



HEALTH

THE ARTS
CHILD POLICY
CIVIL JUSTICE
EDUCATION
ENERGY AND ENVIRONMENT
HEALTH AND HEALTH CARE
INTERNATIONAL AFFAIRS
NATIONAL SECURITY
POPULATION AND AGING
PUBLIC SAFETY
SCIENCE AND TECHNOLOGY
SUBSTANCE ABUSE
TERRORISM AND
HOMELAND SECURITY
TRANSPORTATION AND
INFRASTRUCTURE
WORKFORCE AND WORKPLACE

This PDF document was made available from www.rand.org as a public service of the RAND Corporation.

[Jump down to document](#) ▼

The RAND Corporation is a nonprofit institution that helps improve policy and decisionmaking through research and analysis.

Support RAND

[Purchase this document](#)

[Browse Books & Publications](#)

[Make a charitable contribution](#)

For More Information

Visit RAND at www.rand.org

Explore [RAND Health](#)

View [document details](#)

Limited Electronic Distribution Rights

This document and trademark(s) contained herein are protected by law as indicated in a notice appearing later in this work. This electronic representation of RAND intellectual property is provided for non-commercial use only. Unauthorized posting of RAND PDFs to a non-RAND Web site is prohibited. RAND PDFs are protected under copyright law. Permission is required from RAND to reproduce, or reuse in another form, any of our research documents for commercial use. For information on reprint and linking permissions, please see [RAND Permissions](#).

This product is part of the RAND Corporation technical report series. Reports may include research findings on a specific topic that is limited in scope; present discussions of the methodology employed in research; provide literature reviews, survey instruments, modeling exercises, guidelines for practitioners and research professionals, and supporting documentation; or deliver preliminary findings. All RAND reports undergo rigorous peer review to ensure that they meet high standards for research quality and objectivity.

TECHNICAL
R E P O R T

Evaluation of the
Arkansas Tobacco
Settlement Program

Progress During 2008 and 2009

Dana Schultz, Shannah Tharp-Taylor,
Tamara Dubowitz, Hao Yu, Susan L. Lovejoy,
Andrea Phillips, John Engberg

Sponsored by the Arkansas Tobacco Settlement Commission

The research described in this report was sponsored by the Arkansas Tobacco Settlement Commission. The research was conducted in RAND Health, a division of the RAND Corporation.

Library of Congress Cataloging-in-Publication Data is available for this publication.

ISBN 978-0-8330-5008-3

The RAND Corporation is a nonprofit research organization providing objective analysis and effective solutions that address the challenges facing the public and private sectors around the world. RAND's publications do not necessarily reflect the opinions of its research clients and sponsors.

RAND® is a registered trademark.

© Copyright 2010 RAND Corporation

Permission is given to duplicate this document for personal use only, as long as it is unaltered and complete. Copies may not be duplicated for commercial purposes. Unauthorized posting of RAND documents to a non-RAND website is prohibited. RAND documents are protected under copyright law. For information on reprint and linking permissions, please visit the RAND permissions page (<http://www.rand.org/publications/permissions.html>).

Published 2010 by the RAND Corporation
1776 Main Street, P.O. Box 2138, Santa Monica, CA 90407-2138
1200 South Hayes Street, Arlington, VA 22202-5050
4570 Fifth Avenue, Suite 600, Pittsburgh, PA 15213-2665
RAND URL: <http://www.rand.org>
To order RAND documents or to obtain additional information, contact
Distribution Services: Telephone: (310) 451-7002;
Fax: (310) 451-6915; Email: order@rand.org

SUMMARY

The Master Settlement Agreement (MSA), the historic agreement that ended years of legal battles between the states and the major tobacco companies, was signed on November 23, 1998. Under the terms of the MSA, Arkansas has a 0.828 percent share of the payments made to participating states over the next 25 years. Arkansas is unique in the commitment made by both elected officials and the general public to invest its share of the tobacco settlement funds in health-related programs. The Arkansas Tobacco Settlement Proceeds Act of 2000 (referred to hereafter as the Initiated Act), a referendum passed by the voters in the November 2000 election, specifies that the Arkansas tobacco funds are to support seven health-related programs:

- **College of Public Health (COPH).** COPH provides professional education, research, and services to the public health community of Arkansas. It is a unit of the University of Arkansas for Medical Sciences (UAMS).
- **Arkansas Bioscience Institute (ABI).** ABI works to develop new tobacco-related medical and agricultural research initiatives, improve the health of Arkansans, improve access to new technologies, and stabilize the economic security of Arkansas. The Initiated Act provides for ABI to be funded through separate appropriations to the participating institutions. The program's management reports to the ABI board, which also was established by the Initiated Act.
- **Delta Area Health Education Center (Delta AHEC).** Delta AHEC is an additional unit in the statewide Arkansas AHEC system to provide clinical education throughout the state. It was put into the Initiated Act to provide such services for the underserved and disproportionately poor Delta region of the state.
- **Arkansas Aging Initiative (AAI).** AAI provides community-based health education for senior Arkansas residents through outreach to the elderly and educational services for professionals. It is housed in the Reynolds Center on Aging, a unit of UAMS.
- **Minority Health Initiative (MHI).** MHI aims to identify the special health needs of Arkansas' minority communities and to put into place health care services to address these needs. MHI is managed by the Arkansas Minority Health Commission (AMHC).
- **Medicaid Expansion Programs (MEP).** The MEP seeks to expand access to health care through targeted expanded benefits packages that supplement the standard Arkansas Medicaid benefits. The programs are managed by the Arkansas Department of Human Services.
- **Tobacco Prevention and Cessation Program (TPCP).** Managed by the Department of Health, TPCP aims to reduce the initiation of tobacco use and resulting negative health and economic impacts. TPCP uses the Centers for Disease Control (CDC) recommendations for tobacco cessation and prevention activities in developing its programs.

The Initiated Act was explicitly aimed at the general health of Arkansans, not just at the consequences of tobacco use. Only one of these programs, TPCP, is completely dedicated to smoking prevention and cessation; it does, however, receive about 30 percent of Arkansas' MSA funds. Some programs primarily serve short-term health-related needs of disadvantaged

Arkansas residents (Delta AHEC, AAI, MHI, MEP); others represent long-term investments in the public health and health research knowledge infrastructure (ABI, COPH).

The Initiated Act also created the Arkansas Tobacco Settlement Commission (ATSC) and gave it the responsibility for monitoring and evaluating the performance of the funded programs. As part of its evaluation function, the ATSC contracted with the RAND Corporation to serve as the external evaluator. RAND was charged with performing a comprehensive evaluation of the progress of the programs in fulfilling their missions, as well as the programs' effects on smoking and other health-related outcomes.

This report is the fourth official biennial report from the RAND evaluation. The report updates the information and assessments provided in our first three biennial reports submitted to the ATSC in 2004, 2006, and 2008. The present evaluation is designed to address the following research questions:

- Have the funded programs achieved the goals that were set for them for the past two years?
- How did the programs respond to the recommendations made in earlier evaluations?
- How do actual costs for new activities compare with the budget, and what are the sources of any variances?
- What effects do the funded programs have on improving the health of Arkansans in terms of smoking behavior, health outcomes related to tobacco use, and other health outcomes addressed by the programs?

The answers to these questions form the basis of recommendations for how the programs, the ATSC, and other Arkansas agencies might better fulfill the aims of the Initiated Act.

SUMMARY OF PROGRAM PERFORMANCE THROUGH 2009

The Initiated Act states basic goals to be achieved by the funded programs through the use of the tobacco settlement funds. It also defines indicators of performance for each of the funded programs—for program initiation and short- and long-term actions. In our prior reports, we reported our conclusion that TPCP, COPH, Delta AHEC, AAI, and ABI had achieved their initiation goals and short-term goals and were now working toward long-term goals.

During 2008–2009, each program systematically reviewed its programmatic goals and the process, cost, and outcome indicators used to assess progress to ensure that the goals and indicators were aligned with changes and additions to the program's activity areas that had occurred over the last several years. While some goals have remained the same, there are also new goals that reflect the maturation of the programs over time. For these new goals, this evaluation report provides baseline data that will be used to assess progress moving forward.

Overall, the seven programs have continued to refine and grow their program activities during the past two years. In doing so, the programs have made a number of changes in their activities in response to the program-specific recommendations we presented in our 2008 biennial evaluation report. Others—including MHI and MEPS—have either completely redefined program goals or are in the process of doing so. In Chapters 3 through 9 of this report, we provide an update on each program's activities and describe progress toward achieving

programmatic goals. We also present an analysis of spending trends for each program and provide recommendations for each program as it moves forward.

As shown in Table S.1, the programs achieved a substantial majority of their performance goals or demonstrated progress toward meeting them.

**Table S.1
Program Status on the Programmatic Goals**

Program	Status of Goal			
	Accomplished	In Process	New; Unable to Assess	Not Met
College of Public Health	4		2	
Arkansas Biosciences Institute	2			
Delta Area Health Education Center	2	1		
Arkansas Aging Initiative	4	1	1	
Minority Health Initiative			5	1
Medicaid Expansion Programs	3		1	1
Tobacco Prevention and Cessation Program	1	4	1	

Below, we briefly summarize each program’s status and progress toward program goals during 2008 and 2009 and list specific recommendations for each program.

College of Public Health

Over the past two years, COPH has continued to develop its education programs, research activities, and service efforts. Enrollment and the number of counties represented by COPH students have both remained stable over the last several years. In the current academic year (2009–2010), COPH had 218 students representing 38 counties enrolled in its education programs. Minority enrollment in its degree programs has also remained consistent over time. The vast majority of graduates pursue employment in a public-health-related field. COPH’s research activities involve obtaining federal and philanthropic funding and conducting research. In terms of its research activities, COPH faculty submitted 97 grants and were awarded 49 totaling nearly \$13 million during 2008 and 2009. The total number of ongoing research projects has remained at about 40 during each six-month period. During 2009, COPH faculty produced 86 publications in peer-reviewed journals, representing almost two publications per full-time equivalent (FTE). The quality of the publications increased substantially, with significantly more publication in the top ten journals during 2008 than in prior years. COPH has also maintained its efforts to serve as a policy and advisory resource to legislative committees and individual legislators. Throughout 2008–2009, COPH faculty were involved in giving talks, lectures, and legislative briefings. COPH efforts to increase funding from sources other than the tobacco settlement funds have continued. Since 2005, COPH has expanded its revenue stream, so that tobacco settlement funding makes up a diminishing share of total revenues. In 2005, tobacco

settlement funds accounted for 38 percent of COPH funding; in 2009, this percentage fell to 22 percent. The remaining funding for COPH came from research grants and contracts (64 percent) and tuition (13 percent). Stakeholders with an interest in COPH rated the quality of its activities and its effectiveness in reaching its goals as quite high, and most indicated that COPH should expand and conduct more activities.

**Table S.2
COPH Program Goal Status**

Goal	Status
Maintain the number of Arkansas counties in which citizens receive public health training.	ACCOMPLISHED
Maintain a high level of graduates entering the public health field.	ACCOMPLISHED
Maintain minority enrollment in the degree programs at or above the minority population of the State (20 percent, as specified in the latest census data).	ACCOMPLISHED
Ensure that by graduation, COPH students report that they have achieved 80 percent or more of the learning objectives associated with their selected degree programs.	UNABLE TO ASSESS (new goal established partway through 2009)
During their tenure at COPH, students provide service and consultation to public-health-related agencies and community organizations throughout Arkansas.	UNABLE TO ASSESS (new goal established partway through 2009)
Increase new extramural grant and contract funding for research by 20 percent above that achieved during 2004–2005.	ACCOMPLISHED

Below we present three recommendations from our evaluation of COPH’s activities during 2008 and 2009. The recommendations focus on strengthening its degree programs and enrollment to help ensure the institution’s future.

- Maintain the growth trajectory of minority student enrollment, student enrollment from across the state, and faculty research.
- Continue to build COPH’s major programs, especially Epidemiology and Biostatistics.
- Develop a student tracking system that provides more current and accurate information on student enrollment.

Arkansas Biosciences Institute

ABI’s efforts focus on research and collaboration among its member institutions. For the most part, the number of research projects in the five target research areas decreased or stayed the same during 2008–2009. However, ABI saw substantial increases in total research funding to a total of \$64.5 million in fiscal year (FY)2009. The ratio of extramural funding to ABI has

increased substantially in the past two years and now stands at 7:1. ABI has also increased the number of collaborative research projects led by the member institutions to 64 such projects in FY2009. ABI's other activity area encompasses its efforts to disseminate research results. Since FY2007, ABI increased the number of publications, lectures, and seminars; in-person media contacts and press releases were similar to prior levels. Looking at the program's policy context, ABI's stakeholders were quite involved in its research and collaboration efforts and perceived its research to be of high quality. While most stakeholders believed that ABI had been effective in reaching its goals, there was also consensus that ABI should expand its efforts. Our assessment of the impact of ABI's funded research found that the total number of publications and the number of articles in top journals decreased for the 2007–2008 academic year.

Table S.3
ABI Program Goal Status

Goal	Status
Increase funding on an annual basis to conduct research.	ACCOMPLISHED
Increase dissemination of research findings, policy-relevant information, and technical assistance to relevant government and community organizations.	ACCOMPLISHED

Below are three recommendations for ABI that come out of our most recent evaluation process. These recommendations emphasize continued growth in ABI's research and collaborative efforts to address sustainability issues across the member institutions.

- Strengthen efforts to foster collaborations among ABI institutions.
- Continue to obtain grant funding at a level that can support the infrastructure that has been established at the different institutions.
- Focus on sustainability at each ABI institution by increasing external funding.

Delta Area Health Education Center

Through its more than three dozen programs and services, Delta AHEC has strengthened its ability to recruit and train health students and professionals and provide education and health-related services to communities and clients throughout the Delta region. For FY2009, Delta AHEC spent about 15 percent of its total budget on recruiting and training health students and professionals. During 2008–2009, Delta AHEC reached approximately 1,800 students with its program to expose young people to careers in health professions. Eighteen medical school students participated in preceptorships, senior selectives, or internships in the Delta region. Delta AHEC's continuing education programs for medical professionals served over 1,400 participants during 2008–2009, and its medical library provided services to over 2,300 health professionals and students. With the vast majority of its budget targeted to community services, Delta AHEC greatly increased the number of community members reached through its health and education services. Overall, there were nearly 68,000 program encounters during 2008 and more than 100,000 during 2009. Delta AHEC met its goals to increase participation in both its health recruitment and training efforts and education and health-related services. Delta AHEC's

stakeholders rated the quality of its programs and services as quite high but were divided about whether it should maintain its current activity level or expand. In looking at smoking-related outcomes for the Delta region, we found that smoking rates for adults and pregnant women do not differ from the baseline trend.

**Table S.4
Delta AHEC Program Goal Status**

Goal	Status
Increase participation in activities related to recruiting and training health students and professionals.	ACCOMPLISHED
Increase participation in services to communities and clients across the Delta region.	ACCOMPLISHED
Partner with tobacco programs to help each other meet program goals.	IN PROCESS

Below are four recommendations based on our evaluation of Delta AHEC’s activities during 2008 and 2009. These recommendations relate to improving the efficiency and effectiveness of the services being offered to community member and professionals.

- Determine capacity for each program and program area.
- Increase utilization of programs with excess capacity to reach the most consumers and professionals and achieve optimal unit cost for program offerings.
- Monitor participants’ improvement with evaluations that include participant and comparison groups by using the existing system to monitor and support evidence based member behaviors.
- Monitor professionals’ educational needs and tailor services to meet those needs.

Arkansas Aging Initiative

AAI’s activities during the past two years have resulted in increased access to quality, evidence-based education, and clinical services for older Arkansans. The Senior Health centers provided clinical services during more than 42,000 visits each year in 2008–2009. AAI also increased its educational activities, with nearly 60,000 education encounters with community members, health professionals, paraprofessionals, and students in FY2008 and over 70,000 in FY2009. Through its promotion and policy work, AAI continued efforts to increase its visibility and inform aging policies at the local, state, and national levels. AAI made substantial progress in its efforts to secure additional funds to supplement its tobacco settlement funding. For FY2008 and FY2009, AAI received more than \$4.5 million in additional funds. The vast majority of AAI’s spending is dedicated to its education efforts, with very small portions supporting the other activity areas. The majority of the stakeholders with an interest in AAI’s work rated the quality of its efforts as high. After declining since its peak in 2003, the avoidable hospitalization rate among elders in Arkansas counties that have Centers on Aging has stabilized.

Table S.5
AAI Program Goal Status

Goals	Status
Clinical Services: Older Arkansans will receive evidence- or consensus-based health care by an interdisciplinary team of geriatric providers.	ACCOMPLISHED
Education: AAI will be a primary provider of quality education for the state of Arkansas.	ACCOMPLISHED
Promotion: AAI will employ marketing strategies to build program awareness.	UNABLE TO ASSESS (new goal established during 2009)
Policy: AAI will inform aging policies at the local, state, and/or national levels.	ACCOMPLISHED
Sustainability: AAI will have permanent funding sufficient to continue implementation of its programs.	ACCOMPLISHED
Research: AAI will evaluate selected health, education, and cost outcomes for older adults who are provided services.	IN PROCESS

Below are six recommendations that result from our evaluation of AAI activities during 2008 and 2009. Each recommendation links to one of the six activity areas outlined in AAI’s strategic plan, including clinical services, education, promotion, policy, sustainability, and research.

- Develop and implement an assessment of the optimal mix of professionals needed to maximize encounters in the most cost-effective manner to maintain high quality care for seniors.
- Continue to make progress in training the Centers On Aging in use of evidence-based guidelines and developing partnerships with nursing homes.
- Maintain work with strong Regional Community Advisory Committees and promotion efforts through media outlets and professional publications, focusing on involvement in policy and clinical services.
- Continue monitoring contact with legislators. Focus on a finite set of legislative issues and provide timely information to lawmakers making decisions relevant to AAI target populations.
- Develop a plan for sustainability that includes identifying multiple reimbursement streams, and continue to seek grants leveraged funding to expand services.
- Continue growth in research activities focusing on publishing completed findings and reporting use of programmatic evaluation.

Minority Health Initiative

At the end of 2009, MHI completed a strategic planning process that identified three priority areas: access to health care, education, and prevention. MHI developed awareness,

screening, and intervention strategies to address these priorities. Through its awareness activities, MHI educated, trained, or screened approximately 2,500 community members and distributed nearly 100,000 educational inserts during FY2009. MHI's participation in Community Health Fairs was its primary strategy for providing screening to minority populations. During FY2008–2009, MHI participated in 36 health fairs with almost 10,000 participants. At these fairs, nearly 5,000 health fair participants were provided with blood pressure, cholesterol, glucose, and cancer screening. For its intervention and pilot work, MHI supported four intervention or pilot projects: (1) educating African American church congregations and other organizations about healthy eating and cooking; (2) training Spanish-speaking medical interpreters and supporting health care centers in using medical interpreters; (3) expanding a minority health clinic's capacity to provide care for chronic conditions, such as diabetes, hypertension, and obesity; and (4) providing educational materials on sickle cell disease to health care providers, sickle cell patients, and their families. During 2008–2009, in response to RAND's recommendation, MHI increased its involvement in policy-related task forces and coalitions to broaden MHI's impact and help MHI reach its goals. In analyzing MHI's spending, unit costs were largely driven by participation levels, with relatively higher unit costs for its intervention strategies and lower unit costs for awareness and screening activities. MHI's stakeholders agreed about the appropriateness and purpose of its goals and believed that MHI is effectively reaching these goals. MHI has expanded its capacity to assess the outcomes of its programs and plans to use this information for future program planning.

As noted earlier, MHI's programming goals are undergoing redefinition. A strategic planning process identified six goals for FY2010 and FY2011. Data for the current reporting period will serve as a baseline to assess progress moving forward for its screening, awareness, intervention, and database activities.

Table S.6
MHI Program Goal Status

Goal	Status
Screening: Increase the annual number of minority Arkansans screened through MHI programs.	NOT MET DURING THIS REPORTING PERIOD
Awareness: Increase the annual number of minority Arkansans educated regarding disparities in health and health care and equity to health and health care services.	UNABLE TO ASSESS (new goal established during 2009)
Intervention: Establish collaborative stakeholder networks in five counties each year to address health care equity, health workforce diversity issues, and minority health disparities.	UNABLE TO ASSESS (new goal established during 2009)
Intervention: Establish a comprehensive system among agencies of coordination and collaboration surrounding minority health disparities.	UNABLE TO ASSESS (new goal established during 2009)
Intervention: Influence public policy towards an equitable health care system for all Arkansans.	UNABLE TO ASSESS (new goal established during 2009)
Database: Establish a free online navigation and resource guide to provide the public access to relevant sources on minority health care in Arkansas.	UNABLE TO ASSESS (new goal established during 2009)

Since most of the MHI programs cut across different activity areas, the seven recommendations that result from our evaluation of MHI during 2008 and 2009 focus on building service and evaluation capacity for its screening, awareness, and intervention activities.

- Maintain legislative focus on HIV/AIDS, sickle cell disease, health workforce, and system navigation issues.
- Continue to strategically fund pilot and demonstration programs.
- Use the Outreach Initiative Grants, as well as other opportunities to partner with other tobacco settlement programs, to reach program goals.
- Continue to forge collaborations with agencies and programs that have completed successful evaluations and with researchers who can bring needed expertise to these efforts.
- Take the next step with outreach grantees to ensure proper reporting and evaluation and monitoring.
- Seek supplemental funding for programs and services.

Medicaid Expansion Programs

With its four expansion programs, MEP provides access to health care for vulnerable populations in Arkansas. By the end of 2009, the ARHealthNetworks had enrollment of 9,554 small-business employees age 19–64 with income at or below 200 percent of the federal poverty level. During 2008–2009, the program’s monthly average number of participants rose from less than 500 per month to more than 1,500. Aside from the ARHealthNetworks program, enrollment in the Medicaid programs remained at consistent levels throughout 2008 and 2009. The MEP Pregnant Women’s Expansion Program provided access to Medicaid services to an average of 1,939 pregnant women with income between 133 percent and 200 percent of the federal poverty level during each six-month period of 2008–2009. More than 450 women received at least two prenatal visits during each six-month period of 2008–2009. Through its AR-Seniors program, MEP expanded Medicaid benefits to an average of 5,253 Medicare beneficiaries per six-month period in 2008–2009. The Medicaid-Reimbursed Hospital Care Program provided reimbursement for hospital care to about 9,200 Medicaid beneficiaries age 19–64. The spending analysis found that spending on the ARHealthNetworks program increased substantially reflecting its expanded enrollment. At the same time, spending in FY2009 on the Pregnant Women’s Expansion Program and the AR-Seniors program was considerably below FY2005 levels. The analysis of outcomes for MEP found that the AR-Seniors program has contributed to a decline in avoidable hospitalizations among the elderly, particularly in high-poverty counties. While the expanded hospital benefits provided by the Medicaid Reimbursed Hospital Care Program appeared to increase access to hospital care for conditions requiring very short stays, the expansion of benefits for pregnant women through the Pregnant Women’s Expansion Program is not associated with increased prenatal care.

**Table S.7
MEP Program Goal Status**

Goal	Status
The percentage of enrolled women who receive at least two prenatal visits will increase.	UNABLE TO ASSESS (new goal established during 2009)
Beneficiaries currently enrolled in the Pregnant Women’s Expansion program will utilize services at least at the same level as the average pregnant Medicaid beneficiary.	ACCOMPLISHED
Enrollment in the AR-Seniors program will increase by 15 percent annually.	NOT MET
Beneficiaries currently enrolled in the AR-Seniors program will utilize services at least at the same level as the average dually eligible beneficiary.	ACCOMPLISHED
Enrollment in ARHealthNetworks will increase by 75 new employers annually and 400 new members per month.	ACCOMPLISHED

Below are five recommendations based on our evaluation of MEP activities during 2008 and 2009. These recommendations emphasize understanding the size and needs of the populations targeted by MEP and improving access to and utilization of the programs.

- Determine the extent of need for each component of MEP and each program’s effectiveness in meeting that need.
- Assess and track service use for the Pregnant Women’s Expansion Program and the AR-Seniors Program.
- Improve the enrollment process.
- Increase the capacity for conducting education and outreach to increase service utilization and enrollment for the programs.
- Develop partnerships with other tobacco settlement programs or other state or local organizations to educate and conduct outreach in communities.

Tobacco Prevention and Cessation Program (TPCP)

TPCP continues to pursue prevention and cessation efforts in accordance with the CDC program components. Through its community prevention, school, and Minority Initiative Sub-Recipient Grant Office (MISGRO) grant programs, TPCP funded a total of 56 community- or school-based organizations in FY2010 to conduct prevention, education, and outreach activities in communities throughout Arkansas. The Arkansas Tobacco Control Board made over 5,200 compliance checks during 2009 with an uptick in the violation rate during the past two years. The new Quitline program fielded more than 27,000 calls during 2009, with 89 percent of the callers enrolling in either the single- or multiple-call program. Follow-up with program participants at 7 months found that 37 percent of those enrolled in the multiple-call program who had also had nicotine replacement therapy had remained abstinent for 30 days. For those in the

multiple-call program without nicotine replacement therapy, the quit rate was 28 percent at 7 months. For its public awareness efforts, TPCP increased its media budget to promote the new Quitline and attracted large amount of free media contributions, even though the media campaign has received less funding over time. Overall, TPCP spending increased by 11 percent in FY2009, reflecting an increase in its appropriation. Cessation programs and activities represent 24 percent of the total budget. The percentage of tobacco funds spent on non-tobacco-related activities remained at about one-fifth of TPCP’s total spending. TPCP’s stakeholders considered the program’s purpose and goals to be appropriate and rated TPCP as effective in reaching its goals.

Our analysis provides evidence of the continued effectiveness of the tobacco settlement programs on smoking-related outcomes, especially for the most vulnerable populations, particularly young people and pregnant women. These outcomes are discussed in more detail in the section below. Other outcomes for TPCP include those related to smoking policies, enforcement, and the geographic distribution of grants. The latest survey data indicate that the proportion of people reporting that smoking is not allowed in workplace indoor common areas increased significantly compared with other states. Recent enforcement data indicate that the violation rate for laws forbidding sales to minors has stabilized at 5 percent. Finally, while there are large regional variations in per-capita TPCP spending, this variation is not associated with differences in smoking rates.

**Table S.8
TPCP Program Goal Status**

Goal	Status
Prevent youth and young adult initiation of tobacco use.	IN PROCESS
Promote quitting among adults and youth.	IN PROCESS
Eliminate exposure to secondhand smoke.	IN PROCESS
Identify and eliminate tobacco-related disparities among population groups.	UNABLE TO ASSESS
Increase the number of communities with stronger smoke-free environment laws than the state legislation.	ACCOMPLISHED
Increase the percentage of Arkansas workers with a smoke-free work environment.	IN PROCESS

Below we present nine recommendations based on our evaluation of TPCP’s activities during 2008 and 2009. The first six recommendations pertain to developing new strategic goals for the program and for other ways to strengthen communication and quality management processes. The last three recommendation fall outside of the purview of TPCP but are nonetheless important to its ultimate success.

- Strengthen the web-based reporting system to improve data collection.
- Utilize program-level reporting into the web-based reporting system in an improved quality feedback mechanism.

- Strengthen communication, coordination, and collaboration between TPCP and agencies, organizations, and grantees in the communities.
- Consider refocusing the work in the school education and prevention activity area on activities within schools aimed at reducing youth tobacco use.
- Strengthen involvement of TPCP advisory committee in planning and decisionmaking.
- Raise funding for the five components of a comprehensive statewide tobacco control strategy to the level recommended for Arkansas by the CDC through either additional funds over and above those provided by the MSA or reallocation of funds from non-tobacco programs.
- Reevaluate funded programs that are not within the scope of tobacco prevention and cessation programming, as defined by the CDC guidelines, for their value in contributing to reduction of smoking and tobacco-related disease.
- Change the process that TPCP must use to budget its funds to be in line with the other tobacco settlement programs.

PROGRAM EFFECTS ON SMOKING-RELATED OUTCOMES

Our analysis of smoking behavior in Arkansas provides evidence of the continued effectiveness of the tobacco settlement programs on smoking outcomes, especially for the most vulnerable populations, such as young people and pregnant women.

Adult Smoking Behavior

- The 2008 adult smoking rate was 22 percent, four percentage points lower than the five-year average preceding TPCP programming, which is equivalent to 16 percent fewer adult smokers. However, the smoking rate was only slightly below the baseline trend and did not match the expected decrease from comprehensive smoking control program comparable to California's. Nonetheless, this trend represents a major improvement for the health of Arkansans.
- For 2008, adult women were smoking significantly less than would be predicted by their baseline trend, while men were not.
- While the smoking rate for young adults did not decrease in 2008, it remained below the baseline trend for this population.
- Analysis of the 2008 data reveals that the smoking rate for pregnant women continued to decrease and was significantly below the baseline trend.

Youth Smoking Behavior

- The smoking rate for high school students and pregnant teenagers was lower than would be expected based on trends prior to establishment of the TPCP activities.

Cigarette Sales

- The most recent data indicate that per-capita cigarette sales increased from prior years and reverted to the baseline trend. Because Arkansas' cigarette tax rate is higher than that of some neighboring states, it was not possible to determine the extent to which this trend reflected increased cigarette purchases by Arkansas residents versus sales to visitors from neighboring states.

Smoking-Related Health Indicators

- There have been reductions in the hospitalization rates for several smoking-related health conditions, including strokes and acute myocardial infarctions (heart attacks).

As in our previous report, we find statistically significant decreases in smoking among adult women and among young people, especially young pregnant women. We also find that smoking rates for adults in Arkansas are significantly below what they were prior to the initiation of tobacco settlement programming. Our analysis of short-term health outcomes shows promising evidence of improvements for smoking-related health conditions. We find strong evidence for reductions in hospitalizations for strokes and heart attacks.

There are mixed results, however, with regard to many of the measures, including smoking prevalence among middle-aged and older adults. Arkansas also lags behind Texas, one of its neighbor states, in cigarette tax rates. However, we expect to find more positive effects of the statewide tobacco control policies and activities on health and health care for Arkansas residents in the coming years as more data become available. Since many of these changes happen slowly, it is necessary to observe the trends over a long period of time.

POLICY ISSUES AND NEW STRATEGIC RECOMMENDATIONS

The programs supported by the tobacco settlement funds provide a variety of services and other resources in an attempt to respond directly to Arkansas' priority health issues. The two academic programs—COPH and ABI—are building educational and research infrastructure that can be expected to make long-term contributions to meeting the state's health needs. The three service-oriented programs—Delta AHEC, AAI, and MHI—are providing needed health-related programs to underserved communities in Arkansas. MEP is extending Medicaid benefits to populations without access to health care. TPCP is providing a statewide comprehensive tobacco control program. The programs' impacts on health needs also can be expected to grow as they continue to evolve and leverage the tobacco settlement funds to attract other resources. Below, we highlight some new areas of focus and provide recommendations for the programs and the ATSC based on our multifaceted evaluation.

Program Reporting and Planning

***Recommendation:* With strategic plans in place, the tobacco settlement programs should utilize progress-reporting systems for ongoing program planning.**

Over the past two years, the tobacco settlement programs have made progress developing strategic plans to guide their efforts in coming years. Many of the programs have also made progress in establishing reporting systems to monitor and assess program activities on a routine basis. The programs should ensure that progress reporting reflects the specific strategies and tasks outlined in the strategic plans. Once the progress-reporting systems are aligned with the

strategic plans, programs should use the information from these monitoring systems to provide their advisory boards with routine feedback on program activities and to better engage the advisory boards in ongoing planning.

Program Capacity and Need

***Recommendation:* As the programs focus on specific activity areas, each program should build on areas of strength relative to the needs of the state and develop capacity within those areas.**

Each tobacco settlement program reviewed its activity areas and the strategies within its activity areas during this reporting period. This process helped identify areas of strength and gaps where strategies are still needed. The programs should use the results of this review to focus on further developing areas of strength and building program capacity to address the gaps. The areas of strengths are different for each program, demonstrating the variety and versatility of the activities supported by tobacco funds.

Education and Outreach

***Recommendation:* The programs should focus on education and outreach efforts to market themselves and provide information to maximize participation.**

Results of stakeholder surveys indicate that about 20–30 percent of stakeholders are completely unaware of one or more of the tobacco settlement programs. Although several of the programs focus on public awareness and education about specific activities or health more generally, these efforts should be expanded to inform communities about the programs and services available through each tobacco settlement program. By targeting the education and outreach efforts, programs can increase participation and service utilization to ensure that the programs and services reach capacity.

Collaboration

***Recommendation:* The seven tobacco settlement programs should be encouraged to intensify their collaborative efforts. The ATSC can further these efforts by providing incentives and focused opportunities for programs to work together.**

Our prior evaluation report recommended that the seven tobacco settlement programs increase collaboration. While our evaluation found a few limited examples of collaboration, stakeholders of the programs noted a need for improved collaboration among the tobacco settlement programs. As a result, we continue to recommend that the program capitalize on the natural synergies between programs to promote and educate communities about the breadth of programs available to different populations. The community-based programs should work together to form strategic partnerships with local organizations to extend each program's reach in the community. The academic programs should work with the service-oriented programs to provide technical assistance related to data collection, management, and analysis.

CONCLUDING THOUGHTS

Arkansas has been unique among the states in investing all its funds from the settlement in programs that focus on smoking prevention and cessation and other health-related endeavors. The seven programs supported by the tobacco settlement funds have continued to strengthen and

expand their reach in support of improving the health of Arkansans. The results of the outcome evaluation indicate that, collectively, the tobacco settlement programs are reducing smoking behavior and improving health in Arkansas. There have been significant decreases in smoking rates for adult women, high school students, and pregnant teenagers. Overall, smoking rates for adults in Arkansas are significantly below what they were before initiation of tobacco settlement programming. There is also evidence of improvements in smoking-related health conditions, including strokes, heart attacks, and low-weight births.

The programs have achieved many of their goals and need to continue to work on the new goals and objectives established during this reporting period. Despite this progress, there is room for improvement. Although Arkansas has been a national leader in spending its tobacco settlement money on smoking prevention, the state still spends only about half of the amount recommended by the CDC for prevention efforts. Increasing funding to CDC-recommended levels would help Arkansas extend its gains in smoking reduction. Most important, we encourage Arkansas policymakers to continue their commitment to dedicate the tobacco settlement funds to health-related programming. To do justice to the services, education, and research that these programs are delivering, they should receive continued support and the time necessary to achieve their mission of improving the health of Arkansas residents.