



# Community Health Needs Assessment 2021

Adopted by the ACMH Hospital Board of Directors on 6/29/2021

An infographic with a teal and light blue geometric background. It features six circular icons arranged around a central teal banner. The banner contains the text 'ACMH: Towards a Healthier Tomorrow' in white, with 'IN ARMSTRONG COUNTY' in smaller white text below it. The icons and their associated text are: 1. Top-left: Pill icon, 'Drug Awareness', 'ACMH supports the Drugs Kill Dreams® program through education of dangers and roadway signage campaigns'. 2. Top-middle: Network icon, 'Technology', 'Linear Accelerator • Cardiac Imaging Interventional Radiology • Diabetic Monitoring • Telemedicine'. 3. Top-right: Lungs icon, 'Early Detection', 'Low Dose CT for Lung Cancer 3D Mammography'. 4. Bottom-left: Hand with finger pointing up icon, 'Managing Diabetes', 'Education, knowledge and tools necessary to control blood sugar and avoid long-term complications'. 5. Bottom-middle: Location pin icon, 'Local Outreach', '9 Draw Stations • 8 Rural Health Centers &amp; Primary Care Centers'. 6. Bottom-right: Brain icon, 'Stroke Education', 'A Certified Primary Stroke Center with trained staff, resources and processes to address acute stroke'.

# Table of Contents

<b>INTRODUCTION AND BACKGROUND</b>	<b>4</b>
<b>AUTHOR CREDENTIALS</b>	<b>6</b>
<b>SUMMARY OF ACCOMPLISHED ACTIVITIES FROM CHNA OF 2018</b>	<b>7</b>
<b>OBESITY</b>	<b>7</b>
<b>INCREASE COMMUNITY KNOWLEDGE ABOUT THE IMPORTANCE OF LEISURE-TIME PHYSICAL ACTIVITIES.</b>	<b>8</b>
<b>NUTRITIONAL SERVICES</b>	<b>9</b>
<b>ADDRESS SUBSTANCE ABUSE</b>	<b>9</b>
<b>COMMUNITY EDUCATION</b>	<b>12</b>
<b>DEFINITION OF POPULATION SERVED</b>	<b>22</b>
<b>HEALTHCARE RESOURCES IN THE SERVICE AREA</b>	<b>24</b>
<b>Medical Resources in the Mid-western Region of Armstrong County</b>	<b>24</b>
<b>Medical Resources in the Rural Regions of Armstrong County</b>	<b>26</b>
<b>Other Health and Human Services Providers</b>	<b>34</b>
<b>RESEARCH METHODS</b>	<b>38</b>
<b>STATISTICAL INFORMATION</b>	<b>39</b>
<b>The COVID-19 Pandemic</b>	<b>39</b>
<b>Demographic Factors</b>	<b>40</b>
Rurality	40
The Aging Population of Armstrong County	41
Economic Factors.	42
Computer and Internet use (Source: US Census QuickFacts)	45
Disability – (Source: US Census Quick Facts)	45
<b>Health Factors and Outcomes – (Source: County Health Rankings and Roadmaps)</b>	<b>45</b>
Food Environment (Source: County Health Rankings and Roadmaps)	46
<b>Morbidity and Mortality Profile of Armstrong County Residents</b>	<b>47</b>
Root Cause Analysis of the Underlying Causes of Death in Armstrong County	48
<b>Morbidity Factors of Armstrong County Residents</b>	<b>50</b>
Cancer Statistics	50
Healthy/(Unhealthy) Behaviors (Source: County Health Rankings and Roadmaps)	51
Substance Abuse (Source: County Health Rankings and Roadmaps)	51
Access to Healthcare and Healthy Lifestyles (Source: County Health Rankings and Roadmaps.)	52
Physical Environment	52

<b>COMMUNITY STAKEHOLDER INTERVIEWS</b>	<b>53</b>
Pandemic related issues	53
Chronic Conditions	55
Healthcare screenings	56
Mental Health	56
Older Adults	57
Providers	57
Behavioral Health	58
Substance Abuse	58
Obesity	60
Smoking	60
Health Literacy and Education	60
Social and Economic Factors	61
<b>SUMMARY OF FINDINGS</b>	<b>63</b>
<b>PRIORITIZATION METHODOLOGY AND THE SETTING OF PRIORITIES</b>	<b>68</b>
<b>ACKNOWLEDGEMENTS</b>	<b>71</b>

## INTRODUCTION AND BACKGROUND

A community health needs assessment (CHNA) was conducted between July 2020 and June 2021 on behalf of the Armstrong Center for Medicine and Health (ACMH) Hospital to identify the health and wellness needs of Armstrong County. A health needs assessment is defined as a systematic review of the unmet health needs facing a defined population, leading to prioritization of those needs and allocation of resources to accomplish those priorities. The population being reviewed in this assessment is all of Armstrong County, Pennsylvania, which is the ACMH primary service area. The assessment will prove useful for identifying cross-sectional partnerships with other community organizations.

### **Background and Purpose**

ACMH Hospital is a 501(c)(3), non-profit community hospital founded in 1898 that serves Armstrong County and surrounding areas.

**Mission:** The hospital is committed to improving the emotional and physical health of its patients through superior clinical care and the compassionate management of illness and disability.

**Vision:**

- We will be a leader in promoting responsible and healthy behavior in our community.
- We will provide compassionate and exemplary inpatient and outpatient services for our patients.
- We will be an employer of choice by encouraging personal growth and recognizing both individual and team accomplishments.
- We will provide value to our medical community by providing innovative, cost-effective, and high-quality services for our medical providers and their patients.
- We will invest or partner in new products and services that will enhance accessibility to services and improve healthcare outcomes.
- We will provide a safe and secure environment for staff, patients, and visitors alike.

ACMH Hospital is known for excellence of quality care having received awards repeatedly acknowledging its quality and safety.

- Women's Choice Award® - America's Best Hospitals for Emergency Care – 2015
- Healthgrades – Coronary interventional Excellence Award™ – 2016
- Healthgrades National Patient Safety Award™ 2017 and 2018.
- National Organization of State Offices of Rural Health - Performance Leadership Award – Outcomes – 2018

Current distinctions include:

- Blue Cross/Blue Shield - Blue Distinction Center for Maternity Care
- Blue Cross/Blue Shield - Blue Distinction Center for Hip and Knee Replacement Surgery
- Blue Cross/Blue Shield - Blue Distinction Center for Spine Surgery
- UPMC Health Plan Hip and Knee Joint Replacement Surgery Center of Excellence
- GO<sub>2</sub> Foundation for Lung Cancer – Screening Center of Excellence

ACMH Hospital has undertaken this community health needs assessment to comply with the requirements of the Patient Protection and Affordable Care Act enacted March 2010. This act requires that all non-profit, tax exempt hospitals complete needs assessments and adopt an implementation strategy to meet those health needs every three years.

This community health needs assessment incorporates components on-line data collection from government organizations and an analysis of community health and wellness needs through interviews with stakeholders within the community.

## **AUTHOR CREDENTIALS**

ACMH Hospital engaged the consulting services of Dianne Emminger to lead this assessment and prepare this report. Ms. Emminger holds a Master's in Business Administration from the University of Pittsburgh, Katz Graduate School of Business. Her Bachelor of Science degree is in Computer Science from Point Park University in Pittsburgh, PA. Ms. Emminger formerly served as the ACMH Vice President of Information Services for over 20 years where she wrote grants, lead strategic planning activities, and conducted the first CHNA in 2012. Since then she has conducted the CHNAs of 2015 and 2018.

Prior to her employment at ACMH Hospital, Ms. Emminger served as Director of Information Services for Pennsylvania Engineering Corporation and the E.G. Smith Division of Cyclops Corporation. Her programming, analytic and quantitative methods, education, and background make her well versed in the compilation and interpretation of statistics.

Ms. Emminger lives in Armstrong County and has worked with and/or is known by members of nearly all health and human service organizations in Armstrong County. She has studied Armstrong County population statistics in many previous assignments. She is familiar with members of the medical community and hospital employees and, as such, knows where to go for information.

## SUMMARY OF ACCOMPLISHED ACTIVITIES FROM CHNA OF 2018

There were no comments or questions received from the public regarding the ACMH Hospital 2018 CHNA.

### OBESITY

#### HEALTHY Armstrong

While the HEALTHY Armstrong (addressing childhood obesity) committee continues to meet, because of a lack of grant funding and the disassociation of UPMC Health Plan from the program, it has stalled. During the early stages of the program, the schools implemented physical education programs with the addition of programs aimed at the development of lifelong physical activities. That has continued. Also, during the early stages of the program, the cafeteria lunch program moved to increase healthy alternatives and reduced unhealthy alternatives. That, also has continued, now mandated by government regulations.

Recent analysis has identified disturbing statistics. When HEALTHY ARMSTRONG started, children were entering kindergarten with the appropriate body mass index (BMI), but a spike was observed by the end of grade school to a higher percentage of children with an elevated BMI. The program was designed to attempt to reach families through the results of the children by opening schools for the use of exercise facilities and by providing nutritional information to parents. When the pandemic started, people lost routines and getting back has become a motivational barrier. There has been additional food insecurity as families experiencing job loss have experienced food insecurity.

Despite the lack of program momentum, the committee continues to look for solutions, working with Head Start. ACMH Hospital has begun identifying patients experiencing food insecurity and, for those with needs, are sending a few days food supplies to discharged patients. Blessings in a Backpack has been helpful but cannot provide perishable items.

Finally, because of the rural nature of Armstrong County and the percent of the population that do not live close to grocery stores, or other sources of fresh foods, much food

shopping takes place in “dollar stores.” As one recently interviewed stakeholder commented, “food security trumps nutrition.”

### **Local providers who treat obesity**

Dr. Jeffrey Reyer, DO, is board certified in obesity management and offers non-surgical obesity management services in the ACMH Sarver Primary Care Center.

### **INCREASE COMMUNITY KNOWLEDGE ABOUT THE IMPORTANCE OF LEISURE-TIME PHYSICAL ACTIVITIES.**

Working together with its collaborative partner LIFE Armstrong, ACMH Hospital offers Food Truck Friday – benefits go to the Alzheimer’s Association.

The ACMH Foundation sponsored the Tour de Armstrong: Ale on the Trail biking event.





## **NUTRITIONAL SERVICES**

### **Educate the community regarding the importance of nutrition in improving health**

ACMH Hospital continues to offer nutritional counseling services. Nutrition counseling is an ongoing process in which a Registered Dietitian/Nutritionist (RD/RDN) works with an individual to assess his or her usual dietary intake and identify areas where change is needed. The nutrition counselor provides information, educational materials, support, and follow-up care to help the individual make and maintain the needed dietary changes.

ACMH Hospital offers Nutritional Coaching. This program is a one-on-one counseling service with a Registered Dietitian/Nutritionist designed to help patients improve nutrition and lifestyle choices for better health. This program has an upfront nominal fee and is not covered by insurances. A physician order is not required.

ACMH Hospital also offers medical nutritional therapy. This is provided by an RD/RDN and is reimbursed by most health care insurances depending upon the diagnosis. The application of medical nutrition therapy and lifestyle counseling, as a part of the nutrition care process, is an integral component of the medical treatment for managing specific disease states and conditions. It can be provided one-on-one or in a group type setting. A physician order is required to receive medical nutritional therapy services.

## **ADDRESS SUBSTANCE ABUSE**

### **Acute Medical Withdrawal (detox) unit at ACMH Hospital**

ACMH Hospital opened a 4-bed medical acute withdrawal unit for patients with alcohol and drug needs and who present with a co-morbid medical condition.

### **ARMOT**

ACMH Hospital continues to participate in the ARMOT program. ARMOT employees have office space within ACMH facility for immediate access to ED patients and inpatient

who indicate a substance abuse problem upon an admission screening. The Addiction Recovery Mobile Outreach Team (ARMOT) program serves as a point of interception for Individuals entering local hospital emergency services, psychiatric units, or Inpatient physical healthcare units that may need substance use disorder services by identifying and linking individuals with services. Clients are referred to the ARMOT team by hospital staff, and a mobile case manager offers comprehensive care assessments for substance use disorder treatment services, with referrals and linkages to treatment providers and support services. Certified Peer Recovery Specialists serve as part of the ARMOT team by providing peer-based recovery support services before, during, and after treatment to the patient and his/her family members.

## **DRUGS KILL DREAMS®**

ACMH Hospital and ACMH Foundation continue to support the Drugs Kill Dreams® prevention program, the purpose of which is to educate children and adolescents on the danger of illegal drug use and prevent them from using drugs and alcohol. This program has been in service for over 15 years. The program founder, Ford City District Judge Gary DeComo has spoken to more than 100,000 children about the dangers of drugs and alcohol and encourages kids to sign pledges to remain drug and alcohol free. Part of the program is the **Jail Experience** session where teens better understand one of the outcomes of illegal substance abuse.

## **SMART Choices**

ACMH Hospital has joined a partnership with the Children's Hospital of Pittsburgh Foundation, Children's Community Pediatrics, ARC Manor, and the Armstrong/Indiana/Clarion Drug and Alcohol Commission to work with youth and parents in the prevention program Stopping Addiction in the Next Generation Program – Screening Motivational Interviewing and Referral to Treatment (SMART Choices). Noting that access to high-quality, specialized treatment early on is critical to preventing the cascade of substance use and abuse-related problems, opioid use in children, and death. Acknowledging that parents have a powerful influence on their kids, even in the teen years, leaders of the program believe there is a real opportunity to work with both the families and the children. The program leaders also acknowledge that adolescents who have substance use issues are also dealing with such things as anxiety, depression, or trauma.

The SMART Choices program trains pediatricians in a technique called “motivational interviewing” for adolescents between the ages of 11 and 18 which encourages teens to identify problems with substance use and create plans to prevent substance abuse in their own lives. Doctors look for any endorsement of vaping, alcohol, or marijuana by the teen, and address concerns by parents over their child’s suspected use of those substances.

The SMART Choices program is in the beginning stages of education being provided to members of the partnership.

### **Armstrong County Veterans Treatment Court**



The Armstrong County Veterans Treatment Court, a collaboration that includes ACMH Hospital and Foundation (which provided much of the start -up funds) has successfully achieved two graduating classes.

### **Perinatal MOMS program to treat drug-addicted pregnant women.**

Prior to the pandemic, ACMH Hospital entered a collaboration with Indiana Regional Medical Center and the Armstrong/Indiana/Clarion Drug and Alcohol Commission to establish a program for local treatment protocols for drug-addicted pregnant women. The development of the program was tabled at the start of the pandemic, but plans are being made to re-start that work.

## COMMUNITY EDUCATION

### EDUCATE THE COMMUNITY REGARDING IMPORTANT HEALTH NEEDS AND ADVISE THE PUBLIC OF SERVICES AND CLASSES OFFERED BY ACMH

ACMH Hospital and ACMH Foundation have extensively utilized billboards, local newspaper articles, and social media to educate the public regarding important health topics and to provide information regarding classes and support groups.



**Not all superheroes wear a cape...**

**Ours wear a mask.**

ACMH Hospital celebrates and thanks our entire team of Healthcare Heroes for their hard work and dedication!

ACMH | Hospital



**KNOW THE WARNING SIGNS OF A HEART ATTACK**

**Don't Delay Emergency Care**

ACMH | Hospital



Early detection significantly improves breast cancer survival, reducing the risk of dying of breast cancer by 40%

REMEMBER:  
75% of women with breast cancer have NO family history or other risk factors



Mammography has helped to reduce breast cancer deaths by 1/3 since 1990



When breast cancer is detected early the five year survival rate is almost 100%



**Remind your mother, sister or daughter to schedule an annual mammogram. Take the time for yourself.**

**Save a life.**



Even for women 50+ skipping a mammogram every year would miss up to 30% of cancers



Mammography can detect cancer early when it is most treatable

Major American medical organizations with expertise in breast cancer care, including the American Congress of Obstetricians and Gynecologists, continue to recommend that women start getting annual mammograms at age 40.



# When it comes to stroke **BE FAST**



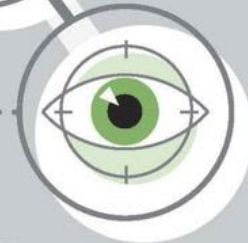
## Balance

Sudden difficulty with balance



## Eyes

Sudden problems with vision in one or both eyes



## Face

Face or smile droops on one side



## Arms

Sudden weakness in arm or leg



## Speech

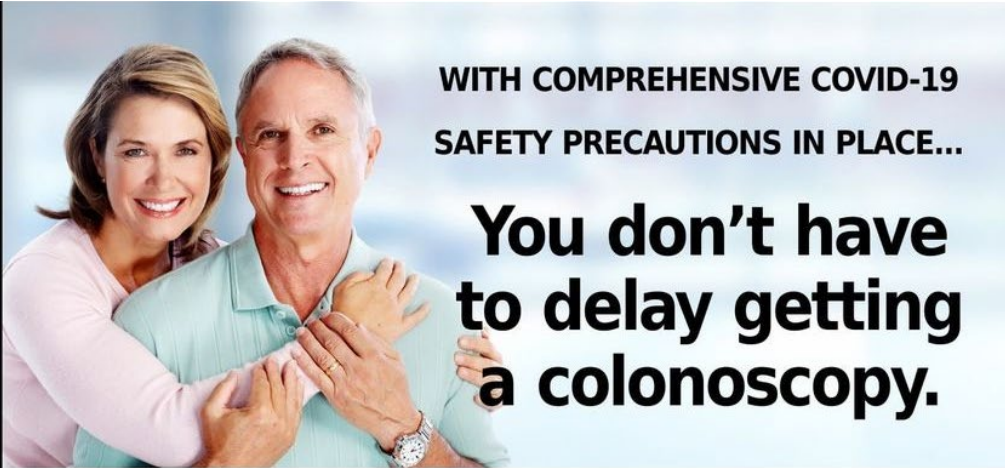
Unable to repeat a simple sentence, or slurred words



## Time

If you observe any of these symptoms, call 9-1-1 immediately





**WITH COMPREHENSIVE COVID-19  
SAFETY PRECAUTIONS IN PLACE...**

## **You don't have to delay getting a colonoscopy.**

**Even during these times, it's important that you do not ignore signs that you may need a colonoscopy. Call your doctor if you are experiencing a combination of any of these symptoms:**

- Abdominal pains
- Bloating
- Chronic fatigue
- Blood in stools
- Narrow/thin stools
- Diarrhea
- Constipation
- A change in bowel habits
- Weight loss
- Cramps

### Safety First

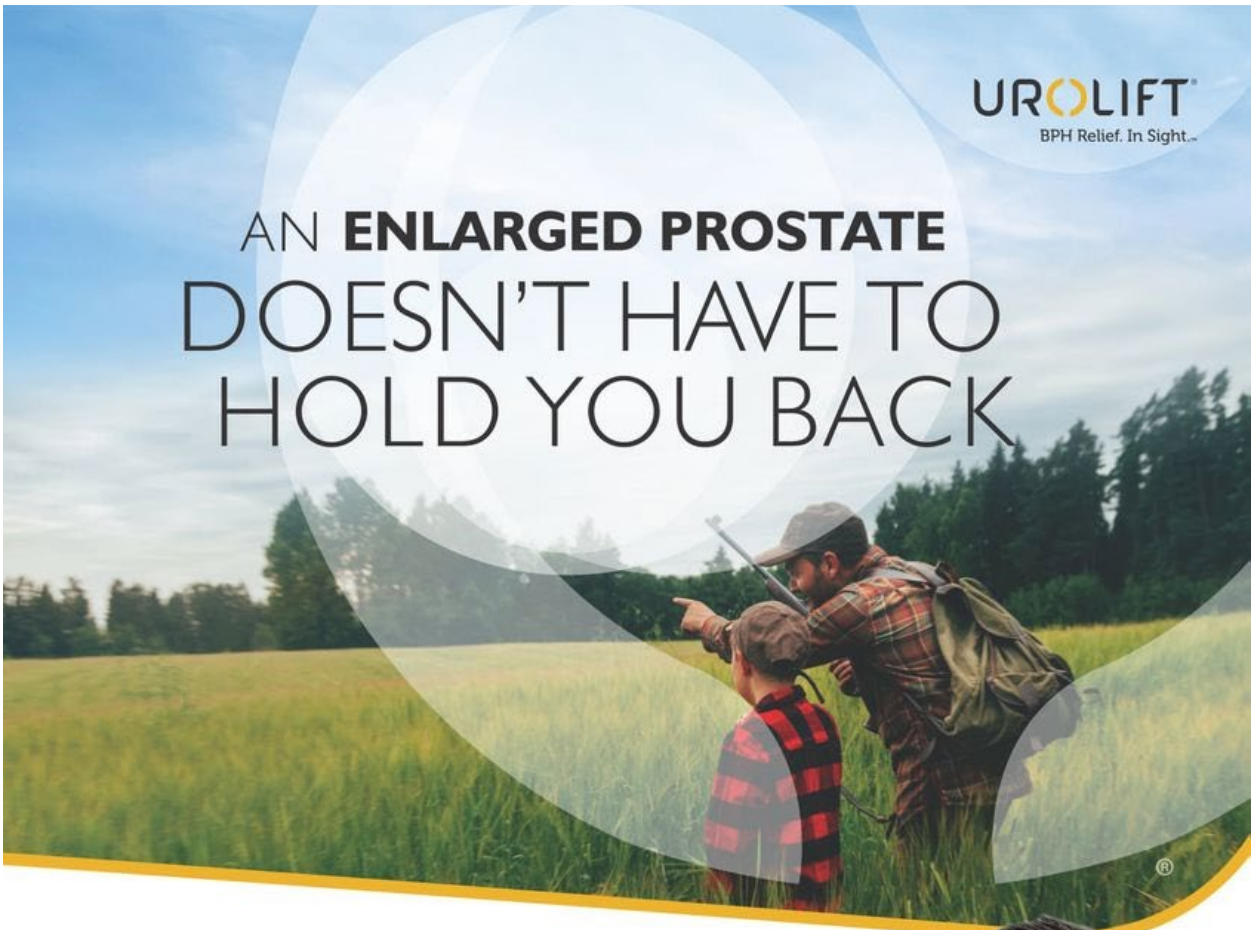
**Know that comprehensive  
COVID-19 precautions are  
in place to help protect  
patients and staff during  
this time.**

**Don't delay... Talk to your doctor, or call  
Armstrong Surgical Associates today.**

**ACMH | Armstrong Surgical Associates**

500 Medical Arts Building | Suite 540 | Kittanning, PA | **724-543-4942**

# AN **ENLARGED PROSTATE** DOESN'T HAVE TO HOLD YOU BACK



The UroLift<sup>®</sup> System is the only leading enlarged prostate procedure that does not require heating, cutting or destruction of prostate tissue.<sup>1-7</sup>

**ACMH** | Armstrong Urology

MEDICAL ARTS COMPLEX | SUITE 660 | KITTANNING, PA

**Jatinder Kumar, M.D., M.Ch**

Call **724-548-3884** to schedule a consultation

Most common side effects are temporary and can include discomfort when urinating, urgency, inability to control the urge, pelvic pain, and some blood in the urine. Rare side effects, including bleeding and infection, may lead to a serious outcome and may require intervention. Visit UroLift.com for more information.  
1. Lokenhwar. Transl Androl Urol 2019; 2. Milano. Med Sci Monit 2008; 3. Miralhos. Can Assoc Rad 2017;  
4. Woo. BJU 2011 and McVary. J Urol 2015; 5. McVary. J Urol 2015; 6. Gilling. Can J Urol 2020; 7. Kadner. World J Urol 2020  
©2020 NeoTact, Inc. All rights reserved. MAC01342-23 Rev A

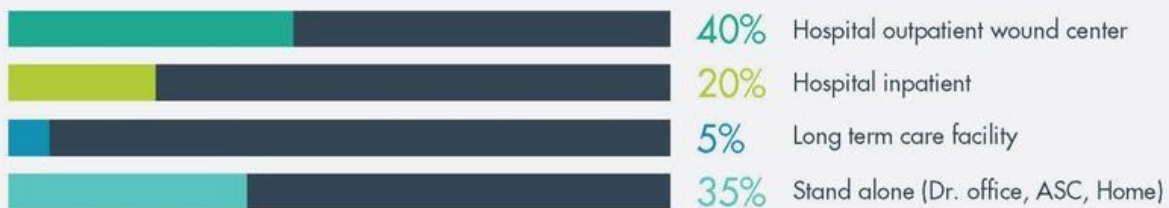




# WOUND CARE AWARENESS MONTH **JUNE 2021**

Specialized wound care is defined as the use of advanced care techniques and technology provided by clinical staff with special training over a sustained period of time until wounds that would not heal on their own are healed.

## WHERE ARE ADVANCED WOUNDS TREATED?



\* estimated



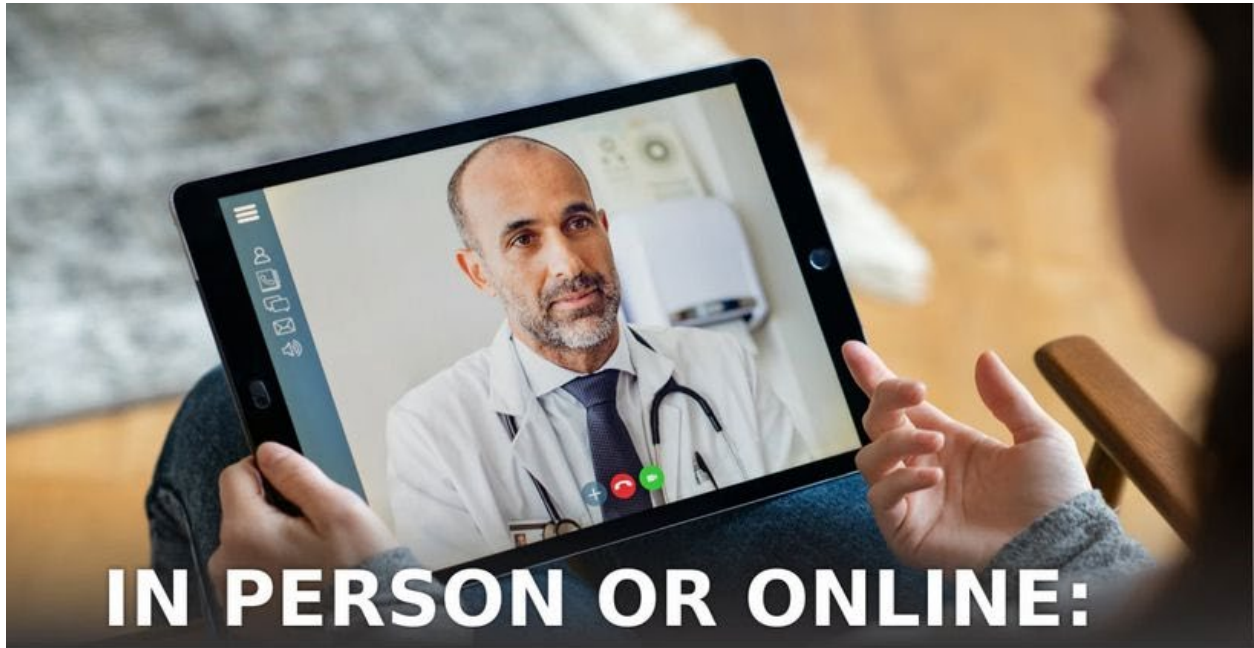
Wounds are becoming a larger burden on the healthcare system given the aging population and increasing prevalence of chronic conditions such as obesity and diabetes.

**COST TO TREAT ADVANCED WOUNDS EXCEEDS \$50 BILLION ANNUALLY IN THE US**

## ESTIMATED NUMBER OF WOUNDED PATIENTS PER YEAR:



ACMH | Hospital



**IN PERSON OR ONLINE:**

# We are ready to see you!

**ACMH physician offices have implemented COVID-19 safety protocols and are also offering the convenience and safety advantages of online virtual visits. Call your ACMH physician office to request an in-person or online telehealth visit.**

**ACMH** | Hospital

# KNOW YOU'RE NOT ALONE



Fecal incontinence (FI) affects more than 20 million American adults.

If you are someone affected by FI, you know just how much it interrupts daily life. It doesn't have to be this way; you have an option for long-term relief – the InterStim II™ by Medtronic.



“The InterStim™ II system is a viable solution for those who are suffering from bowel incontinence. It has the best long-term results compared to any other treatment options available.”

Dr. Richard Fortunato

Dr. Fortunato will be one of the first colorectal surgeons in the area to perform InterStim™ II therapy for diarrhea and bowel incontinence.

## A SAFE & PROVEN APPROACH

**InterStim™ II is an innovative electro-stimulation treatment option for diarrhea and bowel incontinence.** It is a discreet neuro-stimulator system which electrically stimulates the sacral nerve to normalize neural communication between the bowel and nerves. The system is comprised of a lead which is inserted into the body in a minimally invasive procedure as an outpatient.

There are no restrictions for the patient and the new device is MRI compatible. Patients can adjust their device with an easy-to-use controller and work with their provider on long-term management of the device.



Compassionate  
**Care**  
Close to Home

**Accurate diagnosis and effective strategies for treatment**

The Medicine & Health Regional Breast Care Center provides the full continuum of care, from screening through treatment, all in one convenient location.



Breast Surgeon  
Isabelina Guerrero, MD

734.545.2599



**Take Control of Your Labor Discomfort**

Managing discomfort during childbirth is a personal choice for women. ACMH Hospital is now offering qualified patients another option during delivery: *nitrous oxide*. Used across the world for decades, nitrous oxide is safe for both mother and baby!

[www.acmh.org](http://www.acmh.org)



Maternity Care



# A hernia does not go away on its own.

Even with no symptoms, serious problems such as infection and bowel obstruction may occur. In some cases, surgery is the only way to repair a hernia.

Using robotic-assisted techniques, Armstrong Surgical Associates is committed to providing the highest levels of hernia surgical care for ACMH patients. The innovation of robotic surgery allows for more precision, less pain, and shorter recovery times.

If you are currently living with a hernia, or suspect you may have a hernia, please schedule a consult with your doctor to explore options available to you.



Ricky Clay, MD



Sarun Suwan, MD

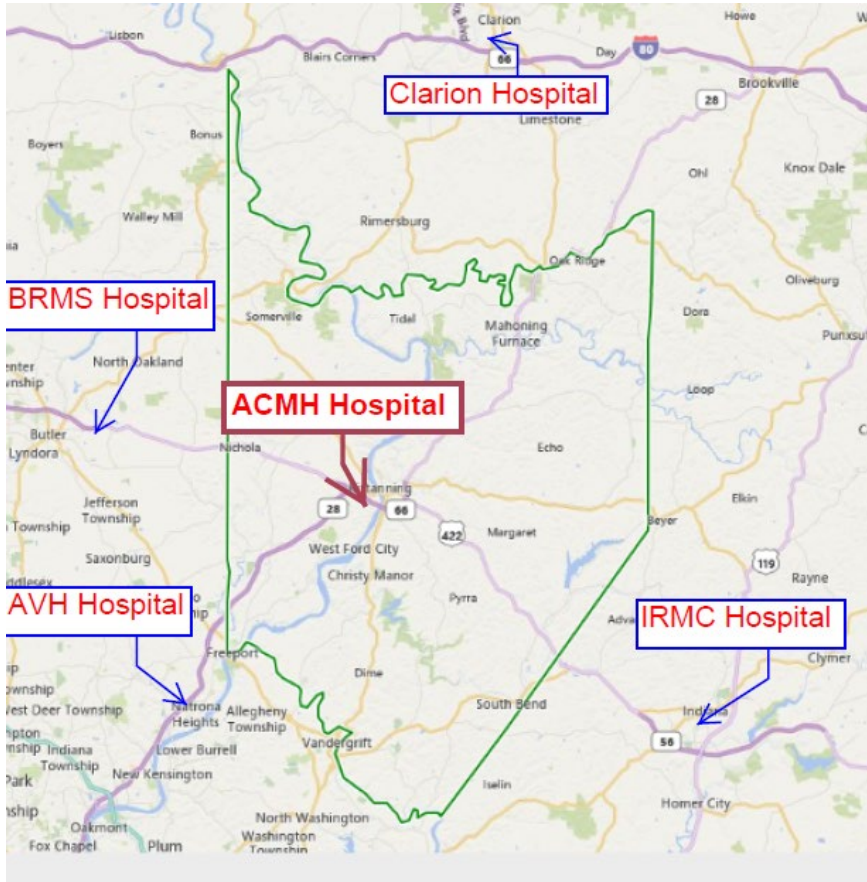


Kelly Zbanic, DO

## DEFINITION OF POPULATION SERVED

ACMH has defined its core population to be adults needing medical and psychiatric hospitalization and surgical services, adults and adolescents needing obstetric services and primary care outpatient services for all ages. Geographically the service area encompasses Armstrong County and the fringes of Butler, Clarion, Indiana, and Westmoreland counties.

For purposes of statistical data, this analysis limits information to Armstrong County alone because statistics are only available at the county level.



Armstrong County is in the rural Appalachian region of Southwest Pennsylvania. Armstrong County and comprises 45 minor civil divisions, many of which are designated as medically underserved areas, health professional shortage areas, or both by HRSA. Most municipalities within the county are sparsely populated with the exception being those in the central portion of the county--within a 10-mile radius of ACMH Hospital.

Because of the topology and seasonal climate changes of the region, highway systems are anything but straight-lined, are costly to maintain, and are difficult to traverse in poor weather conditions. Public transportation systems in the region are lacking in all but the most populous municipalities. The result is that the decision of where patients go for emergency care and routine hospital inpatient and surgical services is driven mostly by highway and transportation systems. A look at the highway systems in the Armstrong County region of Western Pennsylvania and the options for hospital services helps us visualize where patients are likely to go for services.

Armstrong County is bordered by Butler County to the west, Indiana County to the east, Clarion County to the north and Westmoreland County to the South. As can be seen in the previous map, Butler, Clarion, and Indiana all have community hospitals that provide a similar type and level of service as ACMH Hospital.

The major highway systems in Armstrong County are U.S. 422, State Highway 28, and State Highway 66. U.S. 422 connects Butler Regional Medical Center, ACMH Hospital, and Indiana Regional Medical Center. U.S. 28 is a major artery that connects the city of Pittsburgh to ACMH Hospital and then continues north, but becomes a rural highway, and when combined with U.S. route 66, reaches Clarion County. Route 66 south reaches Westmoreland County. Our assumption is that within a 10- to 15-mile distance, patients will find it convenient to travel west and east on U.S. 422 and north and south on Routes 28 and 66 to reach ACMH Hospital. Analysis of ACMH patient records supports this assumption.

Within the Pittsburgh Metropolitan Area, the University of Pittsburgh Medical Center (UPMC) network and the Allegheny Health Systems (AHN) network provide tertiary hospital services for all categories of adult disease and illness, psychiatric and behavioral health services, specialized surgical services, pediatric care, high-risk obstetric and neonatal care, and adolescent inpatient services. Armstrong County residents, for whom transportation is not a barrier, have indicated a willingness to travel to these organizations for the services of highly skilled specialists for certain illnesses. Therefore, ACMH Hospital focuses on low- and moderate-risk inpatient and surgical services for adults. Pediatric patients are seen in the ACMH primary care centers but typically receive inpatient and surgical care at UPMC Children's Hospital of Pittsburgh.

While the statistics of this report are limited to Armstrong County, ACMH Hospital has seen increased patient flow from Indiana, Butler and Westmoreland counties. We have performed analyses of patients who use the services of ACMH Hospital but have limited statistical analytics to Armstrong County alone.

## HEALTHCARE RESOURCES IN THE SERVICE AREA

### MEDICAL RESOURCES IN THE MID-WESTERN REGION OF ARMSTRONG COUNTY

The Armstrong Center for Medicine and Health (ACMH) is the largest healthcare organization in Armstrong County. Its flagship facility, the 160-bed ACMH Hospital is located on a large, beautiful campus in the most populous, mid-western region of Armstrong County. The campus also provides office space for practicing physicians. ACMH employs nearly 1000 workers and is the largest employer in Armstrong County. Approximately 75% of these employees live in Armstrong County.

The core range of inpatient services at ACMH Hospital includes:

- adult medical/surgical,
- intensive/cardiac care,
- oncology,
- acute rehab,
- skilled nursing,
- maternity OBGYN,
- acute medical alcohol/drug withdrawal,
- adult behavioral health.

Surgical/procedural and outpatient services include:

- advanced cardiac care, including percutaneous coronary intervention (PCI) (angioplasty and stents) and interventional cardiac catheterization ,
- wound care including hyperbaric wound treatment,
- concussion care,
- pain management,
- general surgery, including robotic surgery,
- orthopedic surgery,
- podiatric surgery,
- treatment for lung and esophageal disorders including low-dose CT screening, endobronchial ultrasound, and LYNX reflux management,
- breast care, including high-risk breast evaluations,



- a comprehensive cancer program that is accredited by the Commission on Cancer®,
- Ear, nose, and throat (ENT) treatment and surgery,
- neurology
- neurosurgery,
- urology,
- physical, occupational, and speech therapy,
- a full range of laboratory and imaging services,
- diabetic and nutritional counseling, and,
- ACMH Hospital is a Certified Primary Stroke Center.

The emergency department (ED) at ACMH Hospital is a state-of-the-art, two-track ED. The Acute Care track has larger, private treatment rooms with privacy curtains, sliding glass doors and adequate space for all necessary equipment. The Express Care track more efficiently serves those patients who have less acute illnesses. With an expected time-to-treatment in the range of 20 minutes, Express Care patients have an overall length-of-stay significantly below the national average. The state-of-the-art ED offers: a state-of-the-art trauma exam room, 12 private exam rooms, 3 positive-pressure isolation rooms, a specialized bariatric room, and an integrated nurse's station.

Since May 2007, STAT MedEvac, a medical transport helicopter, has been permanently based on the ACMH campus. The base is staffed with an EMS pilot, a flight nurse, and a flight paramedic 24 hours per day, 365 day per year. This intricately links ACMH Hospital to major tertiary care hospitals in the Pittsburgh region. STAT MedEvac is the only critical care transport program in Pennsylvania to be fully accredited in all modes of transport (rotor wing, fixed wing, ground critical care and medical escort).

There are 7 Ambulance Services in Armstrong County serving an area of 654 square miles. Most are in the most populous, mid-west region, and are a part of local hose companies.

## MEDICAL RESOURCES IN THE RURAL REGIONS OF ARMSTRONG COUNTY

Many municipalities in Armstrong County are classified by the U.S. Health Resources and Services Administration (HRSA) as healthcare professional shortage areas (HPSA). Recognizing that provider shortages create barriers to healthcare services HRSA maintains records of the numbers of healthcare professionals and their service locations and provides economic benefits to alleviate shortages.

The ratio of population to primary care physicians in the entire County (2,330:1), higher than the Commonwealth ratio (1,230:1). Primary care physicians include practicing physicians (M.D.'s and D.O.'s) under the age of 75 who specialize in the general practice of medicine, family medicine, internal medicine, and pediatrics. (*Source: HRSA*). This ratio indicates that there is a significant shortage of primary care physicians in Armstrong County, mostly in the rural regions. Because of the county's rural nature—and a highway infrastructure in which roads often wind around hills and streams—it may take a patient 30 to 45 minutes to reach the nearest primary care physician. These areas also lack public transportation. To mitigate the problem, ACMH has opened/expanded primary care centers in many remote areas of the county and now employs many physicians and physician extenders (nurse practitioners, physician assistants and other mid-level practitioners) to work in these primary care centers. These physician extenders are not included in the primary care to population ratio calculated by HRSA at this time. Nevertheless, they provide much of the necessary primary care services needed in Armstrong County.

The ratio of population to dentists in Armstrong County is 3020:1, compared to the Commonwealth (1480:1.) The ratio of population to mental health specialists in Armstrong County is 900:1, compared to the Commonwealth ratio (450:1.) Mental health specialists include psychiatrists, psychologists, licensed clinical social workers, counselors, marriage and family therapists, mental health providers that treat alcohol dependency and/or substance abuse, and advanced practice nurses specializing in mental health. Armstrong County is both a dental and mental health provider shortage area as defined by HRSA.

A health professional shortage area can be a specific geographic area, (geographic HPSA), such as a county or municipality, and is based on the ratio of population to providers in that area, the percentage of the population at or under 100% of the poverty level, and the travel time to the nearest source of care outside of the HPSA region. A health professional shortage area can also be a population HPSA, qualified by the previous three HPSA criterion and which also has a special-needs population, such as a

high percentage of un- or under-insured people. HRSA can also designate areas as Medically Underserved Areas or Populations (MUA and MUP). These are areas that have been identified as having a shortage of health care services (MUA) or a shortage of services to special populations who face economic, linguistic, and/or cultural barriers to health care (MUP.) The designation of MUA's and MUP's uses the above criteria, a high percentage of the population over age 65 and/or a high infant mortality rate. (*Source: HRSA.*)

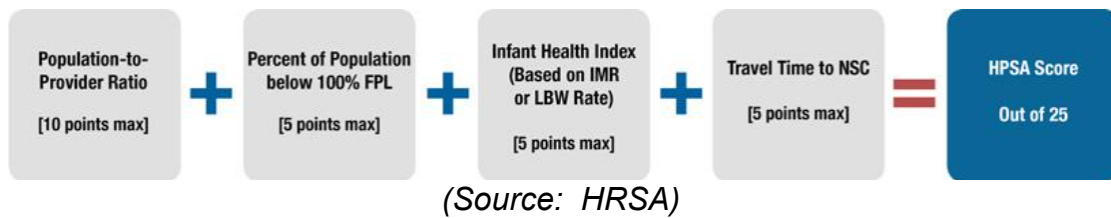
The following pages explain how HPSA and MUA/MUP scores are calculated and show where they are located in Armstrong County.

## How Primary Care HPSA is Scored

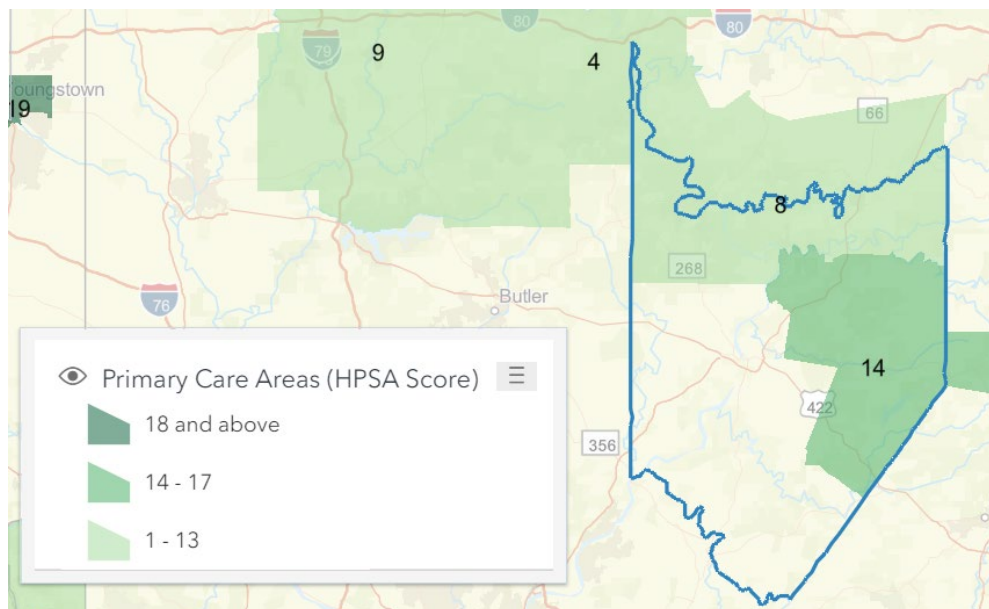
Primary Care HPSAs can receive a score between 0-25.

### What goes into the score?

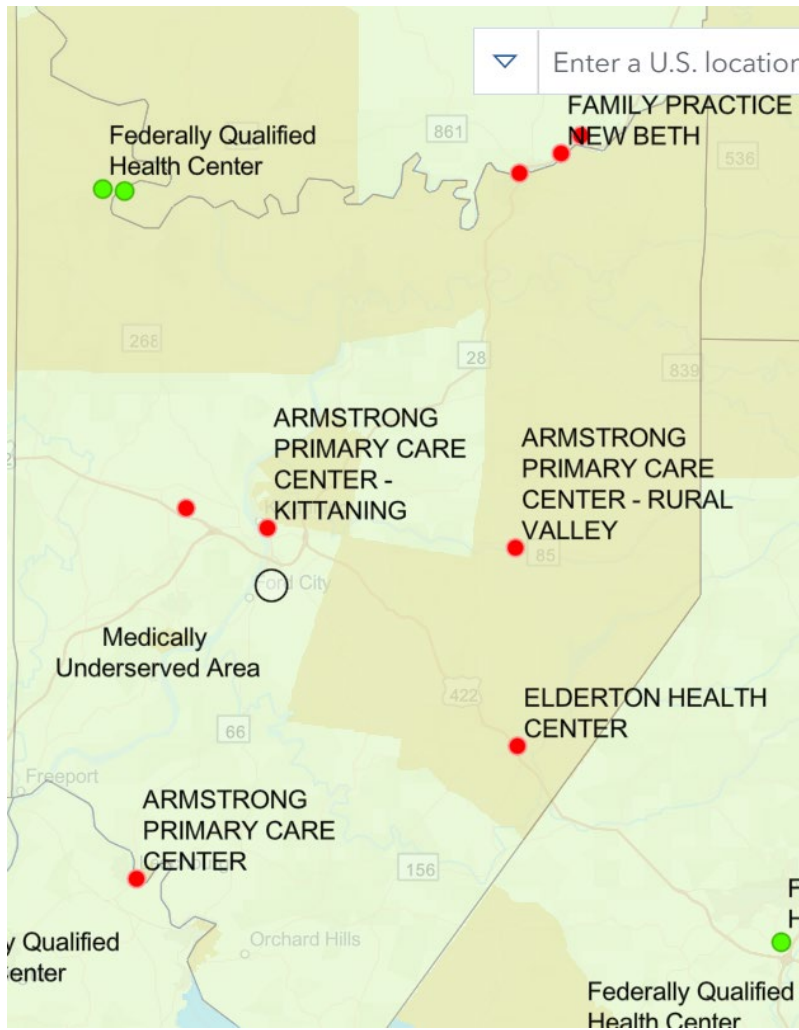
- Population-to-Provider Ratio [10 points max]
- Percent of population below 100% Federal Poverty Level (FPL) [5 points max]
- Infant Health Index (based on Infant Mortality Rate (IMR) or Low Birth Weight (LBW) Rate)\* [5 points max]
- Travel time to Nearest Source of Care (NSC) outside the HPSA designation area [5 points max]



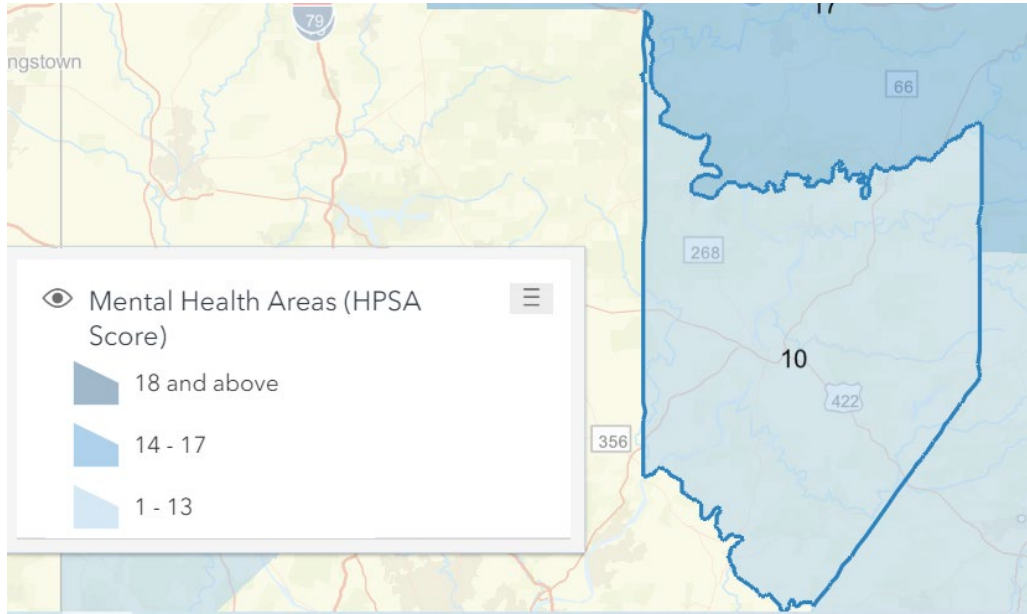
### Armstrong County Primary Care HPSA Score



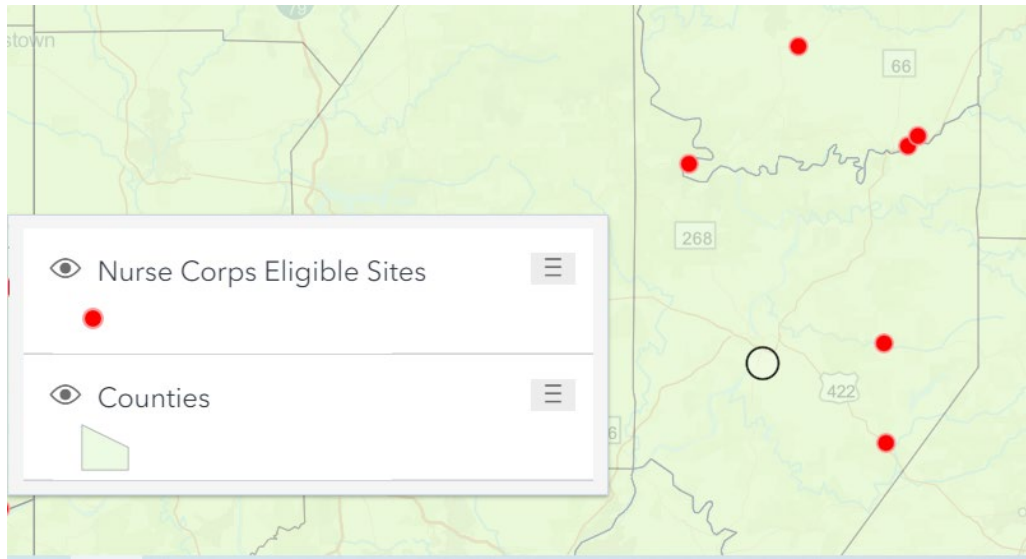
The following map shows Rural Health Centers (RHC) and Federally Qualified Health Centers (FQHC) within Armstrong County that have been implemented to alleviate the primary care health professional shortage.



# Armstrong County Mental Health Area HSPA Score

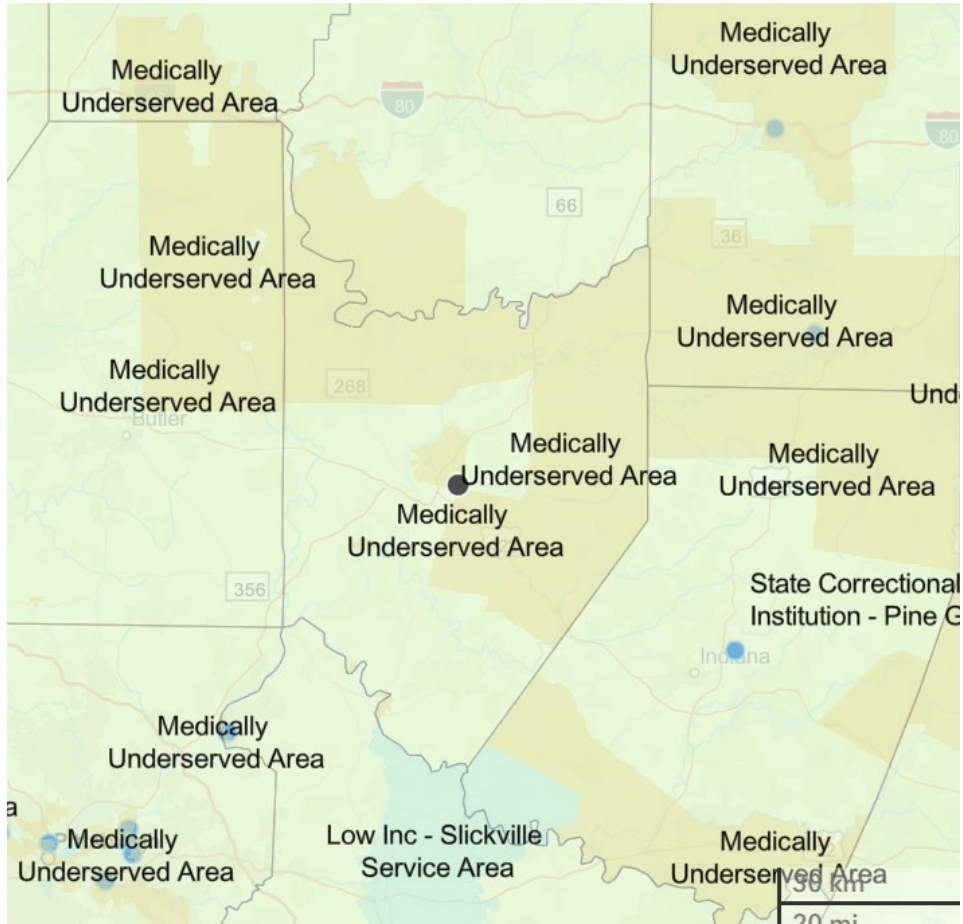


## Nurse Core Loan Repayment Program



Student loan repayment totaling 60% of an outstanding student loan is available from HRSA for Registered Nurses (RN) and Advanced Practice Registered Nurses (APRN) working in a health care facility located in a medical or mental health HPSA with score of 14 or above that provides primary medical care or mental health care to underserved populations. (Source: HRSA)

The following map shows the MUA's within and around Armstrong County.





## Medically Underserved Area and Medically Underserved Population (MUA/P) Scoring

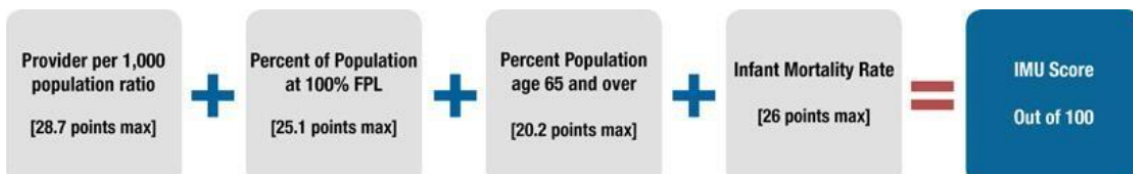
MUA/P scores depend on the Index of Medical Underservice (IMU) calculated for the area or population proposed for designation.

Under the established criteria, an area or population with an IMU of 62.0 or below qualifies for designation as an MUA/P.

An area or population can receive an IMU score between 0-100.

### What goes into the score?

- Provider per 1,000 population ratio [28.7 points max]
- Percent of population at 100% of the Federal Poverty Level (FPL) [25.1 points max]
- Percent of population age 65 and over [20.2 points max]
- Infant Mortality Rate [26 points max]



## OTHER HEALTH AND HUMAN SERVICES PROVIDERS

When identifying healthcare resources, ACMH recognizes that many other health and human service organizations play active roles in the physical, mental, and behavioral health in Armstrong County and work closely with ACMH hospital, joining in many partnerships and collaborations to improve the health and wellbeing of Armstrong County residents.

**ARC Manor** (Addiction Recovery Center) provides inpatient and outpatient addiction recovery treatment, outreach services to families and other agencies, and 24 x 7 intervention services.

**HAVIN** (Helping All Victims in Need) provides food, shelter, and protection for victims of domestic violence. This agency works closely with law enforcement and Commonwealth legislators to help identify needs for changes to the Pennsylvania Code of Regulations.

**Armstrong County Community Action Agency** operates the Head Start program, delivers home meals to over 1500 residents per month, operates the food bank, assists with finding shelter, provides employment application training services, such as training for interviews and resume preparation, and operates the Town and Country transit system, the only public transportation system in Armstrong County.

**The Area Agency on Aging** provides services to residents 60 years old and over, helping them remain active and independent in the community and operates numerous senior centers.

**Armstrong Children and Youth** services personnel mitigate the problems of child abuse and neglect that can occur when parents are not able to properly care for their children.

**The Armstrong/Indiana/Clarion, Drug and Alcohol Commission** provides funding for inpatient detoxification services, rehabilitation programs, the Armstrong County Veterans' Treatment Court, and miscellaneous other programs. The Commission has built the Recovery Capital center in Kittanning, which is a day-center for those recovering from substance abuse—a place removed from previous risks that might cause relapse and where training is provided to help recovering addicts find meaningful employment. The Commission brings a mobile unit into Armstrong County twice a month to provide medication assisted treatments using Vivitrol and Suboxone. They work closely with

medical staff who provide care to incarcerated individuals, beginning treatment protocols before prisoners are released, in the hopes of reducing the risk of recidivism or accidental overdose. The commission distributes Narcan and provides Narcan training throughout the community.

Through the Drug Free Communities program, the commission works with area schools to provide substance abuse education and identify at-risk students. They recruit youth leadership through groups such as Students Against Drunk Driving. They work with state legislators to address gaps in the legal system such as giving grandparents the right to petition custody of their grandchildren whose parents suffer from addiction. The Drug Free Communities program also finds ways to assist residents over 60, who are addicted to either opioids or alcohol and who are experiencing health problems from lifetime use.

**The Addiction Recovery Mobile Outreach Team (ARMOT)**, funded by the HRSA Federal Office of Rural Health Policy, partners with ACMH Hospital medical staff to identify patients who may have substance abuse problems and attempts to transfer them into treatment as quickly as possible. ARMOT personnel describe their services as providing a “tour-guide to the continuum of recovery services.” Certified recovery specialists, each of whom has experienced long-term recovery, help recovering addicts in all recovery needs, such as finding employment and housing, and finding the best-suited 12-step or faith-based programs and sponsors. Additionally, intent on eliminating the stigma associated with addiction, they provide counseling to medical and law enforcement personnel, helping them become non-judgmental, especially when dealing with repeat offenders.

**ADAGIO Health** provides services in the areas of gynecology; family planning; breast and cervical cancer screening; STI prevention, testing and treatment; healthy relationship and sexual health education, and nutrition counseling. They place a special focus on caring for teens, the LGBTQIA+ community, low-income individuals, and those without insurance or are underinsured (have high co-pays,) in a judgement-free environment.

**The United Way of Armstrong County** administers the 2-1-1 program, a directory through which residents can call, and/or go online to find community services that are available near their homes.

**The Richard G. Snyder YMCA** is a provider of exercise, recreational, and family services and offers programs to manage diabetes and prevent Parkinson’s Disease.

**The Armstrong Indiana Behavioral and Developmental Health** program contracts with healthcare providers and supplies administrative oversight of the mental health, intellectual disabilities, and early Intervention systems for Armstrong and Indiana Counties.

**The Children's Advocacy Center** responds to child abuse, educates communities, and advocates for better policy to make sure kids are protected and offenders are held accountable.

**Armstrong County Probation Services** offers education and Survivor Panels to those who have been convicted of DUI.

**Evergreen Homes, Inc.** is an Armstrong County provider of services to intellectually and physically challenged persons through the federally funded Waiver Program.

**The Pennsylvania Office of Vocational Rehabilitation (OVR,)** provides vocational rehabilitation services to help persons with disabilities prepare for, obtain, or maintain employment. OVR provides services to eligible individuals with disabilities, both directly and through a network of approved vendors. Eligible individuals can be provided with medical services and equipment such as physical and occupational therapy, wheelchairs, and automobile hand controls, counseling, job-seeking programs, job clubs, and job development used to increase one's ability to get a job, assistive technology including a wide range of devices and services that can empower persons with disabilities to maximize employment, independence, and integration into society.

**The Progressive Workshop of Armstrong County, Inc.** provides vocational rehabilitation services to people with disabilities. It is currently funded through the Behavioral and Developmental Health Program of Armstrong and Indiana Counties, the Office of Developmental Programs Waivers and fee-for-service funding.

**The Armstrong County Veterans Treatment Court** is a specialized treatment court designed to provide an alternative program for Armstrong County's veterans facing criminal charges, many of whom are dealing with mental health and addiction issues. The goal of Veterans Treatment Court is to rehabilitate and restore veterans as active, contributing members of their community, all the while addressing the criminal action.

**Armstrong Care, Inc.** provides services to intellectually disabled adults by operating 12 group homes located in the Kittanning and Ford City areas.

**Lutheran SeniorLife** has partnered with ACMH Hospital to place Life Armstrong, an adult day care center on the ACMH campus. It gives seniors, living at home, the opportunity to socialize with others while receiving the healthcare services they require.

An understanding of the demographic characteristics of Armstrong County, coupled with knowledge of community resources, provides background to better appreciate the causes and contributing factors for sickness and disease, and assess the ability of ACMH to have meaningful impact. Poverty and unemployment rates do not cause illness, but a poor economy often prevents people from seeking and receiving the medical care they need. A highly rural environment that lacks public transportation systems coupled with a shortage of healthcare providers creates barriers to care.

## **RESEARCH METHODS**

### **Primary Data Collection**

Stakeholder (a key member of the community) interviews were conducted to gather the opinions and perceptions of persons who represent the broad interests of the Armstrong County residents, have experience working in public health or have strong knowledge of public health issues. During phone interviews, each participant was asked comprehensive questions regarding the health and wellness of Armstrong County residents and were asked to identify their perceived health needs of the community and factors affecting health. Most worked within the fields of medical and/or social services. Other participants included representatives from the fields of education, community businesses, and recreation facilities. A full list of the stakeholders who participated can be found in the acknowledgement section of this document.

### **Secondary Data Collection**

Secondary data was collected from many on-line sources which are listed in the references sections throughout this document. The most comprehensive information came from the Robert Wood Johnson Foundation, the US Census Bureau, the CDC, the Center for Rural Pennsylvania, the US Department of Labor and Industry, and Commonwealth of Pennsylvania Department of Health. This data has enabled us to generate a community profile that identifies morbidity and mortality characteristics, available preventative care, access to health care and social issues affecting health.

## STATISTICAL INFORMATION

### THE COVID-19 PANDEMIC

The pandemic, which began in 2020, exacerbated healthcare barriers and demonstrated the magnitude of healthcare issues identified in previous CHNAs. Barriers to care dramatically increased (reduced physician office hours, the willingness of the population to leave their homes for healthcare screenings and lab tests, the availability of lab test supplies and vaccines, and the shortage of healthcare workers, especially nurses.) For many prior years, ACMH conducted tabletop exercises to prepare for pandemics, but COVID19 demonstrated how the reliance on government agencies coupled with supply shortages has limited its ability to implement all the planned activities and placed unanticipated stress on first responders in the region. ACMH Hospital quickly reacted to unforeseen events with an “all hands-on deck” use of employee skills and creativity.

Physical therapy space adjacent to the emergency department was retrofitted to provide additional negative pressure rooms for outpatients suspected of having the virus. ACMH employees designed and built plexiglass shields to protect staff when performing respiratory procedures and invented a mobile shield for use by paramedics and EMTs who provide respiratory procedures in the field.



ACMH implemented a drive-up COVID test area and, at times, had so many cars waiting that they reached the highways. When vaccines became available, ACMH established a highly efficient vaccine administration center that, in the beginning, drew in patients from outside of the county. ACMH expanded its use of tele-medicine and moved many

employees, who do not provide direct patient care, to working from home. ACMH demonstrated leadership in infection control through the use of the Diversey® MoonBeam™ UV disinfection devices for use in patient rooms and operating rooms. *(This system was acquired with Cares Act Funding administered through the Armstrong County Commissioner's Office.)*

It may be some time before we are able to determine how Armstrong County's response compares to that of other Counties or how our hospital effort compares to those of other facilities. Therefore, CHNA interviews with key stakeholders were designed to understand things we can do to better address future pandemics.

## **DEMOGRAPHIC FACTORS**

The 2020 U.S. census results have been delayed due to the COVID-19 pandemic. Therefore, we are using estimates between the decade markers. The Bureau of Census publishes estimates based upon a respondent-based survey—The American Community Survey. These estimates show that the population of Armstrong County has decreased from 2010 by 6.3%. During the same period, the population of Pennsylvania has increased by 0.8%. *(Source: U.S. Census QuickFacts.)*

### **Rurality**

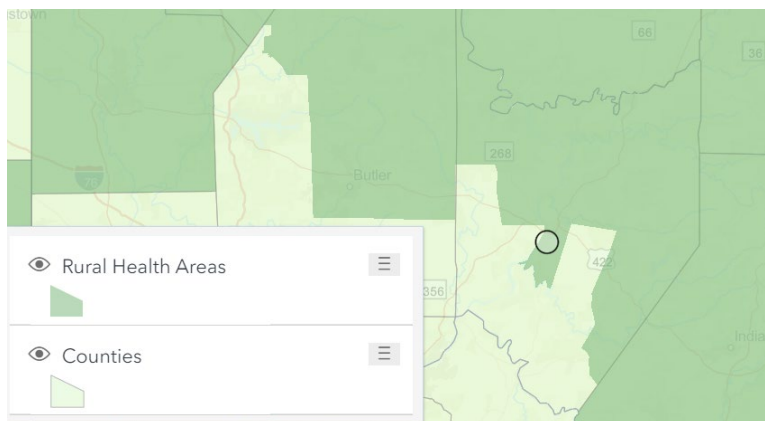
According to the Center for Rural Pennsylvania, the population density per square mile of land area in Armstrong County is 105.5. Population density is a measure of the rurality of a community. The lower the ratio, the more rural a community. The overall population density per square mile of land for the entire Commonwealth is less rural at 283.9. 67.5% of the population in Armstrong County lives in rural areas (compared to 21.3% of the Pennsylvania population.) A highly rural environment presents potential barriers to care such as lack of transportation to and from medical appointments, increased distance from healthcare services and wellness facilities, and even distance from sources of healthy foods.

We have observed that the Armstrong County population has been steadily declining over the past two decades with a shift to an older population, many living with multiple chronic conditions, disability, and pain. Armstrong County is one of 9 counties in Pennsylvania



that are considered “mostly rural”—for the populations aged 65 and older. (Source: *The Older Population in Rural America: 2012–2016 American Community Survey Reports*).

The following map shows the portions of Armstrong County that are considered rural health areas. (Source: *HRSA*)



## The Aging Population of Armstrong County

22.6% of the Armstrong County Population is 65 or older. 19.1% is under the age of 18. Overall, in the Commonwealth, those ratios are 18.7% and 20.6% respectively. From this data, we have calculated an old-age dependency ratio against which we can compare ourselves to other populations. This ratio is intended to measure a community’s economic burden in caring for the elderly, a dependent population not typically in the workforce. It is the ratio of older adults to working age adults. To calculate this, we divided the population age 65 and older by the population between the ages of 18 and 64, the age of population typically in the workforce, and multiplied that result by 100. The higher the ratio, the higher the economic burden of an aging population. The Armstrong County ratio is 38.8. The Commonwealth ratio is 30.8 This indicates a higher economic burden to care for the elderly and increased stress on the healthcare industry to provide the necessary services. A higher ratio indicates a greater need for nurses, pharmacists, rehabilitation therapists, personal care assistants, and long-term and day care facilities.

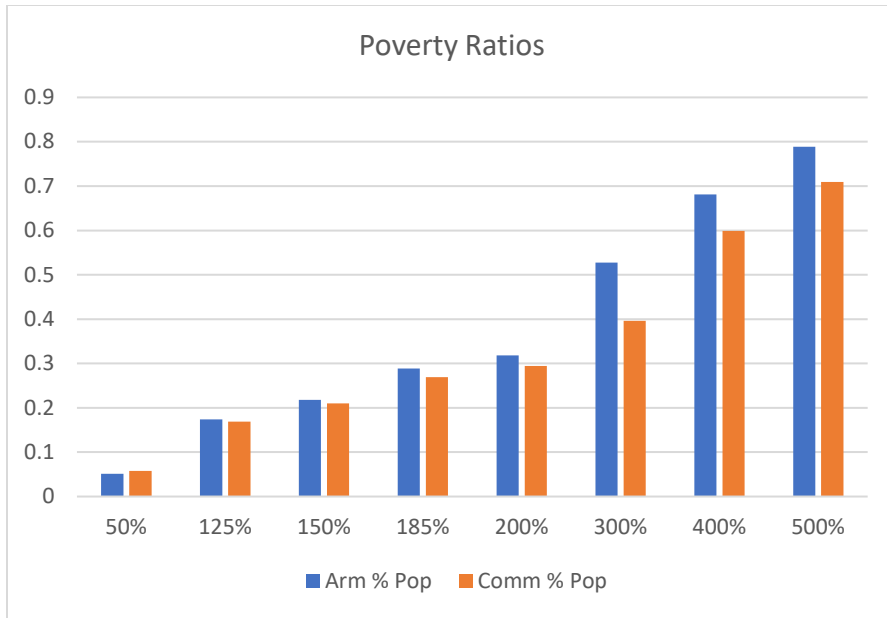
## **Economic Factors.**

Income and poverty status are important when conducting a community health needs assessment as lower-income individuals and families will have less disposable income to spend on healthy recreational activities, may be more likely to find some medical expenses to be unaffordable, and may be more likely to avoid the higher cost of recommended fresh produce and lean sources of protein.

**Unemployment:** The unemployment rate in the Armstrong County was 7.7% in April 2021, higher than the Commonwealth rate of 7.4%. (*Source: Pennsylvania department of labor local area unemployment statistics.*)

**Income:** The percentage of population with income below the poverty level in Armstrong County is 9.2%. (*Source: Center for Rural Pennsylvania.*) This ratio compares favorably to the 12.2% rate for the Commonwealth as a whole. Likewise, the poverty rate for children under the age of 18 (13.6%) (*Source: Center for Rural Pennsylvania.*) is lower than the Commonwealth (16.7%). Still, 53.2% of Armstrong County children are eligible for free or reduced-price lunches, compared to 51.7% for the Commonwealth. (*Source: Center for Rural Pennsylvania.*)

A limitation of the poverty rate is that it fails to identify the percentage of population who are barely above the poverty rate, sometimes called the “working poor.” The following chart graphically shows this income gap:



*(Source: U.S. Census Bureau – American Fact Finder – 2018.)*

Other statistics that reveal the “working poor” status of Armstrong County residents are per-capita personal income and median household income. The annual per-capita income for Armstrong County residents at \$27,715 compares unfavorably to the per-capita income of the average Commonwealth resident (\$34,352.) The median household income at \$51,410 compares unfavorably to the Commonwealth median income (\$61,744.) *(Source – US Census QuickFacts.)*

<b>Armstrong County (2021)</b> <b>Demographic Factors (Source: County Health Rankings and Roadmaps unless otherwise indicated)</b>		
<b>Demographics</b>	<b>Armstrong County</b>	<b>Commonwealth of Pennsylvania</b>
Total Population	64,735	12,787,209
Population percent change from 2010	-6.3%	+0.8%
Population age 65 and over	22.6%	18.7%
Population under 18 years	19.1%	20.6%
Population under 5 years	4.9%	5.5%
Children in single-parent households	22%	26%
Race - % White	97.6%	81.6%
Number of Households	28,137	
Persons per Household	2.31	2.45
Bachelor's degree or higher	16.7%	31.4%
Reading scores	3.2	3.1
Math scores	3.3	3.1
Median Household Income	\$51,410	\$61,744
Per Capita Income	\$27,715	\$34,352
Insured Individuals and Public Assistance (Source: Center for Rural Pennsylvania)		
Uninsured (under 65 years)	5.7%	6.6%
Medical Assistance enrollment	23.3%	22.3%
Free or reduced-price school meals eligibility	67%	51%
Total Employed Persons (Source: Center for Rural Pennsylvania)	29,362	
Healthcare & social assistance	18.9%	16.5%
Mining, Construction, Utilities, Transportation and Warehousing	17.1%	11.8%
Manufacturing	15.3%	11.8%
Wholesale & Retail trade	14.4%	14.1%
Education, Professional, Scientific & Technical Services	13.1%	19.75%

### **Computer and Internet use (Source: US Census QuickFacts)**

The COVID pandemic increased the need for home computers and reliable internet services for on-line education, tele-medicine, and working from home.

- 17.1% of Armstrong County residents households do not have a computer. This compares unfavorably to 12% of the Commonwealth households.
- 25.1% of Armstrong County households lack broadband Internet access. This compares unfavorably to the Commonwealth with 18.5% of the population lacking broadband access.

### **Disability – (Source: US Census Quick Facts)**

- 12.9% of the Armstrong County population under age 65 have a disability. This compares unfavorably to the Commonwealth (9.8%).

### **HEALTH FACTORS AND OUTCOMES – (SOURCE: COUNTY HEALTH RANKINGS AND ROADMAPS)**

Certain data is collected through the CDC's Behavioral Risk Factor Surveillance System (BRFSS) The Behavioral Risk Factor Surveillance System is a state-based random digit dial telephone survey that is conducted annually in all states, the District of Columbia, and U.S. territories. Data obtained from the BRFSS are representative of each state's total non-institutionalized population over 18 years of age and have included more than 400,000 annual respondents with landline telephones or cellphones since 2011.

Answers from respondents	Armstrong County	PA	Source
Experience poor or fair health (age adjusted)	19%	18%	BRFSS
Poor physical health days in past 30 days (age adjusted)	4.3	4	BRFSS
Poor mental health days in past 30 days (age adjusted)	5.2	4.7	BRFSS
Adults reporting 14 or more days per month of poor physical health (age adjusted)	13%	12%	BRFSS
Adults reporting 14 or more days per month of poor mental health (age adjusted)	17%	15%	BRFSS
Current smokers (age adjusted)	23%	18%	BRFSS
Adult obesity - BMI 30 or greater	44%	31%	US Diabetes Surveillance System
Adults reporting no leisure time physical activity	34%	22%	BRFSS
Adequate access to exercise opportunities	79%	84%	BRFSS
Adults reporting binge or heavy drinking	22%	20%	BRFSS
Insufficient sleep - fewer than 7 on average	41%	39%	BRFSS
Diagnosed with diabetes	15%	11%	US Diabetes Surveillance System
% Of Medicare FFS patients who receive annual flu vaccine	40%	53%	Center for Medicare and MA
% Of Medicare female enrollees who receive annual mammography screening	44%	45%	Center for Medicare and MA

**Food Environment (Source: County Health Rankings and Roadmaps)**

The Food Environment Index ranges from a scale of 0 (worst) to 10 (best) and equally weights two indicators of the food environment:

- 1) Limited access to healthy foods – this estimates the percentage of the population that is low income and does not live close to a grocery store. Low income is defined as having an annual family income of less than or equal to 200 percent of the federal poverty threshold for the family size. Living close to a grocery store is defined differently in rural and nonrural areas; in rural areas, it means living less than 10 miles from a grocery store whereas in nonrural areas, it means less than 1 mile.
- 2) Food insecurity – this estimates the percentage of the population that did not have access to a reliable source of food during the past year. A two-stage fixed effects model was created using information from the Community Population Survey,

Bureau of Labor Statistics, and American Community Survey to estimate food insecurity.

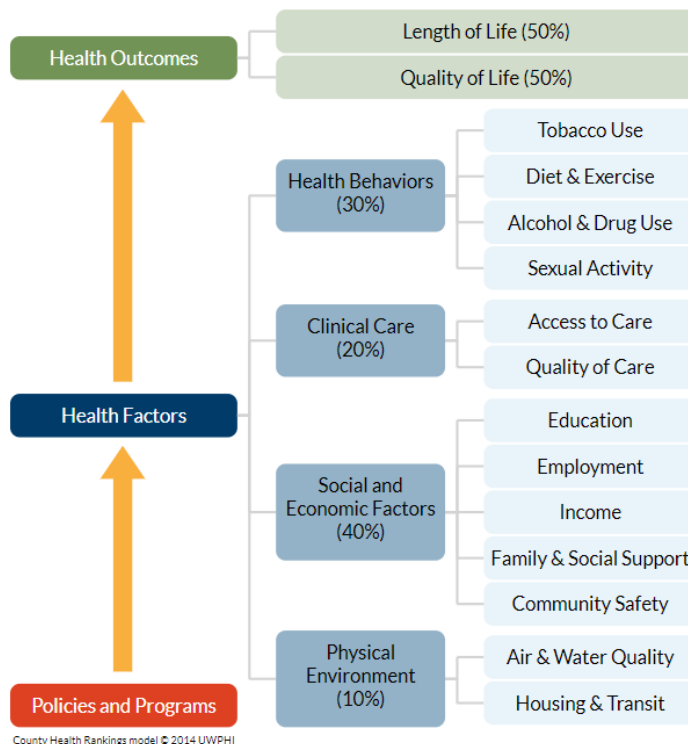
The food environment index of Armstrong County is 8.3. This compares unfavorably to the Commonwealth index of 8.7.

Food insecurity adversely affects nearly 7,800 residents of Armstrong County or 12% of the county's population. This means that 12% of people living in the county have difficulty accessing healthy foods because there are no grocery stores or farmers' markets nearby.

## MORBIDITY AND MORTALITY PROFILE OF ARMSTRONG COUNTY RESIDENTS

A document that is widely used in community health needs assessments is the County Health Rankings and Roadmaps (Exhibit A). This document is readily available online and is prepared by the Robert Wood Johnson Foundation through the University of Wisconsin Population Health Institute. This collaboration gathers data from various sources and various periods of time, and using that data, ranks the health of counties within each state.

The report summarizes data into Health Outcomes and Health Factors. As can be seen in the following model, Health Outcomes gives equal weight to length of life and quality of life. Health Factors weighs health behaviors at 30%, clinical care at 20% social and economic factors at 40% and physical environment at 10%. In 2021 Armstrong County's ranks poorly. In Health Outcomes, Armstrong County ranks 59 out of 67 counties. In Health Factors, Armstrong County ranks 58 out of 67.



**Health Outcomes – Length of Life** – the Rankings and Roadmap report measures years of potential life lost (YPLL) before age 75, per 100,000 (age-adjusted.) The YPLL of Armstrong County is 9,400, much higher than the Commonwealth YPLL of 7,500. **Quality of Life** is primarily comprised of survey responses where the respondent rates his health poor and/or experiences many poor physical or mental health days. Armstrong County resident responses are similar to the responses of survey participants of the entire Commonwealth.

### Root Cause Analysis of the Underlying Causes of Death in Armstrong County

Diseases of the heart, cancers, stroke, accidental deaths, and COPD are the leading causes of death in Armstrong County. The table below lists the age-adjusted death rate (per 100,000) for the most common diseases. Rates in red are significantly high and merit causal investigation. (Source: CDC)

<b>Armstrong County Causes of Death - Age-Adjusted - for the period 2017-2019</b>	
<b>Underlying Causes of Death</b>	<b>Age-Adjusted Rate per 100K</b>
Cardiovascular diseases (major)	236.4
Heart disease	180.0
Cancer	156.4
External cause of death, injury, and accidents	117.2
Coronary heart disease	98.6
Accidents	93.0
Ischemic heart diseases	88.8
Accidents, nontransport	80.9
Poisoning (accidental, suicide, homicide, undetermined, legal interv.)	52.9
Drug-induced deaths	51.6
Accidental poisoning and exposure to noxious substances	50.8
Accidental drug poisoning	49.9
Chronic lower respiratory diseases	45.0
Mental and behavioral disorders	44.6
Cancer of lung and bronchus	38.3
Cerebrovascular diseases	37.6
Digestive system	30.1
Heart failure	29.5
Diabetes mellitus	26.4



Alzheimer's disease	26.0
Acute myocardial infarction	25.6
Infectious and parasitic diseases	23.4
Influenza and pneumonia	18.5
Suicide (intentional self-harm)	18.5
Pneumonia	17.5
Cancer of colon and rectum	17.0
Genitourinary system	17.0
Falls	16.8
Septicemia	16.8
Firearm related injuries (accidental, suicide, homicide, undetermined, legal interv.)	15.0
Hypertension (essential/primary) and hypertensive renal disease	12.4
Accidents, transport	12.1
Accidents, motor vehicle	11.8
Nephritis, nephrotic syndrome, and nephrosis	11.7
Cancer of pancreas	11.4
Renal failure	11.4
Suicide (intentional self-harm), by firearm	11.3
Atherosclerotic cardiovascular disease	8.8
Cancer, leukemia	8.3
Cancer of breast	8.1
Hypertensive heart disease	8.1
Parkinson's disease	8.1
Liver disease, chronic and cirrhosis	8.0
Suicide (intentional self-harm), not firearm, other or unknown	7.3
Pneumonitis due to solids and liquids	7.2
Suffocation and strangulation	6.6
Cancer of brain/other nervous system	5.8
In situ, benign and uncertain neoplasms	5.4
Cancer, non-Hodgkin lymphoma	5.0
Cancer of liver and intrahepatic bile ducts	4.3
Hypertensive heart and renal disease	4.2
Cancer of esophagus	4.0
Cancer of urinary bladder	3.7

As can be seen by the chart above, the high rate of YPLL in Armstrong County is largely driven by the high rate of accidental deaths, deaths due to motor vehicle accidents and poisoning (drugs overdose and exposure to noxious substances.)

## MORBIDITY FACTORS OF ARMSTRONG COUNTY RESIDENTS

- The diabetes prevalence is 9.6% among individuals insured by Aetna. (U.S. rate is 9.9%.) (Source: *U.S. News in Collaboration with Aetna Insurance.*)
- The age adjusted obesity rate of adults over age 20 is 44% — the highest of any Pennsylvania County. (Source: *County Health Rankings and Roadmaps.*)

### Cancer Statistics

Cancer rate – the following table compares cancer rates in Armstrong County with the overall average in the Commonwealth (PA Department of Health)

Age-adjusted cancer rates per 100,000 - (averages for the period 2016-2018)				
Cancer Type or stage	Armstrong County		Pennsylvania	
	Invasive	Early	Invasive	Early
All Invasive cancers	467.1	260.9	462.5	202.6
Early	213.6	260.9	202.6	266.6
Lung and Bronchus	63.9	17.7	61.5	16.6
Breast cancer	58.0	53.2	70.1	63.0
Colorectal	43.3	17.9	39.0	15.1
Urinary Bladder	22.4	16.5	22.6	18.9
Non-Hodgkin Lymphoma	19.3	6.7	20.3	7.2
Pancreas	17.3		14.5	
Leukemia	14.1		14.3	
Oral Cavity and Pharynx	13.1		12.4	
Esophagus	5.7		5.3	

### **Healthy/(Unhealthy) Behaviors (Source: County Health Rankings and Roadmaps)**

- 23% of adults report that they smoke, compared to 18% in the commonwealth.
- 44% of adults report they are obese with a body mass index of 30 or greater. This compares unfavorably to that of the Commonwealth at 31%
- 34% of Armstrong County residents report that they do not regularly participate in leisure time exercise. This compares unfavorably to that of the Commonwealth at 22%
- 22% of Armstrong County residents report that they engage in binge or heavy drinking. This compares unfavorably to the Commonwealth rate of 20%
- 12% of Armstrong County residents report that they experience food insecurity. This compares unfavorably to the Commonwealth rate of 11%
- 41% of Armstrong County residents report that they do not receive sufficient sleep (seven or more hours per night). The rate for the Commonwealth is 39%

### **Substance Abuse (Source: County Health Rankings and Roadmaps)**

Throughout past decades Armstrong County has experienced steady increases in the abuse of prescription drugs and illicit drug use, like that seen in other counties throughout the nation. Most recently, the County has observed increases in methamphetamine use. Individuals who are addicted to or abuse drugs often have co-existing behavioral or psychological disorders which can negatively impact their efforts toward recovery. Between 2017 and 2019 Armstrong County saw 44 drug overdose deaths per 100,000 residents. This compares negatively to the Pennsylvania statistic of 37 overdose deaths per 100,000 people. Within the same period Armstrong County records showed that 44% of motor vehicle deaths were caused by alcohol impaired driving. This is much higher than the Commonwealth rate of 26%

The drug overdose death rate in Armstrong County is 51 per 100,000, greater than the Commonwealth average of 32 per 100,000. (*Source: Center for Rural Pa.*)

### **Access to Healthcare and Healthy Lifestyles (Source: County Health Rankings and Roadmaps.)**

- Of the population under 65 years old, 7% are uninsured. This rate compares favorably to the average in the Commonwealth (8%.)
- 79% of Armstrong County residents report that they have access to exercise opportunities. This compares unfavorably to the rate in the commonwealth of 84%.
- Armstrong County is the 28<sup>th</sup> most rural county in Pennsylvania, in terms of population per square mile. It is comprised of dispersed pockets of population outside of a central area. As a result, much of the population lacks public transportation, is not close to recreational facilities, and lacks access to affordable, healthy foods with much food shopping done in “dollar stores.”

### **Physical Environment**

The air quality, PM2.5 level in Armstrong County is 11.9 – the 3<sup>rd</sup> highest in the Commonwealth (*Source: CDC.*)

## **COMMUNITY STAKEHOLDER INTERVIEWS**

The community stakeholders who participated in this community health needs assessment represented a cross-section of the health and human services agencies in Armstrong County. Some participants were chosen specifically because of their public health knowledge and experience. Others were chosen because of their expertise in:

- Chronic health conditions in Armstrong County.
- Barriers to healthcare.
- Knowledge of underserved population groups in Armstrong County.
- Forming organizational collaborations with ACMH Hospital to meet health needs.
- An awareness of the health concerns of the people utilizing healthcare services.
- Reliable sources of health information.
- Sources where county residents are seeking health and wellness services.

Interviews with these stakeholders revealed certain chronic conditions, barriers to healthcare and underserved population groups in Armstrong County.

## **PANDEMIC RELATED ISSUES**

Most interviewees spoke extensively about the pandemic and the outcomes they expected. They defined new healthcare needs that surfaced during the pandemic or needs that were not readily recognized as a concern before that time. They identified new “special populations.” For example, some special-needs individuals do not have designated healthcare advocates, do not have family living in the area, and do not know who their PCPs are. Because of the limitation placed on who could accompany a patient into the hospital during the pandemic, caretakers and friends of the special-needs inpatients became concerned that hospital staff would not have access to all appropriate health information. Another example is that wearing a mask was found to be problematic for people with dementia.

Finding treatment programs for mental health became worse during the pandemic. The wait time for a first mental health appointment was often four to six weeks. Family Counseling Services closed during the pandemic. Telehealth was used where possible for therapy purposes—even group therapy, but the providers interviewed were reluctant to predict the long-term success rates. Most acknowledged that in many areas of Armstrong County reliable Internet is not available and in virtual group therapy sessions there was uncertainty as to how “accepted” or “included” attendees felt in a group, especially when the group included people from other communities or even other states. With respect to mental health services, one stakeholder commented that “COVID broke an already broken system.”

Many interviewees stated that they have seen an increase in drug use (opioids, methamphetamines, and alcohol) but could not say whether the increased use was caused by the pandemic or caused by the lack of treatment programs during the pandemic. The hospital medical withdrawal unit was closed during much of the pandemic due to space needs for COVID patients. AA/NA meetings went on-line, but stakeholders were concerned that important social benefits from in-person group meetings were lost. Furthermore, much of the population does not have technology or does not know how to use it.

Fear of leaving the house during the pandemic became a barrier for some to receiving health care screenings, especially screening colonoscopies and screenings for prostate cancer. In the southern portion of Armstrong patients without cars did not have easy access to COVID testing. COVID vaccination was a problem due to the Commonwealth not sending vaccines when scheduled. It became necessary to call hundreds of people to postpone appointments. Some patients refused the vaccine because of a lack of trust in the information.

Many interviewees posited that far right and far left politics and healthcare became intertwined during the pandemic. One stakeholder commented: “There seems to be a division among the population, and even among families, as to the seriousness of the pandemic.” A lack of trust grew in members of the public that seemed to align itself with political views—are masks necessary, are masks necessary out of doors, is the COVID vaccine safe, is there really a pandemic? The public has been plagued by uncertainty. Several physicians commented that this uncertainty was exacerbated when patients relied on the Internet or social media to obtain healthcare information.

While it will most likely be years before we know the full outcome of the side effects of the pandemic on the population, many provider stakeholders reported that depression and

anxiety seemed to increase during the pandemic and thought it might be related to social isolation and fear, being masked, being separated from family members, and from negative views of the future. School nurses saw more panic attacks among adolescents. Senior centers and churches were closed.

Stakeholders discussed the need to boost morale. How do we move the population back to pre-pandemic conditions? People who lost their jobs early on may have lost motivation to find new employment now that the economy is opening. Many employees have worked in fear of contracting COVID. Hospital workers, nursing home employees, and first responders, have been traumatized working with the sickest individuals. Jobs have had to change--mandated masks, social distancing, working from home, and the use of Plexiglas Shields. Parents have had to help their children learn remotely. These changes are believed to have stressed members of the community.

## **CHRONIC CONDITIONS**

Medical providers who were interviewed stated that they have seen an increase in diabetes, COPD, asthma, and mental health disorders. They explained that many of these chronic conditions could be improved with weight loss, exercise regimen, and dietary improvements. Some recommended that the community should provide group sessions for individuals and their caregivers who have diseases such as these, with an emphasis on prevention and life goal setting for all ages. Providers also felt that it was important to get patients into rehabilitation programs such as cardio-pulmonary patients.

Many stakeholders discussed the need for home monitoring technology and felt that this would prevent hospitalizations. Congestive heart failure patients who are monitored by visiting nurses would benefit from home monitoring scales to quickly alert physicians to a need for a medication change or even an admission. Hypertensive patients sometimes present to their doctors' offices with high blood pressure but claim it to be "white coat hypertension", stating that their blood pressure is under control when they take it at home. But they do not bring their equipment with them to the visit. Home monitoring equipment would help this.

## HEALTHCARE SCREENINGS

Many stakeholders stated that people were not receiving their recommended cancer screenings. This was especially true for colonoscopies and prostate screenings. One provider reported that some members of the public have stated they “won’t have a screening until they don’t have to wear a mask.” Some stakeholders discussed a lack of mental energy in patients to go and get their screenings. They need to take time off work. Perhaps a family member must take time off work to drive them to their screening.

## MENTAL HEALTH

Many interviewees stated that they have seen an increase in anxiety and depression among the public. School nurses have seen more panic attacks in adolescents. ED boarding for adolescents has become problematic as it may be greater than 24 hours or as much as seven days. Adolescents are being admitted and discharged from the ED because of a lack of adolescent beds in the region. This is especially true for perpetrators of arson and sexual crimes in which case the in-patient provider can deny admission. Those suffering from depression pre-pandemic did not have access to the therapy they had prior to the pandemic. Virtual visits were used, and continue to be used, but a lack of broadband access is barrier in Armstrong County.

Many stakeholders commented that there is a great need for more outpatient programs for mental health services as long-term facilities in the area no longer exist. But the wait time is too long for initial visits and those delays have forced PCPs to deal with many mental health issues in their offices. Some physicians discovered that their patients were not refilling their anxiety and depression medications.

Many interviewees expressed concern over the opioid epidemic and increasing rates of addiction. Some blamed it on the increased strength of the illegal substances that are being abused. Others attributed the increase to people becoming disengaged with jobs that were lost and the loss of the social benefits of in-school education and working from home.

The pandemic exacerbated the nursing shortage problem that already existed in the community. As nurses became exposed to the virus and became quarantined, the pool of nurses diminished and became problematic for the hospital and local nursing homes.



## **OLDER ADULTS**

Stakeholders discussed some of the problems with older individuals living at home. As one put it; “some of them need more than just transportation to and from their doctor's offices but need help just getting out of the house (putting on their coat or navigating the stairs.)” The use of technology to enable older people remain independent, safe, and healthy was discussed. Amplifying phones with large buttons and closed caption phones help those hard of hearing or those with eyesight disorders. Personal sound and voice amplifiers would improve socialization. Fire prevention systems and digital door views and signalers could be used for safety. Magnifiers to assist with hobbies would provide improvements in morale. Monitors, sensors, and telecommunication devices for medical assistance would be beneficial. Some stakeholders wanted a protocol to identify when patients need visiting nurses. One conveyed a need for reimbursement for nurses and dietitians to balance older adults' medications and meals. One stakeholder commented that seniors need an annual home assessment to assure safe living conditions (bathing facilities, appropriate furniture, tripping risks, shelves that are reachable without the use of ladders, handrails for stairs and in the bathroom, and appropriate lighting) to enable seniors to remain in their homes safely.

Telehealth visits are being used with more frequency, but many seniors are not computer savvy and during the pandemic, many family members stayed away to reduce the risk of spreading the virus. FaceTime and other apps were used by many, but some seniors have no reliable Internet and need help with computer skills. It was thought that there should be encouragement for seniors to go out and socialize again and help them stay active. One stakeholder suggested finding ways to encourage seniors to engage with their families again. FaceTime during the pandemic was thought to be beneficial as it gave family members a way to see their parents and, perhaps, spot health changes or new risks. One stakeholder suggested that an educational program be developed for family members: “How to help your parents grow old.”

## **PROVIDERS**

In addition to physician provider shortages in Armstrong County the pandemic exposed shortages of nursing personnel and social workers. ACMH hospital had to use agency

personnel in the ICU and had to cap psychiatric census due to nursing shortages. One stakeholder commented that there should be some type of succession planning for primary care providers as those that have been recruited by the hospital are aging and nearing retirement.

Providers discussed their own frustrations, some of them caused by the pandemic. They expressed frustration in the long wait to schedule initial mental health appointments for their patients. They expressed frustration in the increases of documentation requirements for electronic medical records, taking time away from actual care. They expressed frustration that patients are relying on information from television or the Internet rather than their own physicians. Primary care physicians expressed frustration with the “no show” rate for initial visits, especially in the southern portion of the county and especially with medical assistance patients. Some stated that the primary care provider-hospitalist relationship deteriorated during the pandemic. Many PCPs and other specialists do not personally know the hospitalists and felt this could cause a barrier to the continuum of care. They recommended a “go to” person be designated from the hospitalist program and hoped for more social events during which they could get to know each other.

The shortage of dental health providers was especially problematic among patients with addictions who often present to the ED with abscesses. A need for dermatology services within the county was also discussed as was the need for specialists in the primary care centers in the perimeter areas of the County such as general surgeons, orthopedic surgeons, and OBGYN practitioners.

## **BEHAVIORAL HEALTH**

### **Substance Abuse**

Drug use was the most discussed behavioral issue among the stakeholders interviewed. Most saw increases in all types of drugs. While alcohol still was the most prevalent, it appeared that opioid use was on the increase. Providers were seeing a lot of marijuana use both legal and otherwise. Social service providers stated they were seeing increased numbers of grandparents taking over the role of parents who are drug addicted. Stakeholders commented that addicted individuals do not often see, or even have a primary care physician and use the emergency department for primary care. AA/NA in-person meetings stopped during the pandemic with the implementation of virtual

meetings. There are no residential facilities for adolescents with behavioral health problems except when adjudicated. One stakeholder suggested that we expand the use of the SBIRT (screening, brief intervention, referral, treatment) protocol in primary care physician offices. Patients do not always admit to substance abuse.

Many stakeholders discussed that methamphetamine use was on the increase--an uptick greater than before the pandemic. It was posited that this might have been caused by boarder closings that curtailed opioid distribution. Most methamphetamine being used now is being manufactured outside of the country and is more powerful and less expensive than that locally produced. Meth use can cause what seems to be a psychotic state. Prisoners must be put into a holding system until they are stable. ED patients may be placed in a holding status if they do not meet inpatient psychiatric criteria. Patients may be placed in seclusion for days. Stakeholders commented that heroin is more expensive now, but meth is cheap. Insurance does not pay for methamphetamine detoxification (except when combined with a co-morbid medical condition) as meth addiction is believed to be psychological rather than physical. There is no approved or effective medication assisted treatment (MAT) for meth addiction. Some stakeholders stated that they would like to see a methamphetamine withdrawal track in the hospital stating that the psychiatric unit needs help in stabilizing patients. It was thought that the psychiatric unit, together with the medical detoxification unit personnel, could receive training to develop a treatment protocol for a crisis stabilization unit.

A few stakeholders discussed the need for MAT treatment for pregnant women who are addicted to narcotics. ACMH began working collaboratively with Indiana Regional Medical Center and the Armstrong/Indiana/Clarion Drug and Alcohol Commission prior to the pandemic to develop such a program. It is hoped that this project can be started up again. These stakeholders commented that they would like to see more doctors in Armstrong County apply for waivers to provide buprenorphine to opioid addicts.

Stakeholders were concerned with the mortality rate of accident fatalities that involved DUI in Armstrong County. In Pennsylvania there are nearly 50,000 DUI arrests yearly. 500 of them are in Armstrong County. In 2020 there were 78,000 charges filed for DUI--34,000 were drug related (including the use of prescribed medications.) The average age in Armstrong County for DUI is 37. The average blood alcohol content is approximately double the legal limit. The court orders Safe Driving School attendance for persons convicted of DUI and these sessions are run at least once per month. They run approximately 12 1/2 hours over a four-day period. On average 15 to 20 attendees attend each class. Recently the County has been using Zoom for these classes but will soon be going back to live sessions. Additionally the court can orders attendance at Victim Panel sessions which are run by Mothers Against Drunk Driving. Each is a 2-hour

program and tries to make attendees empathetic as speakers discuss the heartbreak they experience as family members of DUI fatalities. The county judiciary system uses the ARD protocol (accelerated rehab disposition.) Usually there is no jail time for first offenders, but they may lose their licenses for a 30-to-60-day period. If incarceration is ordered it can include house arrest. The county participates in approximately 15 sobriety/safety checks per year, sometimes in collaboration with the state police.

## **Obesity**

Obesity was the second most discussed behavioral issue. Childhood obesity seems to be on the increase. When the HEALTHY Armstrong program began, kids were entering kindergarten with the correct body mass index (BMI), but there was a sharp increase by the end of grade school. Recent reports indicate that more kids have a BMI that is too high when entering kindergarten. Adults lost routines during the pandemic and getting back seems to be a barrier. Stakeholders recommended quality after school programs for adolescents to learn healthy, life-long physical activities. One stakeholder suggested a free “Choose to lose program” with weigh-ins, nutrition education, vitamin use and efficacy, and to generate momentum.

## **Smoking**

Smoking was thought to be prevalent in Armstrong county with one primary care physician saying 40 to 50% of his patients smoked.

## **Health Literacy and Education**

Many stakeholders recommended providing education to the public on significant health issues: the importance of seeing a primary care physician regularly; what clinical terms mean; how to maintain ones health at home; the importance of using a primary care physician in-lieu of presenting to the emergency department or an express outpatient office for routine health needs; the importance of wearing masks during a pandemic; the efficacy and safety of vaccines; how to manage ones prescription medications. Older adults often rely on family members to manage and administer their prescriptions and to accompany them to doctors’ appointments, so this education needs to include families.

There was also an expressed need for education to hospital personnel, first responders and security personnel for dealing with special-needs individuals who can be intimidating

to healthcare staff and may be easily agitated. Education should include setting time-related expectations for those patients.

## **Social and Economic Factors**

Food insecurity and nutrition were the most discussed social factors. Older adults need more than just access to food but need to eat the right kinds of food--less salt, sugar, fat, calories. They need better access to fresh food, Much shopping in Armstrong county, especially in the most rural areas, occurs in local "dollar stores" which lack the right kinds of foods. School nurses commented on their awareness of food insecurity when expressed by students. It was noted that families who lost jobs during the pandemic or who run struggling businesses may have experienced food insecurity for the first time. The Blessings in a Backpack program was believed to be a good start, but it cannot provide perishable items. Nutrition is especially problematic for addicts who often need vitamin supplements. The ED often sees patients with nourishment needs caused by mental health disorders or substance abuse. One suggestion was a Y-Farm, organized by the YMCA and run by volunteers to teach people gardening, provide nutrition information, and provide a social environment that gets people moving. The Y-Farm would include bringing in trucks with fresh produce in a farmers' market style.

The lack of public transportation systems in Armstrong County was discussed by several stakeholders. This transportation is especially problematic for seniors and for those recovering from substance addiction. One stakeholder stated that the lack of transportation is "both a barrier to care and a barrier to recovery".

Stigma was discussed as a barrier to care. It has long been known that there is a stigma associated with substance abuse and addiction and this stigma may cause addicts to avoid treatment because of embarrassment, shame, and the fear of being judged. One stakeholder pointed out that stigmas (actual and perceived) affect a person's sense of dignity. This stakeholder believes that there is a perception by many, especially older adults, that asking for help will make them appear undignified. For example, older people may need help with meals, stocking refrigerators, and minor home repairs, but may not ask for help because they perceive that to be a "dignity issue."

Financial barriers that were discussed included paying for medications. Cardiac patients sometimes do not pick up their medications after a hospital episode. It would be helpful if prescribing providers inquire if a patient needs help paying for meds. Some patients are not familiar with PACE/PACENET. Some need help with insurance.

Broadband access as telemedicine and virtual education became widely used during the pandemic during which time broadband access in Armstrong County was identified as a barrier to care. The implementation of home monitoring systems and virtual health visits requires reliable Internet, and this is not available in many areas of Armstrong County.

## SUMMARY OF FINDINGS

Statistical information was obtained from the Robert Wood Johnson Foundation County Health Rankings and Roadmaps report for 2020, the Pennsylvania Department of Health, the Center for Disease Control, the Bureau of Labor and Industry, the Center for Rural Pennsylvania, and the US Census Bureau.

Qualitative and supplemental information came from interviews with stakeholders representing the community, who were consumers of healthcare, or who had knowledge, information, or expertise relevant to health needs.

The County Health Rankings & Roadmaps, a program of the University of Wisconsin Population Health Institute in collaboration with the Robert Wood Johnson Foundation was used extensively as it is easily accessible on-line and is used by most hospitals when conducting CHNAs. The most recent report (2020) ranked Armstrong County as one of the least healthy Counties in the Commonwealth-59 out of 67 in **Health Outcomes** and 58 out of 67 in **Health Factors**. This is a significant drop from previous years.

The **Health Outcomes** ranking is comprised of years of life lost (premature death), where Armstrong County ranks 61, and quality of life, where Armstrong County ranks 40. Years of life lost is the number of years of potential life lost before the age of 75 (per 100,000--age adjusted.) Quality of life is calculated by applying weights to information reported in government surveys.

The **Health Factors** ranking is comprised of:

- health behaviors, where Armstrong ranks 67,
- clinical care, where Armstrong ranks 39,
- social and economic factors, where Armstrong ranks 34,
- the physical environment, where Armstrong ranks 53.

CDC data sources helped to better understand Armstrong County's high premature death rate. While cardiovascular disease, cancer, and stroke are the leading causes of death in Armstrong County, those rates are in line with Commonwealth averages. For the following rates, we are statistically higher than Commonwealth Averages.

## **Causes of Death – Rates that are Above the Commonwealth Averages**

- external causes of death--accident and injury including poisoning (accidental, suicide, homicide), drug induced deaths and exposure to noxious substances.
- COPD,
- diabetes mellitus,
- pneumonia,
- falls,
- hypertension.

## **Health Factors**

### **Negative Health Behaviors that Compare Unfavorably to the Commonwealth Averages**

- Smoking
- Obesity (the highest percentage of any county in Pennsylvania)
- No leisure time physical activity by adults
- Binge or heavy drinking
- The percentage of deaths with alcohol involvement – the highest rate in the Commonwealth.

### **Clinical Factors that Compare Unfavorably to the Commonwealth Averages**

- The ratio of the population to primary care physicians (excluding mid-level practitioners). There are nearly twice as many persons per PCP as the Commonwealth overall.
- The ratio of population to dentists
- The ratio of population to mental health providers (includes marriage, and family therapists, and mental health providers that treat alcohol and other drug abuse)
- Rate of Medicare fee for service enrollees who received a flu vaccination.



### **Social and Economic Factors that Compare Unfavorably to the Commonwealth Averages**

- The low rate of residents who have received some post-secondary education.
- The high unemployment rate in Armstrong County.
- The number of deaths (per 100,000) in Armstrong County that are due to injury from all causes and intents – Armstrong has the 2<sup>nd</sup> highest rate in the Commonwealth.

### **Physical Environment Factors that Compare Unfavorably to the Commonwealth Averages**

- Air pollution particulate matter -average density of fine particulate matter in micrograms per cubic meter
- The percentage of the workforce that drives alone to work.
- The percentage of workers who commute alone, who commute more than 30 minutes to work.

### **Stakeholder Interviews**

Nearly all stakeholders who were interviewed discussed the COVID pandemic which, as one stakeholder put it “further broke already broken systems.” The pandemic exacerbated the health care needs identified in previous CHNA’s and identified new barriers to care and to recovery.

### **The Health Needs Most Discussed by Interviewees were**

#### **Management of Chronic Conditions**

- Diabetes, COPD, and asthma

- Need to improve in the rate of healthcare screenings, especially colonoscopies and prostate screenings.
- Need for more outpatient programs for mental health disorders. Wait time for initial appointments can be 4-6 weeks.
- Need for non-medical alcohol and opioid withdrawal facilities and crisis intervention facilities for methamphetamine overdose.

### **Needs Related to Healthcare Provider Shortages**

- Need for a plan for PCP replacement as many are nearing retirement age.
- Need for more nurses and social workers.
- Need for more dentists and mental health providers.
- Need to improve morale for both patients and providers of care.

### **Needs Related to the Provision of Healthcare and Wellness Services**

- Need to train more primary care providers to identify patients with substance abuse problems.
- Need for a medication assisted treatment (MAT) program for pregnant women with opioid dependencies.
- A need to develop programs and services that address the rising obesity rate in Armstrong County.
- Need to increase the rate of residents utilizing smoking cessation services.
- Need to help patients pay for medications.

### **Needs Related to Healthcare Literacy**

- Need for educational programs for seniors who live alone, and for their family members, so families can help their parents remain independent safely.
- Need to provide education in health literacy, the importance of having a primary care physician, how to maintain health at home, and pandemic-related issues such as wearing masks and the safety of vaccines.
- Need for education to hospital personnel and first responders for dealing with special-needs individuals who can be intimidating and may be easily agitated.

## **Societal Needs**

- Need to address food insecurity and improvement of nutrition especially for children and adolescents, older adult populations, and drug-addicted individuals.
- Need to diminish the stigma of certain behavioral and societal conditions (i.e., addiction and poverty).

## **Environmental Needs**

- Need to improve and expand transportation systems.
- Need for more broadband and reliable Internet service within the County.

## PRIORITIZATION METHODOLOGY AND THE SETTING OF PRIORITIES

The full executive team met on 6/23/2021 to review the identified needs in order to develop a prioritization methodology, to prioritize the needs for which a plan will be developed, and document why certain needs would or could not be addressed by ACMH.

### **The priority methodology used for needs that will be addressed.**

- Needs for which ACMH Hospital has already begun to develop plans.
- Needs for which prevention will be a component of plans.
- Needs that are related to the management of chronic disease.

### **The reasoning behind the decision for not addressing a need.**

- A lack of ability off ACMH to affect change.
- ACMH has determined that other community organizations are working to already address a need.

### **The prioritization of needs that ACMH plans to address.**

#### **Needs for which ACMH Hospital has already developed plans.**

1. Needs related to the high rate of **obesity** in Armstrong County. ACMH has already begun to address this need by contracting with William White, PhD, to assist in the development of a “Choose Health” program. The program includes training “trainers” to help motivate members of the community to lose weight, become stronger, and achieve their life goals regardless of their age and co-morbid conditions.
2. Needs related to **substance abuse**. ACMH has already begun to address this need by
  - a. Co-developing the ARMOT program to identify substance abuse and get patients into treatment quickly. (A collaboration with the Armstrong/Indiana/Clarion Drug and Alcohol Council.)

- b. The development and continuing support for the Armstrong County Veterans' Treatment Court.
  - c. The opening of a four-bed medical detoxification unit.
  - d. ACMH's continuing support of the Drugs Kill Dreams® program.
  - e. ACMH's partnership with Children's Hospital of Pittsburgh Foundation to participate in the SMART Choices program which addresses substance abuse in children and teens.
  - f. A continuation of the development of a program for drug-addicted pregnant women. (This was started pre-pandemic, then tabled.)
3. Needs related to **mental health**, ACMH has begun plans to provide outpatient provider-based mental health services.
4. Needs related to **chronic disease management and prevention** – ACMH has already begun to address these needs through ACMH's participation in the Pennsylvania Rural Health Model, and the development of comprehensive transformation plans as well identified actions inclusive but not limited to:
  - a. collaborative efforts with local nursing facilities,
  - b. the implementation of remote-monitoring systems in patients' homes,
  - c. the ACMH partnership – “Life Armstrong”
  - d. the provision of diabetic patients test kits to identify foot ulcers before they become bad enough to require hospitalization.
5. Needs related to **unhealthy behaviors**. ACMH will look to address these needs through the “Choose Health” program.
6. Needs related to **primary care provider shortages**.
  - a. ACMH plans to work with Duquesne University Medical School to provide physician rotations during 3<sup>rd</sup> and 4<sup>th</sup> year medical school and future residencies in family practice.
  - b. ACMH continues to hire physician extenders who provide many primary care services.
  - c. ACMH plans to contact HRSA to determine if additional areas in Armstrong County are now eligible to be classified as Health Professional Shortage Areas.
7. Needs related to **nurse and social worker shortages**. ACMH is looking into training “community extenders” --people who can be trained to provide certain care in lieu of a nurse or social worker.

8. Needs related to **transportation** to/from healthcare and wellness service. ACMH is working with Vantage to mitigate this need.

**Needs that have been prioritized at this time because they are related to prevention and management of chronic disease for which ACMH does not currently have a plan of action.**

1. The **death rate caused by falls**.
2. **Education** for the public, and clinicians, to improve health literacy, improve trust in the medical community and address morale issues caused by the pandemic. (ACMH has already made space for an Educational Facility, but that space was temporarily taken over for the administration of COVID vaccine.)
3. Needs related to **early detection of substance abuse** by PCPs.
4. Needs related to lack of **broadband**. ACMH has begun discussions with County government and local broadband providers.
5. Needs related to the **affordability of patent medication**. ACMH will investigate the use of the 340B program to help coordinate gaps in insurance coverage.
6. Needs to address food insecurity and nutrition.

**Needs that will not be prioritized because ACMH does not have the ability to affect change or because other community organizations are addressing those needs.**

1. **Driving deaths that had alcohol involvement**. This is being address by the State Police and by the County through its DUI task force.
2. Low post-secondary education rate. ACMH does not have the ability to affect change.
3. **Low flu vaccination rate among Medicare FFS enrollees**. ACMH believes that this is an aberration as most Medicare enrollees in Armstrong County have managed care plans so the FFS population is small and thought to be temporary, as patients will likely move to a managed care plan.
4. **Prevention of drug related deaths**. This is being addressed by the Armstrong/Indiana/Clarion Drug and Alcohol Council, ARC Manor and other County governmental organizations.
5. **Unemployment**. ACMH does not have the ability to affect change.
6. Needs related to low rates of **colonoscopy and prostate screenings**. ACMH believes that this rate decline was caused by the fact that the area lost its gastroenterology providers and was experiencing a shortage of urology providers, which have been resolved through recently added medical staff.

## ACKNOWLEDGEMENTS

The ACMH Hospital Executive Team and Board of Directors wishes to thank the following individuals who provided input for this report.

Elizabeth White	Chairman	ACMH Board of Directors	<a href="http://www.acmh.org">www.acmh.org</a>
Mary Krauland	Member	ACMH Board of Directors	<a href="http://www.acmh.org">www.acmh.org</a>
Colby Owen	Member	ACMH Foundation Board of Directors	<a href="http://www.acmh.org">www.acmh.org</a>
Dana Klingensmith	Director of Nursing	ACMH Hospital	<a href="http://www.acmh.org">www.acmh.org</a>
James Backstrom, MD	Chief Medical Officer	ACMH Hospital	<a href="http://www.acmh.org">www.acmh.org</a>
Kayle Lee, DNP, RN, CNP	Director of Operational Excellence	ACMH Hospital	<a href="http://www.acmh.org">www.acmh.org</a>
Kelly Hepler, RN	Rural Health Nurse Navigator	ACMH Hospital	<a href="http://www.acmh.org">www.acmh.org</a>
Michele Shearer	Diabetic Nurse Navigator	ACMH Hospital	<a href="http://www.acmh.org">www.acmh.org</a>
Shelly Askey-Ffloyd	Program Director - Psychiatric Unit and Medical Withdrawal Unit	ACMH Hospital	<a href="http://www.acmh.org">www.acmh.org</a>
Teresa Zydonik	Director of Healthcare Informatics	ACMH Hospital	<a href="http://www.acmh.org">www.acmh.org</a>
Tracy Klayton, MD	Radiation Oncology Specialist	ACMH Hospital	<a href="http://www.acmh.org">www.acmh.org</a>
Callie Kariaca	Executive Director Physician Practice Operation	ACMH Hospital and Glade Run Medical Associates	<a href="http://www.acmh.org">www.acmh.org</a>
Michael Watterson, PsyD	Executive Director	ARC Manor	<a href="http://www.arcmanor.org">www.arcmanor.org</a>
Janet D. Talerico	Executive Director	Area Agency on Aging	<a href="http://www.co.armstrong.pa.us">www.co.armstrong.pa.us</a>
Scott Patterson	DUI Coordinator	Armstrong County Department of Probation	<a href="http://www.co.armstrong.pa.us">www.co.armstrong.pa.us</a>
Kami Anderson	Executive Director	Armstrong-Indiana-Clarion Drug and Alcohol Commission	<a href="http://www.aicdac.org">www.aicdac.org</a>
Pam Riddinger	Business Owner	Beauty Connection	
K. S. Boris, CRNP	Nurse Practitioner	Cardiology Associates - Kittanning, PA	<a href="http://www.ahn.org">www.ahn.org</a>
Jo Ellen Bowman, MSW	Secretary, Board of Directors	Children's Advocacy Centers of Pennsylvania	<a href="http://www.penncac.org">www.penncac.org</a>
Joseph Cippel, MD	Primary Care Physician	Elderton Primary Care Center	<a href="http://www.acmh.org">www.acmh.org</a>
Louis V. Falsetti	Business Owner	Falsetti's Villa Restaurant	<a href="http://www.falsettisvilla.com">www.falsettisvilla.com</a>
Cynthia Jones	School Nurse	Freeport High School	<a href="http://www.freeport.k12.pa.us">www.freeport.k12.pa.us</a>
Kenneth Grey	Owner	Grey's Senior Living	<a href="http://www.greyseniorliving.com">www.greyseniorliving.com</a>
Trisha Brice	Coordinator	HEALTHY Armstrong	<a href="http://www.acmh.org">www.acmh.org</a>
Erin Saxion, CRNP	Nurse Practitioner	Leechburg Primary Care Center	<a href="http://www.acmh.org">www.acmh.org</a>
Thomas Litz, DO	Physician	Leechburg Primary Care Center	<a href="http://www.acmh.org">www.acmh.org</a>
David Fenoglietto	President and CEO	Lutheran Senior LIFE (Living Independence for the Elderly)	<a href="http://www.lutheranseniorlife.org">www.lutheranseniorlife.org</a>
Chad Shaffer, MD	Primary Care Physician/Pediatrician	New Bethlehem Primary Care Center	<a href="http://www.acmh.org">www.acmh.org</a>
Claudia Price		PA Department of Health	<a href="http://www.health.pa.gov">www.health.pa.gov</a>
Bogie Goughler	VP of Community Based Services	Progressive Workshop of Armstrong County, Inc.	<a href="http://www.progressiveworkshop.com">www.progressiveworkshop.com</a>
Chris King	CEO	Richard G. Snyder YMCA	<a href="http://www.rgsymca.org">www.rgsymca.org</a>
Mark Snyder	Corporate Secretary	Snyder Associated Companies	<a href="http://www.snyderbrothersinc.com">www.snyderbrothersinc.com</a>



The 2021 Rankings includes deaths through 2019. See our FAQs for information about when we anticipate the inclusion of deaths attributed to COVID-19.

## Armstrong (AR) 2021 Rankings

### Download Pennsylvania Rankings Data

	Armstrong County	Commonwealth of PA
Population	64,735	12,801,989
% below 18 years of age	19.1%	20.6%
% 65 and older	22.6%	18.7%
% Non-Hispanic Black	0.9%	10.9%
% American Indian & Alaska Native	0.1%	0.4%
% Asian	0.3%	3.8%
% Native Hawaiian/Other Pacific Islander	0.0%	0.1%
% Hispanic	0.8%	7.8%
% Non-Hispanic White	97.0%	75.7%
% not proficient in English	0%	2%
% Females	50.2%	51.0%
% Rural	67.5%	21.3%

		Error Margin	Top U.S. Performers ^	Pennsylvania
<b>Health Outcomes</b>				
<b>Length of Life</b>				
Premature death	9,400	8,500-10,300	5,400	7,500
<b>Quality of Life</b>				
Poor or fair health **	19%	16-21%	14%	18%
Poor physical health days **	4.3	3.9-4.8	3.4	4.0
Poor mental health days **	5.2	4.7-5.6	3.8	4.7
Low birthweight	8%	7-8%	6%	8%
<b>Additional Health Outcomes (not included in overall ranking)</b>				
Life expectancy	76.6	75.8-77.3	81.1	78.4
Premature age-adjusted mortality	420	390-450	280	350
Child mortality	60	40-90	40	50
Frequent physical distress **	13%	12-15%	10%	12%
Frequent mental distress **	17%	15-18%	12%	15%
Diabetes prevalence	15%	11-21%	8%	11%
HIV prevalence	53		50	331
<b>Health Factors</b>				
<b>Health Behaviors</b>				
Adult smoking **	23%	20-27%	16%	18%
Adult obesity	44%	36-53%	26%	31%
Food environment index	8.3		8.7	8.4
Physical inactivity	34%	27-42%	19%	22%
Access to exercise opportunities	79%		91%	84%
Excessive drinking **	22%	20-23%	15%	20%
Alcohol-impaired driving deaths	44%	37-50%	11%	26%
Sexually transmitted infections	169.1		161.2	463.4
Teen births	22	19-24	12	17
<b>Additional Health Behaviors (not included in overall ranking)</b>				
Food insecurity	12%		9%	11%



Limited access to healthy foods	3%		2%	5%
Drug overdose deaths	44	35-54	11	37
Motor vehicle crash deaths	16	12-20	9	9
Insufficient sleep **	41%	39-43%	32%	39%

**Clinical Care**

Uninsured	6%	6-7%	6%	7%
Primary care physicians	2,330:1		1,030:1	1,230:1
Dentists	3,240:1		1,210:1	1,410:1
Mental health providers	900:1		270:1	450:1
Preventable hospital stays	4,155		2,565	4,464
Mammography screening	44%		51%	45%
Flu vaccinations	40%		55%	53%

**Additional Clinical Care (not included in overall ranking)**

Uninsured adults	7%	6-8%	7%	8%
Uninsured children	4%	3-6%	3%	4%
Other primary care providers	1,180:1		620:1	800:1

**Social & Economic Factors**

High school completion	90%	89-91%	94%	91%
Some college	55%	52-59%	73%	66%
Unemployment	5.1%		2.6%	4.4%
Children in poverty	16%	10-21%	10%	17%
Income inequality	4.4	4.1-4.6	3.7	4.8
Children in single-parent households	22%	19-25%	14%	26%
Social associations	19.5		18.2	12.2
Violent crime	108		63	315
Injury deaths	122	110-133	59	89

**Additional Social & Economic Factors (not included in overall ranking)**

High school graduation	91%		95%	86%
Disconnected youth	7%	4-9%	4%	6%
Reading scores	3.2		3.3	3.1
Math scores	3.3		3.4	3.1
Median household income	\$56,300	\$52,700-59,900	\$72,900	\$63,500
Children eligible for free or reduced price lunch	67%		32%	51%
Residential segregation - Black/White	73		23	71
Residential segregation - non-white/white	42		14	59
Homicides	3	1-5	2	5
Suicides	18	13-23	11	15
Firearm fatalities	15	11-20	8	12
Juvenile arrests	13			18

**Physical Environment**

Air pollution - particulate matter	10.5		5.2	9.0
Drinking water violations	Yes			
Severe housing problems	10%	9-12%	9%	15%
Driving alone to work	83%	82-85%	72%	76%
Long commute - driving alone	45%	43-48%	16%	38%

**Additional Physical Environment (not included in overall ranking)**

Traffic volume	130			567
Homeownership	76%	75-77%	81%	69%
Severe housing cost burden	9%	8-10%	7%	13%
Broadband access	75%	74-76%	86%	82%

^ 10th/90th percentile, i.e., only 10% are better.

\*\* Data should not be compared with prior years

Note: Blank values reflect unreliable or missing data