

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 assess patterns and trends in cancer-associated health behaviors, practices, genetic susceptibility, health services, and outcomes, including patient-reported outcomes. ARP monitors and evaluates these factors to determine their influence on patterns and trends in cancer incidence, morbidity, mortality, survival, costs, and health-related quality of life. Identifying, measuring, and monitoring patterns in cancer risk factors, health services utilization, and outcomes across various racial, ethnic, and socioeconomic and other population subgroups is an integral component of ARP's work.

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), the Cancer Care Outcomes Research and Surveillance Consortium (CanCORS), the Cancer Research Network (CRN), and the 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 healthcare services in community settings and how these affect quality of life and other cancer outcomes.

Surveys and studies supported and managed by ARP, such as the California and the National Health Interview Surveys (CHIS & NHIS), the National Health and Nutrition Examination Study (NHANES), and the Tobacco Use Supplement to the Current Population Survey (TUS-CPS), provide critical insight 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, and 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 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
- Sun Exposure
- Energy Balance and Cancer
- Genetics and Family History
- Health Disparities
- Health Services Research
- Health Policy
- Outcomes Measurement
- Quality/Patterns of Care
- Risk Modeling
- Pharmacoepidemiology and Pharmacogenomics
- 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 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 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://healthservices.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)** <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 Topical Module (CCTM)** <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

- **Diet History Questionnaire (DHQ)** <http://riskfactor.cancer.gov/DHQ>
- **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/>
- **Pharmacoepidemiology and Pharmacogenomics Resources** <http://riskfactor.cancer.gov/tools/pharmaco/>
- **Patient-Reported Outcomes Measurement Information System (PROMIS)** <http://www.nihpromis.org>

To learn more about ARP and these and many other research resources, visit our website: <http://appliedresearch.cancer.gov>

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