EXHIBIT C1

ARKANSAS TOBACCO SETTLEMENT COMMISSION

BIENNIAL EVALUATION REPORT

2022-2023







Arkansas Tobacco Settlement Commission 101 East Capitol Avenue, Suite 108 Little Rock, AR 72201



REPORT PRESENTED BY

Arkansas Tobacco Settlement Evaluation Team University of Central Arkansas 201 Donaghey Avenue Conway, AR 72035



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About the Report

Purpose

This report serves as the biennial evaluation of the health programs funded through the Arkansas Tobacco Settlement Commission (ATSC) for 2022–2023. Programs include the Tobacco Prevention and Cessation Program (TPCP), Tobacco Settlement Medicaid Expansion Program (TS-MEP), Arkansas Biosciences Institute (ABI), Arkansas Minority Health Initiative (MHI), UAMS Fay W. Boozman College of Public Health (UAMS COPH), UAMS Centers on Aging (UAMS-COA), and UAMS East Regional Campus (UAMS East). Progress of each program is contingent upon established goals, long-term and short-term objectives, and indicators that operationalize these goals and objectives. In coordination with the ATSC, the University of Central Arkansas (UCA) evaluation team assists program directors and administrators in aligning indicators with program goals and objectives. Indicators are fulfilled through various program activities like education, research, and community and clinical services.

Structure

The report consists of five main parts: (1) an overview of the ATSC with a funding flowchart; (2) an infographic illustrating the combined efforts of the programs as they work to build a culture of health; (3) individual program progress and evaluation; (4) a synthesis and conclusion for the biennial evaluation; and (5) a qualitative report focused on tobacco-funded efforts in the state's five public health regions, followed by references. The program progress and evaluation section offers seven subsections, one for each of the ATSC-funded programs. These sections include an infographic with key accomplishments, program goals, long-term and short-term objectives, indicators and their associated activity, evaluator comments, and testimonials.

Evaluation Timing

While all ATSC-funded programs rely on annual indicators to guide activities, the timing of evaluation varies across programs. Some programs are evaluated at the end of the fiscal year; others are evaluated at the end of the calendar year.

- January-March Quarterly Report: Quarterly updates provided for all ATSC-funded programs
- April-June Quarterly Report: Quarterly updates provided for ABI, COPH, TS-MEP, UAMS-COA, and UAMS
 East; Fiscal year evaluation of MHI and TPCP
- July-September Quarterly Report: Quarterly updates provided for COPH, MHI, TPCP, TS-MEP, UAMS-COA, and UAMS East; Fiscal year evaluation of ABI
- Annual/Biennial Report, inclusive of October-December data: Calendar year evaluation of COPH, TS-MEP, UAMS-COA, and UAMS East; Review of most recent fiscal year evaluation of ABI, MHI, and TPCP.

About the Arkansas Tobacco Settlement Commission



ATSC Mission

The mission of the Arkansas Tobacco Settlement Commission is to provide oversight and assessment of the performance of the seven programs funded by the Tobacco Settlement Proceeds Act of 2000. The Act mandates the distribution of Master Settlement Agreement funds. The seven health programs that receive funding work to enhance the health and well-being of Arkansans through various projects, programs, and outreach.



Funded Programs

Arkansas Biosciences Institute

Robert McGehee, Jr., PhD, Director Jimie Jarry, Program Coordinator **ABI Goal:** To develop new tobacco-related medical and agricultural research initiatives to improve the access to new technologies, improve the health of Arkansans, and stabilize the economic security of Arkansas.



UAMS Fay W. Boozman College of Public Health

Mark Williams, PhD, Dean Liz Gates, JD, MPH, Assistant Dean for Planning and Policy **UAMS COPH Goal:** To improve the health and promote the well-being of individuals, families, and communities in Arkansas through education, research, and service.



Arkansas Minority Health Initiative

Kenya Eddings, MPH, Director

MHI Goal: To improve healthcare systems in Arkansas and access to healthcare delivery systems, thereby resolving critical deficiencies that negatively impact the health of the citizens of the state.



Tobacco Prevention and Cessation Program

Lana "Joy" Gray, Branch Chief

TPCP Goal: To reduce morbidity and death associated with tobacco use by preventing initiation of tobacco/nicotine products and providing cessation services/resources to Arkansans who want to quit using tobacco.



Tobacco Settlement Medicaid Expansion Program

Mary Franklin, Director, Department of Human Services Division of County Operations **TS-MEP Goal:** To expand access to healthcare through targeted Medicaid expansions, thereby improving the health of eligible Arkansans.



UAMS Centers on Aging

AmyLeigh Overton-McCoy, PhD, GNP-BC, Director

UAMS-COA Goal: To improve the health of older Arkansans through interdisciplinary geriatric care and innovative education programs and to influence health policy affecting older adults.



UAMS East Regional Campus

Stephanie Loveless, MPH, Director

UAMS East Goal: To recruit and retain healthcare professionals and to provide community-based healthcare and education to improve the health of the people residing in the Delta region.

Arkansas Tobacco Settlement Commission and Staff

Andrea Allen, Commission Chair

Executive Director, A-State Delta Center for Economic Development Governor Appointee

Jennifer Fowler, Commissioner

Director, Arkansas NSF EPSCoR at Arkansas Economic Development Commission (AEDC) AEDC Permanent Designee

Jerri Clark, Commissioner

Director of School Health Services, Arkansas Department of Education (ADE) ADE Permanent Designee

Mary Franklin, Commissioner

Director of Divisions of County Operations, Arkansas Department of Human Services (DHS) DHS Permanent Designee

Nick Fuller, Commissioner

Deputy Director, Arkansas Department of Higher Education (ADHE) ADHE Permanent Designee

Ken Knecht, MD, Commissioner

Physician, Arkansas Children's Hospital Senate President Pro Tempore Appointee

Martha Hill, Commissioner

Counsel Attorney General Appointee

Cristy Sellers, Commissioner

Director of Center for Health Advancement, Arkansas Department of Health (ADH) ADH Permanent Designee

Zsanica Ervin, Administrative Analyst



ATSC Evaluation Team

Emily Lane, MFA, PhD(c)

Project Director

Betty Hubbard, EdD, MCHES

Evaluator: Arkansas Biosciences Institute

Marc Sestir, PhD

Evaluator: UAMS Fay W. Boozman College of Public Health

Denise Demers, PhD, CHES

Evaluator: Arkansas Minority Health Initiative

Janet Wilson, PhD

Evaluator: Tobacco Prevention and Cessation Program

Joseph Howard, PhD

Evaluator: Tobacco Settlement Medicaid Expansion Program

Ed Powers, PhD

Evaluator: UAMS Centers on Aging

Jacquie Rainey, DrPH, MCHES

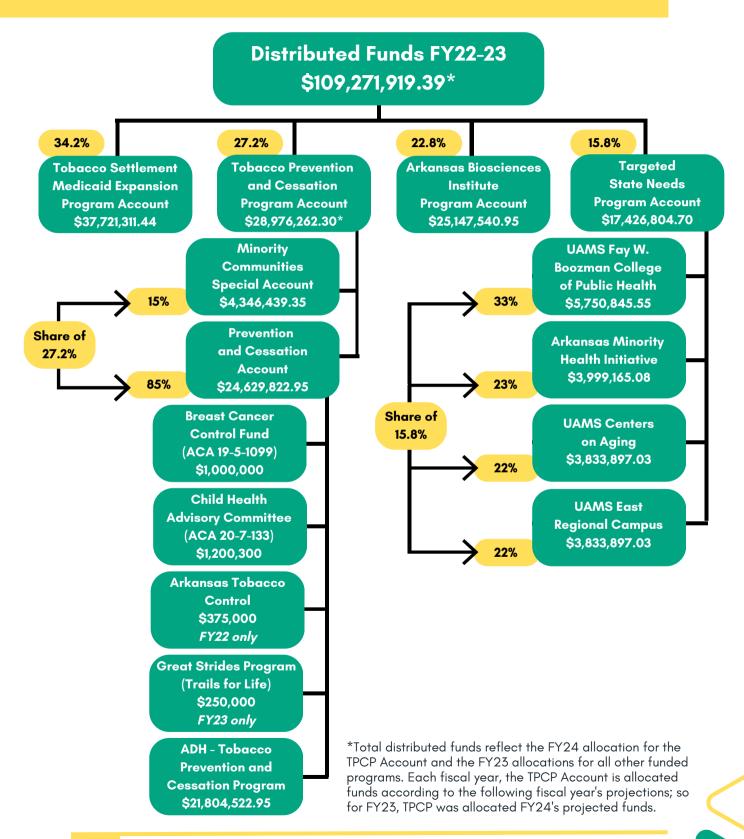
Co-Pl & Administrator; Evaluator: UAMS East Regional Campus

Rhonda McClellan, EdD

Co-PI; Qualitative Report



ATSC Funding FY22-23



ATSC Funding FY22-23

Funding Flowchart Description

The flowchart on the previous page illustrates the distribution of ATSC funds for FY22-23. As shown, ATSC funds are divided among four program accounts: Tobacco Settlement Medicaid Expansion Program, Tobacco Prevention and Cessation Program, Arkansas Biosciences Institute, and Targeted State Needs. The Targeted State Needs account is divided among four programs: UAMS Fay W. Boozman College of Public Health, Arkansas Minority Health Initiative, UAMS Centers on Aging, and UAMS East Regional Campus.

The Tobacco Prevention and Cessation Program Account sets aside 15% into the Minority Communities Special Account, the remaining balance stays in the Prevention and Cessation Account, which is divided between the Breast Cancer Control Fund, Child Health Advocacy Committee, Arkansas Tobacco Control, the Great Strides Program (Trails for Life), and Arkansas Department of Health (ADH) Tobacco Prevention and Cessation Program.

Data Representation in Report

ATSC funding is awarded at the start of the fiscal year (July 1), but not all ATSC-funded programs are evaluated at the end of the fiscal year. As mentioned earlier, some ATSC-funded programs are evaluated at the end of the calendar year. Therefore, program data highlighted in this report cover FY22-FY23 (July 2021-June 2023) for ABI, MHI, and TPCP and cover the 2022-2023 calendar years for TS-MEP, UAMS-COA, and UAMS East. The UAMS COPH is an exception as its indicator related to leveraged funds is evaluated at the end of the fiscal year, while the other indicators are evaluated at the end of the calendar year.





COMBINED EFFORTS TO BUILD A CULTURE OF HEALTH

Arkansas Biosciences Institute (ABI), UAMS Fay W. Boozman College of Public Health (COPH), Arkansas Minority Health Initiative (MHI), Tobacco Prevention and Cessation Program (TPCP), Tobacco Settlement Medicaid Expansion Program (TS-MEP), UAMS Centers on Aging (UAMS-COA), UAMS East Regional Campus (UAMS East)

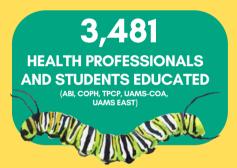
EDUCATION



211,993

ARKANSANS
EDUCATED
(MHI, TPCP, UAMS-COA, UAMS EAST)







71
DISTANCE-ACCESSIBLE
COURSES BY COPH

SERVICE



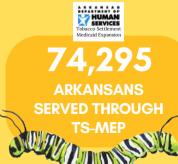
34,375
HEALTH
SCREENINGS
(MHI, UAMS EAST)

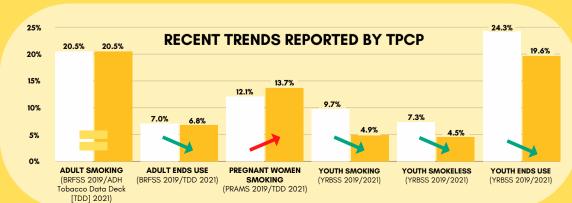
19,348
PATIENT
ENCOUNTERS
(UAMS-COA, UAMS EAST)



7,228
CALLERS ENROLLED IN TOBACCO CESSATION

QUIT RATE VIA BE WELL ARKANSAS, AVERAGED ACROSS FY22-23, HIGHEST QUITLINE RATE IN U.S.







COMBINED EFFORTS TO BUILD A CULTURE OF HEALTH

Arkansas Biosciences Institute (ABI), UAMS Fay W. Boozman College of Public Health (COPH), Arkansas Minority Health Initiative (MHI), Tobacco Prevention and Cessation Program (TPCP), Tobacco Settlement Medicaid Expansion Program (TS-MEP), UAMS Centers on Aging (UAMS-COA), UAMS East Regional Campus (UAMS East)

RESEARCH



RESEARCH PROJECTS
FOCUSED ON ARKANSAS

RATIO OF PUBLICATIONS
PER INVESTIGATOR
ON AVERAGE

4.28



CONTINUED
COLLABORATIONS
BETWEEN ABI AND
COPH TO ACCESS
ARKANSAS APCD

426
PROJECTS ON AVERAGE

1,514
PUBLICATIONS
(ABI, COPH)



(ABI, COPH)

Research activities at **ABI** and **COPH** included a wide range of topics, such as maternal healthcare, reducing violent assault, improving infant outcomes, smoking cessation, metabolic processes, crop performance, childhood obesity,

and cancer prevention, among others.

PRESENTATIONS
(ABI)

10
PATENT AWARDS

MINORITY RESEARCH CENTER FUNDS TOBACCO STUDIES

The UAPB Minority Research Center reported funding two studies in FY22-23 with Philander Smith College and Community Clinic on the topics of tobacco treatment in a healthcare setting and tobacco use during COVID-19, respectively.

ECONOMIC IMPACT

ATSC PROGRAMS LEVERAGED

\$403.7 MILLION

EQUAL TO \$5.57 PER ATSC \$1.00.

(ABI, COPH, TS-MEP, UAMS-COA)



\$270.5 Million

TOTAL CLAIMS PAID BY TS-MEP





REVENUE GENERATED FROM UAMS
EAST FAMILY MEDICAL CENTER





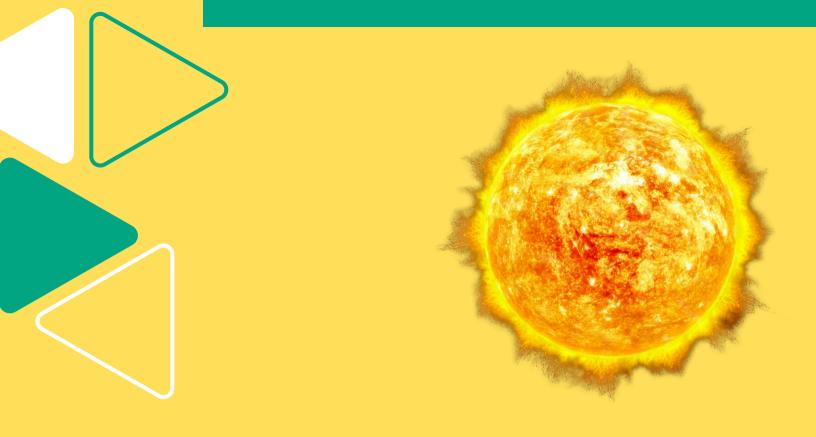




SAVINGS FOR BE WELL CALLERS

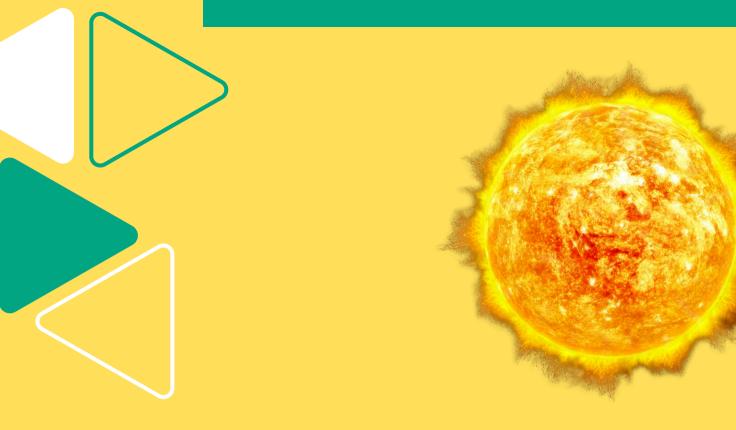
Arkansas smokers experience lifetime out-of-pocket costs of \$132,802, increased healthcare costs of \$131,351, and income loss of \$427,464 (McCann, 2024). This equates to lifetime costs of \$714,496 or \$14,885 annually. Approximately 2,539 Be Well callers guit smoking in FY22-23.

THESE ARKANSANS WILL SAVE \$37.8 MILLION IN THE COMING YEAR.



PROGRAM PROGRESS AND EVALUATION





ARKANSAS BIOSCIENCES INSTITUTE

Robert McGehee, Jr., PhD, Director Jimie Jarry, Program Coordinator UCA Evaluator: Betty Hubbard, EdD, MCHES







ARKANSAS BIOSCIENCES INSTITUTE



Tara Johnson, MD Arkansas Children's Research Institute 2023 New Investigator of the Year



Maureen Dolan, PhD
A-State
2023 Established Investigator
of the Year



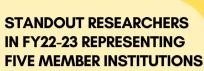
Justin Putnum, PhD Student University of Arkansas



Ali Ubeyitogullari, PhD University of Arkansas, Division of Agriculture



Alan Tackett, PhD University of Arkansas for Medical Sciences















Tameka Bailey, PhD

230 PROJECTS ON AVERAGE



Vibha Srivastava, PhD UofA, Division of Ag

PATENT AWARDS

IN FY22-23

243

FULL-TIME EQUIVALENT EMPLOYEES SUPPORTED ON AVERAGE



654
PRESENTATIONS
IN FY22-23

962
PUBLICATIONS
IN FY22-23

Research activities included a wide range of health-related topics such as metabolic processes, crop performance, childhood obesity, sleep, and cancer prevention, among others.

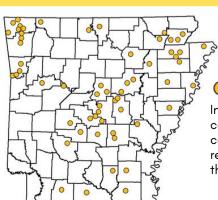


PROJECTS THAT WERE COLLABORATIVE AMONG INSTITUTIONS





The 2023 Fall Research Symposium was held at UAMS Jack Stephens Spine and Neurosciences Institute. ABI-supported investigators offered a variety of presentations and posters.



STUDENT HOMETOWNS

In FY22-23, 498 high school and college students from 63 communities engaged in ABI-related research. The map indicates where these students call home.



\$172 MILLION

LEVERAGED IN FY22-23, EQUAL TO \$6.85 PER ATSC \$1.00.

Program Description and Goals



Program Description

The Arkansas Biosciences Institute, the agricultural and biomedical research program of the Tobacco Settlement Proceeds Act, is a partnership of scientists from Arkansas Children's Research Institute, Arkansas State University, the University of Arkansas System Division of Agriculture, the University of Arkansas, Fayetteville, and the University of Arkansas for Medical Sciences. The ABI supports long-term agricultural and biomedical research at its five member institutions and focuses on fostering collaborative research that connects investigators from various disciplines across these five institutions. The ABI uses this operational approach to address the goals as outlined in the Tobacco Settlement Proceeds Act. These goals are to conduct:

- · Agricultural research with medical implications;
- Bioengineering research that expands genetic knowledge and creates new potential applications in the agricultural-medical fields;
- Tobacco-related research that identifies and applies behavioral, diagnostic, and therapeutic knowledge to address the high level of tobacco-related illnesses in Arkansas;
- Nutritional and other research that is aimed at preventing and treating cancer, congenital and hereditary conditions, or other related conditions; and
- Other areas of developing research that are related or complementary to primary ABI-supported programs.

Program Goal

The goal of the ABI is to develop new tobacco-related medical and agricultural research initiatives to improve the access to new technologies, improve the health of Arkansans, and stabilize the economic security of Arkansas.



Evaluator Summary and Comments



Economic Impact

During the biennium, the Arkansas Biosciences Institute consistently met the indicator related to funding from extramural sources. This funding was generated from research awards to ABI institutions from governmental and voluntary health agencies across the nation. These funds were used to develop and maintain the infrastructure and personnel required to further scientific innovations intended to advance the health of Arkansans. In FY22 and FY23, ABI received 22.8% of the funds available for distribution to the programs instituted by the Arkansas Tobacco Settlement Proceeds Act. The five ABI institutions received approximately \$25 million of the approximately \$110 million dollars available. As a result of efforts to leverage these funds, a two year average of \$6.85 was generated for every \$1.00 provided by the Settlement monies during FY22 and FY23.



Opportunities

The ending of restrictions associated with the pandemic heralded a welcomed return to normalcy. The ABI Annual Symposium resumed during the fall of 2023 which allowed the celebration and sharing of the research endeavors of the fiscal year. To continue this annual meeting, Dr. Robert McGehee, executive director of ABI and Dr. Travis Marsico, director of ABI at Arkansas State University in Jonesboro will partner to host the ABI Annual Symposium on September 18 and 19, 2024. The events will be held at the Arkansas State University (A-State) campus in Jonesboro where they will be simultaneously holding the 20th anniversary celebration of the ABI building. This flagship building at Arkansas State University was inaugurated in 2003 and this two-day celebration will include dignitaries (governor, state legislators, the ABI board and A-State campus leaders). The ABI Symposium will consist of at least five ABI-supported research investigator presentations and at least 40 poster presentations. These presentations will enable currently funded ABI research investigators to collaborate with researchers from all five member institutions. These collaborations will be very beneficial in securing future external grant funding.



Challenges

The difficulty in collecting data and pursuing collaborative efforts were hallmarks of the pandemic; however, those difficulties are being resolved over time. In addition to issues related to the pandemic, challenges of the past biennium centered on problems with access to the Arkansas All-Payer Claims Database (APCD). This database is a dynamic tool that collects healthcare data to empower Arkansans to better understand how healthcare is delivered. Its use by research investigators who were not properly trained resulted in problems accessing the data. Dr. McGehee, executive director of ABI, and the stakeholders continue to have discussions regarding the ACPD to solve the research investigators' access issues. Kenley Money, director of information systems for the Arkansas Center for Health Improvement (ACHI) continues to work with Dr. McGehee on various applications that will include helpful tips and training for all users. The training will be online with a required proficiency test for all new users and existing users who repeatedly misuse the database.



Evaluator Comments

The resilience of ABI researchers and support personnel was commendable as they transitioned from a pandemic to a post-pandemic research environment. Even though some indicators have been unmet in recent years, these shortfalls were due to the influence of COVID-19. Efforts to leverage funds, disseminate research results, and support the activities that lead to patents and collaborative efforts have been ongoing. In the upcoming fiscal year, one indicator will be submitted for revision since the original metric is no longer applicable. The economy and periodic hiring freezes prevent the attainment of the previous employment metric that was prescribed when ABI and other programs were established.

Indicators and Progress

Long-Term Objective

Research results should translate into commercial, alternate technological, and other applications wherever appropriate in order that the research results may be applied to the planning, implementation, and evaluation of any health-related programs in the state. The institute should also obtain federal and philanthropic grant funding.

#1 Indicator

The five member institutions will continue to rely on funding from extramural sources with the goal of increasing leveraged funding from a baseline of \$3.15 for every \$1.00 in ABI funding.

>>> FY22 - Met

Activity - This indicator was met. During FY 2022, ABI-supported research investigators reported \$6.74 in extramural funding for every \$1.00 provided by the Arkansas Tobacco Settlement. It should be noted that ABI leveraged funds increased from FY21 to FY22, from \$6.19 to \$6.74. This extramural funding was received from a variety of government agencies such as the National Institutes of Health (NIH) and the Food and Drug Administration (FDA). Funding was also received from voluntary health agencies such as the American Cancer Society as well as public companies like Pepsico, Allergan, and Novartis.

>>> FY23 - Met

Activity - This indicator was met. During FY23, investigators received \$6.95 in extramural funding for every \$1 provided by the Arkansas Tobacco Settlement. These combined funds are used to support pilot projects, purchase new equipment, gain access to core laboratories, hire critical research technicians, and develop collaborative relationships. Such efforts provide infrastructure and support personnel to ensure the success of extramural grant applications.

#2 Indicator

ABI-funded research will lead to the development of intellectual property, as measured by the number of patents filed and received.

>>> FY22 - Met

Activity - This indicator was met. ABI-supported research investigators filed 10 patents and received seven. Patent activity included diverse subjects such as the diagnosis of depression, acetaminophen protein adducts, and scaffolds for spinal cord injury repair.

>>> FY23 - Met

Activity - This indicator was met. Patent filings and patent awards are key indicators of entrepreneurism, innovation, and potential commercial opportunities at ABI. In FY 2023, there were five patent filings by three of the member institutions and three patent awards to ABI-supported research investigators from two of the member institutions.

Indicators and Progress

#3 Indicator

The ABI will promote its activities through various media outlets to broaden the scope of impact of its research.

>>> FY22 - Met

Activity - This indicator was met. During FY 2022, ABI investigators reported 56 media contacts via a variety of outlets. Fifteen newspaper articles, two news conferences, 32 press releases, and seven television/radio interviews were conducted to provide information to the public and to promote ABI activities.

>>> FY23 - Met

Activity - This indicator was met. For FY23, ABI made 92 media contacts that occurred in a variety of formats: 34 newspaper articles, 37 press releases, three news conferences, and 18 television/radio broadcasts. These contacts highlight the activities of ABI investigators and also increase the scope and impact of research conducted by this program.

Short-Term Objective

Initiate new research programs for the purpose of conducting, as specified in § 19-12-115, agricultural research with medical implications, bioengineering research, tobaccorelated research, nutritional research focusing on cancer prevention or treatment, and other research approved by the board.

#4 Indicator

The ABI will allocate funding to its five member institutions to support research, while also monitoring that funded research activities are conducted on time, within scope, and with no overruns.

>>> FY22 - Met

Activity - This indicator was met. Research investigators reported 233 new and ongoing research projects covering all five research areas. Funding was also allocated to initiate research start-ups and to maintain ongoing projects by purchasing equipment, updating infrastructure, and providing animal care.

>>> FY23 - Met

Activity - This indicator was met. During FY 2023, research investigators reported 226 new and ongoing research projects covering all five research areas. Funding was also allocated to initiate research start-ups and to maintain ongoing projects by purchasing equipment, updating infrastructure, and providing animal care.

Indicators and Progress

#5 Indicator

The ABI and its member institutions will systematically disseminate research results and ensure that at least 290 publications and 370 presentations are delivered each year. These include presentations and publications of results, curricula, and interventions developed using the grant funding, symposia held by investigators, and the creation of new research tools and methodologies that will advance science in the future.

>>> FY22 - Unmet

Activity - This indicator was not met. Although ABI reported 426 publications, well above the goal of 290, research investigators fell slightly short of the number of presentations with 344. Publications by ABI investigators included 287 independent research articles and 134 articles in collaboration with others. ABI reported five new or improved methodologies and research tools to advance future scientific endeavors.

>>> FY23 - Unmet

Activity - This indicator was unmet. Although ABI reported 536 publications, well above the goal of 290, research investigators fell slightly short of the expected number of presentations with 310. Publications by ABI investigators included 301 independent research articles and 235 articles in collaboration with other researchers. No new nor improved methodologies or research tools were developed during the fiscal year.

#6 Indicator

Employment supported by the ABI and extramural funding will be maintained at a baseline of 300 full-time equivalent (FTE) with at least 65% of the FTE supported by extramural funds.

>>> FY22 - Unmet

Activity - This indicator was not met. ABI reported that 280 FTE jobs were supported by ABI and extramural funding during FY22. This number is slightly below the expectation of 300 FTEs. However, of these 280 jobs, 73% were supported by extramural funding, which exceeded the goal of 65%.

>>> FY23 - Unmet

Activity - This indicator was unmet. During the fiscal year, 206 FTE jobs were supported by ABI and extramural funding. This number falls below the expectation of 300 FTEs. However, of these 206 jobs, 65% were supported by extramural funding. This percentage met the metric described in the indicator.

#7 Indicator

The ABI will facilitate and maintain research collaboration at a level of 20% - 25% among member institutions.

>>> FY22 - Met

Activity - This indicator was met. During the fiscal year, there were 233 new and ongoing research projects reported by ABI investigators. Of these projects, 81% were collaborations between scientists at ABI institutions. Research activities included a wide range of health-related topics such as metabolic processes, crop performance, childhood obesity, sleep, and cancer prevention.

>>> FY23 - Met

Activity - This indicator was met. There were 226 new and ongoing research projects reported by ABI investigators. Of these projects, 30% were collaborations between scientists at ABI-supported institutions. Research activities included a wide range of health-related topics such as pediatric asthma, organic recycling, memory dysfunction, human norovirus control, and hospital violence intervention.

Testimonial

Researcher Shares Findings at Fall Symposium: Epigenetic Age to Predict the Risk of Rheumatoid Arthritis



The 2023 ABI Fall Research Symposium gathered together scientists from the five-member institutions to share research findings and recent accomplishments and to build collaborative opportunities. Nandini Mukherjee, PhD, representing UAMS, presented a poster of her research on epigenetic aging and rheumatoid arthritis. She and her colleagues found that epigenetic age can predict risk of rheumatoid arthritis.

Mukherjee explained the complex project in laymen's terms, "I would say that our DNA can tell us about the rate at which we are really aging; that this is different from the number of years we have lived. . . . This difference between the DNA age and the biological age is what we are really interested in. So, my study provides evidence that there is a difference between DNA age, between controls and cases, with rheumatoid arthritis. So this ultimately informs larger studies that are needed to identify whether DNA age can predict the incidence of rheumatoid arthritis, and if they really can, then we can just prick and draw blood, and then do some DNA methylation analysis. That can really tell you whether you're going to develop rheumatoid arthritis in the next few years. You're in the high risk."

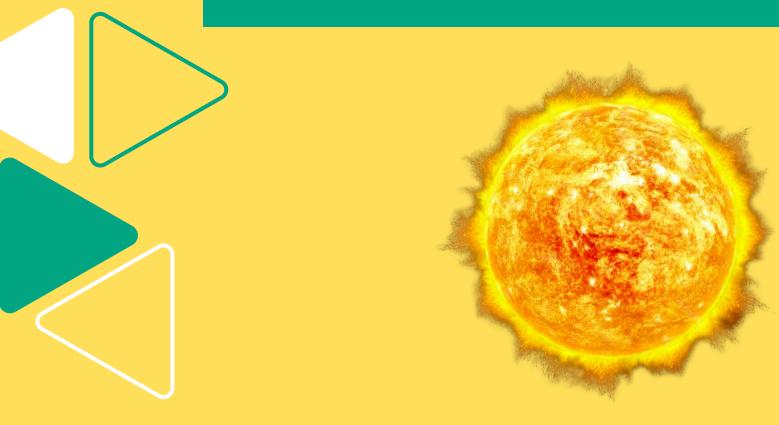
Mukherjee emphasized the "so what" of the study, "So the advantage of using epigenetic age is that it can be reversed. Biological age cannot. But epigenetic aging is actually capturing several molecular processes that are underlying. So we can identify factors that influence the epigenetic age and then develop interventions like specific nutrition for specific people."

Murkherjee also explained her journey from India to the U.S. to pursue epidemiology, "During my master's degree, I used to make drug delivery vesicles that encapsulated DNA drugs, and I used to test it experimentally in different cancer cell types. That lab was in India, and then I came to the U.S. to pursue epidemiology with a focus on epigenetics and DNA methylation-related studies, expanding my knowledge about molecular sciences to population based approaches. So, I think this journey has been very good and also exciting."

When asked about her experience at the Fall Research Symposium, she said, "This is my second year here. The talks were amazing, and the posters, I will have another look around now, and I hope to identify more collaborating here. Some of the other researchers have already said 'hi' and to just go and talk to them. So that's what I'm going to do."

When asked about what she values most about ABI, Mukherjee shared, "Well, I have to say, I have been lucky to have found mentors, and they guide me through the process."





UAMS FAY W. BOOZMAN COLLEGE OF PUBLIC HEALTH

Mark Williams, PhD, Dean Liz Gates, JD, MPH, Assistant Dean for Planning and Policy UCA Evaluator: Marc Sestir, PhD





UAMS FAY W. BOOZMAN COLLEGE OF PUBLIC HEALTH



RESEARCH PROJECTS FOCUSED ON ARKANSAS

RATIO OF PUBLICATIONS
PER FACULTY MEMBER

4.97

163
GRADUATES

85%

GRADUATES WHO PLANNED TO STAY IN ARKANSAS

196 RESEARCH

RESEARCH PROJECTS ON AVERAGE **552**

PUBLICATIONS
IN 2022-23

Research activities included improving maternal healthcare and infant outcomes, reducing violent assault, and smoking cessation, among others.



COPH continues to collaborate with ABI to access to the Arkansas APCD.

This partnership enables the establishment of a parallel server based in the UAMS Biomedical Informatics Department which allows investigators access at no cost.

71
DISTANCE-ACCESSIBLE
COURSES

REMOTE PRESENTATIONS





In 2023, alumnus, now assistant professor at the COPH, Austin Porter, DrPH, MPH, was named Arkansas's Deputy State Epidemiologist. Dr. Michael Thomsen, professor and director of the Center for the Study of Obesity will lead a \$1.2 million study examining how the availability of school meals impacts the behavior and mental health of youth.





During the biennium, 26.6% of COPH students came from rural counties. The map highlights rural counties, indicated by a crosshatch, and indicates the counties (in orange) that students call home. In all, COPH students represented 56 counties, 39 of which are rural.



Program Description and Goals



Program Description

The Fay W. Boozman College of Public Health (COPH) educates a public health workforce and advances the health of the public by investigating the causes, treatments, and prevention of human health problems. Preventing chronic disease and promoting positive health behavior is the most effective way to improve the health of all people. The College's mission of improving the health of all Arkansans is realized through teaching and research as well as service to elected officials, agencies, organizations, and communities. Examples of the complex health issues addressed include improving the multiple dimensions of access to healthcare; reducing the preventable causes of chronic disease; controlling infectious diseases; reducing environmental hazards, violence, substance abuse, and injury; and promoting preparedness for health issues resulting from terrorist acts, natural disasters, and newly emerging infectious diseases.

Program Goal

The goal of the COPH is to improve the health and promote the well-being of individuals, families, and communities in Arkansas through education, research, and service.



Evaluator Summary and Comments



Economic Impact

Across the 2022-2023 fiscal years, the COPH received a total of approximately \$5,750,845.35 from the ATSC. The college was able to successfully leverage that money to generate further funding in the form of grants and contracts, as well as other funding for tuition and fees, investment revenue, and gifts. The total leveraged extramural funding was approximately \$20,705,844, a ratio of \$3.60 of extramural funds for every \$1 of tobacco settlement funds. In addition, the tobacco settlement funds were directly used in conjunction with other funding to improve public health through activities such as partnerships to study and promote the health of Arkansans, providing courses and presentations on contemporary health topics and issues, and extensive health research that helps train students from every area of Arkansas.



Opportunities

The COPH created and pursued many valuable opportunities in the 2022–2023 biennium. Three key opportunities are discussed below:

- The All-Payer Claims Database (APCD) in collaboration with the Arkansas Center for Health Improvement (ACHI) has become an extremely valuable source of information to ABI-supported investigators over the last several years. This partnership continues to enable the establishment of a parallel server based in the UAMS Biomedical Informatics Department which allows all ABI investigators access at no cost. At the six-year mark, impressive grant activity continues to move forward due to the utilization of this database.
- The College of Public Health received funding from the National Institutes of Health (NIH) to support its role in a collaboration to improve school playgrounds in Little Rock. Year one of the 4-year NIH grant is for \$389,847. Funding for the following years will be determined by the overall performance of the program.
- The UAMS Center for the Study of Obesity will lead a \$1.2 million, multiorganization, three-year research project examining how the availability of school meals benefits the mental and behavioral status of youths.



Challenges

The COPH faced several challenges in 2022-23. Perhaps the biggest were due to the process of renormalization as it adjusted from major changes brought on by the COVID-19 pandemic. In 2022, concerns surrounding COVID altered COPH planning and programming, from meetings to classes to the hiring process. In 2023, the COPH faced the major challenge of restarting its strategic planning process, which had been paused due to the pandemic and has been ongoing throughout 2023. By the end of the biennium, COVID concerns had dissipated greatly. Other major challenges have included replacing the institutional knowledge of retired longtime faculty members and implementing a new student information system.



Evaluator Comments

The College of Public Health has had a successful and effective 2022-2023 biennial period with regards to the use of tobacco settlement funds. It has met all of its indicators for each year, and has begun transitioning from the major changes brought about by the pandemic. It conducts substantive public health research, communicates and consults with the public and interested organizations, and uses funds effectively to secure additional funding and support a diverse population of Arkansas students and future health professionals, most of whom have remained in the state.

Indicators and Progress

Long-Term Objective

Elevate the overall ranking of the health status of Arkansans.

#1 Indicator

Through consultations, partnerships and dissemination of knowledge, the COPH serves as an educational resource for Arkansans (e.g., general public, public health practitioners and researchers, and policymakers) with the potential to affect public health practice and policy – and population health.

>>> 2022 - Met

Activity - This indicator was met. Faculty participated in an average of 52 activities per quarter, with 48 (92%) reported as ongoing at the end of the year. All activities had an Arkansas scope, with 37 (71%) focusing statewide, and six (11%) emphasizing central Arkansas. Topics included partnerships with public health community organizations and service on health-related boards at the state and national level.

>>> 2023 - Met

Activity - This indicator was met. Faculty participated in an average of 52 relevant activities per quarter; 48 (92%) were reported as ongoing at the end of the calendar year. All activities again had a scope including Arkansas; 37 (71%) included a statewide focus on Arkansas, and six more (11%) focused on the central Arkansas region. Activities included community health engagement, service on public health-focused boards, and partnerships with outside academic institutions.

#2 Indicator

COPH faculty productivity is maintained at a level of two publications in peer-reviewed journals per one full-time equivalent (FTE) employee for primary research faculty.

>>> 2022 - Met

Activity - This indicator was met for the calendar year. During 2022, 53 College of Public Health faculty collectively had 275 publications in peer-reviewed journals, a ratio of 5.30 publications per faculty member. This only includes faculty who are expected to publish in peer-reviewed journals.

>>> 2023 - Met

Activity - This indicator was met. The 58 COPH faculty expected to publish in peer-reviewed journals collectively had 277 publications, a ratio of 4.78 publications per qualifying faculty member.

#3 Indicator

Research conducted by COPH faculty and students contributes to public health practice, public health research, and the health and well-being of Arkansans.

>>> 2022 - Met

Activity - This indicator was met. COPH faculty and students contributed substantially to public health practice and research, helping to promote health and well-being. Faculty engaged in 134 funded research projects, covering topics such as cancer prevention, reducing violent assault, improving newborn and infant outcomes, and smoking cessation. Students conducted 37 projects, including improving community sanitation, tobacco prevention, maternal healthcare, and increasing access to preventative care.

Indicators and Progress

>>> 2023 - Met

Activity - This indicator was met. College of Public Health faculty and students were highly active in work that made significant contributions to public health practice and research that furthered the health and well-being of Arkansans. During 2023, faculty engaged in 140 funded research projects, including reducing chronic health disparities, improving cancer outcomes, studying the negative health impacts of tobacco smoking, promoting tobacco cessation, and improving mental health treatment. Students conducted 81 projects, including promoting tobacco cessation among veterans, improving nutrition education, treating diabetes more effectively, and treating autism and other intellectual/developmental disabilities.

#4 Indicator

COPH faculty, staff, and students are engaged in research that is based in Arkansas.

>>> 2022 - Met

Activity - This indicator was met. In all, 130 of 134 faculty research projects (97%) and 37 out of 37 student research projects (100%) were based in Arkansas and/or had an Arkansas focus.

>>> 2023 - Met

Activity - This indicator was met. Overall, 136 of 140 (97%) faculty research projects and 79 out of 81 (98%) student research projects were based in Arkansas and/or had an Arkansas focus.

#5 Indicator

The COPH makes courses and presentations available statewide.

>>> 2022 - Met

Activity - This indicator was met. The COPH offered 35 distance-accessible courses in 2022 on topics such as biostatistics, environmental health sciences, and epidemiology. The college also made 18 presentations available over the course of the year, including topics like COVID-19 treatment, opioid overdoses, and dietary improvement.

>>> 2023 - Met

Activity - This indicator was met. The COPH offered a total of 36 distance-accessible courses during 2023. Topics included maternal and child health, epidemiology, biostatistics, and rural health practice. Additionally, the COPH made 25 presentations available, addressing issues like community-level nutrition implementations, childhood obesity in Arkansas, and antimicrobial resistance.

#6 Indicator

Twenty percent of enrolled students at the COPH come from rural areas of Arkansas.

>>> 2022 - Met

Activity - This indicator was met. In all, 71 of 292 enrolled students who originate in Arkansas come from rural counties, as designated by the federal Office of Management and Budget.

>>> 2023 - Met

Activity - This indicator was met. Overall, 71 of 241 (29%) enrolled students from Arkansas come from rural counties, as designated by the federal Office of Management and Budget.

Indicators and Progress

#7 Indicator

COPH graduates' race/ethnicity demographics for Whites, African Americans and Hispanics/Latinos are reflective of Arkansas race/ethnicity demographics.

>>> 2022 - Met

Activity - This indicator was met. In 2022, 85 students graduated from COPH: 45 graduates (53%) were White, lower than Arkansas demographics (77%); 19 (22%) were African-American, a higher proportion than Arkansas demographics (15%); three (4%) were Hispanic/Latino, comparable to the state population rate (6%). Additionally, eight graduates (9%) were Asian, one (1%) was Native American, and nine (11%) were multiracial or reported no race.

>>> 2023 - Met

Activity - This indicator was met. During 2023, a total of 78 students graduated from COPH; of these, 10 provided no racial demographic information. For the 68 that did provide information, 42 (62%) were White, lower than Arkansas demographics (77%); eight (12%) were African American, comparable to Arkansas demographics (15%); three (4%) were Hispanic/Latino, also comparable to state demographics (6%). Additionally, nine graduates (13% of those reporting race) were Asian, and the remaining six (9%) were multiracial.

#8 Indicator

The majority of COPH alumni stay in Arkansas and work in public health.

>>> 2022 - Met

Activity - This indicator was met for the calendar year. Of the 85 graduating students, 44 (52%) intended to work in public health or healthcare in Arkansas. Another two (2%) planned to pursue a degree in Arkansas. An additional 26 (31%) wanted to pursue a residency or fellowship, many of which were located in Arkansas. Only four (4%) intended to work outside of Arkansas, with the plans of the remaining nine (11%) unknown.

>>> 2023 - Met

Activity - We consider this indicator as being met, although current data does not allow a definitive determination. Of the 78 graduating students, 33 (42%) intended to work for public health or healthcare in Arkansas. An additional four (5%) planned to pursue a further degree in Arkansas, totaling 38 of 78 (48%) who expressed specific intentions to continue in public health in Arkansas. Of the remaining graduates, the largest group (32 graduates [41%]) intended to pursue a residency or fellowship, many of which would likely be located in Arkansas. The lack of state data for residencies and fellowships makes it impossible to confirm a majority will remain in Arkansas, but if as few as two additional graduates take residences, fellowships, or other public health opportunities in the state, a majority will have been achieved. Only five (6%) graduates specifically intended to work outside Arkansas, and data is unavailable for the plans of the remaining four (5%).

Indicators and Progress

Short-Term Objective

Obtain federal and philanthropic grant funding.

#9 Indicator

The COPH shall maintain a 1.5:1 ratio of total annual fiscal year extramural award funding to annual fiscal year tobacco settlement dollars.

>>> FY22 - Met

Activity - This indicator was met. The fiscal data for July 1, 2021 through June 30, 2022 showed that \$2,835,150.70* was awarded to the COPH from the ATSC, and a total of 2,545,931.35* was expended for the fiscal year. This leaves a carryover into the next year of \$289,219.35*. Grants and contracts to the COPH in FY22 totaled \$7,322,264. The financial information that was provided by COPH indicated a 2.88:1* ratio of external funds to tobacco funds.

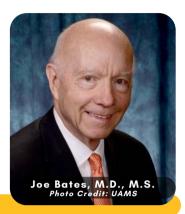
• *Updated data for this indicator were reported by COPH in February 2024, and so these numbers have been updated in this biennial report.

>>> FY23 - Met

Activity - This indicator has been met for the fiscal year. Fiscal data from July 1, 2022, to June 30, 2023 showed that the COPH received \$3,204,914 in funding from the ATSC (which includes \$2,915,694.85 for FY23 and a carryover of \$289,219.35 from FY22), while grants and contracts totaled \$13,383,580. This indicates a 4.18:1 ratio of extramural award funding to tobacco funding.

Testimonials

Celebrating the Life and Contributions of Joe Bates



In this testimonial, writer for the College of Public Health, Kev Moye (2023a), honored the life of Joe Bates

Joe Bates M.D., M.S., associate dean for public health practice for the UAMS Fay W. Boozman of College of Public Health, died September 29, 2023. Bates — a dedicated husband, family man, health leader, and humanitarian — was 90.

"Dr. Joe Bates was a giant of a man who had an immeasurable impact on public health and medicine," said UAMS Chancellor Cam Patterson, M.D., MBA. "He was instrumental in the development of the UAMS College of Public Health, the Arkansas Center for Health Improvement and in directing tobacco settlement dollars to public health initiatives. He was brilliant and devoted his life to helping ensure better health for his fellow Arkansans. We are forever grateful to him and will do all we can to carry on his legacy."

"Dr. Bates was a devoted champion of public health," said Mark Williams, Ph.D., dean of the College of Public Health. "He recognized the difference between clinical medicine and public health and, as importantly, the absolute need for both to improve the health of Arkansans."

A pioneer in the health industry, Bates was born September 19, 1933. A native of central Arkansas, Bates attended Hendrix College in Conway and eventually the University of Arkansas at Fayetteville. He continued his education at the University of Arkansas School of Medicine (now UAMS), where he earned his medical degree. Bates became a trailblazer who improved the standard of living for generations of Arkansans.

Joe Thompson, M.D., MPH, is president and CEO of the Arkansas Center for Health Improvement (ACHI). He's among the many people who not only viewed Bates as a colleague but as a comrade who could be trusted to provide guidance. "Joe Bates was an important, inspiring advocate for public health," Thompson said. "He was a mentor for a generation of medical students and a dear friend who worked tirelessly to improve the health of Arkansans." Among Bates' accolades that help to comprise his legacy, he is credited with the following:

- Co-creator of a groundbreaking tuberculosis treatment;
- ADH Chief Science Officer;
- Member of the UAMS College of Medicine Hall of Fame;
- President of the American Thoracic Society;
- Chief of Medical Services at the Little Rock Veterans Administration Center;
- Co-founder of ACHI;
- President of the American Lung Association;
- Chair of the Little Rock Veterans Administration Department of Medicine; and
- Joined other public health experts in lobbying for Arkansas to use a portion of its Tobacco Settlement funding to create a public health college.

"Our state, our country, and our world are healthier today as a direct result of the dedication and commitment to service exemplified by Dr. Joe Bates," said Kevin Ryan, J.D., associate professor and associate dean for students and alumni affairs in the College of Public Health.

"Dr. Bates is a founding father of the College of Public Health," Williams said. "Without the difficult work he and the committee undertook to persuade Arkansans to use the tobacco settlement to improve the health of the people of Arkansas, the college and several other important health concerns would not exist. His work on behalf of the college and public health in general is a true legacy for Arkansas."





ARKANSAS MINORITY INITIATIVE

Kenya Eddings, MPH, Director

UCA Evaluator: Denise Demers, PhD, CHES





ARKANSAS MINORITY HEALTH INITIATIVE

MHI USES MULTIPLE PLATFORMS TO REACH MINORITY POPULATIONS AND COMMUNITIES













32,636

HEALTH
SCREENINGS

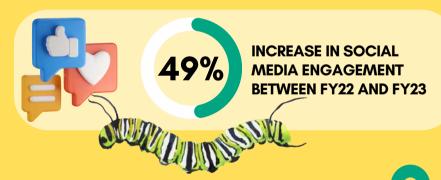




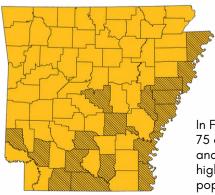
16,322 ARKANSANS EDUCATED











■ COUNTY REACHED
BY MHI AND PARTNERS

□ COUNTY WITH MINORITY
 POPULATIONS ABOVE 40%

In FY22-23, MHI and partners reached all 75 counties and provided vital education and screenings for Arkansans. The map highlights counties with minority populations above 40%.



CONTINUED REPUTATION OF GOOD STEWARDSHIP

MHI received \$4,008,165 in FY22-23, and the program upholds good stewardship of tobacco funds by partnering with a variety of cross-sector partners, offering health screenings and educational events and resources to all counties. MHI also appropriated CARES funds in FY22 to assist minority populations during the pandemic.

Program Description and Goals



Program Description

The Arkansas Minority Health Initiative (MHI) was established in 2001 through Initiated Act I to administer the Targeted State Needs for screening, monitoring, and treating hypertension, strokes, and other disorders disproportionately critical to minority groups in Arkansas by 1) increasing awareness, 2) providing screening or access to screening, 3) developing intervention strategies (including educational programs) and developing/maintaining a database. To achieve this goal, the MHI's focus is on addressing existing disparities in minority communities, educating these communities on diseases that disproportionately impact them, encouraging healthier lifestyles, promoting awareness of services and accessibility within our current healthcare system, and collaborating with community partners.

Program Goal

The goal of the MHI is to improve healthcare systems in Arkansas and access to healthcare delivery systems, thereby resolving critical deficiencies that negatively impact the health of the citizens of the state.



Evaluator Summary and Comments



Economic Impact

During FY22 and FY23, the MHI received 3.6% of the total ATSC funds, \$1,976,014.12 and \$2,032,150.96 respectively. The MHI remains a good steward of all funds received by partnering with an increased number of community, grassroots, nonprofit, and faith-based organizations and offering health screenings, educational events, and materials to all counties in Arkansas and throughout all congressional districts. Additionally, the MHI offers thousands of advertisements about important health-related issues for minority groups via radio, TV, and social media.



Opportunities

The MHI remains constant in their commitment to welcome new opportunities to partner with a variety of grassroots, nonprofit, government, and faith-based organizations. These partnerships not only increase awareness and provide multiple screenings that reduce death and disability due to lifestyle-related illnesses, but also increase morale among rural Arkansas. Along with partnerships, the Mobile Health Unit (MHU) has become integral in providing screenings and additional resources to hard-to-reach areas of the state. During and after COVID-19, the MHI worked hard to continue their outreach. They turned that challenge into a great opportunity within the realm of social media. This effort remains robust as the MHI carries on with the opportunity to capitalize on topics and issues of great importance to minority Arkansans.



Challenges

Despite challenges of meeting minority Arkansans where they reside, as well as increasing awareness in a state consistently ranked poorly in health outcomes, the MHI remains diligent in their efforts to improve the quality of life for Arkansans. Although educating rural and disadvantaged communities is difficult, the overwhelming hurdles for the MHI throughout this biennium have been regarding personnel changes and discrepancies and equipment repairs. Because of the hiring freeze in January 2023, positions still remain unfilled, which has caused an extra strain on those who remain and continue to provide adequate outreach in the community. Furthermore, the MHU needed repairs during parts of this biennium, which stopped some of the MHI's screening processes. Despite these stumbling blocks, the MHI persisted to educate minority Arkansans.



Evaluator Comments

Heart disease remains the leading cause of death for our nation, and Arkansas continues to be ranked poorly when it comes to health outcomes (48 out of 50 states). However, the MHI has sustained its commitment to reducing death/disability due to tobacco, chronic, and other lifestyle-related illnesses of Arkansans. The agency's continued effort to provide minority Arkansans with health-related information, screenings, and social media campaigns shows diligence and dedication to improving the health of Arkansans, specifically for minority populations and those in rural areas. The MHI continues to increase awareness, establish new and strengthen existing partnerships, provide multiple health screenings, and provide vital services as they strive to shape the culture of health for minority and rural Arkansas. Furthermore, they continue to increase their impact and remain exceptional in their accountability of monies received.

Indicators and Progress

Long-Term Objective

Reduce death/disability due to tobacco, chronic, and other lifestyle-related illnesses of Arkansans.

#1 Indicator

The MHI will raise awareness and provide access to screenings for disorders disproportionately critical to minorities as well as to any citizen within the state regardless of racial/ethnic group, as measured by the number of health screenings, educational encounters, counties reached, as well as efforts related to multimedia outreach.

>>> FY22 - Met

Activity - This indicator was met. Although COVID-19 remains a small influence, the MHI continues to schedule outreach initiatives and sponsor multiple health fairs, educational events, and screening initiatives which has resulted in substantial increases from last year. In addition to face-to-face events, MHI's impact reaches hundreds of thousands via multimedia efforts. Below are the FY22 efforts.

- During FY22, the MHI shared educational information via outreach events with 10,664 (275% increase
 from FY21). Health screenings totaled 21,805 (up from 9,817 in FY21, a 222% increase). Further, the MHI
 was able to utilize their Mobile Health Unit (MHU) to provide screenings across the state. Each quarter,
 the MHU has provided anywhere from 50% to 80% of the total number of screenings. This program has
 been a huge success and continues to bring screenings and educational encounters to minority
 populations throughout the state.
- Although the MHI was not as limited in terms of face-to-face events, COVID-19 still played a role in the scheduling and implementation of events. However, the agency contributed health information through their multimedia outreach. The MHI increased their radio and television ads focusing on a variety of health topics including tobacco, COVID-19, cholesterol, nutrition, and exercise. More than 20,000 ads were disseminated via radio and TV. The MHI also continued to use print media, webpages, and social media to disseminate information. On their social media platforms alone, more than 350,000 impressions were reported during this fiscal year.
- Using CARES funds, MHI provided 4,227 masks and 17,128 sanitizers in 42 counties in the state. This initiative along with the MHI's outreach events mentioned above reached a total of 57 counties.

>>> FY23 - Met

Activity - This indicator has been met. The MHI continues to schedule outreach initiatives and sponsor multiple health fairs, educational events, and screening initiatives throughout the state, which has resulted in sustained progress toward raising awareness and providing access to screening. In addition to face-to-face events, MHI reaches hundreds of thousands of Arkansans via multimedia efforts. Below are the FY23 efforts related to this indicator.

- In FY23, the MHI shared educational information via outreach events with 5,658 Arkansans (150% increase from FY21) from 56 counties. Health screenings totaled 10,831 (about half as many as in FY22). Further, the MHI was able to utilize its MHU to provide screenings across the state.
- The MHU has become a strong force for the MHI. Each quarter, the MHU provided anywhere from 50% to 80% of total screenings. This year the MHU provided nearly 80% again. This program has been a success and continues to bring screenings and education to minority groups, reaching 45 counties (an increase of 14 counties) this year.
- Information given via MHI's multimedia outreach remains a constant force for raising awareness of healthy habits. MHI continued its radio and TV ads focusing on a variety of health topics including tobacco, COVID-19, cholesterol, nutrition, and exercise. The MHI also continued to use print media, webpages, and social media to disseminate information. On its social media platforms alone, more than 520,000 impressions (1.5 times the number last year) were reported during FY23.

Indicators and Progress

Short-Term Objective

Prioritize the list of health problems and planned interventions for minority populations and increase the number of Arkansans screened and treated for tobacco, chronic, and lifestyle related illnesses.

#2 Indicator

The MHI will maintain the number of health screenings and educational encounters related to stroke awareness for minority Arkansans within a 10% variation of the previous fiscal year.

>>> FY22 - Met

Activity - This indicator was met. With continued robust education of minority Arkansans regarding high blood pressure and cholesterol, the two leading causes of stroke, MHI has increased in every marker related to this indicator. MHI's efforts related to this indicator are provided below.

- The MHI provided 3,277 blood pressure screenings and 2,451 cholesterol screenings this year; this is an increase of 300% and 400%, respectively, from the previous fiscal year.
- The agency also ran more than 20,000 paid TV and radio commercials focused on healthy eating and
 exercise, the importance of health screenings related to stroke, and tobacco prevention and cessation
 to avoid stroke risks.
- Minority Arkansans were also educated about stroke risk through community events. Through these
 events, the MHI reached over 10,000 Arkansans this fiscal year. Educational encounters are still being
 impacted by COVID-19; however, MHI reached thousands of people across the state through outreach
 events and reported approximately 350,000 social media impressions on Facebook and Twitter.

>>> FY23 - Met

Activity - This indicator was met. With continued robust education of minority Arkansans regarding high blood pressure and cholesterol, the two leading causes of stroke, MHI has increased in every marker related to this indicator. The MHI provided 1,935 blood pressure screenings and 1,633 cholesterol screenings this year; this is an increase of 300% and 400%, respectively, from the previous fiscal year. The agency also ran more than 6,000 paid TV and radio commercials focused on healthy eating and exercise, the importance of health screenings related to stroke, and tobacco prevention and cessation to avoid stroke risks. Minority Arkansans were also educated about stroke risk through community events. MHI reached thousands of people across the state through outreach events and reported approximately 520,000 social media impressions on Facebook and Twitter.

#3 Indicator

The MHI will maintain the number of health screenings and educational encounters related to hypertension awareness for minority Arkansans within a 10% variation of the previous fiscal year.

>>> FY22 - Met

Activity - This indicator was met and far exceeded the indicator criteria. MHI's efforts related to hypertension awareness are documented below.

- Hypertension is the leading cause of stroke. During FY22, the MHI provided 3,277 blood pressure screenings. Additionally, more than 8,000 paid television commercials encouraging healthy behaviors related to hypertension were aired on six television stations in Central and Northwest Arkansas. The MHI has been able to provide educational resources related to blood pressure awareness to over 10,000 Arkansans at various community events.
- The MHI reached several thousand Arkansans over the course of the year through their social media campaigns, recording nearly 350,000 impressions on Facebook and Twitter.

Arkansas Minority Health Initiative

Indicators and Progress

>>> FY23 - Met

Activity - This indicator was met. Hypertension is the leading cause of stroke. In FY23, the MHI provided 1,935 blood pressure screenings. Also, more than 6,000 paid television commercials encouraging healthy behaviors related to hypertension were aired on six television stations in central and northwest Arkansas. The MHI reached several thousand Arkansans over the course of the year through their sponsored events and social media campaigns, recording nearly 520,000 impressions on Facebook and Twitter.

#4 Indicator

The MHI will maintain the number of health screenings and educational encounters related to heart disease awareness for minority Arkansans within a 10% variation of the previous fiscal year.

>>> FY22 - Met

Activity - This indicator was met As stated above, all screening numbers increased over the course of the fiscal year including the number of screenings related to heart disease. All other community and media efforts continue to increase. MHI's efforts related to heart disease awareness are documented below.

- High cholesterol levels lead to heart disease. This year, MHI provided 2,451 cholesterol screenings. The MHU has been serviceable and increased this number tremendously compared to FY21.
- Additionally, thousands of paid television commercials encouraging healthy behaviors were aired on six television stations in Central and Northwest Arkansas. The MHI has been able to provide educational resources related to heart disease awareness to over 10,000 Arkansans at various community events.
- With heart disease as the leading cause of death in the nation, the MHI has worked diligently with minority Arkansans to raise awareness of the many ways to combat this deadly disease. Screenings, educational encounters, and outreach events remain a top priority. The MHI works hard to establish new community partners while strengthening those relationships already made. With the help of the MHU, the MHI is on their way to meeting this indicator for FY23.

>>> FY23 - Met

Activity - This indicator was met. This year's screening numbers looked more like FY20 and FY21 numbers, though the cholesterol screenings during FY23 increased 121% and 183% from FY20 and FY21, respectively. Additionally, all other community and media efforts continue to increase. MHI's efforts related to heart disease awareness are documented below.

- High cholesterol levels lead to heart disease. During this year, the MHI provided 1,633 cholesterol screenings. The Mobile Health Unit was also serviceable to the communities.
- Additionally, thousands of paid television commercials encouraging healthy behaviors were aired on six television stations in central and northwest Arkansas.

#5 Indicator

The MHI will maintain the number of health screenings and educational encounters related to diabetes awareness for minority Arkansans within a 10% variation of the previous fiscal year.

>>> FY22 - Met

Activity - This indicator was met. Glucose screenings increased 300% from the previous fiscal year. Additionally, the MHI continued to ramp up the other opportunities to educate minority Arkansans regarding their health. MHI's efforts related to this indicator are documented below.

During FY22, 2,748 blood glucose screenings were offered by the MHI. Also, thousands of paid television commercials encouraging healthy behaviors were aired on six television stations in Central and Northwest Arkansas. The MHI has been able to provide educational resources related to diabetes awareness to over 10,000 Arkansans at various community events.

Arkansas Minority Health Initiative

Indicators and Progress

>>> FY23 - Unmet

Activity - This indicator was unmet. Glucose screenings increased almost 200% from FY21. However, from the previous fiscal year (FY22), this indicator was a couple hundred short of the goal for FY23 (about 10% short). Additionally, the MHI continued to ramp up the other opportunities to educate minority Arkansans regarding their health. MHI's efforts related to this indicator are documented below.

 During this fiscal year, 2,008 blood glucose screenings were offered by the MHI, and the agency educated several thousand Arkansans on important health topics. Also, hundreds of thousands of paid television commercials encouraging healthy behaviors were aired on six television stations in central and northwest Arkansas.

Indicator #6

The MHI will conduct ongoing needs assessments to determine the most critical minority health needs to target, including implementation of a comprehensive survey of racial and ethnic minority disparities in health and healthcare every five years.

>>> FY22 - On Track to Meet Five-Year Goal

Activity - This indicator is on track to meet the five-year goal. The survey is completed every five years. In FY19, the UALR Survey Research Center conducted the most recent update of the Arkansas Racial and Ethnic Health Disparities Study. A hardcopy of the final report is available upon request. The next survey will be in FY24. In the meantime, MHI consistently monitors health issues that are critical to minority Arkansans. These health issues are translated into educational materials and multimedia ads (including social media campaigns).

>>> FY23 - On Track to Meet Five-Year Goal

Activity - This indicator is on track to meet the long-term goal. The survey is completed every five years. In FY19, the UALR Survey Research Center conducted the most recent update of the Arkansas Racial and Ethnic Health Disparities Study. A hardcopy of the final report is available upon request. The next survey will be in FY24.

Indicator

The MHI will develop and implement at least one pilot project every five years to identify effective strategies to reduce health disparities among Arkansans.

>>> FY22 - Met

Activity - This indicator was met. Camp iCan was implemented during the summer months of 2022 as a three-day program with activities, workshops, and exercises that promote healthy eating, physical activity, and self-confidence development. This year the MHI partnered with Hendrix College and the Boys and Girls Club of McGehee. Forty-one youth from Faulkner, Pulaski, and Desha counties participated in the threeday camp designed to educate and empower young boys and girls. Campers were equipped with the necessary tools to understand and combat key risk behaviors that lead to unhealthy lifestyles.

>>> FY23 - Met

Activity - This indicator has been met for FY23. Camp iCan was implemented during the summer months of 2023 as a three-day program with activities, workshops, and exercises that promote healthy eating, physical activity, and self-confidence development. Forty-five youth participated in the camp.

Testimonials

Summer Camp Partnership to Empower Local Youth

Camp iCAN is a three-day program for Arkansas youth that offers activities, workshops, and exercises to promote healthy eating, physical activity, and self-confidence development. This year, Heart2Heart Connections participated in Camp iCAN, offering programming to 45 children who took part in Heart2Heart Connections' Summer Camp. Below is a testimonial from Carolyn Harris, founder and executive director of Heart2Heart Connections.

"Our students and staff would like to thank the Arkansas Minority Health Commission for partnering with us at Heart2Heart Connections Summer Camp, making it extra special this year. This fantastic partnership allowed us many activities and experiences we had not had available in previous years. Your support not only gave us a first-class week of engaging and learning for the students, but it has also allowed us to impact the surrounding communities in a positive way!"

Harris also provided a summary of Camp iCAN activities.

- "Rhonda Gilbert-Hines, Arkansas Minority Health, taught us kitchen fundamentals emphasizing healthy food alternatives and how to prepare them at home. She also provided goodies bags, which included infusion bottles, aprons, yoga mats, and many other goodies."
- "Harleigh Livingston, Arkansas Cooperative Extension, taught yoga techniques and made this day one to remember. We learned stress relief exercises and healthy coping skills. The Glow Germ hygiene activities taught us the importance of proper hand-washing practices."
- "Meg Gholson, Recycle Bikes for Kids, provided bikes and helmets to our students this year! After teaching about bike maintenance and safe riding fundamentals, the students went on to help a few of their fellow students ride a bike for the very first time! It was an exciting time that day, and the days that have followed have added a sense of freedom and adventure for the kids and neighbors throughout the community."
- "Detrich Smith, Arkansas Department of Health, We Can Catch class. In this class, we learned the importance of daily physical activity. Moving the body 60 minutes daily is the minimum requirement for a strong and healthy growing body."



Harris added, "At our Camp iCAN graduation celebration, Heart2Heart staff presented the students with a certificate of completion to commemorate the growth and development achieved at camp. Students returned home with new skills to carry throughout life and a new bike to maintain the healthy skills learned throughout this exciting week! Campers will remember the moments created through this partnership. We are grateful for each person who offered their time and skills to continue enriching our youth—Heart2Heart Summer Camp in cooperation with CAMP iCAN GROW.GLOW.GO has created a lasting impact on our community and memories that will last a lifetime."



TOBACCON PREVENTION AND CESSATION PROGRAM





TOBACCO PREVENTION AND CESSATION PROGRAM

42,444

ARKANSANS
EDUCATED





7,228
CALLERS ENROLLED IN TOBACCO CESSATION

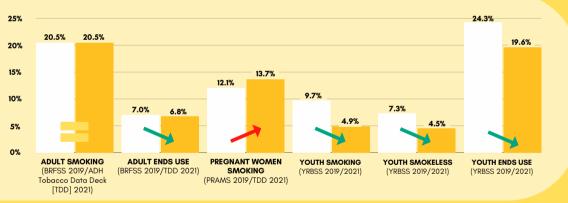


QUIT RATE VIA BE WELL ARKANSAS ON AVERAGE IN FY22-23, THE HIGHEST QUITLINE RATE IN THE U.S.



TRENDS IN TOBACCO, SMOKELESS, AND ENDS USE

In FY23, TPCP reported reductions in adult and youth ENDS use and youth smoking and smokeless rates. Adult smoking rates stayed the same; rates increased in pregnant women.







GRADUATES
Graduate Addiction Studies
Program (GASP)



FAITH-BASED GROUPS ENGAGED Minority Sub-Recipient Grant Office (MISRGO)



TOBACCO STUDIES
FUNDED
MINORITY RESEARCH CENTER (MRC)





■ TWO CHAPTERS

ONE CHAPTERS

At the end of FY23, 89 Project Prevent Youth Coalition chapters were active in 49 counties. These chapters engage youth in tobacco education and prevention activities.





Arkansas smokers experience lifetime out-of-pocket costs of \$132,802, increased healthcare costs of \$131,351, and income loss of \$427,464 (McCann, 2024). This equates to lifetime costs of \$714,496 or \$14,885 annually. Approximately 2,539 Be Well callers quit smoking in FY22-23. THESE ARKANSANS WILL SAVE \$37.8 MILLION IN THE COMING YEAR.



Program Description and Goals



Program Description

The Arkansas Department of Health (ADH) Tobacco Prevention and Cessation Program (TPCP) includes community and school education prevention programs, enforcement of youth tobacco control laws, tobacco cessation programs, health communications, and awareness campaigns. The TPCP also sponsors statewide tobacco control programs that involve youth to increase local coalition activities, tobacco-related disease prevention programs, minority initiatives and monitoring, and evaluation. The TPCP follows the Centers for Disease Control and Prevention Best Practices for Tobacco Control 2014 as a guide for program development. Outcomes achieved by Arkansas's TPCP include reducing disease, disability, and death related to tobacco use by preventing initial use of tobacco by young people, promoting quitting, eliminating exposure to secondhand smoke, and educating Arkansans about the deleterious health effects of tobacco use.

Program Goal

The goal of TPCP is to reduce morbidity and death associated with tobacco use by preventing initiation of tobacco/nicotine products and providing cessation services/resources to Arkansans who want to quit using tobacco.



Evaluator Summary and Comments



Economic Impact

In FY22, the Tobacco Prevention and Cessation Program Account received \$15,210,375.91 from the ATSC. This is an increase of \$420,176.65 from the FY21 fund allocation. As directed by the Tobacco Settlement Proceeds Act, 15% of these funds (\$2,281,556.39) was deposited into the Minority Communities Special Account at the University of Arkansas at Pine Bluff (UAPB). The remaining 85% (\$12,928,819.52) was utilized by Arkansas Department of Health (ADH) TPCP and partners in FY22. The Breast Cancer Control Fund received \$500,000, the Child Health Advisory Committee received \$600,150, and Arkansas Tobacco Control (ATC) received \$375,000. The Great Strides Program (Trails for Life) was not funded during FY22; however, discussions will be held to determine their level of funding for future fiscal years. Thus the balance allocated to the ADH TPCP for FY22 was \$11,453,669.52.

In FY23, the TPCP Account received \$13,765,886.39 from the ATSC. This is a decrease of \$1,444,489.52 from the FY22 fund allocation. As directed by the Tobacco Settlement Proceeds Act, 15% of these funds (\$2,064,882.96) was deposited into the Minority Communities Special Account at UAPB. The remaining 85% (\$11,701,003.43) was utilized by ADH TPCP and partners in FY23. The Breast Cancer Control Fund received \$500,000, the Child Health Advisory Committee received \$600,150, and the Great Strides Program (Trails for Life) received \$250,000. While the ATC typically receives funding, during FY23 they had a balance that needed to be spent; therefore, they did not receive any funds. Thus the balance allocated to the ADH TPCP for FY23 was \$10,350,853.43.

Smoking addiction comes at a cost for Arkansans. In the article, "The Real Cost of Smoking by State" (see https://wallerhub.com/edu/the-financial-cost-of-smoking-by-state/9520), Adam McCann (2024) calculated, by state, the financial costs of smoking across one's lifetime as well as annually. He estimated that each smoker in Arkansas experiences lifetime out-of-pocket costs of \$132,802 (approximately \$2,767 annually), increased healthcare costs of \$131,351 (approximately \$2,736 annually), and income loss of \$450,343 (approximately \$9,382 annually). Thus, it is easy to show how the reduction of smoking in the state not only contributes to the health of Arkansans, but also to the financial health of the state as a whole.



Opportunities

One highlight of this biennium was the creation by TPCP personnel of the two episodes of Coral's Reef and the various supplemental materials including age-appropriate coloring and activities books, a themed hand washing book, stickers, and bag. This vape prevention animated program is the first in the nation to target kindergarten through second grade youth. In regards to day-to-day operations, the past two years has seen a return to faceto-face programming with the benefit of reaching a wider audience via virtual offerings. In the second quarter of FY24 (July-September 2023), there were a large amount of programming and training opportunities offered. On October 23-27, 41 people received virtual Tobacco Treatment Specialist training. The Arkansas Cancer Coalition (ACC) gave six presentations to 534 attendees. ACC personnel also participated in three events with 6,400 attendees: Arkansas Goat Festival (400 attendees), Arkansas State Fair (3,000 attendees), and St. Bernards Community Outreach Event (3,000 attendees). ACC's virtual Tobacco and Disease Symposium attracted 89 attendees. Finally, ACC provided 309 lung cancer screenings, with 24 people qualified for LDCT (a low-dose CT scan). Project Prevent held three statewide meetings from October to December with over 20 advisors. The Arkansas Tobacco Education Initiative (ARTEI) was active with various presentations and events. ARTEI made 11 vaping presentations to 1,868 students, presented an Act 811 webinar to three attendees, and presented at three conferences: an Arkansas Home Visiting Network Conference with 200 attendees, a Region 9 Prevention Conference at University of Arkansas at Little Rock (UALR) MidSouth with 50 attendees, and a conference for the Arkansas Early Childhood Education Association with 250 attendees. ARTEI also attended three events: a Fall Fest with National Park College (NPC) with 60 attendees, a Trunk or Treat event with the Pine Bluff Early Childhood Association with 150 attendees, and a Community Health Fair with NPC with 110 attendees. Also, a Red Ribbon Vaping Booth was held at Dover High School, Atkins Middle School, and Pottsville Junior High during Red Ribbon Week, while two vaping presentations were given at Atkins High School.

Evaluator Summary and Comments



Challenges

A few significant challenges were identified by TPCP and its sub-grantees. There were some challenges noted in scheduling presentations in various schools across the state: some schools did not have the technology or a large enough meeting space to easily allow for the presentation; presentations may need a more "attention grabbing" format, especially with some of the older youth; and there was a need to schedule the presentation earlier in the school year to not interfere with end-of-year activities. However, sub-grantees suggested ways to address these challenges by, for example, setting the presentation for earlier in the school year and working with the schools more closely in regards to the space and technology available.



Evaluator Comments

There is a notable difference in the tone of this biennial evaluation report when compared to that for 2020-2021. In the previous report, COVID-19 restrictions limited face-to-face training, presentations, meetings, and conferences for TPCP and its sub-grantees. Youth Electronic Nicotine Delivery System (ENDS)/e-cigarette use had surpassed the baseline, while the Be Well Arkansas's tobacco cessation quit rate fell below the baseline. Both the quit rate and the quitline participation being lower, in part, due to reported COVID-19 stressors experienced by Arkansans. During the years of 2022-2023, however, TPCP and its sub-grantees have been able to return to many face-to-face encounters, while still utilizing virtual formats in order to reach a wider audience of Arkansans. Additionally, recent data reflect a downward trend in ENDS/e-cigarette usage by youth and a tobacco cessation quit rate that now surpasses the baseline. This support and excitement for tobacco/nicotine use cessation programming can best be seen in the Testimonial section where an increase in the number of requests for presentations is reported, as well as in the Opportunities section where the creation of a new and innovative Coral's Reef animated series and supplemental materials targeting kindergarten through second grade youth are featured.

The TPCP operates on a fiscal calendar; thus, the indicator progress noted in this report covers to the end of FY23. Below is a summary of progress made during the second quarter of FY24.

• TPCP: While long-term indicator activities are summarized in the fourth quarter of the fiscal year, progress made during the second quarter for TPCP and its subgrantees is provided. Community sub-grantees conducted 292 presentations, with approximately 9,727 attendees, covering the following topic areas: economic burden of tobacco use, current and emerging tobacco/nicotine products, and dangers of exposure to secondhand smoke and strategies for decreasing exposure. Statewide sub-grantees conducted 17 presentations, with approximately 3,225 attendees. Details for these trainings by community and statewide sub-grantees are discussed further in the Opportunity section. A total of 1,005 unannounced compliance checks were completed by the ATC with 85 sales-to-minor violations for a non-compliance rate of 8.46%. There were 26 online complaints submitted and eight that were called into the 1-877-ID-TEENS number. A total of 211 attendees received retailer training. Be Well Arkansas (BWA) received 1,550 calls inquiring about tobacco cessation, hypertension, and/or diabetes. A total of 792 individuals enrolled in the tobacco cessation program. Additionally, the BWA Call Center mailed out 356 diabetes and/or hypertension pamphlets as requested by callers. The actual quit rate is reported annually in the fourth quarter. During the second quarter, 28 women were enrolled in the Be Well Baby program. A total of 141 counseling sessions were conducted (28 mothers counseled, 80 prenatal sessions, and 33 postnatal sessions). Also, 32 educational packets were mailed to healthcare professionals. No Project Prevent chapters were established in Red Counties during this quarter. Media activities from the ADH Health Communication multi-platform will be discussed annually in the fourth quarter report.

Evaluator Summary and Comments

Evaluator Comments (Continued)

- Minority Initiative Sub-Recipient Grant Office (MISRGO): Much of their work during the second quarter of FY24 was spent on planning two events that will occur in May 2024. First, MISRGO will partner with the Coalition for a Tobacco-Free Arkansas to implement No Menthol Sunday activities. Second, MISRGO will sponsor the 21st Clearing the Air in Communities of Color conference in partnership with the Arkansas Cancer Coalition's 25th Arkansas Cancer Summit (awards banquet on May 8 and Cancer Summit on May 9). The virtual Clearing the Air Conference will serve as a pre-conference on May 8 and will include the following presentations: "Pushing Cool-Big Tobacco"; "Racial Marketing and the Untold Story of Menthol"; "Understanding the Complex Dynamics of Cigarette Smoking and its Impact on Substance Use and Crime"; "African-American College Student's Attitudes and Behaviors about Tobacco Use during COVID"; "Assessing Attitudes, Norms and Behavioral Control among Minority Populations using Tobacco Products and their Attempts at Cessation"; and "A Conversation with Jay Francis Springs."
- Minority Research Center (MRC): Two main activities completed during the second quarter of FY24 include the distribution of a new request for proposals (RFP) and the planning of two activities that will be completed in the spring of 2024. First, because the funding of the current RFP will end June 2024, the MRC distributed in December a new RFP to institutions around the state. The new research topics to be funded are as follows: (1) research focused on tobacco use and mental health in Arkansas's minority population, (2) research focused on the dual usage of combustible cigarettes and marijuana in Arkansas's minority population, and (3) research focused on the dual usage of combustible cigarettes and e-cigarettes/vapes in Arkansas's rural population. A request for an update to this indicator for FY25 will be made at the April 2024 ATSC meeting. Second, the MRC made progress scheduling meetings during March to May 2024 in minority communities to discuss tobacco usage among minority groups with the first occurring in March with the Future Builders Coalition. Additionally, open editorials on topics similar to the topical areas of the new RFP will be sent to small-town newspapers in April during Minority Health Month.
- Graduate Addiction Studies Program (GASP): During the second quarter of FY24, four new students were recruited to the program and will begin their studies in January 2024. One student graduated in December 2023. Additionally, five GASP students were awarded stipends in the amount of \$800 each. GASP faculty and students continue to make progress on two indicator-related activities. First, they are working on developing the framework for a tobacco prevention/cessation program specifically designed for juvenile offenders housed at detention in Jefferson County. Second, a student working on the development of a virtual presentation on symptoms of marijuana use addiction submitted the first draft for review and has received faculty feedback to implement revisions.

Indicators and Progress

Long-Term Objective

Survey data will demonstrate a reduction in numbers of Arkansans who smoke and/or use tobacco.

#1 Indicator

By June 2025, the TPCP will work to decrease the current smoking/smokeless tobacco/Electronic Nicotine Delivery System (ENDS) use rate among youth (grades 9-12) from 13.7% to 11.7% for smoking, from 12.7% to 11.7% for smokeless tobacco, and from 13.9% to 12.9% for ENDS.

>>> FY22 - On Track towards Long-Term Goal

Activity - This indicator is on track towards the long-term goal. It is expected that ongoing COVID-19 restrictions impact the current ability of TPCP and its partners to have direct contact with youth in grades 9-12. However, the Arkansas data available for this interim progress report come from the 2019 Youth Risk Behavioral Surveillance Survey (YRBSS) which reflect pre-COVID-19 numbers.

- The Arkansas youth smoking rate is 9.7%. The baseline rate was 13.7%.
- The Arkansas youth smokeless rate is 7.3%. The baseline rate was 12.7%.
- The Arkansas youth Electronic Nicotine Delivery System (ENDS)/e-cigarette rate is 24.3%. The baseline
 was 13.9%.
- There has been a downward trend in both cigarette and smokeless use among youth. However, as
 noted in previous reporting since 2019, there has been an increase in ENDS/vaping product use among
 youth. Preliminary data reveals that ENDS/vaping product use among youth has not dropped during
 the COVID-19 pandemic.

>>>> FY23 - On Track towards Long-Term Goal

Activity - This indicator is on track towards the long-term goal. It is expected that ongoing COVID-19 restrictions impact the ability of TPCP and its partners to have direct contact with youth in grades 9-12. Data for this variable originally reported in the fourth quarter FY23 report were not correct; thus, this error is corrected below. The following indicator data are taken from the results of the 2021 Youth Risk Behavior Survey for Arkansas:

- The Arkansas youth smoking rate is 4.9%. The baseline rate was 13.7%.
- The Arkansas youth smokeless rate is 4.5%. The baseline rate was 12.7%.
- The Arkansas youth Electronic Nicotine Delivery System (ENDS)/e-cigarette rate is 19.6%. This is higher than the baseline rate of 13.9%. Although the current rate is higher than that of the baseline, it does represent a decrease from the FY22 rate of 24.3%.

#2 Indicator

By June 2025, 1) the TPCP will work to decrease smoking use among adults (18+) from 22.3% to 20.3%, 2) decrease ENDS use among adults (18+) from 5.7% to 3.7%, and 3) decrease the pregnancy smoking rate from 13.9% to 11.9%.

>>>> FY22 - On Track towards Long-Term Goal

Activity - This indicator is on track towards the long-term goal. It is expected that ongoing COVID-19 restrictions impact the current ability of TPCP and its partners to have direct contact with adults and pregnant women. The Arkansas data available for this interim progress report come from the 2018 and 2020 Behavioral Risk Factor Surveillance System (BRFSS) and the 2020 Pregnancy Risk Assessment Monitoring System (PRAMS).

Indicators and Progress

Activity (Continued)

- The 2020 data indicate the adult smoking rate in Arkansas is 20.5%. The baseline from the 2017 BRFSS was 22.3%. These 2020 data reflect a downward trend.
- The 2018 data indicate the adult e-cigarette use rate in Arkansas is 7.0%. The baseline was 5.7%. No new data were available in 2020. As with youth, adults have been impacted by the tobacco industry's focus on the advertising of e-cigarette/vaping products.
- The 2020 PRAMS data indicate the smoking rate of pregnant women in Arkansas is 12.1%. The baseline from the 2017 PRAMS was 13.9%. These 2020 data reflect a downward trend.

>>> FY23 - On Track towards Long-Term Goal

Activity - This indicator is on track towards the long-term goal. Updates for this indicator come from the 2021 Tobacco Data Deck report published by the Arkansas Department of Health.

- The recent adult smoking rate in Arkansas is 20.5%. The baseline from the 2017 BRFSS was 22.3%. These data reflect a downward trend.
- The recent adult e-cigarette use rate in Arkansas is 6.8%. The baseline was 5.7%. This reflects an upward trend.
- The recent smoking rate of pregnant women in Arkansas is 13.7%. The 2017 PRAMS baseline was 13.9%. This reflects a slight downward trend.

#3 Indicator

By June 2025, the number of comprehensive smoke-free/tobacco-free policies will increase from 219 to 400.

>>> FY22 - On Track towards Long-Term Goal

Activity - This indicator is on track towards the long-term goal. The creation of this indicator to track the increase in policies from 219 to 400 was approved by the Arkansas Tobacco Settlement Commission (ATSC) in January 2020. During FY20 through FY22, 21 policies were established in local communities. With the onset of the pandemic, communities, businesses, and housing sectors were not interested in addressing tobacco-free policies while combating the challenges caused by COVID-19. TPCP and sub-grantees are hopeful that as some normalcy returns, local communities will welcome educational efforts regarding tobacco-free policies. This success was seen during FY22 when the Northwest Arkansas Tobacco and Drug Free Coalition worked with the city of Springdale to implement a smoke-free city parks ordinance.

>>> FY23 - On Track towards Long-Term Goal

Activity - This indicator is on track towards the long-term goal. It was established in January 2020. The goal is to increase the number of smoke-free/tobacco-free policies from a baseline of 219 to 400. With the onset of the pandemic, progress towards this goal was severely limited. During FY20 through FY22, 21 policies were established in Arkansas communities. This past year (FY23), additional policies were established within two churches. It is expected that there will be limited progress towards this goal in the coming two years since annual work plans for TPCP and subgrantees are addressing other activities such as those identified in the short-term indicators below.

Indicators and Progress

Short-Term Objective

Communities shall establish local tobacco prevention initiatives.

#4 Indicator

By June 2022/2023, 500 presentations will be conducted to educate the public and decision makers on the economic burden of tobacco use, current and emerging tobacco/nicotine products, implementing smoke-free/tobacco-free policies, and dangers of exposure to secondhand smoke.

>>> FY22 - Unmet

Activity - This goal was not met. While there were only 42 presentations in the first two quarters of FY22, by quarters three and four, there were an additional 41 and 58 presentations respectively for a total of 141. While this number is far less than the goal of 500 presentations, it is promising that the last two quarters saw a dramatic increase in presentations compared to the first two quarters. During the last quarter, a total of 1,866 youth and adults participated in the tobacco, nicotine, and ENDS cessation educational opportunities (3,875 for FY22). Additional training was sponsored by TPCP and sub-grantees during the fiscal year. Ten conferences and training sessions were held to educate healthcare professionals and staff on best practices for tobacco cessation interventions with 672 individuals attending training sessions.

>>> FY23 - Met

Activity - This goal for this indicator was met. During this quarter, approximately 15,291 youth and adults participated in 214 presentations covering the topics of the economic burden of tobacco use, current and emerging tobacco/nicotine products, the dangers of exposure to secondhand smoke and strategies for decreasing exposure, Coral's Reef, and vaping. Statewide sub-grantees conducted 14 presentations with approximately 1,045 attendees. For FY23, a total of 715 presentations were made to approximately 36,402 attendees.

#5 Indicator

By June 2022/2023, maintain the sales-to-minor violations at 6.5% or below (Baseline in FY19 = 6.3%).

>>> FY22 - Unmet

Activity - The goal for this indicator was not met. When compared to FY21 end-of-year statistics of only 1,289 total compliance checks with a non-compliance rate of 12.65%, we can see a significant recovery in FY22 from the impact of early COVID-19 restrictions. During the last guarter of the fiscal year, Arkansas Tobacco Control (ATC) conducted 1,599 unannounced compliance checks with 156 sales-to-minor violations for a non-compliance rate of 9.76%. For FY22, a total of 5,418 unannounced compliance checks and nine behind the counter compliance checks were conducted with 631 sales-to-minor violations for a non-compliance rate of 11.63%. In the last quarter of the fiscal year, an additional 31 sales-to-minor complaints were received by ATC; 22 were received through the 1-877-ID Teens line and nine through the online form. During the final quarter of the fiscal year, ATC offered one educational session for retailers and store owners with seven attendees. For the annual merchant certified training programs, ATC reported 23 certified programs, which covered 329 stores. Also during the last quarter of the fiscal year, ATC reported two managers meetings for those stores with a certified training program. These meetings were held to provide a recap of how their stores were doing following tobacco control laws, including sales to minors. The meetings were an opportunity to discuss the sales to minor violations for the year. Two retail chains were represented with a total of 66 managers attending. For FY22, a total of four educational sessions for retailers and store owners were offered to 43 attendees.

Indicators and Progress

>>> FY23 - Unmet

Activity - The goal for this indicator was not met, although the sales-to-minor violations rate continues to trend downward. In FY21, the non-compliance rate was 12.65%; however, it dropped to 9.76% by the end of FY22. This quarter, 1,192 compliance checks were completed by the Arkansas Tobacco Control (ATC) and there were 136 sales-to-minor violations for a noncompliance rate of 11.41%. However, by the end of the fiscal year, 6,447 unannounced compliance checks were completed with 610 sales-to-minor violations for a total noncompliance rate of 9.46% (which is lower than the FY22 total of 9.76%). During FY23, ATC offered 37 educational sessions for approximately 643 attendees and 375 retailers and store owners.

#6 Indicator

By June 2022/2023, Project Prevent will establish seven new school chapters within the Red Counties (Red Counties are those counties with low life expectancy).

>>> FY22 - Unmet

Activity - The goal was not met. No new chapters were established in the Red Counties during the last quarter of the fiscal year. For FY22, a total of four new school chapters were established by Project Prevent within Red Counties. While this number does not meet the goal of seven new school chapters, it is important to note that only two new chapters were established during FY21. While COVID-19 restrictions have directly impacted programming provided by Project Prevent, this increase in Red County school chapters during FY22 is another indicator that we are recovering from and adapting to pandemic restrictions.

>>> FY23 - Unmet

Activity - The goal was not met. During the current quarter, no new chapters were established in the Red Counties. For FY23, one new school chapter was established during the second quarter in Cleveland County (Red) at Rison High School. During this quarter, Project Prevent facilitated statewide meetings for student attendees.

#7 Indicator

By June 2022/2023, ADH Health Communication will maintain a comprehensive, multiplatform media plan to prevent youth initiation, eliminate exposure to secondhand smoke, and promote cessation. (Report Annually)

>>> FY22 - Met

Activity - The goal was met. During FY22, the Office of Health Communications (OHC) implemented and maintained a comprehensive multimedia plan. The OHC, along with the media vendor, evaluated the needs of the state and targeted media to reach populations more affected than others by tobacco and nicotine use. The media plan focused on the following areas:

- Youth Prevention: Educational messaging about the harms of tobacco/nicotine use inclusive of ecigarettes and other products such as vaping devices while promoting cessation services.
- Tobacco/Nicotine Cessation Messaging: Media messaging designed to drive calls to Be Well Arkansas
 as well as providing education on the harms of tobacco/nicotine products. The Be Well Baby program
 was promoted to assist pregnant women quit tobacco and nicotine use.
- Eliminating Exposure to Secondhand Smoke (SHS): Educational messaging focusing on the harms of exposure to SHS.

For the areas listed above, OHC utilized extensive digital, print, social media, non-traditional, and out of home media. Also, OHC increased Marshallese and Spanish language ads to encourage these minority populations to utilize the Be Well Arkansas cessation services.

Indicators and Progress

>>> FY23 - Met

Activity - The goal for this indicator was met The Office of Health Communications has developed a comprehensive yearly media plan to address youth initiation, reduction of exposure, and promotion of cessation regarding tobacco and nicotine use. This statewide media effort is scheduled to begin in August and will continue until May 2024. The plan encompasses diverse media channels including digital platforms, social media platforms such as YouTube, Facebook, Snapchat, and Instagram, as well as selected print media. By strategically utilizing these channels, they aim to effectively reach and engage with the target audience, raising awareness about the risks of tobacco use among youth, minimizing exposure, and providing resources for cessation.

#8 Indicator

By June 2022/2023, Be Well Arkansas will consistently maintain a tobacco cessation quit rate higher than the previous baseline level of 28% for those enrolled in the program. (Report Quarterly: # of callers requesting service; # of callers enrolled in tobacco cessation counseling {Reset Annually})

>>> FY22 - Met

Activity - The goal was met. During the last quarter, Be Well Arkansas (BWA) received 2,025 calls inquiring about tobacco cessation, hypertension, and/or diabetes. A total of 1,081 individuals enrolled in the tobacco cessation program. For FY22, a total of 6,458 calls were received by BWA with a total of 3,477 eligible callers enrolling in tobacco cessation counseling. This results in a quit rate of 36% for FY22. In addition, during the fourth quarter the BWA call center mailed out 415 diabetes and 132 hypertension pamphlets as requested by callers. For FY22, a total of 1,861 diabetes and hypertension pamphlets were sent out to Arkansans who requested the information.

>>> FY23 - Met

Activity - The goal for this indicator was met. During the quarter, Be Well Arkansas (BWA) received 1,937 calls inquiring about tobacco cessation, hypertension, and/or diabetes. A total of 1,104 individuals enrolled in the tobacco cessation program. For FY23, a total of 6,750 calls were received by BWA with a total of 3,751 eligible callers enrolling in tobacco cessation counseling. The quit rate for FY23 was 34.33%. In addition, during the fourth quarter the BWA call center mailed out 156 diabetes and 372 hypertension pamphlets as requested by callers. For FY23, a total of 1,862 diabetes and hypertension pamphlets were sent out to Arkansans who requested the information.

#9 Indicator

By June 2022/2023, provide quarterly updates on the implementation of the Be Well Baby program.

>>> FY22 - Met

Activity - The goal for was met. For the fourth quarter, 26 women enrolled in the Be Well Baby program. A total of 96 counseling sessions (which include both prenatal and postpartum sessions for previous enrollees as well) were conducted between April and June. FY22 has seen an increase in enrollment across each of the four quarters with a total final count of 77 participants and 286 counseling sessions.

>>> FY23 - Met

Activity - The goal was met. In the fourth quarter, 35 women enrolled in the program. Be Well Baby provides enrolled participants with 34 prenatal and eight postpartum sessions. A total of 100 counseling sessions (which included both prenatal and postpartum sessions for previous enrollees) were conducted between April and June. FY23 has seen an increase in enrollment with a total of 107 women receiving 367 counseling sessions, as compared to FY22 with 77 participants receiving 286 counseling sessions.

Indicators and Progress

#10 Indicator (MISRGO)

By June 2022/2023, the MISRGO will work with five new faith-based churches/organizations to implement No Menthol Sunday (NMS) activities.

>>> FY22 - Met

Activity - The goal for this indicator was met. During this quarter, MISRGO held a No Menthol press conference in partnership with the Coalition for a Tobacco Free Arkansas. In addition, they held a No Menthol Sunday event in partnership with HTC (Holy Temple Cathedral) Cares. The agency reported that five organizations participated in these events during FY22.

>>> FY23 - Met

Activity - The goal for this indicator was met. No Menthol Sunday activities were held on May 17th, including a press conference and the invitation for participants to wear green in recognition of the national observance of the dangers of menthol-flavored tobacco and smoking-related health concerns in communities of color. This year, MISRGO partnered with the Coalition for Tobacco Free Arkansas and Holy Temple Cares. As a result, five churches were involved in implementing No Menthol Sunday activities.

#11 Indicator (MISGRO)

By June 2022/2023, the MISRGO will execute an annual event that supports the mission of the program and report on funded and non-funded attendees.

>>> FY22 - Met

Activity - The goal for this indicator was met. During the third quarter, the 19th Clearing the Air in Communities of Color Conference was held virtually on March 9 with approximately 250 attendees. The theme for the conference was "Finding a Way Forward: Tobacco Control, MentalHealth, and Disparate Population Groups."

>>> FY23 - Met

Activity - The goal was met. The 20th Clearing the Air Conference was held virtually during the third quarter (March 8th) in partnership with the Arkansas Cancer Coalitions's Cancer Summit (March 7th). These meetings were held virtually, in part, as an effort to increase access for a wider range of participants, as well as in response to positive feedback about previous virtual offerings. This year, 99% of respondents reported they were very satisfied/satisfied with the speakers/presenters, while 90.5% rated the event as excellent/above average.

#12 Indicator (MISGRO)

By June 2022/2023, the MISRGO will provide and report on technical assistance through direct stakeholders and property owners regarding reducing tobacco related disparities in Arkansas.

>>> FY22 - Met

Activity - The goal for this indicator was met for FY22. While no technical assistance was reported during the current quarter, in the second quarter MISRGO reported providing technical assistance to the ASU Media Communications Department regarding a local tobacco coalition's grant funding process and ways to integrate current department community outreach into the proposal.

Indicators and Progress

>>> FY23 - Met

Activity - The goal was met. During this fiscal year, MISRGO worked with such stakeholders as the Arkansas Lupus Foundation, the National High School Basketball Association, and the Pulaski County Special School District. This quarter, the MISRGO collaborated with the Minority Research Center (MRC) to bring the "Hate the Vape" tour to the Fordyce, West Memphis, and Blytheville School Districts. As noted below, this virtual and in-person event featured Daniel Ament who received a double-lung transplant due to damage from vaping. Pre- and post-assessments were distributed and are currently being tabulated.

#13 Indicator (MRC)

By June 2022/2023, the MRC will distribute requests for proposals (RFP) to fund research studies focused on: 1. Tobacco cessation among African-American women tobacco users, 2. Tobacco use among minority groups in a time of COVID-19, and 3. Tobacco and opioid use among minority youth and young adults.

>>> FY22 - Met

Activity - The goal was met. In the third quarter, two RFPs for FY22-FY23 were funded. The MRC will be working with Community Clinic and Philander Smith College on the topics of utilization of tobacco treatment in a healthcare setting and tobacco use during COVID-19, respectively.

>>> FY23 - Met

Activity - The goal was met. Two requests for proposals (RFP) for FY22-FY23 were funded during the third quarter of FY22. Since that time, the MRC has facilitated the continuation of the previously awarded subrecipients: Community Clinic and Philander Smith College on the topics of utilization of tobacco treatment in a healthcare setting and tobacco use during COVID-19, respectively.

#14 Indicator (MRC)

By June 2022/2023, the MRC will conduct three virtual and/or face-to-face meetings in minority communities to discuss tobacco usage among minority groups.

>>> FY22 - Unmet

Activity - The goal for was not met. While no meetings in minority communities were conducted during the fourth quarter, the MRC reported two virtual meetings with coalitions in the third quarter.

>>> FY23 - Met

Activity - The goal was met. One service of the MRC is to provide resources to schools and youth regarding vaping and the use of electronic cigarettes. This quarter, the MRC collaborated with MISRGO to provide the "Hate the Vape" tour in the Fordyce, West Memphis, and Blytheville School Districts. This virtual and in-person event featured Daniel Ament who received a double-lung transplant due to damage from vaping. Pre- and post-assessments were distributed and are currently being tabulated.

#15 Indicator (MRC)

By June 2022/2023, the MRC will submit three open editorials to small town newspapers focusing on tobaccorelated issues in rural communities in Arkansas.

>>> FY22 - Met

Activity - The goal was met. During the final quarter of the fiscal year, the MRC worked with Design Group to complete four editorials.

Indicators and Progress

>>> FY23 - Met

Activity - The goal for this indicator was met. The following subjects were used for op-eds this quarter: "Pregnancy and tobacco use," "Tobacco products and opioids," "Vaping and menthol-flavoring," and "Third-hand smoke." These op-eds were pitched to the following publications: Arkansas Democrat-Gazette (a family of newspapers including The Pine Bluff Commercial, Northwest Arkansas Democrat-Gazette, and Washington County Enterprise-Leader), The Evening Times, Chicot County Spectator/The Eudora Enterprise, The Jonesboro Sun, The Log Cabin Democrat, and The Sentinel-Record.

- Arkansas Democrat-Gazette, 5/27/2023: https://www.arkansasonline.com/news/2023/may/27/thirdhand-smoke-a-growing-concern/
- Northwest Arkansas Democrat-Gazette, 5/27/2023: https://www.nwaonline.com/news/2023/may/27/thirdhand-smoke-a-growing-concern/?opinion
- Arkansas Democrat-Gazette, 5/15/2023: https://www.arkansasonline.com/news/2023/may/15/vaping-dangers-clear/
- Northwest Arkansas Democrat-Gazette, 5/15/2023: https://www.nwaonline.com/news/2023/may/15/vaping-dangers-clear/?opinion
- The Sentinel-Record, 4/30/2023: https://www.hotsr.com/news/2023/apr/30/tobacco-opioid-addiction-closely-linked/
- Northwest Arkansas Democrat-Gazette, 4/13/2023: https://www.nwaonline.com/news/2023/apr/13/pregnancy-the-time-to-give-up-smoking/

#16 Indicator (GASP)

By June 2022/2023, GASP faculty and staff will report the number of new students recruited into their program, the number of students who have graduated from the program, and the number of students who have been provided a stipend.

>>> FY22 - Met

Activity - The goal was met. During the fourth quarter, the number of new students recruited to the program was four, the number of students who graduated was five, and the number of students who received a stipend was 14. For FY22, the number of new students recruited to the GASP program was 11, five students graduated, and a total of 14 received a stipend.

>>> FY23 - Met

Activity - The indicator was met. During the fourth quarter, there were 20 students enrolled in the GASP. The GASP did not award any stipends in the last quarter. Two students graduated May 6th, bringing the current number of graduates from the GASP to 134. For FY23 as a whole, the number of new students recruited to GASP was 12, seven students graduated, and a total of 15 students received a stipend.

#17 Indicator (GASP)

By June 2022/2023, GASP faculty will identify programs interested in initiating tobacco prevention curriculum for juvenile justice programs in Jefferson County, Arkansas.

>>> FY22 - Met

Activity - The goal for this indicator was met in FY22. While one meeting was held during the first quarter, during the fourth quarter a GASP representative reported the following:

Indicators and Progress

Activity (Continued)

"The focus (with students) was on developing a tobacco prevention education model. The students and I worked on conceptualizing a tobacco prevention model specific to the detention population as we learned from the literature review that almost none existed. Most prevention programs were generic, one-size-fits all. According to the literature, [the] optimal prevention approach is programming tailored to fit a specific population. At the end we . . . discussed incorporating an Afrocentric component in an awareness that the make-up of the detention center was overwhelmingly African American. I interviewed detention staff, student interns, and other stakeholders in an attempt to assess interests in tobacco prevention; even though there was a consensus that tobacco use is a serious problem, detention personnel questioned its priority as a health concern. So, we immediately realized that an initiative in tobacco prevention education needs to address educating the staff and other stakeholders to build an alliance and solid consensus regarding the need for tobacco prevention education."

>>> FY23 - Met

Activity - The indicator was met. Between April 3 - May 15, the nine-month faculty project leader and students working on this goal concluded their work for the academic year by summarizing that stakeholder interest exists for initiating a tobacco prevention curriculum for the juvenile justice program in Jefferson County. After completing a literature review, it was determined that no appropriate or relevant evidence-based curriculum matching the needs of the Jefferson County Juvenile Detention Center is available. The next step is to identify stakeholder interest in creating such a curriculum in collaboration with faculty and students.

#18 Indicator (GASP)

By June 2022/2023, GASP faculty will explore the possibility of a learning partnership between Be Well Arkansas Quit Tobacco Program and the GASP students.

>>> FY22 - Met

Activity - The goal was met. During the final quarter of the fiscal year, two meetings (for a total of three during FY22) were held to explore the partnership. Dr. Troutman, GASP interim program director and assistant professor, conducted the two meetings to discuss with Joy Gray (TPCP Branch Chief) the scheduling of the GASP students to visit the Be Well call center. During May, two students visited the call center to observe the operations. Prior to the May visit to the call center, Dr. Troutman held a meeting with the GASP students to prepare them for the event.

>>> FY23 - Met

Activity - The goal was met last year when two meetings were held to discuss GASP student observation of the Be Well Arkansas Quit Tobacco Program workings. GASP faculty met in the first quarter of FY23 to set programmatic goals for the 2022-2023 academic year. In response to requests from the UAPB community, GASP faculty prioritized the development of three virtual presentations to share with UAPB. Two presentations will focus on tobacco and nicotine health hazards and cessation resources; the other will focus on health hazards and addiction symptoms of marijuana use. Since the original FY22 goal was met, and the programmatic focus of GASP shifted, we will request an update of this indicator at an upcoming ATSC meeting. During the final quarter, it was determined that a GASP faculty member will assume leadership of this project in FY24 and will work with two to three GASP students receiving stipends to advance the indicator. Work on the new indicator will begin in September 2023.

Indicators and Progress

#19 Indicator (GASP)

By June 2022/2023, GASP faculty and staff will develop an alumni survey addressing employment and credentials earned since graduation as well as GASP strengths, weaknesses, and areas for potential growth in substance use workforce development. Quarterly reports will highlight progress on the creation, administration, and evaluation of this survey.

>>> FY22 - Met

Activity - The goal was met. During FY22, GASP developed one survey and disseminated it among alumni. Fourteen surveys were returned. Two of the questions and responses are provided below:

- Question: How closely is your job associated with your GASP training?
- A great deal--eight responses; Moderately--three responses; Not at all--three responses
- How competitive has your GASP degree made you in your field of study?
 - Extremely valuable in these regards--six responses; Very valuable in these regards--two responses; Somewhat valuable in these regards--six responses

Also, five respondents identified as being certified or licensed in substance use prevention.

>>> FY23 - Met

Activity - The goal was met las year when GASP developed and administered an alumni survey (see previous reports for more information). Returned surveys indicate the GASP program is closely aligned with current jobs in the field and helped the former students become competitive in their career. Since the original FY22 goal has been met, a request was submitted on February 7th to the ATSC to delete this indicator. The Commission voted to support the deletion of this indicator at their April 12th quarterly meeting.

Testimonials

Subgrantee Successes



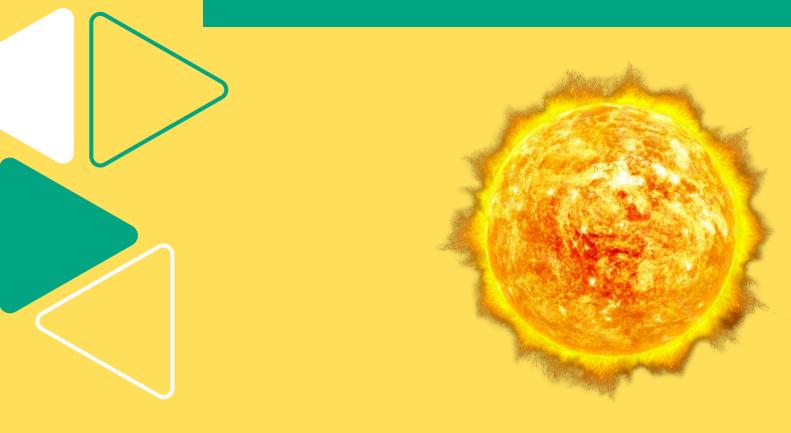
In FY23, TPCP and its subgrantees received numerous requests for additional programming as seen in the following testimonials:

Allie Spann, a health promotions specialist with the American Lung Association relayed, "This was probably the best turnout I have had with Red Ribbon Week. I had so many schools that wanted me to come during Red Ribbon Week that I was busy doing presentations throughout the whole month of October and even into early November."



Elizabeth Bright, an oncology nurse at CHI St. Vincent Hospital in Hot Springs, Arkansas had this to say: "My connection with CHI St. Vincent Cancer Center in Hot Springs has been great. I worked with them for National Lung Cancer Screening Day for the first time and they were all so kind. After that day they had already invited me back for next year's screening day. I was also invited to give the first presentation in a 12-week 'Smoke No More in 24' series they kicked off this new year and it went great. I got great feedback from her, saying 'Thank you so much for speaking yesterday!! You are a natural and wonderful speaker!! Sorry about the technical issues. I will keep you posted on the progress and success of the class. I hope this slightly different approach may help some of them quit. Vaping is my next big initiative. I still have to study a lot on it because I just have always been so focused on cigarettes. So very soon, I would like to see your presentation on that and start planning for in the near future more joint endeavors. Thank you again!!"





TOBACCON SETTLEMENT MEDICAID EXPANSION PROGRAM

Mary Franklin, Director, Department of Human Services
Division of County Operations

UCA Evaluator: Joe Howard, PhD





TOBACCO SETTLEMENT MEDICAID EXPANSION PROGRAM



74,295
ARKANSANS SERVED

\$270.5 Million

TOTAL CLAIMS PAID



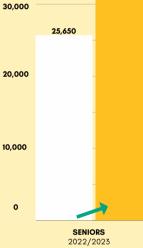
TRENDS IN POPULATIONS SERVED

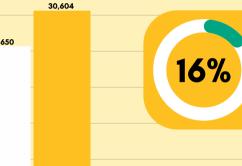
During the biennium, TS-MEP reported an increase in Arkansans served among three of its four populations. The TS-MEP reported a decrease in the number of adults receiving hospital benefit coverage.











INCREASE IN ARKANSANS SERVED BETWEEN 2022 AND 2023

3,543 4,492

WOMEN

2022/2023





The Blue Umbrella showcases arts and crafts made by Arkansans with developmental and intellectual disabilities. The store also offers job training and employment. Pictured to the right are a few of the store's artists.



ADULTS WITH EXTENDED

HOSPITAL STAYS

2,728







2,021

9

COUNTIES SERVED BY TS-MEP DDS SUPPORTS

In 2022-23, the TS-MEP served 3,305 adults and 676 children with development and intellectual disabilities across 73 of 75 counties.

\$206 MILLION

LEVERAGED IN FEDERAL MATCHING FUNDS, EQUAL TO \$5.47 FOR EVERY ATSC \$1.00.







Program Description and Goals



Program Description

The Tobacco Settlement Medicaid Expansion Program (TS-MEP) is a separate and distinct component of the Arkansas Medicaid Program that improves the health of Arkansans by expanding healthcare coverage and benefits to targeted populations. The program works to expand Medicaid coverage and benefits in four populations:

- Population one expands Medicaid coverage and benefits to pregnant women with incomes ranging from 138-200% of the Federal Poverty Level (FPL);
- Population two expands inpatient and outpatient hospital reimbursements and benefits to adults aged 19-64;
- Population three expands non-institutional coverage and benefits to seniors age 65 and over;
- Population four expands medical assistance, home and community-based services, and employment supports
 for eligible adults with intellectual and developmental disabilities and children with intellectual and
 developmental disabilities.

The Tobacco Settlement funds are also used to pay the state share required to leverage federal Medicaid matching funds.

Program Goal

The goal of the TS-MEP is to expand access to healthcare through targeted Medicaid expansions, thereby improving the health of eligible Arkansans.



Evaluator Summary and Comments



Economic Impact

For the past biennium, total claims paid for the TS-MEP populations were \$270.5 million with \$129.8 million in 2022 and \$140.7 million in 2023. The Tobacco Settlement funds are also used to pay the state share required to leverage approximately 70% federal Medicaid matching funds. This amounted to more than \$206.3 million in federal matching Medicaid funds with \$100.7 million in 2022 and \$105.6 million in 2023, which has a significant impact on the health costs and health outcomes for the state of Arkansas.



Opportunities

With the TS-MEP program, the Arkansas Department of Human Services (DHS) provides support for the four TS-MEP populations as well as the state's overall Medicaid efforts. The DHS has had the legislative authority for over fifteen years to use any savings in the TS-MEP programs to provide funding for traditional Medicaid. These savings are not used to provide any funding for the ARHOME (Arkansas Health and Opportunity for Me) program. As the state of Arkansas continues to explore opportunities for Medicaid reform, new possibilities for using TS-MEP funds may emerge.



Challenges

As a result of the implementation of the ARHOME program, traditional Medicaid expenditures have decreased. Many Medicaid-eligible adults aged 19-64 are covered by the ARHOME program and receive their coverage through Qualified Health Plans in the individual insurance market. Arkansas Medicaid pays the monthly insurance premiums for the majority of these individuals. For the TS-MEP populations, Pregnant Women Expansion and Hospital Benefit Coverage were expected to significantly decline as individuals are provided health coverage outside of the TS-MEP. As of now, successful performance has been measured by growth in the number of participants in the TS-MEP initiatives. Arkansas DHS may need to continue to explore new performance measurements for the TS-MEP initiatives as individuals are transitioning into new coverage groups.



Evaluator Comments

The TS-MEP has been impacted by the significant changes in the healthcare system. The COVID-19 pandemic has influenced all populations served through TS-MEP. With many elective medical procedures being placed on temporary hold at the beginning of the pandemic, there was a decrease in claims as individuals delayed seeking treatment. This may explain the continued increase over the biennium in the number of seniors served by the ARSeniors program as more procedures become available. There was also an increase in the number of persons with developmental disabilities being served during the biennium with all 500 TS-MEP funded slots being filled each quarter of 2023. Additionally, the extending of health coverage during the public health emergency can possibly explain the decreases that have been seen in the Pregnant Women Expansion population during 2022. Since coverage is only being terminated due to death, moving out of the state, incarceration, or at the request of the client, there has been less need to apply for coverage specifically for pregnancy. The lifting of this extended health coverage may explain the increases in the PWE in 2023. The Hospital Benefit Coverage population has had a significant overall decrease in 2022 and 2023. The Arkansas DHS suspended cost share requirements for day one hospitalizations as DHS works to implement guidance from the Centers for Medicare and Medicaid Services with changes across the eligibility and claims management systems during the public health emergency. This has resulted in a reduction in the number of persons needing to use the Hospital Benefit Coverage.

Indicators and Progress

Long-Term Objective

Demonstrate improved health and reduce long-term health costs of Medicaid eligible persons participating in the expanded programs.

#1 Indicator

The TS-MEP will demonstrate improved health and reduced long-term health costs of Medicaid eligible persons participating in the expanded programs.

>>> 2022 - Unmet

Activity - This indicator was not met. With the implementation of the ARHOME program, more individuals will have health coverage beyond the TS-MEP initiatives. Therefore, the TS-MEP long-term impact will be limited compared to the influences outside of the TS-MEP. From January 2022 to December 2022, TS-MEP provided expanded access to health benefits and services for 34,450 eligible pregnant women, seniors, qualified adults, and persons with developmental disabilities. This is a significant decrease from 59,184 persons served in 2021.

>>> 2023 - Met

Activity - This indicator was met. From January 2023 to December 2023, TS-MEP provided expanded access to health benefits and services for 39,845 eligible pregnant women, seniors, qualified adults, and persons with developmental disabilities. This is an increase of 5,395 persons served over the previous year.

Short-Term Objective

The Arkansas Department of Human Services will demonstrate an increase in the number of new Medicaid eligible persons participating in the expanded programs.

#2 Indicator

The TS-MEP will increase the number of pregnant women with incomes ranging from 138-214% of the FPL enrolled in the Pregnant Women Expansion.

>>> 2022 - Unmet

Activity - This indicator was not met. Between January 2022 and December 2022, there were 3,543 participants in the TS-MEP initiative Pregnant Women Expansion (PWE) program. There was a decrease of 1,242 women served from 2021 to 2022. This reduction may be due to the extended health coverage during the public health emergency. The TS-MEP continues to provide vital services to thousands of pregnant women each year. This program provides prenatal health services for pregnant women with incomes ranging from 138-214% of the federal poverty level (FPL). Before the TS-MEP funding, the income limit for pregnant women was at or below 100% FPL. The TS-MEP funds for the PWE program totaled \$3,055,713 in 2022.

Indicators and Progress

>>> 2023 - Met

Activity - This indicator was met. From January 2023 to December 2023, there were 4,492 participants in the TS-MEP initiative PWE program. There was an increase of 949 women served from 2022 to 2023. This increase may be due to the lifting of the extended health coverage for pregnant women in other categories during the public health emergency. The TS-MEP funds for the PWE program totaled \$4,430,317 in 2023.

#3 Indicator

The TS-MEP will increase the average number of adults aged 19-64 years receiving inpatient and outpatient hospital reimbursements and benefits through the Hospital Benefit Coverage.

>>> 2022 - Unmet

Activity - This indicator was not met. From January 2022 to December 2022, the TS-MEP initiative Hospital Benefit Coverage (HBC) provided inpatient and outpatient hospital reimbursements and benefits to 3,287 adults aged 19-64. This was a significant decrease from the 30,291 persons served in 2021. Overall, the HBC program had a significant decrease during the public health emergency. This decrease was largely due to suspended cost share requirements for day one hospitalizations. Traditional Medicaid covered 20 hospital days per year for qualified adults. The HBC program has increased the number of hospital days from 20 to 24 and reduced the copay on the first day of hospitalization from 22% to 10%; though, this has been suspended as noted above. In 2022, TS-MEP funds for the Hospital Benefit Coverage totaled \$22,365,123.

>>> 2023 - Unmet

Activity - This indicator was not met. From January 2023 to December 2023, the TS-MEP initiative HBC provided inpatient and outpatient hospital reimbursements and benefits to 2,728 adults aged 19-64, a decrease of 559 persons from 2022. In 2023, TS-MEP funds for the Hospital Benefit Coverage totaled \$14,589,831.

#4 Indicator

The TS-MEP will increase the average number of persons enrolled in the ARSeniors program, which expands non-institutional coverage and benefits for seniors aged 65 and over.

>>> 2022 - Met

Activity - This indicator was met. The ARSeniors program expanded Medicaid coverage to 25,650 seniors between January 2022 and December 2022. This was an increase of 3,425 seniors covered in 2021. The ARSeniors program serves Arkansans 65 years or older that have incomes at or below 80% of the federal poverty level. Arkansas Medicaid benefits that are not covered by Medicare are available to ARSeniors participants. Some examples of these benefits are coverage for physician, lab, pharmacy, and inpatient services. Additionally, the ARSeniors program pays the Medicare premium to the Social Security Administration (SSA) for qualified seniors. As a result, the SSA does not withhold this premium from these seniors in their SSA benefits. The TS-MEP funds for the ARSeniors program totaled \$19,799,584 in 2022.

>>> 2023 - Met

Activity - This indicator was met. The ARSeniors program expanded Medicaid coverage to 30,604 seniors from January 2023 to December 2023. This was a significant increase of 4,954 seniors covered compared to 2022. The TS-MEP funds for the ARSeniors program totaled \$24,198,296 in 2023.

Indicators and Progress

#5 Indicator

The TS-MEP will increase the average number of persons enrolled in the Developmental Disabilities Services, Community and Employment Supports (CES) Waiver and note the number of adults and children receiving services each quarter by county.

>>> 2022 - Met

Activity - This indicator was met. From January 2022 to December 2022, 1,970 individuals were provided services through TS-MEP funds. This is an increase of 87 persons served from the previous year. In 2022, there were a total of 383 children (18 and under) and 1,587 adults (19 andover) in 69 of 75 counties that were provided services. The Community and Employment Support (CES) provides assistance for major life activities to individuals with intellectual or developmental disabilities. This includes activities such as living independently and working in a job in the community rather than an institutional setting. TS-MEP funding helps to reduce the waitlist for this population of Arkansans. The TS-MEP funds for the CES Waiver program totaled \$84,410,392 in 2022.

>>> 2023 - Unmet

Activity - This indicator was met. From January 2023 to December 2023, 2,021 individuals were provided services through TS-MEP funds. This is an increase of 51 persons served from the previous year with all 500 TS-MEP funded slots filled each quarter. In 2023, there were a total of 293 children (18 and under) and 1,718 adults (19 and over) in 73 of 75 counties that were provided services. The TS-MEP funds for the CES Waiver program totaled \$97,550,797 in 2023.

Testimonials

The Blue Umbrella Supports Individuals with Disabilities

The Blue Umbrella is a unique store with one-of-a-kind, handmade items by Arkansans with developmental and intellectual disabilities. Upon entering the store, you are flooded with color, light, texture, and beauty. It is a wonderful space to be in according to Wendy, a regular customer at the store: "I'm usually in here every day. I just love to come here and look, you know, see what's new. . . . It's just unique." When asked about her favorite things in the store, Wendy added, "I honestly don't know. I love so much stuff in here. I've gone for the pens and I've gone for the blankets, and I love those rugs. They're so pretty. . . . You can get anything, and they make great gifts."

Thelma, program coordinator and assistant store manager, started working at the store in late 2023 and relayed her appreciation for the store's mission. She shared, "As far as the mission, I just I've always believed that [people with disabilities] deserve as much of an independent life as the rest of us do. And this is a neat program because it's a way for them to make money, get their work out there, be exposed."

Store manager, Erin Skrodenis, echoed Thelma's sentiments, "This is the little store that could. We provide a good service for the individuals that participate in this. Then on the flip side, we also increase awareness across the board. The fact that, as [Thelma] said, quality of life, disabled clients, artists we call them, they can do just as much as anybody else. It depends on the opportunities that they get, and they don't always get the same opportunities, which is why this store is so important."

Blue Umbrella artist, Este, is a favorite of store-goers, routinely selling several pieces of her Diamond Art per month. "It's kind of like paint by number and cross stitch combined," she explained. Since she began her craft in 2018, Este has enlisted her siblings to help out: "All my sisters got doing them as well and fell in love with it, and we really enjoy it and now we are making a business out of it." It's more than just a business for Este, though, making Diamond art has another purpose: "It gives me an opportunity to express myself. . . . I could choose to work on a picture based on like, how I'm feeling, you know, and I can express that through this artwork. So that's what is most valuable."

When asked about the importance of the Blue Umbrella, Este reflected, "It's important for people to be in the know. . . . They will soon get to realize that even people with disabilities can put out some pretty great stuff, pretty great products, you know, that we are not going to allow our disability to hold us back from what we want. We're not going to let that stop us. If we have more people know about us, about the store, then people will start to realize, oh, even people with disabilities, you know, you're not limited to just one specific thing because of your disability. The possibilities are endless."















UAMS CENTERS ON AGING

AmyLeigh Overton-McCoy, PhD, GNP-BC, Director *UCA Evaluator: Ed Powers, PhD*





UAMS CENTERS ON AGING

1,992
HEALTHCARE
PROFESSIONALS AND
STUDENTS EDUCATED

94,158
ARKANSANS
EDUCATED









PARTNERSHIPS

One of the strengths of UAMS-COA is its partnerships. In 2022-23, these partnerships included UAMS East, Harvest Regional Food Bank, Alzheimer's Arkansas, Workforce Development, University of Arkansas, Veterans Administration, Senior Olympics, Crystal Bridges, Arkansas Coalition for Obesity Prevention, Arkansas Diabetes Advisory Council, first responders, community libraries, rural health clinics, elder law resources, senior housing facilities, assisted living and long-term care facilities, local businesses, parks and recreation departments, and community clinics.





12,691
PATIENT ENCOUNTERS

8,510 EXERCISE ENCOUNTERS



ENCOUNTERS BY COUNTY

LARGER DOTS = MORE ENCOUNTERS

SERVICE AREAS

- DELTA
- **NORTHEAST**
- NORTHWEST
- SOUTH ARKANSAS
- SOUTH CENTRAL
- **TEXARKANA**
- **WEST CENTRAL**
- ☐ UAMS / LITTLE ROCK

UAMS-COA reported more than 102,000 education and exercise encounters in at least 73 counties. The agency was unable to capture all participants' county of origin; some may have come from the other counties.

35%

INCREASE IN EXTERNAL FUNDS LEVERAGED BETWEEN 2022 AND 2023



\$4.96 MILLION

LEVERAGED IN 2022-23, EQUAL TO \$2.68 PER ATSC \$1.00.



Program Description and Goals



Program Description

The purpose of the UAMS Centers on Aging is to address one of the most pressing policy issues facing this country: how to care for the burgeoning number of older adults in rural community settings. The overall goal is to improve the quality of life for older adults and their families through two primary missions: an infrastructure that provides quality interdisciplinary clinical care and innovative education programs.

Program Goal

The goal of the UAMS-COA is to improve the health of older Arkansans through interdisciplinary geriatric care and innovative education programs and to influence health policy affecting older adults.



UAMS Centers on Aging

Evaluator Summary and Comments



Economic Impact

Although the precise economic impact of the UAMS-COA is difficult to estimate, the agency is directly responsible for bringing new money to the state through federal and private grants focused on assisting aging populations. During the last two years, nearly a million dollars of new money has been brought to the state through the grant writing and fundraising efforts of the UAMS-COA. There is no other agency in the state better situated to procure external support for seniors in the needlest regions of Arkansas.

However, most of the UAMS-Centers on Aging economic impact is realized indirectly. The most important indirect economic impact is realized through improving the quality of life for older Arkansas residents and helping to defer the most disabling effects of aging. Positive economic benefits are realized through reducing the time spent suffering with unmanaged chronic disease and by increasing the length of time adults can remain independent, productive contributors to their communities. Elder independence not only impacts the seniors themselves but also their family members who can spend less time worrying about their aging relatives and experience fewer interruptions to their own work lives.

One way to assess the economic impact of UAMS-COA programming is to consider the costs of medical treatment for unmanaged chronic diseases. The UAMS-COA provides vital information and training that raises awareness about chronic diseases and other health issues commonly found among seniors in Arkansas. The information provided by the UAMS-COA has been linked to earlier detection and more effective management of chronic conditions such as diabetes, cardiovascular disease, and dementia. The UAMS-COA continues to sponsor campaigns on fall prevention and diseases that often lead to early disability and lack of independence among seniors. Dealing with these conditions earlier with a managed approach is much less costly than ignoring these problems until they erupt into traumatic surgical events or more heavily debilitating conditions. In an era of high medical costs, it is safe to say that any health improvement among the vulnerable older population is likely to make a positive economic impact.

Another way to assess the economic impact of UAMS-COA directives is to consider the high costs of long-term care. One of the most consistent objectives across COA programs was to keep seniors healthy enough to remain independent as long as possible. Through its work with older adults across the state, the UAMS-COA is able to identify the most critical threats to independence and implement solutions that help offset those threats.

The UAMS-COA programs designed to improve in-home caregiving, expand resources for dementia treatment, prevent falls, monitor mental health, and address food insecurity are all examples of strategies aimed at preserving independence and extending the period in which seniors can stay in their own homes. In a state where the median daily cost of long-term care is \$260 per day for nursing homes (Genworth Cost of Care survey for Arkansas, 2023), it is easy to see the potential savings associated with the UAMS-COA programs and services.



Opportunities

The UAMS-COA continues to seek and find ways to cope with changes in healthcare systems and changes in the needs of the population served. Some of the most encouraging opportunities are described below.

Distribution of services: The UAMS-COA ordinarily offers at least minimal services to residents in a majority of
Arkansas counties. When the pandemic limited many traditional client-based services, the COA directors and
clients began to embrace new digital tools and online forms of communication. Some of these new tools and
techniques are already helping the COAs provide a richer assortment of services to a broader base of clients.

Evaluator Summary and Comments

Opportunities (Continued)

- Technology: The agency continues to advance its approach to technology to expand public access to information and educational programming throughout the state. This includes the expansion of online support groups for caregiving and disease management. This also includes new investments in virtual reality equipment that augments education related to dementia, sensory deficits, and end-of-life care. The pandemic forced both the staff and clients of COAs to develop new skills that enabled them to stay connected. Many of the new technologies continue to be employed and will ensure a broader audience than was possible before.
- Raising awareness: The UAMS-COA continues raising awareness about the challenges of aging in Arkansas.
 Representatives from the agency continually pursue public relations opportunities to combat ageism,
 encourage successful aging practices, and celebrate the contributions of older adults in the state. Of
 significance in this regard, Dr. Overton-McCoy, director of the UAMS-COA, is a sitting member on the
 Governor's Advisory Council on Aging. The UAMS-COA is also actively working with the legislative-appointed
 Alzhimer's/Dementia State Committee and the Medicare Wellness Program through the Bold Act with ADH.
- Partnerships: The UAMS-COA continues to foster partnerships with other agencies to lead the state with
 respect to mitigating opiate abuse, monitoring falls, expanding geriatric caregiver training, reducing hunger
 among seniors, and increasing awareness of chronic disease. The agency has also been active in facilitating
 partnerships with other UAMS units such as the UAMS School of Nursing Hartford Center of Excellence in
 Geriatrics and the UAMS College of Physical Therapy in northwest Arkansas. In 2022-23, the UAMS-COA
 partnered with a number of other entities to build resources for seniors in Arkansas. These partnerships include
 UAMS East Regional Campus, Harvest Regional Food Bank, Alzheimer's Arkansas, SHIPP (Senior Health
 Insurance Information Program), Workforce Development, AR Rehab, University of Arkansas County Extension
 Services, University of Arkansas, Veterans Administration, CASA (Committee Against Spousal Abuse) Women's
 Shelter, Alzheimer's Association, Senior Olympics, Crystal Bridges, Whole Nedz, Arkansas Coalition for Obesity
 Prevention, Arkansas Diabetes Advisory Council, Department on Aging Services, first responders (local fire
 departments, law enforcement officers, and emergency medical services), community libraries, rural health
 clinics, elder law resources, senior housing facilities, assisted living and long-term care facilities, senior home
 caregiver agencies, local businesses, parks and recreation departments, and community clinics.
- Enhancing the geriatric medicine workforce: The UAMS-COA works with multiple colleges and universities across the state to recruit and train new geriatric specialists in different allied health fields. This includes sponsoring fellowships for medical students and social workers.
- Enhanced attention to the outlying regions: The UAMS-COA continues expanding relationships with UAMS East Regional Campus combining resources to better serve Crittenden, Monroe, Lee, St. Francis, and Phillips counties by implementing Walk with Ease, the Diabetes Empowerment Education Program, Cooking Matters, and other education events. Expansion of UAMS facilities in El Dorado should help broaden impact in the southern portion of the state.

Overall, despite pandemic and post-pandemic challenges and an inflationary economy, the UAMS-COA is open to innovation and actively seeking opportunities that contribute positively to the health of older Arkansans.



Challenges

The aging of the state's population coupled with an unstable national healthcare model continues to be the primary challenge to the clinical aspects of this agency's mission. The UAMS-COA remains committed to ensuring that seniors in Arkansas have the best possible access to healthcare services in places where Senior Health Clinic access is unavailable. For much of 2022, the elevated vulnerability of seniors with regard to COVID-19 imposed a number of barriers to other fundamental aspects of the agency's mission such as group exercise, educational presentations, and community outreach. Even as concerns about coronavirus dissipated in 2023, several challenges remained, as noted next.

Evaluator Summary and Comments

Challenges (Continued)

- Despite the availability of vaccines, UAMS-COA client populations remain some of the most vulnerable due to
 age and underlying chronic health conditions. The challenge of adhering to UAMS and CDC virus control
 guidelines requires the use of innovative service design and delivery. While online alternatives have been
 refined over the course of the pandemic, these alternatives cannot fully replace traditional programming (for
 example, exercise activities are limited by safety concerns for remote participants). For many people in the
 age cohorts served by the COAs, these alternative digital activities are also not as desirable as in-person
 contacts.
- Staffing issues continue to threaten the flow of services throughout the state. This impacts both COA staffing and clinic access. During 2022-2023, several leadership positions went vacant for months before they could be filled. Increased demand for healthcare professionals persistently poses problems for hiring and retention, especially for hiring qualified professionals in less-developed portions of the state (e.g., specialists in dementia assessment and management).
- Adequate supervision of COAs in more remote regions of Arkansas has always been a concern of this agency. Efforts have been made to address many of the issues through better data collection and assessment protocols. However, keeping staff trained and monitoring activity across the COAs remains challenging.
- Changing racial and ethnic demographics of seniors in some areas of the state is an ongoing challenge. The agency continues to strive for more inclusive communication and the development of bilingual or multilingual materials and programs.
- Due to underdeveloped infrastructure, poverty, and small and decentralized populations, the basic UAMS-COA model is more difficult to deploy in some areas of the state. For example, it is estimated that in 2022 as many as 15 Arkansas counties received no direct services from the UAMS-COA. More effort is needed to find effective modes of delivery for serving seniors in impoverished, hard-to-reach communities. These concerns escalated during the pandemic as an increasing volume of COA client services have, out of necessity, shifted to an internet-based model. Client services are unavailable to many as substantial portions of the state lack reliable broadband internet access and the effectiveness of online delivery models is questionable due to lack of resources to fully evaluate these newer service modalities. A major challenge for upcoming years will be to find ways to effectively reach populations in these underserved communities.
- The agency continues developing the data collection and data processing capacity needed to fully assess program outcomes. Much progress has been made on developing a new monitoring system, but some challenges have been exacerbated by the shift to digital training modes. New efforts in 2023 deployed more standardized measures of health improvement that can be associated with program participation. It will be interesting to see if these new measures can be harnessed to bring significant improvements to the agency's service model.
- It may be time to explore and introduce new evidence-based exercise options offered to seniors in the state. Participants have been demanding more variety for several quarters but developing/implementing new programs has been made more difficult by pandemic concerns. Some of the current options are hard to monitor for quality and safety using online interaction formats. It is important to continue efforts aimed at comparing the effectiveness of traditional modes of service delivery to newer modes of delivery.
- Many of the programs and services offered through the UAMS-COA have an indirect effect on senior health in Arkansas. The UAMS-COA continues efforts aimed at demonstrating the net positive impact (including the direct economic impact) of services provided by the agency. However, specific return-on-investment models have not yet been sufficiently developed.
- As state and federal funding continues to evaporate, as older funding commitments end, and as inflationary pressures mount, maintaining external funding streams is more important than ever. At stake is the continuation of critical programs such as CNA and home caregiver training that are expensive and particularly vulnerable to funding cuts. The UAMS-COA did excellent work throughout 2023 to increase funding through grants, awards, service contracts, donations, and volunteer support. However, many of these grants tend to be short-term solutions. Ensuring necessary levels of support over the long-term remains a challenge especially in an unpredictable economy.

UAMS Centers on Aging

Evaluator Summary and Comments

Challenges (Continued)

Finding the time and other resources necessary to stay connected with best practices in geriatric care is an
enduring challenge. The UAMS-COA must continue to secure professional development opportunities for staff
to ensure high quality programming.

Overall, the UAMS-COA recognizes its key challenges and has become adept at formulating strategies to address them. This is evidenced by improvements in many critical categories between 2022 and 2023.



Evaluator Comments

As 2022 began, services were still being modified to keep clients healthy during the latter part of the COVID-19 pandemic. During 2023, the UAMS-COA began to successfully re-align services to post-pandemic standards. Prevailing evidence suggests that the UAMS-COA continues fulfilling its mission to advance the state's agenda for successful senior health services, knowledge, and programming in Arkansas. Despite persistent strains on conventional service modalities, the UAMS-COA has enhanced senior health this period through the following activities:

- Maintaining alliances between nonprofit, for-profit, and state-funded agencies to better address the needs
 of older adults in Arkansas;
- · Educating the community about the special needs of older adults;
- Keeping seniors active by providing exercise opportunities across the state (through digital platforms);
- Reaching broader audiences by improving digital access to aging-related issues;
- Recognizing the necessity of fall reduction education for seniors and mobilizing resources to meet the need;
- Leading efforts to develop alternative therapies for pain management;
- Enhancing the healthcare workforce with geriatric training for medical professionals;
- Working to develop better models of long-term care in Arkansas;
- · Working to educate caregivers and increase the capacity for quality in-home senior healthcare;
- Focusing on dementia care and building dementia-friendly communities; and
- Addressing needs exacerbated by the pandemic such as social isolation and hunger among older adults.

The trajectory in services observed over the 2022-2023 period indicates substantial recovery from the pandemic years. Even though economic uncertainty disrupted much of this biennial period, the UAMS-COA is able to meet its annual goals and is serving the needs for who it was intended.

Indicators and Progress

Long-Term Objective

Improve the health status and decrease death rates of elderly Arkansans as well as obtain federal and philanthropic grant funding.

#1 Indicator

The UAMS Centers on Aging will provide multiple exercise activities to maximize the number of exercise encounters for older adults throughout the state.

>>> 2022 - Met

Activity - This indicator was met, although the effort was substantially altered due to concerns surrounding COVID-19. A total of 4,315 exercise encounters with senior Arkansans were counted in 2022 with encounters distributed across five of the state's seven COAs. The exercise options have been curated by the UAMS-COA to include evidence-based programs that address core concerns of the client population (e.g., balance/fall prevention and pain management). Of the 2,001 encounters that occurred in the last two quarters of the year, a majority were live, in-person experiences as opposed to Facebook or videoconference methods. Overall, the UAMS-COA provided approximately 681 hours of exercise programming to seniors in 2022, and preliminary self-reported data suggest that these exercise options are meeting the perceived needs of participants.

>>> 2023 - Met

Activity - This indicator was met, though the effort continues to be impeded somewhat by COVID-19 concerns. A total of 4,195 exercise encounters were counted in 2023 with encounters distributed across five of the state's seven COAs. The exercise options have been curated by the UAMS-COA to include evidence-based programs such as Ageless Grace, Tai Chi, Drums Alive, and Walk with Ease that address the core concerns of the client population (e.g., physical activity increases, balance/fall prevention, and pain management). A majority of encounters were in-person experiences as opposed to Facebook or videoconference methods. Overall, UAMS-COA provided approximately 673 hours of exercise programming. Post-participation data demonstrate that substantial numbers of participants in exercise activities report increased activity levels, a substantial reduction in falls, and perceived reductions in pain.

#2 Indicator

The UAMS Centers on Aging will implement at least two educational offerings (annually) for evidence-based disease management programs.

>>> 2022 - Met

Activity - This indicator was met. In 2022, UAMS-COA offered evidence-based educational programs that addressed a range of health priorities related to aging. This year, UAMS-COA staff provided 5,684 hours of educational offerings in five focal areas: caregiving/dementia training, physical activity/fall reduction, healthy eating/food insecurity, mental health/well-being, and opioid addiction/pain management.

>>> 2023 - Met

Activity - This indicator was met. In 2023, UAMS-COA offered evidence-based educational programs that addressed a range of health priorities related to aging. In 2023, UAMS-COA staff provided 7,530 hours of educational offerings including 4,918 hours in four critical areas: caregiving/dementia training (3,122 hours), healthy eating/food insecurity (352 hours), mental health/well-being (1,137 hours), and fall reduction (307 hours).

Indicators and Progress

#3 Indicator

On an annual basis, the UAMS Centers on Aging will obtain external funding to support programs in amounts equivalent to ATSC funding for that year.

>>> 2022 - Met

Activity - This indicator was met. In 2022, UAMS-COA developed external support from various sources valued at \$2,108,270. This amount exceeds the goal of \$1,847,416 and represents an improvement over the prior two years. During 2022, \$869,613 was raised from grants to support programming (the largest being \$354,000 from the USDA for dementia education). The agency also received \$62,052 through contractual service agreements and a \$100,000 Mission Daybreak Promise award for suicide prevention efforts among older veterans. Another large stream of funding was derived from community foundations that provided \$515,114 to support the Schmieding Center and other operations. Additional funding included community partner donations (\$92,572), UAMS core support (\$456,000), and the value of volunteer hours supplied to COAs (\$3,717). The numbers indicate clear efforts to stay active in fundraising.

>>> 2023 - Met

Activity - This indicator was met. In 2023, UAMS-COA developed external support from various sources valued at approximately \$2,847,284. This amount exceeds the goal of \$1,851,499 and represents four consecutive quarters of successful fundraising. The UAMS-COA and its affiliates have elevated their productivity in securing external funding. In 2023, \$1,673,371 was raised from eight grants. The most sizable grant received was a \$1,416,000 award from USDA to support virtual-reality-based dementia education. Another large stream of funding came from the Schmieding Foundation that provided \$542,608 to support Schmieding Center operations. Additional extramural funding included community partner donations (\$105,712), UAMS core support (\$456,000), and the value of volunteer hours supplied to the COAs (\$935). The agency also received \$68,654 through contractual service agreements. Financial numbers indicate clear efforts to remain active in external fundraising and these amounts represent a significant increase over the previous year. Overall, the UAMS-COA exceeded external funding goals by leveraging \$995,785 above the \$1,851,499 in funding provided through the ATSC during this calendar year.

Short-Term Objective

Prioritize the list of health problems and planned interventions for elderly Arkansans and increase the number of Arkansans participating in health improvement programs.

#4 Indicator

The UAMS Centers on Aging will assist local healthcare providers in maintaining the maximum number of Senior Health Clinic encounters through a continued positive relationship.

>>> 2022 - Met

Activity - This indicator was met. In 2022, UAMS-COA recorded 7,571 Senior Health Clinic encounters. There were 390 nursing home visits and 315 inpatient/home visits; these occurred in the first quarter. Given the diminished capacity of general health clinics and the paucity of specialized geriatric care in the state, UAMS-COA is doing the best it can to broker clinical services. While the demand for clinical encounters is expected to increase as COVID-19 risks become more manageable, the capacity for specialized geriatric clinic access in most of the state remains restricted to approximately 7,200 encounters per year. By this estimate, the recorded 7,571 senior clinic encounters exceeds reasonable expectations for 2022.

Indicators and Progress

>>> 2023 - Met

Activity - This indicator was met. The UAMS-COA recorded 4,415 Senior Health Clinic encounters during 2023. There were no recorded nursing home, inpatient, or home visits during this period. The capacity of geriatric health clinics was diminished with only the Schmieding Center brokering clinical services during much of the year. The reestablishment of clinical services in northeast Arkansas helped to boost 2023 numbers closer to the averages from prior years. Overall, given the limited availability of specialized geriatric care in the state, UAMS-COA is doing the best it can do to connect seniors to clinical services.

#5 Indicator

The UAMS Centers on Aging will provide education programming to healthcare practitioners and students of the healthcare disciplines to provide specialized training in geriatrics.

>>> 2022 - Met

Activity - This indicator was met. Opportunities to provide training to healthcare workers and students were restricted in the first half of 2022 due to COVID-19 safety protocols and pandemic-related time constraints on health professionals. Nonetheless, the UAMS-COA produced 2,283 hours of educational presentations and in-service training opportunities attended by 1,026 healthcare practitioners and students during this reporting period (many encounters earlier in the year were conducted via video conference).

>>> 2023 - Met

Activity - This indicator was met. The UAMS-COA produced 2,464 hours of educational presentations and specialized geriatric training opportunities attended by 966 healthcare practitioners and students during 2023 (most of these were in-person encounters).

#6 Indicator

The UAMS Centers on Aging will provide educational opportunities for the community annually.

>>> 2022 - Met

Activity - This indicator was met. Many conventional in-person educational opportunities during the first half of 2022 were blocked by COVID-19 restrictions. However, using social media and other digital means of communication, the agency was able to produce a steady community presence throughout the year. In 2022, the UAMS-COA generated 49,956 community education encounters during this reporting period. While almost 44% of these encounters occurred in person (21,930), other encounters occurred via telephone or online platforms (e.g., 20,626 encounters were recorded from Facebook).

>>> 2023 - Met

Activity - This indicator was met. Using live events, social media, and other means of communication, the UAMS-COA generated 44,202 community education encounters during 2023. While approximately 58% of these encounters occurred in person (25,718), other encounters occurred via telephone or online platforms (e.g., 14,729 encounters were recorded from Facebook).

Indicators and Progress

#7 Indicator

On an annual basis, the UAMS Centers on Aging will develop a list of health problems that should be prioritized and education-related interventions that will be implemented for older Arkansans.

>>> 2022 - Met

Activity - This indicator was met for 2022 in June when a list of prioritized problems and interventions was generated for 2023. The list is similar to the FY22 priorities and includes a continued emphasis on fall reduction and healthy activity, a revised emphasis on healthy eating and food insecurity, an emphasis on caregiving/dementia training, and a new emphasis on mental health/well-being. The COA directors will continue to monitor the current and emerging needs of older Arkansans and make adjustments if necessary.

>>> 2023 - Met

Activity - This indicator was met. The UAMS-COA directors meet in the final quarter of every year to generate a list of priorities based on local observations and prevailing national trends. The list of priorities for FY24 (which includes the remaining two quarters of calendar year 2023) continues to emphasize fall reduction and healthy activity, healthy eating and food insecurity, caregiving/dementia training, and mental health/well-being. The COA directors continuously monitor the current and emerging needs of older Arkansans and make adjustments if necessary.

Testimonials

Praise from Program Participants and Partners

Program participants and partners from across the state praised UAMS-COA. A sampling of these comments is provided below.

A participant in training provided by Northeast COA shared, "This training gave me real life advice on how to care, approach, and see those who could have dementia. As a first responder, this will truly help to make a difference one day as well as help me look out for this."

A representative of the Alzheimer's Association reflected, "The Alzheimer's Association is privileged to have the Schmieding Center as one of our strongest community partners in Arkansas. As we work to forward our mission of leading the way to end Alzheimer's and all other dementia, we require key community partners to work alongside us to ensure we drive risk reduction and early detection and maximize quality care and support to all those affected. The Schmieding Center team's work perfectly aligns with our mission as they lead Alzheimer's and dementia support groups, community listening sessions, caregiver training, and early-stage engagement programs."

A participant in Medicare Open Enrollment at the South Central COA stated, "I don't know what people do when they don't have someone to help them like this. I appreciate you more than you probably know; learning I will be saving \$1,452.59 by switching my part D plan for 2023."

A participant in an art activity at the Schmieding Center relayed, "My mother and I spent quality time together doing an activity that she enjoyed. At age 91, she has lost interest in most activities. She kept with the watercolor classes for about an hour until her arms hurt. She hasn't spent that long focusing on anything for a long time!"

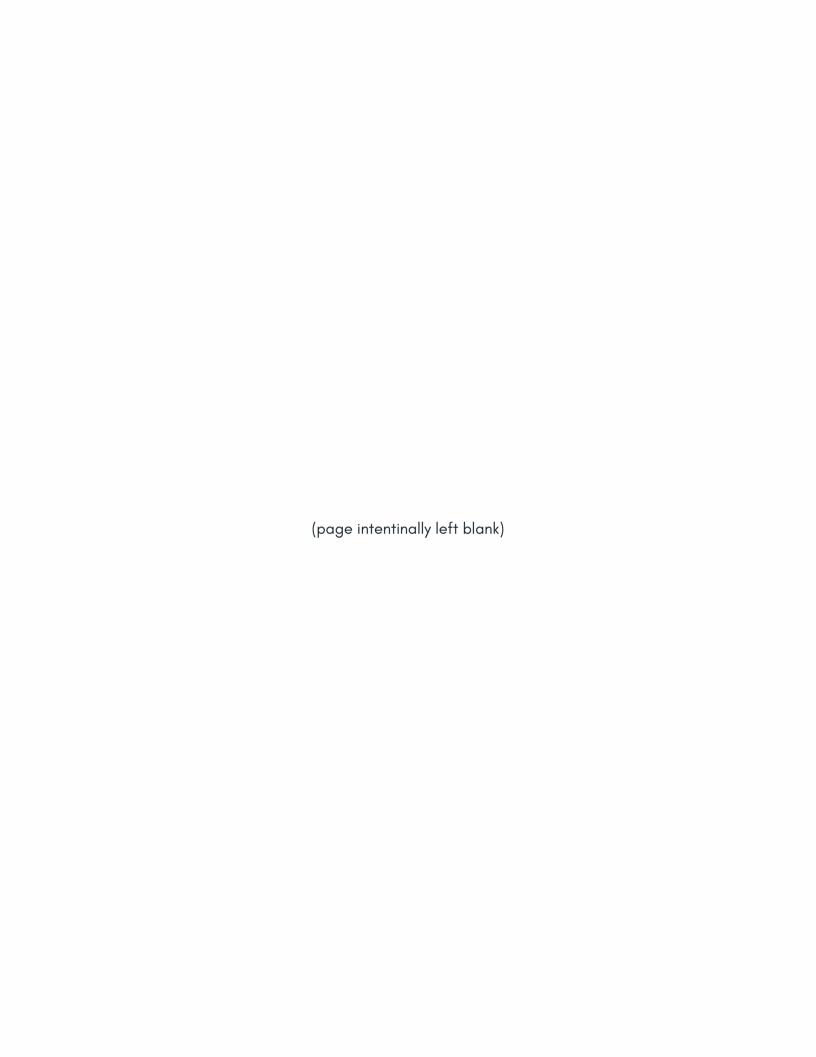
A participant in Walk with Ease at South Central COA shared, "I learned a lot that's beneficial to my health and arthritis pain. Now I know the importance of warming up, stretching, and how to perform strengthening exercises."

A healthcare provider reflected after participating in the Schmieding Center's Alzheimer's Experience, "The Alzheimer's Experience allowed me to put myself in the shoes of someone with Alzheimer's and I was able to understand what it was like to have all of the common symptoms."

A participant in a cooking program at the Texarkana COA shared, "[Cooking Matters] is one of my favorite activities! It taught me the importance of meal planning on a budget. I will definitely use this tool to help with food costs because sometimes I do not have enough food and money to last all month."

A Drums Alive participant at the Northeast COA commented, "This is the best exercise! This is the most fun I've had since moving here. I used to be sad and lonely but knowing you're coming and our group will be here makes me want to get out of bed in the morning."

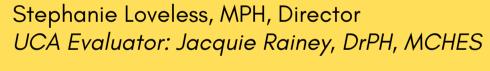








UAMS EAST REGIONAL CAMPUS







UAMS EAST REGIONAL CAMPUS



59,069 **ARKANSANS EDUCATED**











4,772 **YOUTH IN** PRE-PROFESSIONS **HEALTH PROGRAMS**









69,259 **EXERCISE ENCOUNTERS**







1,839

HEALTH SCREENINGS







INCREASE IN HEALTH SCREENINGS FROM 2022 TO 2023



In 2022-23, UAMS East provided CPR/First Aid training to Arkansans in 21 Delta communities across nine counties. Training was provided to school faculty, daycares, high school seniors, community groups, businesses, and

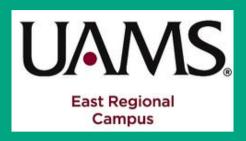
\$142,292



REVENUE GENERATED IN 2022-23 FROM THE UAMS FAMILY MEDICAL **CENTER**



Program Description and Goals



Program Description

The University of Arkansas Medical Sciences East Regional Campus provides healthcare outreach services to seven counties including St. Francis, Lee, Phillips, Chicot, Desha, Monroe, and Crittenden counties. The UAMS East Regional Campus, formerly known as the Delta Area Health Education Center and UAMS East, was established in 1990 with the purpose of providing health education to underserved populations in the Arkansas Delta region. The counties and populations served by the UAMS East Regional Campus are some of the unhealthiest in the state with limited access to healthcare services being one of the challenges. As a result of limited access and health challenges, the UAMS East Regional Campus has become a full-service health education center with a focus on wellness and prevention for this region. The program has shown a steady increase in encounters with the resident population and produced a positive impact on the health and wellness of the region. Programs to address local health needs of residents are being implemented in partnership with more than 100 different agencies. The overall mission of the UAMS East Regional Campus is to improve the health of the Delta's population. Goals include increasing the number of communities and clients served and increasing access to primary care providers in underserved counties.

Program Goal

The goal of the UAMS East Regional Campus is to recruit and retain healthcare professionals and to provide community-based healthcare and education to improve the health of the people residing in the Delta region.



Evaluator Summary and Comments



Economic Impact

In FY22, UAMS East received \$1,890,100.46. The FY23 distribution was \$1,943,796.57 from the ATSC. This is an increase of \$53,696.11 from FY22. In FY22-23, UAMS East received 22% of the 15.8% allocated to the Targeted State Needs Program account. The general health and life expectancy of many of the counties in the Delta are lower than other Arkansas counties. Health literacy levels in the Delta are lower than the majority of other counties in the state. It is estimated that up to 53% of adults in the region score at or below the basic level of health literacy (RAND Corporation, 2012, as cited in ADH, 2020). Low health literacy can lead to higher rates of medical mistakes and higher costs. It can cause an overuse or underuse of the medical system when people are not treated early for health conditions or cannot navigate the health system and use the resources and information that is available. It is estimated that low health literacy costs the state of Arkansas up to \$3 billion per year (Temple, 2017). The Arkansas counties with the highest costs from low health literacy are located in the southeast part of the state. UAMS East provides disease prevention to the region through education and screening programs and primary health care to the region through the Family Medical Center.



Opportunities

UAMS kidney and liver transplant programs are rated among the best in the nation and UAMS is offering satellite transplant clinics at regional centers. UAMS East will be offering a satellite clinic and provide follow-up care to transplant patients. Dr. Lyle Burdine, M.D., Ph.D. is an associate professor in the UAMS Department of Surgery and provides care in Helena. He is a board-certified kidney, liver, and pancreas transplant surgeon.

The UAMS Winthrop P. Rockefeller Cancer Institute has implemented a statewide patient navigation program. The Cancer Navigator for the Delta region has been hired and is working out of the UAMS East office with the UAMS East staff. The navigator will be linking the community with cancer services and help patients access prevention, screening, treatment, and support services.



Challenges

The predominant challenge facing UAMS East relates to staffing the programs. Many of the current staff have taken on additional duties to meet the needs of the communities they serve. Patient care, health screenings, health coaching, student mentoring and teaching in the schools and community are all labor intensive. The current staff is working at full capacity to maintain the existing programs while being ever vigilant for new opportunities and needs in the community.



Evaluator Comments

UAMS East Regional Campus continues to engage new and existing partners to meet the needs of the community. For instance, they have a new partnership with Liberty Dental to provide dental health kits for their outreach programs. UAMS East is open to begin new programs that align with the goals set forth in the Tobacco Settlement Proceeds Act (The Initiated Act). They are illustrating this through their initiation of the Good Food Rx program, the Narcan training to prevent opioid overdose death, and the specialty clinics they support.

The Family Medical Center is continuing to add new patients to the practice and to meet or exceed the benchmark standards of care. It is especially impressive that their scores on the NCR (National Research Corporation) patient survey are high. Many of these areas, such as the provider listening and explaining things well, deal with issues that are critical for providing care to patients with low health literacy.

Evaluator Summary and Comments

Evaluator Comments (Continued)

This year there were two indicators that were not met. Work on planning a Rural Residency Training Track for the Family Medical Center is continuing. A change in the ownership of the local hospital was a challenge to progressing on this goal this year. Additionally, the number of encounters for the health professions recruiter was lower in 2023 compared to 2022. Much of the recruiter's time in 2023 was spent on individual and small group mentoring with students rather than large healthcare fair recruitment events. Thus, the overall number of encounters in 2023 was decreased from 2022 but the intensity of the activities actually was increased. All other indicators were met or exceeded expectations for this biennial period.

Indicators and Progress

Long-Term Objective

Increase the number of health professionals practicing in the UAMS East Regional Campus service areas.

#1 Indicator

The UAMS East Regional Campus will maintain the number of students participating in pre-health professions recruitment activities.

>>> 2022 - Met

Activity - This indicator was met. This year, 2,610 students were served by the pre-health professions recruiter. This was a 384% increase from 2021. The return of in-person health career fairs accounted for a large part of this increase. Health career fairs are an excellent way to introduce students to careers in the healthcare field. However much of the recruiters time is spent in activities that involve the development of skills that will prepare students to pursue healthcare professions. These activities included the AHEC (Area Health Education Center) Scholars program that aims "to prepare a primary care workforce for Arkansas that is diverse and culturally competent, equitably distributed statewide, and capable of delivering high quality healthcare in evolving systems." The recruiter conducted mock interviews to help prepare students for their medical school interview process. Additionally, the recruiter held a Day in the Life, Mini M*A*S*H camps, and conducted an all-virtual camp, Find Your Future in Health Care. These camps include activities such as shadowing healthcare professionals, CPR and first aid training, blood typing, and casting.

>>> 2023 - Unmet

Activity - This indicator was unmet. This year there were 2,162 students served by the UAMS East recruiter. This was a decrease of 17% from 2022. This change can be attributed to the large number of student encounters in 2022 due to the recruiter participating in health career fairs. There were not as many health career fairs encounters this year. However, the more intensive activities, including camps, coaching, and providing shadowing opportunities were maintained at the same rate.

#2 Indicator

The UAMS East Regional Campus will continue to provide assistance to health professions students and residents, including RN to BSN and BSN to MSN students, medical students and other interns.

>>> 2022 - Met

Activity - This indicator was met. The UAMS East Regional Campus provided 47 students with assistance through internships and clinical opportunities. Examples include assisting RN to BSN nursing students and offering a student from the Fay W. Boozman College of Public Health a practical experience to work with the Good Food Rx program.

>>> 2023 - Met

Activity - This indicator was met as the UAMS East Regional Campus continued to provide assistance to 22 students this year. Students were enrolled in nursing programs, graduate public health programs, allied health careers, and medicine.

Indicators and Progress

Short-Term Objective

Increase the number of communities and clients served through UAMS East Regional Campus.

#3 Indicator

The UAMS East Regional Campus will maintain the number of clients receiving health screenings, referrals to primary care physicians, and education on chronic disease prevention and management within 10% of the previous year.

>>> 2022 - Met

Activity - This indicator was met for the number of screenings performed. In 2022, 719 screenings were provided. This is an increase of 81% from the number of screenings provided in 2021. Much of the effort in 2021 went into providing COVID-19 vaccinations. For 2022, the programs were able to return to providing screenings at worksites, community centers, and local events like the Susan G. Koman rally for breast cancer awareness. Biometric screenings included cholesterol, blood pressure, body mass index, glucose, prostate, and waist circumference. In total, there were 459 abnormal screenings. Participants were provided education related to the condition and referred to a healthcare provider for follow-up care.

>>> 2023 - Met

Activity - This indicator was met. This year, there were 1,120 health screenings provided. This was an increase of 56% from 2022. Screenings were conducted at local schools, workplaces, churches, community centers, and the local food drop off center. In total there were 632 screenings that were identified as an abnormal finding so the individual was referred to a healthcare provider for follow-up care. Screenings included blood pressure, glucose, cholesterol, PSA, BMI, and waist circumference. All participants were provided education on healthy habits and disease prevention.

#4 Indicator

The UAMS East Regional Campus will maintain a robust health education promotion and prevention program for area youth and adults.

>>> 2022 - Met

Activity - This indicator was met. In 2022, there were 23,116 health education and promotion encounters. This was a 22% increase from the previous year when many of the programs were still influenced by COVID-19. Programming included parenting and child safety classes, diabetes education, stroke prevention, CPR and first aid training, nutrition and cooking education, as well as increasing healthy food accessibility through the Arkansas Delta Region Obesity Project. This year, UAMS East was able to return to the schools. High school students were provided skills in HIV contact tracing and public health. The *Kids for Health* program was offered in Phillips and Crittenden counties. Also, CPR and First Aid/AED instruction was provided to high school students. Several of these students are involved in the HELP (Help Everyone Learn Possibilities) mentoring group that provides opportunities for underserved minority students interested in careers in healthcare. UAMS East Regional Campus at Lake Village collaborated with Chicot County Cooperative Extension Service to provide the Kids in the Kitchen camp. This program encourages kids to eat healthy through hands-on learning experiences that include preparing healthy foods.

Indicators and Progress

>>> 2023 - Met

Activity - This indicator was met. In 2023, there were 35,953 health education and promotion encounters. This was a 56% increase from the previous year. Health education and promotion programs were offered to both adults and children. The *Kids for Health* program was offered to over 7,000 students in Phillips and Crittenden counties. Other programs included nutrition education such as *Cook Smart*, *Eat Smart*, stroke awareness, opioids, smoking and vaping prevention, CPR and first aid, dental health, and parenting classes.

#5 Indicator

The UAMS East Regional Campus will maintain the number of clients participating in exercise programs offered by UAMS East Regional Campus within 10% of the previous year.

>>> 2022 - Met

Activity - This indicator was met. There were 31,050 exercise encounters in the programs and facilities offered by UAMS East Regional Campus. This is a 7% increase over the 28,945 encounters reported in 2021. In the UAMS East Fitness Center and the walking track in Helena, there were 23,019 exercise encounters. This was a 14% increase from the previous year. The number of encounters outside the center and track decreased to 8,031 compared to 8,848 in 2021. These types of encounters included a 5K walk/run, exercise classes such as Zumba and Silver Sneakers, and yoga.

>>> 2023 - Met

Activity - This indicator was met. There were 38,209 exercise encounters this year. Of these, 28,198 exercise encounters were from the UAMS East Fitness Center and walking track. This is a 22% increase from 2022. Additionally, there were 10,011 exercise encounters through the outreach programs offered by UAMS East. This is a 25% increase from the previous year. Community members participated in programs such as *Silver Sneakers*, Zumba, line dancing and *Walk away the Pounds*.

#6 Indicator

The UAMS East Regional Campus will provide medical library services to consumers, students, and health professionals.

>>> 2022 - Met

Activity - This indicator was met. The medical library provided services to 5,261 community consumers via circulating books and audio visual aids and conducting electronic searches for information. The library served 45 healthcare professionals and 206 students.

>>> 2023 - Met

Activity - This indicator was met. This year, the medical library provided services to 6,758 community consumers through circulating books and audio visual aids and conducting electronic searches for information. The library served 74 healthcare professionals and 68 students through literature searches and providing teaching materials. Overall the services provided were increased over the 2022 value. The number of consumers served increased by 28% and the providers by 64%. The number of students served decreased this year.

Indicators and Progress

#7 Indicator

The UAMS East Regional Campus will plan and implement a Rural Residency Training Track for Family Medicine in Helena, in partnership with the UAMS South Central residency program.

>>> 2022 - Unmet and Ongoing

Activity - This indicator was unmet for the year, but the activities related to this indicator are ongoing. UAMS East is building the foundation for the Rural Residency Training Track by increasing the patient volume at the UAMS East Family Medical Center. The agency is marketing its services at local health fairs and other community venues. In 2022, 579 new patients were seen at the medical center. Increasing the patient load is critical to applying for the residency program.

>>> 2023 - Unmet and Ongoing

Activity - This indicator was unmet for the year, but the activities related to this indicator are still progressing by working to increase the number of patients served in the medical center. In 2023, 353 new patients were seen at the medical center. Increasing the number of patients served by the medical center is necessary before applying for the residency program. There was a change in the ownership of the local hospital which necessitated the need to build a relationship with the new owners.

#8 Indicator

The UAMS East Regional Campus will increase the number of patient encounters by 5% annually at the UAMS Family Medical Center in Helena.

>>> 2022 - Met

Activity - This indicator was met. Patient encounters for 2022 increased by 15% over 2021. In 2022, there were 2,716 patient visits compared to 2,356 in 2021. UAMS East Family Medical Center (FMC) staff is utilizing primary, secondary, and tertiary prevention measures to improve the health of the rural Delta population. The FMC staff have been trained and are proficient in telehealth and are providing telehealth specialist visits for patients. This service provides access to specialists while reducing the burden of traveling to receive care. The FMC staff have been improving the target goals for patients with hypertension and diabetes. The staff are keeping scorecards and metrics on provider services to ensure that improvements are being made with clinical patients. The medical center is hosting a virtual endocrinology clinic and is conducting a project on the use of continued glucose monitoring for high risk clinical patients. The clinic employs two health coaches to provide additional support to patients for smoking cessation, weight loss, and chronic disease management. UAMS East Health Coaches are offering a free 8-week smoking cessation coaching program. Patients receive helpful tips and motivation to quit tobacco and are provided nicotine patches and/or nicotine gum at no cost.

>>> 2023 - Met

Activity - This indicator was met. Patient encounters for 2023 increased by 45% over 2022. In 2023, there were 3,940 patient visits compared to 2,716 in 2022. The center continues to provide a full range of services to the patients with access to specialists through telehealth. The FMC staff have been exceeding the quality metrics for controlling diabetes and hypertension, screening for foot care, and screening all patients for tobacco. For example, over 90% of patients are being screened for tobacco use. The clinic continues to provide additional support to patients for smoking cessation, weight loss, and chronic disease management. The Good Food Rx program, which considers food as medicine, is continuing with positive feedback from participants. Overall, the clinic has very high patient satisfaction scores with the quality of the care they receive. Over 96% of patients responded that they would likely recommend the clinic to a friend.

Indicators and Progress

#9 Indicator

The UAMS East Regional Campus will provide diabetes education to at least 100 community members annually.

>>> 2022 - Met

Activity - This goal was met with 313 encounters. Diabetes education is provided through health coaching to clinic patients and community members. UAMS East at West Memphis is providing the Diabetes Empowerment Education Program (DEEP) to residents. This program teaches participants about diabetes diagnosis, how diabetes affects the body, medications, and meal planning.

>>> 2023 - Met

Activity - This goal was met with 985 encounters. This is a 215% increase from the previous year. Diabetes education is provided to clinic patients and community members. UAMS East at West Memphis is continuing to provide the Diabetes Empowerment Education Program (DEEP) to residents.

Testimonials

Food as Medicine Program Changes Lives

UAMS East continues to offer *Good Food Rx*, a partnership with Well Fed, as a food-as-medicine program. UAMS East is working with 20 FMC patients to encourage them to make dietary changes, particularly increasing fruits and vegetables in their diet. The program also address local food insecurity and makes nutritious food more accessible to Delta populations. Participants of the program have provided positive feedback and have reported health improvements like weight loss and lower Alc values.

Tiffany Jackson, a participant from Helena, shared her experience with the program, "This has been a great experience. [Before], I had the basics. I had the foundation, but I would get off track. So this is a good help, because it's like we have a friend. You can talk to somebody. This program has helped with portions. I'm working on meal prep and planning. I'll fix it and I'll put it away, you know, things like that. "When asked what was the most important thing she has learned so far, she stated, "Nutritional label. I never read them. Now I look at them. They add more salt. So now I'm reading, I'm actually looking and might say let me put this back and see if I can find it a fresher thing than all the processed stuff that I've had."

Tiffany expressed excitement that what she was learning in the program was rubbing off on her family. She said, "My husband, can't get him to eat fruit, trying to get him to. Now that I'm [in this program], he's been asking for more fruit, more vegetables. And I'm like, 'Thank God'. . . . Yeah, he's picking up some of the habits, which is great. I even got my sisters and they're cooking differently now and healthier now. . . . They see me, and it's like, okay, 'what you doing?' I said, 'I'm cooking . . . I'm doing different because I want to get the weight off of me.' So they picked up the habit."

Tiffany acknowledged the challenge of local food insecurity, "That's the problem with [Helena]. We can't get the fresh, fresh stuff. . . . The access is not good, because all around there is nothing but junk food. . . . We don't have access to fresh fruit like we should. Maybe twice a month, they'll go up a farmers market in Helena. And it's like, okay, but you never know when it's there. You have to actually hear from somebody to say, well, it's here, but then when you hear it, it's too late, because it's gone . . . and it upsets me, because I want fresh. I want the sweet potatoes. I want the carrots. I want it all fresh. That's what I grew up with my grandfather, because we had a garden . . . and I'm not a good person with the garden, so that ain't gonna work with me, but I would love to have our access to fresh stuff out of the garden."

The fresh food items, along with health education classes, are a bright spot in the Delta, and participants like Tiffany are grateful for the opportunity to learn more and get access to fresh foods. Tiffany reported that her health has improved while in the program, "It has been absolutely wonderful," she said. "My cholesterol level has went down. My weight has went down. I lost 27 pounds since I've started this. . . . I love this program."







During the evaluation period, efforts of ATSC-funded programs have improved the overall health and well-being of Arkansans. This report has shown the collective impact of program efforts, how a culture of health has been supported by a network of ATSC-program leaders, and individual program progress and testimonials. In the summary, we synthesize program opportunities, challenges, and comments by UCA evaluators. We then summarize indicator progress across programs.



Synthesis of Program Opportunities

Leveraging Research Partnerships and External Dollars

Research institutions partnered on various health-related projects to build knowledge, shared access to equipment and robust databases, and generated impressive grant activity, bringing in millions of dollars in external funds each year to support continued research and collaborations.

Recruitment and Training of Health Students and Professionals

Several programs recruited, educated, and trained health students and professionals including education and training related to tobacco treatment, dementia and senior caregiving, mental health, and more. Program administrators also noted the use of technology and virtual offerings to enhance the reach and effectiveness of various educational and training opportunities.

Providing Direct Education and Services to Arkansans

Tobacco-funded programs provided direct education and services to Arkansans in every county in the state. Program staff raised awareness of critical health topics like tobacco prevention and chronic disease management through various community education programs, events, and conferences. Program staff also provide a variety of direct services like preventative health screenings (diabetes, cholesterol, lung cancer, and more), patient navigation services, expanded Medicaid supports, and much more. Program leaders reported also the expanded use of technology and utilization of a mobile health unit to broaden reach and get at hard-to-reach areas. The programs' ability to adapt and respond to COVID-related limitations allowed for the expanded use of technology, and this will continue to pay dividends post-pandemic.

Prioritizing Vulnerable and Underserved Populations

Through research, education, advocacy, and direct services, tobacco-funded programs attended to vulnerable and underserved populations throughout the reporting period. Populations of particular focus this biennium included pregnant women, children, seniors, minority groups, rural and impoverished populations, people suffering substance abuse or incarceration, and those living in disproportionately impacted communities (e.g., Arkansas's Red Counties or communities in the Delta region).

Cross-Sector and Multiscalar Collaboration and Engagement to Address Public Health Challenges

Tobacco-funded programs continually collaborate with and engage others in addressing a myriad of public health challenges. Programs collaborate across sectors (with educational institutions, nonprofits, advocacy groups, local businesses, faith-based groups, first responders, and many more) and at multiple scales (from large academic institutions and state agencies to community subgrantees, students, and residents/recipients of programs). Some program leaders reported direct collaboration with other ATSC-funded programs (ABI and UAMS COPH; UAMS-COA and UAMS East); these are just a few examples of ongoing partnerships among these programs. Those doing collaborative work in the state are addressing a number of health challenges, like those related to opioid abuse, senior hunger and fall prevention, school meals, mental health, youth vaping prevention, minority health, and chronic disease.



Synthesis of Program Challenges

Recovering after the Pandemic

In the first year of the biennium, the pandemic presented various challenges including limitations to service delivery and education, altering program assessments, limiting new hires, and elevating the vulnerability of specific populations. Programs adapted by offering online programming, but these could not replace traditional in-person opportunities that may be more preferred by some Arkansans, particularly seniors and residents of rural areas. In 2023, impacts from the pandemic were felt less, and many program leaders discussed the challenges associated with "re-normalizing" as the pandemic waned; for example, the UAMS COPH faced challenges in resuming its strategic planning process which had been paused during the pandemic.

Staffing Challenges

Staffing and personnel challenges were reported by programs. Staff reported position vacancies and hiring freezes during the biennium. Loss and shifting of personnel resulted in some staff being overloaded with duties. In rural and impoverished areas, it was difficult to recruit and retain qualified healthcare professionals. Retirement of long-time faculty members at UAMS left a void in the COPH.

Aiding Hard-To-Reach Populations and Communities

Several programs noted challenges in reaching "hard-to-reach" populations or communities. Much of the state is rural, and some areas are much less developed in terms of healthcare or technology infrastructure, and this presents a challenge to service delivery. For example, before and after the pandemic, TPCP had difficulty in providing tobacco education to some schools in the state because of their limited facilities and inadequate technology. Additionally, the growing number of seniors and changing racial and ethnic demographics in the state has proven challenging.

Other Notable Challenges

Programs are feeling the pressure of inflation and the ongoing need to secure grant dollars to continue providing vital programs, like the UAMS COA's caregiver training programs. The ABI reports continued hiccups with the misuse of the All-Payer Claims Database; the ABI director continues discussions with ACHI about this issue, and new training is required of database users. Lastly, one of the most vital resources for communities in the state, the AMHC Mobile Health Unit, was in need of repairs at times during the biennium, which slowed down or halted some health screening efforts; despite this setback, program leaders continued to offer screenings in other ways.



Synthesis of Evaluator Comments

Faculty evaluators at UCA provided summary comments, emphasizing many of the challenges and opportunities noted above. Many explained that programs, research, services, and education began returning to normal in late 2022 and continued in 2023 as the pandemic greatly waned. Some acknowledged that adaptations made during the pandemic (e.g., expanding virtual offerings) will continue to be utilized post-pandemic as these have boosted efforts and enhanced reach. Evaluators used words like "diligent," "dedicated," "resilient," and "committed" in describing how program leaders worked through public health challenges during the biennium. Evaluators highlighted the consistent and growing collaborations between ATSC-funded programs and external partners as they address the health needs of Arkansans and educate public health professionals. The TPCP evaluator also noted the success of the downward trends in youth smoking and ENDS use and the innovative Coral's Reef vape prevention program, the first in the nation to target youth in grades K-2. Finally, some of the evaluators discussed unmet indicators or indicators that are in need of updating in the future.



Summary of Indicator Progress across Programs

In the first year of the biennium (FY22/2022), 78% of indicators across programs met their annual goals, 6% of indicators were in progress towards long-term, multi-year goals, while 16% were unmet. Progress improved slightly in the second year of the biennium (FY23/2023) as 81% of indicators met annual goals, 6% were in progress towards long-term goals, and 13% were unmet (see Table 1). A summary of unmet indicators is provided on the next page.

Table 1 *Indicator Progress Across Programs*

PROGRAM	EVALUATION PERIOD	TOTAL INDICATORS	MET	UNMET	IN PROGRESS TOWARDS MULTI-YEAR GOAL	OVERALL PROGRESS
ABI	FY22	7	5	2		71% Met
	FY23	5	5	2		71% Met
СОРН*	2022/FY22*	9	9			100% Met
	2023/FY23*	9	9	-		100% Met
МНІ	FY22	7	6		1	86% Met 14% In Progress
	FY23	7	5	1	1	71% Met 14% In Progress
ТРСР	FY22	19	12	4	3	63% Met 16% In Progress
	FY23	19	14	2	3	74% Met 16% In Progress
TS-MEP	2022	5	2	3		40% Met
	2023	5	4	1		80% Met
UAMS-COA	2022	7	7			100% Met
	2023	7	7	-		100% Met
UAMS East	2022	9	8	1		89% Met
	2023	9	7	2		78% Met
Combined	2022/FY22	63	49	10	4	78% Met 6% In Progress
	2023/FY23	63	51	8	4	81% Met 6% In Progress

^{*}A majority of COPH indicators (8 of 9) are evaluated at the end of the calendar year, while one indicator related to leveraging extramural funds is evaluated at the end of each fiscal year.

Explanation of Unmet Indicators

Arkansas Biosciences Institute

- FY22: As reported in the July-September 2022 quarterly report, two of ABI's seven indicators were unmet in FY22. (1) One indicator is related to the number of academic publications and presentations offered by ABI-supported investigators. While the ABI exceeded the goal of 290 publications (with 426 publications in FY22), ABI fell short on the number of presentations with 344 presentations offered towards the goal of 370. (2) The other unmet indicator is related to the number of full-time equivalent (FTE) jobs supported by the ABI and extramural funding. In FY22, 280 FTE jobs were supported, short of the goal of 300 FTEs. However, of the 280 jobs, 73% were supported by extramural funds, which exceeds the goal of 65%.
- **FY23:** The same two indicators were unmet in the second year of the biennium. (1) Although ABI publications were well above the goal, the number of presentations fell short at 310. (2) Also, the number of FTE positions supported this fiscal year was 206, below the goal of 300. However, 65% of the FTE jobs were supported by external funds.

Minority Health Initiative

• **FY23:** As reported in the April–June 2023 quarterly report, the indicator related to the number of glucose screenings was not met. The evaluator reported that MHI provided more than 2,000 glucose screenings during the fiscal year, and this value fell approximately 10% short of the annual goal.

Tobacco Prevention and Cessation Program

- **FY22:** As reported in the April-June 2022 quarterly report, three indicators were not met, while one indicator for the UAPB Minority Research Center (MRC), funded through the TPCP program account, was not met.
 - **TPCP:** (1) The agency fell very short of the goal to offer 500 presentations to the public and decision makers about the burden of tobacco on the state; however, the last two quarters of the fiscal year saw a promising increase in presentations offered, and the agency hopes to carry this momentum. (2) The indicator monitoring sales-to-minor violations was unmet. In FY22, the non-compliance rate was 11.63%, which is above the goal of 6.5%. However, as compared to FY21, TPCP increased the number of compliance checks by more than 400%, and offered more educational sessions than in FY21. (3) The goal to establish seven new Project Prevent chapters in Red Counties fell short at four new chapters. While this number does not meet the goal of seven, it is important to note that only two new chapters were established during FY21.
 - **UAPB MRC:** The MRC, in FY22, conducted two virtual meetings in minority communities to discuss tobacco usage among minority groups. The goal for this indicator is three in-person or virtual meetings.
- FY23: As reported in the April-June 2023 quarterly report, two indicators for the TPCP were not met. (1) The indicator monitoring sales-to-minor violations was unmet, although the rate continues to trend downward from FY22 to FY23. The non-compliance was 9.76% at the last quarter of FY22, and by the end FY23, the sales-to-minor violations rate was 9.46%. While this is a downward trend, it is still above the goal of 6.5% non-compliance rate. (2) TPCP was not successful this year in meeting the goal of seven new PPYC changes in Red Counties, although one new chapter was established in Cleveland County at Rison High School.

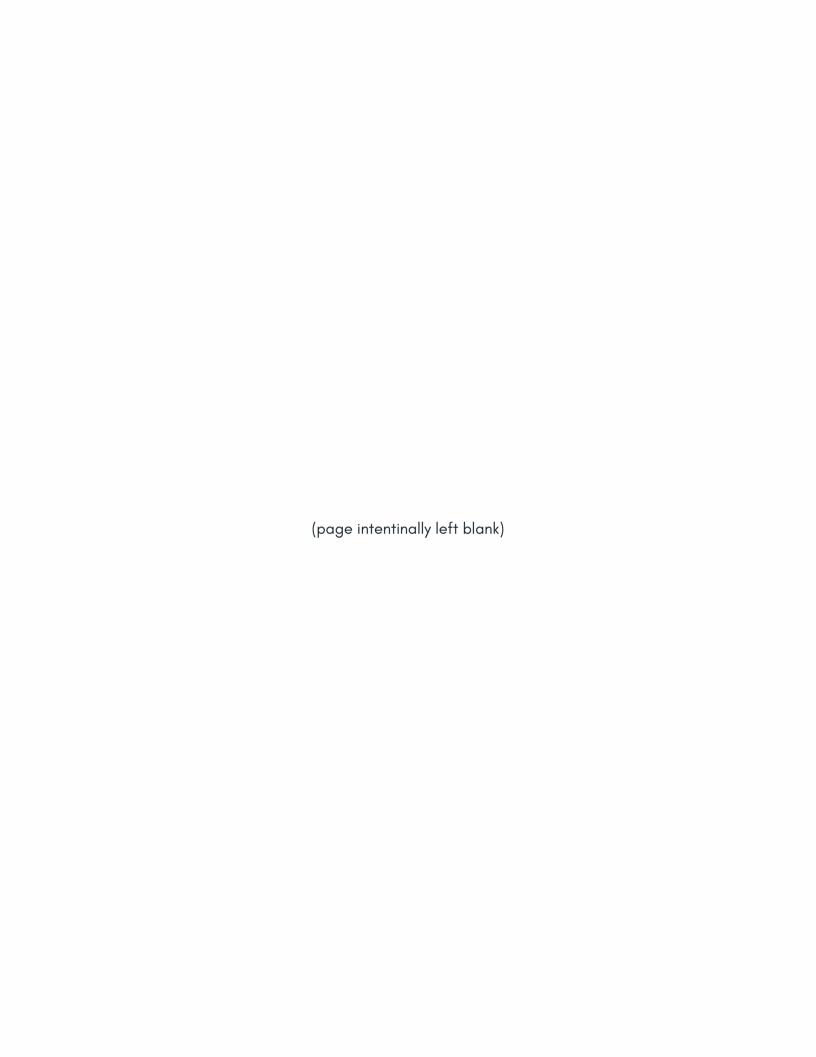
Tobacco Settlement Medicaid Expansion Program

- 2022: Three of TS-MEP's five indicators were not met for 2022. (1) There was a significant decline in the number of Arkansans served across the four TS-MEP populations, and so the long-term indicator was not met for the year. (2) Fewer women were served under the Pregnant Women Expansion program, in part, because of extended health coverage during the pandemic. (3) The Hospital Benefit Coverage population saw a significant decrease as DHS suspended cost share requirements for day one hospitalizations and this resulted in a reduction in the number of persons needing to use the HBC.
- 2023: Again, the HBC indicator was not met. This population saw a slight decrease of 559 persons compared to 2022 as DHS suspended cost share requirements for day one hospitalizations, resulting in fewer people needing to use the HBC.

UAMS East Regional Campus

- **2022:** This indicator related to implementation of a Rural Residency Training Track was not met for the year, and activities are ongoing. UAMS East continues to build a foundation for the training track by increasing the patient volume at the Family Medical Center. The UAMS East evaluator reported that the agency is diversifying and expanding its marketing of services to draw in more patients. During the year, 579 new patients were seen at the medical center.
- 2023: UAMS East had two unmet indicators this year. (1) Again, the indicator related to the RRT Track was not met and activities are ongoing. In 2023, 353 new patients were seen at the medical center. Each new patient gets the clinic one step closer to applying for an RRT. (2) Although UAMS served more than 2,100 students in pre-professions health programs, they fell short of their annual goal with a 17% decrease in the number of students engaged. The program reported that not as many health fairs were held in 2023 compared to 2022, so the program recruiter did not have as large a pool of students to engage.

Despite some unmet indicators and other program and evaluation challenges noted above, ATSC-funded programs were determined, highly-responsive, and innovative during the biennium, including during the lingering effects of the pandemic in 2022. Evaluators also reported that during the biennium, programs had a strong focus on serving vulnerable populations, creating new knowledge and research tools, supporting the growth of public health professionals who stay and practice in Arkansas, and collaborating with each other and external partners to improve quality of life in the state. In all, ATSC-funded programs confronted health challenges and, through thoughtful action, contributed to a culture of health.





COMPLEMENTARY QUALITATIVE REPORT

IMPROVING HEALTH
AND WELL-BEING THROUGH
AN ECOSYSTEM OF CARE

--Rhonda McClellan, EdD; Emily Lane, PhD(c)

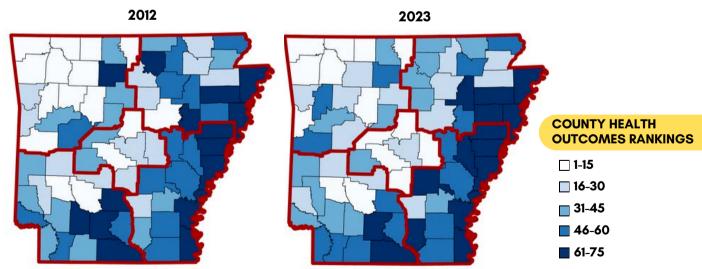
Background to Qualitative Report: The Numbers Tell a Story

In the 2020-2021 ATSC Biennial Report (2022), we presented how our hopes for and understanding of the improved quality of life and a stronger culture of health have materialized in Arkansas. In that report, we recognized how the united vision and efforts of many Arkansans secured funding for public health education, outreach, and research. Securing the Arkansas Tobacco Settlement funds was a game changer for the health of our residents. From our historical vantage point, we noted how public health in Arkansas and the development of health expertise had indeed been transformed in the state.

For the 2022-23 ATSC Biennial Report, our complementary qualitative piece highlights the complexities of Arkansans' health and the research, outreach, and care services offered by the Arkansas Tobacco Settlement programs. We probe deeper into the state of Arkansans' health. We do so by first taking a look at county health data for Arkansas's five public health regions (Central, Northeast [NE], Northwest [NW], Southeast [SE], Southwest [SW]) and the counties represented within those regions. Then, we turn to Arkansas Tobacco Settlement-funded [ATS] program leaders to acquire their perspectives about the last decade, current challenges, and their hopes for the near future. We thought such data would help us address the common question we receive from stakeholders, "Have we moved the needle in terms of improving health in Arkansas?"

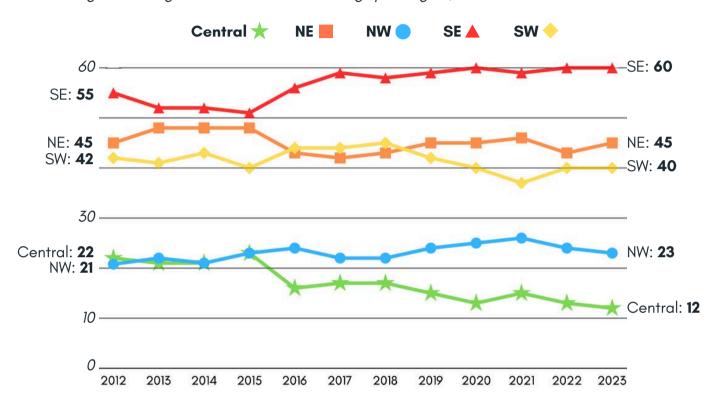
First, we focused on health data between 2012-2023, capturing the decade before the current biennium. We relied primarily on County Health Rankings (CHR) data from the University of Wisconsin Population Health Institute. CHR data provide an assessment of health outcomes and health factor rankings. Our exploration was guided by our presumptions about the data. Given the difficulty of changing health outcomes quickly, we assumed that there would be consistency in health outcomes rankings over time. Simply, we assumed that the most disadvantaged regions would continue to be the most disadvantaged after a decade. Figure 1 illustrates CHR health outcomes across counties and in the five public health regions and comparatively demonstrates any changes within rankings. Figure 2 on the following page also illustrates the change over time in rankings among the regions; remember that **a lower ranking means better health**.

Figure 1 County and Regional Comparisons of Health Outcomes Rankings, 2012 and 2023



Background to Qualitative Report: The Numbers Tell a Story

Figure 2
Change in Average Health Outcomes Rankings per Region, 2012-2023



As expected, we discovered that health outcomes rankings remained fairly consistent across counties and within specific regions over the past decade. Some regions and counties reflect vulnerabilities and disadvantages, and others indicate flourishing. The top two regions in overall health outcomes (Central and NW) remained the top two during the decade, though the Central region surpassed the NW. The three other regions (SW, NE, SE) stayed at the bottom, including regions that capture the historically deprived Delta region (NE and SE). The Central region was the only one to make substantial gains in health outcomes rankings, while the SE suffered the opposite fate. The NW, NE, and SW regions remained fairly steady across the decade.

It is important to understand that a drop in relative ranking at the county or regional level does not imply that overall health or specific health metrics worsened in those areas. A drop in ranking might simply mean that all regions made gains but that some made more gains than others. The opposite also holds true; an increase in relative ranking might reflect that overall health stayed the same or worsened but that some regions saw greater declines than others.

For a deeper understanding of actual changes in health factors and outcomes between 2012–2023, as well as the growing disparities between the Central region and the others, see Table 2 on the following page. We selected metrics to illustrate the evolution of key health challenges and improvements over the decade. Table 2 values in bold represent the region with the greatest improvement-or the least decline-per metric (like in the rate of adult obesity), and values underlined represent those that saw the greatest decline-or the least gain (like in median household income). Again, the numbers bear out that the Central region experienced the greatest gains while the SE region saw the greatest declines.

Background to Qualitative Report: The Numbers Tell a Story

Table 2Change in Key Public Health Metrics across Regions, 2012–2023

Public Health Metric	Central	NE	NW	SE	SW
Premature Death Rate	-292.57	-739.56	-452.95	<u>-1938.36</u>	-388.94
Rate of Low-Birth Weight Babies	-0.09	+0.53	-0.14	<u>-0.26</u>	+0.41
Days per Month with Poor Physical Health	+0.53	+0.09	+0.08	+0.24	<u>-0.16</u>
Days per Month with Poor Mental Health	-0.91	-1.08	<u>-1.63</u>	-1.06	-1.14
% Adult Smoking	+4.71	+0.72	+2.26	<u>-1.43</u>	-0.71
% Adult Obesity	-3.86	<u>-6.61</u>	-5.53	-6.36	-5.59
Rate of Primary Care Physicians	-8.29	<u>-9.28</u>	+1.53	-7.5	-7.23
Median Household Income	+\$13,540	+\$11,184	+\$12,676	<u>+\$9,974</u>	+\$10.811
*% Minority Population	22.57%	19.28%	16.68%	44.64%	33.82%

Note: A plus-sign (+) indicates positive change, an improvement in health; a minus (-) indicates a decline in health, regardless of the mathematical direction of the rate of change. For example, a decrease in the percentage of adults smoking is a positive gain, so is indicated with a plus sign.

Most importantly, we must remind the reader that despite the regional numbers, pockets of advantages and disadvantages exist in every region. Even in the healthiest region, the Central region, neighborhoods in Little Rock and North Little Rock, for example, are among the most disproportionately impacted communities in the state, and many local populations suffer from cumulative health, socioeconomic, and environmental burdens (Lane et al., in press).

These broad, **descriptive statistics are certainly not enough** for us to make inferences about how health outcomes will change in the next decade, but the numbers remain compelling. The numbers tell the story that the Central region is head and shoulders above the rest, and the gap between this region and the others is growing. **This increasing divide is cause for attention.**

^{*}The percent minority population metric comes from the most recent decennial census in 2020, and it offers an illustration of a key demographic measure and clarifies the distribution of population groups between the regions.

Beyond the Numbers: Voices of Tobacco-Funded Program Leaders

The programs, funded in part by the Arkansas Tobacco Settlement (ATS), operate within the five public health regions. Their efforts are reflected in the health data and rankings noted earlier. As expressed by one of the ATS program directors, emphasizing a culture of health is a "need to focus on all 75 counties while understanding that each county is different. If we want to know about the quality of life in Arkansas, much depends upon who you ask." Whereas the maps provide a comparison of health outcomes within various regions and counties, when speaking with ATS program directors, interestingly, individual health concerns and disparities suggest that within every region and county, many individuals are vulnerable to health crises. Further, the challenges felt at the local level will have an impact at the regional and state level eventually; for now, these local challenges lurk, hidden by aggregated numbers.

Our response to the question, "Has the needle moved?" is that the needle is constantly moving. For some, though, a multitude of factors influence the measurement of outcomes. Geography-the placement within a particular public health region alone could be one of these factors. Also, health disparities often fall within particular population demographics-race, gender, and age, for example. The numbers present a compelling case that maintaining and sustaining health is easier for some than for others. Some individuals constantly face disproportionate impacts. As noted by one of the ATS program directors, "There's more to the numbers than just the numbers"; promoting well-being for all Arkansans is complex. To acquire a fuller picture of the status and future of health in Arkansas, attention should be paid to these vulnerable individuals whose experiences speak to the realities of health in Arkansas.

Ecosystem of Care

ATS staff are committed to the culture of health and to understanding the complexities of inclusive care for all Arkansans. To navigate the complexities of public health work, the ATS program staff members have cogenerated an ecosystem of care. ATS program administrators and personnel engage in partnerships external to their programs, and **they partner** internally with other ATS programs. They **leverage purpose, talents, money, and services** to orchestrate a culture of health throughout the healthcare system and across the state.

From research to educational programs to lifestyle coaching, the ATS ecosystem addresses a full cycle of well-being through an **inclusive system of health expertise and services**:

- <u>researchers</u> who increase health-related knowledge and funding that draws experts from other states and countries to Arkansas;
- advanced healthcare educators who are committed to increasing the number of representative professionals
 from the state who stay in the state;
- <u>funders</u> who leverage their money to increase research and services in the state and to attract more grant dollars while providing services for Arkansans;
- <u>health service providers</u> who diagnose and assist health challenges for residents and confront health disparities daily-and in unprecedented times;
- · health coaches and specialists who communicate with and care for clients as they shift their lifestyle choices.

This **ecosystem of care strengthens a culture of health for the state**. The ATS ecosystem is founded on health inquiries and the resulting research. This research informs healthcare curriculum and services, which draws prospective and professional researchers and providers to Arkansas. The presence of healthcare researchers, providers, and educators boosts awareness of well-being services and choices. Many of the ATS program directors commit their programs to supporting and coaching clients through health-related choices. **Such systemic interconnections empower clients so they navigate healthcare resources and their own choices.**

This ecosystem of care, from research to daily interactions, also enhances the awareness these professionals have about state needs. They have a clear sense of what health disparities and challenges residents face. They know all too well the hidden truths of health crises within each region; they know the circumstances beyond the numbers. They have relationships with and know the individual healthcare factors that impact well-being.

With the passing of the Initiated Act of 2000, public health expertise and the talent needed to promote it increased in Arkansas. As noted by a long-term serving ATS director, "[Mike Beebe] knew that investment in **research was the long game**, and it was so nice. He knew it was going to be a long time for potential payoffs, and now we are at the point of seeing some of these payoffs. You look back ten years ago at some of our research investigators and where they are now. . . . We've really grown the research enterprise and the intellectual horsepower of research in the state. All of these programs contributed to that in a large way."

This research 'horsepower' has been complemented by many programs and services spearheaded by other ATS programs. One program director noted, "ATS programs are becoming service centers for many of our communities. What a loss if we weren't there." Consider how ATS programs assisted during the pandemic. They adapted procedures and led initiatives for educating, testing, healing, and monitoring long-term recovery for Arkansans. One health administrator commented, "Imagine the last three years without the College of Public Health. They didn't do everything, but they did a massive amount. Even the UAMS graduate school became overwhelmed with PCR testing. Students who worked with the health department did PCR tests because they can do it in their sleep. Many ATS programs made a huge difference in how the state dealt with the pandemic."

For the remainder of our qualitative report, we turn to the ATS commentary, gathered through individual and focus group interviews and a review of various public documents. From these sources, the ATS partners and their ecosystem of care are portrayed as experts navigating the complexity of enhancing quality of life. "It's never just one thing," noted one ATS program leader. These qualitative data, although not exhaustive of their efforts, also demonstrate the advantage of acquiring an ecosystem's viewpoint-seeing healthcare needs from more than a singular perspective and partnering with others to increase resources and services to address those needs. Even from these limited data sources, a portrayal of the ATS ecosystem emerges-flexing and innovating to influence the current health factors that groups of individuals face-and, by extension, their future health outcomes. Below, we illustrate how programs use an ecosystem of care to target various vulnerable populations.

Women and Children

ATS program directors report that mothers and children are of significant importance to them. Mothers in crisis, infant mortality and low-weight births, breastfeeding awareness, lactation stations, children facing obesity, mental health diagnoses, and food insecurity have been a few of the targets of various ATS research, educational programs, and outreach services. The response by these experts has been adaptive and thoughtful.

Certainly not exhaustive of their productivity, but during this biennial period, **Arkansas Biosciences Institute (ABI)** celebrated its ongoing research and partnerships related to women and children. Some of these projects include:

- Tony Goudie, PhD (Principal Investigator [PI]): Recent Trends in Mental Health Diagnoses Among Arkansas School Children. **Supports UAMS COPH investigators.**
- Michael Thomsen, PhD, Anthony Goudie, PhD: The Impact of School Meal Delivery in Behavioral Disorders among Children in Health Disparity Populations. **Supports UAMS COPH investigators.**
- Akilah Jefferson, PhD (PI): Association of Quality Metrics and Adverse Outcomes for Children with Asthma: An Analysis using the APCD.
- Taren Swindle, PhD: USDA, Antenatal Factors Impacting Obesity and the Metabolism in Children and Pediatric Physical Activity: Mechanisms Impacting Health and Development.
- Lorraine M McKelvey, PhD (PI): Home Visiting in AR: Exploring Impacts on Infant Birth Outcomes, Maternal and Child Health Care Utilization; Lorraine M McKelvey, PhD (PI): Healthy Families America, Parents as Teachers, Home Instruction for Parents of Preschool Youngsters.



Similarly, the UAMS Fay W. Boozman College of Public Health, during this same period, also highlighted its work with women and children. As described by Moye (2022a), a journalist for the UAMS COPH, Clare Brown, an associate professor in the Department of Health Policy and Management at the COPH, received national attention with her study on maternity and mental health. With the support of colleagues at the Institute for Medicaid Innovation out of Washington, DC, Brown studied how mental health conditions increase adverse maternal outcomes, including severe maternal morbidity, high hospital costs, and long hospital stays. Her study caught the attention of the White House. Brown was quoted in a UAMS article (Moye, 2022a): "I love knowing that our projects factor into policy decisions, particularly those that address health equity. . . . But I'm also pleased with how the report emphasized the need to address mental health issues for women. Not only do clinical conditions such as diabetes and hypertension affect a pregnancy, but also mental health conditions, such as anxiety, depression, PTSD, and trauma. Psychological trauma is one of the main ways to predict a woman's severe maternal morbidity. . . . Increasing mental health awareness is a much-needed evolution, especially for women who are pregnant or just had a baby. People don't have to feel like they're alone and that nobody understands what they're dealing with." According to the White House report, living in rural communities and states limit women's options for maternal care. "As researchers, that's the goal for our careers, to come up with answers and suggestions that improve population health," Brown explained. "I hope this trickles down to saving infant lives or maternal lives and to reduce racial disparities in those outcomes."

Interest in women's health and maternal care research was carried out through outreach services by other ATS programs. At **UAMS East**, program leaders report that the West Memphis campus was selected to be a Satellite Site for the Arkansas Children's Hospital Child Passenger Safety Education Program. This program provides car seats to those in need within the area and education on the proper use and installation of the car seat. These services, and more, provided by UAMS East are especially important for the Delta, covering the NE and SE public health regions, considering the lack of obstetricians and resources for pregnant women. As noted by the UAMS East administrator, "**Maternal and child health is a huge problem** in the Delta. Right now, in Helena, our population has no OB services locally, **our women are traveling at least 45 minutes for prenatal care. . . .** There are still babies delivered in the ambulances because there's no OB. Several, several babies. The hospital doesn't have those kinds of services anymore. Can you imagine that? Part of the problem here is we have so many teen births, and we lost that programming. We lost the funding during COVID. We couldn't go into the schools and educate young people about pregnancy. You've got so many teen moms that don't even know they're pregnant, or their parents until they deliver in the ambulance. We have an OB in Forrest City. He's the only one between here and Jonesboro, and they work until nine o'clock at night."

Other ATS-funded programs recognize local needs in Arkansas, like those related to trends in youth vaping. So, leaders at **TPCP** developed Coral's Reef, an innovative, animated vape prevention program made for youth in grades K-2. Arkansas is the only state in the nation that currently has a youth tobacco/nicotine prevention program designed for this age group. TPCP shares the program with schools across the state and also offers YouTube videos to reach wider audiences (https://www.bewellarkansas.org/youth-education/). Be Well Arkansas's website also offers other free Coral's Reef educational materials including coloring book pages and holiday activity ideas. Early feedback on the first Coral's Reef episode has been very positive. A teacher at Cedarville Schools in the NW region reported, "My little ones love the Coral's Reef cartoon, but they are begging for the next episode. Can you send me all the episodes?" Also, TPCP sub-grantees who have been sharing Coral's Reef with schools across public health regions have relayed positive feedback that the school children had "lots of questions about health risks and an interest to watch further episodes."

TPCP also regularly partners with the Minority Health Initiative (MHI) to provide Coral's Reef materials to Arkansas youth as well as to provide families with information and resources on tobacco prevention and cessation.

Women and children have the attention of ATS program leaders. They share research and resources with one another to meet these needs. The program director from **UAMS East listed these** partnerships: "In the last decade, we have worked with the **Minority Health Commission**, **Center on Aging**, and also the **College of Public Health**." UAMS East furthered upon another external partnership, "We held Camp iCan for youth designed around nutrition and exercise. This camp was held in Helena at UAMS East for around 35 youth. Partners in this camp were AMHC, the local Boys and Girls Club, and the local Cooperative Extension Service. The summer **camp was held daily for two weeks, and students participated in hands-on learning activities** based on nutrition and the importance of staying active." For years, Camp iCan has been empowering kids from disadvantaged communities in Arkansas with education and new experiences that enlighten them to their own power and build emotional, behavioral, and relational skills.



Rural and Underserved

Health outcomes for each region are related to the health factors individuals face daily, and the regional data presented above suggest that health factors and outcomes may be contingent upon the population and demographic makeup of each region. One ATS director commented, "The needs [in each region] are similar and varied at the same time. Each area has rural and urban population centers. Each region may have counties where employment is less available. Geography differs from Northwest to Southeast. Medical provider availability can vary within and across the regions." Another administrator explained, "These regions vary greatly in their access to a variety of services, products, and things like grocery stores. And if a region does have these things, it is at times a long and difficult drive for a resident to get there. For example, the Central region is well populated and has a variety of easily accessible goods and services, whereas the Southwest region has goods and services, but the residents are spread out in such a way that it makes getting to these things a hardship at times." Such regional nuances influence well-being, and within each, there are those that face disproportionate impacts.

The accessibility of healthcare resources is most significantly related to geography and population vulnerability. ATS program staff are cognizant of the unique challenges of each region and the factors that vulnerable populations face. One director remarked that their team "works to make sure that we are aware of the unique challenges in each region. This way we can address whatever particular disparities may be the most pressing at that time. Some of the regions are more economically depressed and their residents are slow to seek any sort of help that may come at a cost. We specifically make sure that when we work in those areas we assure them that our cessation services are provided at no cost to them. This encourages residents to use the services offered knowing that they will not be charged." Another ATS leader added, in regards to older Arkansans, "Each of the five public health regions likely has its own unique set of stories and experiences from older adults that are deeply rooted in the local context, culture, and challenges faced by that particular community. These regional narratives can provide valuable insights into the specific needs, strengths, and resilience of older adults in different parts of the state. . . . There is a need to amplify the voices and stories of older adults themselves, which are often overlooked or underrepresented in public discourse."

Because each region and the circumstances within them fluctuate, ATS program staff demonstrate a commitment to understanding these factors and the people within them. Fairly new to their position as an ATS administrator, one director offered, "My impressions of the quality of life in Arkansas were fairly limited because what I was seeing was Little Rock and not the rest of the state. Racial diversity here reminds me of my previous hometown, and the economic striation is similar. I see the same types of urban problems that I have seen in other urban areas, at least in areas where I've lived in the country (U.S.). Since arriving in Arkansas, though, I've been in the rural areas. . . . Arkansas rural areas have a lot more poverty than I would have expected, . . and with that, accompanying health issues, for example, obesity and smoking. I'm not used to people smoking, so seeing people smoke is still somewhat disconcerting to me. I see people smoke in Little Rock and more predominantly in rural areas. The number of people who have difficulty with obesity is also just visually more predominant and more of an issue than it is in other areas. Addressing these and the health issues that go with it is going to be very, very difficult."

The ATS ecosystem of care is committed, in great part, to vulnerable and underserved populations throughout the state, from research and education to outreach services-especially for rural, impoverished, aging, and minority populations, non-native English speakers, and those facing substance addiction and incarceration. This system begins with various studies and grants dedicated to these populations. Some of the **ABI-supported projects** during the biennium include, but are not limited to:

- Batool Khattab, Pharm D., Jacob Painter: The Association of Hormone Replacement Therapy and the Postponed Onset of Alzheimer's Disease in Women with Down Syndrome. Supports UAMS COPH investigators.
- Nick Zaller, PhD: Social Determinants of Health and Healthcare Utilization among Individuals with a History of Jail Incarceration. **Supports UAMS COPH investigators.**
- Joseph Asnte, PhD, Corey Nagel, PhD, and Steven Barger, PhD: Association of P-gp Substrates with the Development of Alzheimer's Disease.
- Cathy Bradley, PhD (PI): Working, Low Income, and Cancer Caregiving: Financial and Mental Health Impacts.
- Brittany Crawford, PhD (PI): Dietary Patterns, Socioeconomic Disparities, and Risk of Type 2 Diabetes in the Sister Study.
- Mofan Gu, PhD (PI): Surveillance of COVID-19 Outbreaks in Prisons in the US South: The Role of Economic Distress in the Communities Surrounding Prison Facilities.
- Corey Hayes, PhD: Impact of Opioid Dosing Strategies on Pain Scores and Adverse or Unintended Clinical Outcomes.
- Zhuopei Hu, PhD: Buprenorphine Treatment for Opioid Use Disorder in Arkansas.
- Alexandra Marshall, PhD (PI): Barriers and Facilitators to HIV Care Engagement: Recommendations from People with HIV in Rural Arkansas.
- Matt Najarian, PhDc (PI): Socioeconomic Determinants of Remote Patient Monitoring Implementation Among Rural and Urban Hospitals.

Reaching these vulnerable populations is not easy. Indeed, they find that it is rarely one factor that populations face. **Disadvantages and disparities often cluster, negatively spiraling into disproportionate impacts.** The commitment, though, to these populations resonates throughout the ATS staff comments: "Arkansas's health-related issues have both a minority and rural component to them. We address health disparities across the curriculum and focus on how they interact, how they interplay, and how they can affect things. . . . That's part of what our accreditation criterion is. Public health is to increase equity with respect to health across populations. . . . We investigate how to go about reducing health disparities." Another program director noted, "We're looking at how we can address social determinants. I think we are making small chomps at the elephant. **A culture of health is getting a community to work, play, eat, live, and thrive all together**. **That's who we are.** We do not exclude anybody from our services because we all want to age well."

Rural and Impoverished Populations

Rural residents are affected by their lack of proximity to and the actual number of accessible resources. Rural communities find themselves unable to attract healthcare staff and maintain facilities. These conditions complicate the well-being for those living in remote areas. This is described by an ATS staff member: 'In small towns, you [often] only have two ambulances that are available for transport. [Further], our hospital has been **in crisis** in Helena, as well as many of our small rural hospitals, but [our hospital] was just purchased by Progressive Health. The hospital is being classified as a Rural Emergency Hospital. This federal designation comes with a 5% additional payment for Medicare patients for covered outpatient services. This designation means the hospital will only provide outpatient and 24/7 emergency services."

To increase staffing options, some of the programs turn to internship programs, offering educational opportunities for students while providing services to residents. In some cases, students are able to return to their rural communities as healthcare providers, as one administrator relayed: "UAMS East has also provided internships for College of Public Health Students over the years for interested students. Most recently, we had a local hometown student complete her internship for UAMS East and graduated last summer and is now employed in Helena." Internships are just oneway ATS programs have pooled resources in rural areas.



Many staff members also report enhancing partnerships beyond ATS programs with external partners as well. The UAMS-COA director shared, "Many [clients], though, are not receiving services. They're in rural, isolated areas not getting services, and we want to help. And they're not being screened . . . if they are homebound, we want to get them helped. We're going to do that, but we're not going to do it alone. We're getting people out of these silos, bringing them to the table, working, putting plans together so that we can educate adults and put these plans together to get this awareness out." Also, a TPCP leader explained, "We provide funding to sub-grantees around the state, and we work with the Hometown Health Improvement Branch and Local Health Units to use workers that are already embedded in those areas to reach residents. Rather than trying to take people from the far away home office in Little Rock and force a connection, we find that it is more successful when we take workers who are already known and trusted and allow them to perform tobacco control in that region."

Public health efforts are often informed by research focused on populations experiencing poverty. One project, captured by Moye (2022b), is a partnership between **COPH** and area schools and investigated the relationship between student behavior and eating breakfast. Faculty researchers Andres Cuadros-Menaca and Michael Thomsen discovered that the Breakfast After the Bell program positively affects children's behavior at school. "Breakfast After the Bell creates a better learning environment," said Thomsen, director of the UAMS Center for the Study of Obesity in the COPH. "If you haven't eaten anything, it's easier to become irritated at someone or just not care about school. Breakfast After the Bell fosters a better educational experience because students are not hungry." The increased access to healthy meals for all students, especially those from low-income households, enhances the program's value. Cuadros-Menaca added, "Some children may miss breakfast because the school bus arrives late. Some kids choose not to get breakfast before the bell because of the negative stigma of school meals being only for students from low-income families." Today, the **Breakfast after the Bell program is in more than 400 schools across Arkansas, touching all public health regions, supporting thousands of children**.

In the disadvantaged Delta, poverty also greatly affects well-being-and inspires ATS programs to address poverty-related needs. An administrator at **UAMS East** shared, "Many Delta towns have seen a drastic decline in population due to lack of resources, lack of jobs and income for families to survive. Delta towns have seen generational poverty, despair, and hopelessness. Recently, the water crisis in Helena/West Helena was a major public health crisis and devastating for residents. In addition, the rural regions are facing healthcare shortages and a lack of access to healthcare and healthcare facilities, including specialists. **UAMS East is working on investing in healthcare education and student training opportunities.** Pre-Professions recruiters have been hired and are covering the public health regions trying to encourage, support, and provide training opportunities for both high school and college-aged students. **This career pipeline has proven to work on recruiting local students to return to their hometown to practice.**"

Aging Populations

Aging populations face multiple vulnerabilities, especially in rural and impoverished areas. One director put vulnerability for this population into perspective, "Older adults in rural areas are at a higher risk of social isolation, which can lead to depression, cognitive impairment, and an increased risk of suicide. This is exacerbated by factors such as lack of transportation, limited social support networks, and the outmigration of younger family members." ATS programs have dedicated their resources to aiding older Arkansans, their families, caregivers, and the health professionals and students who work with them. Some of these efforts are highlighted next.

To build knowledge in the state, the Centers on Aging collaborates with the UAMS College of Public Health, providing Master of Public Health (MPH) students with clinical opportunities to develop public health expertise in aging, collect data, and analyze factors related to aging populations. The COA director also noted, "[We] partner with COPH faculty with research opportunities related to aging issues across the state, addressing social determinants that impact health outcomes, such as food insecurities. . . . Faculty assist COA by providing feedback on appropriate measurement utilization during evaluation, data outcomes on programs, and exploring economic impact/health outcomes analysis."



Beyond research collaborations, ATS programs take on the challenges that face seniors and offer impactful education and services that improve health outcomes. The director of the **UAMS Centers on Aging** shared, "Everybody looked at me in 2016 when I said I was going to take on senior hunger. They said, 'Oh yeah, and I bet you want world peace, too.' I said, 'Sure. Why not? That would be great.' We took on senior hunger, and everybody snickered at me. Well, we're 28th. We're not 50th anymore. We're going to eat this elephant one piece at a time. . . . Remember, addressing basic needs is not a one-time effort but an ongoing process that requires sustained commitment, collaboration, and a deep understanding of the unique challenges faced by vulnerable older adult populations." The COA director continued, "Well-aging starts when we are born. We believe in intergenerational programming. If we can get cooking together, shopping together, and learning healthy behaviors, these cognitive activities and these intergenerational activities show that aging is a positive thing. . . . **Encouraging and involving younger community members in initiatives for older adults can help bridge generational gaps and foster a sense of shared responsibility.** This approach may be particularly effective in regions with strong family ties or where younger generations have migrated away."

The director of **UAMS East** shared how they attempt to address local senior hunger as well: "Many smaller towns in the Delta may have only one grocery store . . . many areas are known as food deserts with no options other than gas stations, and many times those do not have healthy options. **Many of our older populations do not drive, live on limited income, do not have extra dollars for food, and many times can't access food banks.** To increase access, AR DROP, through the Cooperative Extension Service, a local food bank, [Phillips] County, and UAMS East partnered to offer a mobile food bank called 'The Drop Off.' This philosophy is to take food to people out in our smaller communities, accessibility is key. They may not get to Helena to the food bank but can make it within their own community to a specific location.

Several ATS programs have collaborated with each other to share resources and provide education and services to older adults. The **TPCP works with UAMS COA** "to increase [Be Well] referrals by senior clinics across the state and provide educational materials on chronic disease management to older adults." The **UAMS COA and UAMS East** often collaborate on external funding opportunities to meet the needs of Delta seniors and caregivers. Also, the COA has assisted UAMS East by creating and gifting them a database for older Arkansans in their service area. The COA director explained, "This avoids duplication and unnecessary expenses and facilitates sharing similar programs."





Further, an administrator at **UAMS East shared another ongoing partnership**, "For the past 15 years we have collaborated with the **Centers on Aging** in delivering aging programs to the West Memphis and Helena Regional Centers. In the past two years, we had a COA staff member located in our Helena office. She provided valuable programs to local agencies, including fire and ambulance services for search-and-rescue operations, and also provided exercise programs like Drums Alive and tai chi." However, it has been hard to keep this position staffed, as one leader said, "COVID affected staffing, and finding a replacement workforce [post-pandemic] has impacted the center's operations." Recruiting and maintaining staff in rural areas of Arkansas has been a persistent challenge to UAMS East. In large part, it is another reflection of how regional disparities present unique challenges for local health and health professionals.

In addition to research and services, the **UAMS COA** also recognizes the value of empowering older adults, a COA administrator relayed, "While addressing immediate basic needs is crucial, it's also important to empower vulnerable older adults and build their capacity to sustain their well-being in the long term. This can involve providing education and resources on self-care, nutrition, and disease management; offering skill-building workshops; facilitating access to financial assistance programs; and promoting community engagement and advocacy efforts. By empowering vulnerable older adults and equipping them with the necessary tools and resources, we can help them achieve greater self-sufficiency and improve their overall quality of life."

Minority Populations and Non-Native English Speakers

Social determinants and health disparities may threaten the quality of life for several in the state, including minority Arkansans. When comparing the demographic composition of the public health regions, we see the two healthiest regions (Central, NW) have an average minority population of 19.63% while the three unhealthiest regions (NE, SE, SW) have an average minority population of 32.58%. The tobacco settlement-funded programs have acknowledged these challenges and targeted these vulnerable Arkansans. ATS leaders acknowledge the disparities between the healthiest and unhealthiest regions. Leaders' testimonies further account for this commitment and care of ethics for individuals who struggle across the state. Generational health disparities present a decade ago in the unhealthiest regions still influence well-being today. One Program Director commented, "We still have the social determinants that were here 10 years ago across our state. There are still geographical divides in life expectancies among people. People in one area of the state live 10 years longer than people in another. We have yet to break that barrier. I'd like to believe that we have made some headway, yet we're still trying to figure out how to do better."

ATS-funded programs utilize research to better understand disparities. Clare Brown, PhD, at the **UAMS COPH**, received **recognition for investigating low-weight births and racial and ethnic disparities** (Moye, 2022c). As a recipient of a K01 grant from the National Institute on Minority Health and Health Disparities, Brown will explore and identify algorithmic fairness in predictive models to eliminate disparities in adverse infant outcomes. Brown explained: "For the next four years, this grant will allow me to focus on disparities in adverse infant and maternal outcomes in relation to race. Because this is a training grant, a portion of my time will include training and learning about the cultures of Black, Hispanic, and Marshallese women and ways to reduce adverse infant outcomes." **Brown's research is also supported by ABI's access to the Arkansas All-Payers Claim Database**, which has insurance claims and birth certificates for infants in Arkansas.



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ATS staff also recognize the value of being within and knowing the communities they serve. As described by Moye (2022d), the Center for Research, Health, and Social Justice at the **COPH** initiated Barbershop Talk, an initiative to help black men avoid using alcohol. The project is grant funded and will expand to 60 barbershops throughout the state over a four-year span. Participants who come into the barbershop will answer questions about their drinking habits and overall health. For their participation, participants will receive a free haircut. Tiffany Haynes, PhD, associate professor, pointed out, "It's well-documented that black men often deal with situations that create a lot of stress in their lives. . . . We want the men to think about what the alcohol is doing to their body. . . . Going to these men is important. People are more apt to listen if you go to where they're comfortable. **This is a chance for black men to discuss their health in a way that is judgment-free and beneficial.**"

In addition to research, the COPH measures its success by the diversity of its graduates and understands how important it is for Arkansans seeking health services to have a diverse pool of health experts to lean on. Annually, the COPH has the goal to produce graduates that are representative of state demographics and they routinely meet or exceed this goal, which boosts numbers of diverse health professionals. COPH staff work to recruit students from a variety of communities and institutions, including at historically Black colleges and universities (HBCUs). Writer for the COPH, Kev Moye (2023b), highlighted one recruiting event targeting the Biology Club at the University of Arkansas at Pine Bluff (UAPB). More than 40 members of the club attended the program. Tiffany Haynes, PhD, COPH associate professor shared, "It's important that we're intentional about raising awareness of our programs and how the programs prepare students for meaningful careers in public health. Also, building collaborations with other state universities, and especially HBCUs, is critical to both increasing and diversifying our student body and ultimately Arkansas's public health workforce." Austin Porter, DrPH, COPH assistant professor shared, "I'm committed to our success and a big component of that is recruiting. We have a great college. I want people to know about us." Having an increase in African-American students is helpful for all Arkansans, Porter added: "The diversity of thought and experiences are beneficial to the overall learning experience for both students and faculty. Another benefit is that this will ensure a more diverse public health workforce... a more diverse collection of public health leaders. That's a win-win for everybody."

Moreover, ATS programs provide direct education and service to minority communities around the state. The MHI takes the lead on addressing health conditions (like diabetes) that disproportionately impact minority groups. The MHI routinely travels the state to provide health screenings and education; the agency also provides subgrantees with funds and resources to assist minority populations in their communities. Two examples of MHI's work this biennium included partnerships with the city of Dermott (in the SE region) to host a health fair at the Dermott Fire Department and also a partnership with Pulaski Technical College to host a health fair. These events were designed to educate participants on preventative health screenings, physical activity, and nutrition and to provide screenings and health literature to attendees. Attendees at these events shared some brief reflections on their experiences. One attendee at the Dermott event said, "This was great. I learned a lot that I did not know."

Another attendee in Dermott expressed, "I'm glad to know [MHI] came to our town and I hope they will return." A participant at the Pulaski Technical College health fair reported, "I feel the health fair staff was great, knowledgeable, and friendly. They made the testing painless and gave good information."

ATS program leaders also have shown a commitment to reaching non-Native English speakers across the state. For example, the **TS-MEP** administrator reported that their website is available in English, Spanish, and Marshallese based on client preference. Paper applications are also available in English, Spanish, and Marshallese. [We] have a language interpretation and translation vendor on contract to assist clients." TS-MEP also lists bilingual Spanish and Marshallese skills as preferred qualifications on all job vacancy announcements in an effort to have more bilingual employees to serve their clients. Similarly, **TPCP** reported that the ADH Office of Health Communities increased Marshallese and Spanish language ads to encourage these populations to utilize Be Well Arkansas cessation services. The TPCP reported that these media messaging efforts are "designed to drive calls to Be Well Arkansas as well as providing education on the harms of tobacco/nicotine products. The Be Well Baby program was promoted to assist pregnant women quit tobacco and nicotine use." Other ATS programs, chiefly including the **MHI**, put great effort into reaching non-Native English speakers as well, especially Hispanic populations.

Populations Facing Substance Addiction and Incarceration

ATS programs offer services and understanding to those in need of treatment and recovery from substance use and addiction, including tobacco/nicotine, opioids, alcohol, and other substances. Often substance use and addiction is compounded by a multitude of other socioeconomic and health problems, and ATS leaders have relayed for years that addressing tobacco use and substance addiction is difficult for populations that suffer other disproportionate impacts: "It's just one more thing", we have heard. ATS programs that fight against tobacco use and addiction do so through awareness campaigns, and community events, providing access to cessation and medical resources (e.g., overdose-reversal kits) in high-risk areas, and much more. Some of these efforts are highlighted below.

A **TPCP** administrator explained the ongoing challenge of fighting tobacco use and recent accomplishments by the agency: "The world of tobacco is ever-changing with new products on the market all the time. Additionally, we must persevere against complacency with combustible cigarettes. Just because we don't allow public smoking anymore doesn't mean that cigarettes aren't an extreme danger to public health. Cigarettes are the only product on the market that when used 'correctly,' kills almost half of their customers. Even with the rise of vaping in our youth, public health still has a long road ahead toward educating Arkansans on the dangers of cigarettes. TPCP has accomplished a lot since the creation of Be Well Arkansas, including Be Well Baby, and the Coral's Reef program for youth ages 5-7. We will continue to be innovative in our efforts and work to keep the dangers of both old and new tobacco products on the minds of Arkansans as they consider how to make healthy lifestyle choices."

One noteworthy event during the biennium was the 23rd Arkansas Cancer Summit, an event co-supported by **TPCP** and the Arkansas Cancer Coalition. The summit focused on mental health, screenings, survivorship, and educational programming related to tobacco and cancer. Attendees commented, "I learned that disposable ecigarettes are the most used form of e-cigarettes among our youth." Another shared, "Menthol cigarettes were directly, intentionally, and specifically marketed to Black and African Americans." A third attendee reflected that "the mental health wellness session was powerful and practical." Events such as these emphasize the intersections of public health burdens-tobacco use, mental health, cancer-as well as social determinants of health, in the case of Menthol marketing.

Another notable event in the first year of the biennium was a partnership between the Minority Health Initiative and Better Community Development, Inc. for an event called Recovery Jam. This event highlights individuals who have reclaimed their lives in long-term recovery and also honors the prevention, treatment, and recovery service providers who make recovery possible. The event helps unite those already in recovery, and those receiving treatment and broadly spreads the message that prevention works, treatment is effective, and people recover, often against all odds. One participant reflected on what many have to overcome to be in recovery, "We grew up in homes where love was conditional and often was not there. . . . Many of us were so fearful of being punished or ostracized that we learned to manipulate those around us. Some of us became very good at passive-aggressive behavior as well as other inappropriate behaviors; we learned to get what we thought we wanted or needed without directly asking for it by putting on a mask or just by acting out." At the event, service providers offered education and awareness activities. Partners were available to share smoking cessation information and offer health screenings, HIV/HepC testing, education, insurance awareness, and job opportunities. The MHI director discussed the larger aim of the event as building greater social connectedness and stronger community cohesion, strengthening family environments so future generations will live and develop a healthier and more effective workforce for the future. (as cited in the ATSC July-September 2022 Quarterly Report)

ATS programs have also co-funded ground-breaking research and outreach with higher education faculty. As reported by Amber Austen in UCA's campus newspaper, the ECHO (2022), UCA has become the first college in the state to install opioid overdose rescue kits across its campus. The rescue kits are called Naloxboxes and contain supplies for reversing an opioid overdose. Stephanie Rose, program director of UCA's addiction studies program and assistant professor for the Department of Health Sciences, pitched the idea and secured funding from the Division of Aging, Adult and Behavioral Health Services in partnership with MidSouth, a sub-grantee of the TPCP. "We are empowering students, faculty, and staff to save lives by increasing knowledge and accessibility to naloxone," Rose said. Conway's community, as have many Arkansas communities, has been affected by the misuse of drugs. "UCAPD has administered naloxone once at a nearby convenience store, . . and they have administered it another time on the sidewalk near AETN," said Fredricka Sharkey, UCA's director of media relations. By the end of September 2022, 26 Naloxboxes were installed on campus in areas with high student traffic. Resident coordinators and assistants will receive training on how to administer naloxone properly. "The next step is to provide on-site training for all on how to utilize the kits and raise awareness against the stigma of addiction," Rose furthered, "I also plan to apply for more funding to get as many individual Narcan kits in the hands of as many students as possible. You never know when it can be your turn to save a life."

Other ATS programs reach out to higher education institutions to address substance use issues in their populations of focus. The **UAMS COA** has collaborated with students and faculty at UAPB. COA staff have discussed **opportunities for students of the Graduate Addiction Studies Program** (GASP), also funded by ATS dollars, to rotate and serve the multiple COAs around the state and to "evaluate addictions among older adults," explained the COA director. The director also discussed a potential study with GASP faculty and students that "could consider including sugar in their evaluation for lifelong inability to change health behavior, obesity, or potential correlation to other addictions such as alcoholism." Leaders at the UAMS COA are constantly trying to build their knowledge of addiction to better address these problems in older adults. **In older adults, substance addiction, especially related to opioids, can commonly be present in this population.**

The COPH also has done extensive work in substance addiction in incarcerated populations. As reported by Tim Taylor (2022), UAMS writer, the college announced a partnership with the Pulaski County Sheriff's Office to reduce the use of opioids among incarcerated populations. Efforts involve continuing and expanding the office's reentry program, providing funds for more staff, including a substance abuse counselor and peer recovery support specialists. An accompanying grant will fund medication-assisted treatment for detainees with opioid use disorder pre- and post-release, transitional housing for detainees upon release, and curriculum materials for classes. Nickolas Zaller, PhD, professor and director of the UAMS Southern Public Health and Criminal Justice Research Center, will be evaluating the project's effectiveness. He shared, "People who have been incarcerated have more than a hundredfold greater risk of dying from an overdose compared with the general public."

Melissa Zielinski, PhD, assistant professor in the Department of Psychiatry in the UAMS College of Medicine and director of the UAMS Health and the Legal System Lab, will oversee one of the classes offered to those in recovery. Zielinski is quoted in this ATSC 2022 Annual Report, "Nearly all people who become incarcerated have experienced chronic and severe trauma, often beginning in early childhood, and **the cycle of trauma, addiction, and incarceration has been documented in research for many years.... This partnership is an opportunity to interrupt that cycle through foundational services,** including housing and substance use treatment as well as education and skill-building around managing the consequences of trauma specifically."

UAMS East also reported providing educational programs to women housed in the correctional facility in West Memphis (East Arkansas Community Corrections Center), "These women often find themselves at the Center due to drug use, which often correlates to other health and social issues as well. The programs we provide aim to help improve their lives, as well as their families, once they return home. We teach classes on diabetes, parenting, and child safety, all of which aim to improve the physical, mental, and social health of the student as well as that of the family. [We know] 35% of children living in Crittenden County live in poverty. Growing up in poverty can set the stage for many negative health-related consequences for that child.

By focusing on providing parents the knowledge and tools to raise their children, we aim to help improve the next generation's place in life." Again, we see **ATS program leaders focused on educating and empowering highly vulnerable populations in hopes that these Arkansans are empowered to make better health choices for themselves and their families-for generations to come.** These types of efforts are vital to breaking the cycle of generational health disparities.

Vital Strategies for Leaders in an Ecosystem of Care

To compensate for the factors that vulnerable populations in Arkansas face, ATS administrators and staff describe innovative research, personalized attention, rapport within communities, engagement with partners and their own ATS ecosystem, and advocacy. Health factors and social determinants are addressed best with frequent and informed contact with their clients. This presence requires more boots on the ground-more experienced and expert healthcare providers, and it requires funding.

The **UAMS College of Public Health** can with credited with increasing the number of qualified health professionals in the state. As the COPH administration reported, "I would like to think that the college has made a large contribution to improving public health in the state. The Arkansas Department of Health has employed a number of our graduates in their programs, and a number of community-based organizations have done the same. We've also made a contribution to the private sector. A number of our masters' students are employed in the private sector, so they bring that public health perspective into what those companies are doing. Our practice degree in the doctoral program, I would say, is largely influenced by the professionals that are being employed by the health department or community-based organizations that have a health focus. With our PhD students, I think it's having an impact by increasing the number of faculty who are in a position to educate and train our future."

This being said, keeping these educated specialists in the state is a different story. One ATS director reported that the "loss of staff and programs is being felt in many of the tobacco-funded programs." Another said, "We need scholarships for high-profile healthcare experts for all five [ABI] institutions. We could pay them to come and reap the benefits of bringing the brightest minds to Arkansas." Then, the state needs to pay them to retain them. These personnel are essential when maintaining connections with individuals and their communities. As echoed by a program director: "We cover every county, and that does not go very far. We are challenged to generate a dollar for dollar. When you have a center that has 14 counties to serve, and you have a staff of two, that is extremely challenging for those staff of two to produce a lot. . . . We are going to take a significant reduction in this upcoming year. I've not broken this news to the staff yet. They're already on a pretty tight budget. [To fulfill our services, we need nurses.] Keeping nurses for us has been an extreme challenge because private entities can offer our nurses extremely high competitive salaries that we cannot compete with since COVID. We've lost some extremely talented nurses to private entities because they've been offered six-figures."

ATS program administrators suggested how partnerships and building rapport with communities might open opportunities—and offset some of the resource and staff shortages. One leader shared, "It's much easier taking services to the people than getting them to the services. We need to provide services . . . using, perhaps, the housing authority in areas. We have to work with partners to get them services within the community. We have lost our ability to take services to them because we lost staff and facilities." UAMS East leaders added, "We need additional resources, more hands on board. . . . When we first started and had our \$2.6 million and several more staff. We never did as much as we wanted to do, but we had a presence in all seven counties. We don't anymore. There's just not enough staff to go around. . . . We try to go out as much as we can, but it's just not feasible for me to work [in Monroe County] every day. Building relationships takes time. You really need staff who are there and staying." Another emphasized, "Many of the ATS programs do the work on the ground in the most disadvantaged areas, yet receive the smallest percentage of funding."

The director of **UAMS COA** relayed the importance of advocating for older Arkansans and building rapport through listening to community stories and addressing basic needs: "There is a need to amplify the voices and stories of older adults, which are often overlooked or underrepresented in public discourse. There is a wealth of untold stories and narratives that deserve to be heard. . . . Many rural areas experience higher rates of poverty and lower levels of educational attainment, which can impact the overall well-being of older adults. **In regions with limited resources, addressing practical needs such as transportation, access to healthcare, and food insecurity can demonstrate a genuine commitment to improving the well-being of older adults. This can help build rapport by showing that their concerns are being heard and addressed."**

Further, the **UAMS East** director detailed how service providers can best fulfill their efforts by building rapport with communities: "Building rapport seems to work best when done at the ground level, working directly with those we serve. Going back to the women at the correction facility we work with. . . . From the evaluations of classes taught, I've found that when we're open, honest, and relatable with those we work with, they are more receptive to the information and services we convey. Each class we teach here is part of a series of classes where **we are working with the same women for several weeks, which helps us to further connect with them rather than a simple one time encounter.**" The ATS ecosystem of care offers a holistic, personalized approach to counter the factors confronting many mothers and children.

Some of the unique approaches to getting services within communities involve technology, community partners, and mobile units. **UAMS East** also does worksite wellness and several school-based programs like *Kids for Health*. The **Minority Health Initiative** has had great success with the mobile health unit. "The mobile health unit assists people experiencing poverty in remote rural areas. The program continues to collaborate with faith-based organizations, beauty and barbershops, cooperative extensions, and veteran's offices," shared one program director. Additionally, an **ABI** administrator explained, "Through technological applications, we are making research and service more accessible. One such application developed by Eddie James supports clients who seek assistance for their depression, you know, we've got ChatGPT out. It's gonna change a lot of things."

The **UAMS COA** director noted, "**Any chance we get, we reach out.** I mean, we're constantly networking, whether it's through email or picking up the phone. [We] utilize any connections with professional colleagues that we have. I utilize the connections that I had as a clinician. I have been in the state for 26 years. So sometimes just picking up the phone and making those connections of where you've been and never being too shy or afraid. . . . COVID forced us to utilize technology in a different way. It forced us to realize caregivers can't always come [in person]. We found that a hybrid method may be the way of the future. **We will continue to utilize technology even though older adults and caregivers want face-to-face interaction**. Because of the lack of respite care or additional support, we may have to do some [programs] remotely by Zoom. Or, because of inflation, they may not have additional gas money, so we are going to have to continue to meet the needs of the community. We will continue to focus on caregiving as a top priority."

Finally, the **MHI and UAMS East**, over the years have partnered with each other and also benefited from each other's networks. The UAMS East director explained that they have "made some really great connections in [minority] communities and offered great services. . . . It has been beneficial to work with [MHI's] existing partners." For example, UAMS East Lake Village partners with MHI to provide preventive health screenings in the Lake Village community.



Summary

The complexity of disadvantage cannot be unraveled overnight-or even over decades. Metaphorical needles may be only slightly or never moved, unfortunately, for some Arkansans. Public health advocates in these areas hope they can hold the course, at best, and alter the effects for some individuals if not for a region. Although these outcomes are unclear and health factors are complicating wellness in Arkansas even more, ATS-funded leaders have not given up. They are engaging in partnerships, seeking out innovative approaches, and offering a complementary ecosystem of care toward change. Many things are clear about the culture of health in the state. Arkansas residents-all residents-are better served and are in better health because of the ATS-funded programs. These programs and their leadership are attentive to all people and their needs. They acknowledge that those facing multiple vulnerabilities have a compromised well-being, and they confront health disparities-collectively and holistically. They recognize that these vulnerable Arkansans require resources, service, and heart. ATS programs accept the calling to educate and serve with research-based practices and services, to connect with relative strategies and community rapport, and to draw resources and expertise through engaged partnerships and a systems approach. They inquire, inform, innovate, and adapt.

When we step back and look at the big picture, we must remember to give credence to a variety of data sources when reflecting on public health. We must, of course, explore the numbers, but we also must never lose sight of local nuances of population health or our most vulnerable Arkansans. It is through the voices of local public health leaders and community members served by programs that we hear these nuances, the lived experiences of community disadvantage and well-being-and public health work being done across regions and the state. Our vulnerable populations who face sociocultural, socioeconomic, and health disparities and who live in resource deserts have the attention of our health experts; these experts continue to testify their commitment to address vulnerabilities. The rest of us bear witness to the expertise, resources, and hearts—the ecosystem of care, committed to healing the state's health disparities and divides.



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THANK YOU





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