The Cancer Control Program of the National Cancer Institute

The Editor interviews John C. Bailar III, M.D., Deputy Associate Director for Cancer Control, National Cancer Institute, Bethesda, Maryland.

Dr. Holleb: What is the purpose and scope of the National Cancer Control Program?

Dr. Bailar: The program represents a coordinated, national effort to assure that our extensive knowledge about cancer is used in the most effective way to reduce cancer incidence, morbidity and mortality. Our job begins when some aspect of cancer control, either a new or established finding, in prevention, screening, primary treatment or rehabilitation, is fully developed and ready for widespread use. We will be dealing not only with the medical aspects of cancer, but also with the associated social and economic problems of the patient, his family, the community and the nation.

Dr. Holleb: The Cancer Control Program is a significant development in the fight against cancer. How did it originate legislatively?

Dr. Bailar: Almost from its inception, the National Cancer Institute had a Cancer Control Program. However, the original program was phased out several years ago. With the enactment of the National Cancer Act of 1971, Congress re-established a National Cancer Control Program as part of the new National Cancer Institute.

Dr. Holleb: How is the current program different from the original one?

Dr. Bailar: We now have a clearer, more specific statutory base, separate budget authorization and we will employ only contracts, instead of grants, for project support. We have developed a number of spe-
specific guidelines, based partly on previous experience, to help operate the most effective, broad national program possible. For example, the Cancer Control Program will not support research, unless it is specifically related to the improved application of measures ready for widespread use. Such a study might be designed to answer the question, "Why is the Pap smear not more widely used and what can be done to promote its use?" Other guidelines include requirements that every CCP-supported program concerning cancer detection and diagnosis must provide for adequate treatment and follow-up and that every project dealing with primary treatment must have an integrated component of rehabilitation, unless there is strong justification for its absence. Also, each program is responsible for adequately evaluating its results, both quantitatively and qualitatively.

Dr. Holleb: What specific programs are you considering?

Dr. Bailar: The first priorities will be to survey where we stand now and to determine the most pressing unmet needs. The Cancer Control Program is searching for more effective means to expedite the diffusion of new and established knowledge, skills and technology—information vital to the practicing physician and dentist—in efforts to prevent cancer, relieve its effects and improve the quality of life for its victims. The program will be engaged in a number of demonstration projects for the medical and dental communities on cancer prevention, diagnosis, treatment and rehabilitation. CCP will also be involved in the training of health professionals for cancer-oriented skills—for instance, training radiologists to read mammograms—as well as considerable general public education and some specifically targeted programs for the cancer patient and his family.

Dr. Holleb: What do you mean by a demonstration project?

Dr. Bailar: There are two kinds of demonstration projects—Pilot and Applied. A Pilot Demonstration project involves general field testing of a new technique or treatment to see if it will work in practice. An Applied Demonstration project concerns some method of cancer control which has already been proved effective and is ready for widespread use. As we all know, a tremendous amount of research data has traditionally been filtered to practicing clinicians through medical schools, scientific meetings, and professional journals. A part of our program will be designed to improve or bypass these processes of communication by demonstrating findings directly to the medical and dental professions.

Dr. Holleb: Will these be short-term projects to demonstrate a specific technique?

Dr. Bailar: No. A demonstration project is a long-term, continuing program showing the way a model treatment program, a prototype program, can serve the patient and the medical community. We expect these
projects to last several years.

**Dr. Holleb:** I assume, then, that patients will be treated at these demonstration projects?

**Dr. Bailar:** Yes. The demonstration programs will be treatment facilities of high technical excellence which will handle a substantial number of patients with certain types of cancer. We are not so much interested in narrow demonstrations of a specific technique as with showing what can be accomplished by a broad, integrated long-range program of the highest quality.

**Dr. Holleb:** How will the practicing physician, not directly involved in the operation of the project, participate?

**Dr. Bailar:** There will be local efforts in each medical community to make sure that physicians are aware of the program. Each demonstration project must be based on the voluntary participation of a large number of physicians and other health professionals. It must make a substantial difference in how a great many patients are treated, or we can't support it. Once a physician is aware of the program, he may choose to refer some of his cancer patients to the facility or he may participate in short training courses, workshops, tumor clinics or tumor boards conducted by the program.

**Dr. Holleb:** Where will these demonstration programs be located?

**Dr. Bailar:** We will invite existing organizations, agencies, hospitals, medical schools, state and local health departments and many others to participate in the program. We will ask for proposals in a number of different types of activities which will be judged by several criteria, the most important being technical excellence. Is the proposed a good program? Will it accomplish its goals? Is there sufficient local support available?

**Dr. Holleb:** I take it these programs will be located in many different sections of the country?

**Dr. Bailar:** Yes, these projects will have a wide geographic distribution.

**Dr. Holleb:** What specific demonstration projects do you envision for the immediate future?

**Dr. Bailar:** We expect to begin with demonstration programs in the chemotherapy of acute lymphocytic leukemia, Hodgkin’s disease and other lymphomas at approximately 12-15 different facilities and a program on the early detection of breast cancer through clinical history, examination, mammography and thermography at about 20 facilities. The latter program is being developed and supported jointly by the National Cancer Institute and the American Cancer Society.
Dr. Holleb: *How will the results of the Cancer Control Programs be evaluated?*

Dr. Bailar: Each part of the Cancer Control Program, not only the demonstration projects, must include a statement of goals, often in precise quantitative terms, with a method of evaluating whether these goals have been reached. An example would be a clear demonstration that some change, instituted by the Cancer Control Program, has or has not had a beneficial effect on cancer incidence, mortality, or on some measurable aspect of disability caused by the cancer itself or by treatment. Another method of evaluation might be to train a specific number of ostomy therapists per million population. This wouldn't be a direct measure of whether the Cancer Control Program has changed the disability rate from cancer, but would be an indirect guide and could be evaluated.

Dr. Holleb: *Are you planning cooperative projects with other agencies and with the private sector?*

Dr. Bailar: Very definitely, and on a broad scale. It's required in our enabling legislation. Moreover, it's obviously necessary if we are going to carry our part of the National Cancer Program with maximum effectiveness. We will continue and expand our long working relationship with the American Cancer Society, a great resource of expertise in the international fight against cancer. We also will be working with the American Medical Association, the American Dental Association and most other major private organizations in the health field as well as with state and local governmental organizations. All of this is in addition, of course, to working with other federal agencies, including the Veterans Administration, the Regional Medical Program Service, the Food and Drug Administration and the Health Services and Mental Health Administration, plus all other units of the National Institutes of Health.

Dr. Holleb: *What are your resources and how are the various projects funded?*

Dr. Bailar: The President's Budget requests $4 million this year and $34 million next year, but no funds have yet been appropriated. The Cancer Control Program will be contract-supported and awards will usually be made under competitive procedures. We feel this is a better mechanism than grants since our activities are highly directed and specifically targeted. In the delivery of health care we will support only those costs generated directly by CCP activities. Our resources will not be used to replace present sources of support for ongoing projects or programs, and "pump-priming" activities will be supported only if there is a substantial element of cost-sharing from the beginning of the project and satisfactory assurance of continued support.

Dr. Holleb: *How are CCP policies developed?*

Dr. Bailar: The Cancer Control Program is organizationally located in the Of-
Dr. Holleb: How is the program coordinated with the NCI to avoid duplication and overlap?

Dr. Bailar: Since Cancer Control is part of the NCI, there are very frequent personal contacts with staff at all levels and with various committees. The four NCI Division Directors serve on the Cancer Control Advisory Committee.

Dr. Holleb: What is the organizational structure of CCP?

Dr. Bailar: The Cancer Control Program is divided into five organizational branches. There are branches for cancer cause and prevention, detection and diagnosis, treatment, rehabilitation, training and education. There will be five technical advisory committees, supporting the five branches.

Dr. Holleb: In summary, how do you foresee that this program, which is still in its infancy, will eventually affect the cancer patient of today and tomorrow?

Dr. Bailar: First, we hope that as a result of our program, there will be fewer cancer patients tomorrow. We have proposed a program to reduce the incidence of cancer and, when it cannot be prevented, to make sure that physicians and related health professionals know the value and most effective use of various methods of early detection, adequate diagnosis, effective treatment, and prompt and productive rehabilitation. We want also to insure that the health professionals and the public, cancer patients in particular, know where to get the scarce and specialized services that are sometimes required. It's our job to make sure that the very substantial advances in cancer research are brought quickly and effectively to the people who need them.

Dr. Holleb: Thank you, Dr. Bailar.