NATIONAL CANCER INSTITUTE

NCI Cancer Bulletin

A Trusted Source for Cancer Research News

July 18, 2006, Volume 3 / Number 29

Director's Update

Guest Update by Dr. Robert Croyle

CISNET Offers Powerful New Tools for Cancer Control

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Major decisions about population-level cancer control are sometimes difficult, as is evaluating the success of those choices. Six years after its creation, the Cancer Intervention and Surveillance Modeling Network (CISNET) is emerging as a powerful new tool to guide clinical and policy decisions on cancer control.

CISNET is a consortium of NCI-sponsored teams who use biostatistical modeling to improve our understanding of cancer control interventions in prevention, screening, and treatment. The teams use data from randomized controlled trials, meta-analyses, observational studies, national surveys, and studies of practice patterns to evaluate the past and potential future impact of these interventions. This is critical because population-level activities happen outside, and sometimes in advance of, controlled trials. CISNET helps science keep up with these activities by synthesizing information about the natural history of disease and the efficacy and utilization of interventions.

Currently CISNET has four groups of teams who focus on breast, prostate, colorectal, and lung cancers. Because of their high incidence and mortality, informed decisions regarding effective clinical and public health interventions for these cancers would have enormous impact.

The network uses comparative modeling, a methodology with strengths demonstrated in a major study from CISNET's breast cancer group published last fall. The goal of the study was to determine the relative contribution of adjuvant treatments and mammograms to the actual American experience with breast cancer.

CISNET's results added important new evidence. With seven different teams independently developing models (but agreeing on common parameters and variables to be controlled), a consensus emerged: Screening mammography and adjuvant chemotherapy each contributed about half of the 24 percent decrease in breast cancer mortality between 1990 and 2000. The results confirm that both interventions have been, and will continue to be, worth the investment.

Clearly, dissemination of results is an important part of the CISNET initiative. To that end, DCCPS Deputy Director Dr. Jon Kerner is overseeing testing for a new Web site that will give planners and

policymakers interested in colorectal cancer a powerful decision-making tool. The site will include different projections of risk factor levels, as well as projections of the use of screening methods and treatments. CISNET's simulation models can be used to project the impact of differing choices on long-term colorectal cancer mortality.

I'd also like to highlight the efforts of Dr. Eric J. Feuer, program director for CISNET, and the scientific coordinators for each cancer site for helping to make CISNET a success: Dr. Kathleen Cronin (breast cancer), Dr. Angela Mariotto (prostate cancer), Drs. Kevin Dodd and Barnali Das (lung cancer), and Drs. Martin Brown and Paul Pinsky (colorectal cancer).

As technology progresses and new interventions arise, I'm confident CISNET will help ensure that the best strategies to prevent, diagnose, and treat cancer are utilized.