PRINCETON Community Hospital

Community Health Needs Assessment 2019

Arnett Carbis Toothman llp
CPAs & Advisors

Princeton Community Hospital

ABOUT US

Princeton Community Hospital Association, Inc. (PCHA) provides inpatient, outpatient, and emergency care services for residents of Princeton, West Virginia, and the surrounding area in a modern health care facility. PCHA is a not-for-profit corporation organized under the laws of West Virginia and is established as an administrative agency of the City Council of Princeton, West Virginia for the purpose of controlling, acquiring, improving, extending, equipping, operating, maintaining, managing, supervising, and having the custody of a general hospital owned by the City of Princeton, West Virginia. PCHA is considered to be a component unit of the City of Princeton. PCHA operates a 203 licensed bed, acute-care facility plus 64 psychiatric inpatient beds. The Behavioral Health Pavilion of the Virginias, located in Bluefield, West Virginia, is an inpatient and outpatient behavioral health facility which has 24 general adult psychiatric beds, 30 geriatric psychiatric beds and 10 psychiatric intensive care beds.

The Mission, Vision, and Values are the building blocks of the hospital's strategic and operational plans, budgets, resource allocation, and policies and procedures. Each manager is responsible for communicating and ensuring that staff understands the hospital Mission and Vision Statement and how their roles integrate to promote the success of the entire organization.

Mission

Princeton Community Hospital Association will lead in building a health care system that provides a broad range of health care services which improve the health status of individuals in defined geographic regions. We will emphasize high quality, low cost and predictable outcomes for all our services.

Vision

Princeton Community Hospital will be an indispensable resource to, and the preferred hospital for, residents of Mercer County and the surrounding region.

Values: CARING SERVICE

- **C** **Committed:** We are committed to serving our customers.
- **A** **Attitude:** We are responsible for displaying an attitude of professionalism, courtesy, and respect.
- **R** **Respectful:** We are responsible for respecting others.
- **I** **Integrity:** We are responsible for displaying integrity and honesty at all times.
- **N** **No Passing Zone:** We are responsible for responding to the needs and safety of our customers.
- **G** **Genuine Care:** We are responsible for listening, anticipating, and responding to customer needs in a timely manner.

- **S** **Satisfaction:** We are responsible for maintaining high levels of satisfaction.
- **E** **Encourage Excellence:** We rely on each other to provide patient care. Together, we are responsible for the outcomes of our efforts.
- **R** **Responsive:** Our responsiveness will convey our concern and willingness to serve.
- **V** **Value:** Our patients, staff, and physicians each play an important role and we value their contribution to our success.
- **I** **Image:** We will take pride in our appearance, as well as in the appearance of our hospital.
- **C** **Communicate:** We recognize that good communication is essential in understanding the needs of our customers and in helping them appropriately.
- **E** **Enjoy:** Enjoy your work and the opportunity to make a difference.

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I. INTRODUCTION

The Community Health Needs Assessment (CHNA) of Princeton Community Hospital (Hospital) was conducted to identify health issues and community needs as well as provide information to key decision makers to make a positive impact on the health of the residents in the hospital's service area. The results of the CHNA will enable the Hospital as well as other community providers to collaborate their efforts to provide the necessary resources for the community.

To assist with the CHNA process and completion, Princeton Community Hospital retained Arnett Carbis Toothman LLP, a regional accounting firm with offices in West Virginia, Ohio, and Pennsylvania. The assessment was designed to ensure compliance with current Internal Revenue Service (IRS) guidelines for charitable 501(c)(3) tax-exempt hospitals which require tax-exempt hospitals to conduct a CHNA every three years to identify the community's health needs and adopt an implementation strategy to meet those needs. In addition, community benefits must be reported on IRS Form 990, Schedule H. As described in the instructions to Schedule H, community benefit activities or programs: "seek to achieve a community benefit objective, including improving access to health service, enhancing public knowledge, and relief of a government burden to improve health".

The study considered services offered by health care providers in the area, population trends, socio-economic demographics and the region's overall sufficiency of health care providers in the community. Data was obtained from numerous health organizations as well as interviews with community leaders and hospital staff. This information was used to determine the Community's future health needs. The study also reviewed the prior implementation plan to assess the progress and community feedback related to the Hospital's plan.

The assessment identified key risk factors based upon the population's medical history. Additionally, the assessment used socio-economic and demographic data to determine whether area health care providers adequately assess the Community's key risk factors. As part of this assessment and as prescribed by IRS section 501(r), this determination will be used in developing a forthcoming strategy to meet the Community's health needs. Furthermore, and as mandated by IRS section 501(r)(3)(B)(ii), the assessment, as well as the Hospital's strategy to meet the Community's health needs, will be made widely available to the public on the Hospital's website.

The significant components of the CHNA include:

- Service Area Definition, Population & Vital Statistics
- Socioeconomic Characteristics of the Service Area
- Health Status Indicators
- Access to Care
- Results of Community Participation

Research Process

- Statistical data profile of Princeton, West Virginia and surrounding areas
- Online survey
- Key Informant interviews with community stakeholders

Key Areas of Opportunity

- Access to Care
- Behavioral Health
- Drug & Alcohol Abuse
- Physical Activity & Nutrition
- Public Health Education

The purpose of the study was to gather current statistics and qualitative feedback on the key health issues facing service area residents. This community health needs assessment (CHNA) included both quantitative and qualitative research components including data profile and stakeholder interviews.

The data collection process utilized the following sources:

- Bureau of Business and Economic Research, College of Business and Economics, West Virginia University
- West Virginia Bureau for Public Health
- West Virginia Department of Health and Human Resources
- US Department of Health and Human Resources
- The Robert Wood Johnson Foundation: County Health Rankings System
- U.S. Census Bureau
- United States Department of Agriculture, Economic Research Service
- Substance Abuse and Mental Health Services Administration (SAMHSA)

Quantitative Data:

- Statistical Data Profile was compiled to depict the population, household, economic, education, income, vital, and other healthcare statistics.
- An online survey was conducted anonymously. The survey collected demographic information and health related information to assess the health status, health care access, and other needs of the community.

Qualitative Data:

- Key Informant Interviews were conducted with community leaders between April and May 2019. Participants represented a variety of sectors including public health and medical providers, children and youth services, community resources, and religious organizations.

Progress Report

ACCOMPLISHMENTS IN QUALITY, SAFETY, CUSTOMER SERVICE AND FINANCE

The Key Issues & Priorities identified in the previous Community Health Needs Assessment prepared for PCHA were:

- Access to care/coverage
- Chronic disease –obesity, heart disease, diabetes
- Substance abuse
- Hepatitis B & C
- Teen pregnancy
- Child abuse/neglect
- Suicide

Each of the above items were prioritized and addressed based upon the severity of the need, the resources available, the potential for success and ability to have an impact. The strategies to address these issues were outlined in a separate document "Princeton Community Hospital – CHNA Implementation Plan"

Since its last Community Health Needs Assessment in 2016 PCHA has had many accomplishments and changes resulting in improved health care for its residents of Princeton and surrounding communities. Below are some of the more significant items impacting Quality, Safety and Customer Service:

- **Quality**

  - In October 2017 PCHA's Womens Center was recognized during the WV Perinatal Summit at the Stonewall Resort in Roanoke, WV for their commitment to reducing early elective deliveries and the Help2Quit campaign to reduce tobacco use before and after delivery.

  - In October 2017 PCHA's CEO Jeffrey Lilley was elected chair of the WV Hospital Association Board of Trustees for 2017-2018. WVHA is an association for hospitals and health systems that provide leadership in healthcare advocacy, education, and information throughout the state.

  - In October 2017, Dr. David Mullins was appointed to the American College of Surgeons Commission on Cancer. This appointment enables Dr. Mullins to be part of the decision-making body of the Commission on Cancer which is dedicated to improving survival and quality of life for cancer patients. Access to the Commission on Cancer's reporting tools has provided PCHA's cancer program

with benchmarking data to aid in improving patient outcomes.

- In November 2017, Risk Management's Suzanne Catron became one of two Certified Specialists in Trauma Registry in West Virginia. The certification required months of intensive study to prepare for the rigorous exam that covered the collection, entry, maintenance and reporting of data for a trauma center. Board certification in trauma registry is highly valued and recognized nation-wide as a validation of the recipient's expertise in trauma registry.

- In December 2017, The Orthopedic Center at Princeton Community Hospital officially opened. Based on a national best practice protocol, The Orthopedic Center's advanced program in joint replacement is a personalized program designed to decrease pain and shorten recovery time. By the end of June 2018, the 2nd quarter of the program, length of stay after surgery had decreased to 2.2 days or less and more than 75% of patients were going home after surgery as opposed to going to skilled nursing and rehab centers.

- During January and February 2018 four PCHA off-site rural imaging centers received digital radiography upgrades. The new equipment offers versatility, superior image quality with lower exposure and seamless data transfer for printing, archiving and remote viewing of images.

- In February 2018 PCHA's 2017 Annual Report was awarded the Silver Addy for excellence in content and design by the American Advertising Federation of Southwest Virginia.

- In February 2018 Biomedical Engineering installed the Compumedics Grael High Definition PSG amplifier for the Sleep Lab. Specified for the gold standard AASM Type 1 sleep studies, this amplifier includes the latest technology and advanced applications software to provide clearer more precise data and more advanced capabilities in data analysis and management.

- In March 2018, PCHA installed the in-house 128 slice Siemens Somatom Definition Edge CT Scanner. The system produces significantly improved image quality, enabling visualization down to 0.30 millimeter and with the lowest radiation doses in the region.

- In April 2018, PCHA installed the mobile 128 slice Siemens Somatom Definition Edge CT Scanner. The mobile scanner brings the same imaging quality to off-site rural imaging centers as the service at PCHA's main facility.

- During FY 2018, PCHA's medical imaging department received accreditation for the mobile MRI at the rural imaging center in Oceana, WV and the new in-house

CT scanner through the American College of Radiology (ACR). In addition, the Rural Mammography Center in Oceana, WV received re-accreditation. Facilities receiving accreditation must meet ACR's practice guidelines and standards and undergo an evaluation by board certified physicians and medical physicists who are experts in the field.

- In March 2018 staff from the Womens Center attended the Neonatal Abstinence Syndrome seminar. This seminar provided education on the current treatment of infants experiencing withdrawal symptoms from extended intrauterine exposure to certain medications. In May 2018, the staff attended training at the WV School of Osteopathic Medicine which focused on improving the care of substance exposed newborns including caregiver roles and non-pharmacologic interventions.

- In April 2018, two Womens Center RN's attended the WV Perinatal Partnership Conference. This conference provided current information on national and state practices in maternal healthcare. The participants were provided with the updated birth score form which identifies those infants at higher risk for Sudden Infant Death Syndrome and developmental delays.

- PCHA's Director of Plant Operations, Kevin W. Graham was one of 10 national recipients of the 2018 Regional Leader Award from the American Society for Healthcare Engineering. This prominent award recognizes the recipient for their exemplary leadership skills and contribution to the fields of health care engineering, facilities management, safety, and biomedical engineering.

- In 2018, PCHA's Occupational Therapist, Veronica Brooks, successfully completed the 2018 Clinician Training on Tobacco Dependence for Respiratory Therapists. Veronica began providing a formal tobacco cessation program to both in-patients and outpatients in October 2018.

- In February 2019, PCHA became the first hospital in the state of West Virginia and one of 22 hospitals in the nation to have a Center of Excellence Certification in hip and knee replacement, certified by the prestigious international organization DNV-GL (Det Norske Veritas of Norway and Germanischer Lloyd of Germany).

- **Safety**

  - PCHA's Education Department programs are a key component of our organization's mission, values and operational objectives. In the ever-evolving field of healthcare delivery, these programs provide staff with information and training for new equipment, new technology and the latest standards of care to insure our patients receive the most safe and best quality care. In addition to promoting staff development, many of the department's classes are also made

available to the community.

During FY 2018 PCHA employees and members of the community earned certifications for:

- Advanced Cardiac Life Support
- Non-violent Crisis Intervention
- Pediatric Advanced Life Support
- Trauma Nursing Core Course
- Critical Care Review
- Neonatal Resuscitation
- Electrocardiogram
- Monitor Tech
- Cardio Pulmonary Resuscitation
- CPR and First Aid

The Education Department also developed training programs for updated regulations, new equipment, changes and updates to standards of care and skills competencies including:

- Skills Day for Certified Nursing Assistants
- Nurse Extern and Graduate Nurse Skills
- MRI Safety
- Trauma
- Intravenous Therapy
- Wound Vac/Ostomy Care/Aspira Drain
- Central Line Care
- HODE Training
- Restraint and Seclusions Training
- Emergency Preparedness/Fire Safety/Evacuation
- Disinfection, containment & transport
- Venous Thromboembolisms/Chest Tubes
- In-services for Masimo, Hover Matt/Jack, Nurse Call, Eliquis, Abbott glucometer, Cardiac Cath teaching packet and Bedside Medication Verification/Reconciliation.

- In January 2018 Biomedical Engineering installed the Phillips Intellivue Central Monitoring System in ICU and CCU; then in March 2018 installed the system on 3 East and 3 West. This system enhances patient safety due to the clinical decision support tools that are integrated into the system's main display which allows for quicker identification of changes in patient condition. Other key advantages include supporting clinical workflow and improving alarm management.

- In March 2018, the Behavior Health Pavilion made several changes to improve patient safety and reduce ligature risks. New psychiatric safe beds were installed

on the geriatric and PICU units, new furniture for the day rooms was purchased and camera monitoring was installed in the day rooms and hallways. In addition, door hardware was replaced in all patient areas.

- In March 2018 the Womens Center began a collaboration with the Alliance for Innovation on Maternal Health related to the recognition, readiness and response to post-partum hemorrhaging. Quantification of Blood Loss is one of AIM's initiatives to eliminate preventable maternal mortality.

- As part of the PCHA Trauma Program, Coordinator Alston Sarver and Education Instructor and Emergency Preparedness Coordinator Mark Pickett have trained over 120 local law enforcement staff, Region I and local fire department volunteers in the Stop the Bleed Program

- During FY 2018, Plant Operations continued infrastructure upgrades to insure a safe environment of care:
    - Replaced patient room heating/cooling HVAC units;
    - Added surge protection for key equipment to protect against power surges;
    - Improved boiler efficiencies by adding sensors;
    - Completed 5-year roofing replacement project;
    - Replaced underground gas line to improve safety and natural gas delivery;
    - Completed upgrades to the pneumatic tube system to improve reliability;
    - Insulated mechanical spaces for increased energy efficiency;
    - Continued upgrades to elevator mechanical systems;
    - Completed coping project around building roof line.

- **Customer Service**

    - Throughout FY 2018 PCHA's Executive Team, Human Resources Department, and Management Staff developed and implemented changes to respond to the FY 2017 employee survey results. Employee feedback in the areas of communication, the evaluation and merit award processes and employee recognition resulted in the following new initiatives and changes to processes:

        - Executive Team Rounding Program: Visits to 3-6 departments each month to speak with employees, discuss concerns and share information;
        - Trusted Leader Program: Easier access to submit employee recognitions online;

- Recognition Kits: Provided to managers for recognizing deserving employees;
- Performance Evaluation Process: Simplified the employee evaluation form;
- Annual Merit Raise Calculation Process: Calculation changed from using the midpoint of the employee's pay grade to using the employee's current rate of pay;
- Exit Interview Feedback: Responses from terminating employees during exit interviews are presented quarterly to management staff;
- Department Meetings: Meeting schedule changes for departments to follow management staff meetings to allow for more timely information sharing;
- Daily Communication/Recognition: Daily displays on TV's outside the café and kiosk showcasing employees recognized as trusted leaders and information about upcoming events.

- During the months of July and August 2017, following the cyber-attack, PCHA's IT Department rebuilt 169 servers, 701 computers, 240 laptops for PCHA's main campus and The Behavior Health Pavilion. In addition, numerous laptops and computers were built and installed at PCHA's off-site facilities.

- August 2017 marked several notable events for Mercer Medical Group ENT. Dr. Robert Jones retired after providing 34 years of outstanding care to area residents. MMG ENT welcomed three new providers to the practice, Mark Lentner, D.O., MMS, Deborah Lentner, PA-C and Mark Weitzel, D.O. On August 14, 2017, the new providers along with Dr. Lee Smith and Nurse Practitioner Melissa Shrewsbury began seeing patients in their newly renovated 9,000 square feet of office space on the third floor of PCHA's Parkview Center. The move to PCHA's main hospital campus has meant better patient flow due to the larger space and more immediate access for the ENT physicians to do consults in the hospital. The new up-to-date equipment allows for more complete examinations and a higher level of care for patients.

- In August 2017, the Behavior Health Pavilion of the Virginias welcomed new psychiatrist Emily Boothe, D.O. to its staff. In addition to general adult psychiatry, Dr. Boothe plans to offer new services in her subspecialty, perinatal psychiatry for women suffering from postpartum depression and anxiety.

- In late September and throughout the month of October 2017, PCHA staff and nursing students from the Mercer County Technical Education Center distributed over 6,000 doses of free flu vaccine. Community vaccines were administered during a four-day campaign in October at PCHA's Parkview Atrium. Free flu shots were also available at the annual Princeton Autumnfest in September and the Women's Expo in October. In addition, at the request of several area employers,

PCHA staff administered the vaccines to their staff and customers on-site.

- In December 2017 PCHA provided a free women's screening for 74 participants, which included free breast, cervical and colon cancer screenings.

- In February 2018 PCHA participated in CASE WV Commission on Aging's Happy Hearts Day. PCHA Lab employees Tammy Walker and Cristine Aker provided free cholesterol testing and lipid profiles and the Orthopedic Care Coordinator Helena Griffith distributed literature on the innovative hip and knee replacement surgery at PCHA's Orthopedic Center. In addition, Business Development Director Connie Cochran and Director of Outpatient Services Kimberly Franklin from The Behavioral Health Pavilion provided information on mental health care for older adults.

- In March 2018 PCHA's HR Department celebrated National Human Resources Week with events to show appreciation for dedicated employees throughout the organization. Employees and spouses were provided free lipid panels and glucose testing during the week. Trivia games with prizes were included in the week's activities. In addition, an Employee Wellness Fair was held to promote health and wellness in which numerous vendors participated. Throughout the week employees generously donated over 200 scrub pieces to benefit Women in Search of Empowerment, a local women's resource center.

- In April 2018 to improve employee recruitment and retention, PCHA increased the educational aid to employees from $1,500 per semester to $2,000 per semester with the lifetime maximum aid available increasing from $18,000 to $24,000. In addition, the scholarship/tuition loan program available to students working on degrees in hard to fill areas was increased from $1,500 to $2,000 per semester.

- In April 2018, PCHA welcomed Dr. Abbas El-Khatib and opened Mercer Medical Group Nephrology in the New Hope Professional Park in Princeton, WV. Dr. El-Khatib will be treating patients with kidney conditions including acute renal failure, dialysis, kidney stones, chronic kidney failure and polycystic kidney disease.

- During 2018 PCHA's Volunteer Auxiliary provided the organization with over 10,000 hours of service. In addition, their financial support provided the following:

    - Raised over $9,000 and purchased $5,800 in HALO sleep sacks for newborns through the Macey Whittaker SIDS Awareness project in FY18;
    - Contributed $44,106 to purchase 8 vital signs machines, a pharmacy safety hood and 175 hip/knee equipment kits;
    - Donated $7,500 for nursing and medical student scholarships;

- Provided $10,000 for startup cost for PCHA's Nurse Residency Program;
- Continued furnishing replacement car seats for the Emergency Department;
- Continued furnishing outpatient oncology patients with blessing bags
- Continued providing WECAN children with birthday boxes.

- On June 15, 2018, PCHA held the second annual *Evening of Hope,* an event designed as a celebration of life to honor and support cancer patients throughout the community and memorialize those people who lost their fight with the disease. The event raised over $24,000 with all proceeds used to assist PCHA cancer patients with the cost of medications, nutritional supplements, medical equipment and travel expenses.

- PCHA's Health and Fitness Center continued its community outreach programs for preventive health and wellness as well as participating in community fundraising events:

  - Served over 4,000 members in 2018;
  - Served 80 students in the After-School Program and the Summer Day Camp Program;
  - Served over 175 children in Kids Korner/Kids Gym Child Care;
  - Served over 85 participants (the largest provider in WV) of the PEIA Weight Management Program with ten certified/licensed providers;
  - Expanded the Group Exercise Program to 50 classes per week;
  - Expanded pool services to include swim lessons and physical therapy services;
  - Participated in community events including blood drives for the American Red and VA Blood Services, PCHA's Evening of Hope, Autumn-fest, the annual Women's Expo and various health fairs at area high schools and colleges.

II. COMMUNITY HEALTH NEEDS ASSESSMENT OVERVIEW

HOSPITAL & COMMUNITY PROFILE

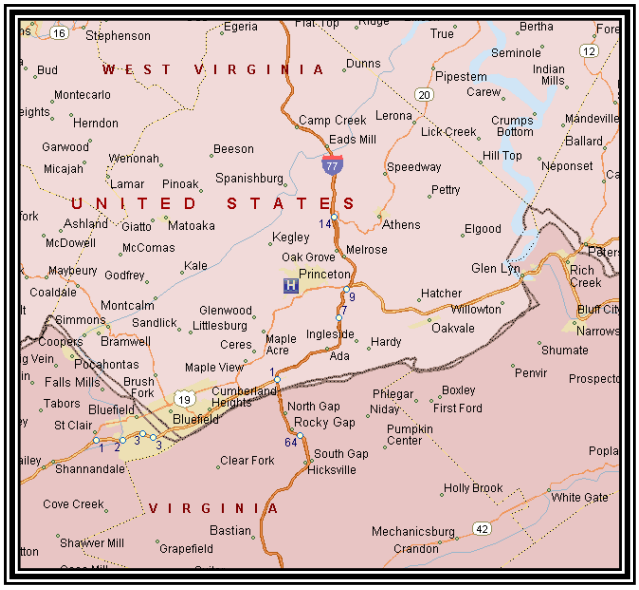
Hospital Profile

Princeton Community Hospital is committed to providing patient friendly, quality health care to its communities. The governmental, not-for-profit critical access hospital was created and is owned by Princeton, West Virginia. First opening its doors to the public over 100 years ago, the Hospital provides a continuum of care that includes the following services:

- Acute Care
- Behavioral Medicine
- Cardio-pulmonary Therapy
- Diagnostic Imaging
- Emergency Department
- Internal Medicine
- Laboratory Services
- Long-term care
- Physical Therapy and Fitness Center
- Sleep Lab
- Surgery

Community Profile

Located in Princeton, West Virginia, Princeton Community Hospital Association, Inc. defined their service area based on an analysis of the geographic area where those utilizing PCHA's services reside. The service area includes Mercer, McDowell and Wyoming Counties in southern West Virginia. Princeton is one and one-half hours south of Charleston, West Virginia near the West Virginia-Virginia border. The Hospital and surrounding communities are accessible by major interstates and secondary roads.



III. SERVICE AREA, POPULATION, AND VITAL STATISTICS

SERVICE AREA

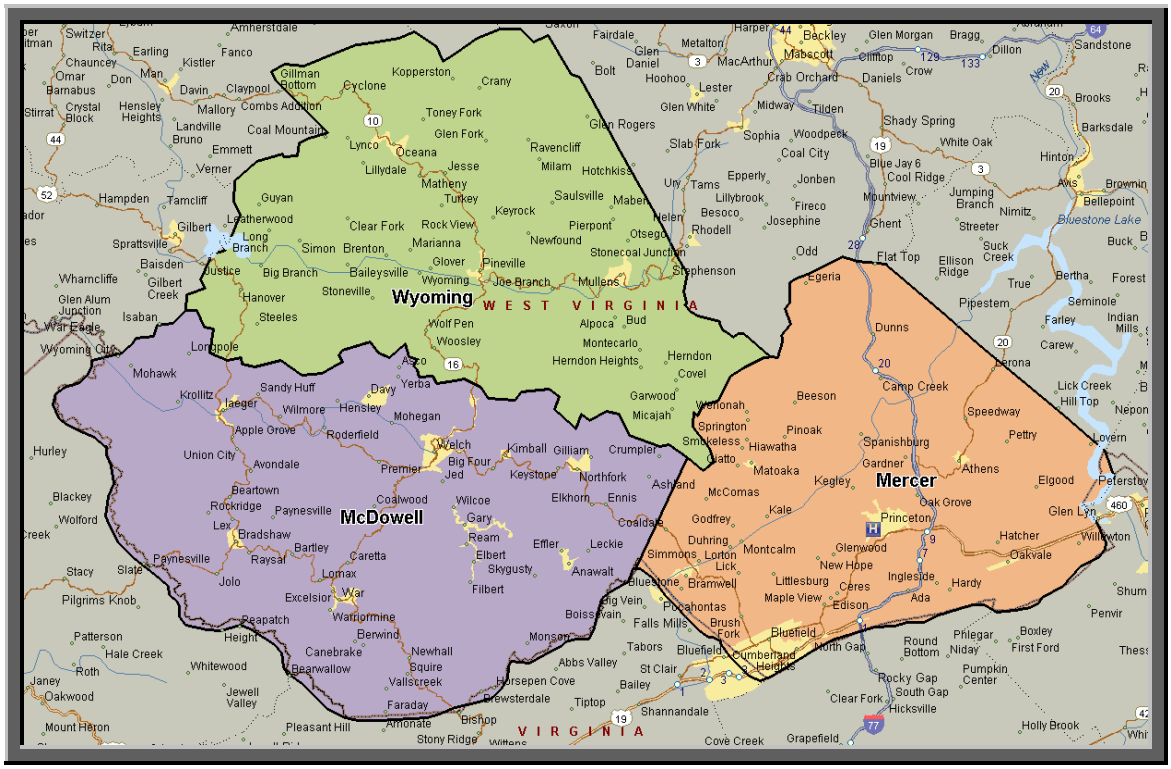
Princeton Community Hospital Association, Inc. defined their service area based upon the geographical area in which a majority of their patients reside. As shown in Exhibit 1, 75% of the Hospital's patients reside in Mercer County, the Hospital's location. For purposes of the needs assessment, the Hospital's primary service area included Mercer, McDowell and Wyoming Counties in West Virginia.

Exhibit 1
Service Area
Summary of Patient Volume by County (Descending Order)
7/1/2017 - 6/30/2018

County (State)	Patient Volume	Percent of Total Volume	Cumulative Percent
Mercer (WV)	***128,826***	***75%***	***75%***
McDowell (WV)	***6,133***	***4%***	***79%***
Wyoming (WV)	***6,124***	***4%***	***82%***
Tazewell (VA)	2,775	2%	84%
Monroe (WV)	5,870	3%	87%
Raleigh (WV)	1,122	1%	88%
Summers (WV)	3,129	2%	90%
Bland (VA)	1,153	1%	90%
Giles (VA)	452	0%	91%
All Others	16,006	9%	100%
	171,590	**100%**	

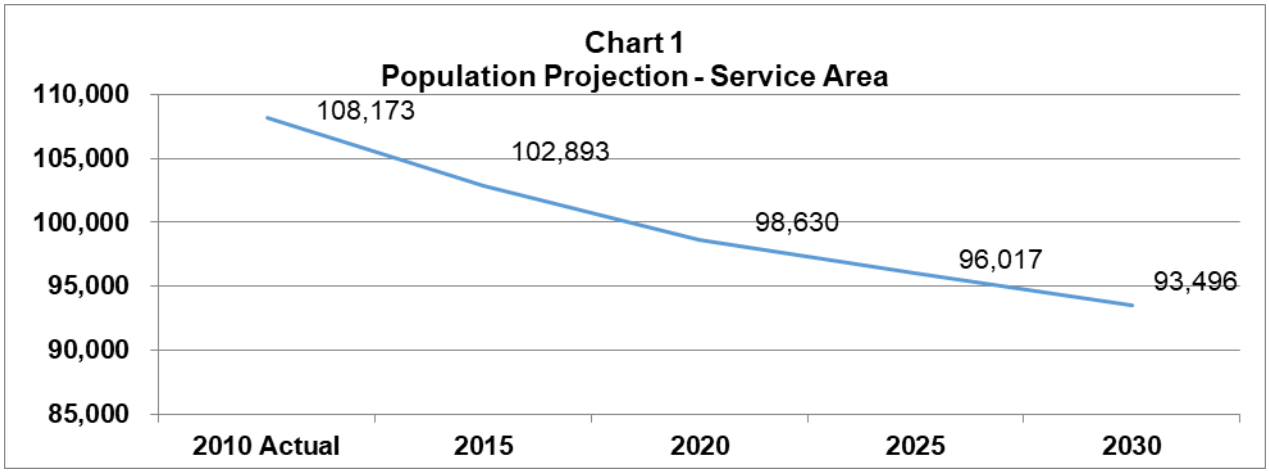
Source: PBC - 2018 Patient Volume by County, Zip Code, and State

The following map identifies the geographic location of the service area counties.



POPULATION

As shown in Chart 1 and Table 1, the population of the total service area is projected to steadily decrease through 2030. However, the population for Mercer County will decrease by 2.1% over the next 10 years compared to 5.2% for the service area counties.



Source: Source: Https://business.wvu.edu/centers/bureau-of-business-and-economic-research/data/population-data

Table 1 includes the population detail by each service area county. As shown below, Mercer County has the highest population in the service area.

Table 1: Population Projections

County	2010 Actual	2015	2020	2025	2030
Mercer	62,264	61,043	59,943	59,395	58,675
McDowell	22,113	19,698	17,751	16,459	15,559
Wyoming	23,796	22,152	20,936	20,163	19,262
Total Service Area	**108,173**	**102,893**	**98,630**	**96,017**	**93,496**

Source: Source: Https://business.wvu.edu/centers/bureau-of-business-and-economic-research/data/population-data

DEMOGRAPHIC PROFILE

Exhibit 2 presents quick facts data for the service area, state of West Virginia and the United States.

Exhibit 2

Quick Facts	Wyoming County	McDowell County	Mercer County	Service Area	West Virginia	United States
Age						
Persons Under 5 years, percent V2017	4.9	5.5	5.9	5.4	5.5	6.2
Persons under 18 years, percent V2017	20.7	20.5	20.7	20.6	20.5	23.1
Persons 65 years and over, percent V 2017	20.1	20.9	21.4	20.8	17.8	14.5
Race and Hispanic Origin						
White alone, percent July 1, 2017, (V2017) (a)	97.8	89.9	91.2	93.0	93.7	77.4
Black or African American alone, percent, July 1, 2017, (V2017) (a)	0.7	8.5	6.2	5.1	3.6	13.2
American Indian and Alaska Native alone, percent, July 1, 2017, (V2017) (a)	0.2	0.2	0.2	0.2	0.2	1.2
Asian alone, percent, July 1, 2017, (V2017) (a)	0.1	0.1	0.6	0.3	0.8	5.4
Native Hawaiian and Other Pacific Islander alone, percent, July 1, 2017, (V2017) (a)	0.0	0.0	0.0	0.0	0.0	0.2
Two or More Races, percent, July 1, 2017, (V2017)	1.2	1.3	1.7	1.4	1.6	2.5
Hispanic or Latino, percent, July 1, 2017, (V2017) (b)	0.7	1.2	1.1	1.0	1.5	17.4
White alone, not Hispanic or Latino, percent, July 1, 2017, (V2017)	97.2	88.8	90.4	92.1	92.5	62.1
Housing						
Median value of owner-occupied housing units, 2013-2017	67,900	34,800	89,400	64,033	100,200	175,700
Median selected monthly owner costs -with a mortgage, 2013-2017	813	730	934	826	971	1522
Median selected monthly owner costs -without a mortgage, 2013-2017	281	255	301	279	292	457
Median gross rent, 2013-2017	613	529	614	585	630	920
Families and Living Arrangements						
Households, 2013-2017	9,169	7,702	25,019	41,890	742,359	116,211,092
Persons per household, 2013-2017	2.41	2.34	2.39	2.38	2.43	2.63
Living in same house 1 year ago, percent of persons age 1 year+, 2013-2017	93.9	93.6	86.1	91.2	88.3	85.0
Language other than English spoken at home, percent of persons age 5 years+, 2013-2017	0.4	1.8	2.9	1.7	2.4	20.9
Education						
High school graduate or higher, percent of persons age 25 years+, 2013-2017	78.4	65.3	83.5	75.7	84.4	86.3
Bachelor's degree or higher, percent of persons age 25 years+, 2013-2017	9.3	4.9	19.8	11.3	18.7	29.3
Health						
With a disability, under age 65 years, percent, 2013-2017	28.1	23.7	19.3	23.7	14.4	8.5
Persons without health insurance, under age 65 years, percent	7.7	10.0	6.7	8.1	10.4	12.0
Economy						
Total health care and social assistance receipts/revenue, 2012 ($1,000) (c)	36,137	58,472	432,934	527,543	12,259,395	2,040,441,203
Total retail sales, 2012 ($1,000) (c)	154,322	131,211	929,125	1,214,658	22,637,923	4,219,821,871
Total retail sales per capita, 2012 (c)	6,631	6,153	14,861	9,215	12,201	13,443
Transportation						
Mean travel time to work (minutes), workers age 16 years+, 2013-2017	30.1	24.8	21.6	25.5	25.6	25.7
Income and Poverty						
Median household income (in 2017 dollars), 2013-2017	37,644	25,595	37,763	33,667	41,576	53,482
Per capita income in past 12 months (in 2017 dollars), 2013-2017	20,474	13,985	21,698	18,719	23,237	28,555
Persons in poverty, percent	25.7	31.7	21.0	26.1	18.3	14.8

This geographic level of poverty and health estimates are not comparable to other geographic levels of these estimates
The vintage year (e.g., V2015) refers to the final year of the series (2010 thru 2015). Different vintage years of estimates are not comparable.
(a) Includes persons reporting only one race
(b) Hispanics may be of any race, so also are included in applicable race categories
(c) Economic Census - Puerto Rico data are not comparable to U.S. Economic Census data
D: Suppressed to avoid disclosure of confidential information

Source: U.S. Census Bureau-QuickFacts data are derived from: Population Estimates, American Community Survey, Census of Population and Housing, Current Population Survey, Small Area Health Insurance Estimates, Small Area Income and Poverty Estimates, State and County Housing Unit Estimates, County Business Patterns, Nonemployer Statistics, Economic Census, Survey of Business Owners, Building Permits.

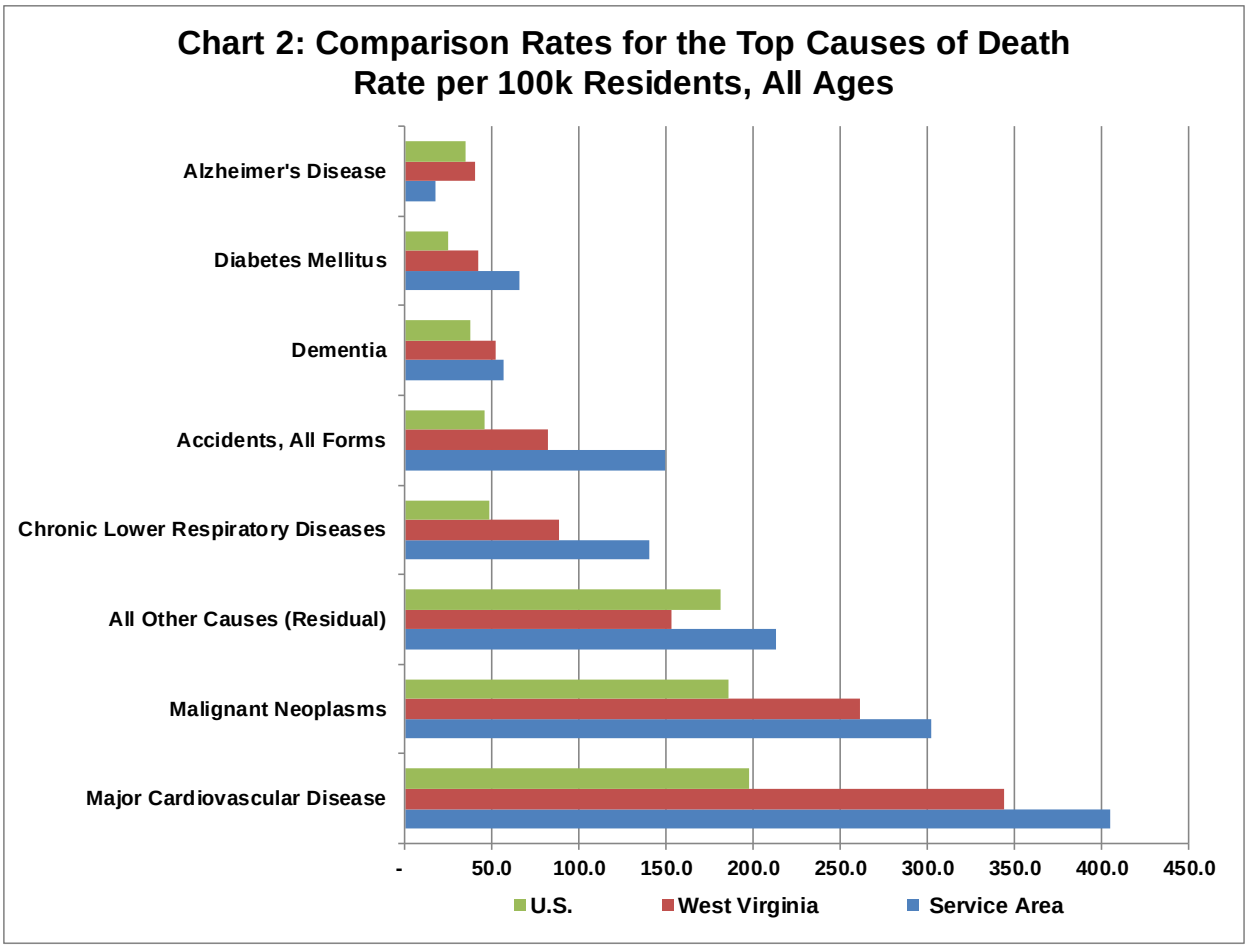
Overview of the Community

- The residents of the PCHA service area are predominately White/Caucasians (92.1%) followed by Black or African American (5.1%).
- English is the primary language, though 1.7% speaks other than English at home.
- The service area has a lower rate of persons with a high school diploma as compared to the state and the U.S averages.
- 14.7% of those in the service area hold a bachelor's degrees or higher as compared to the state average of 19.8%. However, both are significantly less than the U.S. average of 30.9%.
- Housing is generally stable and comparable between the service area and the state with 91% and 88% living in the same house 1 year and over, respectively.
- The service area and the State of West Virginia have a higher rate of persons living below the poverty level than of the United States average.

Mercer County, located in the south central portion of West Virginia and bordering Virginia, is the primary service area for PCHA. County residents account for over 75% of the hospital's volume, with little change over the years. Mercer County was the community assessed in the study. Many of the community representatives interviewed serve individuals beyond Mercer County, and many of the challenges and issues identified are present beyond Mercer County, but the County serves as a good indicator of area needs.

Mercer County has a population of 62,264 (2010 Census). Princeton and Bluefield are the largest towns, making up almost 30% of the County population. As with many rural communities, the younger population is the primary cause for the decline, as they often leave the community for better employment opportunities. As the population declines, it is also aging; the ratio of Mercer County residents over age 65 is equivalent to the state, but considerably higher than the national average. The aging population is a major contributor to the high demand for healthcare services in Mercer County.

Chart 2 reflects the leading causes of death for residents of the service area, the State of West Virginia and the United States. The leading causes of death are determined by the average rate per thousand residents. Diseases of the heart ranks highest among the causes with Malignant Neoplasms as second highest. Alzheimer's disease ranks lowest among the selected top causes of death in West Virginia while Major Cardiovascular Disease ranks the highest.



Source: West Virginia Department of Health & Human Resources Bureau for Public Health, "West Virginia Vital Statistics 2015"

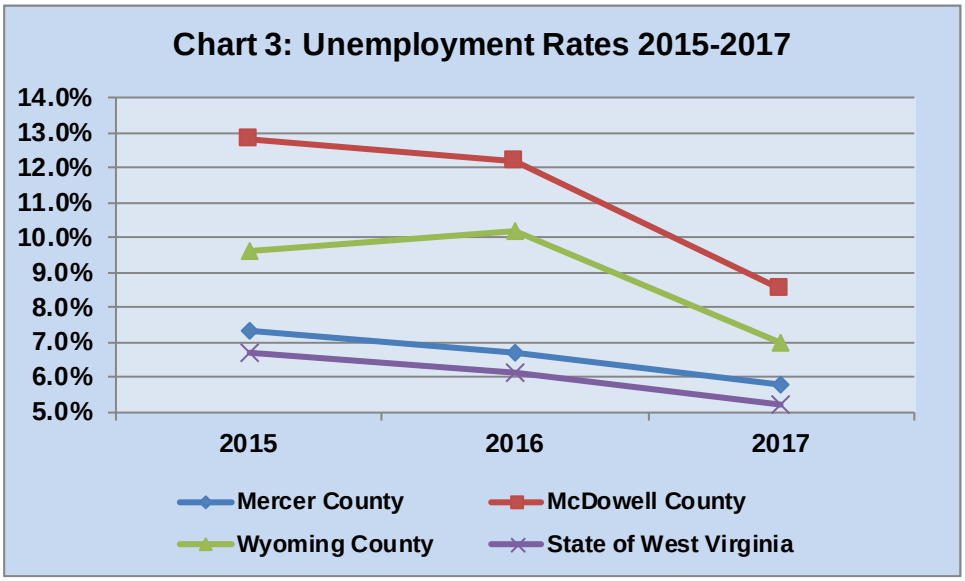
Source: DHHR, Bureau for Public Health, Health Statusitics Center, Vital Statistics System, 2017

**Dementia: N/A for the U.S.*

III. SOCIOECONOMIC CHARACTERISTICS

UNEMPLOYMENT

As shown in Chart 3, the Unemployment rate for West Virginia and the service area decreased during the three year period. The largest decrease was seen in McDowell County.



WorkForce West Virginia - www.lmi.workforcewv.org

INCOME

Exhibit 3 presents the median household income and median family income for the service area counties, the State of West Virginia and the United States. Mercer County and Wyoming County rank favorably compared to McDowell County. McDowell County Median Family income is less than half of the U.S. Average.

Exhibit 3
Median Household & Family Income
2013-2017 (5 Year Estimate)

County	State	Median Household Income	Median Family Income
Mercer	WV	$37,763	$50,067
McDowell	WV	$25,595	$32,007
Wyoming	WV	$37,644	$48,911
Total Service Area		**$33,667**	**$43,662**
State of West Virginia		**$44,061**	**$55,949**
United States		**$57,652**	**$70,850**

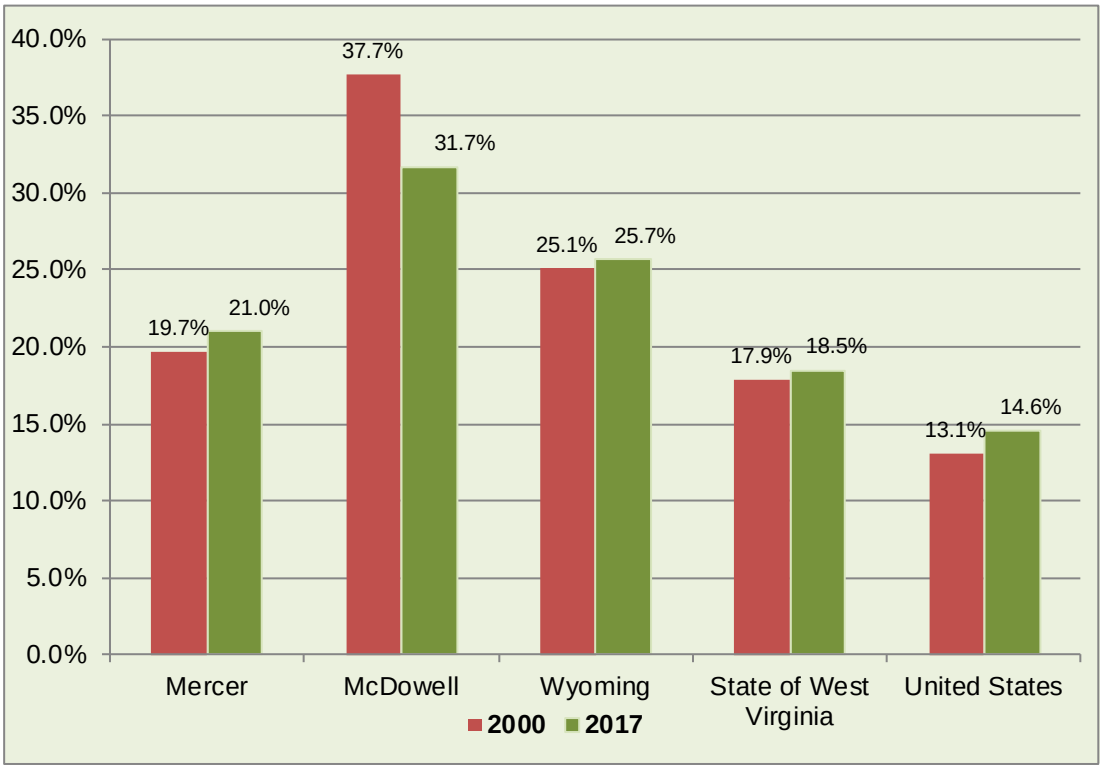
SOURCE: U.S. Census Bureau American FactFinder, American Community Survey 5-Year Estimates

POVERTY TITLE

Poverty affects many facets of a person's life, including living conditions, nutrition, and access to health care. Low income children, youth, and their families are inexplicably affected by health challenges which can weaken the ability of children and youth to succeed in school and often puts them at risk of involvement with child welfare and juvenile justice agencies. Chart 4 presents the percentage of adults living in poverty in 2000-2017 for the service area counties, West Virginia, and the United States. As Chart

4 illustrates, one county experienced a decrease for the seventeen year period. McDowell County had the highest level of adults living in poverty in 2017 at 31.7% with Mercer County as the lowest at 21.0%. The service and the state were above the national level of 14.6% for the seventeen year period.

Chart 4
Percent of Population Living in Poverty
2000 – 2017



Source: USDA Economic Research Service

EDUCATION

The education levels of a population have been shown to correlate to its overall health and welfare. Exhibit 4 presents the distribution of education levels for those 25 years of age and over in the service area, West Virginia and the United States for the years 2013-2017. Although the service area and the state had a higher level of those with a high school diploma only when compared to the United States average, the attainment of a college degree was lower in the service area than the United States average.

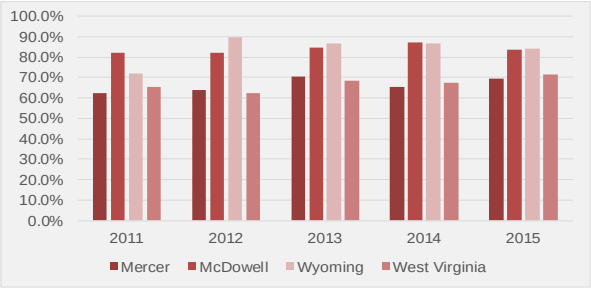
Exhibit 4
Highest Level of Education Attained
2013-2017

	Service Area	West Virginia	United States
Less than a high school diploma	21.2%	14.1%	12.7%
High school diploma only	42.1%	40.6%	27.3%
Some college or associate's degree	22.0%	25.5%	29.1%
Bachelor's degree or higher	14.7%	19.8%	30.9%

SOURCE: US Census Bureau / USDA

Access and participation in early education programs is an important determinant in the future success of students for a community. Chart 5 provides the level of four-year-olds enrolled in a qualified pre-kindergarten program. Wyoming County experienced a steady increase for years 2011-2015, with just a slight decrease in 2015. The highest enrollment of the five-year period was in 2012 for Wyoming County.

Chart 5
Percent of Four-Year-Olds Enrolled in a Qualified Pre-Kindergarten Program
2011-2015



Source: http://datacenter.kidscount.org/

IV. HEALTH STATUS INDICATORS

County Health Rankings

Exhibits 5 through 7 include selected data from the University of Wisconsin Population Health Institute, 2019 County Health Rankings for the service area, State of West Virginia, and U.S. median. Health factors in the County Health Rankings represent what influences the health of a county. Four types of health factors are measured: health behaviors, clinical care, social and economic, and physical environment factors. In turn, each of these factors is based on several measures. Exhibit 5-Health Behaviors, includes unfavorable indicators as the percentage of adults in poor/fair health, who smoke or are obese, and excessive drinking. As shown in Exhibit 5, all counties within the service area were either at or within 10% of the state performance for these negative indicators. Approximately one-fourth of the adults in the service area counties and the state are reportedly in poor/fair health or smoke while one-third are obese.

Exhibit 5
Health Behaviors
2019

Health Status Indicator	West Virginia	Mercer	McDowell	Wyoming
Adults in fair / poor health	24%	25%	33%	27%
Adult smoking	25%	24%	28%	25%
Adult obesity	36%	38%	46%	41%
Excessive drinking	12%	10%	9%	11%
Health behaviors county ranking		48	55	52

Source: countyhealthrankings.org

Exhibit 6 Physical Environment includes environmental factors such air pollution, drinking water violations, housing problems and work commute information. The service area and the State compared unfavorably for air pollution and commuting to work, while comparing favorably with regards to housing problems.

Exhibit 6
Physical Environment

Environmental Factor	West Virginia	McDowell County	Mercer County	Wyoming County
Air Pollution[1]	9.6	9.3	8.9	9.3
Drinking Water Violations	X	Yes	Yes	Yes
Severe Housing Problems	11%	11%	13%	10%
Driving Alone to Work	82%	88%	85%	84%
Long Commute - Drving Alone	33%	41%	25%	44%
County ranking Physical Environment		44	31	36

Source: countyhealthrankings.org

[1]Average daily density of fine particulate matter in micrograms per cubi meter (PM2.5)

Clinical Care

Exhibit 7 Clinical Care includes measures related to Access to Care and Quality of Care. Access to affordable, quality health care is important to physical, social, and mental health. Health insurance helps individuals and families access needed primary care, specialists, and emergency care, but does not ensure access on its own. It is also necessary for providers to offer affordable care, be available to treat patients, and be in relatively close proximity to patients. High quality health care is timely, safe, effective, and affordable, the right care for the right person at the right time. High quality care in inpatient and outpatient settings can help protect and improve health and reduce the likelihood of receiving unnecessary or inappropriate care. Previously the uninsured population in the state of West Virginia was approximately 22%. As shown in Exhibit 7, the service area slightly higher than the State average of uninsured individuals. However, the ACA and Medicaid expansion in West Virginia had a significant impact on the reduction of uninsured.

Exhibit 7
Clinical Care

Measure	West Virginia	Mercer	McDowell	Wyoming
Uninsured	7%	8%	9%	8%
Preventable Hospital Stays	75	70	100	126
Diabetic Screening	84%	86%	83%	79%
Mammography Screening	59%	58%	43%	49%
Ranking for Clinical Care		17	53	54

SOURCE: countyhealthrankings.org

Mental Illness

The Substance Abuse and Mental Health Services Administration (SAMHSA), an operating division within the U.S. Department of Health and Human Services, is charged with reducing the impact of substance abuse and mental illness on America's communities. Each year, SAMHSA publishes the most recent annual results from the National Survey on Drug Use and Health (NSDUH) which is a primary source of statistical information on the use of illegal drugs, alcohol, and tobacco by the U.S. civilian, noninstitutionalized population aged 12 or older. The NSDUH also collects data on co-occurring substance use, mental disorders, and treatment for substance use and mental health problems. An adult with Any Mental Illness (AMI) was defined as having any mental, behavioral, or emotional disorder in the past year that met DSM-IV criteria (excluding developmental disorders and SUDs). Adults with AMI were defined as having Serious Mental Illness (SMI) if they had any mental, behavioral, or emotional disorder that substantially interfered with or limited one or more major life activities. Exhibit 8 presents statistics of mental illness taken from the NSDUH for those aged 18 or older at a national level and for West Virginia for 2016-2017. West Virginia compared unfavorably to the nation for those with SMI or AMI.

Exhibit 8
State Estimates of Adult Mental Illness amoung Persons Aged 18 or Older
2016-2017

Location	Serious Mental Illness %	Any Mental Illness %
National Average	4.38	18.57
West Virginia	5.18	20.90

SOURCE: State Estimates of Substance Use and Mental Disorders, 3/21/2019

SOURCE: State Estimates of Substance Use and Mental Disorders, 3/21/2019
http://www.samhsa.gov/data/reports-by-geography?tid=672&map=1

Pregnancy and Birth Data

The well-being of mothers and babies is a critical component of a community's overall health. Healthy pregnancies help to provide a better start in life and improve the health of future generations. A review of public health data available included prenatal care, pregnancy risk factors, percentage of low birth-weight births and teen pregnancy. Exhibit 9 illustrates pregnancy and birth data for the service area and West Virginia. The amount of low birthweight births in the service area was higher than the state average. Alcohol use during pregnancy was at the State rate for Mercer County. Tobacco use during pregnancy was at the state rate for Mercer and Wyoming counties but much higher for McDowell county. Serious risks to babies whose mothers smoked during their pregnancy include Sudden Infant Death Syndrome (SIDS), low birth-weight, birth defects, attention deficit/hyperactivity disorder, neurodevelopmental disorders and behavioral/psychiatric disorders.

Exhibit 9
Pregnancy and Birth Data
2015

Selected Factors	Mercer	McDowell	Wyoming	West Virginia
Birth Rate per 1,000 Population	12	10.7	9.6	10.7
Number of Births	734	212	212	19,778
% of Births Delivered in Hospital	99.7%	99.5%	100.0%	99.4%
% of Low Birthweight Births	11.9%	13.2%	12.3%	9.6%
% Births to Mothers Under 18	1.1%	2.8%	1.4%	2.1%
% of Births - Prenatal Care Began in First Trimester	75.0%	74.6%	75.8%	78.6%
% of Births - Prenatal Care Began in Second Trimester	19.4%	18.5%	17.9%	16.1%
% of Births - Prenatal Care Began in Third Trimester	4.5%	5.4%	6.3%	4.2%
% of Births - No Prenatal Care	1.1%	1.5%	0.0%	1.0%
Pregnancy Risk Factor: Drug Use	3.1%	6.1%	1.4%	5.9%
Pregnancy Risk Factor: Tobacco Use	30.2%	41.6%	38.5%	25.3%

Sources: West Virginia Vital Statistics

VIII. RESULTS OF COMMUNITY PARTICIPATION

Community participation was solicited in two ways to obtain input from a wide variety of individuals. The approaches included:

- **Online Survey**
- **Key Informant Interviews**

ONLINE SURVEY RESULTS

The community health needs assessment includes anonymous survey results using an online survey website, which was disseminated to employees and patients of the hospital as well as patients' family members and the community. Survey responses were collected between April and June 2019.

Respondent Zip Codes

The online survey results were received from residents in the following zip codes representing a wide diversity of respondents:

24605	24739	24918	25825
24701	24740	25801	25922
24712	24747	25813	25971

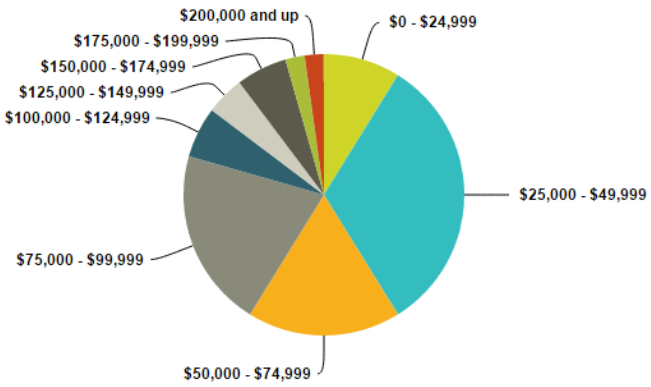
Respondent Age Groups

The survey requested that participants provide various demographic data. The ages of participants who responded were Under 18 (<1%), 18-24 (2.0%), 25-40 (29.33%), 41-64 (50.67%) and 65 or older (18.0%).

Gender, Marital Status and Race

The survey respondents indicated the following information with regards to their gender, marital status and race:

- Gender: 25% were male and 75% were female.
- Marital Status: 15.3%-Single, 65.3%-Married, 11.4%-Divorced, 6.0%-Widowed, and 2.0%-Separated/Civil Union
- Race: 95%-Caucasian, 1.3%-African American, 3.7%-Other.



Household

Respondents indicated the following household characteristics:

- 35% have children under the age of 18 in their household
- Number in household ranged from 1 to 5 (2% did not respond):

1: 8% 2: 44% 3: 22% 4: 18% 5: 5% 6: 3%

Income

Household income varied among survey-takers:

$0-$24,999: 12%

$25,000-$49,999: 19%

$50,000-$74,999: 19%

$75,000-$99,999: 17%

$100,000-$124,999: 12%

$125,000-$149,999: 7%

$150,000-$174,999: 5%

$175,000-$199,999: 3%

$200,000 and up: 6%

Education

Respondents were asked:
"What is the highest level of education you have completed?"

All respondents indicated an education level of high school graduate or above. 58% of the participants completed a four year or graduate degree.

Employment

In a separate question, participants were asked to provide their employment status. Approximately 79% of respondents indicated they are working at least part time, with following percentages:

Full time: 70.0% Part time: 4.7%

The remaining responses included Retired-17.3%, Disabled-4.0%, and Unemployed - not actively searching-2.7%.

Insurance Coverage

Since the Affordable Care Act's (ACA) coverage expansion began, about 16.4 million uninsured people nationwide have gained health insurance coverage. In 2016, the uninsured rate for the service area was over 20%. Due to the new coverage options for young adults, employees may add or keep children on their insurance policy until they turn 26 years old. This has afforded coverage to over 2.3 million young adults nationwide that would otherwise been uninsured. As part of the ACA, states were able to expand Medicaid coverage to individuals with family incomes at or below 133% of the federal poverty level. Due to this expansion, over 170,000 West Virginians and approximately 11.2 million nationwide gained Medicaid or Children's Health Insurance Program (CHIP) coverage.

Participants were asked to list their insurance carrier. 19.3% indicated Medicare, 6.0% indicated Medicaid and 1.3% indicated Uninsured. 68.0% of respondents indicated they are insured by private insurance. The remaining 5.4% selected "Other" but manually entered the following responses: PEIA, Blue Cross Blue Shield, United Healthcare, and Benefit Assistance.

Routine Health Care

Respondents were asked "Do you and/or your family have a primary care physician?" 91% indicated "Yes" while 9% indicated "No". For those having a primary care physician, 91% are able to get an appointment when needed. For those not having a primary care physician, respondents indicated they use a hospital emergency room, an urgent care center, or community health center for routine primary care. 30% of respondents indicated they delayed health care due to lack of money and/or insurance.

Dental Health Care

- 69% of respondents indicated they have a dentist.
- 83% of patients that did not see a Dentist cited Cost or lack of insurance as the reason.

Health Issues Most Prevalent

Participants were asked to indicate for which conditions have they or someone in their household received treatment. The top three responses were high blood pressure, Joint, Bone and Muscle pain, and then depression/anxiety disorders. The least selected conditions were cancer, obesity, and behavioral health.

High Blood Pressure	56.00%
Joint, Bone or Muscle Pain	38.00%
Depression/Anxiety	35.33%
High Cholesterol	34.00%
Diabetes	30.67%
Heart Disease	19.33%
Sleep Disorders	18.67%
Obesity	14.67%
Behavior Health	11.33%
Cancer	8.00%

COMMUNITY INTERVIEW RESULTS

Input was solicited from those representing the broad interests of the community between April and June 2019. Discussions included the health needs of the community, barriers to healthcare access, opportunities for improvement, perception of Princeton Community Hospital and feedback on PCHA's initiatives. The following organizations were selected to provide feedback.

Input from persons who represent the broad interests of the community served by the

Mercer County Board of Education

Mercer County Commissioner's Office

Mercer County Sheriff's Office

Child Protect Services of Mercer County

Princeton Church of God

Fincastle First Church of God

Princeton Health Care Center

Princeton Rescue Squad

Princeton Salvation Army

Southern Highlands Mental Health

Union Mission

Wade Center

Key informant interviews were conducted face-to-face by Arnett Carbis Toothman consultants in April 2019. The interviews were designed to obtain input on health issues and needs from persons who represent the broad interest of the community served by PCHA, including those with special knowledge of the health care environment including public health.

Interviews were held with 17 individuals with a wide range of background and knowledge. Interviews were conducted using a structured questionnaire. Interviewees were also allowed to discuss any other health care related topic. Informants were asked to discuss community health issues and encouraged to comment on social, behavioral and other factors impacting the health care delivery system. Interviewees were asked to provide their thoughts on:

1. **Health status of the community**
2. **Health care access and available health care services**
3. **Chronic health conditions prevalent in the community**
4. **Populations with special needs**
5. **Health disparities**

Below are the specific issues interviewees mentioned that were perceived to be of highest importance (severity) and how widespread the issues are, listed in order of importance, based upon the results of the interviews. The issues are listed in order of importance however the differences, in some cases, were minor.

Health Status Issues

1. **Mental and behavioral health:** Mental and behavioral health issues were frequently mentioned health issues impacting the community. Many interviewees commented that the demand for mental health related services has continually increased, yet the overall capacity to treat these types of issues has not kept pace. Depression, anxiety and other behavioral or mental health issues were often correlated with drug and substance abuse. Drug and substance abuse can impact an entire family's mental health. When a family member abuses substances, the effect on younger family members can result in abnormal behavioral issues.
2. **Drug and substance abuse:** Substance abuse was one of the most frequently mentioned health issues and was commonly discussed in conjunction with mental and behavioral health issues. All interviewees commented that this issue has

continued to tighten its grasps on the community and providing resolution must be made a top priority. Illicit drug use is at an epidemic level throughout the community and has had a devastating impact on individuals and their families. Interviewees commented that while opioids have continued to be a major contributing factor to this crisis there has been a significant increase in the abuse of methamphetamine.

3. **Shift in household dynamics:** As the opioid and drug epidemic continues to ravage the area, extended family members are increasingly involved with raising children whose parents have overdosed, been incarcerated, or are in rehab. Many identified these types of scenarios as having a significantly negative impact on the community's overall health status.

4. **Obesity:** Obesity and complications frequently associated with being overweight such as diabetes and high blood pressure were commonly mentioned during interviews. However, many mentioned that they've noticed an increase in the community's involvement in physical activities such as walking, biking, hunting and fishing. It was also noted that many youth participate in organized sports; however, many in rural areas have a more difficult time accessing these types of activities.

5. **Smoking, tobacco and nicotine abuse:** Smoking and tobacco use, including smokeless tobacco has continued to be a significant issue that negatively impacts the community's overall health. While traditional forms of tobacco use were often mentioned many interviewees expressed significant concern relating to the increased use of vaping devices. It was frequently mentioned that the community's younger population have moved away from the more traditional methods of nicotine use; respondents often expressed concern of not fully understanding the long term health care impacts vaping may have.

Factors Contributing to Health Status and Access to Health Care

During the interviews respondents discussed items that are contributing to, or directly related to the overall health status of the community; these items included access to health care. The major contributing factors mentioned are as follows:

1. **Low income and poverty:** Issues related to economic status and financial resources were frequently cited as factors limiting access to care; these inhibitors were also associated with poor diet and nutrition. It was frequently mentioned that living with economic uncertainty can contribute to a stressful living environment which can negatively impact health. The negative impact of the economic decline

of the areas industry was often mentioned as creating an environment of economic hopelessness. Especially the McDowell County service area, which is well below median Family incomes.

2. **Access to health care:** Participants cited a wide range of difficulties with access to care, including availability of access to some types of specialty providers, cost and affordability of care, significant transportation issues for low-income and elderly populations. Numerous interviewees stated that a lack of readily available access to Neurology and Cardiology specialists within the community increased the difficulty of receiving care for these types of major health issues.

3. **Low education levels and lack of knowledge about health care:** The lack of formal education and trades knowledge can contribute to an individual's inability to effectively obtain health care. Many interviewees commented that the education level of many persons in the community may prevent them from timely identifying health care issues before they are exasperated and become chronic.

4. **Poor nutrition and unhealthy lifestyles:** Respondents often commented that a significant amount of the area's population have some form of poor health habits; these frequently included dietary and nutrition selections. Interviewees commented that these lifestyle choices directly contribute to obesity, diabetes and heart disease; these and related conditions add to the economic strain felt throughout the community.

5. **Preventive health services and preventive health behaviors:** Interviewees agreed that healthy behaviors are vital to overall community health status and that individual participation in preventative health care is crucial to population health. Respondents also agreed that preventative health services are available within the community and that there has been an increased usage of these services. However, many persons living in poverty, as well as the elderly continue have a difficult time finding transportation to doctor's appointments and accessing care.

IX. CONCLUSION AND HEALTH PRIORITIES

SUMMARY OF FINDINGS

The goal of the needs assessment was to identify health issues and community needs as well as provide information to key decision makers to make a positive impact on the health of the hospital's service area. Statistical data was compiled to depict demographic and economic profiles while the surveys provided additional feedback with regards to community perception of the Hospital, availability of resources and challenges as it relates to their healthcare needs.

- Overall population in the service area will continue to decline with the outmigration of residents. However, the aging population will contribute to the highest growth in the 65 and over age category. An increase in the 65 and older age category contributes to an increase of Medicare beneficiaries with an increased need of services.
- Diseases of the heart and cancer continue to be the leading causes of death in the service area.
- The portion of individuals living in poverty in the service area continue to exceed State and U.S. averages by as much as 20% in one of the counties in the service area.
- Pregnancy and birth data continue to illustrate there are serious health issues.
- The area with the highest level of births to mothers under the age of 18 was 2.8% in McDowell County, West Virginia.
- Cigarette smoking was 25% for Mercer County but McDowell and Wyoming counties were at 28%. The state of West Virginia was 25%.
- Adult obesity continues to rank high at over 40% of the population for the service area.

    - The results of the community health needs assessment's quantitative and qualitative analysis, along with the input from members of the community, appears to indicate common themes in the health needs of the Princeton area and surrounding communities. These focus areas include the need for the following:

        - Better access and utilization of preventive care services, especially in the secondary service areas;
        - Even with increased coverage from Medicaid expansion there are still many individuals delaying getting health care services because of a lack of money;
        - Substance abuse treatment collaboration needs to continue;
        - Additional community events focusing on health related issues;
        - General health education for the primary service area.

COMMUNITY HEALTH PRIORITIES AND IMPLEMENTAION PLAN

The results of the CHNA will enable the Hospital as well as other community providers to collaborate their efforts to provide the necessary resources for the community. After reviewing data sources providing demographic, population, socioeconomic, and health status information in addition to community feedback, health needs of the community were prioritized. The following community health issues were also identified in the prior CHNA of PCHA. These issues have been selected again as the priority health issues to be addressed:

- Chronic Disease Management
- Unhealthy Lifestyles
- Drug and Alcohol Abuse

Chronic Disease Management

Priority conditions include obesity and diabetes. Obesity and unhealthy eating and activity habits give individuals a higher risk for liver and gallbladder disease, type 2 diabetes, high blood pressure, high cholesterol and triglycerides, coronary artery disease (CAD), stroke, sleep apnea and respiratory problems, osteoarthritis, and gynecological problems, among other conditions. Children who are obese are at risk for many of the same long-term health problems. If you have healthier habits or lose weight, your risk for these conditions is reduced.

Resources: The Hospital will continue to provide outreach and education to the residents of Princeton and the surrounding communities. PCHA will continue to provide diabetic and weight loss education to the community.

Unhealthy Lifestyles

Unhealthy lifestyle choices contribute to other health conditions. Smoking, poor nutrition, and physical inactivity are prevalent amount residents in the service area. Tobacco is the leading cause of preventable illness and death in the United States. It causes many different cancers as well as chronic lung diseases, such as emphysema, bronchitis, and heart disease. Community culture, lack of health care coverage, and low income can lead to unhealthy lifestyle choices.

Resources: The Hospital will continue to provide outreach and education for smoking cessation, proper nutrition and the importance of physical activity. The PCHA Foundation oversees the Princeton Health and Fitness Center to promote health and wellness in our community. Several times per year free health assessments are offered at the fitness center and at PCHA. PCHA and the Princeton Health and Fitness Center will continue to assist with health and wellness programs and provide the necessary resources for those seeking a healthy lifestyle through diet and exercise.

Drug and Alcohol Abuse

Abuse of alcohol and illicit drugs is costly to our nation, exacting over $400 billion annually in costs. The toll that drug and alcohol problems have on individuals is significant, as they are at increased risk for serious health problems, criminal activity, automobile crashes, and lost productivity in the workplace. But individuals with drug and alcohol problems are not the only ones who suffer. The families, friends, and communities also suffer greatly. The abuse of alcohol and drugs leads to multiple acute and chronic adverse health outcomes, as well as a variety of negative consequences within the family unit, poor performance in school, or difficulties at work. Alcohol abuse leads to decreased inhibitions and impaired judgments that influence reckless and sometimes aggressive behavior. It also leads to high rates of motor vehicle accidents and injuries/deaths. On a chronic basis, it can lead to anemia, hepatitis and cirrhosis, pancreatitis, cognitive effects due to brain damage, fetal alcohol syndrome, low birthweight, and other poor health outcomes. Substance abuse problems commonly occur in conjunction with mental health issues.

Illicit drug use was a recurring issue of concern in many of our interviews with community members. The problems of substance abuse involve three levels of intervention: prevention, screening, and detection. These three opportunities require determined, collaborative action involving public health, education, health care, and criminal justice systems at the community level.

Resources: The Hospital will maintain its collaboration and referral network to address patients' needs with regards to addiction and abuse. The Behavioral Health Pavilion of the Virginias will continue to monitor patients' treatments using state of the art therapy procedures including Transcranial Magnetic Stimulation (TMS). TMS is a non-invasive procedure that uses magnetic fields to stimulate nerve cells in the brain to improve symptoms of depression. PA will to continue to provide outreach and education to the residents of Princeton and the surrounding communities.