

Applied Research Program

Overview

The Applied Research Program (ARP) is one of five programs in the National Cancer Institute's (NCI's) 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 collaborates with grantees and many public and private partners. ARP's research initiatives, tools, and resources contribute in important ways to the translation of research knowledge into effective policies across the cancer control continuum.

Office of the Associate Director

Sets ARP priorities, determines ARP resource use and staff responsibilities, and carries out initiatives that support the mission of ARP within DCCPS.

Risk Factor Monitoring and Methods Branch

Focuses on monitoring of cancer-related health behaviors and risks in populations, as well as improved measurement of those factors.

Health Services and Economics Branch

Focuses on the study of cancer-related health services.

Outcomes Research Branch

Focuses on cancer outcomes measurement, analysis, and improvement.

Areas of Research Supported by ARP

- Monitoring cancer-relevant risks and health behaviors
- Improving methods for assessing cancer-relevant exposures
- Advancing methods and systems for measuring and monitoring quality of cancer care
- Evaluating and improving methods for measuring cancer outcomes
- Estimating costs and benefits of cancer interventions at the population level
- Describing and understanding cancer-related health disparities
- Improving dissemination of efficacious cancer control interventions

ARP participates in the **National Collaborative on Childhood Obesity Research (NCCOR)**, a partnership of the Centers for Disease Control and Prevention, National Institutes of Health, U.S. Department of Agriculture, and Robert Wood Johnson Foundation. NCCOR seeks to improve the efficiency, effectiveness and application of childhood obesity research and to halt and reverse childhood obesity through enhanced coordination and collaboration. NCCOR accelerates progress to reduce childhood obesity in the U.S. by maximizing outcomes from research, building the capacity for research and surveillance, creating and supporting the mechanisms and infrastructure needed for research translation and dissemination, and supporting evaluations. For more information, see

<http://www.nccor.org>

Research Tools and Surveys

Below are examples of tools and surveys developed or supported by ARP. For more details on these and other ARP tools and surveys, please visit our Web site at <http://appliedresearch.cancer.gov>.

Risk Factor Monitoring and Methods Branch	Health Services and Economics Branch	Outcomes Research Branch
<p>Dietary Assessment Instruments: ARP has developed tools for assessing dietary intakes in surveys and studies. These include those designed to capture total diet as well as short screeners.</p> <p>Automated Self-administered 24-hour Dietary Recall (ASA24™): ASA24 is a freely available, web-based software tool that enables automated and self-administered 24-hour dietary recalls. It can be used by researchers for epidemiologic, intervention, behavioral, or clinical research. Clinicians may use ASA24 for diet assessment and nutrition counseling, and it is also a useful teaching tool. ASA24 consists of a Respondent Web site and a Researcher Web site.</p> <p>Tobacco Use Supplement to the Current Population Survey (TUS-CPS): This survey contains information on a nationally representative sample of about 240,000 individuals. The data have been used to monitor trends in tobacco use, conduct tobacco-related research, and evaluate tobacco control programs.</p> <p>Physical Activity Assessment Tools: ARP funded the collection of accelerometer data in the 2003-2006 National Health and Nutrition Examination Survey (NHANES)—the first-ever objective measurement of physical activity. ARP provides software programs to analyze the accelerometer data. ARP is supporting accelerometry in the 2011-2014 NHANES.</p> <p>Measures of the Food Environment Web Site: This site (https://riskfactor.cancer.gov/mfe/) provides a compilation of articles that include community-level measures and some of the instruments themselves. The food environment is defined as food stores, restaurants, schools, and worksites.</p>	<p>SEER-Medicare Linked Database: This database links the clinical data collected by Surveillance, Epidemiology, and End Results (SEER) registries with claims for health services collected by Medicare. These combined datasets can be used to assess patterns of care for persons with cancer, uses of tests and procedures, and costs of treatment.</p> <p>Physician Surveys: ARP tracks the use of screening modalities, therapies, new technologies, and other factors that may influence the national cancer burden. Staff assess physician practice to see whether research findings are having the desired impact on physician knowledge and practice. Also an Outcomes Research Branch initiative.</p> <p>National Health Interview Survey (NHIS) Cancer Control Supplement: ARP provides questions on cancer risk factors and screening and analyzes the data collected. Also a Risk Factor Monitoring and Methods Branch initiative.</p> <p>California Health Interview Survey (CHIS): CHIS provides information on the general California population as well as local-level information on most counties. It has been culturally adapted for and translated into Spanish and several Asian languages. CHIS includes cancer control questions focused on cancer-related risk factors, screening behaviors, and diagnosis. Also a Risk Factor Monitoring and Methods Branch initiative.</p> <p>Medical Expenditure Panel Survey (MEPS) — Experiences with Cancer Survivorship Supplement: First fielded in 2011 by AHRQ, this questionnaire will yield important data about the burden of cancer, its treatment and impact on access to health care, the ability to work and participate in usual activities, health insurance, and quality of care.</p>	<p>Patient-Reported Outcomes Measurement Information System (PROMIS): This publicly available web-based resource (http://www.nihpromis.org) can be used to measure key health symptoms and health-related quality of life (HRQOL) domains. These domains are relevant to a variety of chronic diseases, including cancer. Branch staff have contributed to the development of the item banks and cancer-specific HRQOL domains.</p> <p>SEER-Medicare Health Outcomes Survey (MHOS) Linked Database: Sponsored by NCI and CMS, this resource is designed to improve understanding of the HRQOL of cancer patients and survivors enrolled in Medicare health plans.</p> <p>Adolescent and Young Adult Health Outcomes & Patient Experience (AYA HOPE) Study: Unlike other cancer populations, adolescents and young adults have seen little or no improvement in cancer survival rates for decades. To help provide needed data in this population, this study includes a survey component with questions assessing the impact of cancer, HRQOL, healthcare delivery practice patterns, decision-making, symptoms, and other domains.</p> <p>Multidisciplinary Treatment Planning (MTP) Questionnaire: This questionnaire will provide insight into the ways in which MTP is structured and implemented for different types of cancer within care delivery organizations. It is initially being used by the Commission on Cancer (CoC) to understand MTP within CoC-accredited hospitals. The questionnaire is also available for use by other organizations and individual researchers.</p>

Working with Us

ARP welcomes the opportunity to explore our areas of research with a broad range of investigators. Mechanisms used by scientists and students to work with us include NIH Training Programs such as the Cancer Research Training Award and the Division of Cancer Prevention Fellowship Program. ARP also works with NIH Guest Researchers and Special Volunteers who donate their time and gain research experience. ARP funding mechanisms for cancer research include the full range of NIH mechanisms, including grants, contracts, training grants, small business innovation research grants, and cooperative agreements.