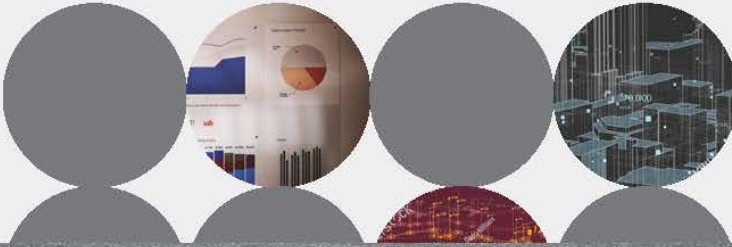
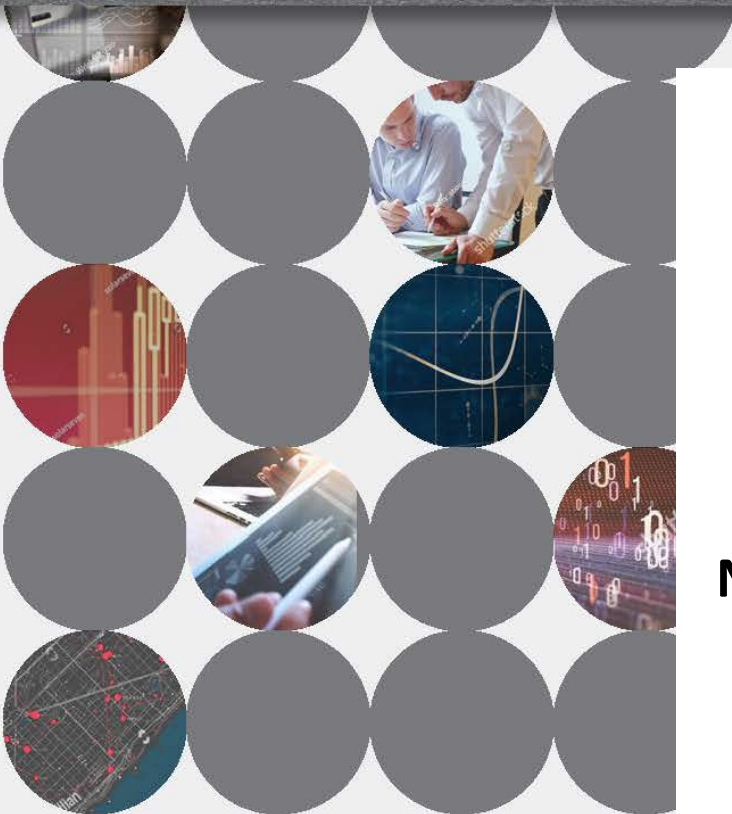


A Partnership Among Geisinger Commonwealth School of Medicine, Johnson College, Keystone College, Lackawanna College, Luzerne County Community College, Marywood University, Misericordia University, Penn State Scranton, Penn State Wilkes-Barre, The Wright Center for Graduate Medical Education, University of Scranton & Wilkes University



THE INSTITUTE FOR PUBLIC POLICY & ECONOMIC DEVELOPMENT



**Geisinger
Commonwealth
Medical College
Behavioral Health
Initiative**

**Mental Health
Needs Assessment**

April 2022

The Institute

Turning Information into Insight

The Institute is a nonprofit economic and social innovation research and policy organization dedicated to empowering business and community leaders with research-based strategies for informed decision-making. We conduct independent, non-biased research to identify the opportunities, issues, and challenges unique to the region and to find innovative solutions to help solve the problems facing our communities. The Institute also offers a wide array of research, consulting, and support services to help organizations boost productivity, increase profitability and be successful in their missions. The Institute is a partnership of 13 colleges and universities and the business community. The Institute has served clients in a number of states, including the federal government.

Community-Based Research

Community-based research is at the core of The Institute's mission. This work, funded by our academic partners, generous underwriters, and sponsors, is made available to organizations and communities needed reliable, objective data, research, and best practices to make more informed decisions.

Client Solutions

The Institute prepares studies, surveys and conducts research for public, private, and nonprofit entities to identify strategies and solutions that facilitate decision-making and enhance growth, profitability, revitalization, and sustainability of their businesses and organizations.

The Institute Team

Teri Ooms, Executive Director
Andrew Chew, Director of Research
Dr. Jolene Carey-Pace, Research Analyst
Sarah Bender, Research Assistant
Jill Avery-Stoss, Director of Operations

The Institute

Turning Information into Insight

Table of Contents

Acknowledgements.....	1
Research Methodology	2
Executive Summary	2
Literature Review	4
Mental health access for vulnerable populations in COVID	4
Addressing the Post-COVID Mental Health Needs	5
Quality improvement and models of behavioral healthcare integration.....	6
Conclusions	8
Secondary Data Analysis	10
Survey Data	36
Provider Results	36
Patient & Caregiver Survey	40
Caregiver Responses	40
Patient Responses.....	43
Stakeholder Interviews	51
Patient Interview.....	51
Providers and Community Mental Health Advocate Interviews	52
Summary, Conclusions, Recommendations	56
Appendix	62
References	69

Acknowledgements

The Institute would like to thank the many organizations in the region that shared the surveys with their employees and clients and those that participated in the interview process.

In addition, The Institute would like to thank the Hospital and Healthcare Association of Pennsylvania, specifically Vice President of Health Care Research, Sushma Sharma for providing data to support the project.

Research Methodology

In order to conduct a comprehensive needs assessment, The Institute used a mixed methods approach. This included extensive public outreach through health care, social services, mental health associations and employers in order secure both quantitative and qualitative information through electronic survey tools. The goal was to get feedback from providers at all levels, patients themselves, and caregivers.

Volunteers were requested to participate in semi-structured interviews focused on their experiences with behavioral health and substance abuse services in order to create context and help to inform the survey data.

The specific backgrounds of the participants are not included to maintain anonymity.

Although the number of interviews was less than anticipated, the experiences described in the interviews provided rich descriptions of experiences and are supportive of the quantitative data.

Perspectives of the interviewees can be found throughout the report.

Additionally, demographic data were obtained from the Pennsylvania Behavioral Risk Factor Surveillance System, the Center for Disease Control, Pennsylvania Cost Containment Council through the Hospital Association of Pennsylvania and the Kaiser Family Foundation.

A detailed literature review on behavioral needs was also conducted as part of the assessment.

Data from all sources was synthesized and summarized in order to develop thoughtful recommendations to improve behavioral health in northeastern Pennsylvania.

Executive Summary

As a result of COVID-19, there has been an intensification of the need for services. Participants have cited the phenomenon of the escalation of anxiety and depression resulting from COVID-19 as a prominent regional issue. Furthermore, jobs and housing were cited as significant sources of anxiety since COVID began.

The behavioral needs assessment offered the insights of healthcare providers, community advocates, and patients regarding their experiences concerning behavioral health and substance abuse. In addition to their perspectives, the interviewees provided several challenges that exist in the behavioral health system in this region.

Several of these challenges included:

1. Lack of training to create a multi-discipline behavioral health workforce.
2. Providers are not practicing in an evidence-based manner.
3. Integration of behavioral health into primary care.
4. Training of the established behavioral health workforce.
5. Overdiagnosis of particular disorders (ADD and bipolar disorder was mentioned).
6. Resilience is not incorporated into behavioral health.

Themes that appeared consistently throughout the assessment were:

1. A Fragmented System
2. A Lack of Quality Care

3. Barriers to Accessing Care
4. Wait Times
5. Gaps in Services

Providers generally agreed that the upward trend is difficult to predict. Still, interviewees agreed that patients “need care right now.” Looking at the current circumstances, the interviewees feel that the need for mental health will increase because of the aftermath of symptoms and health care issues. And, there is a need for “comprehensive care management.”

Current literature aligns with the behavioral health assessment in that our present mental and behavioral health crisis is not specific to our region. It is a national epidemic that the federal government has recognized. And, Black and Brown communities are disproportionately undertreated – even as their burden of mental illness has continued to rise. COVID-19 has exacerbated the situation through increased grief, trauma, and physical isolation. Our youth have also been impacted by COVID-19, disrupting their routines and relationships, leading to increased isolation, anxiety, and learning loss.

In consideration of the research, active steps should be considered in shifting how the behavioral health system operates and expanding services to create sufficient access to services, including assessing how to improve the overall quality of the experience of the patients and building connections with individuals, bolstering confidence in the patients that providers are interested and care about a patient’s well-being.

As a result of this analysis and as aligned with the current bi-partisan effort to address mental health concerns as a result of the impact that the COVID-19 pandemic has had on the nation over the last two years, the following recommendations, which are described in detail in the Summary, Conclusions, and Recommendations, should be taken into consideration:

1. The creation of a resource directory that identifies local programs and providers in the areas of mental health and substance abuse, including resources in areas such as prevention, education, shelters, and housing services, is needed.
2. Prioritize and fund the development of a comprehensive continuum of mental health care that incorporates a full spectrum of integrated, complementary services to improve the outcomes for individuals of all ages with mental health and substance abuse issues.
3. Integrate behavioral health into primary care offices.
4. Further Development of Community Partnerships
5. Training for the established workforce and increasing training opportunities for providers
6. Train social and human services professionals in basic mental health skills.
7. Expand system capacity
8. Incorporate resilience research into behavioral health practices
9. Urge the community at large to follow through and participate in Dr. Leighton Huey’s Resilience Colloquium in Fall 2022 to see where a collective focus on resilience can lead the region.
10. Educate the community
11. Maintain and Expand Access to Tele- and Virtual Mental Health Care Options

For years, state support for mental health resources has been declining, and services for psychiatric patients in the United States are simply inadequate. The prevalence of mental illness and substance abuse in this country, combined with a lack of resources to care for these individuals in the most appropriate setting, is a national crisis. Systemic changes are needed in combination with additional

facilities and integrated services necessary to achieve meaningful access and to support the increase in the population reporting mental health and behavioral health concerns due to COVID-19.

Literature Review

Before COVID-19, 47 million United States adults reported a mental illness in 2019, 11 million reported a serious mental illness, 17 million reported major depressive disorder, and limited access to mental healthcare (Panchal et al., 2020). Barriers to access included limited health insurance access, mental health professional shortage areas in every state across the United States, distance one must travel to a mental health provider, fragmented care, and societal stigma (Panchal et al., 2021).

COVID-19 has been responsible for over 350,000 deaths to date (Centers for Disease Control, 2019). The COVID-19 pandemic and the resulting economic recession have negatively affected many people's mental health and created new barriers for people already suffering from mental illness and substance use disorders. (Panchal, 2021). Along with this, COVID-19 disproportionately impacts vulnerable populations such as the elderly, ethnic minorities, the severely mentally ill, and the homeless (Centers for Disease Control, 2019).

Mental health access for vulnerable populations in COVID

The impact of COVID-19 is beyond disease mortality alone. As estimates of mortality and morbidity continue to increase, isolation and lockdown are prolonged; recreational opportunities are lessened, and mental health problems are likely to rise. A recent review of psychological sequelae among quarantined individuals and health care providers revealed elevated stress, depression, irritability, insomnia, fear, confusion, anger, frustration, boredom, and stigma associated with quarantine, some of which persisted after the quarantine was lifted. Risk factors included greater confinement duration, inadequate supplies, difficulty securing medical care and medications, and financial losses (Brooks et al., 2020).

Those with pre-existing mental health issues, including serious mental illnesses, are likely to be affected by a relapse of their illness, disruption to services, isolation, possible exacerbation of symptoms in response to pandemic-related information and behaviors, as well as changes in mental health law (Panchal et al., 2020).

Studies and surveys conducted so far during the pandemic consistently show that young people, rather than older people, are most vulnerable to increased psychological distress, perhaps because their need for social interactions is stronger. Data also suggest that young women are more vulnerable than young men. People with young children, or a previously diagnosed psychiatric disorder, are at particularly high risk for mental health problems. "The things that we know predispose people to mental health problems and conditions have been increased as a whole," says Victor Ugo, a campaign officer who specializes in mental health policy at United for Global Mental Health, an advocacy group in London (Abbott, 2021).

Considering the senior population, approximately one in four U.S. seniors experience mental illness in any given year (National Institute of Mental Health, 2013). Representing more than 13 million seniors, mental health remains a significant public health concern, with an estimated 60% of those in need not receiving proper care and treatment for their mental health conditions (Substance Abuse and Mental Health Services Administration, 2010). In far too many cases where mental health services are received, care often occurs in emergency departments (Alakeson, Pande, & Ludwig, 2010) or inpatient settings (Trudnak et al., 2014)— settings notorious for their lack of attention to preventive care. A shift in this

pattern of mental health utilization is required to make significant progress in achieving meaningful access for this vulnerable population (Adepoju et al., 2018).

Older adults' mental health disorders can be major impediments to living well, resource use, and visit patterns, contributing to increased healthcare spending. For example, older adults with depression visit the doctor and emergency department more often, use more medication, incur higher outpatient charges, and stay longer in the hospital [Agency for Healthcare Research and Quality (AHRQ), 2010]. Higher rates of physician care continuity among older adults are associated with a lower risk of an emergency department visit and preventable hospitalization (Nyweide & Bynum, 2016, as cited in Adepoju et al., 2018).

Additionally, racial/ethnic differences in morbidity from behavioral health conditions have been well documented, with minority groups faring worse relative to whites. The extent to which differences in specialty behavioral health care utilization are contributing these morbidity differences is not clear. In many cases, it was found that racial/ethnic minorities had a lower probability of having any behavioral health care expenditures and utilization relative to whites. Within racial/ethnic and language subgroups, the pattern of expenditure/ utilization differences is similar across genders for all but Hispanic English speakers; however, for many service types, the magnitude of the difference is more significant among women. These results are consistent with the work of Alegria et al. (2017), who found a lower probability of any behavioral health care utilization among racial/ethnic minorities with depression using self-reported utilization data. (Narain et al., 2019). Moreover, analyses showed that relative to whites, all racial/ethnic subgroups had lower rates of individual psychotherapy utilization. These differences were primarily driven by lower service penetration rather than differences in service use intensity.

Shifts in mental health utilization patterns are necessary to allow for meaningful access to care for vulnerable populations. There have been long-standing issues in how mental health is provided, which has caused problems in that care being efficacious for those seeking it (Adepoju et al., 2018).

Addressing the Post-COVID Mental Health Needs

Health care payers and providers have long recommended integrating behavioral and general medical care to provide more comprehensive treatment to patients with behavioral health conditions, which should both improve patient health and reduce overall health care costs (American Psychiatric Association, 2016; Centers for Medicare and Medicaid Services, 2019e). However, historically, the U.S. behavioral health care delivery system has been segregated from the general medical delivery system. Patients rely on specialty behavioral health care providers and often receive inadequate care for other health conditions (Buck, 2011). This segregation has impeded efforts to integrate the two forms of health care (McClellan et al., 2019).

Integration of behavioral and general medical care can improve outcomes for individuals with behavioral health conditions—serious mental illness (S.M.I.) and substance use disorder (SUD). However, behavioral health care has historically been segregated from general medical care (McClellan et al., 2019).

The percentage of people experiencing symptoms of depression and anxiety has surged amid the COVID-19 pandemic, data from nationally representative surveys show. July 2019–March 2020 U.K. adults were reporting symptoms of depression, U.S. adults reporting symptoms of anxiety or depression June 2020 January–June 2019 December 2020. Before pandemic During pandemic 10% 19% 11% 42% (Abbott, 2021).

Some 42% of people surveyed by the U.S. Census Bureau in December (2020) reported symptoms of anxiety or depression in December, an increase from 11% the previous year. Data from other surveys suggest that the picture is similar worldwide (see 'COVID's mental stress'). "I don't think this is going to go back to baseline anytime soon," says clinical psychologist Luana Marques at Harvard Medical School in Boston, Massachusetts, who is monitoring the mental-health impacts of the crisis in U.S. populations and elsewhere (Abbott, 2021).

During the pandemic, about 4 in 10 adults in the U.S. have reported anxiety or depressive disorder symptoms, a share that has been broadly consistent, up from one in ten adults who reported these symptoms from January to June 2019. A KFF Health Tracking Poll from July 2020 also found that many adults are reporting specific negative impacts on their mental health and well-being, such as difficulty sleeping (36%) or eating (32%), increases in alcohol consumption or substance use (12%), and worsening chronic conditions (12%), due to worry and stress over the Coronavirus. As the pandemic wears on, ongoing and necessary public health measures expose many people to experiencing situations linked to poor mental health outcomes, such as isolation and job loss (Panchal et al., 2021). With 31.5% of Pennsylvanians reporting symptoms of anxiety or depressive disorder (K.F.F. Health Tracking).

Quality improvement and models of behavioral healthcare integration

Increasingly, primary care physicians are being thrust into the role of treating behavioral health concerns, with 59% of psychiatric medications being prescribed by general practitioners (Mark, Levit, & Buck, 2009; Olfson, 2016). The reality that primary care is the first point of access to behavioral health services for many patients provides an opportunity for integrating nonpharmacologic behavioral health services into primary care settings (O'Loughlin et al., 2019).

Behavioral health/addiction issues ranked fifth on the list of top concerns in a 2018 survey of healthcare C.E.O.s (American College of Healthcare Executives, 2019). The wide interest comes as no surprise in light of disturbing and growing trends. Suicide rates have increased by 33% (Weir, 2019); life expectancy in the United States has declined, primarily as a result of suicide and the opioid epidemic (Haskins, 2019); and depression has significantly contributed to the overall global burden of disease (World Health Organization, 2019). In the United States alone, \$200 billion in productivity is lost annually because of mental illness (Roehrig, 2016; as cited in Garrett, 2020).

Increased services and access, quality improvement, and models of healthcare integration should be discussed as mental health and behavioral health concerns are rising. Such integration ensures that traditional silos in medical care provision and mental healthcare are well bridged along the care continuum. Considering the significant correlations between chronic diseases and mental health conditions (Garrido, Kane, Kaas, & Kane, 2011), such integration promotes timely and effective patient transitions, limiting the likelihood that patients will experience adverse outcomes due to a lack of integrated services (Adepoju et al., 2018).

The concept of the Patient-Centered Medical Home (P.C.M.H.) endeavors to shift the focus of individuals' episodic acute care to manage the health of defined populations, especially those living with multiple, complex, and chronic health conditions. Many individuals are living with chronic physical illnesses and conditions present with co-morbid behavioral health and substance use problems, requiring collaborative and comprehensive care by a team of healthcare professionals (Shell et al., 2019).

Models that position behavioral health in a primary care setting and employ dually prepared providers such as Family/ Psychiatric-Mental Health Nurse Practitioners and/or physicians double boarded in Family Medicine/Psychiatry have the potential to generate efficiencies in the healthcare system while improving access to prevention and treatment services (Shell et al., 2019).

One such model is the Four-Quadrant Model (Mauer, 2009) is a Behavioral Health/ Primary Care Integration model that assumes competency-based mental health and substance abuse (MH/SA) service integration within a primary care setting as well as the notion of integrating primary care into a specialty psychiatric setting. This model describes the unique needs of subsets of the population that Behavioral Health/Primary Care integration must address (Shell et al., 2019).

Each quadrant considers the level of behavioral and physical health risk and complexity along with the needs of the population in order to suggest the major system elements. The Four-Quadrant Model (Mauer, 2009) is a Behavioral Health/ Primary Care Integration model that assumes competency-based mental health and substance abuse (MH/SA) service integration within a primary care setting as well as the notion of integrating primary care into a specialty psychiatric setting. This model describes the unique needs of subsets of the population that Behavioral Health/Primary Care integration must address.

Definitions of the four quadrants of the Four-Quadrant model (Mauer, 2009).

Quadrant 1	Low to moderate behavioral health and low to moderate physical health complexity/risk
Quadrant 2	Moderate to high behavioral health and low to moderate physical health complexity/risk
Quadrant 3	Low to moderate behavioral health and moderate to high physical health complexity/risk
Quadrant 4	Moderate to high behavioral health and moderate to high physical health complexity/risk

Five Levels of Integrated Healthcare are differentiated by the amount of recommended collaboration (Heath et al., 2013).

Level 1	Minimal Collaboration: Mental health and other healthcare providers work in separate facilities, operate separate systems, and rarely communicate about cases.
Level 2	Basic Collaboration at a Distance: Mental health and other healthcare providers operate separate systems at separate sites, but engage in periodic communication about shared patients, mostly through telephone and letters. Providers view one another as resources
Level 3	Basic Collaboration Onsite: Mental health and other healthcare providers operate separate systems but share facilities. Proximity supports at least occasional face-to-face meetings. Communication improves and is more regular.
Level 4	Close Collaboration in a Partly Integrated System: Mental health and other healthcare providers share the same sites and operate some systems in common, such as scheduling and charting.
Level 5	Close Collaboration in a Fully Integrated System: Mental health and other healthcare providers share the same sites, vision, and systems. All providers are on the same team and have developed an in-depth understanding of one another's roles and areas of expertise

There are regular face-to-face interactions among primary care and behavioral health providers, coordinated treatment plans for difficult patients, and a basic understanding of one another's roles and cultures. Level 5 Close Collaboration in a Fully Integrated System: Mental health and other healthcare providers share the same sites, vision, and systems. All providers are on the same team and have developed an in-depth understanding of one another's roles and areas of expertise to be utilized (e.g., care management can be assumed by either primary care or behavioral health providers, depending on the identified needs). Overall, this model describes levels of integration in terms of primary care complexity and risk and mental health and substance use disorder complexity and risk.

Issues relating to the sustainability of the components of the Four Quadrant model include consumer preferences, a trained workforce, organizational support in providing services, and fiscal resources. These interrelated issues need to be discussed with a consensus reached by both primary care and behavioral health providers before establishing an integrated care approach. Positive resolution of these issues will enhance the outcome of sustainability (Kathol, Butler, McAlpine, & Kane, 2010; National Council for Community Behavioral Healthcare, 2009) as cited in Shell et al., 2019).

Beyond the Four Quadrant Model, several other frameworks have been developed to meet patient needs. These include: (a) the Vertical vs. Horizontal Model and (b) Levels of Integrated Care (Shell et al., 2019).

Although advantages exist in bringing behavioral health services on-site in primary care settings, some level of integration can still occur between clinicians and organizations that are physically separate but use shared care plans and workflows. Physically separated care providers are an acceptable variation as long as the care team fulfills the required functions of integrated behavioral healthcare from separate locations. The SAMHSA-HRSA Center for Integrated Health Solutions (C.I.H.S.) promotes the development of integrated primary and behavioral health services to address better the needs of individuals with mental health and substance use conditions, whether seen in behavioral health or primary care provider settings.

Sustainable models of integrated care must address the development of an adequate workforce to meet the complex needs of these clients. Both primary care and behavioral health providers need to develop specific skills in order to function effectively in integrated care settings. Psychiatric-Mental Health R.N.s and Advanced Practice R.N.s (A.P.R.N.) are uniquely qualified to lead teams of integrated care providers. A list of core competencies developed by SAMHSA provides organizations and individual professionals with a "gold standard" for the skill set needed to deliver integrated care. They represent the long-term goals of workforce development for professionals with careers in integrated care. These core competencies include interpersonal communication, collaboration and teamwork, screening and assessment, care planning and coordination, intervention cultural competence, systems-oriented practice, practice-based learning, quality improvement, and informatics (Hoge et al., 2014; as cited in (Shell et al., 2019).

Conclusions

The pandemic has both short- and long-term implications for mental health and substance use, particularly for groups at risk of new or exacerbated behavioral health disorders and those facing barriers to accessing care. Phased COVID-19 vaccinations are taking place across the country, perhaps signaling that the end of the pandemic is on the horizon. However, many of the stressful conditions employed to mitigate the spread of the Coronavirus are likely to persist into the near future (Panchal et al., 2021).

History has shown that the behavioral health impact of disasters outlasts the physical implications, suggesting today's elevated mental health need will continue well beyond the coronavirus outbreak itself. For example, an analysis of the psychological toll on health care providers during outbreaks found that psychological distress can last up to three years after an outbreak. Due to the financial crisis accompanying the pandemic, there are also significant implications for mortality due to "deaths of despair." A May 2020 analysis projects that, based on the economic downturn and social isolation, additional deaths due to suicide and alcohol or drug misuse may occur by 2029 (Panchal et al., 2021).

For years, state support for mental health resources has been declining, and services for psychiatric patients in the United States are simply inadequate. As a result of this diminishing support, psychiatric patients are increasingly turning to emergency departments for their acute care needs. Unfortunately, it takes three times as long to find an inpatient bed for a psychiatric patient rather than a medical patient after the decision to admit has been made. These psychiatric patients require more physician, nurse, and hospital resources than other patients and, thus, diminish our ability to evaluate and treat other medical patients who are awaiting emergency care services.

The prevalence of mental illness and substance abuse in this country, combined with a lack of resources to care for these individuals in the most appropriate setting, is a national crisis. Systemic changes are needed in the way individuals with mental illness are cared for in this country (American College of Emergency Physicians). According to the American College of Emergency Medicine/physicians, the cutbacks are spilling over to other service providers, including hospitals, where 1 in 8 emergency-room visits includes mental-health issues, according to the American College of Emergency Medicine/physicians (A.C.E.P./Mental Health Advocacy).

It is time to bolster our behavioral health system in preparation for the inevitable challenges precipitated by the COVID-19 pandemic. Stepped care, the practice of delivering the most effective, least resource-heavy treatment to patients in need and then stepping up to more resource-heavy treatment based on patients' needs, is a practical approach. This will require that systems are both well designed and well prepared to deliver this care to patients, from screening to the overflow of mental illness that will inevitably emerge from this pandemic. Scaling up treatment amid a crisis will take creative thinking (Galea, 2020).

There is a significant need to increase investment in mental health services to prevent and manage the expected mental health issues and make mental health services accessible to everyone in every place (Singh, 2020). The U.S. Department of Health and Human Services has already predicted that we'll have a shortage of many types of mental healthcare professionals by 2025. If burnout leads to an exodus of therapists from the profession, that could leave many people without the support they need to recover from the emotional blow of the pandemic (Sweet, 2021). Additional facilities and integrated services are necessary to achieve meaningful access and to support the increase in the population reporting mental health and behavioral health concerns due to COVID-19.

Secondary Data Analysis

The following demographic analysis contains state and regional data specific to adverse childhood experiences, alcohol consumption, mental and physical health, opioid use, death rate data, and health care access. Additionally, national data from the Kaiser Family Foundation (KFF) relative to the effects of COVID-19 is included. Finally, data specific to Geisinger in the Northeast Region and Behavioral Health Data are included.

Additional data can be found in the Appendix, which includes the Behavioral Risk Factor Surveillance System (BRFSS) estimates in Pennsylvania for Alcohol Consumption, Mental/Physical Health Status, Illegal/Prescription Drug Use, and Resident Deaths. The BRFSS is a state-based system of health surveys established by the Centers for Disease Control and Prevention (CDC) and is an important public health tool for measuring adult health by directly contacting Pennsylvanians to collect information on chronic disease prevalence, risk behaviors, demographics, health care access, and preventive behaviors. Public and private health programs at the federal, state and local levels rely on BRFSS to identify public health issues and use BRFSS estimates to formulate preventative action plans and to measure progress toward those prevention efforts (PA Department of Health, 2022). The data included in the appendix is a breakdown of the type of mental health death at the state level and by six counties trended over time. The data also includes data on alcohol, drug use and mental health status. The numbers are striking in that 20 percent of Pennsylvanians have minor depressive order, 38 percent indicate their mental health was not good for one or more days per month, and 28 percent used illegal drugs. Suicides have increased annually. Since the majority of data is pre-Covid, we know that in today's world they may not reflect the extent of the issues.

Adverse Childhood Experiences, Pennsylvania Adults, 2019 (2020 data not available)

The Adverse Childhood Experiences for 2019 demonstrate that 19 percent of adults before age 18 lived with anyone who was depressed, mentally ill, or suicidal throughout Pennsylvania. Twenty-four percent of adults throughout the state, before age 18, lived with anyone who was a problem drinker or alcoholic.

Demographics	Before Age 18, Lived With Anyone Who Was Depressed, Mentally Ill or Suicidal*		Before Age 18, Lived With Anyone Who Was a Problem Drinker or Alcoholic*		Before Age 18, Lived With Anyone Who Used Illegal Street Drugs or Abused Prescriptions*		Before Age 18, Lived With Anyone Who Was Sentenced to Serve Time in Prison*	
	%	CI	%	CI	%	CI	%	CI
All adults	19	18-21	24	23-26	13	12-14	10	9-11
Gender								
Male	16	14-18	22	20-24	13	12-15	11	10-13
Female	23	21-25	27	25-29	12	11-14	9	8-11
Age								
18-29	34	29-38	28	24-32	19	16-23	19	15-22
30-44	24	21-28	27	24-31	22	19-26	17	14-20
45-64	16	15-19	26	24-28	10	9-12	7	6-9
65+	9	8-11	17	15-20	3	2-4	3	2-4
Education								
< High school	20	15-27	28	21-35	20	15-27	18	13-25
High school	17	14-19	25	23-28	13	11-15	12	10-14
Some college	23	20-26	27	24-30	13	11-16	11	9-13
College degree	20	18-22	20	18-22	9	8-11	5	4-6
Household income								
< \$15,000	22	17-28	30	24-37	19	14-25	13	9-19
\$15,000 to \$24,999	20	16-25	27	23-32	14	11-19	15	11-19
\$25,000 to \$49,999	22	19-25	27	24-31	15	13-19	13	10-16
\$50,000 to \$74,999	19	16-23	24	20-28	11	9-14	10	7-13
\$75,000+	19	17-22	22	19-24	11	9-13	7	5-9
Race								
White, non-Hispanic	20	18-21	24	23-26	11	10-12	8	7-9
Black, non-Hispanic	17	13-21	25	21-31	22	18-27	21	17-27
Hispanic	27	20-35	27	20-35	21	15-29	21	15-29

Source: Pennsylvania Department of Health 2019 Adverse Childhood Experiences

Thirteen percent of adults in Pennsylvania, before age 18, lived with anyone who used illegal street drugs or abused prescriptions. And, 10 percent of adults in the state, before age 18, lived with anyone who was sentenced to serve time in prison. In general, people who identify as Black or Hispanic make up the majority of those who indicated an Adverse Childhood Experience.

Alcohol Consumption, Pennsylvania Adults, 2020

In 2019 and 2020, seventeen percent of adults identified as binge drinkers. In 2019, six percent indicated they were at risk of problem drinking or chronic drinking. These levels increased to seven percent in 2020. While those identifying as Hispanic held a higher percentage in alcohol consumption in 2019, in 2020, those identifying as Black, non-Hispanic and White, non-Hispanic had higher percentages.

Demographics	Binge Drinking* **		At Risk for Problem Drinking* ***		Chronic Drinking* ****	
	%	CI	%	CI	%	CI
All adults	17	15-18	7	7-8	7	6-8
Gender						
Male	21	19-23	8	6-9	11	9-12
Female	13	11-15	7	6-9	4	3-5
Age						
18-29	28	24-33	9	7-12	9	6-11
30-44	23	20-26	10	8-12	8	7-11
45-64	16	14-18	8	7-10	8	7-10
65+	5	3-6	3	2-5	5	4-6
Education						
< High school	11	7-16	4	2-7	4	2-8
High school	15	13-18	7	5-8	7	6-9
Some college	20	17-23	9	7-11	8	6-10
College degree	17	16-19	8	7-10	8	7-10
Household income						
< \$15,000	17	11-24	7	4-11	8	5-14
\$15,000 to \$24,999	9	7-13	5	3-8	5	3-8
\$25,000 to \$49,999	16	13-20	6	5-9	6	4-8
\$50,000 to \$74,999	19	16-23	8	6-11	10	8-13
\$75,000+	21	19-24	10	8-12	9	8-11
Race						
White, non-Hispanic	17	16-19	8	7-9	8	7-9
Black, non-Hispanic	17	13-22	7	5-10	7	4-10
Hispanic	16	12-23	5	3-9	5	3-8

Source: Pennsylvania Department of Health 2020 Behavioral Risk Factor Surveillance System (BRFSS) estimates

*Excludes missing, don't know, and refused

**Defined as having five or more drinks on one occasion for men and having four or more drinks on one occasion for women

***Defined as adult men having more than two drinks per day and adult women having more than one drink per day

****Defined as having an average of two drinks or more every day for the past 30 days

Alcohol Consumption, Pennsylvania Adults, 2019

Demographics	Binge Drinking* **		At Risk for Problem Drinking* ***		Chronic Drinking* ****	
	%	CI	%	CI	%	CI
All adults	17	16-18	6	5-7	6	5-7
Gender						
Male	22	20-24	6	5-8	9	8-11
Female	12	11-14	6	5-7	3	2-4
Age						
18-29	31	27-35	9	7-13	8	6-11
30-44	22	20-25	6	5-8	5	4-6
45-64	14	12-16	6	5-8	7	6-9
65+	5	4-7	3	2-4	4	3-6
Education						
< High school	14	10-19	4	2-6	5	3-9
High school	16	13-18	7	6-9	7	6-9
Some college	19	17-21	6	5-8	6	5-7
College degree	18	16-20	6	5-7	5	4-7
Household income						
< \$15,000	14	11-19	5	3-9	5	3-8
\$15,000 to \$24,999	13	10-17	5	3-7	5	3-8
\$25,000 to \$49,999	15	13-18	7	5-9	6	5-8
\$50,000 to \$74,999	17	14-20	5	4-8	7	5-9
\$75,000+	21	19-23	7	6-9	7	6-8
Race						
White, non-Hispanic	18	16-19	6	5-7	6	6-7
Black, non-Hispanic	15	11-18	5	4-8	5	3-8
Hispanic	20	15-27	8	5-12	6	4-11

Source: Pennsylvania Department of Health 2019 Behavioral Risk Factor Surveillance System (BRFSS) estimates

*Excludes missing, don't know, and refused

**Defined as having five or more drinks on one occasion for men and having four or more drinks on one occasion for women

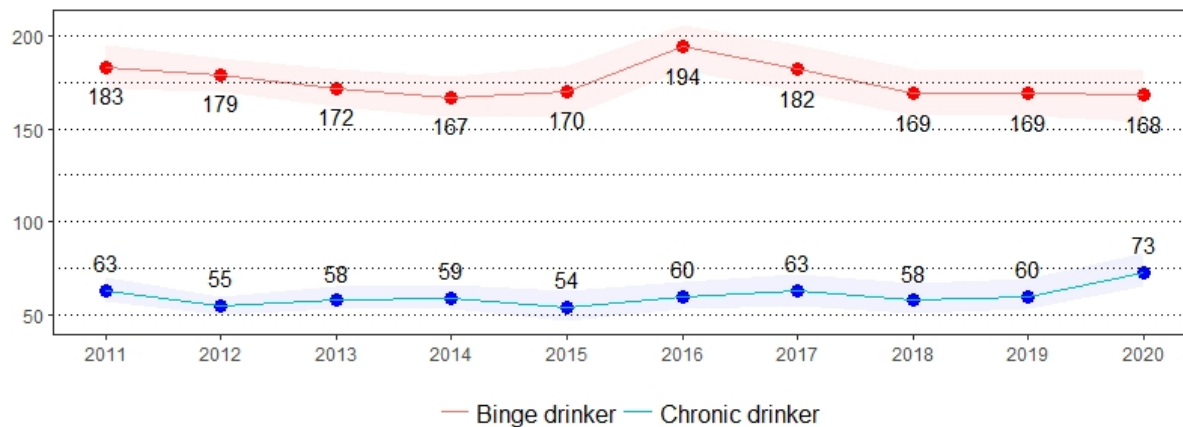
***Defined as adult men having more than two drinks per day and adult women having more than one drink per day

****Defined as having an average of two drinks or more every day for the past 30 days

Alcohol Consumption Prevalence per 1,000 Pennsylvania Population, Pennsylvania Adults, 2011-2020

According to the Alcohol Consumption Prevalence per 1,000 Pennsylvania Population, binge drinking in Pennsylvania peaked in 2016 and then began a downward trend, leveling off in 2019 and 2020. Chronic drinking levels in Pennsylvania saw a significant spike from 2018-2020. And according to the Behavioral Risk Factor Surveillance System (BRFSS) estimates (see appendix), the percentage of at-risk for heavy drinking increased from 6 percent (2019) to 7 percent (2020), while binge drinking remained at 17 percent in both 2019 and 2020.

Source: Pennsylvania Department of Health 2020 Behavioral Risk Factor Surveillance System (BRFSS) estimates



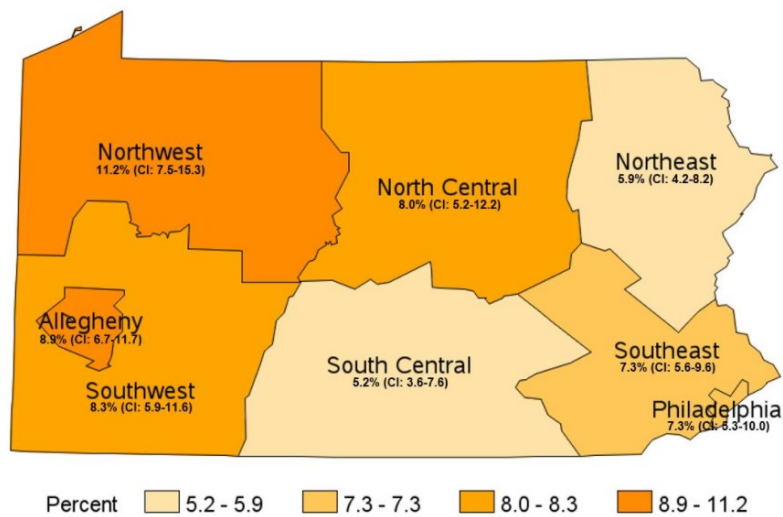
Concerning at-risk problem drinking, the districts remained relatively stable with the exception of the Northwest region, 11.2 percent (2020) and 4.7 percent (2019). The Allegheny and Southwest districts were slight increases.

Lackawanna, Luzerne, and Wyoming Counties saw a slight increase from 6.5 percent (2019) to 6.7 percent (2020).

Pike, Monroe, Susquehanna, and Wayne were 5.8 percent (2020). 2019's data was not statistically reliable.

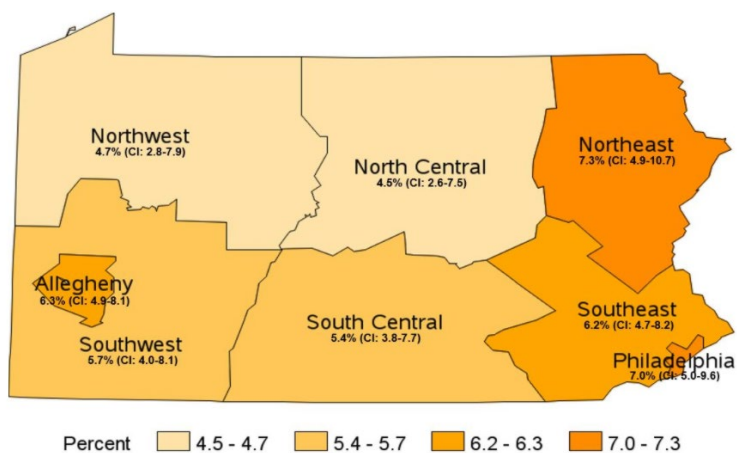
Centre, Columbia, Montour, Northumberland, Snyder, and Union saw an increase to 6.1 percent (2020) from 3.3 percent (2019).

At-Risk for Problem Drinking, Pennsylvania Health Districts, 2020



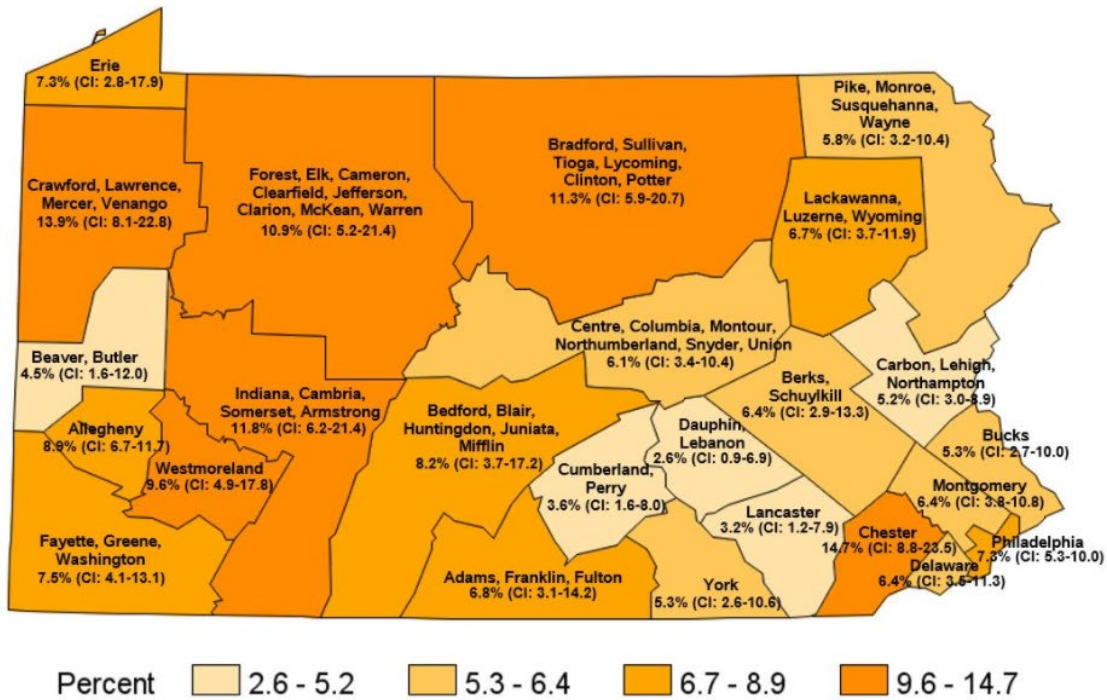
Source: Pennsylvania Department of Health 2020 Behavioral Risk Factor Surveillance System (BRFSS) estimates

At-Risk for Problem Drinking, Pennsylvania Health Districts, 2019



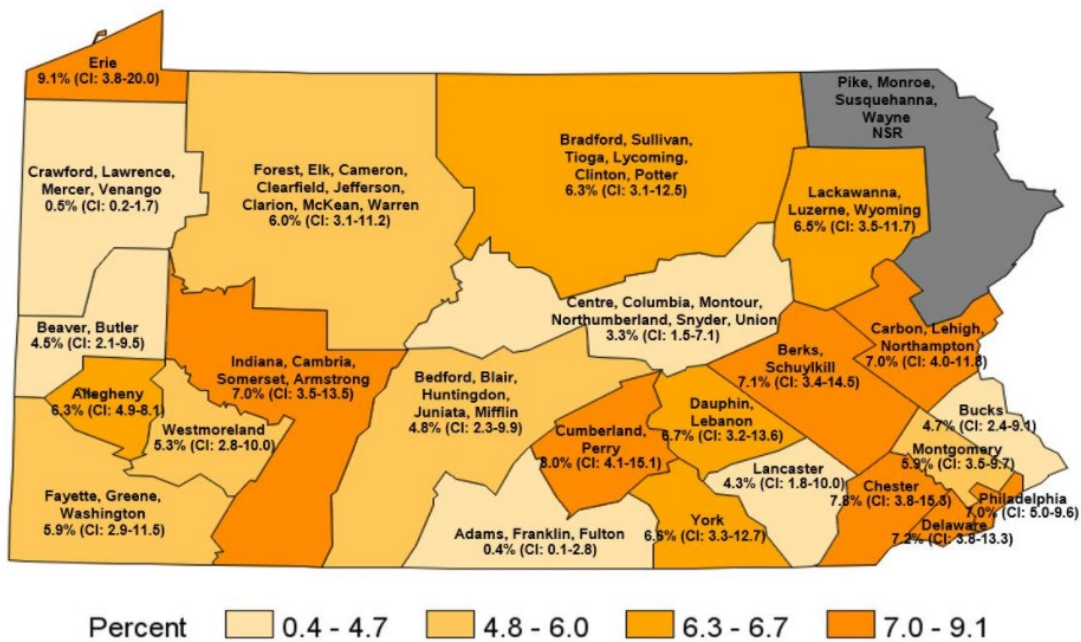
Source: Pennsylvania Department of Health 2019 Behavioral Risk Factor Surveillance System (BRFSS) estimates

At-Risk for Problem Drinking, Pennsylvania Regions, 2020



Source: Pennsylvania Department of Health 2020 Behavioral Risk Factor Surveillance System (BRFSS) estimates

At-Risk for Problem Drinking, Pennsylvania Regions, 2019



Source:

Pennsylvania Department of Health 2019 Behavioral Risk Factor Surveillance System (BRFSS) estimates

Note: If "NSR" is displayed, then the total response is less than 50, and/or the percentage prevalence is considered "not statistically reliable."

Depression, Pennsylvania Adults, 2020

In 2020, twenty percent of Pennsylvanians indicated they were ever told they have a depressive disorder. Fourteen percent of this group identified as male, and 26 percent identified as female. Of this 20 percent, thirty percent indicated they are Hispanic, 19 percent Black, and 20 percent White. This data is similar to 2019, with the exception of an increase in the Hispanic population, from 21 percent (2019) to 30 percent (2020).

Demographics	Ever Told They Have Some Form of Depressive Disorder*	
	%	CI
All adults	20	19-22
Gender		
Male	14	12-16
Female	26	24-28
Age		
18-29	24	20-28
30-44	25	22-28
45-64	19	17-22
65+	15	12-17
Education		
< High school	28	22-35
High school	19	17-22
Some college	25	22-28
College degree	15	13-17
Household income		
< \$15,000	43	35-51
\$15,000 to \$24,999	24	20-29
\$25,000 to \$49,999	24	20-28
\$50,000 to \$74,999	18	15-22
\$75,000+	14	12-17
Race		
White, non-Hispanic	20	18-22
Black, non-Hispanic	19	15-23
Hispanic	30	23-38

Source: Pennsylvania Department of Health 2020 Behavioral Risk Factor Surveillance System (BRFSS) estimates

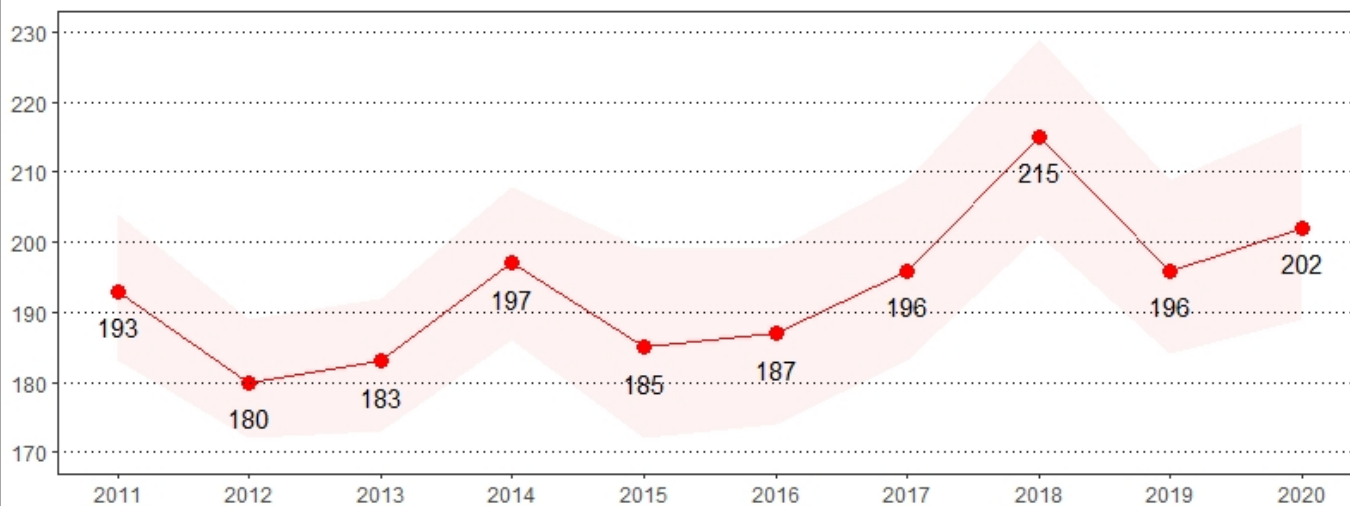
Depression, Pennsylvania Adults, 2019

Demographics	Ever Told They Have Some Form of Depressive Disorder*	
	%	CI
All adults	20	18-21
Gender		
Male	13	12-15
Female	26	24-28
Age		
18-29	26	22-29
30-44	21	18-24
45-64	20	18-22
65+	14	12-16
Education		
< High school	22	17-27
High school	19	17-21
Some college	23	20-26
College degree	17	15-19
Household income		
< \$15,000	37	32-43
\$15,000 to \$24,999	28	24-33
\$25,000 to \$49,999	21	18-24
\$50,000 to \$74,999	17	14-20
\$75,000+	14	12-16
Race		
White, non-Hispanic	20	19-22
Black, non-Hispanic	19	15-23
Hispanic	21	16-27

Source: Pennsylvania Department of Health 2019 Behavioral Risk Factor Surveillance System (BRFSS) estimates

Depression Prevalence per 1,000 Pennsylvania Population, Pennsylvania Adults, 2011-2020

After a sharp decrease in depression prevalence, there was a steady climb from 2015, spiking in 2018. Another drop took place in 2019 and began to rise again in 2020.

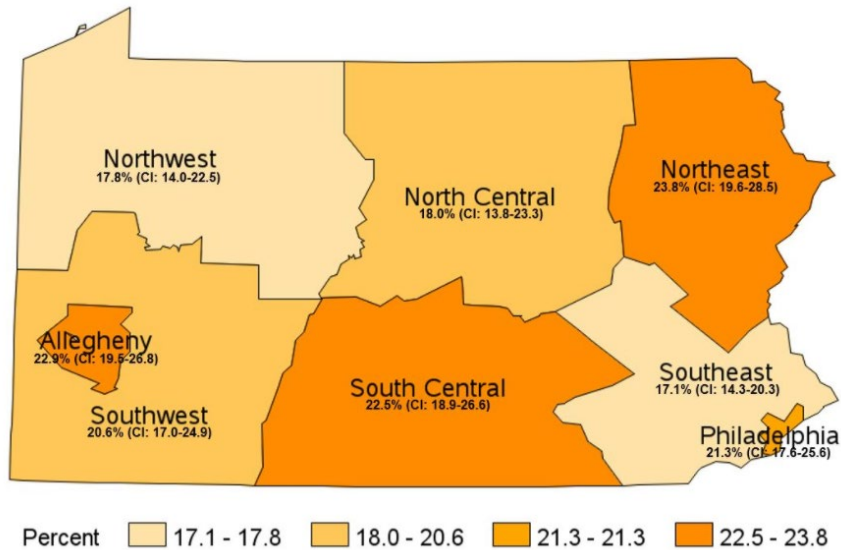


Color bands around estimates show 95% confidence intervals

Source: Pennsylvania Department of Health 2020 Behavioral Risk Factor Surveillance System (BRFSS) estimates

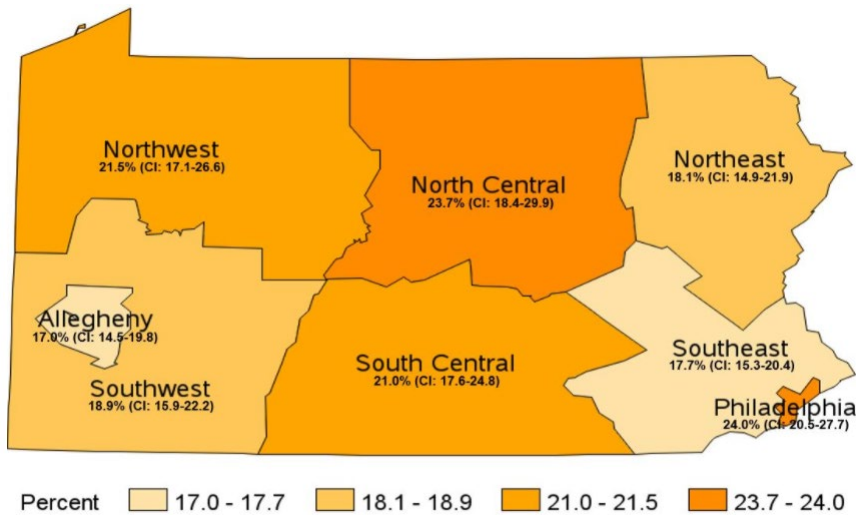
In 2020, the Northeast district had the highest incidence of being told they have some form of depressive disorder at 23.8 percent, a spike from 18.1 percent in 2019.

Ever Told They Have Some Form of Depressive Disorder, Pennsylvania Health Districts, 2020



Source: Pennsylvania Department of Health 2020 Behavioral Risk Factor Surveillance System (BRFSS) estimates

Ever Told They Have Some Form of Depressive Disorder, Pennsylvania Health Districts, 2019

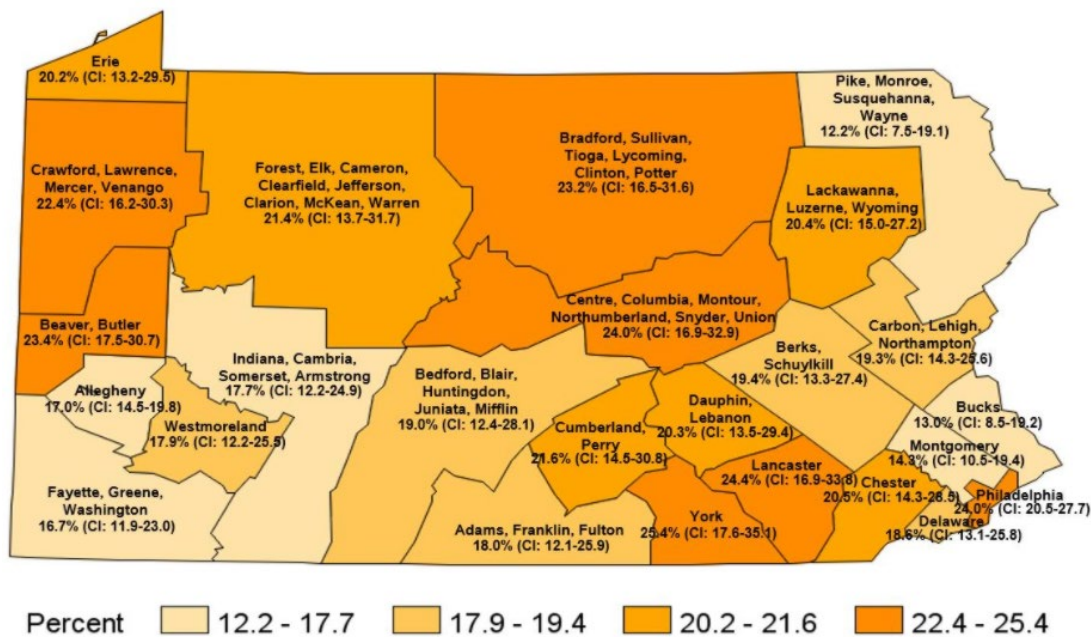


Source: Pennsylvania Department of Health 2019 Behavioral Risk Factor Surveillance System (BRFSS) estimates

With regard to Pennsylvania’s regions, Lackawanna, Luzerne, and Wyoming saw a slight increase to 22.1 percent in 2020 from 20.4 percent in 2019. Pike, Monroe, Susquehanna, and Wayne saw a significant spike to 26 percent from 12.2 percent in 2019. Finally, Centre, Columbia, Montour, Northumberland, Snyder, and Union decreased to 18.7 percent in 2020 from 24 percent in 2019. According to the BRFSS

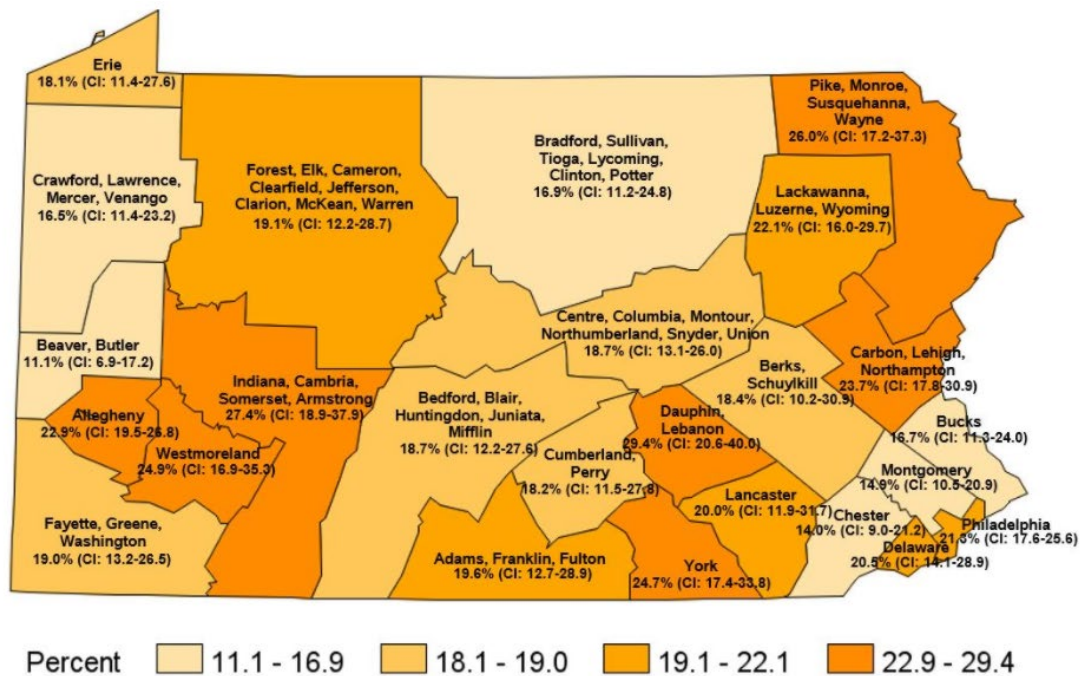
(see Appendix), there was a slight decrease in Pennsylvanians claiming their mental health was not good for one or more days, 38 percent in 2020 and 2019, from 39 percent in 2018.

Ever Told They Have Some Form of Depressive Disorder, Pennsylvania Regions, 2020



Source: Pennsylvania Department of Health 2020 Behavioral Risk Factor Surveillance System (BRFSS) estimates

Ever Told They Have Some Form of Depressive Disorder, Pennsylvania Regions, 2019



Source: Pennsylvania Department of Health 2019 Behavioral Risk Factor Surveillance System (BRFSS) estimates

Opioid Use, Pennsylvania Adults, 2020

Concerning opioid use in Pennsylvania in 2020, 28 percent of adults indicated that they had used any prescription pain medications in the past year. Six percent used prescription pain medicines not prescribed to them in the past year, and 2 percent used non-prescription street drugs that were injected or snorted in the past year. Of these areas, the percentage of males and females was nearly even. And, the age bracket of 30-44-year-olds held the highest percentage for this using prescription pain medicines not prescribed to them in the past year and using non-prescription street drugs that were injected or snorted in the past year. The race demographic that held the highest percentage in all three categories are those that identify as Black, non-Hispanic.

Demographics	Used Any Prescription Pain Medications in the Past Year*		Used Prescription Pain Medicines Not Prescribed to You in the Past Year*		Used Non-Prescription Street Drugs That Were Injected or Snorted in the Past Year*	
	%	CI	%	CI	%	CI
All adults	28	26-29	6	4-8	2	1-2
Gender						
Male	26	24-29	7	5-10	2	1-3
Female	29	26-32	5	3-9	1	1-3
Age						
18-29	19	15-24	NSR	NSR	2	1-5
30-44	23	19-27	7	4-13	4	2-6
45-64	27	24-30	5	3-8	1	0-2
65+	38	34-42	4	3-7	1	0-2
Education						
< High school	35	26-44	NSR	NSR	3	1-10
High school	28	25-31	6	4-9	1	1-2
Some college	29	26-33	5	3-10	2	1-4
College degree	24	22-26	7	5-11	1	1-2
Household Income						
< \$15,000	43	34-52	4	2-12	3	1-8
\$15,000 to \$24,999	37	31-43	8	4-15	2	1-5
\$25,000 to \$49,999	31	27-36	7	3-17	3	2-7
\$50,000 to \$74,999	24	20-29	7	3-12	1	0-2
\$75,000+	22	19-25	6	3-11	1	0-2
Race						
White, non-Hispanic	27	25-29	5	4-7	1	1-2
Black, non-Hispanic	34	28-40	10	5-19	4	2-8
Hispanic	32	23-43	NSR	NSR	NSR	NSR

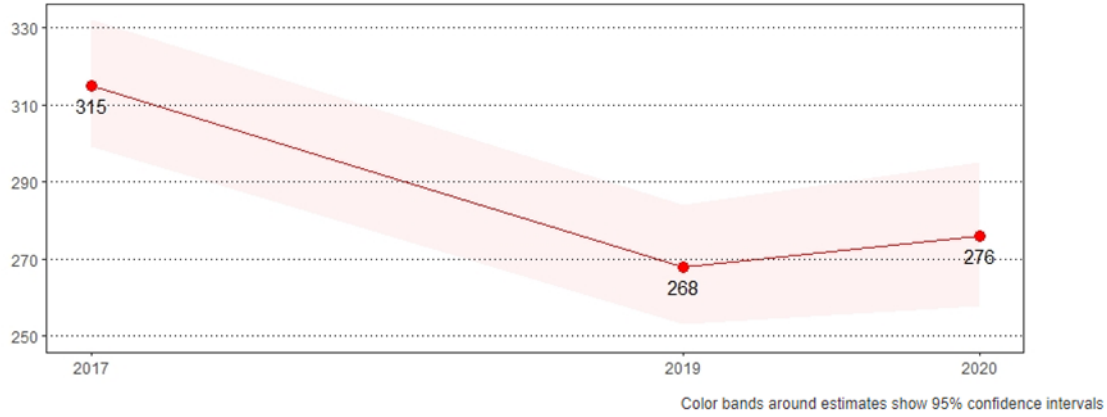
Source: Pennsylvania Department of Health 2020 Behavioral Risk Factor Surveillance System (BRFSS) estimates

*Excludes missing, don't know, and refused

Note: If "NSR" is displayed, then the total response is less than 50, and/or the percentage prevalence is considered "not statistically reliable."

According to the graph below, there was an increase from 2019 to 2020 after a steep decline in the use of prescription pain medications.

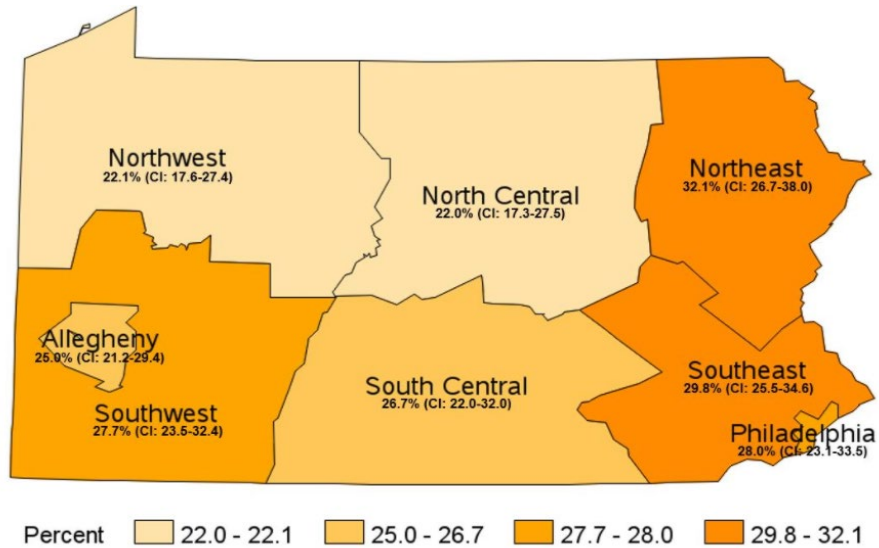
Used Any Prescription Paid Medications in the Past Year Prevalence per 1,000 Pennsylvania Population, Pennsylvania Adults, 2017-2020



Source: Pennsylvania Department of Health 2020 Behavioral Risk Factor Surveillance System (BRFSS) estimates

Concerning the use of any prescription pain medications across Pennsylvania in 2020, 32 percent of the Northeast district indicated that they used some type of prescription pain medications in the past year.

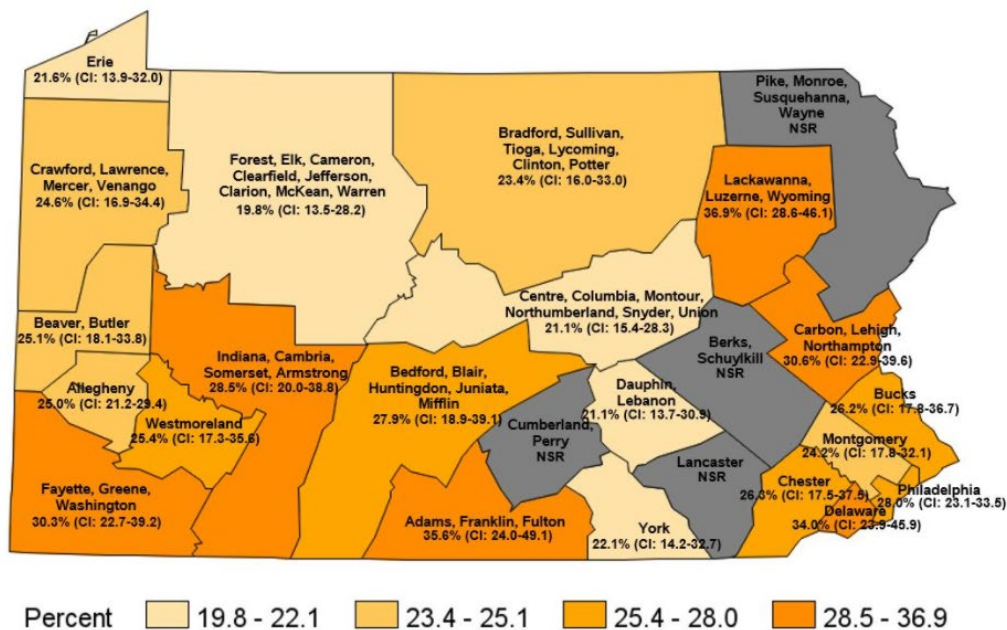
Used Any Prescription Pain Medications in the Past Year, Pennsylvania Health Districts, 2020



Source: Pennsylvania Department of Health 2020 Behavioral Risk Factor Surveillance System (BRFSS) estimates

Used Any Prescription Pain Medications in the Past Year, Pennsylvania Regions, 2020

In 2020, 36.9 percent of Lackawanna, Luzerne, and Wyoming indicated that they had used some type of prescription pain medication. The Centre, Columbia, Montour, Northumberland, Snyder, and Union region was significantly lower, at 21.1 percent. The Pike, Monroe, Susquehanna, and Wayne region's data was not statistically reliable for 2020.



If "NSR" is displayed, then the total response is less than 50 and/or the percentage prevalence is considered "not statistically reliable."

Source: Pennsylvania Department of Health 2020 Behavioral Risk Factor Surveillance System (BRFSS) estimates

Suicide Rates, Pennsylvania

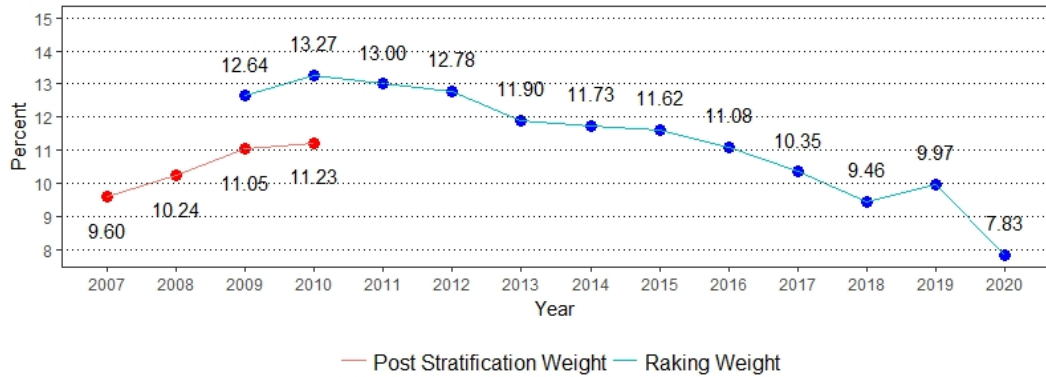
Pennsylvania overall experienced a decrease in suicide rates from 2017 (4,046) to 2019 (3,774). Luzerne County, Monroe, and Susquehanna Counties all experienced a slight decline. Although Luzerne County experienced a decrease in suicide rates, it is slightly higher than the state average. While Lackawanna County and Wayne County experienced a slight increase and Montour's rates in 2017 and 2019 were the same.

Additional BRFSS data detailing death rates by county as well as the underlying cause of death can be found in the appendix.

Health Care Access

As Chart 2 illustrates, raked weighting increased the prevalence estimates for each year from 2011 to 2015 among Pennsylvania adults who indicated they needed to see a doctor in the past 12 months but could not because of cost. The inclusion of cell phones did not have a major effect on the prevalence estimates.

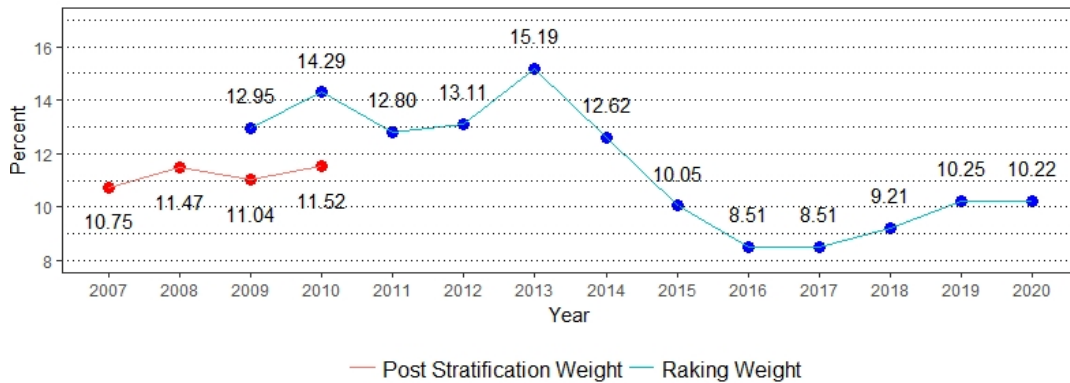
Chart 2: Adults Who Needed to See a Doctor in the Past Year but Could Not Because of Cost



Source: Centers for Disease Control and Prevention, 2020

The prevalence estimates for Pennsylvania adults who reported not having any kind of health care coverage also increase when raking is applied, as Chart 3 illustrates. Once again, the inclusion of cell phones had minimal effect on the prevalence estimates produced by the raking method.

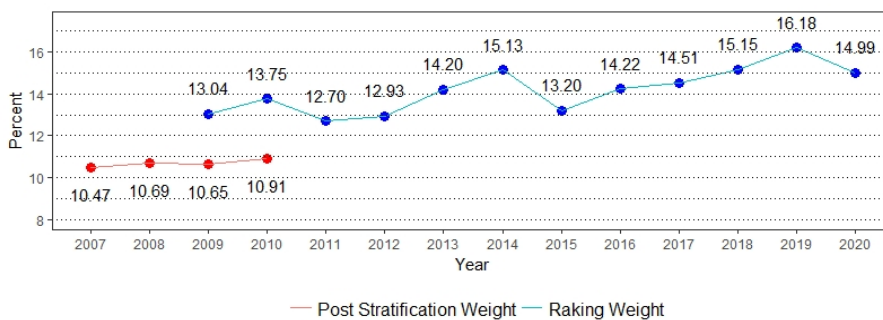
Chart 3: Adults Without Any Kind of Health Insurance



Source: Source: Centers for Disease Control and Prevention, 2020

Chart 4 shows that raking produces higher estimates for the proportions of people who do not have one person they think of as their personal doctor compared to the post-stratification method. Table 1 illustrates that young adults and minorities are more likely not to have their own doctor. The cell phone sample provides proportionally more respondents from those populations, and raking seems to have increased their contribution to the estimate.

Chart 4: Those Who DO NOT Have One Person They Think of as Their Personal Doctor or Health Care Provider



Source: Kaiser Family Foundation, 2021- [The Implications of COVID-19 for Mental Health and Substance Use – Issue Brief – 9440-03 | KFF](#)

Pediatric Behavioral Health Overview

The data below contains information related to pediatric behavioral health from 2018-2020 sourced from The Pennsylvania Health System Association of Pennsylvania (HAP).

The Pediatric Behavioral Health view data is based on the administrative claims data repository at PHC4. The data represents how many children visited PA hospitals in 2018, 2019 and 2020. These numbers represent total number of hospitals visits including multiple visits by one child at different time points.

The behavioral health table shows the numbers of children visited hospitals because of behavioral health difficulties (3 years data). The tables with Charges show the total charges filed by hospitals for all types of visits and for behavioral health.

The Claims data indicates that there has been a slight decrease in claims overall from 2018-2020, while behavioral health claims had a more significant decrease of approximately 14 percent. Although there was a decrease in claims, there was approximately an 8 percent increase in behavioral health charges from 2018-2020.

Pediatric Behavioral Health Overview

CY2018-2020

Statewide Claim and Charge Volume

Claims

All		Behavioral Health	
2018	1,504,568	2018	19,203
2019	1,643,030	2019	19,364
2020	1,491,757	2020	16,419
Total	1,549,504	Total	54,986

Charges

All		Behavioral Health	
2018	107,748,046,739	2018	\$ 499,407,172
2019	107,748,046,739	2019	\$ 530,924,767
2020	106,376,713,000	2020	\$ 539,824,155
Total	321,872,806,478	Total	\$ 1,570,156,093

Data source: PHC4 Inpatient Claims Files 201801-202004



The tables below demonstrate the demographic distribution of pediatric visits related to behavioral health. Notably from 2018-2020, regarding race, there was a slight increase of visits by those that identify as White, and also increases in the Asian population, those who identify as two or more races, and those listed as unknown. There was a decrease in visits by those who identify as Black.

From 2018-2020 there was a slight increase in visits by those who are non-panic and a slight decrease in visits by those who identify as Hispanic.

And, from 2018-2020 there was an increase in the percentage of visits by female pediatric patients and a decrease in male pediatric patients.

Pediatric Behavioral Health Overview

CY2018-2020

Demographics

	Race						Ethnicity						
	2018		2019		2020		2018		2019		2020		
White Alone	12,591	65.57%	12,931	66.78%	11,144	67.87%	Non-Hispanic	17,619	91.75%	17,803	91.94%	15,165	92.36%
Black Alone	3,661	19.06%	3,392	17.52%	2,655	16.17%	Hispanic	1,584	8.25%	1,561	8.06%	1,254	7.64%
Other	1,849	9.63%	1,705	8.80%	1,345	8.19%							
Unknown	658	3.43%	857	4.48%	786	4.79%							
Two or More Race Groups	224	1.17%	252	1.30%	271	1.66%							
Asian Alone	203	1.06%	186	0.96%	195	1.19%							
American Indian and Alaskan Native Alone	10	0.05%	23	0.12%	20	0.12%							
Native Hawaiian or Pacific Islander	7	0.04%	8	0.04%	3	0.02%							

	Gender					
	2018		2019		2020	
Female	11,351	59.11%	11,485	59.32%	10,499	63.96%
Male	7,851	40.89%	7,876	40.68%	5,916	36.04%

Data source: PwC4 Inpatient Claims Files 201801-2020Q4



The data below details data related to behavioral health related hospital visits by children in PA. Admission source explains where the patients came from, the admission type shows the admission area classification and facility type is the type of hospital patient was admitted. Dx category is the diagnosis based on the ICD codes classification. Length of stay represents the days patient spent during the hospital stay.

Admission type remained relatively stable with the exception of those labeled as emergency, which saw a decrease and an increase in visits labeled as urgent. Pertaining to the length of stay, there were only decreases in the 0-7 day stay range. All other categories saw at least slight increases, with the largest increase in the 8-14 and 15-21 stay ranges.

With regard to diagnosis codes, there was a slight decrease in those diagnosed with depression, bipolar, and anxiety. But, there was a slight increase in those diagnosed as Other. The percentage diagnosed with Schizophrenia remained stable from 2018-2020. But, the percentage diagnosed as suicidal rose from 3.9 percent to 4.6 percent from 2018-2020.

Pediatric Behavioral Health Overview

CY2018-2020
Utilization

Admission Source						
	2018		2019		2020	
Another Hospital	7,927	41.3%	9,078	46.9%	8,259	50.3%
Non-healthcare Facility	6,824	35.5%	6,737	34.8%	5,707	34.8%
Clinic or Physician's office	2,678	13.9%	1,797	9.3%	1,063	6.5%
Another Healthcare Facility	1,496	7.8%	1,560	8.1%	1,268	7.7%
Other	278	1.4%	192	1.0%	122	0.7%

Admission Type						
	2018		2019		2020	
Emergency	8,469	44.1%	7,759	40.1%	5,800	35.3%
Elective	6,764	35.2%	6,819	35.2%	5,865	35.7%
Urgent	3,913	20.4%	4,415	22.8%	4,718	28.7%
Trauma Center	52	0.3%	365	1.9%	29	0.2%
Info Unavailable	4	0.0%	6	0.0%	7	0.0%
Newborn	1	0.0%				

Dx Category						
	2018		2019		2020	
Depression	11,998	62.5%	12,436	64.2%	10,052	61.2%
Other	3,685	19.2%	3,828	19.8%	3,545	21.6%
Bipolar	1,405	7.3%	1,167	6.0%	1,053	6.4%
Anxiety	952	5.0%	903	4.7%	663	4.0%
Suicidal	742	3.9%	651	3.4%	748	4.6%
Schizophrenia	421	2.2%	379	2.0%	358	2.2%

Length of Stay						
	2018		2019		2020	
0 - 7 Days	8,775	45.7%	8,286	42.8%	6,381	38.9%
8-14 Days	6,849	35.7%	6,976	36.0%	6,106	37.2%
15-21 Days	1,749	9.1%	2,069	10.7%	1,936	11.8%
22-28 Days	729	3.8%	781	4.0%	749	4.6%
29-35 Days	317	1.7%	333	1.7%	325	2.0%
36-42 Days	152	0.8%	195	1.0%	187	1.1%
43-49 Days	120	0.6%	136	0.7%	146	0.9%
50-56 Days	80	0.4%	113	0.6%	116	0.7%
57+ Days	432	2.2%	475	2.5%	473	2.9%

Facility Type						
	2018		2019		2020	
General Acute	3,647	19.0%	3,524	18.2%	3,250	19.8%
Psychiatric	14,250	74.2%	14,600	75.4%	11,864	72.3%
Other	1,306	6.8%	1,240	6.4%	1,305	7.9%

Data source: PHC4 Inpatient Claims Files 201801-2020Q4




The table below represents discharge locations, the location the patient was discharged to. Most of the data in this category from 2018-2020 is stable or represents slight decreases. There were slight increases in Discharged to a Designated Cancer Center or Children's Hospital and Left Against Medical Advice or Discontinued Care.

Pediatric Behavioral Health Overview
 CY2018-2020
 Discharge Status

Top 10 Discharge Statuses		2018		2019		2020	
Discharged to Home or Self Care (routine discharge)		17,372	90.7%	17,571	91.0%	14,419	88.1%
Discharged/transferred to a Designated Cancer Center or Children's hospital		466	2.4%	552	2.9%	763	4.7%
Discharged/transferred to a psychiatric hospital or psychiatric distinct part unit of a hospital		518	2.7%	472	2.4%	592	3.6%
Left against medical advice or discontinued care		379	1.5%	364	1.9%	294	1.8%
Discharged/transferred to another Type of Health Care Institution not Defined Elsewhere in this code list		286	1.5%	142	0.7%	81	0.5%
Discharged/transferred to a short term general hospital for inpatient care		53	0.3%	89	0.5%	64	0.4%
Discharged/transferred to an inpatient rehabilitation facility including rehabilitation distinct part units of a hospital		80	0.4%	54	0.3%	39	0.2%
Discharged/transferred to Court/Law Enforcement		58	0.3%	30	0.2%	28	0.2%
Discharged/transferred to home under care of organized home health service organization in anticipation of covered skilled care		31	0.2%	21	0.1%	39	0.2%
Other		12	0.1%	6	0.0%	39	0.2%

Data source: PHC4 inpatient Claims File 201801-202004

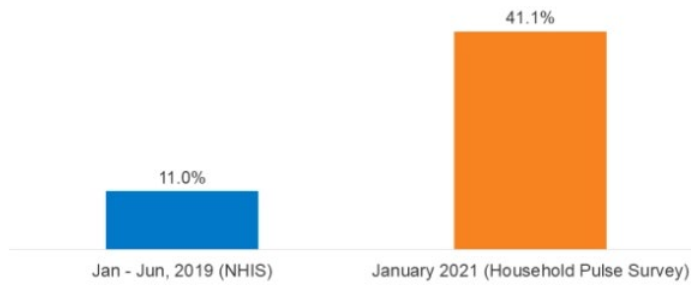


National Effects of COVID-19

According to national data obtained through the Kaiser Family Foundation (KFF), there was a significant increase in the average share of adults reporting symptoms of anxiety disorder and/or depressive disorder in January 2021 (41.1%) when compared to January-June 2019 (11.0%).

Figure 1

Average Share of Adults Reporting Symptoms of Anxiety Disorder and/or Depressive Disorder, January-June 2019 vs. January 2021



NOTES: Percentages are based on responses to the GAD-2 and PHQ-2 scales. Pulse findings (shown here for January 6 – 18, 2021) have been stable overall since data collection began in April 2020.
SOURCE: NHIS Early Release Program and U.S. Census Bureau Household Pulse Survey. For more detail on methods, see: <https://www.cdc.gov/nchs/data/nhis/earlyrelease/ERmentalhealth-508.pdf>



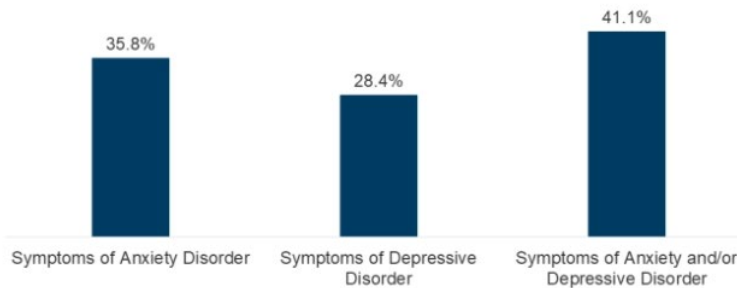
Figure 1: Average Share of Adults Reporting Symptoms of Anxiety Disorder and/or Depressive Disorder, January-June 2019 vs. January 2021

Source: Kaiser Family Foundation, 2021- [The Implications of COVID-19 for Mental Health and Substance Use – Issue Brief – 9440-03 | KFF](#)

Additionally, the share of adults reporting anxiety and/or depressive disorder symptoms during the COVID-19 pandemic was 41.1 percent.

Figure 2

Share of Adults Reporting Symptoms of Anxiety or Depressive Disorder During the COVID-19 Pandemic



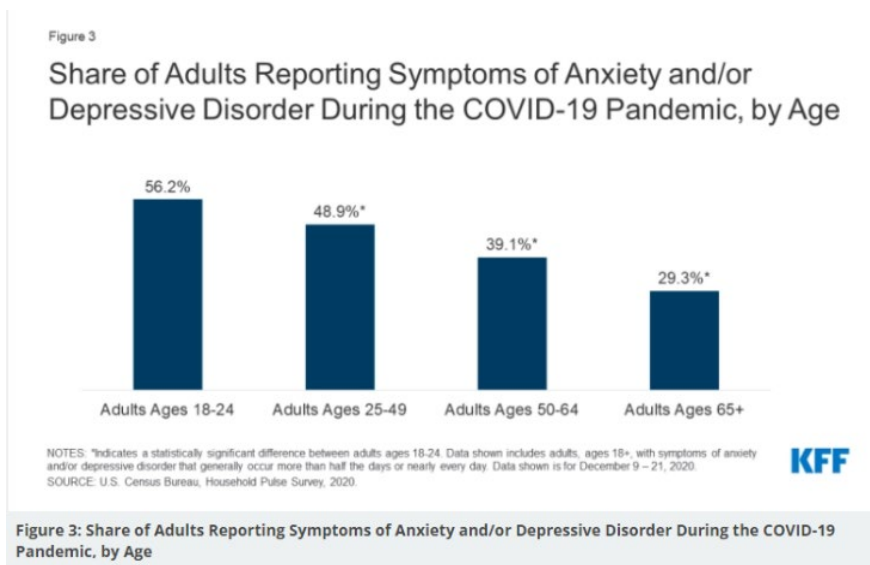
NOTES: These adults, ages 18+, have symptoms of anxiety or depressive disorder that generally occur more than half the days or nearly every day. Data shown is for January 6 – 18, 2021.
SOURCE: U.S. Census Bureau, Household Pulse Survey, 2020 - 2021.



Figure 2: Share of Adults Reporting Symptoms of Anxiety or Depressive Disorder During the COVID-19 Pandemic

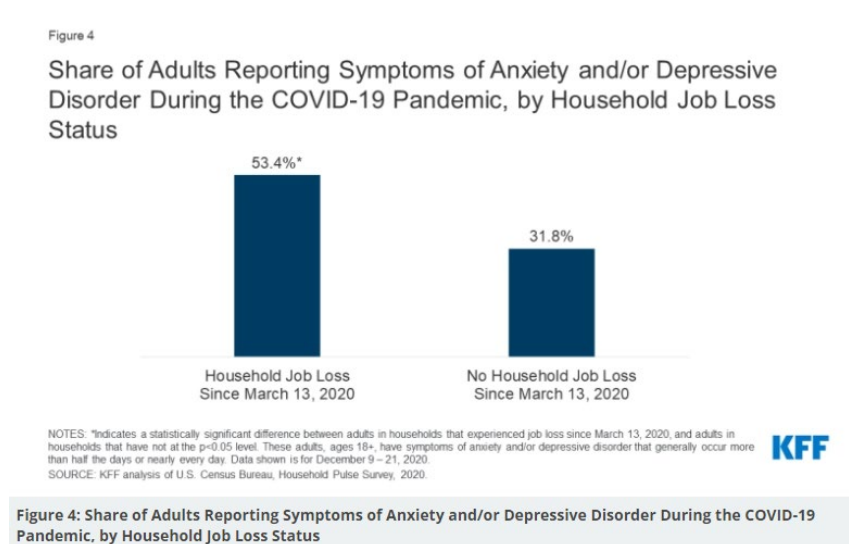
Source: Kaiser Family Foundation, 2021- [The Implications of COVID-19 for Mental Health and Substance Use – Issue Brief – 9440-03 | KFF](#)

The age group that was most likely to report symptoms of anxiety and/or depressive disorder during the COVID-19 pandemic was adults ages 18-24 (56.2%), followed by adults ages 25-49 (48.9%), adults ages 50-64 (39.1%), and finally, adults ages 65+ (29.3%). It is not unreasonable then to hypothesize that adults ages 18-49 reported anxiety and/or depressive disorder at higher levels because these age groups also make up the secondary education and prime workforce age groups.



Source: Kaiser Family Foundation, 2021- [The Implications of COVID-19 for Mental Health and Substance Use – Issue Brief – 9440-03 | KFF](#)

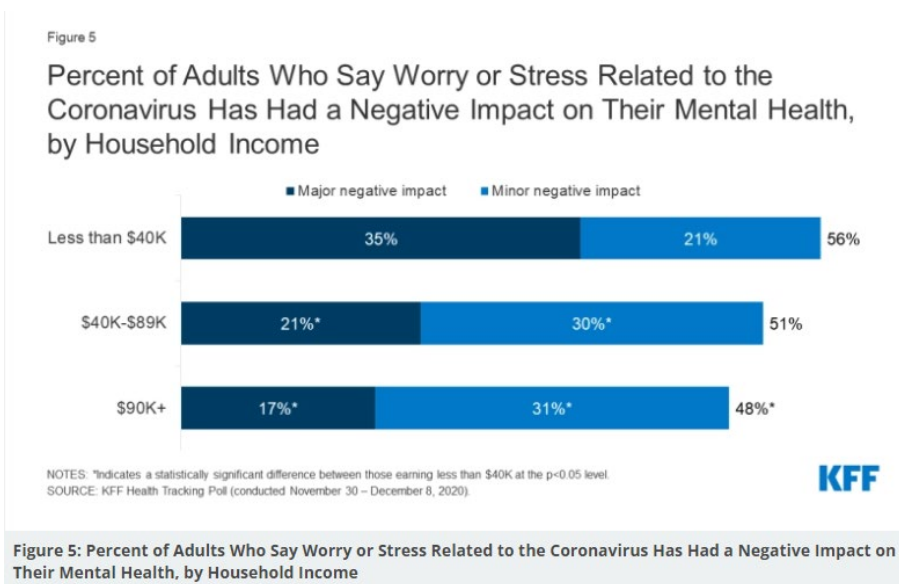
In line with the data above, the households that experienced job losses since March 2020 also had a significantly higher reporting rate of anxiety and/or depressive disorder (53.4%) than households with no job losses (31.8%).



Source: Kaiser Family Foundation, 2021- [The Implications of COVID-19 for Mental Health and Substance Use – Issue Brief – 9440-03 | KFF](#)

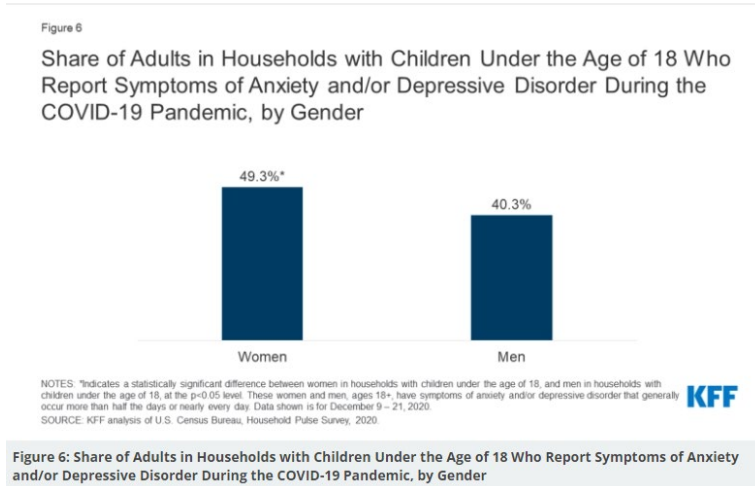
Furthermore, the percentage of adults who say worry or stress related to the Coronavirus has had a negative impact on their mental health is directly related to income. Fifty-six percent of households that make less than \$40K indicated that worry or stress related to the Coronavirus had a negative impact on their mental health. Thirty-five percent of the 56 percent said that it has had a major negative impact on their mental health and 21 percent said it has had a minor negative impact. Conversely, only 48 percent of those making \$90K+ indicated worry or stress related to the Coronavirus that has negatively impacted

their mental health. Seventeen percent of the 48 percent said it has had a major negative impact, while 31 percent noted a minor negative impact.



Source: Kaiser Family Foundation, 2021- [The Implications of COVID-19 for Mental Health and Substance Use – Issue Brief – 9440-03 | KFF](#)

Additionally, women, who have children under 18 in their household, reported anxiety and/or depressive disorder symptoms during the COVID-19 pandemic at a higher rate (49.3%) than men (40.3%).



Source: Kaiser Family Foundation, 2021- [The Implications of COVID-19 for Mental Health and Substance Use – Issue Brief – 9440-03 | KFF](#)

Those who identify as Other Non-Hispanic, Non-Hispanic Black, and Hispanic or Latino also reported anxiety and/or depressive disorder symptoms during COVID-19 at higher rates than Non-Hispanic Whites and Non-Hispanic Asians.

Figure 7

Share of Adults Reporting Symptoms of Anxiety and/or Depressive Disorder During the COVID-19 Pandemic, by Race/Ethnicity

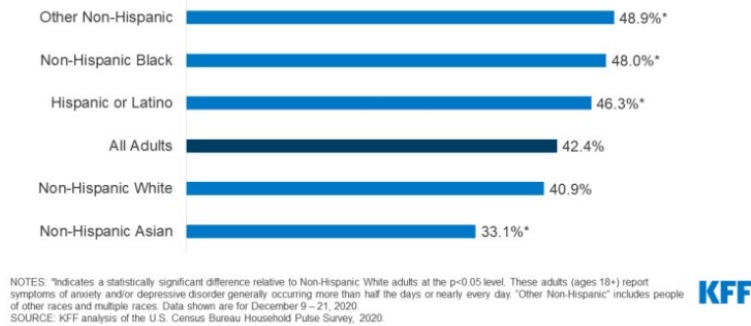


Figure 7: Share of Adults Reporting Symptoms of Anxiety and/or Depressive Disorder During the COVID-19 Pandemic, by Race/Ethnicity

Source: Kaiser Family Foundation, 2021- [The Implications of COVID-19 for Mental Health and Substance Use – Issue Brief – 9440-03 | KFF](#)

When looking at the data for essential and nonessential workers, nonessential workers reported a higher percentage of symptoms of anxiety or depressive disorder (42%), started or increased substance use to cope with stress or emotions related to COVID-19 at higher rates (25%) and reported seriously considering suicide in the past 30 days at a much more significant rate (22%) compared to nonessential workers (8%).

Figure 8

Among Essential and Nonessential Workers, Share of Adults Reporting Mental Distress and Substance Use, June 2020

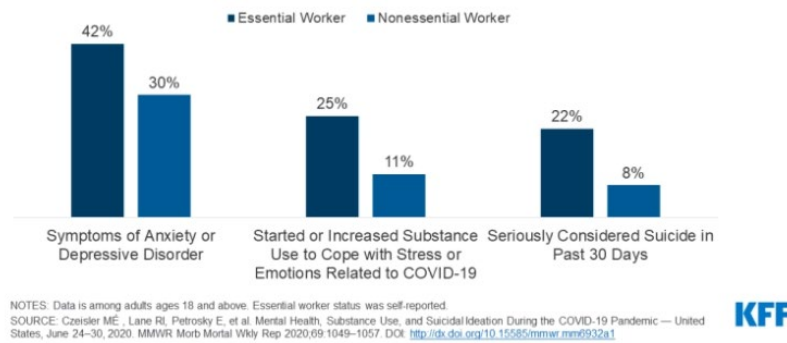


Figure 8: Among Essential and Nonessential Workers, Share of Adults Reporting Mental Distress and Substance Use, June 2020

Source: Kaiser Family Foundation, 2021- [The Implications of COVID-19 for Mental Health and Substance Use – Issue Brief – 9440-03 | KFF](#)

Geisinger Northeast Region and Behavioral Health Data

In 2021, Robert Wood Johnson’s *County Health Rankings* included a component that calculated the population ratio per 1 mental health provider (xx:1). The organization identified “top performers” as being in the 90th percentile, which meant having a ratio of 270:1. During this timeframe, Pennsylvania held a ratio of 450:1, well below the 90th percentile. Furthermore, the largest Northeastern Pennsylvania counties had even worse ratios (Lackawanna County – 470:1 & Luzerne County – 920:1), indicating a need for additional mental health providers in the region.

Robert Wood Johnson BH Provider Ratios	
Top U.S. Performers (90 th %)	270:1
Pennsylvania (Overall)	451:1
Lackawanna (Scranton)	470:1
Luzerne (Wilkes-Barre)	920:1

Source: [Mental health providers in Pennsylvania | County Health Rankings & Roadmaps](#)

Geisinger’s Strategy & Market Advancement (SMA) team created a provider supply gap analysis by using the 270:1 ratio to calculate the provider demand for mental health providers in the Scranton & Wilkes-Barre service areas and internal files plus internet research to create a comprehensive list of existing mental health providers in the communities.

The analysis indicates significant provider shortages in all communities examined, with the largest deficit in Wilkes-Barre (-529 providers) followed by Scranton (-143 providers). This data coincides with the findings from Robert Wood Johnson.

Additionally, Sg2, a health care analytics organization, is projecting a 1.5% increase in Mental Health diagnoses between 2019 and 2024. One of the Sg2 Impact of Change publications states, “Outpatient growth for behavioral health will outpace every other service line in the Sg2 forecast due to the continued stress and repercussions from the COVID-19 pandemic. Rates of anxiety and depression have increased significantly and will drive both immediate and long-term demand for OP services for both mental health and substance use.

Emergency departments can expect to see amplified acuity and suicidality in both children and adults due to stressors as well as delays in care brought about by the pandemic.

Geisinger Region	Hospital Referral Region	Hospital Service Area City	Sg2 2024 Forecast*	Estimated # of Providers Needed**	Providers in Community***	Provider Gap
Northeast	Scranton	Carbondale	1.0%	105	8	-97
Northeast	Scranton	Honesdale	1.6%	132	42	-90
Northeast	Scranton	Scranton	1.8%	802	659	-143
Northeast	Scranton	Susquehanna	0.2%	44	21	-23
Northeast	Wilkes-Barre	Wilkes-Barre	1.4%	780	251	-529
Total			1.5%	1,862	981	-881

*Sg2 (v2020)

**Calculated using 2021 population (Sg2) and RWJ Top U.S. Performer Ratio (270:1)

***GHP Par list & internet reseach; assumes every provider is a 1.0FTE; split FTEs if multiple locations are known; includes Psychiatrists, Psychologists, Licensed Clinical Social Workers, Marriage & Family Therapists; & mental health providers treating D&A, as well as advanced parctice nurses specializing in mental healthcare; does not included telehealth services based outside of the community.

Geisinger Behavioral Health Data

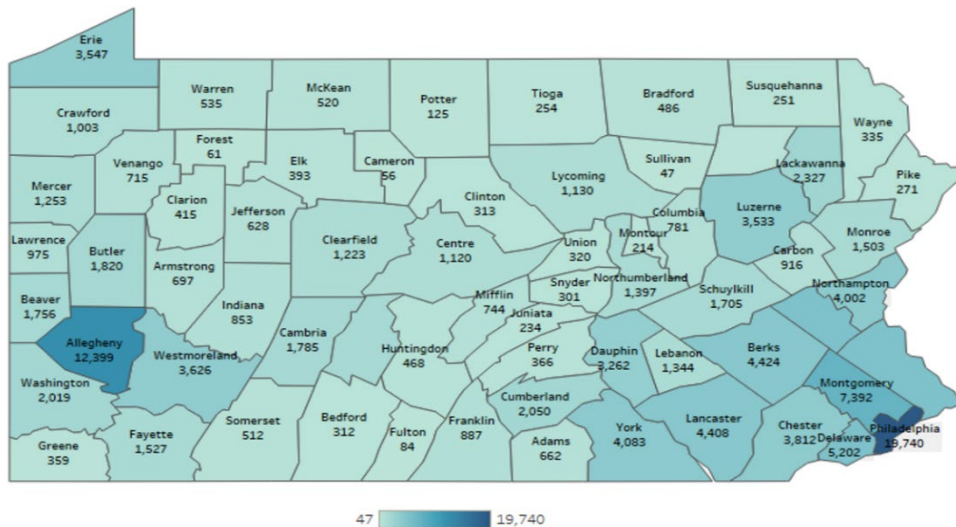
Inpatient claims data for 2019 (January 1, 2019- December 31, 2019) were extracted from the Pennsylvania Health Care Cost Containment Council (PHC4) data set at Hospital Association of Pennsylvania (HAP) using ICD10 (International Classification of Diseases) codes (at any position) for mental health and substance use disorders. This work was performed in collaboration with HAP.

Visits	BH	All	Visits	BH	All
Q1 2020	33,332	394,473	Q1 2018	35,545	430,513
Q2 2020	27,018	328,834	Q2 2018	36,183	426,268
Q3 2020	31,075	382,103	Q3 2018	34,895	416,943
Q4 2020	29,962	386,347	Q4 2018	34,817	414,436
Total	121,387	1,491,757	Total	141,440	1,688,160

Quarter	BH Charges	All Charges	Quarter	BH Charges	All Charges
Q1 2020	\$1,193,894,607	\$26,969,953,443	Q1 2018	\$1,134,889,405	\$26,400,189,449
Q2 2020	\$996,104,628	\$22,675,263,655	Q2 2018	\$1,133,354,699	\$25,878,731,637
Q3 2020	\$1,198,374,932	\$27,502,989,185	Q3 2018	\$1,137,840,554	\$25,989,604,504
Q4 2020	\$1,224,523,081	\$29,228,506,717	Q4 2018	\$1,123,647,966	\$26,782,254,288

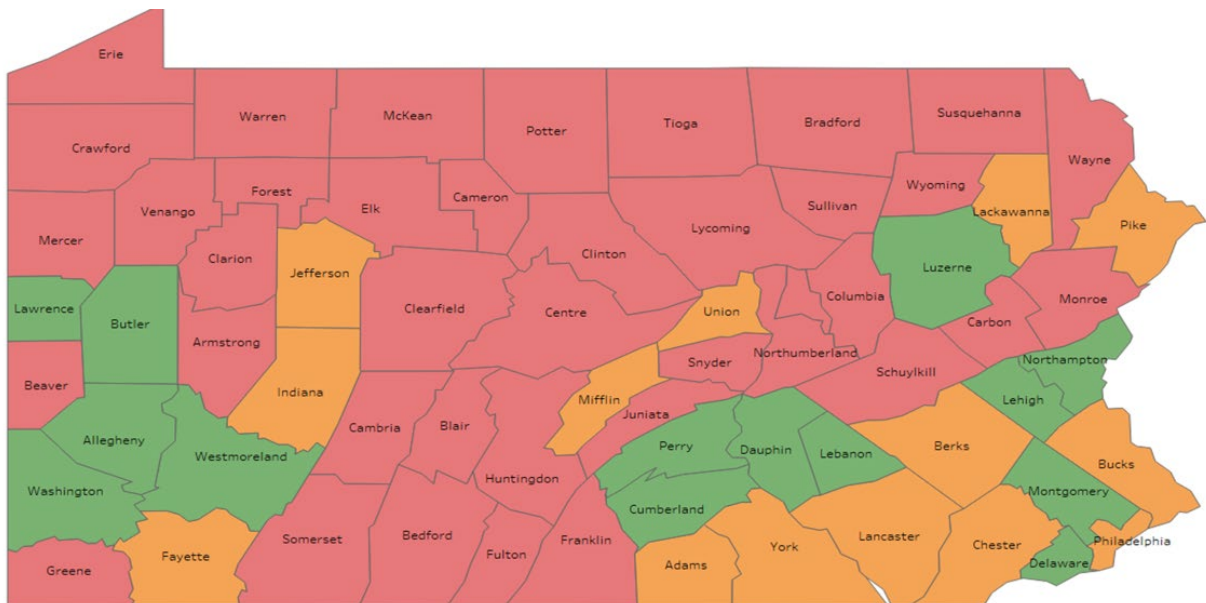
2020			2018		
Total	\$4,612,897,248	\$106,376,713,000	Total	\$4,529,732,624	\$105,050,779,878

The hospital inpatient visits in numbers by counties depict that Luzerne and Lackawanna Counties have the highest number of inpatient hospital visits in the Northeast region at 3,533 and 2,327, respectively. The higher number of visits in these two counties compared with most neighboring counties likely reflects that Lackawanna and Luzerne Counties are regional hubs for health care services to residents in neighboring counties.



The Mental Health Professional Shortage Areas (HPSAs) map, below, indicates that while Luzerne County is not experiencing a mental health professional shortage, Lackawanna County is partially in a mental health professional shortage area, and a significant number of regions throughout Pennsylvania are entirely in a mental health professional shortage area.

None
 Part
 Whole



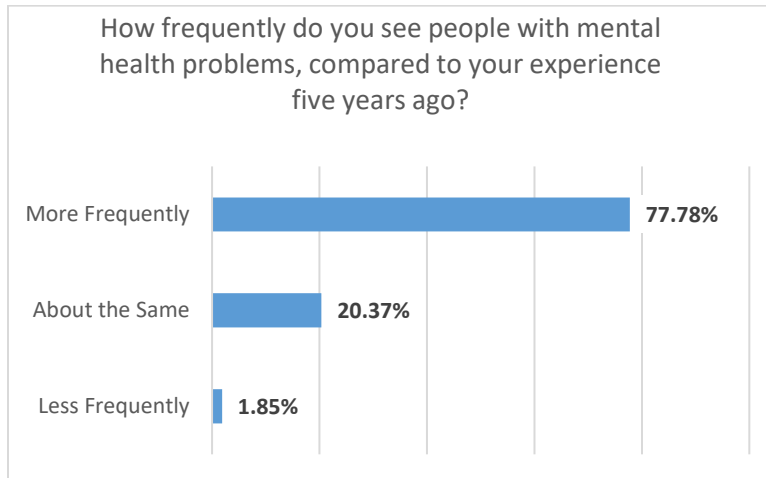
Survey Data

What follows is a summary and analysis of the two Regional Behavioral Health Needs Assessments that were distributed. The first survey was distributed to providers, and the second was distributed to patients and/or caregivers.

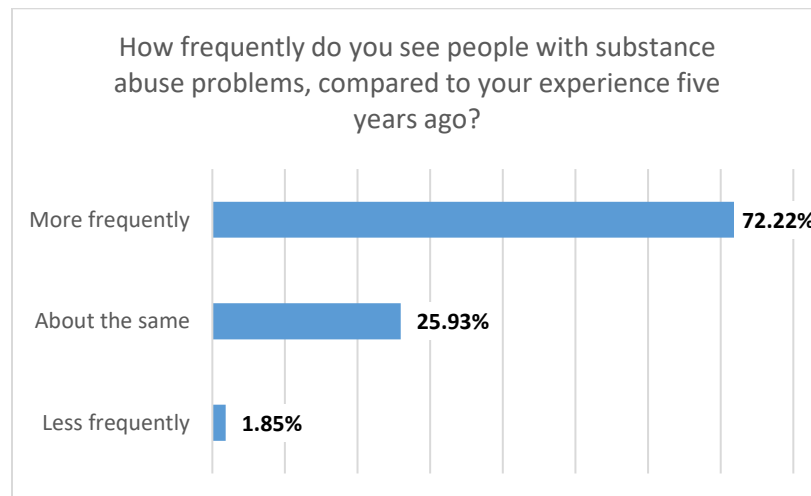
Provider Results

The provider survey elicited 54 responses with an 87 percent completion rate.

When providers were asked how frequently they see people with mental health problems compared to five years ago, the majority of respondents stated “More Frequently,” at 77 percent.

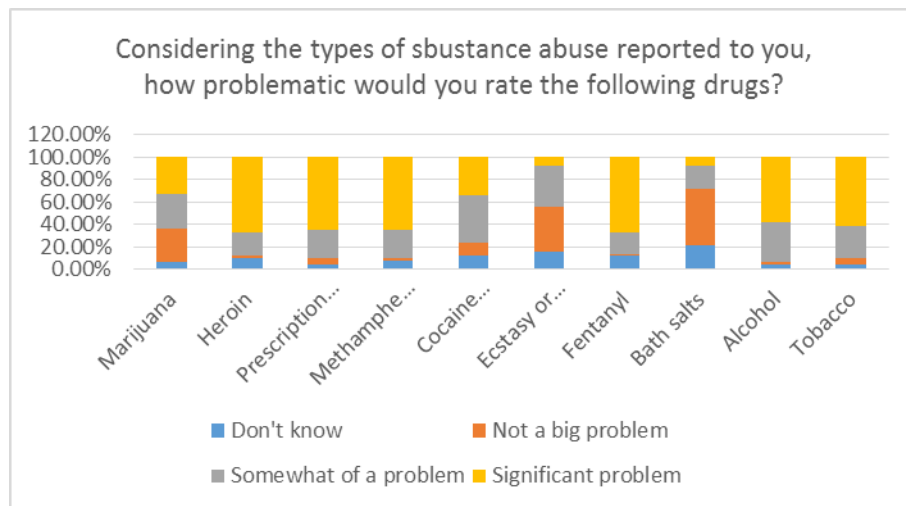


When providers were asked, “How frequently do you see people with substance abuse problems, compared to your experience five years ago?” the majority of respondents stated “More Frequently,” at 72 percent.



Question three asks respondents, “Considering the types of substance abuse reported to you, how problematic would you rate the following drugs?” The majority of respondents who stated that a

particular drug was “Not a big problem” was bath salts, at 50 percent. The majority of respondents who stated that a particular drug was a “Significant problem” were fentanyl and heroin, each at 67 percent.



Question four asks respondents, “Are there certain demographic groups (race, nationality, age, income, sexual orientation, etc.) that seem disproportionately impacted by mental health issues? Some of the most identified demographics were Lower-income individuals, African Americans, Hispanics, Whites/Caucasian, LGBTQ+, Youth/Children, or generally stated “No Specific group,” “All Groups,” or “All demographics.”

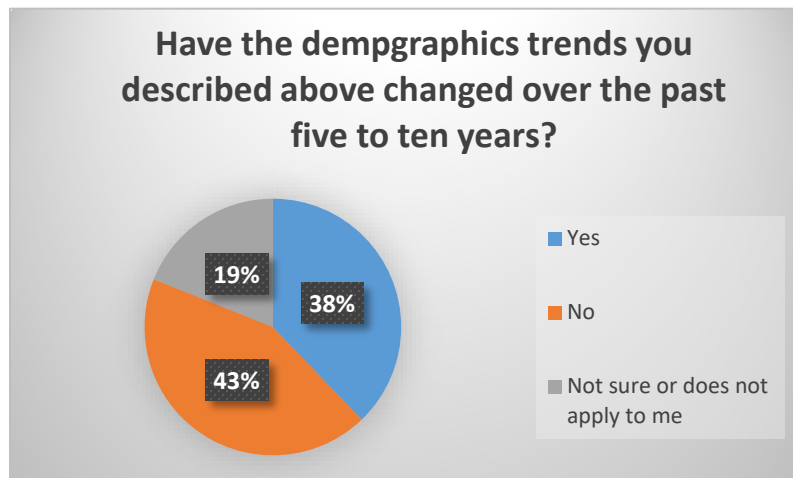
Question five asks respondents, “Are there certain demographic groups (race, nationality, age, income, sexual orientation, etc.) that seem disproportionately impacted by substance abuse issues? Please identify.” There is not much difference in opinion between affected demographics between Mental health issues and Substance abuse issues. All of the same groups were identified in both questions, including African Americans, Hispanics, Whites/Caucasian, LGBTQ+, Youth/Children, or generally stated “No Specific group,” “All Groups,” or “All demographics.”

When asked, “Have the demographic trends you described above changed over the past five to ten years? Please describe.”

There are very close margins in regards to whether people believe demographic trends have changed over the past five to ten years.

There are slightly more people who believe the demographic trends have not changed. While

those who did say they changed say it affects the youth primarily.



Respondents were also asked to “Please indicate your level of agreement with the following statements.”

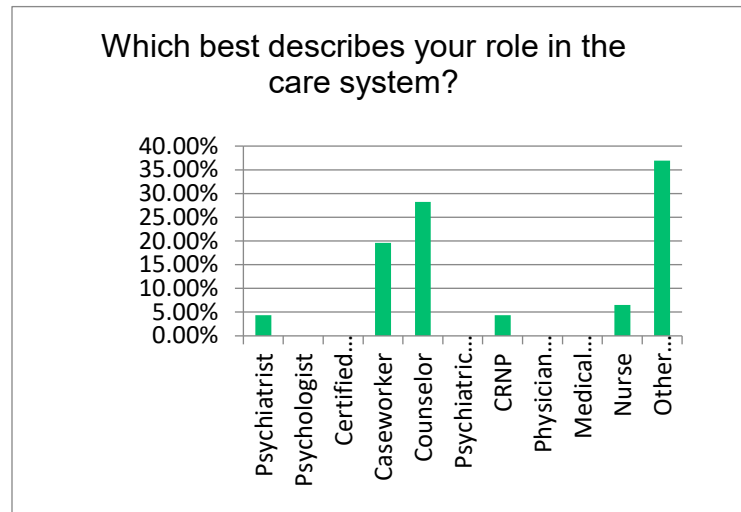
- *People with mental health issues have access to all the resources they need in Northeastern Pennsylvania.*

- *People with behavioral health issues usually know where to go for behavioral health care or support services.*
- *Many people with behavioral health issues cannot access care due to a lack of health insurance.*
- *A significant number of people with behavioral health issues remain undiagnosed.*
- *A significant number of people with behavioral health issues do not have primary care physicians.*
- *There is a staffing shortage of behavioral health workers in Northeastern Pennsylvania.*
- *There is a correlation between behavioral health issues and poverty.*
- *There is a correlation between behavioral health issues and people recently leaving incarceration.*
- *There is an increase in incidence of combined substance abuse and mental illness.*

The majority of respondents who “Strongly disagreed” with a particular statement was for “People with mental health issues have access to all the resources they need in Northeastern Pennsylvania.” Those who “Strongly disagreed” with this statement made up 54 percent of the survey question. The majority of respondents who “Strongly agreed” with a particular statement was “There is a staffing shortage of behavioral health workers in Northeastern Pennsylvania.” Those who “Strongly agreed” with this statement made up 87 percent of the survey questions.

	Not Sure	Strongly disagree	somewhat disagree	somewhat agree	strongly agree
People with mental health issues have access to all the resources they need in Northeastern Pennsylvania.	2.08%	54.17%	27.08%	14.58%	2.08%
People with behavioral health issues usually know where to go for behavioral health care or support services.	4.17%	47.92%	31.25%	14.58%	2.08%
Many people with behavioral health issues cannot access care due to lack of health insurance.	6.25%	10.42%	16.67%	39.58%	27.08%
A significant number of people with behavioral health issues remain undiagnosed.	2.08%	2.08%	2.08%	39.58%	54.17%
A significant number of people with behavioral health issues do not have primary care physicians.	14.89%	6.38%	17.02%	36.17%	25.53%
There is a staffing shortage of behavioral health workers in Northeastern Pennsylvania.	2.08%	0.00%	0.00%	10.42%	87.50%
There is a correlation between behavioral health issues and poverty.	8.33%	2.08%	2.08%	35.42%	52.08%
There is a correlation between behavioral health issues and people recently leaving incarceration.	12.50%	4.17%	0.00%	33.33%	50.00%
There is an increase in incidence of combined substance abuse and mental illness.	6.25%	0.00%	8.33%	16.67%	68.75%

Question eight asks respondents, “Please describe the resources you believe are needed to support people with behavioral health issues.” There were several consistent themes found in this question. Some of these included was that people needed more access to professional help, Affordability is an issue (especially with insurance), there was also a convenience factor (not enough mental health resources), transportation issues, and the most prevalent theme was that there was a lack of available professionals (not enough). The examples of professionals given include psychologists, psychiatrists, support groups, doctors, etc.

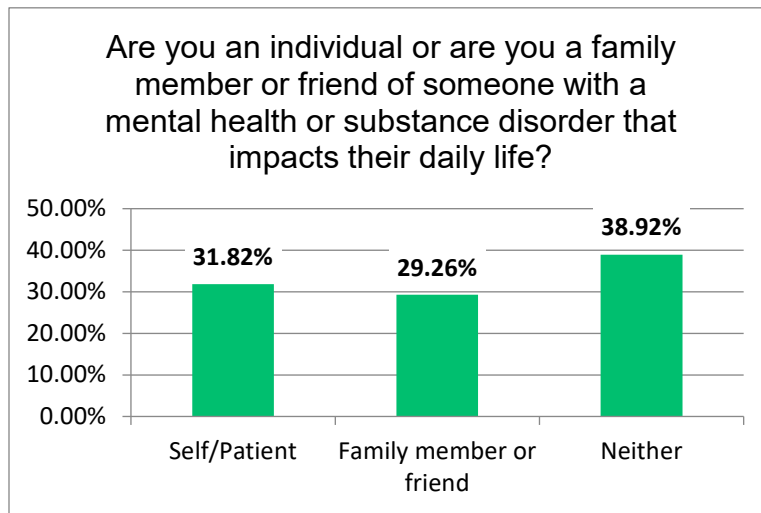


Next, respondents were asked, “Which best describes your role in the care system?”. The majority of respondents answered this question with “Other,” at 36 percent. The next portion of respondents, at 28 percent, were made up of counselors.

Finally, respondents were asked, “Is there any other information you think should be addressed in this needs assessment? Please describe.” Some notable comments included an increase in salaries for mental health workers, appreciation for mental health workers, and deregulation.

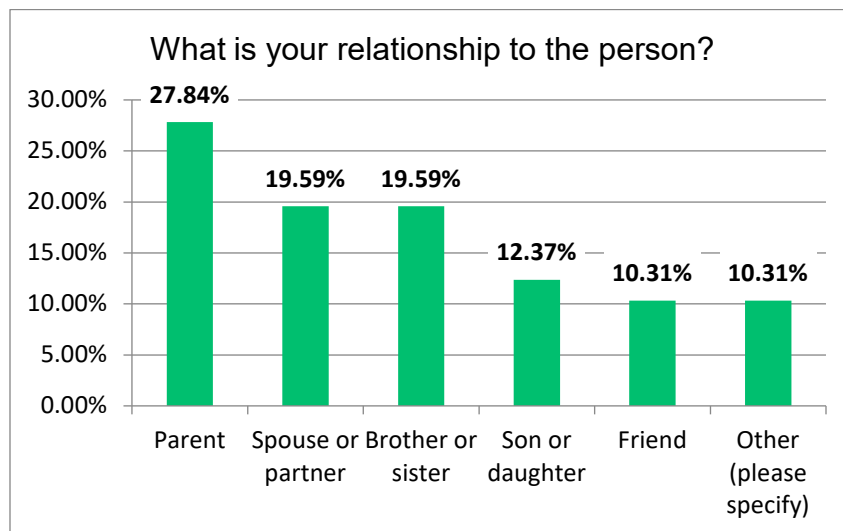
Patient & Caregiver Survey

Three hundred and fifty-six people participated in the patient/caregiver survey. Out of the 356 participants, 215 people indicated that they are either an individual with a mental health or substance abuse disorder or a family member or friend of a person with a mental health or substance abuse disorder. Those respondents who indicated they were neither, 137 participants, were disqualified from continuing to participate in the survey.



Caregiver Responses

Participants were first asked what their relationship is to the person they are caring for. The majority of respondents chose parent (27.84%), followed by spouse or partner (19.59%), and brother or sister (19.59%).



The majority of these respondents (78%) indicated that their friend or family member does not need help with daily activities or assistance to live independently. Those who stated, “Yes, and someone else is the primary caregiver” made up 12 percent of the survey. Finally, those who said, “Yes, and I am a primary caregiver,” made up nine percent of the survey.

When asked “What resources or supports would help you as a caregiver?” general themes for resources or supports that would help an individual as a caregiver are more access to professionals like psychologists, transportation needs, support groups, and daily assistance needs.

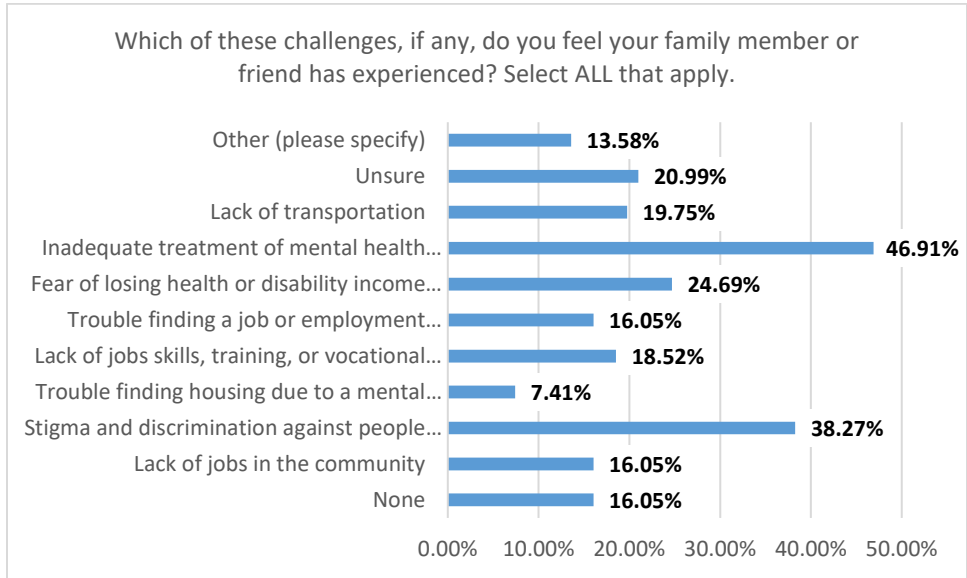
When asked what condition(s) their family member or friend has been diagnosed, the majority of respondents, 65 percent, stated that anxiety was a condition with which a family member or friend had been diagnosed with, followed by depression (53%), substance abuse problems (41%), bipolar disorder (25%), schizophrenia (6%) and another condition not listed (20%).

professionals
convenience
affordability
access transportation

When asked to choose the support or treatment types their family member or friend has received from a health care provider or social service, the most selected support or treatment type was medication at 84 percent. Other services include outpatient care (62%), individual or group psychotherapy (61%), inpatient care (hospitalization) (36.7%), crisis intervention (34%), treatment of substance abuse problems (33%), peer or other consumer-run programs (14%), and supported employment services (5%).

When asked, “How long did your family member or friend have to wait for treatment?” the majority of respondents, 30 percent, stated that it took “Less than one week’ for a family member or friend to wait for treatment. Twenty-two percent indicated it took more than one month, followed by more than one week, but less than two weeks (11.84%) and more than two weeks, but less than three weeks (10.53%). The other categories fell under ten percent.

When asked what challenges they feel their family or friend has experienced, the majority of respondents, 46 percent, stated that the most significant challenge their family member or friend has experienced was “Inadequate treatment of mental health or substance abuse condition,” followed by “Stigma and discrimination against people with mental or behavioral health issues (38%).



Other resources or services respondents identified as necessary to help those with behavioral health and substance use issues include more providers/provider options, more treatment options (like rehab or support groups), and more professionals (high-quality professionals). However, many outlier responses spoke to issues with the system (mental health care and substance abuse system) rather than specific resources that were needed. These responses include the following: affordability issues (including insurance issues), need for easier access, and long wait times for treatment.

Patient Responses

Below is a summary of the demographics of those participants that indicated they have a mental health or substance abuse disorder.

Almost 27 percent of respondents were male, and just over 70 percent were female. Just over four percent of respondents identified as transgender. And, 74 percent identified as heterosexual or straight, while almost 13 percent identified as Bisexual, just over four percent as Gay, three percent as Lesbian, one percent Queer, one percent pansexual, and two percent other.

Almost 97 percent of the respondents identified their race as White. Just over four percent identified as Asian or Asian American, two percent Black or African American, two percent American Indian or Alaska Native, and one percent noted Other.

The majority of respondents were in the 53-63 age group (23%).

20-30 years old	17%
31 – 41 years old	17%
42-52 years old	20%
53-63 years old	23%
64-74 years old	16%
75+ years old	7%

Thirty-four percent of respondents have a Graduate or professional degree; another 34 percent hold a Bachelor's degree. Just over 9.5 percent indicated they were a high school graduate, and another 9.5 stated that they had some college experience but did not finish. Only one percent did not complete high school, and another one percent did not ascertain a high school education.

The majority of respondents, 47 percent, stated that they were married. The second-largest portion of respondents, close to 28 percent, indicated that they had never been married. Respondents who stated that they were part of an unmarried couple living in the same household made up close to 10 percent of the survey. Those who said they were divorced made up eight percent of the survey. Respondents who stated they were widowed made up six percent of the survey. Finally, there were no individuals who indicated that they were separated.

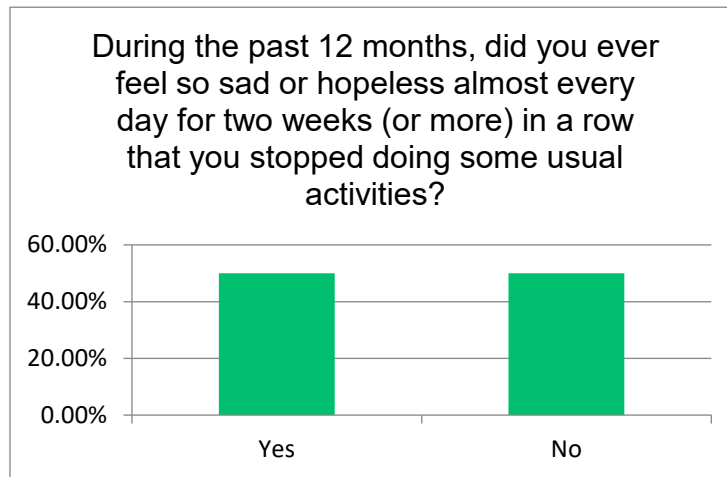
The majority of respondents, 52 percent, stated that they were employed for wages. The next largest section of respondents, 19 percent, were those who said they were retired. This was followed by those who were unable to work, at 12 percent. Those who indicated that they were self-employed made up close to 10 percent of the survey question. The remaining categories fall beneath five percent each.

Sixteen percent of respondents indicated that their annual household income was between 35,000 – 49,000 dollars. Fourteen percent stated that they preferred not to answer this question. This was followed by respondents who said their annual household income was 75,000 – 99,999 (13%). Respondents who stated that their annual household income was between 50,000 – 74,999, 100,000 – 149,999, and 150,000 + made up each individually 10 percent of the survey. The remaining categories fall beneath 10 percent each.

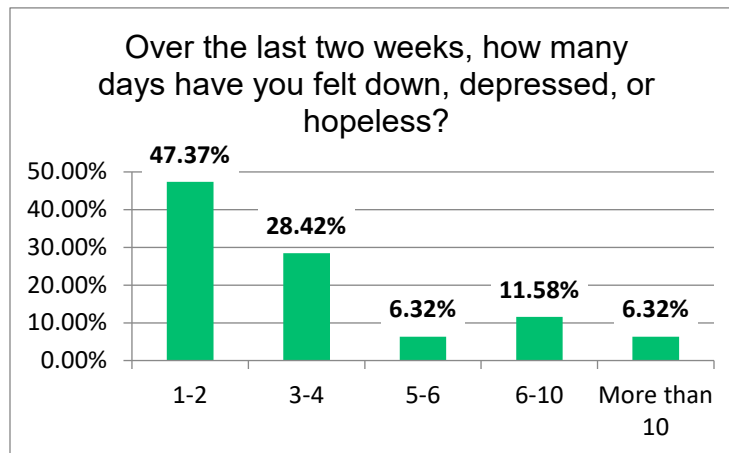
The majority of respondents, 61 percent, stated that they owned their home. Those who said that they rented their home made-up 30 percent. Finally, those who chose "Other" made up close to 9 percent of the survey question.

The majority of respondents, close to 95 percent, stated that “No” they were not a veteran of the U.S. Armed Forces. Those who said “Yes,” that they were a veteran of the U.S. Armed Forces made up a little over five percent of the survey.

When asked, “During the past 12 months, did you ever feel so sad or hopeless almost every day for two weeks (or more) in a row that you stopped doing some usual activities?” The results were a 50/50 split for “Yes” or “No” to the question mentioned above.

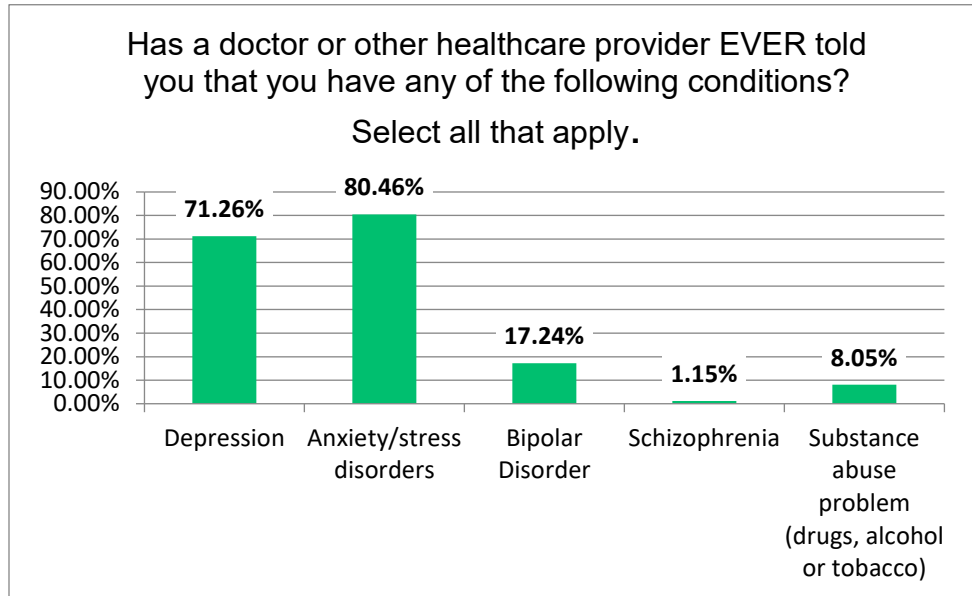


When asked, “Over the last two weeks, how many days have you felt down, depressed, or hopeless?” those who answered between one and two days made up 47 percent of the survey question. Twenty-eight percent answered between three and four days. Six percent of respondents answered five to six days. Nearly 12 percent answered six to ten days. Finally, six percent answered ten days or more.

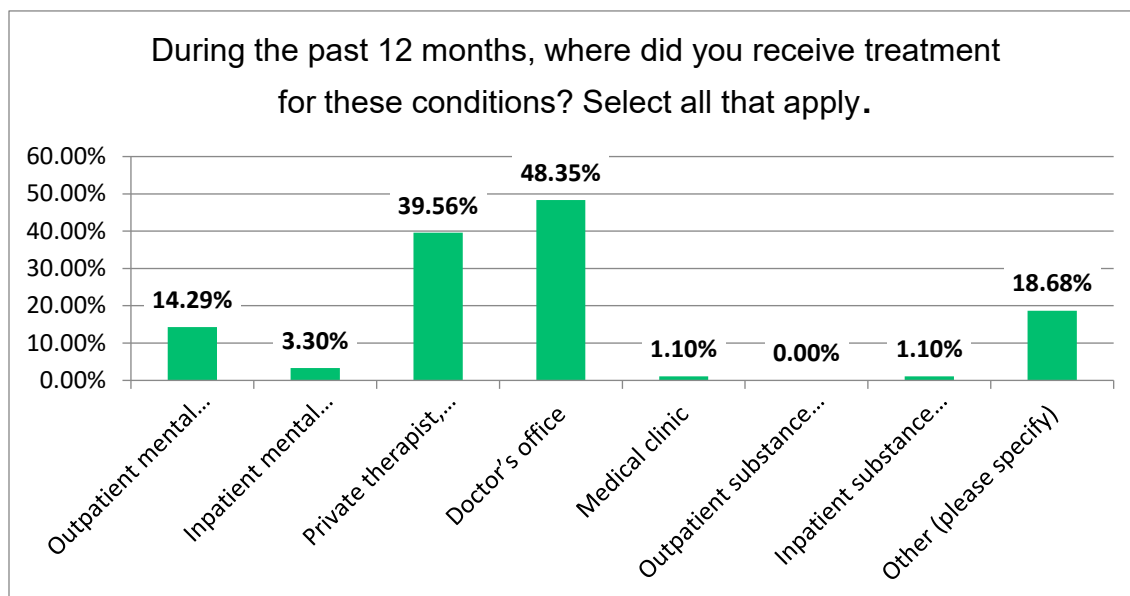


Question four asked respondents, “Has a doctor or other healthcare provider EVER told you that you have any of the following conditions? Select all that apply.” Seventy-one percent of respondents

selected "Depression." Eighty percent of respondents chose Anxiety/stress disorders. Respondents who chose Bipolar disorder made up 17 percent. Finally, less than ten percent indicated Schizophrenia or Substance abuse problems.

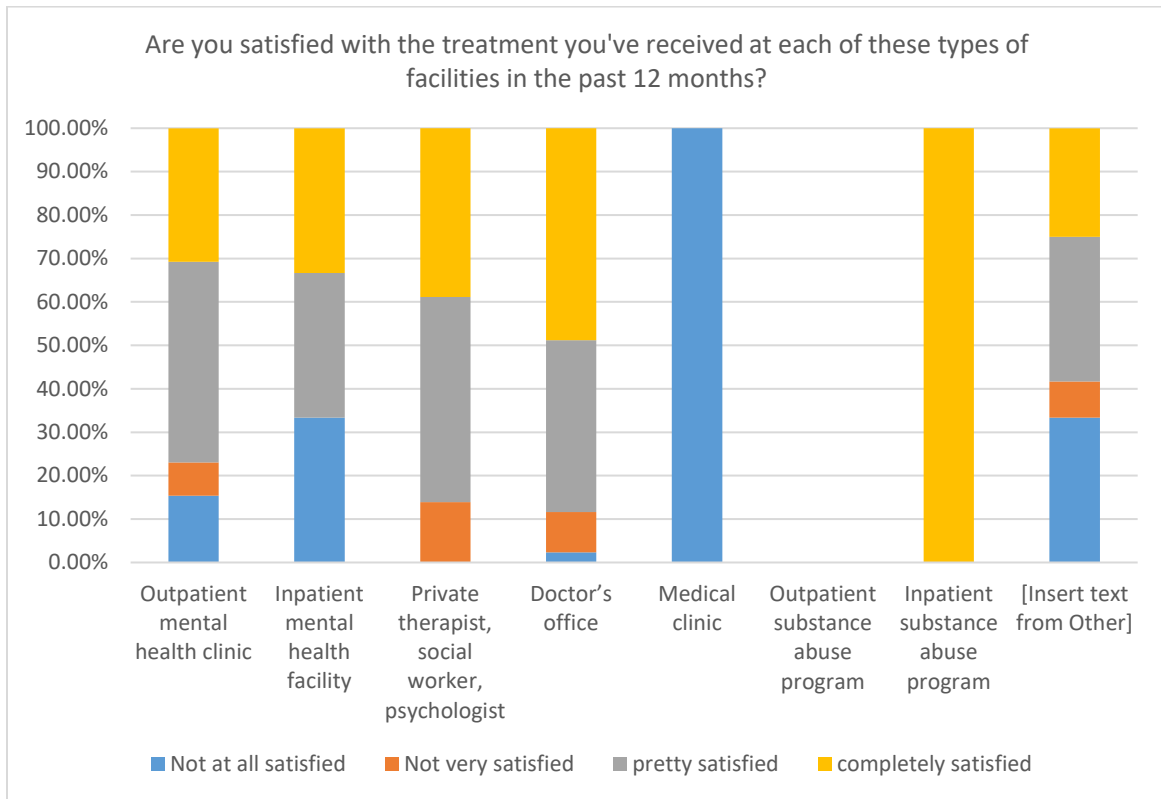


When asked, "During the past 12 months, where did you receive treatment for these conditions? Select all that apply." Notable responses included, Outpatient mental health clinic, Private therapist-social worker-psychologist, Doctors office, and "other." Outpatient mental health clinics made up 14 percent of the results. Private therapist-social worker-psychologist made up 39 percent of the results. Doctors' offices made up close to half of the survey questions. Finally, those who chose "Other" made up 18 percent of the survey results. Other possible options had three percent or less chosen.

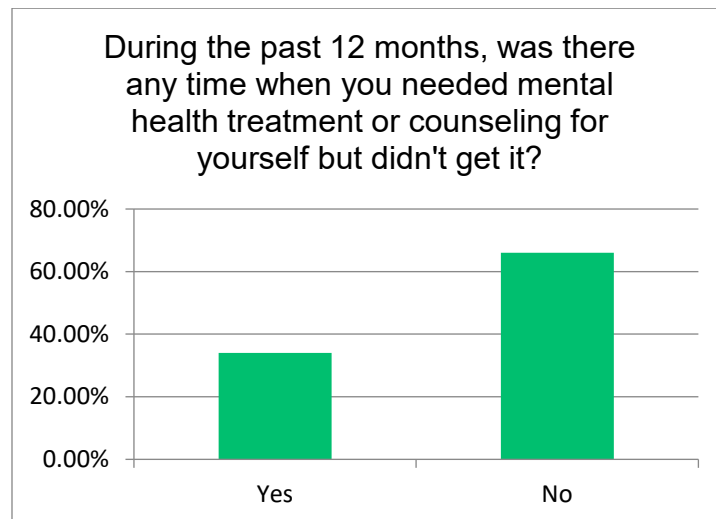


When asked, "Are you satisfied with the treatment you've received at each of these types of facilities in the past 12 months," All respondents stated that they were not satisfied with the treatment received

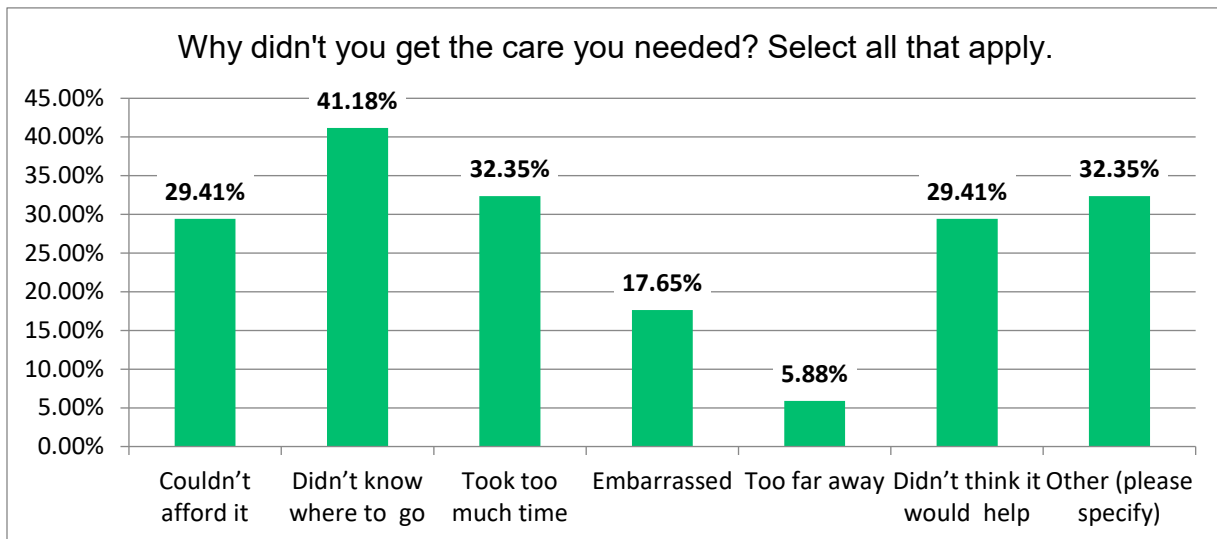
from a medical clinic. While all respondents who received treatment from an inpatient substance abuse program were “Completely satisfied.”



When asked, “During the past 12 months, was there any time when you needed mental health treatment or counseling for yourself but didn't get it?”. 34 percent of respondents indicated yes, while those who responded “No” made up 66 percent of the survey question.



Respondents were then asked, “Why didn't you get the care you needed? Select all that apply.” Those who said they Couldn't afford it made up 29 percent of the survey question. Respondents who said they Didn't know where to go made up 41 percent of the survey. Time also was an important factor. Those who stated that it took too much time made up approximately 32 percent of the survey. Those who felt uncomfortable or embarrassed to seek care made up 17 percent of the survey question. Those who struggled with the distance to seek care or that it was too far away made up close to 6 percent of the survey question. Those who believed seeking care would not help make up 29 percent of the survey question. Finally, those that stated another reason or “Other” made up 32 percent of the survey question.



When asked, “How would you prefer to receive your care?” Twenty-three percent of respondents chose telehealth, 27 percent chose in-person, and 50 percent indicated that delivery type does not matter.

When respondents were asked if they have access to the technology for telehealth services, 92 percent indicated that they have access to the technology. Two percent indicated that they did not have access, and six percent chose Not Sure.

When respondents were questioned about habits, specifically if they smoked cigarettes in the last month, the majority of respondents (91%) indicated no, and only nine percent said they smoked cigarettes in the last month. When asked how often those who chose yes that they smoke cigarettes, 88 percent stated every day, only 11 percent stated that they smoke cigarettes some days, and none chose “Rarely.” When asked how many cigarettes they smoke each day, 11 percent said five or less, and 22 percent said 6-10 cigarettes each day. The largest percentage of respondents, 44 percent, stated they smoke 11-19 cigarettes each day. Finally, another 22 percent of the survey respondents said they smoke 20+ cigarettes each day.

When asked if any health professional has ever advised them to quit smoking, 88 percent reported yes, and 11 percent indicated no. Respondents indicated that withdrawal symptoms and fear of failure are the most challenging part of quitting smoking.

When asked about smokeless tobacco use, sometimes called dip, chew, or snuff) in the last month, the majority of respondents stated “No,” or 98 percent, that they had not used a smokeless type of tobacco in the previous month. Only two percent stated “Yes” that they had used a smokeless type of tobacco in

the last month. Of the two respondents that responded to how often they use smokeless tobacco, one indicated every day while the other stated some days.

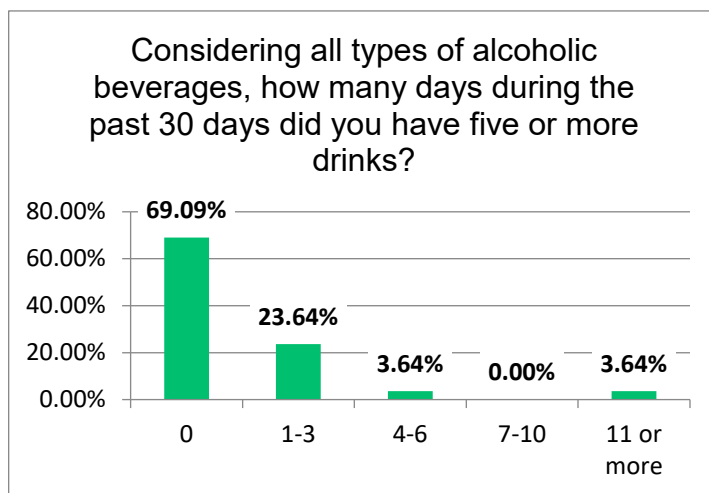
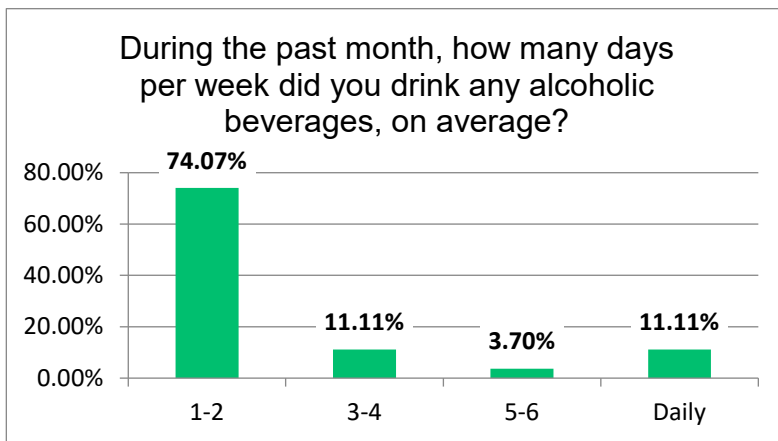
When asked about vaping and e-cigarette use, the majority (94%) of respondents indicated that they had not used some form of e-cigarettes in the last month. In comparison, only six percent stated “Yes” that they had used some form of e-cigarettes in the previous month. Eighty-three percent of respondents that used some form of e-cigarettes in the last month indicated they use every day. Sixteen percent indicated that they rarely use them.

Pertaining to alcohol consumption, when asked if they have had at least one drink of any alcoholic beverage during the past month, such as beer, wine, or liquor, fifty-five percent stated yes, while 45 percent indicated no.

When asked, “During the past month, how many days per week did you drink any alcoholic beverages, on average?”. Those that answered that they had an alcoholic beverage 1-2 days per week made up 74 percent of the survey question. Those that said they had an alcoholic beverage 3-4 days a week made up 11 percent of the survey. Those who said they had an alcoholic drink 5-6 days a week made up close to 4 percent of the survey. Finally, those who said they had a drink daily made up 11 percent of the survey.

When asked, “On the days when you drink, about how many drinks did you have on average?”. The majority of respondents, 77 percent, stated that on the days they had an alcoholic beverage, on average, they had 1-2 drinks. Those that stated they had 3-4 drinks on average for the days they drank alcohol made up about 20 percent of the survey. Finally, those who had five or more drinks made up less than two percent of the survey.

When asked to consider all types of alcoholic beverages, how many days during the past 30 days did you have five or more drinks?” The majority of respondents stated that there were no days or zero days during the past 30 days in which they had five or more drinks. Those that stated they had five or more drinks between 1-3 days in the past 30 days made up 23 percent of the survey. Respondents that stated they had five or more drinks between 4-6 days in the past 30 days made up 3 percent of the survey. Zero respondents indicated that they had five or more drinks, between 7-10 days, in the past 30 days. Finally, those that had five or more drinks for 11 days or more in the past 30 days also made-up 3 percent of the survey.



When respondents were asked, “During the past 30 days, how many times did you drive after having a drink(s) the same day?”. The majority of respondents, 85 percent, stated that during the past 30 days, there were 0 days where they drove after having an alcoholic beverage the same day. Only 12 percent of respondents said they drove 1-3 days, in the past 30 days, after having an alcoholic beverage on the same day. Less than two percent of respondents stated they drove 4-6 days, in the past 30 days, after having an alcoholic beverage on the same day. Finally, there were no respondents who stated they drove after having an alcoholic beverage on the same day, between 7-10 days or 11 or more days in the past 30 days.

Ninety-six percent of respondents indicated they had not received treatment or counseling for their use of alcohol. In comparison, only four percent stated they had received treatment or counseling for their use of alcohol. Respondents noted receiving treatment through AA or another group or individual therapy. One individual reported receiving residential treatment (other than detox).

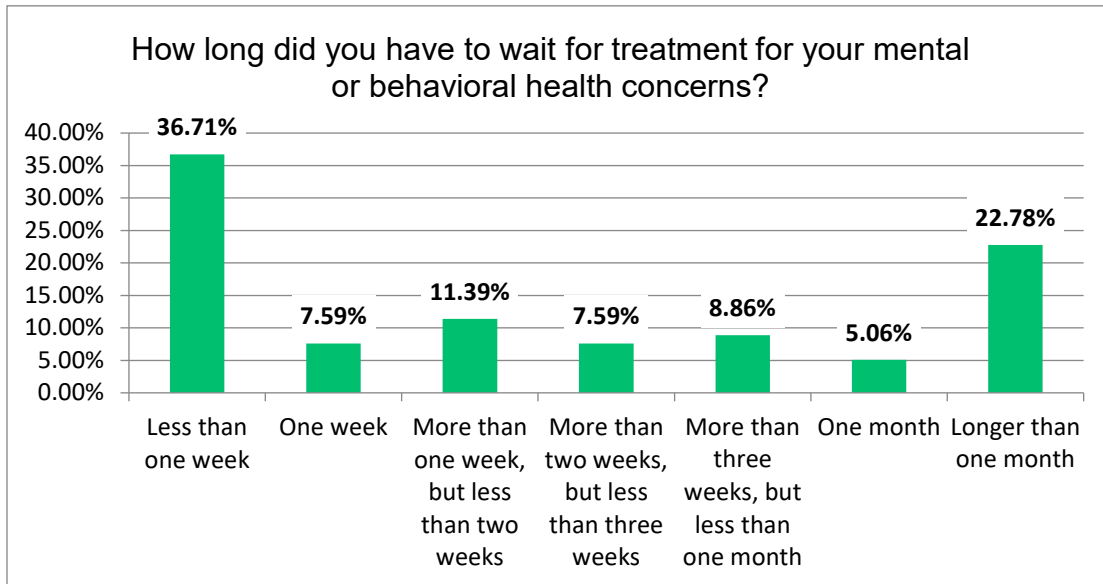
When questioned about drug use and how easy or difficult it would be to obtain the following drugs: Marijuana, Heroin, Prescription pain relievers (not prescribed for you), Methamphetamine (meth, crystal meth), Cocaine (including powder, crack, free base, and cocoa paste), Ecstasy or MDMD, Fentanyl, and Bath Salts, thirty percent of respondents indicated that it would be very easy to obtain Marijuana. The results across the other drug groups were varied.

	Don't know	Very easy	Fairly easy	Fairly difficult	Very difficult	Probably impossible
Marijuana	46.88%	31.25%	11.46%	3.13%	3.13%	4.17%
Heroin	71.88%	3.13%	7.29%	1.04%	6.25%	10.42%
Prescription pain relievers (not prescribed for you)	69.79%	5.21%	5.21%	3.13%	6.25%	10.42%
Methamphetamine (meth, crystal meth)	73.68%	3.16%	5.26%	1.05%	6.32%	10.53%
Cocaine (including powder, crack, free base, and cocoa paste)	70.83%	3.13%	5.21%	4.17%	6.25%	10.42%
Ecstasy or MDMA	71.88%	2.08%	3.13%	5.21%	8.33%	9.38%
Fentanyl	74.74%	4.21%	4.21%	2.11%	6.32%	8.42%
Bath salts	77.08%	0.00%	0.00%	4.17%	6.25%	12.50%

When asked which of those substances respondents used in the last 30 days, the majority of respondents, 80 percent, stated that they had not used any of the substances mentioned above. Only about 18 percent of respondents indicated that they had used Marijuana in the last 30 days. While an even smaller fraction of respondents, about one percent, stated they had used Prescription pain relievers (not prescribed for themselves) in the last 30 days. Finally, for the remaining categories, no respondents said they had used Heroin, Methamphetamines, Cocaine, Ecstasy or MDMA, Fentanyl, or Bath salts in the last 30 days.

Ninety-six respondents stated that they had not received treatment or counseling for their drug use. Only three percent said they had received treatment or counseling for drug use. Of those that indicated they received treatment or counseling, two indicated they received individual therapy, and the remaining individual stated another treatment source under “Other.” All three individuals stated they are still in treatment counseling.

When respondents were asked, “How long did you have to wait for treatment for your mental or behavioral health concerns?” A large portion of respondents, 36 percent, stated they only had to wait “Less than one week” for treatment. Another large portion of respondents, 22 percent, stated they had to wait “Longer than one month” for treatment. Finally, respondents that stated they had to wait “More than one week (but less than two weeks)” made up close to 12 percent of the survey question. All other categories fell under ten percent each.



When asked to describe any challenges respondents face in their daily lives due to their behavioral or mental health issues," there were many common themes regarding the challenges individuals face in their daily lives as a result of behavioral or mental health issues. Some of these themes included a lack of motivation, financial issues, Anxiety, and Difficulty with social interactions.

The majority of respondents (37%) feel pretty comfortable or very comfortable (30%) talking about their mental or behavioral health concerns with immediate family members and close friends. Six percent indicated they are not comfortable at all, and 26 percent indicated they are not very comfortable.

Thirty-two percent of respondents said they are not comfortable at all talking about their mental or behavioral health concerns with acquaintances or co-workers. Thirty-six percent stated they are not very comfortable. Only 17 percent indicated they were pretty comfortable or very comfortable (13%).

The majority of respondents are pretty comfortable (34%) or very comfortable (46%) talking about their mental or behavioral health concerns with health care providers like their doctor. Only two percent stated they were not comfortable at all, and 16 percent not very comfortable.

Stakeholder Interviews

The qualitative portion of this study offered numerous insights and experiences concerning behavioral health. In addition to their perspectives, the interviewees provided several challenges that exist in the behavioral health system in this region. These challenges include:

1. Lack of training to create a multi-discipline behavioral health workforce.
2. Providers are not practicing in an evidence-based manner.
3. Integration of behavioral health into primary care.
4. Training of the established behavioral health workforce.
5. Overdiagnosis of particular disorders (ADD and bipolar disorder was mentioned).
6. Resilience is not incorporated into behavioral health.

Patient Interview

The qualitative interviews comprised four healthcare providers, community advocates, and a single patient. Although the study achieved only a single patient interview, which is a limitation of the study, the patient offered a unique perspective. The patient worked in the behavioral health industry as a practitioner and administrator for 30 years prior to suffering anxiety from a traumatic brain injury. The patient currently sees a psychiatrist for their anxiety and referred to behavioral health care in this region as a “lack of a system.”

The patient discussed barriers and challenges that exist to accessing services and specifically mentioned that there is a lack of resources in the area and that finding a provider who listened was informed and authentic in their practice was challenging and “very frustrating.”

When asked to discuss any gaps in services that exist, the interviewee discussed the idea that “there is no continuum of care, there’s no prevention, there’s no community education to self-identify.” “Continuum of care should have everything from prevention through early intervention...from standard intervention to in-homes, to more intense care...all the way down to crisis prevention, crisis management, and emergency...there should be a whole range.” Community members, according to the interviewee, “aren’t even looking for prevention because they don’t know they could benefit from the prevention...the earlier phases.” Then noting that “our mental health system is mental health crisis, emergency follow-up, and they treat...that’s pretty much the canned responses that you’re going to get...it’s sad.”

“This is a desert. It’s like 30 years behind the times. I don’t even think there’s a best practice. I don’t think the words best practice have been said in my town until today.”

Concerning waiting times, the interviewee noted that wait time is generally a couple of weeks to a month, and according to the interviewee, “for people who don’t know how to do all that digging, nobody if the resources are out there...[but] they’re just not there.”

Pertaining to the effectiveness of telehealth, the patient offered that they believe if you already have a relationship and know the provider, and if it is more for maintenance, then it is effective, but “if it were an initial assessment in terms of getting to know [a provider]” or if there is a deeper level of mental health counseling and sharing on the patient’s part “I don’t think that the telehealth is effective.”

Providers and Community Mental Health Advocate Interviews

The qualitative interviews consisted of mental health providers, primary care doctors, and community mental health care advocates. Throughout these interviews, several themes emerged.

1. **A Fragmented System**
2. **A Lack of Quality Care**
3. **Barriers to Accessing Care**
4. **Wait Times**
5. **Gaps in Services**

Beyond these five themes, the interviewees also discussed the effectiveness of telehealth and how COVID-19 has exacerbated the need for mental health and substance abuse care.

Primary Care Referrals

The primary care provider that was interviewed indicated that they refer their patients to a specialist if what they are treating is out of their comfort zone of managing the patient.

A Fragmented System

The interviewees noted the notion of a fragmented behavioral health system throughout the interviews. This fragmented system was also attributed to the overdiagnoses that are believed to be often seen. One interviewee noted that this overdiagnosis “makes a difference because prognosis and outcomes are different and treatment approaches are different.” Many providers “don’t really take the time to do a careful developmental assessment...that’s actually very poor care, just to base assessment on, kind of a list of symptoms without understanding the totality of a person’s life....all this stuff takes time to elicit information, but it’s very important in terms of understanding...taking the time to do that is essential.”

“What I see is an incredible level of fragmentation and programs that should be available are not available.”

A Lack of Quality Care

The level of quality care in the area was at the forefront of what the interviewees were interested in discussing. One provider pointed out that they found it particularly interesting that when they call patients to check in on them, the patients are so appreciative and surprised that somebody has gotten back to them or calls them directly to follow up on an issue the patient has called in about. The interviewee noted that patients are not used to getting that kind of individual attention, which is a concern, along with the level of expertise in the community.

“The caliber of care that’s being provided in my mind is questionable. Just because you have a degree or have a certification in my mind, doesn’t equate with excellence.”

Barriers to Accessing Care

The need for more trauma-informed therapy and trauma-focused therapy for patients was discussed in that providers are not able to meet the needs of all their patients, creating barriers for the patient population to access all of the behavioral health needs that they require, especially when there are co-occurring conditions compounded by social determinants of health. In this analysis, it is important to note that social determinants as a health component were mentioned multiple times and are viewed as an obstacle in this region.

With regard to mental health in this region, it was referred to in one interview as “rural mental health,” with the interviewee stating that “I consider this to be a rural part of the country and has all the attendant challenges and issues that go along with rural healthcare.” Affording care, medications, and delivering care, in terms of lack of access, whether it be transportation or network connectivity, were described as problematic and all issues that drive health inequities.

Wait times

Similarly, wait times were described by providers as a few weeks to a month or more, the same as the individual patient described wait times. One provider noted that some patients should be seen twice a week or seen in a group, and they would like to develop the possibility to establish these opportunities. A community mental health advocate noted that some therapists and counselors are easier to make an appointment with as opposed to a psychologist, but even finding a good match with a therapist or counselor is an issue. In addition to wait time issues, according to one interviewee, many patients wonder if counselors and therapists would have values and views similar to their and respect their background.

Another provider noted, “there are services available, but not enough; we don't have that much support in bandwidth.... It could be weeks to months. It's not immediate.”

Gaps in Services

Relating directly to wait time issues is the gap in services. Some describe the general lack of adequate facilities close by, the lack of beds in the Northeast, Pennsylvania, and the lack of specialized services for what one described as more “difficult disorders.”

One instance of a lack of specialized services is Dialectical Behavioral Therapy (DBT). An interviewee noted that “there’s really not DBT service providers here...so that’s been a problem.

“They know that if they want to get quicker treatment they have to go to the, ER...everyone kind of knows. That's how it works. Unfortunately.”

An interviewee noted that patients expressing barriers to accessing services is a “regular topic for discussion.” Another interviewee stated that they “do not have the bandwidth to provide the care needed to all our patients. So, what happens is a lot of mental health is actually managed significantly by primary care physicians...and they kind of become the main facet of care for mental health.”

Another area where a gap in services was indicated was regarding non-U.S. citizens who are not eligible for health insurance, and “getting them services when they need healthcare...it can be a really long process...there’s a lot of advocacy involved.”

Ultimately, networking and not having centralized locations for patients to receive care are common issues among those interviewed.

“We’re just silos. A lot of us who are in these different organizations need to stay close. There’s a lot of confusion.”

The following issues mentioned by the interviewees are addressed in the Summary, Conclusions, and Recommendations.

Capacity

The capacity of facilities was listed as a specific issue concerning gaps in services, including hospital beds and the lack of facilities for someone that needs longer care. One interviewee cited, that if you need longer care....” that’s not really available.”

Dialectical Behavior Therapy (DBT)

Dialectical Behavior Therapy (DBT) is another service cited as missing in the region. One interviewee notes that many therapists say they use DBT, but there is not anyone locally fully certified in DBT through any certification boards. Another issue the interviewee noted is getting compensated for the time it takes to get certified. Part of the confusion lies in the fact that professionals say that they have DBT as part of their practice, and there is no way to stop that.

Suicidal Prevention Training

Suicide prevention training was another area listed explicitly as a gap in service in the region. One interviewee noted the Collaborative Assessment and Management of Suicidality (CAMS), a clinical approach used to identify, assess, and manage suicidal outpatients.

An interviewee noted that there is no intermediate step that happens before taking a person to the emergency room. There is no facility available for those in the early stages of psychosis without being hospitalized.

Telehealth

While the patient that was interviewed felt that telehealth was specifically only helpful if the patient was established with a provider, the providers and community mental health care advocates that were interviewed believe that the trend of telehealth “is sticking.” The interviewees stated that telehealth is more convenient for many patients, especially older people. However, there will also be a population that would prefer to be seen in person. Another provider noted that telehealth works very well for psychiatry and psychology, especially for those who can’t or don’t want to travel to the clinicians. Another provider pointed out that the “problem remains that we don’t have as many adequate providers as we need.” Leaving the issue on the table that, although telehealth is available, there are still not enough quality providers to go around. And although the ability to use telemedicine has improved, there are still network connectivity issues in certain areas.

An area of positivity that the interviewees pointed out is that with telehealth, children who do not live with or near their parents can now be more involved in their parent's care, attending telehealth visits and providing their email addresses to providers.

“Telehealth is going to become one of the more important aspects of providing care for our patients and it's convenient. It's extremely effective.”

COVID-19

With regard to COVID-19, all of the interviewees expressed an intensification of the need for services due to the pandemic. The phenomenon of anxiety and depression experiencing an intensification as a result of COVID-19 is not only national but also regional.

Specifically, jobs and housing were cited as significant sources of anxiety since COVID began. And the interviewees feel that this trend is likely to continue due to all of the significant changes that have taken place throughout COVID along with the tumultuous political climate over the past couple of years, one provider noting that “people are so confused. We try to help them as best as we can through this time of uncertainty with everything they need and figuring out what they need most.”

“It's a lot more stressful...there's a lot more fear...patients have a lot more concerns that I didn't see in the mental health field before COVID started.”

Providers agree, though, that the upward trend is difficult to predict. Still, interviewees agreed that patients “need care right now.” Looking at the current circumstances, the interviewees feel that the need for mental health will increase because of the aftermath of symptoms and health care issues. There is a need for “comprehensive care management.”

Summary

Finally, across the surveys and interviews, the data demonstrate that an integrated system of care and continuity of care is lacking, which is addressed in the Summary, Conclusions, and Recommendations.

Summary, Conclusions, Recommendations

Our current mental and behavioral health crisis is not specific to our region, it is a national epidemic that has been recognized by the federal government. And, Black and Brown communities are disproportionately undertreated – even as their burden of mental illness has continued to rise. COVID-19 has exacerbated the situation through increased grief, trauma, and physical isolation. Our youth have also been impacted by COVID-19, with disruptions in their routines and relationships, leading to increased isolation, anxiety, and learning loss. More than half of parents express concern over their children’s mental well-being.

“We need more able bodies to provide care...we definitely need to expand in terms of our recruitment and retention efforts...access needs to be addressed...the important thing is to create an umbrella for our patient which need care.”

Health care systems are not the only entities that can support mental health. The following recommendations apply to various sectors within the community. Improving mental health outcomes must involve collaboration between health care institutions, individual providers, nonprofit and social service organizations, government, and community leaders.

Active steps should be considered in shifting how the behavioral health system operates and expanding services to create sufficient access to services, including assessing how to improve the overall quality of the experience of the patients and building connections with individuals, bolstering confidence in the patients that providers are interested and care about a patient’s well-being.

As a result of this analysis and as aligned with the current bi-partisan effort to address mental health concerns as a result of the impact that the COVID-19 pandemic has had on the nation over the last two years, the following recommendations should be taken into consideration:

The creation of a resource directory that identifies local programs and providers in the areas of mental health and substance abuse, including resources in areas such as prevention, education, shelters, and housing services, is needed. As indicated through the interviews, finding the proper care or an available provider can be a frustrating experience. Treatment locator tools, such as a print and/or online resource directory, can help community members find care more efficiently.

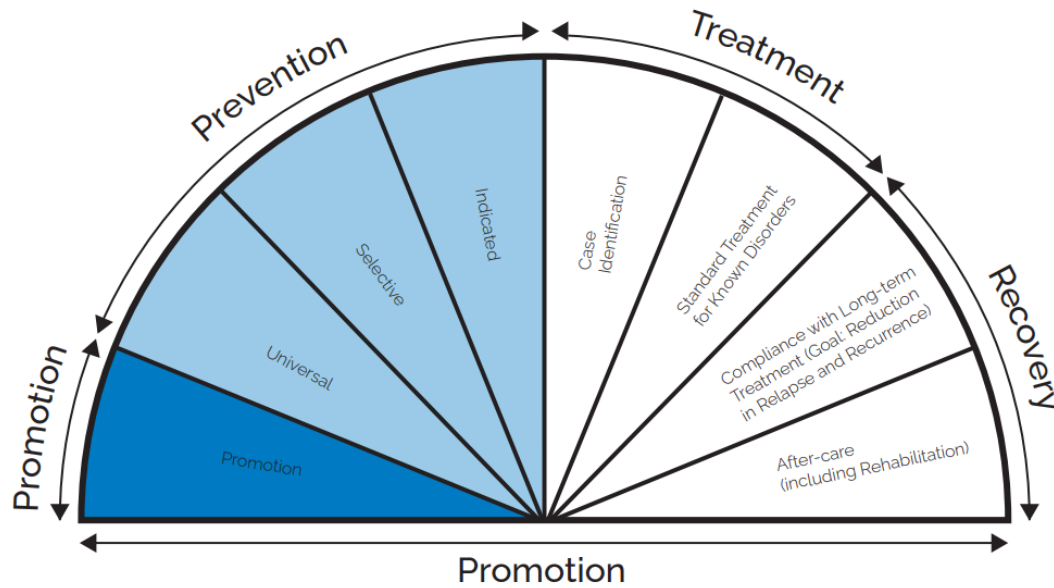
Prioritize and fund the development of a comprehensive continuum of mental health care that incorporates a full spectrum of integrated, complementary services to improve the outcomes for individuals of all ages with mental health and substance abuse issues.

Continuum of care is a concept involving an integrated system of care that guides and tracks patients over time through a comprehensive array of health services spanning all levels of intensity of care.

A continuum of care refers to the entire range of available care. Multiple service levels mean the person receives the appropriate care in the proper setting. The continuum of care plays a crucial role in

treatment. It helps patients receive the appropriate treatment at the right time, ensuring patients can stay in treatment long enough to address issues adequately. This is especially important in behavioral health and addiction treatments. Because treatment needs evolve, treatment tends to be more effective when received along a continuum of care that can adjust in real-time.

The Behavioral Health Continuum of Care Model recognizes multiple opportunities for addressing behavioral health problems and disorders. Based on the Mental Health Intervention Spectrum, first introduced in a 1994 Institute of Medicine report, the model includes the following components:



Promotion — These strategies are designed to create environments and conditions that support behavioral health and the ability of individuals to withstand challenges. Promotion strategies also reinforce the entire continuum of behavioral health services.

Prevention — Delivered prior to the onset of a disorder, these interventions are intended to prevent or reduce the risk of developing a behavioral health problem.

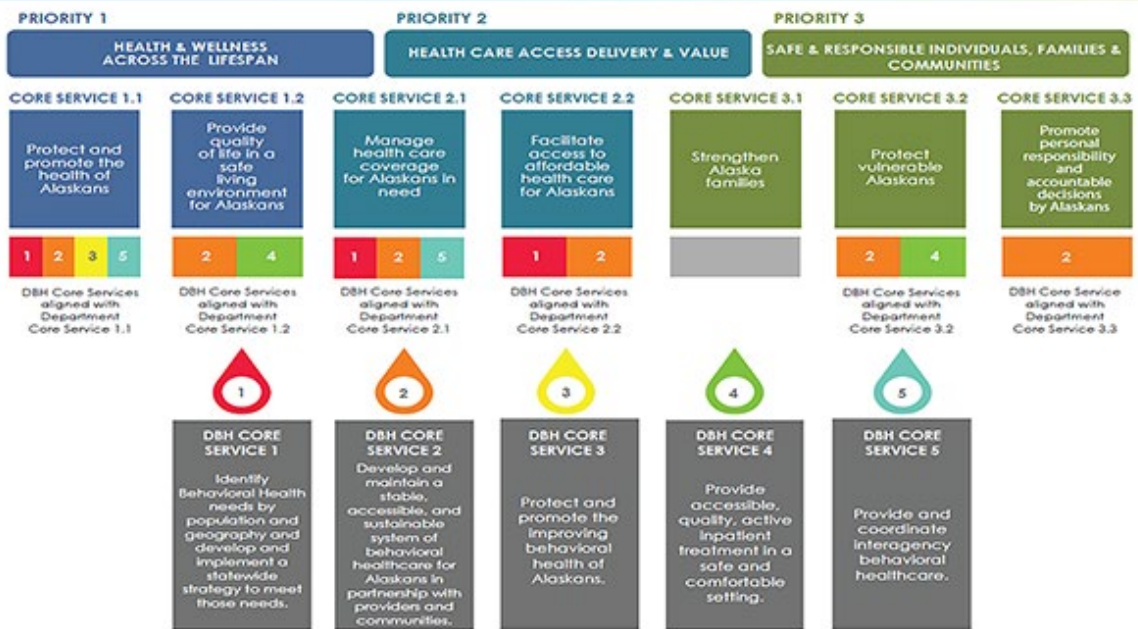
Treatment — These services are provided for individuals diagnosed with a substance use or other behavioral health disorder.

Recovery — These services support individuals' abilities to live productive lives in the community.

Source:
www.samhsa.gov/prevention

Example: Alaska – Division of Behavioral Health Prevention and Treatment Continuum - The continuum of care represents a commitment to mitigating the risk of behavioral health with prevention and early intervention, ensuring Alaskans are served effectively at the lowest level of care possible while recognizing that the most acute and chronic conditions require a corresponding increased level of services, supports and resources (Alaska Department of Health and Social Services, 2022).

Division Core Service Alignment



MISSION TO PROMOTE AND PROTECT THE HEALTH AND WELL-BEING OF ALASKANS

Without treatment in a continuum of care, patients are more likely to fall through the gaps in the system, which results in poor care and an increased likelihood of relapse, overdose, and other difficult outcomes. An ideal continuum of care will have a wide array of services and specialties to meet the individual's unique needs. Three main factors predict whether someone will recover from substance abuse and maintain their recovery over a long period.

Those factors are:

- Support and stability from loved ones
- Engaging in longer periods of professional care
- Social and community support, like organized support groups

If care is not continuous, starting from the time the person arrives at treatment, there are numerous places where someone can discontinue care and fall out of recovery. As a result, the cycle may start all over again.

Lack of follow-up can cause them to lapse into old habits, resulting in another acute crisis and starting the process over. In the worst cases, the person will overdose following their period of sobriety and suffer grave physical effects (Carmona, 2021).

Moving beyond the notion of capacity and more beds, timely and appropriate support is the first line of mental health care. When fully realized, they reduce the demand for the inpatient beds, which provide essential backup when psychiatric needs cannot be met in the community.

A continuum of care should address mental health and substance abuse issues across the age continuum – child, adult, older adult. Illness is not static and needs to shift over time, and as such, levels of care should exist but not be standardized and consider the individual (SAMHSA, n.d.).

Integrate behavioral health into primary care offices- Collaborative and coordinated care provided by a primary-care-based team to improve access and treatment. (Consider a Behavioral Health Integration Program (BHIP) model of care). Behavioral health screenings should also be implemented as part of primary care visits and ensure that doctors and nurses in primary care settings have adequate behavioral health training

Also, integrating mental health and substance use disorder services and supports into a variety of settings in the community will ease the issue of access that providers, community health advocates, and patients indicate is a significant struggle.

Further Development of Community Partnerships - Recognize the vital role families and non-traditional partners outside the mental health system can play in improving mental health outcomes and encourage and support the inclusion of a broader range of invited stakeholders around mental illness and policy practice (Beyond Beds, n.d.).

Training established workforce and increasing training opportunities for providers – Training programs to increase the number of community health workers and other health support workers providing services. Examples of specialized training included throughout the qualitative research include training for Dialectical Behavior Therapy and specialized suicide prevention training.

Train social and human services professionals in basic mental health skills and signs of addiction – Partner with and train community organizations to equip them to identify, understand, and respond to signs of mental illness and addiction among those they serve. Examples of community organizations include housing organizations and home-based service coordinators. Early recognition of the signs of emotional distress and connecting residents with mental health and substance use disorder resources will serve as a source of early intervention and potentially lead to better outcomes.

Train school personnel in basic mental health skills and signs of addiction – These health concerns do not only affect adults. COVID has exacerbated the situation among the young. School personnel spend a number of hours daily with students and if they recognize the signs early, they can play a significant role in helping the student find support. This includes school health and counseling staff as well as classroom teachers and administrative and support staff.

Expand system capacity – Work to expand the supply, diversity, and cultural competency of the mental health and substance use disorder workforce – increase opportunities and incentives for providers to practice in the areas which are in the highest demand.

Incorporate resilience research into behavioral health practices – Focusing on health-centered approaches to building resilience to disasters and preventing vulnerability to disease, social dysfunction, human and environmental resource depletion (Almedon, 2008; Färber, F., & Rosendahl, J., 2018).

Urge the community at large to follow through and participate in Dr. Leighton Huey’s Resilience Colloquium in Fall 2022 to see where a collective focus on resilience can lead the region –

Consideration should be given as to whether NEPA can become known as a Community of Resilience and whether this project can become an academic and economic engine for NEPA.

Educate the community – Creating an educated population of patients who are aware of the level of care they should be receiving. As well as educating the public about mental health and substance abuse issues in terms of stigma, prevention, and intervention. Research shows that less than half of Americans with mental health conditions receive treatment. The average delay from the onset of mental health symptoms to treatment is 11 years. Those with mental illnesses are often misunderstood, mistreated, mislabeled, and misdirected to services. It is imperative to educate communities about behavioral health needs and create a better pathway to care for community members in order to access the resources that will improve their well-being.

Educate the health care community, social services, human services and educators in equity, in cultural behaviors and values – The region is becoming very diverse and culture differences can affect both access to care and quality of care. This also applies to the impoverished individuals in the region, who may not understand the system, how to access, or even if they or a loved one have a problem. Those living in poverty are focused more on basic needs like food and shelter.

Educate the community at-large, social and human services, and educators on needs of people in recovery – Users of benephrenine and other drugs often face discrimination when they share they are in recover or using prescribed drugs due to common stereotypes and perceptions.

Legalize Fentanyl test strips – Policy changes to legalize and distribute test strips for fentanyl can help to save lives by allowing drug users to identify potentially dangerous quantities of fentanyl, the drug responsible for the largest share of accidental overdose deaths among recreational drug users.

Establish social and human service worker teams to respond to or accompany police on 911 calls.

There are case studies around the country that demonstrate that this saves lives and is a cost savings to police departments.

Ensure all communities have a warm hand off program – This will provide patients a better chance of success in dealing with their mental health or addiction issue. The points of entry can police, emergency departments or other agencies. **Maintain and Expand Access to Tele- and Virtual Mental Health Care Options** - The use of telehealth to address mental health and substance use needs rose dramatically during the height of the pandemic and has remained above pre-pandemic levels even where COVID has waned. Providers throughout the interviews indicated that tele-mental health services have proven effective while reducing barriers to care. Going forward, providers should work to understand best practices for forming relationships and building trust via telehealth.

Addressing fragmentation and strengthening the above areas will help to ensure that those facing behavioral health and substance use disorder challenges can be seamlessly connected to the necessary services in a timely manner, leading to more positive outcomes in the community being served.

Add a mental health and substance abuse mobile services unit – This can support underserved rural areas and high risk neighborhoods with onsite support.

Advocate for medical records sharing and access among providers and systems - A provider, of any type, will be in a position to provide the medical and/or behavioral health services with access to patient records regardless of where the patient sought care. Accessible medical records, regardless of platform, will likely speed up and improve outcomes.

Encourage federal, state, and local governments to release more data timely and on a granular level – Local level data available timely can help inform solutions. Data available 18 – 24 months after a point in time is not effective. State level data cannot help specific communities so more granular data is needed.

Appendix

Mental/Physical Health Status

Pennsylvania BRFSS: Mental/Physical Health Status – Ever told they have a depressive disorder including depression, major depression, minor depression or dysthymia				
Year	Demographic	Percent	Lower Bound	Upper Bound
2020	All adults	20	19	22
2019	All adults	20	18	21
2018	All adults	21	20	23
Pennsylvania BRFSS: Mental/Physical Health Status – Mental health not good 1 or more days in the past month				
Year	Demographic	Percent	Lower Bound	Upper Bound
2020	All adults	38	37	40
2019	All adults	38	37	40
2018	All adults	39	37	40
Pennsylvania BRFSS: Mental/Physical Health Status – Rarely or never get the social and emotional support they need <i>*Not tracked since 2010</i>				
Year	Demographic	Percent	Lower Bound	Upper Bound
2010	All adults	8	8	9

ND = Not displayed if sample is considered statistically unreliable.

Source: Pennsylvania Behavioral Risk Factor Surveillance System (BRFSS).

Alcohol Consumption

Pennsylvania BRFSS: Alcohol Consumption – At risk for heavy drinking (males having more than 14 drinks per week or females having more than 7 drinks per week)				
Year	Demographic	Percent	Lower Bound	Upper Bound
2020	All adults	7	7	8
2019	All adults	6	5	7
Pennsylvania BRFSS: Alcohol Consumption – Binge Drinkers (males having 5 or more drinks on one occasion or females having 4 or more drinks on one occasion)				
Year	Demographic	Percent	Lower Bound	Upper Bound
2020	All adults	17	15	18
2019	All adults	17	16	18

ND = Not displayed if sample is considered statistically unreliable.

Source: Pennsylvania Behavioral Risk Factor Surveillance System (BRFSS).

Illegal Prescription Drug Use

Pennsylvania BRFSS: Illegal/Prescription Drug Use – Used any prescription pain medication in the past year				
Year	Demographic	Percent	Lower Bound	Upper Bound
2020	All adults	28	26	29

ND = Not displayed if sample is considered statistically unreliable.

Source: Pennsylvania Behavioral Risk Factor Surveillance System (BRFSS).

Resident Deaths

Pennsylvania Resident Deaths: Age-Adjusted Rates per 100,000											
Underlying Cause of Death	County/State	Year	Sex	Race/Ethnicity	Age	Count	Expected Count	Population	Age-Adjusted Rate	Lower Bound	Upper Bound
Suicide (intentional self-harm)	Pennsylvania	2019	Total	All Races	All Ages	1,887	ND	12,801,989	14.0	13.4	14.6
Suicide (intentional self-harm by firearm)	Pennsylvania	2019	Total	All Races	All Ages	960	ND	12,801,989	6.7	6.3	7.2
Suicide (intentional self-harm), not firearm, other or unknown	Pennsylvania	2019	Total	All Races	All Ages	927	ND	12,801,989	7.2	6.8	7.7
Suicide (intentional self-harm)	Pennsylvania	2018	Total	All Races	All Ages	2,017	ND	12,807,060	14.9	14.2	15.5
Suicide (intentional self-harm by firearm)	Pennsylvania	2018	Total	All Races	All Ages	1,025	ND	12,807,060	7.3	6.8	7.7
Suicide (intentional self-harm), not firearm, other or unknown	Pennsylvania	2018	Total	All Races	All Ages	992	ND	12,807,060	7.6	7.1	8.1
Suicide (intentional self-harm)	Pennsylvania	2017	Total	All Races	All Ages	2,023	ND	12,805,537	15.0	14.3	15.6
Suicide (intentional self-harm by firearm)	Pennsylvania	2017	Total	All Races	All Ages	989	ND	12,805,537	7.1	6.6	7.5
Suicide (intentional self-harm), not firearm, other or unknown	Pennsylvania	2017	Total	All Races	All Ages	1,034	ND	12,805,537	7.9	7.4	8.4

ND = Not displayed if sample is considered statistically unreliable.

Source: Pennsylvania Behavioral Risk Factor Surveillance System (BRFSS).

Pennsylvania Resident Deaths: Age-Adjusted Rates per 100,000											
Underlying Cause of Death	County/State	Year	Sex	Race/Ethnicity	Age	Count	Expected Count	Population	Age-Adjusted Rate	Lower Bound	Upper Bound
Suicide (intentional self-harm)	Lackawanna	2019	Total	All Races	All Ages	33	31	209,674	14.3	9.5	19.2
Suicide (intentional self-harm)	Lackawanna	2019	Total	All Races	All Ages	17	16	209,674	6.8	3.6	10.1

self-harm by firearm)											
Suicide (intentional self-harm), not firearm, other or unknown	Lackawanna	2019	Total	All Races	All Ages	16	15	209,674	7.5	3.8	11.2
Suicide (intentional self-harm)	Lackawanna	2018	Total	All Races	All Ages	50	33	210,793	25.0	18.1	31.9
Suicide (intentional self-harm by firearm)	Lackawanna	2018	Total	All Races	All Ages	17	16	210,793	12.9	8.0	17.9
Suicide (intentional self-harm), not firearm, other or unknown	Lackawanna	2018	Total	All Races	All Ages	16	15	210,793	12.1	7.3	16.9
Suicide (intentional self-harm)	Lackawanna	2017	Total	All Races	All Ages	29	33	210,761	12.8	8.2	17.5
Suicide (intentional self-harm by firearm)	Lackawanna	2017	Total	All Races	All Ages	13	17	210,761	4.6	2.1	7.1
Suicide (intentional self-harm), not firearm, other or unknown	Lackawanna	2017	Total	All Races	All Ages	16	17	210,761	8.2	4.2	12.3

ND = Not displayed if sample is considered statistically unreliable.

Source: Pennsylvania Behavioral Risk Factor Surveillance System (BRFSS).

Pennsylvania Resident Deaths: Age-Adjusted Rates per 100,000											
Underlying Cause of Death	County/State	Year	Sex	Race/Ethnicity	Age	Count	Expected Count	Population	Age-Adjusted Rate	Lower Bound	Upper Bound
Suicide (intentional self-harm)	Luzerne	2019	Total	All Races	All Ages	66	47	317,417	18.4	14.0	22.9
Suicide (intentional self-harm by firearm)	Luzerne	2019	Total	All Races	All Ages	41	24	317,417	10.8	7.5	14.1
Suicide (intentional self-harm), not firearm, other or unknown	Luzerne	2019	Total	All Races	All Ages	25	23	317,417	7.6	4.7	10.6
Suicide (intentional self-harm)	Luzerne	2018	Total	All Races	All Ages	63	51	317,646	19.2	14.4	23.9
Suicide (intentional self-harm)	Luzerne	2018	Total	All Races	All Ages	34	26	317,646	9.6	6.4	12.9

self-harm by firearm)											
Suicide (intentional self-harm), not firearm, other or unknown	Luzerne	2018	Total	All Races	All Ages	29	25	317,646	9.5	6.1	13.0
Suicide (intentional self-harm)	Luzerne	2017	Total	All Races	All Ages	67	51	317,343	21.2	16.1	26.3
Suicide (intentional self-harm by firearm)	Luzerne	2017	Total	All Races	All Ages	29	25	317,343	9.2	5.9	12.6
Suicide (intentional self-harm), not firearm, other or unknown	Luzerne	2017	Total	All Races	All Ages	38	26	317,343	12.0	8.2	15.8

ND = Not displayed if sample is considered statistically unreliable.

Source: Pennsylvania Behavioral Risk Factor Surveillance System (BRFSS).

Pennsylvania Resident Deaths: Age-Adjusted Rates per 100,000											
Underlying Cause of Death	County/State	Year	Sex	Race/Ethnicity	Age	Count	Expected Count	Population	Age-Adjusted Rate	Lower Bound	Upper Bound
Suicide (intentional self-harm)	Monroe	2019	Total	All Races	All Ages	23	25	170,271	12.4	7.3	17.5
Suicide (intentional self-harm by firearm)	Monroe	2019	Total	All Races	All Ages	12	13	170,271	5.8	2.5	9.1
Suicide (intentional self-harm), not firearm, other or unknown	Monroe	2019	Total	All Races	All Ages	11	13	170,271	6.6	2.7	10.5
Suicide (intentional self-harm)	Monroe	2018	Total	All Races	All Ages	34	27	169,507	19.6	13.0	26.2
Suicide (intentional self-harm by firearm)	Monroe	2018	Total	All Races	All Ages	22	14	169,507	12.6	7.3	17.8
Suicide (intentional self-harm), not firearm, other or unknown	Monroe	2018	Total	All Races	All Ages	12	13	169,507	7.1	3.1	11.0
Suicide (intentional self-harm)	Monroe	2017	Total	All Races	All Ages	28	27	168,046	16.5	10.4	22.6
Suicide (intentional self-harm by firearm)	Monroe	2017	Total	All Races	All Ages	20	13	168,046	11.5	6.5	16.5
Suicide (intentional self-harm), not firearm, other or unknown	Monroe	2017	Total	All Races	All Ages	8	14	168,046	ND	ND	ND

ND = Not displayed if sample is considered statistically unreliable.

Source: Pennsylvania Behavioral Risk Factor Surveillance System (BRFSS).

Pennsylvania Resident Deaths: Age-Adjusted Rates per 100,000											
Underlying Cause of Death	County/State	Year	Sex	Race/Ethnicity	Age	Count	Expected Count	Population	Age-Adjusted Rate	Lower Bound	Upper Bound
Suicide (intentional self-harm)	Montour	2019	Total	All Races	All Ages	4	3	18,230	ND	ND	ND
Suicide (intentional self-harm by firearm)	Montour	2019	Total	All Races	All Ages	3	1	18,230	ND	ND	ND
Suicide (intentional self-harm), not firearm, other or unknown	Montour	2019	Total	All Races	All Ages	1	1	18,230	ND	ND	ND
Suicide (intentional self-harm)	Montour	2018	Total	All Races	All Ages	3	3	18,240	ND	ND	ND
Suicide (intentional self-harm by firearm)	Montour	2018	Total	All Races	All Ages	1	1	18,240	ND	ND	ND
Suicide (intentional self-harm), not firearm, other or unknown	Montour	2018	Total	All Races	All Ages	2	1	18,240	ND	ND	ND
Suicide (intentional self-harm)	Montour	2017	Total	All Races	All Ages	4	3	18,272	ND	ND	ND
Suicide (intentional self-harm by firearm)	Montour	2017	Total	All Races	All Ages	3	1	18,272	ND	ND	ND
Suicide (intentional self-harm), not firearm, other or unknown	Montour	2017	Total	All Races	All Ages	1	1	18,272	ND	ND	ND

ND = Not displayed if sample is considered statistically unreliable.

Source: Pennsylvania Behavioral Risk Factor Surveillance System (BRFSS).

Pennsylvania Resident Deaths: Age-Adjusted Rates per 100,000											
Underlying Cause of Death	County/State	Year	Sex	Race/Ethnicity	Age	Count	Expected Count	Population	Age-Adjusted Rate	Lower Bound	Upper Bound
Suicide (intentional self-harm)	Susquehanna	2019	Total	All Races	All Ages	6	6	40,328	ND	ND	ND
Suicide (intentional self-harm by firearm)	Susquehanna	2019	Total	All Races	All Ages	3	3	40,328	ND	ND	ND

Suicide (intentional self-harm), not firearm, other or unknown	Susquehanna	2019	Total	All Races	All Ages	3	3	40,328	ND	ND	ND
Suicide (intentional self-harm)	Susquehanna	2018	Total	All Races	All Ages	14	7	40,589	36.0	17.2	54.9
Suicide (intentional self-harm by firearm)	Susquehanna	2018	Total	All Races	All Ages	9	3	40,589	ND	ND	ND
Suicide (intentional self-harm), not firearm, other or unknown	Susquehanna	2018	Total	All Races	All Ages	5	3	40,589	ND	ND	ND
Suicide (intentional self-harm)	Susquehanna	2017	Total	All Races	All Ages	9	7	40,985	ND	ND	ND
Suicide (intentional self-harm by firearm)	Susquehanna	2017	Total	All Races	All Ages	4	3	40,985	ND	ND	ND
Suicide (intentional self-harm), not firearm, other or unknown	Susquehanna	2017	Total	All Races	All Ages	5	3	40,985	ND	ND	ND

ND = Not displayed if sample is considered statistically unreliable.

Source: Pennsylvania Behavioral Risk Factor Surveillance System (BRFSS).

Pennsylvania Resident Deaths: Age-Adjusted Rates per 100,000											
Underlying Cause of Death	County/State	Year	Sex	Race/Ethnicity	Age	Count	Expected Count	Population	Age-Adjusted Rate	Lower Bound	Upper Bound
Suicide (intentional self-harm)	Wayne	2019	Total	All Races	All Ages	16	8	51,361	34.4	17.5	51.3
Suicide (intentional self-harm by firearm)	Wayne	2019	Total	All Races	All Ages	11	4	51,361	23.0	9.4	36.6
Suicide (intentional self-harm), not firearm, other or unknown	Wayne	2019	Total	All Races	All Ages	5	4	51,361	ND	ND	ND
Suicide (intentional self-harm)	Wayne	2018	Total	All Races	All Ages	16	8	51,276	23.3	11.9	34.7
Suicide (intentional self-harm by firearm)	Wayne	2018	Total	All Races	All Ages	12	4	51,276	14.6	6.3	22.8

Suicide (intentional self-harm), not firearm, other or unknown	Wayne	2018	Total	All Races	All Ages	4	4	51,276	ND	ND	ND
Suicide (intentional self-harm)	Wayne	2017	Total	All Races	All Ages	15	9	51,205	23.0	11.3	34.6
Suicide (intentional self-harm by firearm)	Wayne	2017	Total	All Races	All Ages	9	4	51,205	ND	ND	ND
Suicide (intentional self-harm), not firearm, other or unknown	Wayne	2017	Total	All Races	All Ages	6	4	51,205	ND	ND	ND

ND = Not displayed if sample is considered statistically unreliable.

Source: Pennsylvania Behavioral Risk Factor Surveillance System (BRFSS).

Health Care Access

Ranked Weighting – Pennsylvania Adults

Pennsylvania BRFSS: Health Care Access/Coverage – Does not have a personal health care provider				
Year	Demographic	Percent	Lower Bound	Upper Bound
2020	All adults	15	14	16
2020	Age: 18-29	28	24	32
2020	Age: 30-44	23	20	27
2020	Age: 45-64	9	7	10
2020	Age: GE 65	5	4	6
2020	R/E: Black, non-Hispanic	13	12	15
2020	R/E: Black, non-Hispanic	14	11	18
2020	R/E: Hispanic	23	17	31

Source: Pennsylvania BRFSS, Bureau of Informatics and Information Technology, Division of Health

References

- Abbott, A. (2021). COVID's mental-health toll: How scientists are tracking a surge in depression. *Nature (London)*, 590(7845). <https://doi.org/10.1038/d41586-021-00175-z>
- Adepoiu, O., Lin, S.-H., Mileski, M., Kruse, C.S., & Mask, A. (2018) Mental health status and healthcare utilization among community dwelling older adults. *Journal of Mental Health*, 27(6). <https://doi.org.wilkes.idm.oclc.org/10.1080/09638237.2018.1466030>
- Alaska Department of Health and Social Services. Division of Behavioral Health (2022). Prevention and treatment continuum of care. Prevention and Treatment Continuum of Care (alaska.gov)
- Almedom A. M. (2008). Resilience research and policy/practice discourse in health, social, behavioral, and environmental sciences over the last ten years. *African health sciences*, 8 Suppl 1(Suppl 1), S5–S13.
- American Academy of Child & Adolescent Psychiatry (2022). Continuum of Mental Health Care.
- American College of Emergency Physicians. [A.C.E.P.// Mental Health Advocacy](#)
- Brooks S.K., Webster R.K., Smith L.E. The psychological impact of quarantine and how to reduce it: rapid review of the evidence. *Lancet*. 2020;395:912–920.
- Centers for Disease Control and Prevention Groups at higher risk for severe illness (2019). <https://www.cdc.gov/coronavirus/2019-ncov/need-extra-precautions/groups-at-higher-risk.html>
- Egede, L., Ruggiero, K., & Frueh, B. (2020). Ensuring mental health access for vulnerable populations in COVID era. *Journal of Psychiatric Research*, 129. <https://doi.org/10.1016/j.jpsychires.2020.07.011>
- Evashwick C. Creating the continuum of care. *Health Matrix*. 1989 Spring;7(1):30-9. PMID: 10293297.
- Färber, F., & Rosendahl, J. (2018). The Association Between Resilience and Mental Health in the Somatically Ill. *Deutsches Arzteblatt international*, 115(38), 621–627. <https://doi.org/10.3238/arztebl.2018.0621>
- Fuller & Pinals (n.d.). Beyond beds: The continuum of care as a public health approach. Substance Abuse and Mental Health Services Administration (SAMHSA) [PowerPoint Presentation \(nasmhpd.org\)](#)
- Galea S, Merchant RM, Lurie N. The Mental Health Consequences of COVID-19 and Physical Distancing: The Need for Prevention and Early Intervention. *J.A.M.A. Intern Med*. 2020;180(6):817–818. doi:10.1001/jamainternmed.2020.1562
- Garrett, R. C., F.A.C.H.E. (2020). Writing a New Narrative for Behavioral Healthcare. *Journal of Healthcare Management*, 65(2), 85-89. <http://dx.doi.org/10.1097/JHM-D-20-00022>
- Geisinger (2022). Behavioral Health Data from HAP 2020 aggregates [personal communication].
- Geisinger (2022). Behavioral health write up [personal communication].
- Inpatient claims data for 2019 (January 1, 2019- December 31, 2019) were extracted from the PHC4 data set at HAP using ICD10 codes (at any position) for mental health and substance use disorders.
- Getch, S. E., & Lute, R. M. (2019). Advancing Integrated Healthcare: A Step by Step Guide for Primary Care Physicians and Behavioral Health Clinicians. *Missouri medicine*, 116(5), 384–388. Advancing Integrated Healthcare: A Step by Step Guide for Primary Care Physicians and Behavioral Health Clinicians (nih.gov)
- McClellan, C., Maclean, J.C., Saloner, B., McGinty, E.E., & Pesko, M.F. (2020). Integrated care models and behavioral health care utilization: Quasi-experimental evidence from Medicaid health homes. *Health Economics*, 29(9), 1086-1097. <https://doi.org/10.1002/hec.4027>
- National Institute of Mental Health. [NIMH » One Year In: COVID-19 and Mental Health \(nih.gov\)](#)
- Narain, K., Xu, H., Azocar, F., & Ettner, S. L. (2019). Racial/ethnic disparities in specialty behavioral health care treatment patterns and expenditures among commercially insured patients in managed behavioral health care plans. *Health services research*, 54(3). <https://doi.org/10.1111/1475-6773.13121>
- O'Loughlin, K., Donovan, E. K., Radcliff, Z., Ryan, M., & Rybarczyk, B. (2019). Using integrated behavioral healthcare to address behavioral health disparities in underserved populations. *Translational Issues in Psychological Science*, 5(4), 374-389. <http://dx.doi.org/10.1037/tps0000213>

- Panchal N. 2020. The Implications of COVID-19 for Mental Health and Substance Use. <https://www.kff.org/coronavirus-covid-19/issue-brief/the-implications-of-covid-19-for-mental-health-and-substance-use/>
- ParentsLead.Org (n.d.). Behavioral health continuum of care model.
- Pennsylvania Department of Health (2022). Behavioral health risks of Pennsylvania adults. [Behavioral Risks, PA Adults](#).
- Shell, L., Newton, M., Soltis-Jarrett, V., Ragaisis, K. & Shea, J. (2019). Quality improvement and models of behavioral healthcare integration: Position paper #2 from the International Society of Psychiatric-Mental Health Nurses. *Archives of Psychiatric Nursing*, 33, (4). <https://doi.org/10.1016/j.apnu.2019.05.003>
- Singh O. P. (2020). Covid 19 and access to mental health care - Need of increased investment. *Indian journal of psychiatry*, 62(Suppl 3), S328-S329. https://doi.org/10.4103/indianjpsychiatry.indianjpsychiatry_1140_20
- Storholm et al. (2017). Barriers to integrating the continuum of care for opioid and alcohol use disorders in primary care: A qualitative longitudinal study. *Journal of Substance Abuse Treatment*, 83. <https://doi.org/10.1016/j.jsat.2017.09.015>.
- Sweet, J. (2021). Amid Ongoing Mental Health Crisis, Therapists Struggle to Meet Demand. Ongoing Mental Health Crisis Overwhelms Therapists (verywellmind.com)
- Thomas, S. (2021) Black Mental Health Matters: Addressing Post-COVID Mental Health Needs of Black Americans, *Issues in Mental Health Nursing*, 42(8), 707-708, DOI: 10.1080/01612840.2021.1952017

The Institute

Turning Information into Insight

THE INSTITUTE FOR PUBLIC POLICY & ECONOMIC DEVELOPMENT



ACADEMIC PARTNERS

Geisinger Commonwealth School of Medicine
Johnson College
Keystone College
King's College
Lackawanna College
Luzerne County Community College
Marywood University
Misericordia University
Penn State Scranton
Penn State Wilkes-Barre
The Wright Center for Graduate Medical Education
University of Scranton
Wilkes University - Managing Partner

OFFICES

85 South Main Street
Wilkes-Barre, PA 18701
570.408.9850

St. Thomas Hall
Suite 107
Scranton, PA 18503
570.408.9850

E-mail: info@institutepa.org
www.institutepa.org