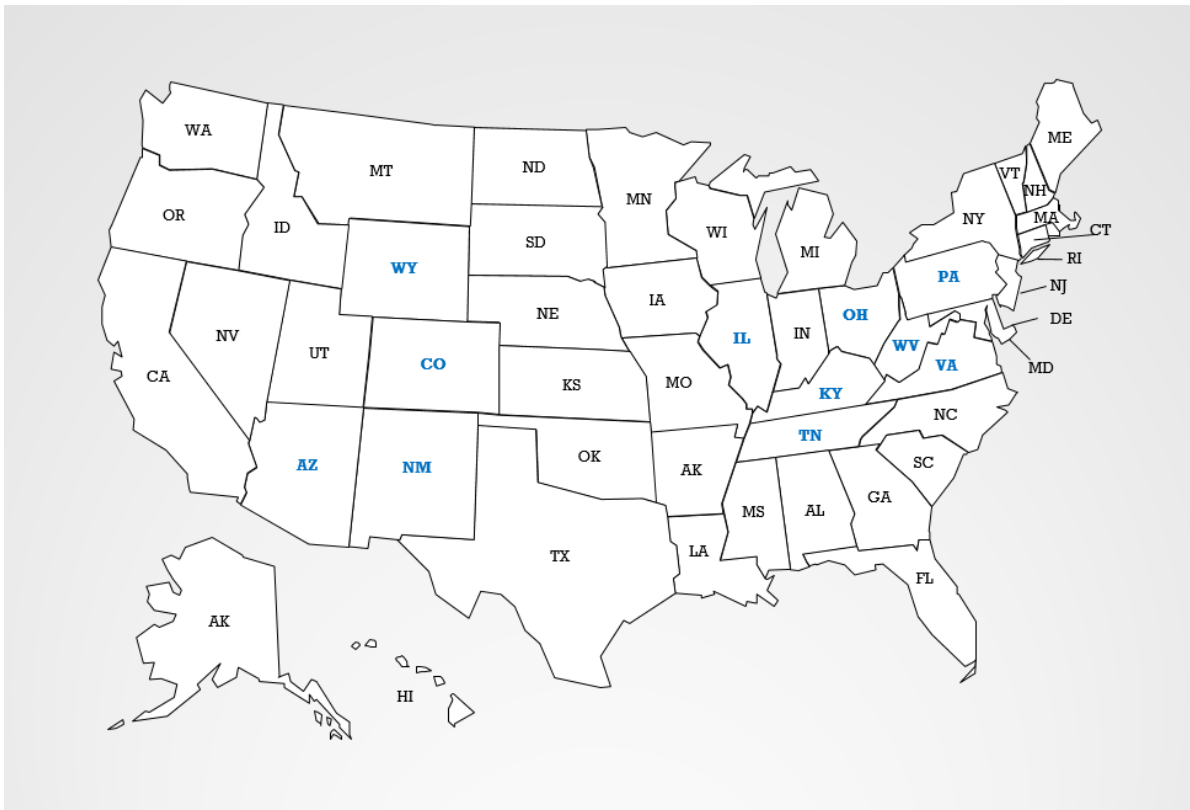




Black Lung Clinics Program

2017-2020 Cohort Snapshot



2017-2020 Black Lung Clinics Program Cohort Snapshot - Background

The Black Lung Clinics Program (BLCP) is authorized by Section 427(a) of the Federal Mine Safety and Health Act of 1977 as amended (30 USC § 937) and accompanying regulations at 42 CFR part 55a. BLCP provides funding for medical, outreach, educational, and benefits counseling services to active, inactive, and disabled coal miners throughout the country. The purpose of this program is to reduce the morbidity and mortality associated with occupationally-related Coal Mine Dust Lung Disease (CMDLD), a spectrum of diseases that includes Coal Workers' Pneumoconiosis (CWP) and its most severe form, Progressive Massive Fibrosis (PMF), collectively called Black Lung disease. Awardees include public, private, and state entities that serve a significant number of coal miners and provide a wide-range of services for Black Lung patients (see page 2). BLCP grantees served nearly 13,000 coal miners across 15 states between July 1, 2017 and June 30, 2018.

Grantee activities include outreach and education to raise awareness of Black Lung disease, medical services such as screening, diagnosis, and treatment of CMDLDs, and guidance when applying for state & federal benefits. The need for these services continues to be high. Recent studies have shown that both CWP and PMF are on the rise nationally, with the highest spikes in Appalachia.¹ Diagnoses among miners with a tenure of 25 years or more are over 10% nationally and over 20% in central Appalachia. Cases of CWP are at a 25-year high,¹ and while only 31 cases of PMF were diagnosed nationally in the 1990s, a cluster of 60 cases of PMF were diagnosed in Kentucky alone in 2015-2016.²

This Snapshot describes the Black Lung Clinics Program across the 2017 – 2020 cohort. All grantees must provide minimum required services, outlined below. A breakdown of each of the 15 awardees, including organizational information, demographics, promising practices, challenges & barriers, and innovative services & major accomplishments follows. Information was collated from awardees' applications and annual progress reports.

For more information, a video highlighting HRSA's Black Lung Clinics Program and its impacts can be found online at <https://www.hrsa.gov/get-health-care/conditions/black-lung/index.html>.

¹ Blackley, D.J., Halldin, C.N., Laney, A.S. "Continued Increase in Prevalence of Coal Workers' Pneumoconiosis in the United States, 1970–2017", *American Journal of Public Health* 108, no. 9 (September 1, 2018): pp. 1220-1222.

² Blackley D.J., Crum J.B., Halldin C.N., Storey, E., Laney, A.S. "Resurgence of Progressive Massive Fibrosis in Coal Miners — Eastern Kentucky, 2016." *Morbidity and Mortality Weekly Report* 2016;65:1385–1389.

2017-2020 Black Lung Clinics Program Cohort Snapshot - Program Services

The Black Lung Clinics Program (BLCP) provides funding for medical, outreach, educational, and benefits counseling services to active, inactive, and disabled coal miners throughout the country. These services are provided in consultation with a physician with special training or experience in the diagnosis and treatment of occupational, respiratory, and/or pulmonary diseases. BLCP services include:

- Outreach
- Primary Care (including screening, diagnosis and treatment)
- Patient and Family Education and Counseling (including anti-smoking education)
- Patient Care and Coordination (including individual patient care plans and referrals)
- Lung Function Testing
- Chest Imaging
- Pulmonary Rehabilitation
- Medical Case Management
- Department of Labor Black Lung Physical Examination and Benefits Counseling
- Federal and State Black Lung Compensation Services and Counseling
- Other Symptomatic Treatments

The clinics also provide educational programs to help respiratory disease patients and their families cope with their disease, improve their breathing and endurance, and improve their quality of life. Services are provided either directly by grantees or through formal arrangements with appropriate health care providers, such as Federally Qualified Health Centers, hospitals, state health departments, and mobile vans or clinics. Services are available regardless of a miners' ability to pay. The Black Lung Clinics Program is the payer of last resort and covers non-reimbursable services such as benefits counseling. Additionally, in an effort to increase reporting efficiencies, align data with other agencies, and allow for better analysis of emergent trends, all awardees will soon report patient-level data.

Below is a detailed description of the minimum required services awardees must provide:

Patient Education and Outreach: Current, evidence-based information should be delivered to coal miners in a variety of formats and forums. Education should include risks associated with coal mine dust exposure as well as available medical services and compensation programs available to them.

Lung Function Testing: Testing includes onsite spirometry and oximetry, with or without a bronchodilator challenge. Staff must have training in the proper interpretation of results and National Institute for Occupational Safety and Health (NIOSH) certification in spirometry.

Chest Imaging: This should include a Postero-Antero chest x-ray (CXR) that must be provided by a contracted or onsite board-certified radiologist and interpreted by a NIOSH-certified B-reader. Every effort must be taken to meet International Labour Organization (ILO) technical standards and facilities must be contracted or onsite.

Pulmonary Rehabilitation: Accredited Phase II and Phase III pulmonary rehabilitation services must be provided onsite, through contract, or by referral.

Medical Case Management: Staffing should include a patient care coordinator, who may be a lay health care worker or trained health care personnel. The coordinator is responsible for assisting the clinic physicians in maintaining contact with the patient's primary care physician and assuring optimum patient participation in the prescribed treatment. Current, evidence-based information and treatment of coal mine dust induced lung diseases (e.g., medications, nutrition, vaccinations, smoking cessation, and referrals to specialty care) should be provided. Applicants must also evaluate and treat (or refer) coal miners for commonly associated conditions, including hearing loss, substance abuse, depression, hypertension, and cardiovascular disease.

Department of Labor Black Lung Physical Examination and Benefits Counseling: The awardee must have the ability to refer patients to an approved and certified DOL medical examiner.

Federal and State Black Lung Compensation Services and Counseling: Compensation counselors should have a minimum of a high school diploma and training to competently assist miners in filing Federal Black Lung, State Worker's Compensation, and Social Security Disability Insurance claims as appropriate.

Other Symptomatic Treatments: Examples of other symptomatic treatments include comorbidities such as Chronic Obstructive Pulmonary Disease (COPD) and asthma.

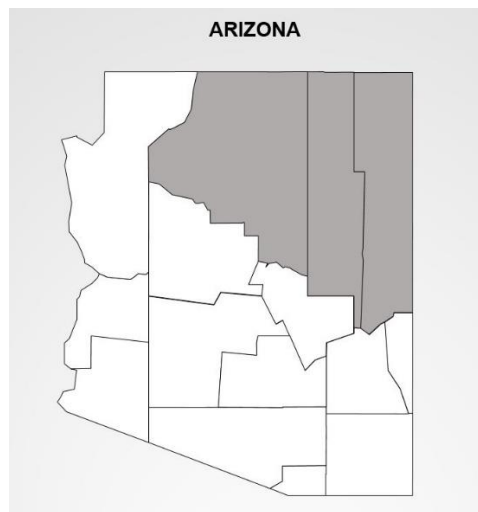
2017-2020 Black Lung Clinics Program Cohort Snapshot – Awardees by State

State	Grant Organization Name	Page
Arizona	Canyonlands Community Health Care	6
Colorado	National Jewish Health	9
Illinois	The Board of Trustees of the University of Illinois	12
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Kentucky	OH Muhlenberg, LLC - Owensboro Health Muhlenberg Community Hospital	17
New Mexico	Miners' Colfax Medical Center	20
Ohio	Alecto Healthcare Services – East Ohio Regional Hospital	23
Ohio	Genesis HealthCare System	26
Pennsylvania	Alveoli Corporation - Lungs at Work	29
Pennsylvania	Centerville Clinics, Inc.	32
Pennsylvania	University of Pittsburgh Medical Center (UPMC) Altoona	34
Tennessee	Community Health of East Tennessee, Inc. (CHET)	37
Virginia	St. Charles Health Council, Inc. - Stone Mountain Health Services Respiratory Care Clinics	40
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Arizona: Canyonlands Community Health Care

Part I: Organizational Information	
Grantee Number	H37RH27224
Project Title	Canyonlands Healthcare Black Lung Clinic Program
Organization Type	Federally Qualified Health Center (FQHC)
Address	827 Vista Avenue Page, Arizona 86040
Grantee Organization Website	https://canyonlandschc.org/
Project Director	Name: CJ Hansen
	Email Address: c.hansen@cchcaz.org

Part II: Demographic Breakdown



- State of Arizona:
 - Counties: Apache, Coconino, and Navajo

Canyonlands Community Health Care serves the remote communities of Kayenta and Page. These two communities face significant health disparities and limited access to health care. The population that the clinic serves is 99% Native American, specifically, the Navajo and Hopi tribes. In these populations, chronic conditions such as diabetes and cardiovascular disease are prevalent. Cancer incidence is also higher than the statewide cancer rate. Currently, 5% of the clinic’s patient population are uninsured. Many households in these two areas are multigenerational, putting pressure on miners to work past retirement age.

Part III: Promising Practices

Canyonlands Health Care promotes the black lung program through radio segments, presentations at conferences and community events, and advertisements in local and national newspaper outlets that engage tribal communities. The clinic also attends local weekly swap meets in Kayenta and Tuba City to engage directly with the community.

The clinic has shown promise in overcoming barriers such as travel time and expense, scheduling, and disability by reaching out to patients in their communities. Implementation methods include telemedicine, education and outreach, referrals to the clinic, and more. Off-site screenings are conducted by Community Health Outreach Workers that work with Nurse Case Managers and Medical Assistants which has shown to be successful.

Part IV: Challenges and Barriers

One of the biggest challenges is stigma and fear of repercussions which prevents miners from seeking screenings, which prevents early diagnosis and referrals for appropriate treatment.

Another challenge is the closure of the Navajo Generating Station in Page, which will force the closure of the Peabody Mine in Kayenta.

There are no local television stations and poor-to-no broadband on the Navajo reservation which is a barrier to outreach and educational activities. Efforts have been focused on radio and print publications in order to overcome this.

Other barriers to care include financial, geographic, language and cultural factors, lack of transportation, and health care provider shortages which often results in health care delivery gaps. By using off-site and culturally relevant care methods, the clinic is able to alleviate some of these challenges.

Part V: Innovative Services and Major Accomplishments

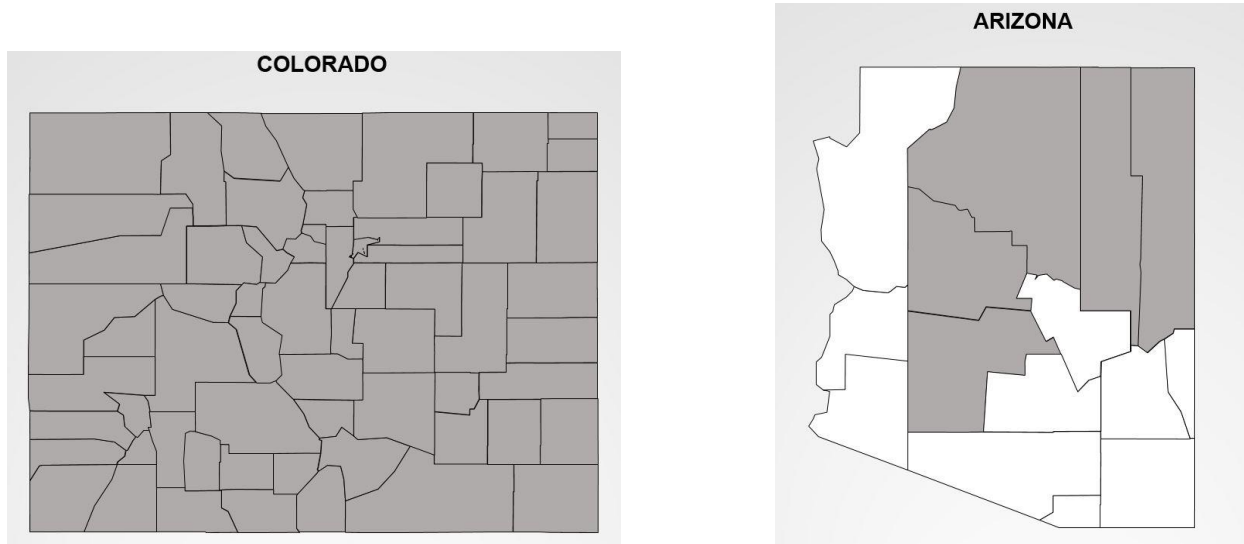
- Innovative Services:
 - Community outreach and health education events occur at various locations including worksites and community gathering places in order to reach miners and their families where they are.
 - Screenings and assessments may occur in miners' homes and other off-site locations using telemedicine in order to reduce barriers to care.
 - Medical case management includes specialty service providers such as nutritionists, mental healthcare providers, and traditional medicine practitioners.
 - Compensation counseling services assist miners and their families to access benefits including the federal Black Lung claims program.
 - The clinic convenes the Page/Kayenta Black Lung Consortium, a group of stakeholders committed to health promotion and coordinating health and support services locally.

- The clinic collects patient-level data to document incidence of Coal Workers' Pneumoconiosis and track health outcomes of patients.
- Canyonlands provides an on-site pharmacy to reduce barriers to medication delivery. If a miner is unable to arrange transportation in order to obtain their medication, the Community Health Outreach Worker (CHOW) works with clients and their families to find alternate delivery means.
- The clinic integrates behavioral health including depression screenings at every visit.
- Major Accomplishments:
 - Outreach and education activities have led to a 40% increase in patients.
 - A new, onsite pharmacy opened which is able to provide prescription medications to patients currently receiving primary medical care in the Chilchinbeto clinic.
 - The clinic's integrated behavioral health services expanded by hiring staff specializing in behavioral health and recently awarded grant funding to include medication assisted treatment (MAT) for opioid use disorder.
 - Canyonlands received a USDA grant that allowed for successful integration of grant-funded equipment into the expanding behavioral health services line, incorporate clinical laboratory training across the organization, provide remote yet real-time patient education, and expand program outreach for Black Lung clinic services.
 - Canyonlands provided Black Lung Clinic program service education to all nine of their clinical sites across Arizona.

Colorado: National Jewish Health

Part I: Organizational Information	
Grantee Number	H37RH00066
Project Title	The National Jewish Health Miners Clinic
Organization Type	Hospital/Medical Center
Address	1400 Jackson Street Denver, Colorado 80206
Grantee Organization Website	https://www.nationaljewish.org/home
Project Director	Name: Cecile Rose, MD
	Email Address: rosec@njhealth.org

Part II: Demographic Breakdown



- State of Colorado
 - Counties: all counties in Colorado
- State of Arizona
 - Counties: Apache, Coconino, Maricopa, Navajo, and Yavapai

National Jewish Health’s (NJH) Black Lung Clinic serves the entire state of Colorado and six counties in Arizona. The coal miner patient population served is 52% white and 41% Native American. In addition, 83.5% of miners are over the age of 60. Approximately 3% of miners reported having no health insurance. This patient population has high rates of obesity, hypertension, depression, and respiratory health issues.

Part III: Promising Practices

There is a dedicated marketing team at NJH that maintains a website, creates posters and brochures describing key services, and drives social media content for outreach. Other efforts include participation in state Mine Rescue Contests, radio-based public service announcements, presentations at conferences or community events, interviews and advertisements in local or national newspaper outlets, and journal articles in peer-reviewed publications. Surveys are distributed at outreach events to determine the impact of the event on miners, their families, and local providers.

NJH conducts a bi-monthly Miners Clinic case conference in which participants review and discuss challenging Black Lung cases, share new program efforts, and provide updates on policy and regulatory efforts at the national level.

The Miners Clinic is a training site for Occupational and Environmental Medicine (OEM) residents from the Colorado School of Public Health Mountains and Plains Education and Research Center.

Also promising is the Miners Clinic Advisory Committee which provides oversight and feedback on all of NJH's activities. This committee meets twice every year and consists of members from the state mine safety program, Mine Safety and Health Administration, a black lung attorney, a member from the regional office of the Department of Labor, and representatives from the NJH marketing and public affairs departments. This helps to ensure the best possible experience for patients.

NJH implemented a program to provide chest x-ray services to local coal mine operators as part of the NIOSH Coal Workers' Health Surveillance Program (CWHSP). They also provided spirometry testing to these miners for the "enhanced" CWHSP.

Part IV: Challenges and Barriers

A major barrier to care are the cultural and linguistic challenges to providing services to Navajo Nation coal miners. To alleviate some of these challenges, the clinic scheduler works closely with a representative on the Navajo Reservation to schedule screenings. They also work with United Mine Workers of America (UMWA) representatives from the Navajo Nation who provide essential coordination, leadership, translation, and cultural insight services. NJH has developed a Navajo language spirometry training video for use in the Arizona clinics. As a result of implementing this tool, there is more efficient and better quality spirometry.

Another challenge that NJH faced is finding new and creative outreach strategies to miners with limited access to necessary services. By using a variety of outreach methods, miners and their families are reached regardless of broadband access or cellular service.

There have also been barriers to accessing quality care in the service areas due to a lack of pulmonary and occupational medicine services. One of these services is B reading from pulmonary radiologists. The

clinic's physicians are uniquely capable of addressing this gap, having years of experience as board certified occupational pulmonologists.

Assuring that participating miners obtain effective case management of abnormalities found during screening and are able to access to pulmonary rehabilitation services from rural providers is also challenging.

The program also faces a challenge in increasing the number and success of DOL Black Lung benefits claims.

Part V: Innovative Services and Major Accomplishments

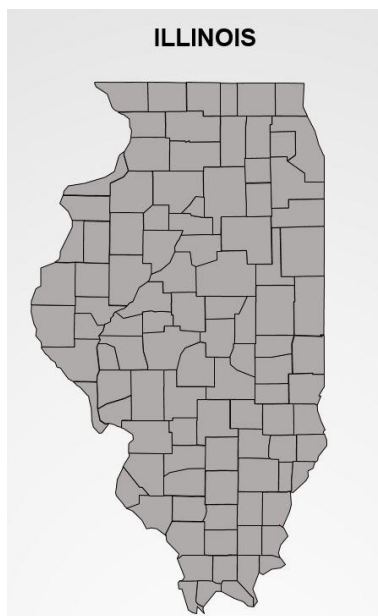
- **Innovative Services**
 - Educational sessions at local and national conferences
 - Central data collection and tracking
 - Implementation of tailored social media advertisements and announcements

- **Major Accomplishments**
 - NJH completed a systematic review of spirometry quality, identified problems with spirometer software reliability in grading quality, and drafted a summary with findings and recommendations.
 - The clinic implemented a new quarterly Miners' Clinic case conference attended by pulmonologists, occupational physicians, radiologists, case managers, benefits counselors, and others to discuss and review challenging cases as well as to update team members on relevant policy and administrative issues.
 - New staff were trained on outreach and benefits counseling to expand their capacity to assist miners.
 - Medical staff were invited to be speakers at a national black lung conference.
 - NJH updated their spirometry equipment with a new simple spirometer and a device with spirometry capabilities that can test for diffusion lung capacity.

Illinois: The Board of Trustees of the University of Illinois

Part I: Organizational Information	
Grantee Number	H37RH26508
Project Title	The University of Illinois at Chicago-Shawnee Health Service Black Lung Clinics Program
Organization Type	Hospital
Address	University of Illinois School of Public Health--Environmental and Occupational Health Sciences 106 SPH West, MC 922, 2121 West Taylor Chicago, Illinois 60612
Grantee Organization Website	http://publichealth.uic.edu/eohs
Project Director	Name: Robert Cohen, MD Email Address: bobcohen@uic.edu

Part II: Demographic Breakdown



- States of Illinois and Indiana
 - Counties: all counties in Illinois and Indiana

The University of Illinois at Chicago (UIC)-Shawnee Health Service (SHS) Black Lung Clinics Program is a consortium joining UIC with the SHS Southern Illinois and Southwestern Indiana Respiratory Disease Program (SIRD). While the service area comprises Illinois and Indiana, the program draws coal miners from multiple states including Illinois, Indiana, Missouri, Wisconsin, Iowa, and Kentucky. In both Illinois and Indiana, the most prevalent chronic diseases are cancer, diabetes, and heart disease. The coal mining patient population served is 98.7% white, 93.9% over the age of 60, and none are uninsured. In Illinois and Indiana, 37 counties are Health Professional Shortage Areas (HPSA).

Part III: Promising Practices

The program uses a wide variety of outreach efforts such as radio segments, presentations at conferences or community events, interviews in local or national newspaper and television outlets, and journal articles in peer-reviewed publications. The main focus of outreach efforts is to convey the fact that coal mine dust lung disease (CMDLD) has not been eradicated or even significantly reduced. This message is meant to convince miners that they should be screened for this disease and undergo repeat evaluations to assess disease progression, which happens even without further exposure. Outreach efforts also stress that the clinic provides easy access to high quality testing and that the consortium is a full service provider which has treated, educated, and counseled many miners with excellent results.

In addition, the program staff is collaborating with other Black Lung grantees to share best practices for increasing participation at outreach events and recruitment into care. The program also collaborates to provide chest x-ray B-reading services to help foster sustainable working partnerships and provide the best patient care to miners.

Clinic staff is working to establish the UIC Mining Education and Research Center (MinER) with a mission to advance the health, safety, and wellbeing of miners globally through research and education to improve public health policy.

The project has an occupational medicine residency rotation with Northwestern Medicine. Occupational medicine residents participate in the assessment and evaluation of occupational lung disease patients and receive a valuable experience in the performance and interpretation of chest imaging and pulmonary physiologic testing. This is an effort to increase the number of providers interested in pursuing rural medicine, and more specifically, to work with occupational lung diseases.

Part IV: Challenges and Barriers

A continuing challenge has been to increase participation in the Outreach Screening and Advanced Diagnostic Clinics of the Black Lung Clinics program. However, the program has taken steps to increase community outreach by hiring an Outreach Specialist. The Outreach Specialist is able to conduct quarterly screening clinics, identify alternate screening clinics sites in Southern and Central Illinois, hold screening clinics during community events, and offer rescreening to miners previously examined who did not qualify at that time. They have used other methods to address this such as organizing groups of miners from the same geographic area to come to clinic together, providing lung function screening clinics, offering follow up examinations to previously examined who have not been successful with their benefit claims, and reaching out other Black Lung Clinics programs for ideas to increase capacity.

Another challenge has been standardization of policies and protocols for tracking referral activities for benefits claims and from the Outreach Specialist. To increase accuracy of tracking referrals to consortium members, the program has updated and standardized the language on the occupational and medical demographic intake forms.

Part V: Innovative Services and Major Accomplishments

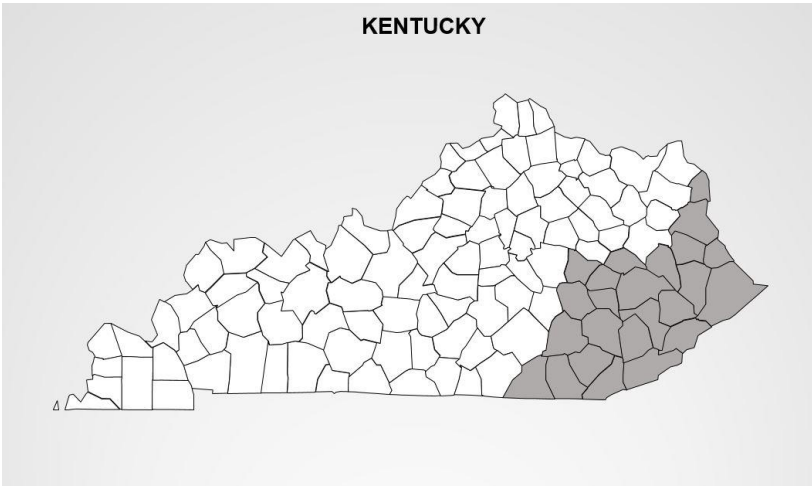
- Innovative Services

- Collaborative efforts with other Black Lung grantees
- Occupational medicine residency rotation
- Major Accomplishments
 - Faculty published peer reviewed manuscripts and abstracts in prominent medical journals.
 - Presented at international meetings including the American Thoracic Society and Colombian Thoracic Society, at national and state Black Lung meetings, in post-graduate courses at the University of California San Francisco, and facilitated trainings for occupational medicine physicians and radiologists in Australia.
 - The project director was interviewed by National Public Radio (NPR) about the resurgence in Progressive Massive Fibrosis (PMF), and on Australian television about Black Lung.
 - UIC hosted a successful national conference in 2018, bringing together for the first time at one event professional representatives from Africa, the Americas, and Australia. Personnel from the medical, legal, union, government (federal and state), academic, public, and private sectors participated in a week of meetings and other activities. More than 160 participants attended the conference.
 - The program continues to use The NDD Easy-On PC pulmonary function testing equipment at the Black Lung Screening Clinic and large annual miner outreach events. This device is capable of performing spirometry and diffusion capacity measurements, which is an important additional capability for the evaluation of impairment.

Kentucky: Mountain Comprehensive Health Corporation

Part I: Organizational Information	
Grantee Number	H37RH00050
Project Title	Respiratory Clinics of Eastern Kentucky
Organization Type	Federally Qualified Health Center (FQHC)
Address	226 Medical Plaza Lane Whitesburg, Kentucky 41858
Grantee Organization Website	http://www.mountaincomprehensivehealth.com/
Project Director	Name: Mike Caudill
	Email Address: lmcaudill@mtncomp.org

Part II: Demographic Breakdown



- State of Kentucky
 - Counties: Bell, Boyd, Breathitt, Clay, Estill, Floyd, Harlan, Jackson, Johnson, Knott, Knox, Lawrence, Laurel, Lee, Leslie, Letcher, Magoffin, Martin, McCreary, Owsley, Perry, Pike, Whitley, and Wolfe

Mountain Comprehensive Health Corporation (MCHC) is one of the largest providers of primary healthcare services in the service area. The coal miner patients that MCHC serves are 99% white and 56.5% are over the age of 60. The percentage of uninsured patients receiving services is 7%. The incidence of lung cancer in Kentucky is the highest in the country, and the leading cause of death is cardiovascular disease.

Part III: Promising Practices

MCHC uses a variety of means for outreach efforts which is a best practice. Throughout the region, MCHC organizes, co-sponsors, and attends annual health fairs and outreach events. MCHC also advertises on local television programming, local newspapers, and with national news media. Lastly,

MCHC utilizes social media to share events and other important information such navigating health care options.

Part IV: Challenges and Barriers

Transportation to the clinic is a barrier to care for some miners as they do not have adequate means to travel. To help alleviate this, MCHC works with local area development district offices that are able to provide transportation services.

Another challenge is enrollment and compliance with the smoking cessation program “Freedom from Smoking.” This program is important because smoking exacerbates lung diseases so efforts to increase participation are ongoing.

Part V: Innovative Services and Major Accomplishments

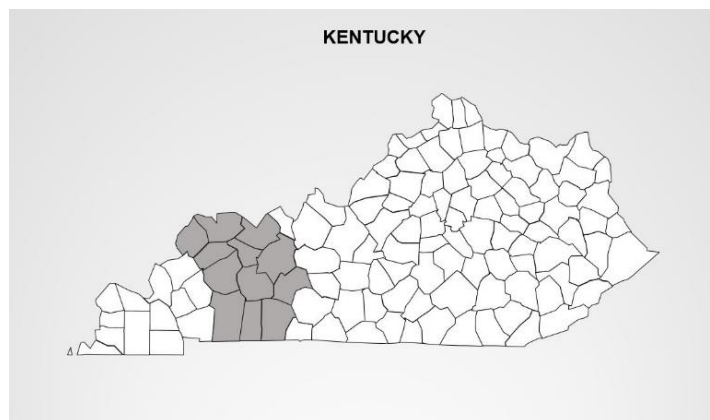
- Innovative Services
 - Integration of Family Practice, Internal Medicine, Pulmonology, Pediatrics, Social Services, Family Planning, OB/GYN, Family Dentistry, Optometry, and Behavioral Health services
 - Ancillary services
 - Indigent medicine programs for uninsured patients
 - Home Medical store to meet need for durable medical equipment (DME)
 - 340B Drug Program

- Major Accomplishments
 - Beginning January 2018, accredited pulmonary rehabilitation was provided on-site via contract, available for all who needed this service.
 - The clinic organized the only chapter of the National Black Lung Association in Kentucky to increase outreach efforts. At chapter meetings, guest speakers from the Department of Labor and the state workers’ compensation program as well as attorneys present information about benefits programs and provide assistance with claims.

Kentucky: OH Muhlenberg, LLC - Owensboro Health Muhlenberg Community Hospital

Part I: Organizational Information	
Grantee Number	H37RH00049
Project Title	Black Lung/Coal Miner Clinics Grant Program (BLCGP) of Greenville, Kentucky
Organization Type	Hospital
Address	440 Hopkinsville Street Greenville, Kentucky 42345
Grantee Organization Website	https://www.owensborohealth.org/locations/muhlenberg-community-hospital/services/coal-miners-respiratory-clinic/
Project Director	Name: Donald Givens
	Email Address: d.givens@mchky.org

Part II: Demographic Breakdown



- State of Kentucky
 - Counties: Butler, Christian, Daviess, Henderson, Hopkins, Logan, McLean, Muhlenberg, Ohio, Todd, Union, and Webster

Coal miners served are 96.7% white, 61.7% over the age of 60, and 7% uninsured. Comorbidities in the coal miner patient population are of great concern as Kentucky ranks the highest for total mortality rate. Cardiovascular disease is the state’s leading cause of death, and rural state residents have unusually high levels of cancer, heart disease, hypertension, asthma, and diabetes. Kentucky has one of the nation’s highest smoking rate at 26.2% of the adult population. These rates contribute to an overall ranking of 44 among the 50 states on the America’s Health Rankings.

Part III: Promising Practices

The Coal Miners’ Respiratory Clinic (CMRC) uses a wide variety of advertising, which has shown to be a best practice. This includes local radio and newspaper advertisements, the Owensboro Health

Muhlenberg Community Hospital Facebook page, and billboards for outreach. CMRC hosts presentations to educate miners in the region on black lung disease along with testing and benefits services available to them. CMRC is also working with National Public Radio (NPR) on the incidence of Progressive Massive Fibrosis (PMF) in the service area. Additionally, CMRC has written articles for the regional newspaper that focuses on the services CMRC offers. Lastly, CMRC hosted a health fair and was interviewed by a local news station during the event.

Part IV: Challenges and Barriers

A major challenge to outreach is conveying the importance of screening. If a miner is denied benefits, other miners do not see the value in pursuing screenings. To overcome this, outreach messages focus on the importance of early detection for long-term health and that every benefits case is different.

Another challenge is literacy levels of the population. Efforts to increase literacy rates include referrals to appropriate local adult education programs and speaking at outreach events rather than just providing written materials.

There is also a need to educate employers about their responsibilities related to the health of their employees. To overcome this obstacle, outreach efforts include working collaboratively with coal industry employers to develop education, prevention, diagnostic, and monitoring programs.

As a result of a recent legislation change, currently only pulmonologists can perform the physical exams and read chest r-rays for a state worker's compensation claim. This is challenging since there are only five pulmonologists qualified to do so in the state.

Miners in this area tend to have the misconception that black lung is an expected outcome of their occupation, which hinders their participation in prevention, monitoring, diagnostic, and treatment interventions. There have also been efforts to educate the coal mining population that economic benefits of the occupation do not outweigh the health risks. Both of these efforts are meant to make miners aware of their employment options and have a realistic understanding of disease prevalence.

A major challenge is attracting and retaining primary care physicians and other health care professionals in the service area. There is also a lack of professional legal representatives willing to accept Federal Black Lung disability cases. This is a barrier to the wide scope of care and meeting miners' needs, so recruitment efforts are a high priority. With mine closure or change in ownership, it is anticipated that there will be an increase in miners applying for federal benefits. This is a lengthy process and requires competent staff to assist.

Part V: Innovative Services and Major Accomplishments

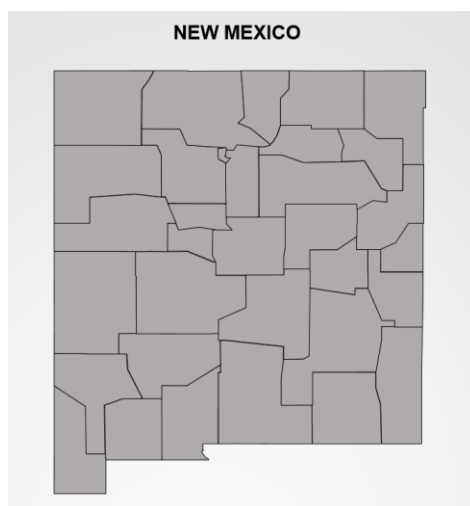
- Innovative Services
 - Leveraging partnerships to increase outreach and education efforts
 - United Mine Workers of America (UMWA)
 - Kentucky Office of Mine Safety & Licensing (OMSL)
 - Community and senior citizen centers
 - On-site health and wellness events for coal industry workers

- Major Accomplishments
 - The radiology department completed National Institute for Occupational Safety and Health (NIOSH) certification on an additional x-ray room which increased the ability to provide services to miners.
 - The front office was remodeled which has improved morale and made for a better work environment for patients and staff.
 - A full-time nurse practitioner was hired to work with pulmonary and sleep disorder patients.

New Mexico: Miners' Colfax Medical Center

Part I: Organizational Information	
Grantee Number	H37RH00057
Project Title	Miners' Colfax Medical Center Black Lung Clinic and the Black Lung Miners' Outreach Program
Organization Type	Critical Access Acute Care Facility, Long-Term Care Facility
Address	203 Hospital Drive Raton, New Mexico 87740
Grantee Organization Website	http://www.minershosp.com/
Project Director	Name: Charles Pollard
	Email Address: cpollard@minershosp.com

Part II: Demographic Breakdown



- State of New Mexico
 - Counties: all counties in New Mexico

Miners' Colfax Medical Center divides activities between the Miners' Colfax Medical Center Black Lung Clinic, housed in an Acute Care Hospital, and the Black Lung Miners' Outreach Program, which is the only Black Lung mobile clinic traveling throughout the state of New Mexico to over 20 different clinic sites. Through the mobile unit, screening services are provided to a geographical area of 121,666 square miles. The majority of healthcare areas in New Mexico are health professional shortage areas (HPSA) and health care underserved areas (HCUA) which results in significant barriers to healthcare access and delivery. In addition, rural communities of New Mexico have a disproportionately high prevalence of chronic comorbidities (such as obesity, hypertension, diabetes, asthma, and heart disease) which makes the care of chronic respiratory diseases even more difficult. Hispanic, Mexican, and Native American populations make up over 50% of the residents in the state of New Mexico. Of miners served, just over 27% are Native American and just under 47% are Hispanic or Latino.

Part III: Promising Practices

Quarterly strategic planning sessions are held with all management and administration staff to review the work plan, completion of goals, and patient satisfaction surveys. The surveys are given to each miner at the end of their exam. The feedback is reviewed for areas that need improvement.

Quantitative data is used to increase efficiencies and evaluate the impact of our black lung program on health and well-being of coal miners. We track new and returning patients at each clinic site location to understand where outreach efforts reach the most miners.

Multiple means are used for outreach such as journal articles in peer-reviewed publications; advertisements, articles, and op-eds in local and national newspaper outlets; and an article in a local magazine to disseminate information about the impact of the program.

The clinic is able to schedule patients for their Department of Labor exam within one month of receiving their approved packets from Department of Labor. This increases efficiency and reduces wait time for miners.

The mobile clinic allows providers to be easily accessible and readily available to the patient. These clinics are held in a semi-tractor trailer consisting of a dedicated x-ray room, soundproof audiometric booth, examination room, pulmonary function area, and reception area. Consultations with a pulmonary physician specialist are available using real-time satellite telemedicine technology.

Part IV: Challenges and Barriers

A challenge with setting up a traditional pulmonary rehabilitation program in this vast area is that there are limited brick-and-mortar medical facilities with pulmonary rehabilitation programs. To help overcome this barrier, patients are taught home pulmonary rehabilitation activities such as pursed lip breathing and exercises.

The outreach clinic also faces challenges with scheduling clinic locations at mines across New Mexico. Safety coordinator staff turnover at the mines often results in a delay as they reestablish contacts and operational procedures.

There are high rates of uninsured individuals in the service area which is a barrier to seeking care. The clinic's personnel are being trained as certified healthcare navigators who will be able to help patients with the exchange webpage, the application for coverage, and answering general questions.

There are also communication barriers. The majority of patients are Native American or Hispanic, many of whom do not speak English as their first language, have cultural differences, and have visual or auditory deficits. There is also poor cellular coverage and limited land line phones, as well as frequent changes in phone numbers. The clinic hopes to overcome communication challenges by using print advertising as well as training staff and making available resources that are culturally sensitive and in three languages (English, Spanish, and Navajo).

The vast state of New Mexico has disproportionately high rates of inadequate health insurance and poverty. It also suffers from shortages of health care providers and inadequate access to pulmonologists. New Mexico's rural hospitals serve large, remote, high-altitude geographic areas with long driving distances that further limit access to quality care. The use of grant funds as a payer of last resort and the mobile clinic to bring providers to patients helps overcome these barriers.

Part V: Innovative Services and Major Accomplishments

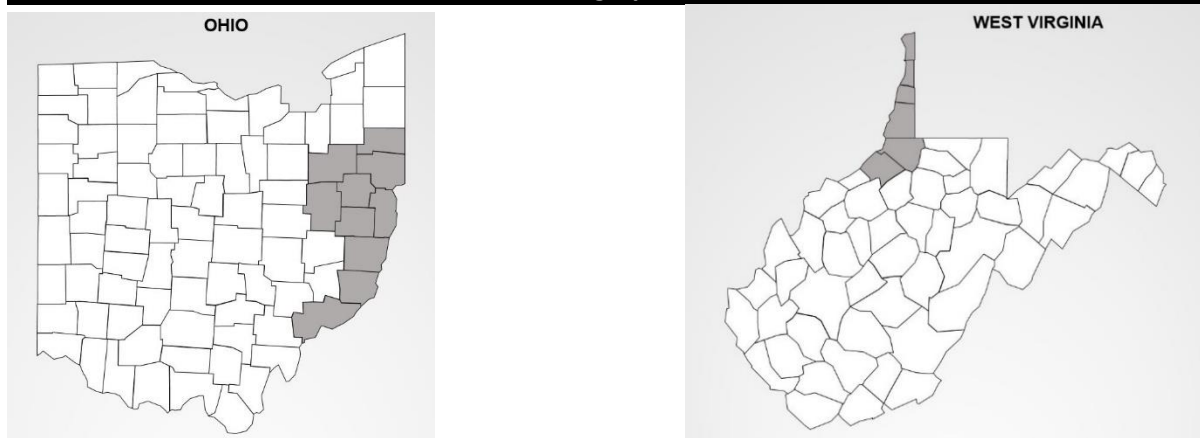
- **Innovative Services**
 - Mobile medical unit that travels throughout the state providing screening, evaluation, and diagnostic services to miners with occupational pulmonary illness.

- **Major Accomplishments**
 - The on-site wellness fitness center has recently upgraded equipment in order to improve the quality of services provided to miners.
 - Miners' Colfax facilitates Project ECHO (Extension for Community Healthcare Outcomes), a bi-monthly webinar that features a didactic presentation and case discussion for medical providers, lawyers, benefits counselors, and interested stakeholders to learn more about Black Lung.
 - The clinic hosts a Miners' Day Celebration with speakers from across New Mexico and partners from other grants. After miners' day, there was an increase in Department of Labor applications and an increase in interest hosting the Mobile Outreach Unit.

Ohio: Alecto Healthcare Services – East Ohio Regional Hospital

Part I: Organizational Information	
Grantee Number	H37RH31660
Project Title	Respiratory and Occupational Lung Disease Clinic
Organization Type	Hospital
Address	90 N. 4th Street Martins Ferry, Ohio 43935
Grantee Organization Website	N/A
Project Director	Name: Becky Maruca
	Email Address: bmaruca@ovrh.org

Part II: Demographic Breakdown



- State of Ohio
 - Counties: Belmont, Carroll, Columbiana, Harrison, Jefferson, Mahoning, Monroe, Stark, Tuscarawas, Washington
- State of West Virginia
 - Counties: Brooke, Hancock, Marshall, Ohio, Tyler, Wetzel

There are high rates of heart disease, cancer, and chronic respiratory diseases in the service area. Many miners are uninsured (11%) or underinsured (23%), but the clinic works to help the miners obtain insurance coverage through Medicare, Medicaid, or the Affordable Care Act marketplace. No significant minority population is served because 99% of miner patients are white males. The median age of miners ranges from 41 years to 46 years by county.

Part III: Promising Practices

The most effective method of outreach to the coal miners has been word of mouth. In this tight-knit community, miners frequently pass on information to each other. Other methods of outreach include presenting at conferences and community events, intrahospital communications on the clinic and pulmonary rehabilitation, social media, HRSA-provided materials, and in magazines such as the

American Association for Respiratory Care (AARC) Times Magazine. Using a wide variety of outreach methods helps to ensure a miner is reached where they are.

Because miners are often unsure what benefits program they may qualify for, when miners are tested for black lung, they also meet with a benefits counselor to go over the claims process. This helps them to prepare for the process should their test results show they are able to apply for state or federal programs.

Since early diagnosis is important, the clinic recruits active coal miners for baseline pneumoconiosis and breathing testing. These miners are also offered flu vaccines.

The clinic has several internal operational best practices. First, maintaining a high level of staffing ensures comprehensive continuity of care. Second, to encourage compliance with pulmonary rehabilitation, upon qualification miners are immediately referred to a program that is close to their residence. And lastly, the clinic administers Patient Satisfaction Surveys and responds appropriately to ensure patients feel valued and respected.

Part IV: Challenges and Barriers

While the service area does not have a shortage of physicians, recruitment into care is a challenge. Physicians are often unwilling to evaluate miners for compensation or disability due to the prolonged legal process.

Especially for inactive, retired, or disabled miners, the financial burden of paying a registration fee creates a barrier to attendance at outreach programs and conferences.

Transportation in rural communities is often a challenge, especially with continuing pulmonary rehabilitation after the first phase. However, the pulmonary rehabilitation service continues to recruit new Phase II patients, and there has been an exceptional attendance record in maintaining Phase III patients. To overcome this barrier, miners living away from the clinic area are referred to a pulmonary rehab program close to their home.

Since there is a significant number uninsured and underinsured patients in the population, financial barriers to care are often reported. The clinic works hard to raise awareness that services are available to miners regardless of their ability to pay.

Part V: Innovative Services and Major Accomplishments

- Innovative Services:
 - Localizing pulmonary rehab services
 - Advanced pulmonary and radiology testing
 - Clinic staff regularly attends, participates in, and recruits from, local United Mine Workers of America (UMWA) meetings and events

- Major Accomplishments:

- The Project Director testified at the Ohio State Legislature in Columbus, OH in an effort to gain Workers' Compensation benefits similar to other states. The clinic's statistics were used as evidence.
- The Project Director was a member of the UMWA roundtable discussion of miners' healthcare with Senator Sherrod Brown in Steubenville, OH and has collaborated with the Senator in Washington, D.C. on efforts to improve miners' health care.
- The clinic became a part of the American Association of Respiratory Care's Center of Excellence.
- The clinic collaborated with the National Institute for Occupational Safety and Health to have a Coal Miners' Surveillance program come to six locations in the service area.

Ohio: Genesis HealthCare System

Part I: Organizational Information	
Grantee Number	H37RH31023
Project Title	Coal Miners Respiratory Impairment Treatment Clinics & Services
Organization Type	Hospital
Address	2951 Maple Avenue Zanesville, Ohio 43701
Grantee Organization Website	https://www.geneshcs.org/
Project Director	Name: Michele Newlon
	Email Address: mnewlon@geneshcs.org

Part II: Demographic Breakdown



- State of Ohio
 - Counties: Athens, Coshocton, Fairfield, Gallia, Guernsey, Hocking, Holmes, Jackson, Licking, Meigs, Morgan, Muskingum, Noble, Perry, Ross, and Vinton

Genesis HealthCare System serves 16 counties in Ohio. Health disparities associated with this region include obesity, diabetes, lack of exercise, and cigarette smoking. While less than 1% of Genesis' patients are uninsured, the rate in the service area is increasing. White men ages 35-75 are the most prominent coal mining demographic in this region.

Part III: Promising Practices

The use of the 340B pharmacy program, which discounts prescription medications, has helped ensure that patients can afford their medications, which in turn increases compliance.

Genesis conducts a wide variety of outreach activities. By using multiple methods, the clinic can reach miners across platforms and overcome barriers related to access to any one method. External activities

meant to attract new patients include local radio public service announcements; presentations at community events such as Coal Miners' Appreciation Day, coal miner breakfasts, union meetings, health fairs, and monthly events at the local library; interviews and advertisements in local and national newspaper outlets; interviews with local and national television outlets; social media ads; and mailings to coal miners. Internal activities include an employee newsletter to raise awareness of services among providers in other specialties; short recorded advertisements when patients are placed on hold on all hospital phone lines; and brochures and rack cards highlighting services in physicians' offices.

Operationally, the clinic uses reported data, satisfaction surveys, financial reports, and scorecards to evaluate the impact of the program on the health and wellbeing of coal miners in the service area. Adjustments can be made if necessary to ensure a high standard of patient care.

Nurse Navigators conduct follow up phone calls and identify patient compliance concerns upon discharge from the Emergency Room or Inpatient Hospital. They keep a database to track follow up calls, referrals to the Black Lung Clinic, number of days to first follow up appointment, and 30 day readmissions. This helps to remove barriers to care, identifies the need for any referrals, and ensures tests and appointments are completed in a timely manner. They also provide transportation assistance to overcome barriers to access.

Part IV: Challenges and Barriers

The biggest barrier to care is job loss as mines close or reduce staffing in the area. This causes a lack of adequate income to meet cost of living expenses and loss of health care coverage. The 340B program and grant funds to assist with black lung benefits counseling and application assistance help to overcome this barrier.

A challenge has also been patient compliance with medications for chronic lung conditions and smoking cessation. Barriers to compliance include the high costs of breathing medications and tobacco cessation aids. Financial assistance is available through the 340B pharmacy program to help partly alleviate this challenge.

Another barrier to care is lack of transportation. To alleviate this, through an agreement with a community ambulance service, transportation to the clinic is available for high-risk patients. Other organizations such as local senior centers and county transits provide affordable transportation. Cab vouchers are also available.

The service area also faces systemic challenges to access to care such as limited mental health services, lack of affordable medical and dental providers, lack of health insurance, and long waiting times to see a provider. Nurse Navigators are able to track and identify where referrals are needed or how long a patient has been waiting for care.

Part V: Innovative Services and Major Accomplishments

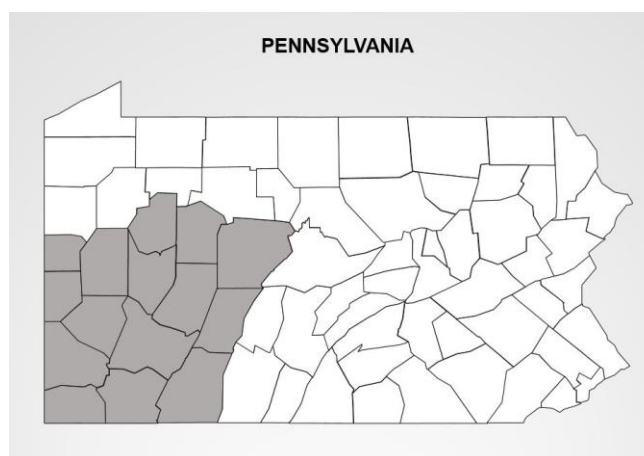
- Innovative Services
 - American Association of Cardiovascular and Pulmonary Rehabilitation Programs (AACVRP) Certified Phase II & Phase III Pulmonary Rehabilitation Programs
 - 340B Pharmacy Program
 - Hosting Better Breathing Club
 - Diverse outreach methods
 - Advanced treatment referrals including Transplant Evaluation and Lung Reduction Surgery

- Major Accomplishments
 - The pulmonary rehab program improved functional capacity of 100% of the participants.
 - Genesis HealthCare System added a clinical pharmacist to review medication histories; update medication lists; review medication lists for interactions and adverse events; make recommendations to providers; provide patient education instruction and demonstration; and provide patients with educational handouts regarding over-the-counter medications.
 - The clinic received a 4-star rating from the Centers for Medicare and Medicaid Services (CMS) for Overall Hospital Quality.
 - The clinic's Low Dose CT Scan program increased 225%, from 247 patients in 2017 to 802 patients in 2018.

Pennsylvania: Alveoli Corporation - Lungs at Work

Part I: Organizational Information	
Grantee Number	H37RH00067
Project Title	Lungs at Work
Organization Type	Free-Standing Clinic
Address	4000 Waterdam Plaza Drive, Ste. 240 McMurray, Pennsylvania 15317
Grantee Organization Website	N/A
Project Director	Name: Lynda Glagola
	Email Address: lynda@lungsatworkpa.org

Part II: Demographic Breakdown



- State of Pennsylvania
 - Counties: Allegheny, Armstrong, Beaver, Butler, Cambria, Clarion, Clearfield, Fayette, Greene, Indiana, Jefferson, Lawrence, Somerset, Washington, and Westmoreland

Lungs at Work’s miner patient population is 100% white and 94.7% over the age of 60. There are currently no uninsured miners served. Heart disease and drug related mortality rates are above national averages, and there is a high incidence of cancer in the state of Pennsylvania.

Part III: Promising Practices

Lungs at Work meets both the medical and legal needs of their patients by offering no-cost lay advocacy services and compensation counselors. Lay advocates assist miners in applying for and obtaining benefits to which they are entitled, and compensation counselors assist with legal research and case preparation. By offering these legal services, miners have the convenience of receiving their medical

and benefits services at the same time in the same clinic, greatly reducing barriers such as time, travel, scheduling, and other logistics that would be required if these services were in separate locations.

The service area's rural nature has made it difficult for patients to attend the main office due to the lack of reliable access to quality pulmonary and medical services, the distance of the clinic from a large percentage of the patient base, limited transportation, and disabling respiratory disorders. As a result, the clinic provides a regional onsite testing program which allows miners to receive spirometry testing, six-minute walking testing, and a prescription for a chest x-ray close to home. This program allows for a wider reach in the service area and increases the clinic's visibility in rural communities.

The clinic collects a wide range of data to monitor overall trends such as comorbidities, exercise arterial blood gas and diffusing capacity, and the amount of simple and complicated Coal Workers' Pneumoconiosis in the patient base. This data is compared with local, county, and state data to determine how the clinic's patients are similar or different, which allows the clinic to tailor outreach and care to the patient population.

Operationally, the clinic evaluates patient satisfaction using anonymous surveys and adopts suggestions whenever possible to ensure a continued high standard of patient care.

Part IV: Challenges and Barriers

Despite efforts to provide regional and off-site services, a challenge has been continued participation in pulmonary rehabilitation services. Barriers to compliance include a lack of quality services in certain home areas, limited access to transportation, or struggles with chronic respiratory conditions that make leaving the home difficult.

Due to the success of the lay advocate and compensation counseling services, there has been an increased demand for concurrent medical services and Department of Labor examinations at the clinic. This has caused a back-log of patient testing and appointments with the clinic physician. The back-log persists despite the physician doubling availability and hiring additional staff. There is also a scarcity of attorneys who are willing to assist with federal Black Lung claims.

Part V: Innovative Services and Major Accomplishments

- Innovative Services:
 - Significant lay advocacy and compensation counseling
 - Regional and localized off-site services

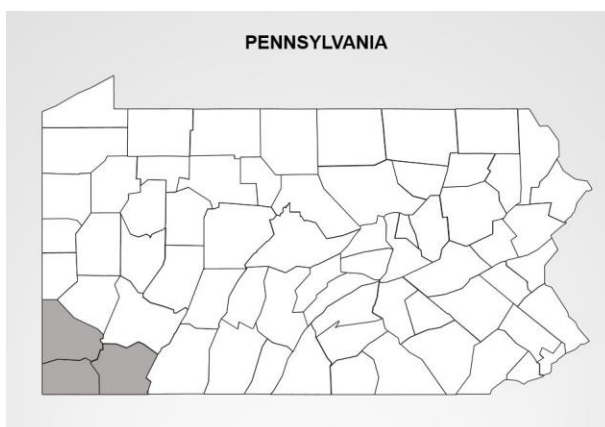
- Major Accomplishments
 - The regional onsite testing program has been very successful in locating, diagnosing, and treating disease in the miner population.
 - The clinic has been able to assist miners in obtaining benefits with a very high rate of success, especially through lay advocacy and compensation counseling.

- National Public Radio (NPR) visited the clinic to interview miners and the clinic director to document trends in and experiences of living with Coal Workers' Pneumoconiosis (CWP).
- Cable News Network (CNN) contacted the clinic director regarding the importance of the Black Lung Disability Trust Fund to the nation's miners.
- A freelance photojournalist is working with the clinic to create an ongoing portrait series of miners with Black Lung. This will humanize and raise awareness of the disease.
- The clinic director has participated in congressional roundtable events concerning Black Lung Disease, providing information to elected officials regionally and nationally.
- The clinic has been featured in many local newspapers as well as in professional journals with the intent to raise awareness of the rising incidence of CWP.
- Lungs at Work provided mentoring services to two physicians and has hosted two cohorts of nursing students and instructors from Monroe College in 2018 and 2019.

Pennsylvania: Centerville Clinics, Inc.

Part I: Organizational Information	
Grantee Number	H37RH00047
Project Title	Centerville Clinics, Inc. Black Lung Clinics Grant Program
Organization Type	Federally Qualified Health Center
Address	1070 Old National Pike Road Fredricktown, Pennsylvania 15333
Grantee Organization Website	https://centervilleclinics.com/
Project Director	Name: Barry Niccolai
	Email Address: bniccolai@centervilleclinics.com

Part II: Demographic Breakdown



- State of Pennsylvania
 - Counties: Fayette, Greene, and Washington

In the service area, 14.5% of residents are low-income, and it is geographically isolated. The patient population is 97.3% white, 65.8% are over the age of 60, and 10% of Black Lung patients are uninsured. The service area is a designated Health Professional Shortage Area (HPSA). The most prevalent and costly chronic diseases in Pennsylvania are heart disease, stroke, cancer, and diabetes. Pennsylvania also ranks 38th in the country for Chronic Lower Respiratory Disease.

Part III: Promising Practices

Information is disseminated about the impact of the program through presentations at coal mines and through social media such as Facebook. These activities emphasize the importance of early detection and screening for obtaining federal black lung benefits. In addition, the clinic includes retired coal miners in outreach efforts as peer-to-peer recruiters and storytellers which has been effective in humanizing the coal mining population and giving hope and encouragement to fellow miners.

Benefits for coal miners who were laid-off expire after one year, so certified Affordable Care Act Counselors are brought in to help navigate and obtain new health insurance.

The Quality Assurance (QA) Committee monitors and evaluates all clinical activity such as development of and monitoring adherence to protocols and identifying systematic problems to ensure high quality patient care.

Patient satisfaction is done annually on every black lung clinic patient to evaluate the impact of the lung program on the health and well-being of coal miners. Based on this evaluation, miners' treatment plans are modified as needed.

Part IV: Challenges and Barriers

The patient base faces barriers such as transportation, impoverishment, health insurance issues, and availability of health services. These issues are being addressed by having two clinic locations, a sliding fee program, and offering testing and outreach at several primary medical care offices.

Another significant challenge is that Black Lung disease rates are increasing in Greene County mines. While these rates are increasing, there is still a challenge of a reduction in the coal miner patient population in the service area due to a mine closure. The clinic is resolving this challenge by increasing outreach to the miners who lost their jobs.

Part V: Innovative Services and Major Accomplishments

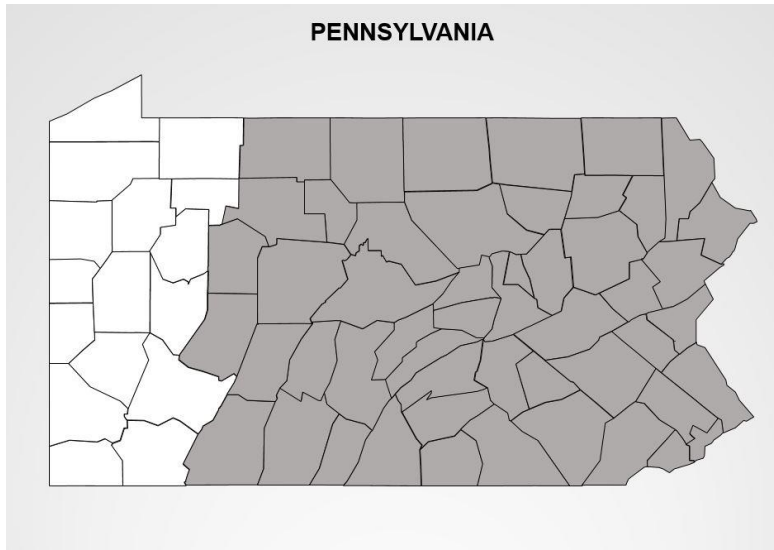
- **Innovative Services**
 - Availability of and coordination with behavioral health, dental, and specialty services
 - Specialty Medical Care
 - Laboratory, Radiographic and Other Diagnostic Services
 - Patient Education and Outreach
 - Lung Function and Other Testing
 - Medical Case Management
 - Compensation Counseling
 - Department of Labor (DOL) Examinations

- **Major Accomplishments**
 - Centerville Clinics had successful strategic efforts to assist miners who have lost their jobs due to recent mine closures to get health insurance and pursue benefits.
 - Vmax[®] Encore PFT system was purchased to replace old equipment, which offers a suite of pulmonary function tests (PFT) in a modular design.
 - ABL9 blood gas analyzer was purchased to replace old equipment.

Pennsylvania: University of Pittsburgh Medical Center (UPMC) Altoona

Part I: Organizational Information	
Grantee Number	H37RH00064
Project Title	Pennsylvania Black Lung Coalition
Organization Type	Hospital Health System
Address	620 Howard Avenue Altoona, Pennsylvania 16601
Grantee Organization Website	http://www.altoonaregional.org/
Project Director	Name: Reneé Henry
	Email Address: henryrm@upmc.edu

Part II: Demographic Breakdown



- State of Pennsylvania
 - Counties: Adams, Bedford, Berks, Blair, Bradford, Bucks, Cambria, Cameron, Carbon, Centre, Chester, Clearfield, Clinton, Columbia, Cumberland, Dauphin, Delaware, Elk, Franklin, Fulton, Huntingdon, Indiana, Jefferson, Juniata, Lackawanna, Lancaster, Lebanon, Lehigh, Luzerne, Lycoming, McKean, Mifflin, Monroe, Montgomery, Montour, Northampton, Northumberland, Perry, Philadelphia, Pike, Potter, Schuylkill, Snyder, Somerset, Sullivan, Susquehanna, Tioga, Union, Wayne, Wyoming, and York

UPMC Altoona, along with the Blue Mountain Hospital-Gnaden Huetten Campus and the Chan Soon-Shiong Medical Center at Windber founded the Pennsylvania Black Lung Coalition. These three clinics serve a coal miner patient population that is 99.7% white, 86.6% over the age of 60, and none are uninsured. Additional health needs of the target population include silica dust exposure, asbestos exposure, breathing difficulty, hearing deficit and loss of hearing, smoking, gastroesophageal reflux,

undiagnosed heart disease, undiagnosed sleep apnea, and Chronic Obstructive Pulmonary Disease (COPD). Within the Coalition service area there are hundreds of Health Professional Shortages Areas (HPSA) as much of the rural areas in Pennsylvania are historically underserved.

Part III: Promising Practices

There have been increased outreach efforts for public awareness of the program. UPMC Altoona has participated in radio segments, presentations at conferences and community events, interviews with local and national television outlets, and advertisements and articles in local and national newspaper outlets. The clinic physician regularly publishes a magazine devoted to promoting cardiopulmonary health and authors a bi-weekly column in the local newspaper to promote discussion of pulmonary disease and allow for health inquiries via email. The clinic's website has also been updated to be easier to navigate. New fliers for UPMC Altoona have been designed, and outreach efforts have been expanded to include some local United Mine Workers of America (UMWA) meetings.

The clinic follows up with miner patients on an annual basis to ensure continuity of care and to provide a timeline for possible disease progression, and to encourage miners that are not actively seeking medical services to participate.

Part IV: Challenges and Barriers

A continued challenge is Department of Labor exam provider shortage due to the lack of interest by physicians to provide this service. Recruitment of a physician is ongoing.

There are also barriers to outreach due to the time and demand of outreach, the scope of interaction with active mines, and finding retired miners in the general community. However, UPMC Altoona is currently working with the National Institute for Occupational Safety and Health (NIOSH) to participate in their upcoming visits to active Pennsylvania mines to distribute information and provide the education necessary to funnel active miners to clinics. Miners remain a difficult population to serve because Pennsylvania is increasingly economically depressed in rural areas, miners are an inherently socioeconomically disadvantaged population, and there is still lingering institutional denial of the effects of black lung.

Travel is often a barrier to care, especially for the elderly population who therefore cannot attend the Better Breathers Program. Additionally, barriers such as geography, including the Appalachian Mountains and the rural nature of the service area, and the socioeconomically disadvantaged characteristic of the population impede transportation and affordability of care regardless of age.

Part V: Innovative Services and Major Accomplishments

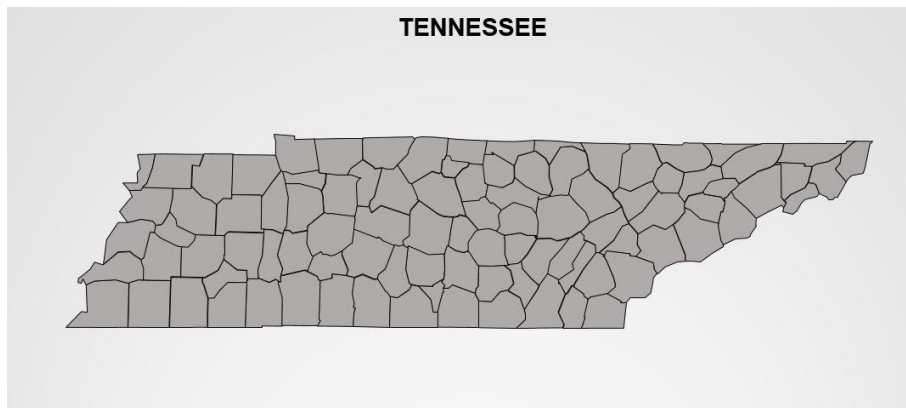
- Innovative Services
 - Collaborative services throughout the coalition
 - Lay advocates to assist with patient case management

- Major Accomplishments
 - UPMC Altoona has implemented an on-site pulmonary rehabilitation program and intends to become American Association of Cardiovascular and Pulmonary Rehabilitation (AACVPR) certified.
 - National Public Radio (NPR) noted the clinic as one finding the increased prevalence of Pulmonary Massive Fibrosis (PMF) and was published in an article in the New York Times.
 - Dr. George Zlupko regularly publishes Breathe magazine to promote cardiopulmonary health and features the work of the Pennsylvania Black Lung Coalition. Dr. Zlupko also authors the bi-weekly column The Buzz in the Altoona Mirror to promote discussion of pulmonary disease and encourage health inquiries.
 - The clinic was featured in the quarterly UPMC publication that goes to thousands of homes in the area. They published an “ask the expert” section for the Black Lung Program at Altoona. This article resulted in a sharp increase of miners served for the quarter that followed.
 - The compensation counselor/lay advocate was recently awarded the 2018 Richard L. Simmons, MD, Speak Up for Safety Award.

Tennessee: Community Health of East Tennessee, Inc. (CHET)

Part I: Organizational Information	
Grantee Number	H37RH00052
Project Title	Tennessee Black Lung Program
Organization Type	Federally Qualified Health Center (FQHC)
Address	130 Independence Lane LaFollette, Tennessee 37766
Grantee Organization Website	https://chetn.org/#home
Project Director	Name: Heather Lane
	Email Address: hlane@chetn.org

Part II: Demographic Breakdown



- State of Tennessee
 - Counties: All counties in Tennessee

Community Health of East Tennessee, Inc. (CHET) began as the Tennessee Black Lung Program (TNBLP), which is the only Black Lung Program in Tennessee. The TNBLP is located in CHET's federally qualified Community Health Clinic in Campbell County, which is central to the region's coal-producing counties. The coal miner patient population is 100% white and 53.2% are over the age of 60. The Tennessee service area is 13.6% uninsured. Tennessee ranks 6th in the country for percentage of adults with diabetes, and Chronic Obstructive Pulmonary Disease is prevalent.

Part III: Promising Practices

TNBLP expanded its outreach program through the Every Door Direct Mail service via the United States Postal Service to active and retired coal miners in the Claiborne County area, sending out 16,000 postcards. From this effort, 101 applications were received.

TNBLP also has a contract with a local radio station for a minute-long, daily ad. They have made presentations to the Campbell County Rotary Club and a local Health Council meeting. Additionally, they

have been interviewed and advertise in newspaper and television outlets, and they have a social media page.

The clinic also signed contracts with local coal companies to do pre- and post-physicals with x-rays and labs on-site.

Additionally, TNBLCP is located inside an existing Section 330 Statue Health Center site which enables the clinic to provide additional services for miners and their families without having to drive long distances.

The Black Lung staff participate in quarterly Performance Improvement/Quality Improvement (PI/QI) meetings for the clinic with medical staff, administrative staff, and compliance personnel. This helps to ensure staff provide the highest level of care for miners and their families.

There is a TNBLP Advisory Board that meets quarterly to review accomplishments, and as experts in their communities, provide suggestions and contacts for black lung community outreach locations.

Part IV: Challenges and Barriers

Despite recruitment efforts, the lack of availability of internists currently limits testing to three days per month. Physician staffing continues to be a challenge in rural communities.

Another staffing challenge is the need for additional case managers and outreach workers to build the program to cover the entire state of Tennessee.

Specialized equipment is needed to perform testing that matches testing done by coal companies and their physicians. This will better gauge the disease level of the miner and prevent discrepancies between screeners, but is costly to obtain and requires additional staff training.

Barriers to care for patients include limited access to transportation, mountainous topography, poverty, and lack of insurance. To help overcome these barriers, services are provided in one location as much as possible, and using grant funds as a payer of last resort, miners are able to receive care regardless of their ability to pay.

Part V: Innovative Services and Major Accomplishments

- Innovative Services
 - Patient outreach and education using the Every Door Direct Mail program
 - Smoking cessation by counselors certified by the American Lung Association
 - Legal representation during the appeals process at the Benefits Review Board

- Major Accomplishments
 - The clinic expanded Outreach to the Middle Tennessee area, as well as additional outreach to sites within East and West Tennessee despite staffing and geographic challenges.
 - The USPS Every Door Direct Mail program using postcards was a new method for outreach. The clinic was able to reach new miners that otherwise may not have heard

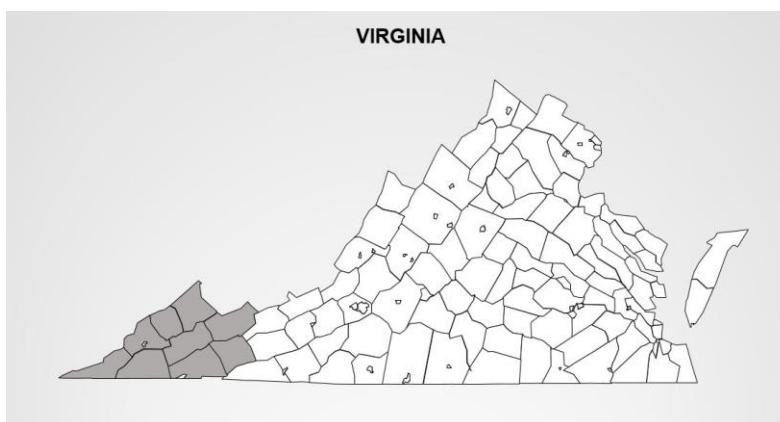
about the clinic and its services. This method of advertising has increased the number of participants at each outreach activity sites.

- TNBLP has secured an attorney who will represent miners in the appeal process at the Benefits Review Board. This benefits coal miners by giving them the opportunity to remain in or be re-instated to pay status.
- Two staff members completed certification by the American Lung Association to conduct smoking cessation classes to address comorbidities in miners.

Virginia: St. Charles Health Council, Inc. - Stone Mountain Health Services Respiratory Care Clinics

Part I: Organizational Information	
Grantee Number	H37RH00048
Project Title	Stone Mountain Health Services Respiratory Clinics
Organization Type	Federally Qualified Health Center (FQHC)
Address	276 Fieldstone Drive Jonesville, Virginia 24277
Grantee Organization Website	https://www.stonemountainhealthservices.org/
Project Director	Name: Malcolm Perdue
	Email Address: mperdue@stonemtn.org

Part II: Demographic Breakdown



- State of Virginia
 - Counties: Buchanan, Dickenson, Lee, Russell, Scott, Smyth, Tazewell, Washington, and Wise

Stone Mountain Health Services (SMHS) serves nine counties in Southwest Virginia. Of coal miner patients, 6.7% are uninsured, 98.5% are white, and 76.4% are over the age of 60. Every county in the service area has a higher percentage of older persons than the state and the nation as a whole. The residents of the service area also have higher rates of diabetes, a higher diabetes mortality rate, higher hypertension hospital admissions, higher congestive heart failure hospital admissions, higher mortality from diseases of the heart, a higher cerebrovascular disease mortality rate, and higher suicide rates when compared to the national average.

Part III: Promising Practices

Tracking longitudinal data helps SMHS to understand disability trends among coal miner patients. Baseline evaluations are compared to outcome values for a variety of pulmonary function activities. Clinical data on Progressive Massive Fibrosis (PMF) diagnoses, the most advanced stage of Black Lung, is

also tracked and analyzed for trends. Additional tracking of data such as referrals or preventative care helps to ensure patients receive holistic, appropriate, and timely care. Other measures for data collection include preventative measures, benefits counseling evaluation, mental health, and substance abuse. Due to the strengths of this data collection, Stone Mountain has been approached to collaborate with other groups on research related to both simple and complicated black lung disease.

Stone Mountain uses a wide variety of means to disseminate information about the program such as radio segments, presentations at conferences or community events, social media, and interviews in local or national newspaper and television outlets.

Staff also hosted a conference on PMF at the University of Virginia's College at Wise. Another collaboration is with the University of Virginia (UVA) for the establishment of a "Rural Respiratory Institute" that will allow the staff to conduct research, apply for grants, and do additional and education activities.

Part IV: Challenges and Barriers

One major challenge has been the continued influx of new patients into the program which causes delays in meeting miners' needs. As coal mining has decreased in the service area and miners lose their benefits, more miners are seeking assistance through the Black Lung Clinics Program for the medical, benefits, and rehabilitation services.

A related and growing challenge is the additional services needed by miners with PMF. To overcome this challenge, the staff is attempting to secure additional funding for a digital x-ray machine in order to reduce radiation exposure to miners and be able to identify Black Lung or any other lung disease immediately instead of after three or four weeks.

Another major barrier identified in the service area is the Appalachian culture. There are issues with seeking medical care before a symptom has progressed into a serious problem, use of self-treatment modalities passed down from generations, a depressed economy resulting in difficulty affording needed medications, and a general distrust of "outsiders" and of government programs. To overcome this, staff takes great steps to integrate into the community, and often staff will share personal stories of their relation to the coal mining community to build trust.

The rural nature of the service area also contributes to challenges of access to care such as lack of transportation and high poverty levels. SMHS attempts to overcome this barrier by having multiple clinic sites for miners to receive care.

Part V: Innovative Services and Major Accomplishments

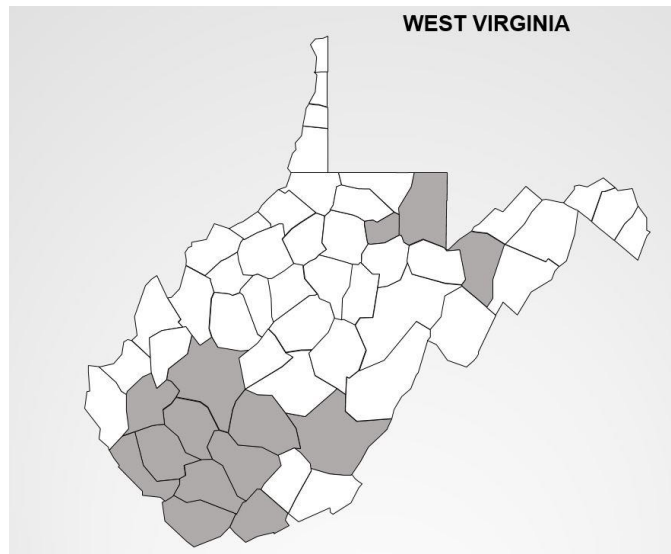
- Innovative Services
 - Dental care
 - Behavioral health services
 - Pharmacy Connect Program for low income or uninsured patients
 - Lay legal representation for compensation and benefits counseling
- Major Accomplishments

- Staff were co-authors on an article that appeared in the *Journal of the American Medical Association* on PMF. This article generated national publicity regarding PMF and for Stone Mountain.
- Clinic staff have worked closely with members of local, state, and federal government to share information related to the program.
- SMHS held “Miner Appreciation Day” events at both clinics. Local companies donated food and some companies put up displays. Several of the local papers covered the events and included pictures.
- The Medical Director received a National Science Foundation grant to develop a pulmonary ECHO (Extension for Community Healthcare Outcomes)-type program for our staff, the staff of a free clinic, and other primary care providers in Southwest Virginia.
- As part of our Rural Respiratory Institute, the clinic will host a Doctor of Nursing Practice student over the summer who wants to learn about Black Lung Disease, which will be used as a pilot first and then will potentially expand outreach to other schools of nursing and medical schools.
- The Black Lung Team received the Virginia Community Healthcare Association’s “Team of the Year Award.”
- The Black Lung Team received the Virginia Rural Health Association’s “Best Practices in Rural Health Award.”
- The staff held a press event to make key announcements and introduce new staff. There were stories on two TV news stations, at least two newspaper articles, and it was videotaped by an online news provider.

West Virginia: West Virginia Department of Health and Human Resources

Part I: Organizational Information	
Grantee Number	H37RH00046
Project Title	West Virginia Black Lung Clinics Program
Organization Type	State Health Department
Address	350 Capitol Street Charleston, West Virginia 23501
Grantee Organization Website	https://dhr.wv.gov/dpc/black_lung_clinics/Pages/default.aspx
Project Director	Name: David Haden
	Email Address: david.s.haden@wv.gov

Part II: Demographic Breakdown



- State of West Virginia
 - Counties: Boone, Fayette, Grant, Greenbrier, Kanawha, Lincoln, Logan, McDowell, Mercer, Mingo, Preston, Raleigh, Taylor, and Wyoming

The West Virginia Black Lung Clinics Program (WVBLCP) is a part of the West Virginia Department of Health and Human Resources. All WVBLCP sites are housed in parent agencies that are Federally Qualified Health Centers (FQHC) and one FQHC Look-Alike. West Virginia has the highest prevalences in the nation for tobacco use and Chronic Obstructive Pulmonary Disease (COPD), as well as the second highest prevalence of hypertension. Miners served in the WVBLCP clinics are 96.3% white and 66.8% are over the age of 60. Across most of the clinic sites, there are a disproportionate number of employed patients who are living below the poverty level and are uninsured.

Part III: Promising Practices

Some outreach efforts that the clinics participate in are presentations at conferences and community events, radio segments, interviews and advertisements in newspaper and television outlets, social media, and participation in health fairs.

The program has formed successful partnerships to provide additional services to miners. For instance, one clinic site works closely with a local Black Lung association to provide speakers for events, and they make available attorneys who assist miners with filing state claims. Another clinic has partnered with nearby medical centers to distribute guidance on filing for both state and federal black lung benefits and to identify new cases of Progressive Massive Fibrosis (PMF). Another example is that a clinic hired a full-time psychologist to address the need of behavioral health services for miners and their families.

Another promising practice is to employ Affordable Care Act counselors to help navigate healthcare options and distribute flyers, brochures, business cards, and promotional items for the black lung program during health fairs and community events. The clinics also uses a variety of other outreach methods such as radio segments, newspaper and television outreach, presentations, mailings, and social media to increase awareness.

Part IV: Challenges and Barriers

An issue that arises across the nine clinics include is a need for new equipment, especially digital x-ray services. Having x-ray services in the program will allow for miners to get needed services in one place instead of having to travel to other facilities which is inconvenient and burdensome. This issue is especially challenging because transportation in remote areas is a barrier.

Some clinics are also facing a financial barrier for American Association of Cardiovascular and Pulmonary Rehabilitation Programs (AACVPR) certification.

Another barrier that the clinics face are the closure of mines in West Virginia. The effects of this on the clinics occurs in opposite ways. While there is an influx of unemployed and uninsured miners in some clinics, there are less miners to serve in other clinics due to them leaving the service area to find new jobs in other clinics. This uneven distribution strains resources on some clinics and for miners who have left, may leave them without access to proper care.

Part V: Innovative Services and Major Accomplishments

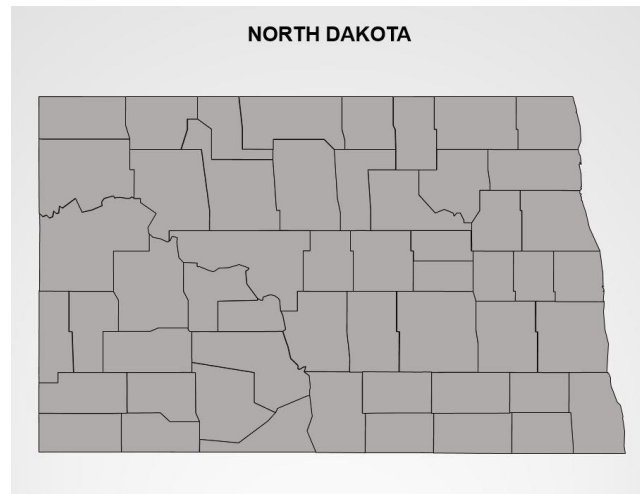
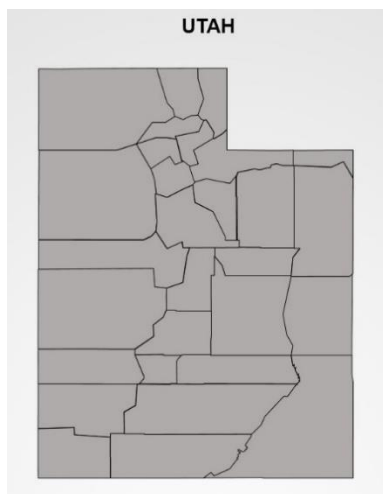
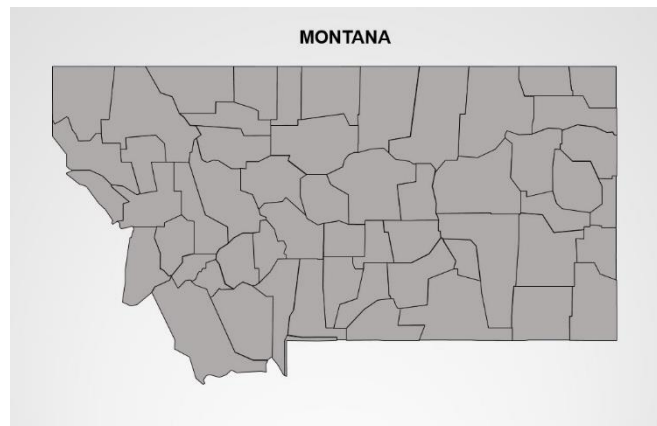
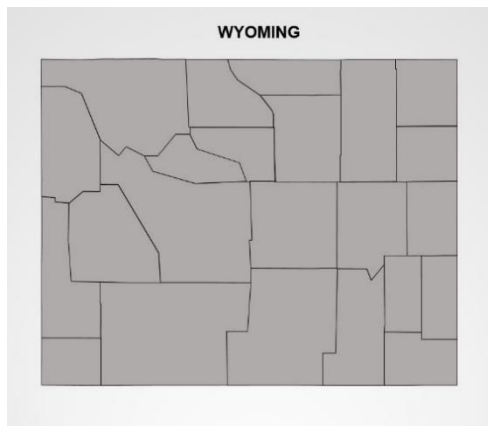
- Innovative Services
 - Health and nutrition education
 - Nine clinic sites
 - Community partnerships

- Major Accomplishments
 - Three clinics have opened additional sites. There has been a significant increase in print outreach efforts, including mailings and announcements in local route mailers.
 - Facilitation of and participation in Project ECHO (Extension for Community Healthcare Outcomes), a virtual knowledge-sharing network including a didactic and case study led by expert teams who conduct virtual clinics with providers.
 - Program staff were interviewed by West Virginia University for local news and posted on YouTube.
 - Upper Big Branch Miners Memorial Park in Whitesville West Virginia is a National Memorial of Miners lost in the disaster of April 5, 2010. Many people stop and visit the memorial yearly. This is always a public remembrance that miner's safety and health need to be prioritized by the government law and regulations.

Wyoming: Northwest Community Action Programs of Wyoming, Inc. (NOWCAP)

Part I: Organizational Information	
Grantee Number	H37RH00058
Project Title	Black Lung & Respiratory Diseases Clinics
Organization Type	Clinic
Address	2240 Coffeen Avenue P.O. Box 6021 Sheridan, Wyoming 82801
Grantee Organization Website	http://www.nowcap.com/
Project Director	Name: Sarah Salveson Email Address: blsheridan2@bresnan.net

Part II: Demographic Breakdown



- State of Wyoming
 - Counties: all counties of Wyoming
- State of Montana
 - Counties: all counties of Montana
- State of Utah
 - Counties: all counties of Utah
- State of North Dakota
 - Counties: all counties of North Dakota

The Northwest Community Action Program (NOWCAP) has four clinics, one each, in Wyoming, Montana, Utah, and North Dakota. Nationally, Wyoming ranks 46th for diabetes. For cancer, Montana ranks 41st, North Dakota ranks 43rd, and Utah ranks 50th. Of the coal miners served, 97.2% are white, 85.5% are over the age of 60, and 5% are uninsured.

Part III: Promising Practices

Capitalizing on a variety of outreach opportunities, NOWCAP has presented at conferences, meetings, and community events such as United Mine Workers America (UMWA) meetings, the Brotherhood of Locomotive Engineers and Trainmen (BLET) meetings, and health fairs. NOWCAP also has an active presence on social media and sends out letters regularly to miners in the areas that have not gone through a screening ever or in over a year. The clinic also calls miners before they are eligible for another annual screening. A target population is surface miners, and they are often surprised at the number of Black Lung cases within this population which increases participation in the program because they were unaware of their susceptibility. By using multiple methods of outreach, more miners are aware of the services available through NOWCAP's clinics.

Miners with Black Lung are referred to Critical Nursing Staff (CNS) for home care, and Critical Nursing Staff in turn refer their clients to NOWCAP if they have not already gone through a DOL exam. This cycle helps to promote continuity of care and initiating the benefits claims process.

Collaborative efforts with other grantees have allowed the mobile clinic from New Mexico to come through the areas where there is no brick-and-mortar clinic in the service area. Another collaboration has facilitated the success of Project ECHO (Extension for Community Healthcare Outcomes), a webinar for providers, lawyers, benefits counselors, and doctors with didactics and case presentations of interest to those working with Black Lung patients and their families.

Part IV: Challenges and Barriers

Provider shortage is the biggest barrier to care. Appointments are often booked two to three months after the first contact due to this shortage. This shortage and an influx of clients has led to some clinic sites not being available for screening. NOWCAP is working to overcome this barrier by exploring the possibility of a contract a clinic to do screenings, as well as continued efforts to recruit providers to the service area.

There are no Department of Labor providers in Wyoming or Montana, so there is little interest for miners to travel long distances to begin Black Lung claims.

Compounding upon the barrier to provider shortages is the vast area the service area covers. The service area encompasses 393,772 square miles, population centers are scattered, and there are long distances between communities. By having at least one clinic in each state, this cuts down on the distance a miner must travel to receive care.

Part V: Innovative Services and Major Accomplishments

- Innovative Services
 - Critical Nursing Staff (CNS) to provide Department of Labor approved workers' compensation home health care

- Major Accomplishments
 - One of the biggest accomplishments was to secure a doctor in North Dakota to begin doing local screenings and decrease the distance miners must travel.
 - Aggressive outreach efforts have led to an increase in screenings. Mailings sent out across the entire service area and opening the North Dakota location has contributed to the increase.
 - NOWCAP received a collaborative grant to bring a mobile screening unit through Wyoming, Montana, Utah, and North Dakota.