ARKANSAS HEALTHCARE TRANSPARENCY INITIATIVE

BIENNIAL REPORT

2020–2021

ACHI
INSPIRING HEALTHY ACTS

AID
ARKANSAS INSURANCE DEPARTMENT
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HEALTHCARE
TRANSPARENCY
INITIATIVE

Introduction

The Arkansas Healthcare Transparency Initiative (HTI) was established in 2015 to provide a source of informative healthcare information to support consumers, researchers, and policymakers. The Arkansas All-Payer Claims Database (APCD) is one of the tools in the HTI used to accomplish these efforts. Since its inception through the Arkansas Healthcare Transparency Initiative Act, the APCD has developed into a robust data asset used to inform many aspects of the healthcare landscape in Arkansas. It has also been used to inform price transparency and population health strategies. This report provides background on the HTI and ways in which initiative data are being used.

HTI GOVERNANCE

The HTI is under the authority of the Arkansas Insurance Department (AID). The Arkansas Center for Health Improvement (ACHI) is the statutorily named administrator of the APCD. The HTI Board advises AID on matters concerning the HTI — predominantly consisting of reviews of APCD data requests. Two subcommittees assist the board with reviews of data requests: the Data Oversight Committee and the Scientific Advisory Committee. The Data Oversight Committee reviews and makes recommendations to the HTI Board regarding data requests, while the Scientific Advisory Committee serves in a peer review role for academic research requests. Additionally, an Arkansas Department of Health (ADH) representative will join the Data Oversight Committee to review data requests that include ADH data. See Appendix A for a roster of the HTI Board and committee members.

Data Submission

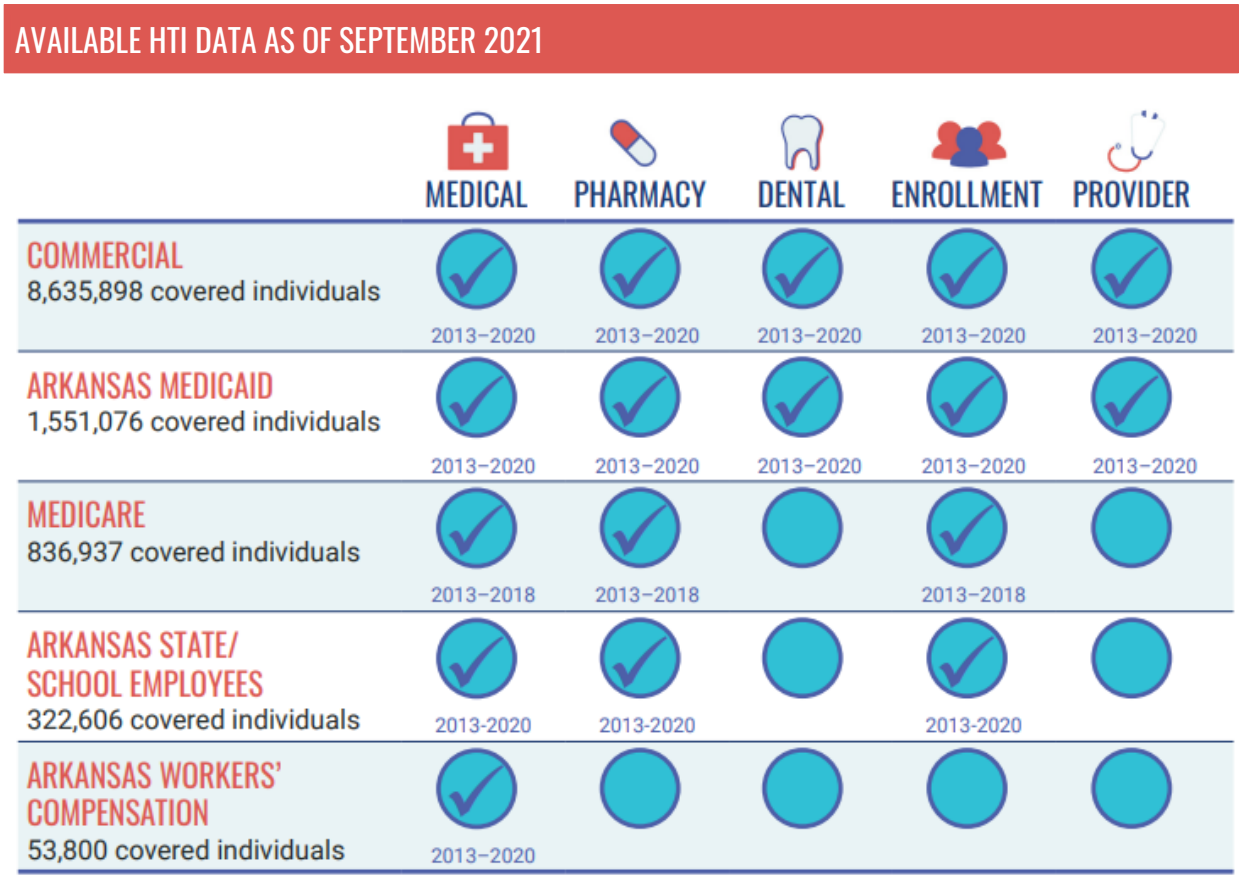
HTI data include medical, pharmacy, and dental claims; enrollment and provider files; hospital discharge and emergency department data for the uninsured; cancer registry data; birth and death records; and medical marijuana qualifying patient and dispensary data.

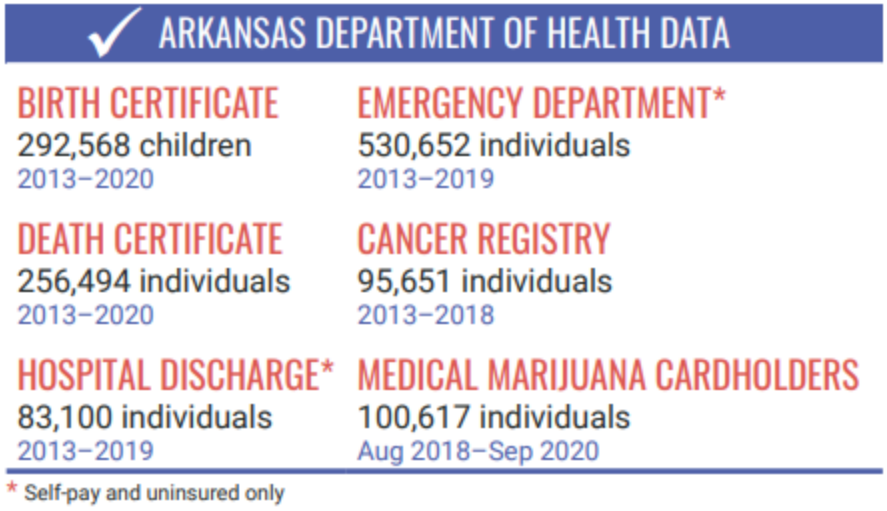
Entities that submit to the HTI include issuers of health or dental insurance plans, Medicaid, Medicare (with agreement from the federal government), the state and public school employee plan, the Arkansas Workers' Compensation Commission, pharmacy benefit managers (PBM), third-party administrators (TPAs), managed care organizations, and Provider-led Arkansas Shared Savings Entities (PASSE), as well as the Arkansas Department of Health.

In an effort to collect the full complement of claims activity for state-funded entities other than the state and public school employee plan, including claims administered by a TPA

or a PBM, AID published a bulletin in June 2021 reenforcing the requirement that state-funded colleges and universities, as well as the Arkansas State Police, submit data to the HTI pursuant to Rule 100. ACHI has worked with over 10 new state-funded submitters to assist with compliance and ensure that their TPAs and PBMs submit data to the HTI.

The following table shows the data elements available by submitting entity and the date range covered for each.





Current Data Requesters

HTI data are available by request through ACHI, the statutorily designated administrator of the HTI. Data may be acquired for one-time use on a project or through a subscription that allows use for multiple projects. State agencies are eligible to receive a subscription without a fee.

HTI DATA REQUEST SUMMARY: 2020–2021

Year	Applications Received	Projects in Progress	Subscriptions
2020	7	17	4
2021	10	17	4

***Applications Received*:** The number of applications received during the year includes applications that were canceled at a subsequent time. ***Projects in Progress*:** Applications received are not included in the total, but subscription projects are included. ***Subscriptions*:** ADH, ACHI, AID, and ABI had a subscription for both 2020 and 2021.

Data Use

In 2020, the Arkansas Insurance Department used HTI data to conduct an examination of spread-pricing activities, and other reimbursement practices governed by the Arkansas PBM Licensure Act, by PBMs administering prescription drug benefits for health plans issued through Arkansas Works and the PASSE program.

The ABI subscription is used for projects by ABI-affiliated researchers at the University of Arkansas for Medical Sciences, the University of Arkansas, Arkansas Children's Research Institute, and Arkansas State University. From 2020 to 2021, 19 ABI projects were approved by AID. These projects covered a variety of topics, including program evaluation, healthcare utilization, provider-referral patterns, and adverse outcomes. For instance, one study explored the relationships between asthma quality metrics and adverse outcomes to identify at-risk children in need of clinical intervention. See Appendix B for a list of projects and summaries.

ACHI continues to use the HTI subscription for various projects. For example, ACHI linked COVID-19 data from ADH to HTI data to study the relative risk of certain diagnoses for severe COVID-19 outcomes for individuals with a history of health insurance claims. Separately, ACHI conducted an assessment using HTI data to identify gaps in access to colorectal cancer (CRC) screenings. In September 2021, ACHI and UAMS were awarded a research grant through the National Institute on Drug Abuse, a division of the National Institutes of Health, to study medical marijuana utilization in Arkansas. For more information on ACHI projects, see Appendix C.

TALON's MyMedicalShopper.com — a consumer-facing, web-based transparency tool — has used HTI data to provide price estimates for procedures and provider quality scores to consumers since 2019. A recent web traffic report indicated that over 300 users in Arkansas have accessed MyMedicalShopper.com over the previous six months.

DATA USERS GROUP

Since September 2019, ACHI has hosted quarterly data users group meetings. These meetings are used to discuss application of HTI data, allow participants to ask specific data-related questions, and provide an opportunity for data users to get feedback from the ACHI team. During each meeting, a data use or analytic solution is presented. All presentations are recorded and available at arkansasapcd.net. In addition, ACHI maintains a repository of data tips and issues to optimize the utility and use of the HTI data. Many data variations exist between submitting entities and submission years. These data can be merged using key linkages, enabling data users to build robust utilization and cost analyses to answer key healthcare questions. Requesters and data users may also ask HTI data-related questions using a support portal.

National Movement

On October 20, 2021, the State All Payer Claims Database Advisory Committee (SAPCDAC) released a report outlining recommendations on the voluntary submission of self-insured health plan data to state APCDs. A 2016 Supreme Court ruling determined that states cannot require self-insured employers to submit claims data, only permitting voluntary submission. As part of the congressional response to the court's ruling, SAPCDAC was established in 2021 under Section 735 of the Employee Retirement Income Security Act (ERISA), as amended by section 115(b) of the No Surprises Act (NSA), part of the Consolidated Appropriations Act of 2021.

SAPCDAC was charged with advising the U.S. secretary of labor on a standardized reporting format for self-funded health plans to voluntarily submit data to state APCDs, along with developing guidance on how states can work to collect this information. The panel leveraged the work developed by the APCD Council and selected the APCD Common Data Layout (CDL) as the standard data layout. The CDL captures common practices among states in data submission formats. Kenley Money, ACHI's director of information systems architecture and secretary of the National Association of Health Data Organizations (NAHDO) board of directors, spoke at the final SAPCDAC meeting and suggested the need for a data dictionary, a suggestion that was incorporated into the final recommendations.

Looking Forward

This report showcases the progress of the HTI over the past two years. State use of HTI data continues to expand while movement at the federal level may provide additional opportunities in years to come. This section provides a few benefits of APCDs and examples of future use.

Early in the pandemic, ACHI linked HTI and other data sources to provide COVID-19 data at ZIP code and school district levels to inform policy decisions. These data have been critical to understanding the local impact of COVID-19 in Arkansas and informing emergency responses and the allocation of resources. The ability to link COVID-19 and claims data will allow researchers to further examine the impact of the disease on individuals (e.g., studying the prevalence of long COVID) and the healthcare system. It will also provide a data-driven approach to address the challenges of COVID-19 among populations that are disproportionately affected by the pandemic.

The NSA — intended to protect patients from surprise medical bills — includes the potential for federal funding of up to $2.5 million for each state to either launch a new APCD or improve an existing APCD to support key components of the act. States may leverage APCDs to identify benchmark prices, resolve billing disputes, or support data collection requirements, particularly regarding air ambulance services. To date, the funding opportunity for states has not been appropriated.

State and federal mental health parity laws are intended to ensure insurance companies cover mental health and substance use disorder (SUD) services the same as other medical services. State APCDs may be used to assess and ensure compliance with existing parity laws and ensure equitable access for individuals with mental health and SUD needs. They may also be used to identify gaps in provider network adequacy.

Hospital mergers and acquisition activities have resulted in concentrated markets throughout the country, which have been linked to the rising cost of hospital care. Policy experts have pointed to the potential for claims data to be able to help identify the impact of consolidation on consumers prior to a hospital merger or acquisition or to be used to monitor hospital prices and quality after consolidation.

Future additions to the HTI in response to changing technology and payment strategies could make the data even more useful. For instance, linking claims to electronic health records for clinical data could offer an opportunity to examine health outcomes in addition to services provided. Federal requirements to collect self-funded health plan data could provide opportunities for additional comparative analysis and more complete data for states. Collection of non-claims payments (e.g., shared savings or supplemental payments) could offer improved assessments of total cost of care and a better understanding of provider quality. Additional resources on how APCDs have been used in other states can be found in Appendix D.

Appendix A

ARKANSAS HTI BOARD MEMBERS

Cal Kellogg (Chair)*
Executive Vice President and Chief Strategy Officer, Arkansas Blue Cross and Blue Shield

Jill Arnold (Vice-Chair)*
Consultant, Consumer Reports

Austin Porter*
Deputy Chief Science Officer, Arkansas Department of Health

Doug Weeks*
Executive Vice President, Baptist Health

Bradley C. Martin
Professor, Division Head of Pharmaceutical Evaluation and Policy, University of Arkansas for Medical Sciences

Dawn Stehle
Deputy Director of Health and State Medicaid Director
Arkansas Department of Human Services

Chad Aduddell
Market Chief Executive Officer, CHI St. Vincent

Anne Santifer
Executive Director, Office of Health Information Technology
Arkansas Department of Health

Billy Roehrenbeck*
Owner, Pulaski County Title

John Ryan
President and CEO, Arkansas Health & Wellness Solutions

Dr. Greg Bledsoe
Arkansas Surgeon General

Jeff Brinsfield
Vice President of Information Systems, QualChoice

Robert McGehee
Dean, UAMS Graduate School
University of Arkansas for Medical Sciences

Jayme Mayo
Nabholz

Robert McGehee (Ex-officio, nonvoting member)
Arkansas Biosciences Institute

*Member of the Data Oversight Subcommittee

SCIENTIFIC ADVISORY SUBCOMMITTEE

Bradley C. Martin
Professor, Division Head of Pharmaceutical Evaluation and Policy,
University of Arkansas for Medical Science

Richard R. Owen
Director and Principal Investigator, Center for Mental Healthcare and Outcomes Research
Associate Chief of Staff for Research, Central Arkansas Veterans Healthcare System
Professor, University of Arkansas for Medical Sciences

D. Keith Williams
Professor, College of Public Health, University of Arkansas for Medical Sciences

Appendix B

ABI: ARKANSAS ALL-PAYER CLAIMS DATABASE RESEARCH PROJECTS

Project Name	Project Summary
Metformin Effect on Asthma Control in Overweight/Obese Children with Asthma	Overweight and obese patients have worse asthma outcomes and have an inferior response to standard asthma therapy, compared to patients who are not overweight. New therapies are needed for overweight and obese children. The hypothesis of the researchers is that use of metformin, an anti-diabetic drug, is associated with decreased asthma exacerbations in patients with asthma and overweight or obesity status due to its anti-inflammatory effects. The project will retrospectively identify patients with asthma and obesity or overweight status by linking APCD and school BMI data. The research team will compare the asthma exacerbation rates of metformin users and non-metformin users by using pharmacy, outpatient emergency department and inpatient claims.
Assessing Statewide Variation in Hereditary Cancer Care Utilization in Arkansas	Leveraging a statewide claims database for a novel analysis of the status of hereditary cancer syndromes (HCS) care in Arkansas will clarify disparities in that care. The results will position the research team to explore specific strategies to address those disparities so that equitable access to genetic services will enhance prevention, early diagnosis, and treatment of cancer. This pilot project is funded by the UAMS Translational Research Institute.
Social Network Analysis of Provider Networks in Arkansas for Management of Pain	The goal of this project is to explore provider-referral patterns associated with measurable patient-health outcomes, such as opioid initiation, high-risk opioid use, and chronic opioid use. The project will also identify the structural features of effective provider networks and the characteristics of key players in opioid use networks. This will enable stakeholders to influence provider behavior with respect to treatment adoption and policy implementation in order to improve overall patient health.
Disparity in Use of Endocrine Therapy for Breast Cancer in Arkansas	This proposed study will assess disparities in endocrine therapy use among Arkansas women with stage 1-3 breast cancer and its association

	with cancer treatment outcomes, relapse-free survival (recurrence), and overall survival.
Socioeconomic Factors and Brachytherapy in Gynecological Cancers	This project explores the healthcare disparities that may exist in the use of brachytherapy as a treatment for gynecological cancers.
Healthy Families America (HFA): Exploring Impacts on Infant Birth Outcomes, Maternal and Child Health Care Utilization in Arkansas	This evaluation focuses on the following research questions, based on the age of the children at enrollment: 1. For families enrolled in HFA during pregnancy, is maternal health and care utilization improved compared to a propensity-matched sample of mothers who did not enroll in the program? 2. For families enrolled in HFA during pregnancy, do children have better birth outcomes than a propensity-matched sample of children who did not enroll in the program? 3. For all families enrolled in HFA prior to their children turning 3 months of age, do participants have better health outcomes than a propensity-matched sample of participants who did not enroll in the program?
Adverse Childhood Experiences of Rural and Underserved Arkansans: Identification of Risk With Links to Outcomes	Funded by the Health Challenges of Rural and Underrepresented Populations Pilot Grant from the UAMS Translational Research institute, the goal of this project is to increase the understanding of the unique consequences of Adverse Childhood Experiences (ACEs) for children living in rural locations. Project findings are expected to support early childhood screening for ACEs in clinical and community settings. This study builds on previous studies, since 2006, of the home environments of rural, underserved children in Arkansas with a novel screening tool developed at UAMS: Family Map Inventories.
Associations Between Nontuberculous Mycobacterium and Gender	This study investigates the relationship(s) between time, gender, and both Nontuberculous Mycobacteria (NTM) and Mycobacterium tuberculosis (Mtb) infection. —
Risk and Prediction of Mental Health Issues in Children With Congenital Heart Defects	This project will conduct a population-based, retrospective, cohort study to compare the risks of mental illness among children born with or without congenital heart defects in Arkansas.

Mental Health Prevalence and Outcomes in Arkansas and the Mississippi Delta Region	This study aims to conduct the following analyses: 1. An examination of the differences between rural and urban counties; 2. An exploration of differences between genders and racial and ethnic groups; 3. An exploration of outcomes specific to children and adolescents; and 4. An identification of comorbidities associated with mental health diagnoses and substance use disorders.
Healthcare Utilization and Costs After Traumatic Brain Injury	This retrospective study aims to assess the healthcare utilization and total costs for individuals suffering from traumatic brain injury (TBI) compared to non-TBI patients, using the Arkansas All-Payer Claims Database. Healthcare utilization will be measured in both total visits and total costs one year following TBI and compared to non-TBI populations. Demographics will also be assessed to find discrepancies in costs and utilization.
Birth Defects Study to Evaluate Pregnancy Exposures (BD-STEPS)	The purpose of BD-STEPS is to identify modifiable maternal exposures in early pregnancy that may increase the risk for having a pregnancy affected by certain major structural birth defects. The proposed validation pilot study will help to document the accuracy and reliability of maternal self-reporting of exposures to psychiatric medication before and during pregnancy for the participants in BD-STEPS. Using data from the Arkansas All-Payer Claims Database and from maternal interviews, the objective of this validation study is to assess the validity of mental self-reporting of neuropsychiatric medication usage during the periconception period.
Assessing Utilization of Remote Patient Monitoring (RPM)	The goals of this study are to evaluate the current telehealth RPM services provided in a representative sample of U.S. hospitals from 2010 to 2019, assess hospital characteristics (e.g., number of beds, geographic location, level of care, IT capabilities, critical access hospital status, hospital affiliation with networks and partnerships, rural vs. urban status, etc.) associated with offering telehealth RPM services, and summarize how current telehealth RPM is used and reimbursed (potentially by Medicare, Medicaid, or private insurers).

Assessing the Need for Mobile Vascular Lab Studies and its Potential Implementation Using Optimization Models and Geographic Information Systems	Using geographic information systems analysis, researchers plan to spatially analyze the proximity of patients requiring vascular lab studies to the nearest IAC accredited vascular lab. The team will then use this information to presumably provide evidence suggesting that there are regions within the state that have accessibility disparities. Our goals for this project are to: 1. Map both the supply of and theoretical demand for vascular lab services in Arkansas, according to the vascular lab study usage, and identify locations where demand cannot be met due to poor spatial access; and 2. Examine the utilization of vascular lab services in Arkansas using the Arkansas All-Payer Claims Database.
Association of Quality Metrics and Adverse Outcomes for Children With Asthma: An Analysis Using the Arkansas All-Payer Claims Database	This project proposes to use the Arkansas All-Payer Claims Database to explore relationships between asthma quality metrics and adverse outcomes in children.
Arkansas Autism and Developmental Disabilities Monitoring Supplemental Statewide Administrative Data	The purpose of this project, funded by Centers for Disease Control and Prevention, is to increase understanding of autism spectrum disorder (ASD) and other developmental disabilities through the use of a variety of state-level administrative data to estimate an administrative ASD prevalence among children aged 3–21.
Patterns of Care and Clinical Outcomes of Patients With Gastrointestinal Tract Malignancy in Arkansas	The intent of this project is to evaluate an existing program or practice and to use the findings within the institution to improve that practice or program. This will include a retrospective review of data from the Arkansas All-Payer Claims Database.
A Moderated Mediation Framework to Identify Disparities and Mechanisms Underlying Hepatitis C Virus Risk in Arkansas	This proposed study will use data from the Arkansas All-Payer Claims Database to investigate and compare the effects of opioid use disorder and methamphetamine use disorder on subsequent Hepatitis C virus risks.

Evaluation of Telehealth Utilization Using the APCD	This project will evaluate telehealth utilization among insured individuals using the Arkansas All-Payer Claims Database (APCD). Specifically, this project will assess the health equity of telehealth utilization overall and a specific form of telehealth called remote patient monitoring. For assessing health equity, the research team will assess trends in telehealth by race and ethnicity status and other patient-defining characteristics (e.g., diagnosis of a substance use disorder) before and after the COVID-19 pandemic. The team will explore whether or not telehealth utilization differed by health equity status. For remote patient monitoring, the project will assess trends in remote patient monitoring before and after the pandemic. The project will explore all patient populations in the APCD (e.g., Medicare, Medicaid).

Appendix C

ADJUSTED RELATIVE RISK OF SEVERE OUTCOMES FOR SELECTED CONDITIONS

ACHI focused on COVID-19-related projects over the past two years. ACHI linked COVID-19 data to HTI data to study the relative risks of severe COVID-19 outcomes for individuals with a health insurance claims history (see below). Though direct personal identifiers are not collected under the HTI, the application of a hashing algorithm allows for ACHI to link unique identifiers across data sources. This is key in linking COVID-19 data to administrative claims data.

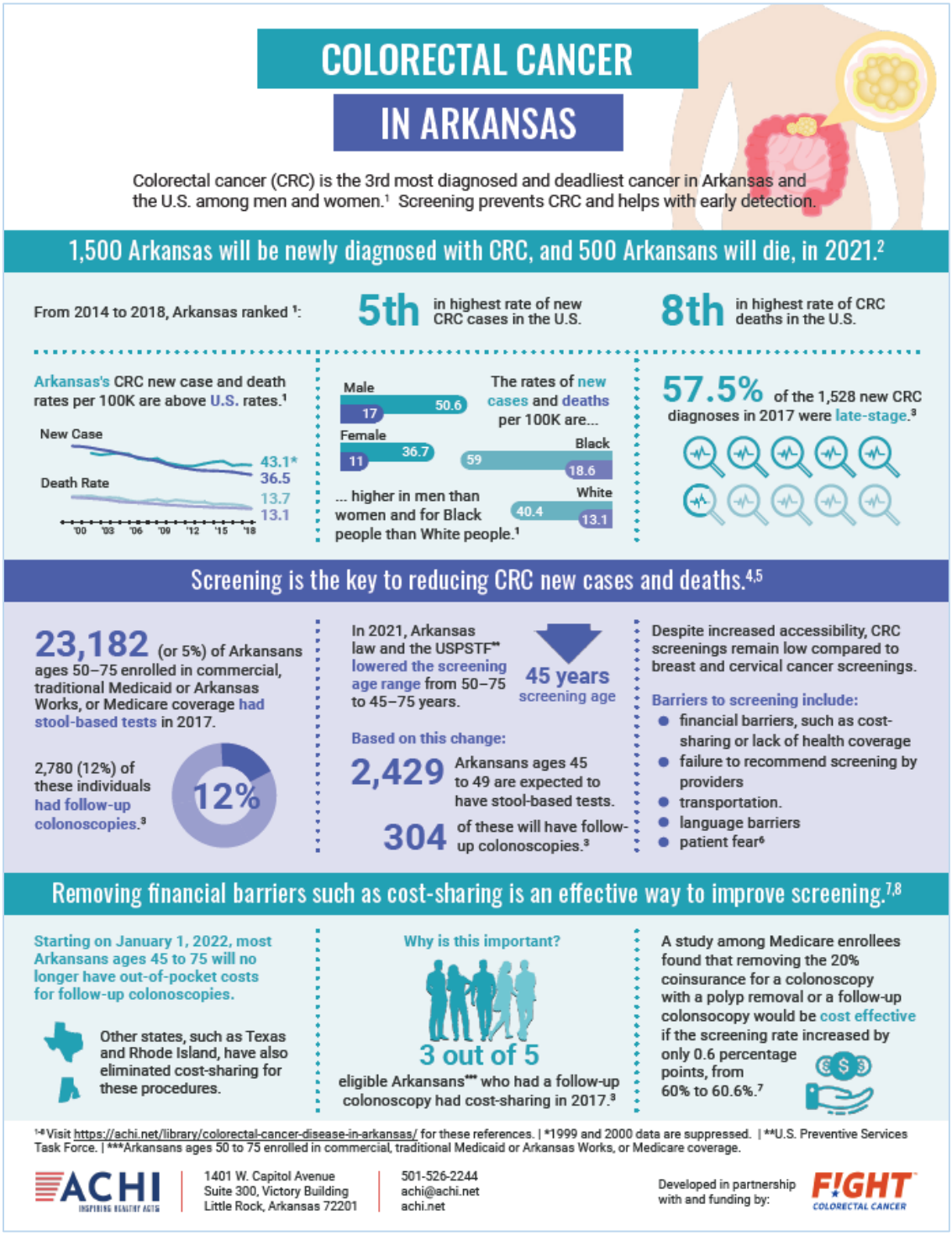
	Hospitalization	ICU admission	Intubation	Death
Immunocompromised	*+90%*	*+100%*	*+120%*	*+100%*
Kidney Failure	*+80%*	*+100%*	*+120%*	*+90%*
Congestive Heart Failure	*+70%*	*+100%*	*+130%*	*+70%*
Diabetes	*+80%*	*+100%*	*+120%*	*+60%*
Dementia	*-10%*	*0%*	*-30%*	*+80%*
COPD	*+60%*	*+70%*	*+70%*	*+60%*
Mental and Behavioral Disorders	*+20%*	*+20%*	*+20%*	*+50%*
Asthma	*+50%*	*+40%*	*+60%*	*+30%*
Coronary Heart Disease	*+50%*	*+50%*	*+60%*	*+30%*
Other Heart Diseases	*+10%*	*0%*	*0%*	*-10%*
Essential Hypertension	*-10%*	*-20%*	*-20%*	*-20%*

Note: Sample size more than 160,000 COVID-19 patients, chosen based upon data availability. Adjusted for gender and age.

COLORECTAL CANCER IN ARKANSAS

ACHI conducted an assessment using HTI data to identify gaps in access to colorectal cancer (CRC) screenings, including screenings related to follow-up colonoscopies and cost-sharing. This assessment examined the current prevalence of and access to CRC screenings as well as incidence of CRC disease. ACHI also projected the number of Arkansans aged 45–49 who could be screened based on the final 2021 U.S. Preventive Services Task Force recommendation to lower the CRC screening age to 45.

ACHI and Fight Colorectal Cancer (Fight CRC) partnered to develop a report assessing the prevalence of colorectal cancer screening in Arkansas and identifying gaps in access to screening. The report is accompanied by an infographic (see below) that provides context about the findings as well as an analytical blueprint for other states to execute similar analyses.

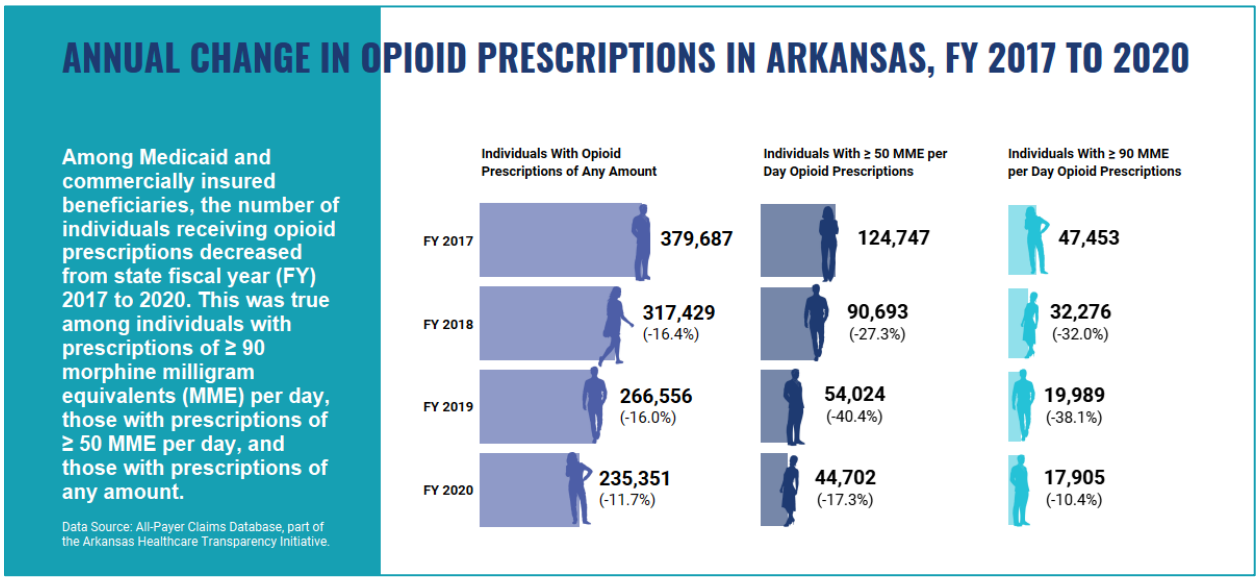


IMPACT OF MEDICAL MARIJUANA IN ARKANSAS

ACHI and UAMS have been awarded a research grant through the National Institute on Drug Abuse, a division of the National Institutes of Health, to study medical marijuana utilization in Arkansas. The study will incorporate data from the APCD with medical marijuana patient registry data, medical marijuana dispensary purchase data, vital records, emergency department records, and Arkansas State Police motor vehicle crash data. This will be the first population-level analysis that measures clinical and adverse events among medical marijuana users and non-users.

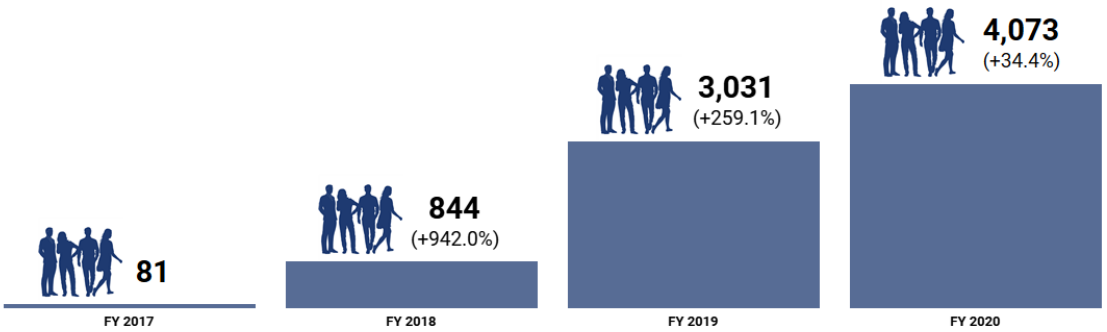
NALOXONE PRESCRIPTIONS IN ARKANSAS

To inform and understand the trends and patterns of naloxone prescribing in Arkansas, ACHI analyzed naloxone and opioid prescriptions for Medicaid and commercially insured beneficiaries from state fiscal years 2017 to 2020. The results of ACHI's analyses are contained in a data brief, "Naloxone Prescription in Response to the Opioid Epidemic," and accompanying infographics (see below).



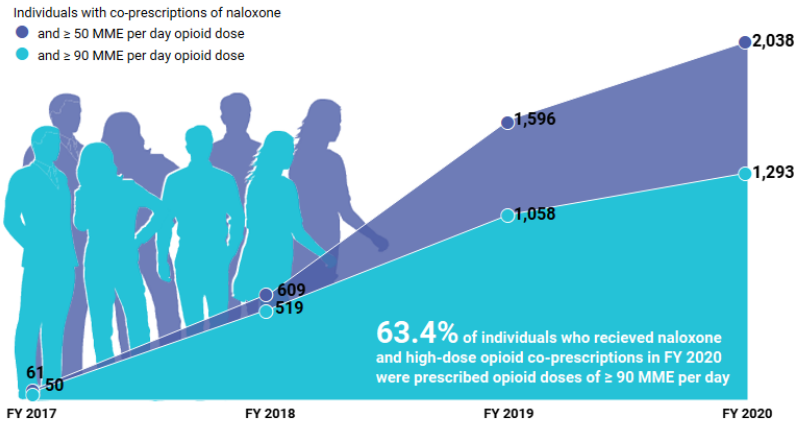
CHANGE IN NALOXONE PRESCRIPTIONS IN ARKANSAS, FY 2017 TO 2020

Among Medicaid and commercially insured beneficiaries, the number of individuals prescribed naloxone increased from state fiscal year (FY) 2017 to 2020.



Data Source: All-Payer Claims Database, part of the Arkansas Healthcare Transparency Initiative.

NUMBER OF INDIVIDUALS WITH HIGH-DOSE OPIOID AND NALOXONE CO-PRESCRIPTIONS IN ARKANSAS, FY 2017 TO 2020



Among Medicaid and commercially insured beneficiaries, the number of individuals receiving a co-prescription of naloxone and high opioid doses of ≥ 50 morphine milligram equivalents (MME) per day or ≥ 90 MME per day increased from state fiscal year (FY) 2017 to 2020.

Data Source: All-Payer Claims Database, part of the Arkansas Healthcare Transparency Initiative.

Appendix C

The following are a few resources that demonstrate how APCDs are being used.

APCD Showcase: States Leading by Example
www.apcdshowcase.org

Addressing Health Care Market Consolidation and High Prices
www.urban.org/sites/default/files/publication/101508/addressing_health_care_market_consolidation_and_high_prices_1.pdf

State All-Payer Claims Databases: Tools for Improving Health Care Value — Part 1: How States Establish an APCD and Make It Functional
www.commonwealthfund.org/sites/default/files/2020-12/McCarthy_State_APCDs_Part1_Report_v2.pdf

State All-Payer Claims Databases: Tools for Improving Health Care Value — Part 2: The Uses and Benefits of State APCDs
www.commonwealthfund.org/sites/default/files/2020-12/McCarthy_State_APCDs_Part2_v2.pdf

The Manatt State Cost Containment Update
www.manatt.com/Manatt/media/Media/PDF/RWJF_Manatt-State-Cost-Containment-Update_February-2022-vFinal.pdf