

Applied Research Program Summary of Tools and Research Resources

Overview

The Applied Research Program (ARP) is one of five programs in the National Cancer Institute's (NCI) Division of Cancer Control and Population Sciences (DCCPS). ARP's mission is to understand how and why cancer care and control activities in the U.S. influence patterns of care and trends in cancer incidence, morbidity, mortality and survival. Pursuit of this mission is possible through ARP's support of methodologic research to improve survey data collection and clinical databases, development of assessment tools for use in clinical trials and observational studies, as well as analysis of existing cancer control data. These data are used to evaluate patterns and trends in cancer-associated health behaviors and risk factors, health care services, economics, and outcomes, including patient-reported outcomes.

ARP supports three primary activities to generate research resources for investigators: (1) research networks; (2) studies, surveys and publicly available data resources; and (3) research tools, including instrumentation and SEER-Medicare data linkages. Research networks, such as the Breast Cancer Surveillance Consortium (BCSC), Cancer Care Outcomes Research and Surveillance Consortium (CanCORS), Cancer Research Network (CRN), and International Cancer Screening Network (ICSN) have established new approaches to data collection, sharing, and analysis. These approaches allow investigators to deepen their understanding of barriers to cancer prevention, early detection, treatment, and health care services in community settings and how these barriers affect quality of life and other cancer outcomes.

Surveys and studies supported and managed by ARP, such as the National Health Interview Survey (NHIS) Cancer Control Supplement, California Health Interview Survey (CHIS) cancer control items, National Health and Nutrition Examination Study (NHANES), and Tobacco Use Supplement to the Current Population Survey (TUS-CPS), provide critical insights into cancer risk behaviors, access to and receipt of care and services, and other cancer-related outcomes. Research tools developed by ARP staff, including dietary assessment instruments, guidance for questionnaire development and testing, and the SEER-Medicare and SEER-Medicare Health Outcomes Survey (MHOS) data linkages, have facilitated progress in cancer-related epidemiologic, surveillance, health services, and outcomes research.

ARP Research Resources Uses

- Assist in formulating public policies.
- Determine treatment dissemination into community practice, possible determinants of dissemination, and resulting variations in therapy.
- Develop and improve methods for assessing cancer risk factors, measuring cancer outcomes (including patient-centered outcomes), and explaining cancer-related impacts of economic and health services factors.
- Evaluate the impact of quality of life, patient experiences of care, and outcomes of variation in screening, treatment, and care.
- Foster innovative, multidisciplinary research that contributes to reducing the cancer burden in the U.S.

- Identify and examine health disparities in cancer prevention, screening, and treatment.
- Identify and explain factors influencing health system access and use.
- Improve understanding of cancer risk behaviors among population groups.

ARP Staff Expertise

- Cancer Screening and Treatment
- Cost-effective Analysis
- Diet, Physical Activity, Weight
- Tobacco Use and Sun Exposure
- Energy Balance and Cancer
- Genetics and Family History
- Health Disparities
- Health Services Research
- Health Policy
- Outcomes Measurement
- Quality/Patterns of Care
- Patient-centered Care/Communication

Working with ARP

ARP funding opportunities focus on:

- Building capacity for cancer control surveillance research
- Investigating health behaviors and health services
- Determining the impact of health behaviors and services on cancer burden
- Developing new methods for measuring health behaviors, risk, and care delivery outcomes

ARP funding mechanisms for cancer research:

- Grants, contracts, and Interagency Agreements
- Educational training grants
- Small business innovation research (SBIR) grants
- NIH/NCI Fellows Programs for students
- Cooperative agreements
- NIH Guest Researcher/Special Volunteer Programs

Research Resources Examples

Research Networks

- **Breast Cancer Surveillance Consortium (BCSC)** <http://breastscreening.cancer.gov>
- **Cancer Care Outcomes Research and Surveillance Consortium (CanCORS)** <http://outcomes.cancer.gov/cancors>
- **Cancer Research Network (CRN)** <http://crn.cancer.gov>
- **International Cancer Screening Network (ICSN)** <http://appliedresearch.cancer.gov/icsn>

Publicly Available Data Resources

- **California Health Interview Survey (CHIS) Cancer Control Supplement** <http://appliedresearch.cancer.gov/surveys/chis>
- **National Health and Nutrition Examination Survey (NHANES)** <http://riskfactor.cancer.gov/studies/nhanes>
- **National Health Interview Survey (NHIS) Cancer Control Supplement** <http://appliedresearch.cancer.gov/surveys/nhis>
- **Tobacco Use Supplement to the Current Population Survey (TUS-CPS)** <http://riskfactor.cancer.gov/studies/tus-cps/>

Tools for Researchers

- **Short Dietary Assessment Instruments** <http://riskfactor.cancer.gov/diet/screeners>
- **Healthy Eating Index (HEI)-2005** <http://riskfactor.cancer.gov/tools/hei/>
- **Questionnaire Design and Testing Tools** <http://appliedresearch.cancer.gov/areas/cognitive/guides>
- **SEER-Medicare Data Linkage** <http://healthservices.cancer.gov/seermedicare/>
- **SEER-Medicare Health Outcomes Survey (SEER-MHOS) Linked Database** <http://outcomes.cancer.gov/surveys/seer-mhos/>
- **Patient-Reported Outcomes Measurement Information System (PROMIS)** <http://www.nihpromis.org>
- **Health Disparities Calculator (HD*Calc)** <http://seer.cancer.gov/hdcalc/>

To learn more about ARP, visit our website: <http://appliedresearch.cancer.gov>