered on a priority basis by the National Cancer Institute for the funding of trials. Conversely, protocols shall be as open as possible to inclusion.

- epidemiological research and research in the social sciences:
  - These fields are currently somewhat neglected by oncological research. Studies on patients (quality of life, health education, participation in the therapeutic process, etc.) shall therefore be developed, as shall work in health economics and cost-benefit analyses focusing both on isolated therapeutic processes and on the whole care delivery chain.

A first study shall be entrusted as of 2003 to the DREES, which shall focus on cancer patients’ quality of life. Research programs shall also be implemented in the fields of epidemiology and risk factors: epidemiology, environmental, nutritional, occupational, infectious risks (in conjunction with INSERM, INVS, and CIRC). Finally, research programs in health education shall also be commissioned.
Fostering transfer of technology and cooperation between public sector or academic research and private sector research

Research and innovation in oncology need to be the focus of France’s traditional public sector research, but must also benefit from the presence in France of a number of industrial structures with their own research and development facilities. Research and innovation also need to be nurtured by a denser network of biotechnology companies. The goal is therefore to foster the transfer of technology and to set up networks allowing for cooperation between universities and various industrial partners in the relevant fields (pharmaceuticals, biotechnologies, diagnostics technology, imaging, instrumentation, nanotechnologies) with research activities in France. Such partnerships will need to be developed at the national level, within the framework of programs steered by the National Institute of Cancer, as well as in the various Cancer Poles, whose remit includes developing their own research agreements with pharmaceutical industries and manufacturers of medical equipment. Assistance to innovative companies participating in improved care delivery schemes for cancer patients shall be increased through the National Cancer Institute’s active support to patent application procedures and industrialization agreements.

Fostering the emergence of world class sites and developing international cooperation, in particular within Europe

Gradually promoting the recognition of Cancer Poles as centers of European excellence in the fight against cancer

Cancer Poles identified through the call for tender to be organized by the National Cancer Institute shall aim gradually for international, and more specifically European recognition. Individual Cancer Poles shall gradually develop international partnerships, in the framework of European research and development programs, as well as in broader contexts, as necessary.

Promoting internationally significant projects and concretely fostering cooperation, in particular among Europeans, in fields where France cannot move ahead alone

Organizing the fight against cancer is a concern that the political bodies of Europe cannot ignore. A “Europe against Cancer” program has already been implemented in the European Union framework, and the Sixth Research and Development Framework Program, currently in force, has identified the fight against cancer as one of its priorities. France wishes to share with other European nations its goals and planned action in this field. To this end, projects likely to contribute to this European cooperation shall be encouraged. A number of projects have actually already been identified:

- the European platform for PET scanner technology development (EuroMedim project)
- a national interest site for hadron therapy using carbon 12 and proton beams, in conjunction with European project ENLIGHT (the ETOILE project). This project, which complements the research program in proton beam therapy currently underway at the Orsay center (PROPULSE) shall be part of a broader European venture, associating sites in Heidelberg, Milan, and Vienna to validate scientific concepts and improve site economic efficiency.
- A program under which the National Cancer Institute, INSERM, the Institut national de veille sanitaire and the International Center for Cancer Research in Lyon shall work together on the epidemiology of cancer and the relative performance of various health care delivery systems in the treatment of this disease
- A European cooperative research plan in the field of genomic tumor analysis, associating the Ile de France Cancer Pole and the Heidelberg Oncology Center. This cooperative project may subsequently be extended to European academic oncology centers members of the Organization of European Cancer Institutes (OECI).
The setting up of the National Cancer Institute (INCa) shall provide a focal point and an emblematic institution to the fight against cancer, to coordinate all players in the field and give international visibility to the oncology dimension of our public health policy.

The National Cancer Institute must also become a center of expertise and a single window where policy orientations can be identified both for health care delivery and for research programs, while initiatives and joint action plans are coordinated.

In the field of health care delivery, the Institute shall be the single body with a global vision of all programs and projects in the fight against cancer, ranging from epidemiology and carcinogenic risk to care delivery provisions, networks, hospitals and clinics. Because of this vision, the National Cancer Institute can be a vigilant player as regards the implementation of the cancer plan. It can give impetus to and subsequently monitor provisions relevant to quality and coordination of care, and ensure patients’ equal access to the best possible care, regardless of where they are being cared for.

The main fields to be covered by the National Cancer Institute are as follows:

**Expertise and the identification of specifications for both clinical practice and administrative structures:**
- specifications for clinical practice: development, dissemination, evaluation
- specifications for the certification / approval of institutions and services
- specifications for oncology networks

**Monitoring and assessing the full range of policies, mechanisms, and facilities used to fight cancer:**
- global performance of health care delivery in oncology
- specific performance of mechanisms, and care and prevention streams or structures
- national observatory for innovation and the access to innovative therapies
- medical and economic assessment of innovative technologies and therapies and assessment of their impact on public health
- identifying facilities and streams of national interest

**Informing both professionals and the general public:**
- operating the “cancer info service” hotline
- running “cancernet”, the National Cancer Institute’s general public website
- publishing information for patients:
  - on therapeutic trials
  - on patients’ rights
  - on specifications to be complied with in health care delivery, for patients and professionals
  - on regional health care delivery

In each of these fields, the National Cancer Institute shall coordinate its own work with that of existing bodies, to avoid duplication. In particular, the National Cancer Institute’s remit does not include supervision of health care delivery bodies, as this role behooves the State and specific regional agencies, but it is however entrusted with goal attainment monitoring. Similarly, cancer epidemiology remains the jurisdiction of the Institut de Veille Sanitaire (InVS – National Institute for Health Monitoring), as prevention is that of the Institut national de prévention et d’éducation pour la santé (INPES – National Institute for prevention and health education), and accreditation, that of the Agence nationale d’accréditation et d’évaluation en santé (ANAES – National Institute for health accreditation and evaluation). The National Cancer Institute shall exchange information with all of these bodies, shall give impetus to new initiatives and shall implement cancer-relevant mechanisms and facilities.

**In the field of research,** the Institute shall be a new player, and may well signal a change in France’s public sector research policy, with a shift of focus towards more autonomous goal-oriented agencies working with large field-specific institutes. In the short term, the National Cancer Institute shall intervene as an autonomous goal-oriented agency defining a global research strategy as well as the corresponding action programs in the fields of biological and genomic research, in clinical...
research, and in research in the social sciences. The National Cancer Institute shall steer and guide priority-ranking theme-based programs to be implemented by the Cancer Poles or other research institutions.

Programs shall be supported in three different ways:
- Cancer Poles shall be the subject of a certification/approval procedure, as shall “INCa-associated” research units, with some funding (supplemental to funding provided by research and hospital institutions)
- A research strategy shall be defined and publicized, and embodied in a series of goal-oriented programs of action
- Theme-specific calls for tender shall be published, and incentive funding mechanisms set up
- The National Cancer Institute shall directly be in operating charge of a number of research activities. This shall involve the appointment of a number of high level project managers, chosen directly among the ranks of staff currently working in laboratories, or coming from the private sector.

The new National Cancer Institute, together with the Cancer Poles, shall significantly contribute to changing the basic structures of research in France, through the identification and funding of goal-oriented programs, and through the operational coordination of these programs by research project managers.

The National Cancer Institute shall also develop, within this same framework, a number of strong and transparent partnerships with the pharmaceutical industry, encouraging it to invest in the fight against cancer, especially in France.

As regards research and health care delivery, the National Cancer Institute shall carry out a number of complementary tasks, such as:

**Partnerships and industrial development**
- setting up and monitoring partnerships with associations, cooperating groupings, industry
- providing legal and financial support to start-up companies
- supporting industrial development and providing assistance with patent applications

**European and other international relations**
- the Institute shall intervene with European authorities
- the Institute shall coordinate European and international programs

The National Cancer Institute shall develop strong international visibility and shall be empowered to fund and name lecturing chairs or research posts, which will subsequently be made available to the main Cancer Poles.

**Ongoing programs**:
- care delivery for the elderly:
  - clinical research programs targeting the elderly
  - adapting health care standards to elderly cancer patients
- rare cancers and pediatric cancers:
  - fostering pediatric pharmacological research
  - developing standards for pediatric care delivery

The National Cancer Institute shall have a flexible organization, so as to be responsive, efficient, and autonomous when it comes to recruiting or appointing. It shall be placed under the joint authority of the Ministries of Public Health and of Scientific Research, but shall also work with user and health care providers’ representatives, as well as with its founding members. It must be empowered to seek private sector funding, in the framework of patronage or tax-deductible sponsorship arrangements, or under external partnerships, and the industrial development of its activities.

Institutions involved in the funding of research projects, such as ARC or La Ligue shall necessarily work in close cooperation with the National Cancer Institute, as well as with large cooperating groupings such as FNCLCC and FNCHU. Similarly, patients shall be associated with the National Institute through their representatives.

Over 85% of the National Cancer Institute’s budget shall be devoted to promoting action. A minimal fraction shall be devoted to managing the Institute, conducting and evaluating externalized projects, and to the funding of the Institute’s in-house expertise.
# Cancer in figures

## 1) New Cases of Cancer in France, 2000

<table>
<thead>
<tr>
<th>Disease site</th>
<th>Men</th>
<th>Women</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Breast</td>
<td>-</td>
<td>41 845</td>
<td>41 845</td>
</tr>
<tr>
<td>Prostate</td>
<td>40 209</td>
<td>-</td>
<td>40 209</td>
</tr>
<tr>
<td>Colorectal</td>
<td>19 431</td>
<td>16 826</td>
<td>36 257</td>
</tr>
<tr>
<td>Lung</td>
<td>23 152</td>
<td>4 591</td>
<td>27 743</td>
</tr>
<tr>
<td>Lip-mouth-throat</td>
<td>12 990</td>
<td>2 395</td>
<td>15 385</td>
</tr>
<tr>
<td>Bladder</td>
<td>8 986</td>
<td>1 785</td>
<td>10 771</td>
</tr>
<tr>
<td>Non-Hodgkin lymphoma</td>
<td>5 527</td>
<td>4 381</td>
<td>9 908</td>
</tr>
<tr>
<td>Kidney</td>
<td>5 306</td>
<td>2 987</td>
<td>8 293</td>
</tr>
<tr>
<td>Melanoma</td>
<td>3 066</td>
<td>4 165</td>
<td>7 231</td>
</tr>
<tr>
<td>Stomach</td>
<td>4 520</td>
<td>2 606</td>
<td>7 126</td>
</tr>
<tr>
<td>Leukemia</td>
<td>3 609</td>
<td>2 634</td>
<td>6 243</td>
</tr>
<tr>
<td>Liver</td>
<td>5 014</td>
<td>962</td>
<td>5 976</td>
</tr>
<tr>
<td>Central Nervous System</td>
<td>2 697</td>
<td>2 602</td>
<td>5 299</td>
</tr>
<tr>
<td>Uterine</td>
<td>-</td>
<td>5 064</td>
<td>5 064</td>
</tr>
<tr>
<td>Oesophagal</td>
<td>4 040</td>
<td>928</td>
<td>4 968</td>
</tr>
<tr>
<td>Pancreatic</td>
<td>2 701</td>
<td>2 186</td>
<td>4 887</td>
</tr>
<tr>
<td>Ovarian</td>
<td>-</td>
<td>4488</td>
<td>4488</td>
</tr>
<tr>
<td>Larynx</td>
<td>3 865</td>
<td>361</td>
<td>4 226</td>
</tr>
<tr>
<td>Thyroid</td>
<td>821</td>
<td>2 890</td>
<td>3 711</td>
</tr>
<tr>
<td>Myeloma</td>
<td>1 942</td>
<td>1 645</td>
<td>3 587</td>
</tr>
<tr>
<td>Cervical</td>
<td>-</td>
<td>3 387</td>
<td>3 387</td>
</tr>
<tr>
<td>Hodgkin’s Disease</td>
<td>736</td>
<td>631</td>
<td>1 367</td>
</tr>
<tr>
<td>Mesothelioma</td>
<td>671</td>
<td>200</td>
<td>871</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>161 025</td>
<td>117 228</td>
<td>278 253</td>
</tr>
</tbody>
</table>

## 2) Cancer Mortality (main cancer types), 2000

<table>
<thead>
<tr>
<th>Disease site</th>
<th>Number of deaths</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Men</td>
<td>Women</td>
</tr>
<tr>
<td>Lung</td>
<td>22 649</td>
<td>4 515</td>
</tr>
<tr>
<td>Colorectal</td>
<td>8 505</td>
<td>7 468</td>
</tr>
<tr>
<td>Breast</td>
<td>-</td>
<td>11 637</td>
</tr>
<tr>
<td>Prostate</td>
<td>10 004</td>
<td>-</td>
</tr>
<tr>
<td>Liver</td>
<td>6 287</td>
<td>1 569</td>
</tr>
<tr>
<td>Pancreatic</td>
<td>3 728</td>
<td>3 453</td>
</tr>
<tr>
<td>Non-Hodgkin Lymphoma</td>
<td>2 664</td>
<td>2 579</td>
</tr>
<tr>
<td>Leukemia</td>
<td>2 547</td>
<td>2 548</td>
</tr>
<tr>
<td>Lip-mouth-throat</td>
<td>4 341</td>
<td>749</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>92 311</td>
<td>57 734</td>
</tr>
<tr>
<td><strong>Total deaths</strong></td>
<td><strong>150 045</strong></td>
<td></td>
</tr>
</tbody>
</table>
• Premature mortality due to cancer is some 20% higher in France as compared to the rest of Europe, which underscores the deficiencies of our prevention schemes.
  - 41,000 premature deaths (before the age of 65) are due to cancer, representing a loss of 460,000 potential years of life each year
  - 35% of all premature deaths of French men are due to cancer
  - 42% of all premature deaths of French women are due to cancer.

• The main risk factors linked to cancer are smoking, food hygiene and nutrition, and alcohol abuse.

3) Breakdown by age, 2000

<table>
<thead>
<tr>
<th>Incident cases, estimated</th>
<th>0–64 years of age</th>
<th>65 and above</th>
<th>Total</th>
<th>Age moyen</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Men</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>59 874</td>
<td>101 151</td>
<td>161 025</td>
<td>66,3</td>
</tr>
<tr>
<td><strong>Women</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>54 226</td>
<td>63 002</td>
<td>117 228</td>
<td>64,0</td>
</tr>
</tbody>
</table>

| Deaths, estimated         |                  |              |       |           |
|---------------------------|                  |              |       |           |
| **Men**                   |                  |              |       |           |
|                           | 28 494           | 63 817       | 92 311 | 69,4      |
| **Women**                 |                  |              |       |           |
|                           | 14 400           | 43 334       | 57 734 | 72,2      |

4) Changes 1997-2000 (increasing frequency of occurrence)

<table>
<thead>
<tr>
<th>Disease Site</th>
<th>Men % par an</th>
<th>Women % par an</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mesothelioma</td>
<td>+ 4,76%</td>
<td>+ 6,83%</td>
</tr>
<tr>
<td>Melanoma</td>
<td>+ 5,93%</td>
<td>+ 4,33%</td>
</tr>
<tr>
<td>Prostate</td>
<td>+ 5,33%</td>
<td>-</td>
</tr>
<tr>
<td>Liver</td>
<td>+ 4,84%</td>
<td>+ 3,38%</td>
</tr>
<tr>
<td>Thyroid</td>
<td>+ 2,89%</td>
<td>+ 4,80%</td>
</tr>
<tr>
<td>Lung</td>
<td>+ 0,58%</td>
<td>+ 4,36%</td>
</tr>
<tr>
<td>Non-Hodgkin Malignant Lymphoma</td>
<td>+ 3,82%</td>
<td>+ 3,46%</td>
</tr>
<tr>
<td>Kidney</td>
<td>+ 2,70%</td>
<td>+ 3,74%</td>
</tr>
<tr>
<td>Central Nervous System</td>
<td>+ 2,25%</td>
<td>+ 3,09%</td>
</tr>
<tr>
<td><strong>Average, all types</strong></td>
<td>+1,31%</td>
<td>+ 1,36%</td>
</tr>
</tbody>
</table>

• From 1978 to 2000, the incidence of cancer generally grew by 35%, for comparable populations.
• From 1978 to 2000, the risk of death by cancer dropped by 9%, for comparable populations.

5) Survival Estimates

• Relative survival estimates, after 5 years
  - For men: about 40% (European average: 35%)
  - For women: about 60% (European average: 50%)
  - For children: over 75% (European average: n/a)

• Relative survival after 5 years is higher in France than it is, on average, in Europe. This reflects the fact that France’s health care delivery system is performing relatively better than systems in other European countries.

N.B.: Figures presented above are from the following sources: FRANCIM, InVS, Report of the Commission d’Orientation Cancer.