Addressing Unmet Healthcare Needs in Southwest PA
BBF Safety Net Program
March 2023
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Hello! My name is Julia van den Bergh and I am the Director of Strategic Initiatives at Brother’s Brother Foundation (BBF). The goal of this project is to understand the medical safety net, identify local unmet needs, and design impactful programs.

We focus on the major types of safety net clinics, listing them from most to least prevalent on a national scale. We then review key advocacy networks and emerging healthcare trends. The appendix covers national health and economic trends and Pennsylvania demographics, economics, infrastructure, and foundations.

The following sections underpin BBF’s local strategy:
1. Executive Summary
2. US & Pennsylvania Medical Safety Net
3. Mobile Health Clinics

The Emerging Trends section will shape BBF’s strategy as the market evolves.

The report was created to be a catalyst for discussion, so your ideas and feedback are always welcome. We look forward to working with you!

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1. **BBF Global Safety Net Program**: This local project is part of a larger global program to expand the safety net through innovation, providing access to technological advances that our local implementation partners can use to increase the efficiency and reach of their programs.

2. **Trend Sources**: US/PA medical trends were chosen based on multiple sources investigating the pressing health issues such as the CDC, PA Health Policy Coalition, and other federal/state government departments or alliances.

3. **Report Function**: The report was created to be a catalyst for discussion, so your ideas and feedback are always welcome!

4. **BBF Market Intelligence Database**: Cross-state comparisons of safety net features are created from BBF’s in-house market intelligence database.

5. **References & Data Sourcing**: Innumerable sources are referenced throughout this report. Reference numbers are unique to each slide. Where applicable, the major source is listed on the bottom left of the slide. When more than one major source is referenced, all referenced sources are provided at end of the presentation in the “References” section.

6. **Southwest PA Definition**: Southwest PA includes 14 counties. The PA Department of Human Services uses this structure for the State Managed Care Map & Managed Care Organization Directory. As of 2022, 33% of PA’s population lives in the southeast, 25% in Lehigh/Capital, 22% in the southwest, 14% in the New East, and 6% in the New West¹.
There are two clear deficiencies in the local safety net: Mobile Health Clinics (MHC) and School-Based Health Centers (SBHC). These programs target unique patient populations that are underserved in southwest PA.

1. **Mobile Health Clinics**: ~2,000 MHCs nationally are supported by a decade of data proving their efficacy across multiple endpoints and a strong return on investment. COVID-19 highlighted the benefit of bringing healthcare directly into communities, instigating numerous federal and state initiatives such as grants and congressional legislation.

2. **School-Based Health Centers**: PA has 2.3 – 4.9x as many children under the federal poverty level per SBHC vs. any other state with 10-13M residents. None of them are in southwest PA. The PA public school system is also underfunded, ranking 45th nationally in state share for education.

In 2022, the Pennsylvania MHC and SBHC programs received $5M and $2.85M from the State Fiscal Recovery Funds/American Rescue Plan, respectively. 100% of this funding went to the east half of the state, mainly Philadelphia.

To address this unmet need, BBF is partnering with local organizations to launch MHCs providing primary care and specialty services, including a pediatric MHC to address the lack of school-based health programs.
<table>
<thead>
<tr>
<th>Parent</th>
<th>Focus</th>
<th>Location</th>
<th>Parent Structure</th>
<th>Launch</th>
<th>MHC Cost</th>
<th>Analytics Program</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Motorcycle Response Units</td>
<td>Emergency Response</td>
<td>San Remigio, Philippines</td>
<td>NGO</td>
<td>2018</td>
<td>N/A</td>
<td>Complete</td>
<td></td>
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<tr>
<td>Mobile Response Unit</td>
<td>Emergency Response</td>
<td>Ponce, Puerto Rico</td>
<td>Hospital</td>
<td>2018</td>
<td>N/A</td>
<td>Complete</td>
<td></td>
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<tr>
<td>Vision MHC</td>
<td>Vision</td>
<td>Southwest PA, USA</td>
<td>NGO</td>
<td>2022</td>
<td>~ $200K</td>
<td>Complete</td>
<td></td>
</tr>
<tr>
<td>Eye Van</td>
<td>Vision</td>
<td>Southwest PA, USA</td>
<td>NGO</td>
<td>2023</td>
<td>Transfer</td>
<td>Complete</td>
<td></td>
</tr>
<tr>
<td>Kentucky Care MHC</td>
<td>Primary Care</td>
<td>Kentucky, USA</td>
<td>NGO</td>
<td>2023</td>
<td>~ $200K</td>
<td>Funded</td>
<td></td>
</tr>
<tr>
<td>Caridad Vision MHC</td>
<td>Vision</td>
<td>Florida, USA</td>
<td>NGO</td>
<td>2023</td>
<td>~ $200K</td>
<td>Funded</td>
<td></td>
</tr>
<tr>
<td>Highmark MHC</td>
<td>Primary Care</td>
<td>Southwest PA, USA</td>
<td>NGO</td>
<td>2023</td>
<td>~ $200K</td>
<td>Funded</td>
<td></td>
</tr>
<tr>
<td>Audiology MHC</td>
<td>Audiology</td>
<td>Southwest PA, USA</td>
<td>NGO</td>
<td>2024</td>
<td>~ $300K</td>
<td>Open</td>
<td></td>
</tr>
<tr>
<td>Mammography MHC</td>
<td>Mammography</td>
<td>Pennsylvania, USA</td>
<td>NGO</td>
<td>2024/2025</td>
<td>~ $1.5M</td>
<td>Open</td>
<td></td>
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<tr>
<td>Pediatric MHC</td>
<td>Pediatric Primary Care</td>
<td>Southwest PA, USA</td>
<td>NGO</td>
<td>2024/2025</td>
<td>~ $500K</td>
<td>Planned</td>
<td></td>
</tr>
<tr>
<td>Q4 2021</td>
<td>Q1 2022</td>
<td>Q2 2022</td>
<td>Q3 2022</td>
<td>Q4 2022</td>
<td></td>
<td></td>
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<td>Oct</td>
<td>Nov</td>
<td>Dec</td>
<td>Jan</td>
<td>Feb</td>
<td>Mar</td>
<td>Apr</td>
<td>May</td>
</tr>
</tbody>
</table>

**Summary**

**Phase 1: MHC Pilot #1 – Vision MHC (Project Theia)**

- Market Intelligence & Partnering #1
  - Project Theia (MHC Pilot #1)
  - BBF/PT/Allegheny Valley, PA

**Phase 2: US/PA Market Intelligence**

- Van Build
  - BBF/PT/Allegheny Valley, PA

- Partnering #2
  - BBF/PT/Dallas, TX

**Phase 3: Build Local Strategy**

- Partnering #3
  - UPMC Guerilla

**Phase 2 & 3: Southwest PA Strategy**

- Market Intelligence #1: US Medical Safety Net
  - Eden Hall grant (December 2021)

- Delay – Adhoc BBF Priorities
  - Education Plus Health
  - PA National School-Based Health Alliance

- Market Intelligence #2: Southwest PA Deep Dive
  - Partnering #1
    - UPMC/U Pitt Guerilla Eye Service
    - PA Ear & Eye Foundation
    - Highmark/Allegheny Valley, PA

- Partnering #2
  - BBF/PT/Dallas, TX
<table>
<thead>
<tr>
<th>Q1 2023</th>
<th>Q2 2023</th>
<th>Q3 2023</th>
<th>Q4 2023</th>
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<tbody>
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<td>Apr</td>
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<td>Jun</td>
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<td>Jul</td>
<td>Aug</td>
<td>Sept</td>
<td>Oct</td>
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<tr>
<td>Oct</td>
<td>Nov</td>
<td>Dec</td>
<td></td>
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</tbody>
</table>

**Summary**

<table>
<thead>
<tr>
<th>Phase 3 &amp; 4: US Strategy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phase 5 &amp; 6: Global Strategy</td>
</tr>
</tbody>
</table>

**Phase 3: Build Local Strategy**

**Phase 4: Fund, Launch, and Expand US Program**

**Phase 5: Global Market Intelligence**

**Phase 6: Build, Fund, and Launch Global Program**

**Market Intelligence #3: Audiology & Mammography**

**Van Build & Donation: Caridad, AHN/Highmark, Kentucky Care**

**Market Intelligence #4: MHC National Expansion**

- Partnering #3
- Grant Writing #1
- Partnering #4

- **Competitive Intelligence**
- **Market Intelligence #1: Global Strategy**
- **Market Intelligence #2: Geographical Expansion**

- **Partnering #1**
- **Partnering #2**

- **Partnering #4**
  - Harvard/Johns Hopkins
  - Medical schools/hospital networks/FQHCs
  - Hearing Aid Manufacturers

- **Partnering #3**
  - PA FQHC Network
  - Center for Hearing & Deaf Services

- ChildLife: Pakistan Hospitals
The US medical safety net includes >20,000 clinical sites providing health services to >25 million people regardless of their ability to pay. The safety net is an amorphous term that varies significantly depending on location and perspective. However, a simplistic view can capture the growth of the safety net via three waves.  

1. Hospitals: Until Medicaid/Medicare in 1965 and the rapid expansion of FQHCs in the 1980s, hospitals were the core of the safety net and virtually the only option for poor individuals. There are many issues with this structure, such as inconvenience for patients and the astronomical cost of treating preventable health issues in this setting. The number of safety net or ‘essential hospitals’ is unknown on a national scale. America’s Essential Hospitals trade group counts 300 members, but there are >1,000 public hospitals nationally.

2. Safety Net Clinics: Federally qualified health centers (FQHCs) are the backbone of the safety net, followed by rural health clinics (RHCs). They are more convenient than hospitals, but there are still many barriers such as transportation, missed time at work/school, documentation for the FQHC sliding fee scale, community mistrust, and the cost of outfitting satellite locations with expensive specialty equipment and personnel.

3. Mobile Health Clinics (MHC) & School-Based Health Centers (SBHC): MHCs and SBHCs recently gained momentum as they target unique patient populations. Both are sponsored by a range of organizations (ex: FQHCs and hospitals) and overcome the barriers faced by other types of safety net clinics, making healthcare more accessible and affordable.

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*There are two main overlaps to note in this data set: As of 2017, 51% of SBHCs were sponsored by FQHCs & 20% by hospitals/medical centers; note the overlap in the data. As of 2020, 24% of MHCs were affiliated with universities, 25% with hospitals, and 25% with nonprofits. MHCs are difficult to calculate on a national scale, but the national association estimates 2K. "Free clinics are slightly under-reported on a national scale.
Federally Qualified Health Centers (FQHC) are also the backbone of the safety net in Pennsylvania. The FQHC network is adequately represented in PA vs. similar-sized states (10-13M residents) in terms of sites per residents under the federal poverty level, full-time employees (FTE), patients/site, patients/FTE, and grant money (see slides 37-40).

Mobile Health Clinics (MHC), school-based health centers (SBHCs), and rural health clinics (RHC) are under-represented in PA vs. the ratio of safety net clinic sites on a national level. As PA is densely populated, with the 9th largest number of residents/m², it is logical that RHCs are a smaller portion of clinical sites. The number of MHCs in PA is constantly fluctuating, but in 2020, the national association estimated 16.1² FQHC look-likes are over-represented. Free clinics are as well, but they are slightly under-reported nationally.

There is a clear need for MHCs and SBHCs locally. 22% of PA’s population lives in the 14 counties of southwest PA, yet there are no SBHCs. Several MHCs operate in southwest PA, but all the 2022 COVID Public Health Equity funding went to programs on the eastern side of the state.¹ Both these programs were identified as priorities by the state/federal government over the past few years.

<table>
<thead>
<tr>
<th>Clinic Type</th>
<th>Abbrev.</th>
<th>National</th>
<th>PA</th>
<th>% of PA Sites in Southwest PA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Federally Qualified Health Center Site</td>
<td>FQHC</td>
<td>63%</td>
<td>58%</td>
<td>26%</td>
</tr>
<tr>
<td>Rural Health Clinic</td>
<td>RHC</td>
<td>18%</td>
<td>12%</td>
<td>17%</td>
</tr>
<tr>
<td>School-Based Health Center</td>
<td>SBHC</td>
<td>10%</td>
<td>5%</td>
<td>0%</td>
</tr>
<tr>
<td>Mobile Health Clinic</td>
<td>MHC</td>
<td>7%</td>
<td>3%</td>
<td>fluctuates</td>
</tr>
<tr>
<td>Free &amp; Charitable Clinic</td>
<td>-</td>
<td>5%</td>
<td>14%</td>
<td>23%</td>
</tr>
<tr>
<td>FQHC Look-Alike Site</td>
<td>FQHCLA</td>
<td>2%</td>
<td>9%</td>
<td>4%</td>
</tr>
</tbody>
</table>

¹Free clinics are under-reported on a national scale. They are not required to apply for a federal status and therefore not all of them register with the National Association of Free and Charitable Clinics (NAFC). Members of both NAFC and PA’s FCAP are included in the PA analysis, while only members of NAFC are included in the national analysis. In PA, 34 are registered with only NAFC, 13 with only PA FCAP, and 34 with both. Including only the sites registered with NAFC in PA (N=68), Free Clinics are 5x less common vs. FQHC sites, still substantially greater vs. the national ratio where Free Clinics are 11x less common vs. FQHC sites.
Mobile Health Clinics (MHCs) have the unique ability to bring medical care directly into underserved communities. There are ~2,000 MHCs nationally, supported by a decade of data proving their efficacy across multiple endpoints and a strong return on investment.1,2 They are run by a range of organizations, mainly independent nonprofits, hospital systems, and universities.

1. **Increase healthcare access**: MHCs provide geographical/logistical convenience and increase access to minorities/vulnerable communities. One of the most critical features of MHCs is their ability to build trust with the communities and link them with clinical settings.

2. **Improve health outcomes**: MHCs have demonstrated a statistically significant impact on screening rates, preventive care, chronic disease management, and patient self-efficacy.

3. **Reduce healthcare costs**: MHCs reduce avoidable ER visits and hospitalization/readmission rates while increasing symptom-free days and quality-adjusted life years. Dr. McShane at Penn State College estimates MHCs save $1.1B in healthcare costs annually.2,4

In 2020, Harvard published a strong case for how MHCs align with business-related incentives such as branding, business development, community benefit requirements, patient-centered care, and employee engagement.3

COVID-19 highlighted the importance of MHCs, instigating numerous federal and state initiatives to support the expansion of the MHC network. In 2022, Congress passed the MOBILE Health Care Act allowing federally qualified health centers to utilize federal funds for MHCs. Additionally, Pennsylvania received $5M from the COVID-19 Public Health Equity Initiative to staff mobile clinics. All the grants went to programs in the eastern half of the state.6

Underserved youth have higher rates of asthma, substance use, anxiety, depression, and obesity and are at elevated risk of not having regular health maintenance visits. High prevalence of pediatric asthma is particularly problematic in PA, ranking 3rd nationally.

1. Most Pennsylvania public schools are inadequately funded, ranking 45th in state share for education. PA has the widest funding gap between wealthy and poor school districts of any state in the US, with the wealthiest districts spending 33% more on each student.

2. School-Based Health Centers (SBHCs) unlock new patients vs. other safety net clinics
   - SBHCs do not face the same barriers as FQHC/Free Clinics such as transportation, missed work/school, fees, extensive documentation, and community mistrust.
   - Over 30% of SBHCs nationally treat expanded populations beyond students.
   - Children 5-18 years represent less than a quarter of the national FQHC patients. FQHC patient groups <18yrs grew by 26% over the past decade vs. 65-120% in groups >45yrs.
   - Due to rapid growth and increasing competitive pressure within the FQHC network over the past 20 years, the latest expansion of FQHC sites is more likely to target lucrative communities rather than rural or high-poverty areas.

3. SBHCs are gaining traction in PA, but all of them are in the eastern half of the state
   - Education Plus Health, became an affiliate of the National SBHC Alliance in 2021.
   - In May 2022, PA SBHCs received a $2.8M grant from the American Rescue Plan to expand mental health services to existing sites in eastern PA.

*Low ranking indicates a high number of children per SBHC site

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Children Under Federal Poverty Level Per SBHC Site (2017)

- PA has more than double as many children (0-17 years) < FPL per SBHC site vs. any state with >10M residents, ranking 40th nationally.
- Mobile health clinics can effectively target this population as well as they can visit public school campuses.

State | Population | SBHC Sites | Children Under FPL Per Site
--- | --- | --- | ---
California | 39,332 | 4,403 | 9.4
Texas | 26,084 | 6,333 | 15.1
Florida | 21,626 | 6,834 | 15.5
New York | 20,333 | 3,333 | 11.0
Pennsylvania | 13,925 | 6,731 | 9.9
Illinois | 11,440 | 4,401 | 7.3
Ohio | 10,132 | 4,611 | 4.6
Georgia | 9,708 | 4,762 | 4.9
North Carolina | 9,182 | 4,706 | 5.1
Michigan | 8,382 | 3,152 | 9.9

Pennsylvania: 13M

*Low ranking indicates a high number of children per SBHC site
Two key networks of clinics target underserved populations across both rural and urban communities.

1. **Federally Qualified Health Centers (FQHC):** Public or private nonprofit, eligible for federal/state government programs, operated by employees, and charge patients on a sliding fee scale. Look-Alikes are governed, operated, and provide services like FQHCs but are not eligible for all the government programs\(^1\)\(^5\)

2. **Free & Charitable Clinics:** Funded by the private sector, operated by volunteers, and free\(^1\)

**Federally Qualified Health Centers** include\(^3\)\(^4\)

1. Community Health Centers (CHC) – the vast majority of FQHCs
2. Migrant Health Centers (MHC)
3. Health Care for the Homeless (HCH)
4. Public Housing Primary Care Centers (PHPCs)

**Free & Charitable Clinics have been referred to as the “net below America’s safety net,” by Nicole Lamoureux, President and CEO of NAFC.** They are usually initiated by individuals to address unmet needs in their local communities.\(^2\)

### Federally Qualified Health Centers vs. Free & Charitable Clinic

<table>
<thead>
<tr>
<th>Network</th>
<th>Federally Qualified Health Centers</th>
<th>Free &amp; Charitable Clinics</th>
</tr>
</thead>
<tbody>
<tr>
<td>National</td>
<td>National Association of Community Health Centers (NACHC)</td>
<td>National Association of Free &amp; Charitable Clinics (NAFC)</td>
</tr>
<tr>
<td>Pennsylvania</td>
<td>Pennsylvania Association of Community Health Centers (PACHC)</td>
<td>Free Clinic Association of PA (FCAP)</td>
</tr>
<tr>
<td>Regulatory Agencies</td>
<td>Defined by Section 330 of the Public Health Service Act as a FQHC or FQHC look-alike.</td>
<td>Varies by locale</td>
</tr>
<tr>
<td>Board of Directors</td>
<td>Federal rules require that at least 50% of board members be consumers</td>
<td>Per Bylaws developed by each Free or Charitable Clinic</td>
</tr>
<tr>
<td>Federal Program Eligibilities</td>
<td>Federal 330 grants, HRSA federal loan guarantees, enhanced Medicare/Medicaid reimbursement, Federal Tort Claims Act (free malpractice coverage), Section 340B federal drug pricing programs, automatic HPSA designation, special “safety harbors”</td>
<td>Enhanced Medicare/Medicaid reimbursement and 340B drug pricing programs, but not 330 grants or special “safety harbors” protection under federal and state anti-kickback statutes</td>
</tr>
<tr>
<td>Primary Funding Mechanisms</td>
<td>Federal grants, Medicare/Medicaid, public &amp; private gifts/grants, self-pay</td>
<td>Private sector (donations, grants, etc.)</td>
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<tr>
<td>Population Served</td>
<td>Insured/Uninsured</td>
<td>Uninsured/Uninsured Usually up to 200% of Federal Poverty Level</td>
</tr>
<tr>
<td>Fees for Service</td>
<td>Third party payers or sliding fee scales</td>
<td>Free or minimal fee(s) may be charged only if fee(s) are waived when necessary for essential services. Patient donations may be accepted</td>
</tr>
<tr>
<td>Economic Impact</td>
<td>Unknown</td>
<td>Minimum 3:1</td>
</tr>
<tr>
<td>Services Provided</td>
<td>Provided by Clinic employees</td>
<td>Primarily and often exclusively volunteers</td>
</tr>
<tr>
<td>Vision</td>
<td>Referrals based on reimbursement</td>
<td>Referral to volunteers</td>
</tr>
<tr>
<td>Specialty</td>
<td>Referrals based on reimbursement</td>
<td>Provided on site by volunteers or through referrals at little or no cost to patients</td>
</tr>
<tr>
<td>In-Patient</td>
<td>Referrals to hospitals reimbursement or sliding fee scale</td>
<td>Referrals to hospitals free or sliding fee scale</td>
</tr>
<tr>
<td>Lab/Radiology</td>
<td>Referral based on reimbursement</td>
<td>Referrals usually free</td>
</tr>
<tr>
<td>Prescription Assistance</td>
<td>Through private drug coverage benefits or at federal 340B discounted pricing</td>
<td>Free, may include a processing fee No 340b access</td>
</tr>
</tbody>
</table>

Source: National Association of Free and Charitable Clinics
The Rural Health Clinic (RHC), also known as the “95-210 clinic”, designation was created by the Rural Health Clinic Services Act of 1977. Its primary purpose was to address the inadequate supply of physicians to serve Medicare and Medicaid beneficiaries in rural areas. While sometimes confused with FQHCs, RHCs differ in many ways.

1. **Sponsors & Designation**: RHCs may be provider-based (linked to a hospital) or independent (stand-alone). RHCs are federally designated through the CMS and cannot simultaneously be an FQHC. They do not receive 300 grants but do receive higher Medicare and Medicaid payments similar to the FQHC payment rate.

2. **Providers**: RHCs aim to increase the use of non-physician providers, including Nurse Practitioners (NPs), Physician Assistants (PA-Cs), and Certified Nurse Midwives (CNMs), in rural areas. A non-physician provider must provide patient care services at least 50% of the time.

Because RHCs are not required to maintain an open-door policy and may be operated by for-profit entities, they do not fall within the technical definition of safety-net clinics. However, RHCs increasingly are viewed as safety-net providers in the rural communities they serve because their patients tend to be self-paying and uninsured, Medicaid recipients, and other vulnerable populations.

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### FQHC vs. Rural Health Clinic

<table>
<thead>
<tr>
<th>Category</th>
<th>Federally Qualified Health Centers</th>
<th>Rural Health Clinics</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Network</strong></td>
<td>National Association of Community Health Centers (NACHC)</td>
<td>National Association of Rural Health Clinics (NARHC)</td>
</tr>
<tr>
<td><strong>Local</strong></td>
<td>Pennsylvania Association of Community Health Centers (PACHC)</td>
<td>N/A</td>
</tr>
<tr>
<td><strong>General</strong></td>
<td>Includes Public Health Services Act Section 330 grantees in urban/rural settings</td>
<td>Established only in rural communities</td>
</tr>
<tr>
<td><strong>Corporate Structure</strong></td>
<td>Limited to nonprofit, tax exempt corporations and public agencies</td>
<td>Nonprofit and for profit corporations, public agencies, sole proprietorships, and partnerships</td>
</tr>
<tr>
<td><strong>Board of Directors</strong></td>
<td>Required to have a board of directors – at least 51% must be patients of the health center</td>
<td>Not required to have a board of directors</td>
</tr>
<tr>
<td><strong>Location</strong></td>
<td>Must be located in an area that is underserved or experiencing a shortage of healthcare providers. FQHCs may operate in both non-urbanized and urbanized areas</td>
<td>Must be located in a non-urban area, Health Professional Shortage Area, Medically Underserved Area, or governor-designated and secretary-certified shortage area</td>
</tr>
<tr>
<td><strong>Annual Requirements</strong></td>
<td>Required to submit an annual cost report and audited financial reports</td>
<td>Required to submit an annual cost report; however, auditing of financial reports is not required</td>
</tr>
<tr>
<td><strong>Patient Population</strong></td>
<td>Required to provide care for all age groups</td>
<td>May be limited to a specific type of primary care practice (e.g., OB-GYN, Pediatrics)</td>
</tr>
<tr>
<td><strong>Services</strong></td>
<td>Minimum service required – maternity &amp; prenatal care, preventive care, behavioral health, dental, emergency, and pharmacy</td>
<td>No minimum service requirements</td>
</tr>
<tr>
<td><strong>Fee Structure</strong></td>
<td>Required to treat all residents in their service area with charges based on a sliding fee scale</td>
<td>Not required to charge based on a sliding fee scale or provide services regardless of ability to pay</td>
</tr>
<tr>
<td><strong>Hours of Operation</strong></td>
<td>Required to be open 32.5 hours a week for FTCA coverage of licensed or certified healthcare providers. Must provide emergency service after business hours either on-site or by arrangement with another healthcare provider</td>
<td>Not required to provide a minimum of hours or emergency coverage</td>
</tr>
<tr>
<td><strong>Quality Assurance</strong></td>
<td>Required to have ongoing quality assurance program</td>
<td>Required to conduct a biennial program evaluation regarding quality improvement</td>
</tr>
</tbody>
</table>

Source: Rural Health Information Hub
The FQHC network has grown dramatically in the last 50 years. In the early 1960s, there were only 8 health centers in the US. Currently, ~1,400 FQHCs run >11,200 service sites, serving >25 million people across the US.\(^1\)\(^3\)

FQHC expansion was driven by a strong increase in federal funding over the past 20 years. FQHC network received $1B in funding in 2000, which doubled by 2010.\(^2\) Implemented in 2010, the Affordable Care Act (ACA) greatly altered the landscape for FQHCs. The law not only increased federal funding, which has since grown to >$5B, but it expanded the share of health center patients with insurance coverage and invested in programs to grow the health center workforce.\(^4\) ACA’s Community Health Care Fund ran from 2010-2015 and has received several short-term extensions through 2023.\(^5\)

Source: HealthViewX
The National Association of Community Health Centers (NACHC) is founded

Community Health Centers (CHC) program is authorized as a permanent program. President Carter calls for major expansion of health centers, more than doubling program funding over 4 years

Community Health Centers (CHC) established in Medicare & Medicaid & Congress centralizes health centers’ grants administration

REACH doubles federal funding over 5 yrs ($1B → 2B)

NACHC launches Access for All America

ACA grants $11B in SCHC funding & $1.5B for the National Health Service Corps to increase physicians in underserved areas over 5 years

American Reinvestment and Recovery Act (ARRA) delivers $2B, the largest single investment in health center history

Health Centers Recognized as the backbone of pandemic response. The American Rescue Plan Act of 2021 allocates $7.6B to CHCs to respond to COVID-19

The # of patients served by FQHCs grew rapidly over the past 20 years due to an increased federal funding and the ACA

Source: CHC Chronicles
In 2020, FQHCs Served 1/11 People (9%) in the US...¹

- Including Many Special Populations²

FQHCs commonly serve populations that speak other languages and public housing residents.

Source: NACHC 2021 Chart Book
Health Center Patient Age (2020)

- 8% <5 yrs
- 12% 5-12 yrs
- 3% 13-17 yrs
- 8% 18-19 yrs
- 25% 20-44 yrs
- 34% 45-64 yrs
- 10% 65+ yrs

Adults represent 69% of FQHC pts.

K-8 and high school students represent 20% of FQHC pts.

Growth of Health Center Patients by Age (2010-2020)

- < 18 yrs: 26% Growth
- 18-45 yrs: 26% Growth
- 45-64 yrs: 63% Growth
- 65+ yrs: 120% Growth

Patient groups >45 years grew rapidly over the past decade.

Source: NACHC 2021 Chart Book
Health Center Patient Composition by Income in Relation to the Federal Poverty Level (FPL) (NACHC; 2020)¹

% FQHC Patients near the FPL

91% of FQHC patients are in or near poverty.

FQHC Patients by Insurance Type (NACHC; 2020)²

79% of FQHC patients uninsured or publicly insured.

Almost half of them are on Medicaid.

Source: NACHC 2021 Chart Book
FQHC patients are disproportionately members of minority/underserved populations.¹
1. Nationally, 63% of the FQHC patients were members of racial/ethnic minorities vs. 42% of the general US population.
2. 79% of FQHC patients were disproportionately uninsured (22%) or publicly insured (46% Medicaid; 10% Medicare; 1% other public insurance).
3. 91% of FQHC patients were in or near poverty.

FQHC patients suffer more often from chronic conditions vs. the general population.¹
1. FQHC had 35% higher odds vs. private practices to have pts with a chronic condition in 2020.
2. Chronic conditions increased dramatically in FQHC patients from 2013-2017, with obesity/overweight issues and COPD increasing by 150%.

Source: NACHC 2021 Chart Book
Children make up 26% of PA FQHC’s patients. This is comparable to the national average, with ~20% of patients under the age of 12 (8% are <5 years, 12% are between 5-12 years, and 8% <18 years).
Substantially more PA FQHC patients live **below the FPL**, are part of minority populations, and are uninsured or on Medicaid.

Fewer FQHC patients have **Medicare** or are covered by **private insurance**.

Source: NACHC Pennsylvania Fact Sheet
HRSA defines enabling services as “non-clinical services that do not include direct patient services that enable individuals to access health care and improve health outcomes.”
Pennsylvania and national FQHC staffing of medical/specialist professionals are similar, with medical personnel accounting for approximately half of all professional full-time employees.

Enabling, behavioral health, and dental staff account for the majority of services in the "other" category in both settings. Pharmacy staff is more common nationally.

Comparison of Medical/Specialty Staffing Only

Source: NACHC Pennsylvania Fact Sheet
% FQHCs with the Capacity to Offer Dental Services Onsite (2020)¹

Nationally, 82% of FQHCs provide dental services onsite. 93% in PA.

% FQHCs with the Capacity to Offer Pharmacy Services Onsite (2020)¹

Nationally, 49% of FQHCs provide pharmacy services onsite. 38% in PA.

% FQHCs with the Capacity to Offer Vision Services Onsite (2020)¹

Nationally, 26% of FQHCs provide vision services onsite. 24% in PA.

% FQHCs with the Capacity to Offer ≥3 Services in Addition to Medical Care Onsite (2020)¹

Nationally, 82% of FQHCs provide ≥3 services onsite in addition to medical care. 86% in PA.

Source: NACHC 2021 Chart Book
Health Centers have experienced a drastic increase in patients seeking treatment for opioids and other SUDs over the past decade.

Source: NACHC 2021 Chart Book
28.7 million visits were conducted virtually in 2020.

% Virtual Visits by Service (2020)

- 27% Behavioral Services
- 64% Medical Services
- 27% Other Services
- 4% Other

Growth: % Health Centers Offering Telehealth (2020)

- Overall: 43% (2018), 43% (2019), 44% (2020)
- Rural: 48% (2018), 48% (2019), 51% (2020)

Source: NACHC 2021 Chart Book

Focus: # Health Centers Offering Telehealth (2020)

- Primary Care: 554 (2018), 530 (2019), 353 (2020)

Nationally, 1,362 (99%) of health centers use telehealth for a variety of services.
FQHCs outperform other clinics despite serving more at-risk patients\(^1\).

1. **Hypertension/Diabetes Control**: Higher rates of control vs. national average in 2020
2. **Low Birth Weight (LBW)**: Lower rates vs. national average in 2020
3. **Medicaid Benchmarks**: Exceed most Medicaid Managed Care Organization high-performance benchmark scores in 2013
4. **Preventive Services**: More preventive services (ex: mammograms, pap smears, colorectal cancer screenings) in several studies
5. **Patient Satisfaction**: 8% higher likelihood in 2019

---

**Preventive Services (2009/2010/2017)\(^1\)**

<table>
<thead>
<tr>
<th>Service</th>
<th>Health Center Patients</th>
<th>Patients with Other Physicians</th>
</tr>
</thead>
<tbody>
<tr>
<td>New Meds for Medicaid Pts w/ Uncontrolled Hypertension</td>
<td>21%</td>
<td>9%</td>
</tr>
<tr>
<td>Asthma Education for Asthmatic Pts</td>
<td>24%</td>
<td>15%</td>
</tr>
<tr>
<td>Tobacco Cessation Education for Smoking Pts</td>
<td>33%</td>
<td>19%</td>
</tr>
<tr>
<td>Health Education for Pts &gt; 65 years</td>
<td>61%</td>
<td>37%</td>
</tr>
<tr>
<td>Immunizations for Pts in the last 3 years</td>
<td>70%</td>
<td>65%</td>
</tr>
</tbody>
</table>

**Medicaid Managed Care Organization (MCO) Benchmarks (2013)\(^1\)**

<table>
<thead>
<tr>
<th>Condition</th>
<th>Average Rate in High-Performing Health Centers</th>
<th>Average Rate in All Health Centers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diabetes Control</td>
<td>79%</td>
<td>62%</td>
</tr>
<tr>
<td>Blood Pressure Control</td>
<td>72%</td>
<td>63%</td>
</tr>
<tr>
<td>Pap Test</td>
<td>81%</td>
<td>54%</td>
</tr>
</tbody>
</table>

\(^1\): Medicaid MCO High Performance Benchmark (75\(^{th}\) Percentile)

**Unmet Healthcare Needs (2019)\(^1\)**

<table>
<thead>
<tr>
<th>Need</th>
<th>HRSA-Funded Clinics</th>
<th>Other Clinics</th>
<th>Private Physician</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unable to Get Medical Care</td>
<td>7%</td>
<td>15%</td>
<td>13%</td>
</tr>
<tr>
<td>Delays in Medical Care</td>
<td>6%</td>
<td>17%</td>
<td>13%</td>
</tr>
<tr>
<td>Unable to Get Dental Care</td>
<td>23%</td>
<td>21%</td>
<td>14%</td>
</tr>
</tbody>
</table>

**Source**: NACHC 2021 Chart Book
FQHCs are also more cost-effective vs. other providers.

1. **Novel Models**: FQHCs are increasingly participating in new payment and delivery system models

2. **Medicaid**: Nationally, CHC revenues account for 2.1% of the Medicaid service expenditures which serve 17% of all Medicaid beneficiaries

3. **Medicare**: Medicare spending is lower in areas where FQHCs serve more low-income residents

4. **Patient Savings**: Vs other providers, FQHCs save $1,263 (or 24%) per patient per year, 24% per Medicaid patient, 35% per child, and have lower total spending per Medicare patient.

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**Source**: NACHC 2021 Chart Book
Community Health Center Federal Funding ($Billions)³

- **$2.2B** for 2010
- **$2.6B** for 2011
- **$2.8B** for 2012
- **$3.0B** for 2013
- **$3.7B** for 2014
- **$5.1B** for 2015
- **$5.1B** for 2016
- **$5.1B** for 2017
- **$5.4B** for 2018
- **$5.6B** for 2019
- **$5.6B** for 2020
- **$5.7B** for 2021
- **$5.7B** for 2022

**Source:** Kaiser Family Foundation
A breakdown of 2020 revenue illustrates that Medicaid income is vital for the survival of FQHCs.1,2

1. **Grants represent ~1/4 of total revenue**: While Federal support was pivotal for the expansion of FQHCs between 2000-2020, Federal Section 330 Grants account for <15% of their income1

2. **Medicaid accounts for 41% of the total revenue**: Medicaid is jointly funded by states and the federal government and represents $1 out of every $6 spent on health care in the US3
   - **Prospective Payment System (PPS)**: FQHCs receive an enhanced payment from Medicaid vs. non-FQHC providers, which incentivizes FQHCs to accept more Medicaid patients. States have the option to increase payments further5

3. **FQHC Medicaid revenue percent varies widely between states, ranging from 11% - 57%4**
   - As of 2022, 12 states opted not to expand Medicaid under ACA and tend to depend more heavily on Section 33 grants4
   - These represent 5/6 of the states deriving the largest percent of their revenue from 330 grants and 8/9 of the states deriving the lowest percent of their revenue from Medicaid1

Source: Kaiser Family Foundation
Other Grants and Contracts: Federal grants other than Section 330, grants from state/local governments/private foundations, payments from state/local indigent care programs and contracts
2020 Pennsylvania FQHC Revenue ~800M

- Medicaid: 45%
- Federal Section 330 Grants: 15%
- Grants: 22%
- Other Grants/Contracts: 12%
- COVID funds: 7%
- Self-Pay: 11%
- Other: 12%
- Private: 12%
- Insurance: 68%

2020 National FQHC Revenue ~28B

- Medicaid: 41%
- Federal Section 330 Grants: 14%
- Grants: 26%
- Other Grants/Contracts: 12%
- COVID funds: 8%
- Self-Pay: 1%
- Other: 1%
- Private: 11%
- Insurance: 61%

Source: Kaiser Family Foundation

Other Grants and Contracts: Federal grants other than Section 330, grants from state/local governments/private foundations, payments from state/local indigent care programs and contracts
Pennsylvania is the 5th largest state by population in the US, only surpassed by California, Texas, Florida, and New York. In 2021, the PA population reached 12,964,056, equivalent to 4% of the US population.

Compared to the national average, the PA FQHC network ranks in the bottom third when it comes to sufficiently covering the population. However, PA is in line with other states with populations of 10M-13M. Compared to the national average:

1. **Residents Below Poverty Line/Site**: There are 1K more people living under the federal poverty line per PA FQHC site

2. **Patients/Site**: There are ~60 more patients per PA FQHC site

3. **Patients/Staff Ratio**: PA is in the bottom 1/4 for full-time staff members per FQHC patient

The PA FQHC network receives less grant money per capita vs. the national average, ranking in the bottom quarter nationally. It tends to receive slightly less than others states with 10M+ populations, but the significance of this is unclear. The trend applies to both Federal Section 330 grants as well as those from local governments and private foundations. Of note, 330 Grants do not directly correlate with states that did not expand Medicaid under ACA.

### Pennsylvania vs National Average

<table>
<thead>
<tr>
<th>State Rank</th>
<th>Average</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>5th largest</td>
<td>6,700,327</td>
<td>$76,851 - 39,237,836</td>
</tr>
</tbody>
</table>

| Ppl < Poverty Line (FPL)* | 10.9% | 22nd | 11.7% | 7% - 18.7% |

| FQHCs | 42 | 7th highest | 27.5 | 3 - 175 |

| FOHC Sites | 356 | 12th highest | 271.1 | 15 - 2,017 |

| Ppl < FPL / Site* | 3,969 | 36th | 3,922 | 350 - 7,463 |

| FQHC Patients / Site* | 2,169 | 35th | 2,109 | 242 - 3,898 |

| FQHC Patients / FTE* | 133 | 42nd | 112 | 13 - 171 |

### FQHC Grants

<table>
<thead>
<tr>
<th>State Rank</th>
<th>Average</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>43rd</td>
<td>$14.26</td>
<td>$7.39 - $103.28</td>
</tr>
</tbody>
</table>

| 42nd | $12.36 | $1.15 - $224.64 |

| 36th | $39,89 | $7.69 - $2,339.97 |

### Notes
1. Lower rankings are better (ex: Florida, ranking 1st, has the lowest number of patients per site; Alaska, ranking 1st has the largest $ 330 grant per capital)
2. Other Grants and Contracts: Federal grants other than Section 330, grants from state/local governments/private foundations, payments from state/local indigent care programs and contracts
Source: BBF Market Intelligence Database - The significance of these discrepancies is unknown, particularly as there may be a large variation from site to site.

**People ≤ Federal Poverty Level (FPL) / FQHC Site (2020-2021)**

- PA has an average number of people ≤ FPL per FQHC site of 10-13M states. It ranks similarly to Ohio and Michigan and lower than Georgia (PA 3.9K vs. 4.7K GA; range: 3.1K-4.7K).*

**Patients / FQHC Site (2020-2021)**

- PA FQHC sites treat slightly more patients annually than other 10-13M states except Illinois (2.2K PA vs. 3.1K IL; range: 1.7K-3.1K).*

*Note: The data includes only states with populations between 10-13M people. Pennsylvania's population is 13M.

---

**State Population**

- 29-39M
- 19-22M
- 10M-13M
- Pennsylvania: 13M
The significance of these discrepancies is unknown, particularly as there may be a large variation from site to site. With an average of 16 full-time staff members per site, PA FQHC headcounts fall in the middle of 10-13M states (range: 12-21). With ~133 patients per FTE, PA FQHCs fall in the middle of 10-13M states (range: 108-164).
In 2020-2021, Pennsylvania FQHCs obtain similar or slightly fewer grants vs. other 10-13M states per:
• Capita
• FQHC patients
• People in poverty

This excludes Illinois, which appears to obtain substantially more grant money across multiple metrics.
FQHCs are reimbursed via various models depending on the payer.
Historically, providers have been reimbursed on a Fee-For-Service basis (FFS), but Alternative Payment Models (APM) are gaining momentum.

Medicaid reimbursement models (46% of CHC patients) differ based on state regulations. States offer Medicaid on an FFS basis, through managed care plans*, or a combination.3 The federal government established a prospective payment system (PPS) in ~2000 to structure Medicaid/Medicare reimbursement. PPS is similar to FFS and HMO structures but differs in several ways:2
1. Fee-For-Service (FFS): FFS pays by volume of care provided. PPS payment is based on multiple factors including service location and diagnosis
2. Health Maintenance Organization (HMO): HMOs provide a monthly payment to cover all services. PPS provides the facility with a single predetermined payment for each patient which is based on the diagnosis and standardized assessments and covers a defined time

States also may implement an alternative method (APM) that pays the same or more than the federal PPS.4 Many FQHCs believe the PPS system is no longer sufficient because it hasn’t kept up with health centers’ costs, only covers in-person visits offered by clinicians, doesn’t reflect the fact that the nature of care has changed, or account for patients’ complexity, the magnitude of poverty, and the roles of trauma and the social determinants of health.

*Managed care plans are run by private health insurance companies - managed care organizations (MCOs) – that build provider networks. Example plans include HMOs and PPOs7

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![Payment Models that FQHCs Participate In (2016; N=175)](chart.png)

**FFS was expected to decrease by 40% from 2014-2018, according to survey of 175 FQHC CEOs.**
The transition to Alternative Payment Models (APMs) is based on the belief that many of the problems with the US health system — fragmented care, variable quality, and high and rapidly growing costs — are rooted in FFS payments. Not only does FFS payment fail to provide incentives for efficiency, quality, or outcomes, it encourages the provision of unnecessary care and often discourages coordination of care across providers and settings.  

1. Federal Legislation: Given that healthcare spending now accounts for almost 20% of the US GDP, the federal government is invested in exploring novel reimbursement methods.  
   - Affordable Care Act: In 2010, the Affordable Care Act incorporated several initiatives promoting more value-based care.  
   - Medicare/Medicaid: In October 2021, the Center for Medicare and Medicaid Innovation (CMMI) announced a goal of having every Medicare beneficiary and the majority of Medicaid beneficiaries covered by some type of alternative payment model (APM) by 2030.

2. Advocacy Groups: Groups such as the Health Care Payment Learning & Action Network, which is composed of public and private healthcare leaders, have developed road maps to covert larger numbers of public and private payers to APMs.

<table>
<thead>
<tr>
<th>HCPAN’s Conversion Goals: Percent of Payments Tied to Quality/Value</th>
<th>Medicaid</th>
<th>Commercial</th>
<th>Medicare Advantage</th>
<th>Traditional Medicare</th>
</tr>
</thead>
<tbody>
<tr>
<td>2020</td>
<td>15%</td>
<td>15%</td>
<td>30%</td>
<td>30%</td>
</tr>
<tr>
<td>2022</td>
<td>25%</td>
<td>25%</td>
<td>50%</td>
<td>50%</td>
</tr>
<tr>
<td>2025</td>
<td>50%</td>
<td>50%</td>
<td>100%</td>
<td>100%</td>
</tr>
</tbody>
</table>
Care Team Composition (2018)\(^1\)

<table>
<thead>
<tr>
<th></th>
<th>Traditional Model</th>
<th>Population Health Model</th>
</tr>
</thead>
<tbody>
<tr>
<td>MD</td>
<td>9.2</td>
<td>10.1</td>
</tr>
<tr>
<td>RN</td>
<td>1.5</td>
<td>1.8</td>
</tr>
<tr>
<td>MA / LPN</td>
<td>5.3</td>
<td>1.8</td>
</tr>
</tbody>
</table>

Population models include 5 more team members.

Cost by Team Member (2018)\(^1\)

<table>
<thead>
<tr>
<th></th>
<th>Traditional Model</th>
<th>Population Health Model</th>
</tr>
</thead>
<tbody>
<tr>
<td>MD</td>
<td>$2,213</td>
<td>$2,184</td>
</tr>
<tr>
<td>CNP / PA</td>
<td>$225</td>
<td>$516</td>
</tr>
<tr>
<td>MA / LPN</td>
<td>$3,8</td>
<td>$563</td>
</tr>
<tr>
<td>RN</td>
<td>$2,184</td>
<td>$575</td>
</tr>
<tr>
<td>Care Coordinator</td>
<td>$63</td>
<td>$568</td>
</tr>
<tr>
<td>Pharmacist</td>
<td>$142</td>
<td>$516</td>
</tr>
<tr>
<td>Social Worker</td>
<td>$109</td>
<td>$142</td>
</tr>
</tbody>
</table>

Population models cost the same or less vs. traditional models despite utilizing an expanded care team.

Source: MGMA Conference 2018: Registered Nurse (RN); Medical Assistant (MA); Licensed Practical Nurse (LPN); Certified Registered Nurse Practitioner (CRNP); Licensed Practical Nurse (LPN); Doctor of Medicine (MD)
Share of Medicaid beneficiaries in MCOs (2019)\(^1\)

In most states with comprehensive MCOs, \(\geq 75\%\) of beneficiaries are enrolled in one, including PA.

- \(>75\%\) (25 states)
- 50 – 75\% (11 states + DC)
- 1 – 50\% (4 states)
- No MCOs (11 states)

Percent of Medicaid Spending on MCOs (2020)\(^1\)

In most MCOs states, spending on MCOs makes up \(\geq 40\%\) of the total Medicaid spending.

- \(\geq 65\%\) (8 states)
- 40 – <65\% (23 states)
- 1 – 40\% (9 states including DC)
- No MCOs (11 states)

In PA, it makes up between 40 – 60%.

Source: Kaiser Family Foundation; Department of Human Services
HRSA data illustrates that payments from third-party payers are less than cost. Even Medicaid, which represents 46% of the national FQHC patient population and is reimbursed under the PPS system that provides enhanced payments to FQHCs vs. non-FQHC providers, does not fully cover the cost of care.

Even Medicaid, which represents 46% of the national FQHC patient population and is reimbursed under the PPS system that provides enhanced payments to FQHCs vs. non-FQHC providers, does not fully cover the cost of care.

Third Party Payer Bill vs. Payment (2020)¹

<table>
<thead>
<tr>
<th>% of National FQHC Population</th>
<th>46%</th>
<th>10%</th>
<th>1%</th>
<th>21%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Charges to Third Party Payers</td>
<td>83% Collected</td>
<td>59% Collected</td>
<td>59% Collected</td>
<td>59% Collected</td>
</tr>
</tbody>
</table>

Annual Health Center Total Cost Per Patient (2020)¹

FOHCs cared for over 6.2 million uninsured individuals in 2020 (22% of the national CHC population), leaving a cost of care gap of over $2 billion¹

Source: National Association of Community Health Centers
Every few years, FQHCs face losing a portion of their revenue if the Community Health Center Fund is decreased, particularly the 17 states which derive >25% of their revenue from 330 grants.¹ ³

1. **Federal Section 330**: The CHCF is extended for short durations (between 1-3 years)

2. **State Grants**: 18 states do not directly fund the local FQHC network, including Pennsylvania, and would therefore not be set up to cover the federal 330 revenue loss

**Federal 330 Grants as a Share of Total CHC Revenue (2017)¹**

Federal 330 Grants represented 15% of PA FQHC 2020 revenue.

**Reduction Considerations in Expansion vs. Non-Expansion States (2019)¹**

**FQHC Actions Due to Funding Uncertainty due to CHCF (2019)¹**

- Institute a Hiring Freeze
- Tap Into & Spend Down Reserves
- Cancel / Delay Facility Renovation / Expansion
- Cancel / Delay for Quality Improvement
- Reduce Staff Hours
- Lay off Staff
- Reduce Hours of Operation
- Close > 1 Health Center Sites

<table>
<thead>
<tr>
<th>Action</th>
<th>Taken Action</th>
<th>Considering Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Institute a Hiring Freeze</td>
<td>8%</td>
<td>52%</td>
</tr>
<tr>
<td>Tap Into &amp; Spend Down Reserves</td>
<td>8%</td>
<td>45%</td>
</tr>
<tr>
<td>Cancel / Delay Facility Renovation / Expansion</td>
<td>10%</td>
<td>42%</td>
</tr>
<tr>
<td>Cancel / Delay for Quality Improvement</td>
<td>6%</td>
<td>41%</td>
</tr>
<tr>
<td>Reduce Staff Hours</td>
<td>4%</td>
<td>38%</td>
</tr>
<tr>
<td>Lay off Staff</td>
<td>3%</td>
<td>38%</td>
</tr>
<tr>
<td>Reduce Hours of Operation</td>
<td>2%</td>
<td>33%</td>
</tr>
<tr>
<td>Close &gt; 1 Health Center Sites</td>
<td>1%</td>
<td>23%</td>
</tr>
</tbody>
</table>

Source: Kaiser Family Foundation

*Figures for Pennsylvania:* 330 Grants represented 15% of PA FQHC 2020 revenue.
The FQHC competitive landscape has become dramatically more aggressive over the past 20 years. Multiple studies highlight competition for both patients and physicians as the major challenge, even more so than financial uncertainty.1,3

1. FQHC Network Expansion: Between 2007 and 2014, there was greater expansion in the number of FQHCs (3,489 vs. 6,376; 82.7%) than in the number of service markets. Nearly half of 2007 FQHCs (47%) had at least one new FQHC within 30 minutes of travel time. Most newly certified FQHCs (81%) were located in urban areas2.

2. Novel Competitor Entry: Many large, private organizations with greater economies of scale for pricing and larger pocketbooks for physician salaries have an increased interest in public reimbursement patient communities3,4
   - Business Expertise: These competitors are run by commercial business executives, implement comprehensive marketing and advertising programs to attract patients, and build strategic plans to elevate care and retain patients3
   - Medicaid Acceptance: With the improvement in Medicaid reimbursement, many more practices now accept it3

---

**Challenges Expected over the Next 2 Years (2018; N=694)**

- Increased Competition with Retail Clinics: 53%
- Increased Uncompensated Care Provided: 42%
- Increased Primary Care Physician Shortages: 40%
- Decreased Medicaid Funding: 30%
- Increased Staff Turnover: 20%
- Decreased Financial Stability: 16%

---

**Sources of Competition (2017; N=175)**

- Another FQHC: 68%
- Urgent Care: 55%
- Hospital-Based Ambulatory Care: 57%
- Point-Of-Care Clinic: 38%

---

Source: The Commonwealth Fund, Sage Growth Partners
FQHCs are adopting for-profit business strategies to stay afloat in the face of increasing competition.1

1. **Increase Services & Contract Specialists**: Contracting with specialists retains patients and diversifies the payer mix (ex: NJ’s largest FQHC network purchased a private dental practice with 95% commercially insured patients)3,6,7

2. **Adopt Innovative Payment Models**: Engaging with a value-based purchasing model can boost revenue (ex: NJ’s largest FQHC network joined the shared savings program of every insurance company and receives an extra quarter million dollars annually from many of the insurance partners. Many other FOHCs also report success)3,4,6,7

3. **Track Profit to Measure Growth**: In 2016, FQHC leaders were more likely to track patient growth (95%), visit growth (87%), and operating growth (77%), vs. profit (62%) (N=175)2

4. **Implement Marketing/Advertising Programs**: Traditionally, FQHCs focused on community events and outreach as tactics for patient growth and retention. In 2016, only 23% had a fully-implemented marketing plan (N=175)2,5

5. **Expand into wealthier areas**: The latest expansion of FQHCs was less likely in rural or high-poverty areas, suggesting the impact of expansion may have limitations in improving access to care among the most financially disadvantaged populations1

---

Source: The Commonwealth Fund, Sage Growth Partners
Nationally, nearly 62 million people – 20% of the US population – experience inadequate or no access to primary care because of shortages of physicians in their communities.\(^1\) For those experiencing local shortages of primary care physicians, access to care is limited or non-existent because physicians located in these areas can only appropriately treat a limited number of people. Many of the patients that lack access to providers often rely on the hospital emergency room, resulting in costly visits that could be replaced by more cost-effective primary care.

![Estimated Percent of County Residents Experiencing Shortages of Primary Care Physicians (2013)\(^1\)](image)

As of 2013, 62 million people experience inadequate or no access to primary care because of shortages of physicians in their communities.

Source: National Association of Community Health Centers
Primary Care Geography or Population HPSAs (July 2018)

Mental Geographic or Population HPSAs (July 2018)

Dental Geographic or Population HPSAs (July 2018)

Primary Care Facility HPSAs (July 2018)

Mental Facility HPSAs (July 2018)

Dental Facility HPSAs (July 2018)

Source: PA Department of Health
In 2019, the 43 federally-funded health center organizations in Pennsylvania leveraged $129,565,162 in federal investments to serve 837,950 patients, 15% of whom are uninsured and 48% of whom are covered by Medicaid.1

“Non-grant revenue” does not include insurance reimbursement (ex: Medicaid, which composes the majority of revenue)

2020 FQHC Annual Revenue5

Pennsylvania FQHC Facts (2020)2

<table>
<thead>
<tr>
<th></th>
<th>#</th>
</tr>
</thead>
<tbody>
<tr>
<td># Grantee Organizations</td>
<td>42</td>
</tr>
<tr>
<td># Delivery Sites</td>
<td>356</td>
</tr>
<tr>
<td>% Rural Grantees</td>
<td>29%</td>
</tr>
<tr>
<td>% Grantees w/ Staff Authorized to Prescribe Meds for Opioid Use</td>
<td>81%</td>
</tr>
<tr>
<td>% Grantees Utilizing Telehealth</td>
<td>100%</td>
</tr>
</tbody>
</table>

Pennsylvania Association of Community Health Centers (PACHC) Partners5

<table>
<thead>
<tr>
<th>PACHC Partners</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>3RNET</td>
<td>Health Federation of Philadelphia</td>
</tr>
<tr>
<td>DentaQuest</td>
<td>Mid-Atlantic Regional Public Health Training Center</td>
</tr>
<tr>
<td>Department of Aging</td>
<td>National Association of Community Health Centers</td>
</tr>
<tr>
<td>Department of Drug &amp; Alcohol</td>
<td>PA Area Health Education Center</td>
</tr>
<tr>
<td>Department of Health</td>
<td>PA Coalition for Oral Health</td>
</tr>
<tr>
<td>Department of Human Services</td>
<td>PA Insurance Department</td>
</tr>
<tr>
<td>Department of State</td>
<td>PA Office of Rural Health</td>
</tr>
</tbody>
</table>

PA Association of Community Health Centers (PACHC) - Corporate Sponsors (2021)4

<table>
<thead>
<tr>
<th>Association of Community Health Centers (PACHC) - Corporate Sponsors (2021)</th>
<th>Gold</th>
<th>Silver</th>
<th>Bronze</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aetna Better Health</td>
<td>Arnett Carbis Toothman, LLP</td>
<td>Highmark Blue Shield</td>
<td></td>
</tr>
<tr>
<td>AmeriHealth Caritas</td>
<td>Athenia Health</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gateway Health Plans</td>
<td>BKD LLP CPAs &amp; Advisors</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PA Health &amp; Wellness</td>
<td>Center for Organ Recovery &amp; Education</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TangoRX</td>
<td>Gild of Life Donor Program</td>
<td></td>
<td></td>
</tr>
<tr>
<td>UPMS</td>
<td>Hartman Executive Advisors</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>UnitedHealthcare Community Plan</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: National Association of Community Health Centers
Federally Qualified Health Centers are by far the most common safety net clinics nationally and across Pennsylvania. Eleven Federally Qualified Health Centers operate in southwest PA. The Primary Health Network, Cornerstone Care, Squirrel Hill, and Sto-Rox also run mobile health clinics which were excluded from this analysis.

In southwest PA, 4 FQHCs reported revenue of >$10M in their latest 990s.

1. Primary Health Network: $87.2M - 14 sites in Beaver, Blair, Butler, Cambria, Indiana, Lawrence, Westmoreland
   • Primary Health operates a total of 36 sites across PA, including 14 in southwest PA (39%) and 1 in Ohio
2. Centerville Clinic, Inc: $34.5M - 15 sites in Fayette, Greene, Washington
3. Cornerstone Care, Inc: $21.6M - 13 sites in Allegheny, Fayette, Greene, Washington
4. Primary Care Health Services, Inc: $10.5M - 9 sites in Allegheny

Six FQHCs operate sites in Allegheny County. Cornerstone is the only FQHC that has locations elsewhere. The other 5 operate only in Allegheny.

1. Cornerstone Care, Inc: $21.6M - 13 sites in southwest PA including Allegheny (N=2), Fayette, Greene, Washington
2. Primary Care Health Services, Inc: $10.5M - 9 sites in Allegheny
   • A $20M center with a retail pharmacy will open at the Alma Illery Medical Center location in 2023
3. Squirrel Hill Health Center: $8.9M - 2 sites in Allegheny
4. East Liberty Family Health Care Center, Inc: $8.1M - 3 sites in Allegheny
5. North Side Christian Health Center: $4.7M - 2 sites in Allegheny
6. Sto-Rox Neighborhood Health Council, Inc: $2.3M - 2 sites in Allegheny

Primary Health Network: 14 sites (39%) are in southwest PA, out of 36 total (39%). The rest are in other PA counties except one, which is in Ashtabula, Ohio.

Data from most recent 990s - all were 2020 except East Liberty (2018) and North Side/Glendale/Sto-Rox/Primary Health Network (2019).
4 FQHCs reported gross revenue of >$50M in their latest 990s.

The Primary Health Network runs the most sites (N=36) and generated ~$50M more than the next largest FQHC network, Centerville (N=26). Primary Health is the only FQHC that operates both inside (N=14) and outside (N=22) of southwest PA counties.

Centerville (N=16), Cornerstone (N=13), and Primary Care Health Services (N=9) are 2nd, 3rd, and 4th in terms of revenue. Cornerstone Care is the only network with sites in Allegheny County (N=2).

The Primary Health Network sourced 16% of its 2019 revenue from contributions/grants. All other organizations sourced between 31-62% of their revenue from contributions/grants.

On average, PA FQHC sourced ~22% of their income from grants in 2020.

Primary Health Network: 14 sites (39%) are in southwest PA, out of 36 total (39%). The rest are in other PA counties except one, which is in Ashtabula, Ohio.

Data from most recent 990s - all were 2020 except East Liberty (2018) and North Side/Glendale/Sto-Rox/Primary Health Network (2019).
Total # of Sites

<table>
<thead>
<tr>
<th>Site Name</th>
<th>Total Sites</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary Health Network</td>
<td>36</td>
</tr>
<tr>
<td>Centerville Clinic, Inc.</td>
<td>16</td>
</tr>
<tr>
<td>Cornerstone Care, Inc.</td>
<td>13</td>
</tr>
<tr>
<td>Primary Care Health Services, Inc.</td>
<td>9</td>
</tr>
<tr>
<td>Squirrel Hill Health Center</td>
<td>2</td>
</tr>
<tr>
<td>East Liberty Family Health Care Center, Inc.</td>
<td>3</td>
</tr>
<tr>
<td>Hyndman Area Health Center</td>
<td>4</td>
</tr>
<tr>
<td>Community Health Clinic, Inc.</td>
<td>4</td>
</tr>
<tr>
<td>North Side Christian Health Center</td>
<td>2</td>
</tr>
<tr>
<td>Glendale Area Medical Association</td>
<td>1</td>
</tr>
<tr>
<td>Sto-Rox Neighborhood Health Council, Inc.</td>
<td>2</td>
</tr>
</tbody>
</table>

Revenue Per Site: Total, Program & Contribution/Grant

<table>
<thead>
<tr>
<th>Site Name</th>
<th>Total # of Sites</th>
<th>SWPA In-14-1: Beaver, Blair, Butler, Cambria, Indiana, Lawrence, Westmoreland</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fayette, Washington, Greene</td>
<td>16</td>
<td>Allegheny</td>
</tr>
<tr>
<td>Allegheny</td>
<td>13</td>
<td>Allegheny</td>
</tr>
<tr>
<td>Allegheny</td>
<td>9</td>
<td>Allegheny</td>
</tr>
<tr>
<td>Cambria, Bedford</td>
<td>4</td>
<td>Westmoreland</td>
</tr>
<tr>
<td>Westmoreland</td>
<td>3</td>
<td>Allegheny</td>
</tr>
<tr>
<td>Clearfield</td>
<td>2</td>
<td>Allegheny</td>
</tr>
<tr>
<td>Clearfield</td>
<td>1</td>
<td>Allegheny</td>
</tr>
<tr>
<td>Allegheny</td>
<td>2</td>
<td>Allegheny</td>
</tr>
</tbody>
</table>

Primary Health Network: 14 sites (39%) are in southwest PA, out of 36 total (39%). The rest are in other PA counties except one, which is in Ashtabula, Ohio. Data from most recent 990s - all were 2020 except East Liberty (2018) and North Side/Glendale/Sto-Rox/Primary Health Network (2019).

Squirrel Hill generated the largest amount of revenue per site with a substantial portion from contributions and grants.
Centerville, Cornerstone, and East Liberty FQHCs staff ~15 medical doctors (MD/DO) in southwest PA, but Centerville staffs a much larger nursing team. East Liberty's 16 doctors is surprising, considering it ranks 6th in terms of revenue ($87.2M) and only has 3 sites. 32% of Primary Health’s medical locations are in southwest PA (9/28), indicating that southwest PA sites may be staffed by ~8 doctors in total.

41% of Primary Health’s behavioral sites are in southwest PA (7/17) with approximately an equal number of doctors, nurses, and counselors. This indicates that Primary Health is one of the more common behavioral sites in the southwest.

Centerville ranks 2nd in terms of revenue ($34.5M) and has no behavioral doctors on staff but does staff nurses, counselors, and social workers. Cornerstone ranks 3rd in terms of revenue ($21.6M) and staffs 2 behavioral doctors. East Liberty staffs the second largest number of behavioral doctors, which is once again surprising based on its revenue ranking. East Liberty offers limited dental services, an expensive specialty, which may allow them to allocate more resources to medical and behavioral doctors.

Primary Health Network employs a total dental staff of 20, but only 42% (3/7) of dental sites are in southwest PA. This makes Cornerstone Care the largest provider of dental services, with 9 dentists and 6 hygienists.

The following FQHCs have additional specialty staff: Primary Health (1 chiropractor, 1 podiatrist), Centerville (2 podiatrists), Cornerstone (1 chiropractor, 2 optometrists, 1 podiatrist), East Liberty (1 podiatrist), Sto-Rox (1 podiatrist).

*3 FQHC networks are excluded from this analysis: Primary Care Health Services and Squirrel Hill did not list providers on their webpage. Community Health Clinic’s webpage was down.

Primary Health Network: 14 sites (39%) are in southwest PA, out of 36 total. The rest are in other PA counties except one, which is in Ashtabula, Ohio.
According to the PA Department of Health, there are 69 open RHCs across PA. 12 are located in southwest PA (17%).

According to the USDA Economic Research Service, the average per capita income for Pennsylvania residents in 2020 was $61,700, with the rural per capita income at $47,202. The ERS reports, based on 2020 ACS data, that the poverty rate in rural Pennsylvania is 12.2%, compared with 10.7% in urban areas of the state. 10.5% of the rural population has not completed high school, while 8.8% of the urban population lacks a high school diploma according to 2016-2020 ACS data reported by ERS. The unemployment rate in rural Pennsylvania is 6.6%, while in urban Pennsylvania it is 6.3% (USDA-ERS 2021).

### RHC Locations in Southwestern PA

<table>
<thead>
<tr>
<th>Region</th>
<th>Location</th>
<th>City</th>
</tr>
</thead>
<tbody>
<tr>
<td>Armstrong</td>
<td>Armstrong Primary Care Center</td>
<td>Leechburg</td>
</tr>
<tr>
<td></td>
<td>Elderton Health Center</td>
<td>Elderton</td>
</tr>
<tr>
<td></td>
<td>Eldred Health Center</td>
<td>Eldred</td>
</tr>
<tr>
<td>Bedford</td>
<td>New Paris Rural Health Clinic</td>
<td>New Paris</td>
</tr>
<tr>
<td>Blair</td>
<td>Conemaugh Nason Physician Group</td>
<td>Claysburg</td>
</tr>
<tr>
<td></td>
<td>Penn Highlands Tyrone Rural Health Clinic</td>
<td>Tyrone</td>
</tr>
<tr>
<td>Cambria</td>
<td>Portage Health Center RHC</td>
<td>Portage</td>
</tr>
<tr>
<td></td>
<td>Saint Benedict Rural Health Center</td>
<td>Carrolltown</td>
</tr>
<tr>
<td>Greene</td>
<td>Washington Physicians Group</td>
<td>Waynesburg</td>
</tr>
<tr>
<td>Somerset</td>
<td>Conemaugh Physician Group</td>
<td>Hollsopple</td>
</tr>
<tr>
<td></td>
<td>Family Health Care Meyersdale RHC</td>
<td>Meyersdale</td>
</tr>
<tr>
<td></td>
<td>Medical Associates of Boswell</td>
<td>Boswell</td>
</tr>
</tbody>
</table>

Source: Center for Rural Pennsylvania. RHI Hub
Each day in the US, millions of children and adolescents, especially those of color and those who live in underserved communities, go to school with physical and mental health concerns that impact their well-being, educational performance, and career prospects.¹

1. **Unmet Health Needs**: Youth living in impoverished communities have higher rates of asthma, substance use, anxiety and depression, and obesity and are at elevated risk of not having regular health maintenance visits¹

2. **Barriers to Care**: Adolescents cite lack of access, concerns about confidentiality, and inconvenience as reasons for not using the health care system¹

3. **Lack of Continuity**: When adolescents seek health services, they often access care in multiple settings (schools, medical offices, family planning centers, mental health clinics, and emergency departments), with little continuity of care. This fragmentation has far-reaching consequences¹

4. **School & Financial Ramifications**: In the short term, young people with unmet or poorly managed healthcare needs are more likely to be chronically absent from school, experience suspension, and drop out. In the longer term, they are more likely to be underemployed and financially unstable³

5. **Costs to the Health Care System**: There are costs to the health care system associated with fragmented and forgone care, overuse of the emergency department, and duplicated care—as well as costs to the education, welfare, and juvenile justice systems when health care needs are not met¹

---

**Demographics**

<table>
<thead>
<tr>
<th>Pennsylvania Prevalence</th>
<th>Federally Qualified Health Centers</th>
</tr>
</thead>
<tbody>
<tr>
<td>• 68% of PA safety net</td>
<td>• 6% of PA safety net</td>
</tr>
</tbody>
</table>
| • 26% located in southwest PA | • 0% located in southwest PA *

<table>
<thead>
<tr>
<th>Patient Age</th>
<th>School-Based Health Centers</th>
</tr>
</thead>
<tbody>
<tr>
<td>• 70% ages 15-20 years</td>
<td>• 5-18 years</td>
</tr>
<tr>
<td>• Most rapid growth in ages 15-20 years over the past decade</td>
<td>• In 2020, &gt;60% served populations outside the student body (ex: staff, family, out-of-school youth etc)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Location</th>
<th>Federally Qualified Health Centers</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Stand-alone buildings</td>
<td>• Located in the center of communities</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Transport</th>
<th>School-Based Health Centers</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Patients must walk, drive, or use public transportation to access clinics</td>
<td>• None required</td>
</tr>
<tr>
<td>• Access can be particularly burdensome in rural areas</td>
<td>• Children are already in school and families frequent the locations</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Time</th>
<th>School-Based Health Centers</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Parents miss work and children miss school</td>
<td>• None required</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Costs</th>
<th>School-Based Health Centers</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Accept insurance</td>
<td>• Accept insurance</td>
</tr>
<tr>
<td>• Care delivered on a sliding fee scale</td>
<td>• Usually free</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Trust</th>
<th>School-Based Health Centers</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Patients must complete an application and provide proof of income² (tax return/bank statements/payroll stubs)</td>
<td>• No application or documentation required</td>
</tr>
<tr>
<td>• Patients only see team infrequently</td>
<td>• Medical teams build relationships with children over time through constant presence at schools</td>
</tr>
</tbody>
</table>

---

Source: School-Based Health Alliance “Twenty Years Of School-Based Health Care Growth And Expansion”. *~22% of PA’s population lives in the southwest
The first SBHCs emerged in the late 1960s and early 1970s in urban communities in Cambridge, Massachusetts; Dallas, Texas; and St. Paul, Minnesota. They focused on family planning access, teen pregnancy prevention, and supporting adolescent parents.

In 1995, Congress earmarked community health center funds specifically for SBHCs, and the National School-Based Health Alliance was formed. At its peak appropriation in 2002, $7.8M went to 75 SBHCs. When Congress consolidated several safety-net program authorizations, the dedicated funding was reabsorbed into the larger community health center fund, and the Healthy Schools, Healthy Communities Program was suspended. However, HRSA retained SBHCs in the eligibility criteria of future funding opportunities - cementing the model’s growth and sustainability to that of federally qualified health centers.

Prior to the ACA, HRSA funded SBHCs through its Section 330 appropriation. The ACA authorized separate SBHC grants in Section 339Z-1 of the PHSAct.

Medicaid expansions in the 1990s contributed to a sustainable SBHC business model by guaranteeing health insurance coverage to a population of low-income adolescent patients.

The Affordable Care Act appropriated a total of $200 million ($50M annually) for 2010-2013 to improve and expand services at SBHCs.


FQHC-Sponsored SBHCs started to grow.

FOHCs sponsored 51% of all SBHCs by 2017 (550% growth vs. 2001).

The number of SBHCs funded by states significantly increased.

In 2016, findings of the CDC’s Community Guide systematic review resulted in the Community Preventive Services Task Force recommending that SBHCs be implemented in communities to promote health equity and improve educational and health outcomes.

Prior to the ACA, HRSA funded SBHCs through its Section 330 appropriation. The ACA authorized separate SBHC grants in Section 339Z-1 of the PHSAct.

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FOHCs sponsored 51% of all SBHCs by 2017 (550% growth vs. 2001).

May 3, 2022

HHS Awarded $25 Million to expand access to School-Based Health Services.

Source: School-Based Health Alliance. Note: From 1998-99 through 2013-14, behavioral health and oral health only programs were included in the overall count of SBHCs. For the 2016-17 Census, only SBHCs that were confirmed to be open and included primary care were counted. There were 217 behavioral health and oral health only programs that completed the Census, but they were excluded from the sample.
The growth of SBHCs was mainly contingent upon 3 funding sources: state funding, insurance, and federal funding (including federal funding through FQHCs).

Increasing sponsorship by FQHCs and a $200M grant from the Affordable Care Act have driven growth since the early 2000s.

SBHCs federally funded
FQHC-Sponsored SBHCs started to grow
The Affordable Care Act appropriated a total of $200 million for 2010-2013 to support capital grants to improve and expand services at SBHCs

Source: School-Based Health Alliance. Note: From 1998-99 through 2013-14, behavioral health and oral health only programs were included in the overall count of SBHCs. For the 2016-17 Census, only SBHCs that were confirmed to be open and included primary care were counted. There were 217 behavioral health and oral health only programs that completed the Census, but they were excluded from the sample.
For the 2016-17 Census, the School-Based Health Alliance included only those SBHCs that were confirmed to be open and included primary care. Those counts included all SBHC delivery models. Telehealth exclusive SBHCs were located in Georgia (73), Indiana (3), Maryland (6), Michigan (5), North Carolina (35), South Carolina (30), Tennessee (2), and Texas (113).}

Pennsylvania’s SBHC number grew from 24 in 2017 to 33 in 2021. The Pennsylvania School-Based Health Alliance, an official affiliate of the National School-Based Health Alliance since 2021, is advocating for additional state/federal funds.2

Source: School-Based Health Alliance. Updated PA SBHC number provided by Education Plus Health
PA has more than double as many residents under Federal Poverty Level (FPL) per SBHC site vs. other states with populations between 10-13M, ranking 41st nationally.

PA has more than double as many children (0-17 years) per SBHC site vs. other states with populations between 10-13M, ranking 40th nationally.

Source: BBF Market Intelligence Database (2020 USDA Economic Research Service; 2017 SBHC Chart Book)
The National School-Based Health Alliance chartbook is slightly outdated - utilizing data from 2017. The 2022 census is underway; Low ranking means large number of individuals per SBHC site
Ethnic/Racial Profile of Students in Schools with and without Access to SBHCs (2017)¹

Compared to schools without access to SBHCs, those with access had higher percentages of Black and Hispanic students enrolled.

Average Percent of Student Population Eligible for Free-Reduce Price Lunch (2017)¹ ²

Compared to schools without access to SBHCs, those with access had higher percentages of Black and Hispanic students enrolled.

% Schools Eligible for Title 1 Status

Source: National School-Based Health Alliance chartbook - slightly outdated utilizing data from 2017; The 2022 census is underway
Source: National School-Based Health Alliance chartbook - slightly outdated utilizing data from 2017; The 2022 census is underway
Although urban SBCHs represent almost half of the national SBHCs in 2017 (46%), rural (36%) and suburban (18%) SBHCs grew by substantially more in terms of percent increase since 1998.

Source: National School-Based Health Alliance chartbook - slightly outdated utilizing data from 2017; The 2022 census is underway
Schools can support student health through several models, the main two being School Health Services and School-Based Health Care, which offers more comprehensive medical support.¹

School-Based Health Centers (SBHCs) services depend on the provider team available at the school.

<table>
<thead>
<tr>
<th>SBHC Provider Teams Prevalence (2017)²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary Care</td>
</tr>
<tr>
<td>Primary + Behavioral Care</td>
</tr>
<tr>
<td>Primary + Behavioral + Expanded Care</td>
</tr>
</tbody>
</table>

Source: National School-Based Health Alliance chartbook - slightly outdated utilizing data from 2017; The 2022 census is underway

<table>
<thead>
<tr>
<th>Common types of services</th>
<th>School Health Services¹</th>
<th>School-Based Health Care¹</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>School nursing, school counseling, school psychology, school social work services</td>
<td>Primary care assessment, diagnosis and treatment, mental and behavioral health assessment, diagnosis, and treatment; oral health preventive and restorative services; vision care services</td>
</tr>
<tr>
<td>Eligible for Medicaid reimbursement</td>
<td>Yes, but states may require to submit a state plan amendment</td>
<td>Yes</td>
</tr>
<tr>
<td>Medicaid Providers must meet federal and state requirements</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Provide services covered under the early and periodic screenings, diagnostic, and treatment (EPSDT) Medicaid benefit</td>
<td>Yes, in some areas</td>
<td>Yes</td>
</tr>
<tr>
<td>Services provided in-person, via telehealth or both</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Services legally required to be provided by schools</td>
<td>Yes, if required under a student’s Individualized Education Plan (IEP) under the Individuals with Disabilities Education Act (IDEA)</td>
<td>No</td>
</tr>
<tr>
<td>Parental consent required for services</td>
<td>Yes</td>
<td>Yes, unless state laws allow otherwise</td>
</tr>
<tr>
<td>Governing entity</td>
<td>Local Education Agency</td>
<td>Community healthcare organizations (ex: hospitals, public health agencies, FQHCs, non-profits)</td>
</tr>
<tr>
<td>Legal authority governing health data and privacy</td>
<td>Family Education Rights and Privacy Act (FERPA)</td>
<td>Health Insurance Portability and Accountability Act (HIPAA)</td>
</tr>
</tbody>
</table>

¹ Source: National School-Based Health Alliance chartbook - slightly outdated utilizing data from 2017; The 2022 census is underway
Care Team Definitions

**Primary Care**: This provider team is staffed by primary care providers (nurse practitioner, physician assistant, or medical doctor) only.

**Primary Care + Behavioral Health**: This provider team is staffed by a primary care provider in partnership with a behavioral health professional (ex: alcohol/drug counselor, care manager/social services provider, licensed or unlicensed social worker/counselor/therapist, psychiatric nurse practitioner, psychiatrist, or psychologist).

**Primary Care + Behavioral Health with Expanded Care Team**: In this team, primary care and behavioral health providers are joined by other providers to complement the healthcare team (ex: dentist, dental assistant, dental hygienist, care coordinator, health educator, nutritionist, ophthalmic technician, optometrist, ...)

Source: National School-Based Health Alliance chartbook - slightly outdated utilizing data from 2017; The 2022 census is underway
Despite representing only 35% of SBHCs in 2017, SBHCs offering primary, behavioral, and expanded health services grew by 240% since 2001.

Source: National School-Based Health Alliance chartbook - slightly outdated utilizing data from 2017; The 2022 census is underway
### SBHC Delivery Models (2015-16)

<table>
<thead>
<tr>
<th>Location where a Patient Accesses Care</th>
<th>Traditional</th>
<th>School-Linked</th>
<th>Mobile</th>
<th>Telehealth Exclusive</th>
</tr>
</thead>
<tbody>
<tr>
<td>A fixed site on school campus</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A fixed site near school campus</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mobile van parked on or near school campus</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A fixed site on school campus</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Location where Providers Deliver Care</td>
<td>Physically onsite and remotely for some services</td>
<td></td>
<td></td>
<td>All primary care delivered remotely and other services may be available onsite or remotely</td>
</tr>
<tr>
<td>Percent of Total Model Types (N=2,317)</td>
<td>81.7%</td>
<td>3.8%</td>
<td>3.0%</td>
<td>11.5%</td>
</tr>
</tbody>
</table>

### Number of SBHCs, Schools, and Students with Access to SBHCs by Delivery Model

| # of SBHCs | 1,894 | 87 | 69 | 267 | 2,317 |
| # of Schools with Access | 9,318 | 2,022 | 1,522 | 291 | 10,629 |
| # of Students with Access | 5,701,403 | 1,137,970 | 925,209 | 138,789 | 6,344,907 |
| # of Schools with Access on their School Campus | 1,391,428 | 29,594 | N/A | 138,789 | - |
| # of Schools with Access per SBHC (mean ± SD) | 16.0 ± 70.9 | 34.6 ± 139.8 | 247 ± 120.7 | 12 ± 11 | 15.3 ± 73.1 |
| Per SBHC, Median # of Schools with Access | 1 | 5 | 3 | 1 | 1 |
| Per SBHC, Range of # of Schools with Access | 1–1,017 | 1–1,017 | 1–978 | 1–12 | 1–1,017 |

### Sponsor Type by Delivery Model (2015-16)

- **Traditional**
- **School-Linked**
- **Mobile**
- **Telehealth**

#### Sponsor Type by Delivery Model

- **Telehealth** is the only model that is not sponsored primarily by FQHCs.

### Source

National School-Based Health Alliance chartbook - slightly outdated utilizing data from 2017; The 2022 census is underway.
Percent SBHCs with Behavioral Health and Expanded Care Teams by Delivery Model (2015-16)³

Traditional and Linked SBHCs are likely to have the most diverse care teams.

Sponsor Type by Delivery Model¹

Traditional SBHCs are more likely to be in urban settings.
School-Linked SBHCs are more likely to be in urban/suburban settings.
Mobile/Telehealth SBHCs are more likely to be in rural settings.

Source: National School-Based Health Alliance chartbook - slightly outdated utilizing data from 2017; The 2022 census is underway
Education Plus Health, established in 2009, is PA’s major advocate for School-Based Health Centers. It currently serves 15 SBHCs and >7,000 students in Philadelphia and Reading charter, public, and private schools.

Through SBHCs in Title One schools, it provides holistic health care in collaboration with students’ primary care providers and specialists as needed, with a special focus on the core areas of concern in our communities. In some schools the organization provides an integrated school nursing model within the school-based health center for total health and wellness and compliance with all State mandates for school nursing.
Education Plus Health combines the SBHCs with 3 other programs:

1. **Room2Breathe Asthma Home Visiting Program**: Education Plus Health operates the Room2Breathe Program in partnership with the Philadelphia Department of Public Health. Launched in 2019, the program is currently embedded within Temple Pediatrics and St. Christopher’s Center for the Urban Child. A community health worker is embedded within each of these pediatric practices to serve their patients who meet the eligibility criteria with one inpatient hospitalization over the last year or two emergency room visits due to asthma. Community health workers conduct up to seven home visits with eligible families over 12 months helping them to manage their asthma in partnership with their doctor, and ultimately reduce visits to the hospital because of asthma.

2. **Afterschool Programming**: Understanding that education and health outcomes are closely interrelated, our model supports the whole student from elementary school through high school and beyond with afterschool enrichment programs and post-secondary educational opportunities in addition to our school-based health centers.

3. **Accelerated Associate’s Degrees**: Education Plus Health supports the whole student from elementary school through high school and beyond with afterschool enrichment programs and post-secondary educational opportunities in addition to our school-based health centers.

Source: Education Plus Health
% Cumulative Change in SBHC-Sponsorship Since 2001-02

The FQHC-sponsored SBHCs grew rapidly from 2010-2017.

Source: National School-Based Health Alliance chartbook - slightly outdated utilizing data from 2017; The 2022 census is underway
**SBHC Sponsor Organization Types (2017)**

- **FOHC or Look-Alike**: 51%
- **Hospital / Medical Center**: 2.5x
- **Non-Profit / Community-Based Organization**: 5.6x
- **Local Health Department**: 8.5x
- **School System**: 8.5x
- **Other**: 7%

**Funding Sources for SBHCs (2017)**

- **Public Insurance Revenue**: 68%
- **Private Insurance Revenue**: 61%
- **State Government**: 59%
- **Federal Government**: 46%
- **In-Kind Support**: 40%
- **Private Foundation**: 35%
- **Patient Fees**: 35%
- **Sponsor Agency**: 32%
- **School System**: 23%
- **Local Government**: 21%
- **Other**: 12%

Source: National School-Based Health Alliance chartbook - slightly outdated utilizing data from 2017; The 2022 census is underway
Seventeen states dedicated a total of $91.3 million to 855 SBHCs in the 2016-17 school year. The states’ investments ranged from $20 million (supporting 100 SBHCs in MI) to $500,000 (supporting 3 SBHCs in TX). The average amount of state funding and a number of supported SBHCs was $5.3 million and 57, respectively.¹

Seven states (DC, IL, MI, NC, NY, OR, TX) increased their SBHC funding allocation between 2014 and 2017. Another seven states (CO, CT, DE, LA, MD, WV) experienced decreases in financial support since FY2014.

Source: National School-Based Health Alliance chartbook - slightly outdated utilizing data from 2017. The 2022 census is underway.
Despite the decline in the total number of states with state SBHC program offices, the total funding for SBHCs increased 118%, the number of SBHCs supported by states increased 76%, and the total number of SBHCs across the US increased 187%.

One of the best illustrations of the positive effect of state-level investment in SBHCs is represented in the 21-year growth of SBHCs in states with SBHC program offices compared to states without.

State SBHC Program Offices decreased by 54% (13 → 17).

Source: National School-Based Health Alliance chartbook - slightly outdated utilizing data from 2017; The 2022 census is underway
The states vary in their approaches to a funding allocation strategy. The majority of state SBHC programs date back to 1996 (and earlier); many of the funded SBHCs have been grantees since the creation of the program. Most of the state programs operate under a noncompetitive renewal process, with disbursement of funds to SBHCs contingent upon provision of progress reports and performance data. Funding amounts are dictated by annual appropriations; increases to state program funding levels are used to augment existing grantees or put out for competition to support new SBHCs.

States use a mix of criteria for establishing funding priorities and award levels, including number of SBHCs operated by an institution, complexity of patient demographics/population needs, staffing/service models (ex: primary care, mental health, specialty care), and school size/number of SBHC enrollees.

Medicaid either reimburses SBHCs by provider/sponsor-type or recognizes them as unique providers.

### School-Based Health Alliance - Survey Highlights (1996-2017)

<table>
<thead>
<tr>
<th></th>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Funds Dedicated to SBHCs ($M)</td>
<td>$41.9</td>
<td>$38.9</td>
<td>$59.9</td>
<td>$63.7</td>
<td>$83</td>
<td>$89.6</td>
<td>$85.1</td>
<td>$91.3</td>
</tr>
<tr>
<td>Total # State SBHC Programs</td>
<td>34</td>
<td>37</td>
<td>31</td>
<td>20</td>
<td>20</td>
<td>18</td>
<td>18</td>
<td>17</td>
</tr>
<tr>
<td>Total SBHCs Funded by States</td>
<td>486</td>
<td>650</td>
<td>700</td>
<td>738</td>
<td>855</td>
<td>875</td>
<td>915</td>
<td>855</td>
</tr>
<tr>
<td>Total SBHCs*</td>
<td>900</td>
<td>1157</td>
<td>1380</td>
<td>1651</td>
<td>1909</td>
<td>1930</td>
<td>2315</td>
<td>2584</td>
</tr>
<tr>
<td>% of SBHCs Receiving State Funds</td>
<td>54%</td>
<td>56%</td>
<td>51%</td>
<td>45%</td>
<td>45%</td>
<td>45%</td>
<td>40%</td>
<td>33%</td>
</tr>
</tbody>
</table>

### SBHC Models Eligible for State Funding

<table>
<thead>
<tr>
<th>SBHC Models Eligible for State Funding</th>
<th>#</th>
<th>States</th>
</tr>
</thead>
<tbody>
<tr>
<td>Traditional: Clients access care at a fixed site on a school campus and providers are physically onsite, and may deliver some services remotely</td>
<td>16</td>
<td>All</td>
</tr>
<tr>
<td>School-Linked SBHCs: Clients access care at a fixed site near a school campus and providers are both physically onsite and may deliver some services remotely</td>
<td>5</td>
<td>IL, MI, NC, NM, WY</td>
</tr>
<tr>
<td>Mobile SBHCs: Clients access care at a mobile van parked on or near a school campus and providers are physically onsite, and may deliver some services remotely</td>
<td>5</td>
<td>DE, IL, NC, NM, WV</td>
</tr>
<tr>
<td>Telehealth Exclusive SBHCs: Clients access care at a fixed site on a school campus and providers are available remotely for 100% of primary care services.</td>
<td>2</td>
<td>MD, WV</td>
</tr>
</tbody>
</table>

### Data Reporting

<table>
<thead>
<tr>
<th>Data Reporting</th>
<th>AR</th>
<th>CO</th>
<th>CT</th>
<th>DC</th>
<th>DE</th>
<th>IL</th>
<th>LA</th>
<th>MA</th>
<th>MD</th>
<th>ME</th>
<th>MI</th>
<th>NC</th>
<th>NM</th>
<th>NY</th>
<th>OR</th>
<th>WV</th>
</tr>
</thead>
<tbody>
<tr>
<td>Off-line form (ex: excel)</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
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<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Online system</td>
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<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
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<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>EHR/EMR</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
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<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
</tbody>
</table>

Source: National School-Based Health Alliance chartbook - slightly outdated utilizing data from 2017; The 2022 census is underway
% SBHCs that Bill Specific Insurances, by Insurance and Medical Sponsor Type (N=42; 2008)\textsuperscript{1}

- **Public Insurance (Medicaid and/or non-OHP)**
  - FQHCs (N=23): 96%
  - Non-FQHCs (N=19): 63%

- **Private Insurance**
  - FQHCs (N=23): 91%
  - Non-FQHCs (N=19): 63%

- **FPEP**
  - FQHCs (N=23): 70%
  - Non-FQHCs (N=19): 16%

Sources of Billing Revenue for SBHCs under FQHC Medical Sponsors, by Insurance Type (N=23; 2008)\textsuperscript{1}

- **Public Insurance**
  - FQHCs (N=23): 42%
  - Non-FQHCs (N=19): 49%

- **Family Planning Expansion Project (FPEP)**
  - FQHCs (N=23): 5%
  - Non-FQHCs (N=19): 4%

- **Private Insurance**
  - FQHCs (N=23): 7%
  - Non-FQHCs (N=19): 13%

% Operational Costs by Revenue Source: Oregon SBHCs, by Sponsor Type (N=42; 2008)\textsuperscript{1}

<table>
<thead>
<tr>
<th>Revenue Source</th>
<th>FQHCs (N=23)</th>
<th>Non-FQHCs (N=19)</th>
<th>Multiplier</th>
</tr>
</thead>
<tbody>
<tr>
<td>Federal</td>
<td>26%</td>
<td>7%</td>
<td>3.6x</td>
</tr>
<tr>
<td>Family Planning</td>
<td>5%</td>
<td>5%</td>
<td>0.9x</td>
</tr>
<tr>
<td>Fee Revenue</td>
<td>12%</td>
<td>5%</td>
<td>2.4x</td>
</tr>
<tr>
<td>In-Kind Donations</td>
<td>13%</td>
<td>1%</td>
<td>0.4x</td>
</tr>
<tr>
<td>Other Sponsor's Related Revenue</td>
<td>5%</td>
<td>1%</td>
<td>0.5x</td>
</tr>
<tr>
<td>State</td>
<td>5%</td>
<td>1%</td>
<td>5.2x</td>
</tr>
<tr>
<td>Public Insurance (Medicaid and/or non-OHP)</td>
<td>25%</td>
<td>7%</td>
<td>22x</td>
</tr>
</tbody>
</table>

\textsuperscript{1} Source: State of Oregon, Public Health Division, Adolescent Health Section, Portland, OR
**Education Plus Health:** Currently SBHCs in Title one schools are funded by Medicaid reimbursement, but Medicaid rates are insufficient and the model is not sustainable on Medicaid reimbursement alone. While there are more than 2,500 SBHC providers across the country, in Pennsylvania, they exist in only seven cities or counties serving less than 10,000 low-income students and they are not sustainable in the long run. For SBHCs to thrive and survive in Pennsylvania, we need state support with dedicated funding and supportive policies.

**Proposal:** State support of $45,000 per school clinic would help to meet the true cost for a 20-hour per week or more SBHC model in each school to increase capacity and services to the students and their families. A pilot of State support serving the pediatric population most likely to lack routine health care, adolescents, would educate and engage the most vulnerable segment of children at the crucial time when they are about to become responsible for their health care and lay the groundwork for more SBHCs in PA. Specifically, these dollars would enable increased services and capacity through three core areas of need:

- Increased supplies and equipment
- More competitive salaries to recruit and retain high-quality medical providers and community health workers
- Critical infrastructure expansion – to proactively manage student health outcomes, expand for more comprehensive services including behavioral health and oral health care, and ultimately serve more high-need schools and students

Dedicated support to high schools to launch or expand upon existing SBHCs with more provider hours serving the most high-need students in Pennsylvania would reduce absenteeism, teen pregnancy, and STD rates, hospitalizations due to asthma and other chronic conditions, and enable better health outcomes overall among youth. Dedicated support would also enable data reporting and analysis back to the State to quantify and coordinate the return on investment to Pennsylvanians.

*Source: Education Plus Health*
In 2015, The Center for Disease Control and Prevention (CDC)'s Community Preventive Services Task Force (CPSTF) recommended SBHCs as an evidence-based model that improves educational and health outcomes. This was based on a meta-analysis of 46 studies evaluating the impact of SBHCs across a variety of endpoints.

1. **Health**: The Community Preventive Services Task Force recommends the implementation and maintenance of SBHCs in low-income communities, based on sufficient evidence of effectiveness in improving educational and health outcomes. Improved educational outcomes include school performance, grade promotion, and high school completion. Improved health outcomes include the delivery of vaccinations and other recommended preventive services, asthma morbidity, emergency department and hospital admissions, contraceptive use among females, prenatal care and birth weight, and other health risk behaviors.

2. **Cost Savings**: The Community Preventive Services Task Force also finds evidence that the societal benefits of SBHCs are greater than the intervention costs. Further, SBHCs result in net savings for SBHC users and the Medicaid program.

3. **Education / Health Equality**: Most evidence derives from studies of SBHCs in low-income populations. If targeted to low-income communities, SBHCs are likely to reduce educational gaps and advance health equity.

CPSTF also identified 4 major factors to consider in the implementation of SBHCs:

1. **Financial Stability**: Billing and financing is a major challenge to SBHC implementation and sustainability.

2. **Service Update**: Lack of full uptake of available SHBC services by students for whom the services are available is another challenge of SBHC implementation.

3. **Model Variety**: SBHC benefits likely depend on population density. It may be necessary to develop modified models for low population density and rural settings.

4. **Service Hours**: Included studies indicated that the greater the range of services offered, the greater the benefits. Offering services outside of in addition to within school hours also increases effectiveness.
### Educational Outcomes

<table>
<thead>
<tr>
<th>Outcome</th>
<th>Median decrease</th>
<th>IQI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rates of high school non-completion (5 studies)</td>
<td>29.1% (IQR: -53.9% to -14.8%)</td>
<td></td>
</tr>
<tr>
<td>Grade promotion (3 studies)</td>
<td>Average increase of 11.5% (8.4% and 14.6%); 2 studies</td>
<td></td>
</tr>
<tr>
<td>SBHCs associated with increases in students on pace to graduate: 1 study</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GPA (3 studies)</td>
<td>Median increase of 4.7% (Range: 3.5% to 7.2%)</td>
<td></td>
</tr>
</tbody>
</table>

### Healthcare-Related Outcomes

<table>
<thead>
<tr>
<th>Outcome</th>
<th>Median increase</th>
<th>IQI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Immunization (4 studies)</td>
<td>15.5 percentage points* (Range: -22.0 to 26.1 percentage points)</td>
<td></td>
</tr>
<tr>
<td>Other recommended preventive services (8 studies)</td>
<td>12.0 percentage points* (IQR: 5.7 to 45.1 percentage points)</td>
<td></td>
</tr>
<tr>
<td>Regular source of health care (7 studies)</td>
<td>2.2% (IQR: -1.8% to 12.4%)</td>
<td></td>
</tr>
</tbody>
</table>

### Asthma-Specific Outcomes

<table>
<thead>
<tr>
<th>Outcome</th>
<th>Median decrease</th>
<th>IQI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Morbidity (2 studies)</td>
<td>19.3% (36.4% and 2.1%); 2 studies</td>
<td></td>
</tr>
<tr>
<td>Emergency department visits (4 studies)</td>
<td>15.8% (Range: -50.0% to -5.9%)</td>
<td></td>
</tr>
<tr>
<td>Hospitalizations (3 studies)</td>
<td>70.6% (Range: -79.9% to -37.5%)</td>
<td></td>
</tr>
</tbody>
</table>

### Other Morbidity-Related Outcomes

<table>
<thead>
<tr>
<th>Outcome</th>
<th>Median decrease</th>
<th>IQI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-reported physical health (7 studies)</td>
<td>1.2% (Range: -17.4% to 5.6%); 4 studies</td>
<td></td>
</tr>
<tr>
<td>Mixed results in self-report of physical discomfort and health-related quality of life; 3 studies</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self-reported mental health problems (8 studies)</td>
<td>5.7% (IQR: -31.8% to 8.9%); 4 studies</td>
<td></td>
</tr>
<tr>
<td>Favorable, non-significant, effects on psychosocial health; 3 studies</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-asthma-related emergency department visits (5 studies)</td>
<td>14.5% (IQR: -33.8% to 4.6%)</td>
<td></td>
</tr>
<tr>
<td>Reduction in suicide attempts; 1 study</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-asthma-related hospital admissions (2 studies)</td>
<td>Mean decrease of 51.6% (~86.9% and -16.3%); 2 studies</td>
<td></td>
</tr>
</tbody>
</table>

### Risk Behaviors

<table>
<thead>
<tr>
<th>Outcome</th>
<th>Median decrease</th>
<th>IQI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Smoking (7 studies)</td>
<td>21.0% (IQR: -24.1% to 32.4%)</td>
<td></td>
</tr>
<tr>
<td>Alcohol consumption (6 studies)</td>
<td>14.8% (IQR: -19.8% to -9.5%)</td>
<td></td>
</tr>
<tr>
<td>Other illicit substance use (5 studies)</td>
<td>27.2% (IQR: -82.2% to 13.6%)</td>
<td></td>
</tr>
<tr>
<td>Any substance use (tobacco, alcohol, or substance use) (4 studies)</td>
<td>15.7% decrease in any substance use</td>
<td></td>
</tr>
<tr>
<td>Nutrition, physical activity, and weight related outcomes (3 studies)</td>
<td>Metrics too diverse to be summarized</td>
<td></td>
</tr>
</tbody>
</table>

Source: Community Preventive Services Task Force
<table>
<thead>
<tr>
<th>Community Preventive Services Task Force (CPSTF) Outcomes&lt;sup&gt;1&lt;/sup&gt;</th>
<th>Community Preventive Services Task Force (CPSTF) Outcomes&lt;sup&gt;1&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sexual Risk Behavior and Reproductive Outcomes</strong></td>
<td><strong>Sexual Risk Behavior and Reproductive Outcomes</strong></td>
</tr>
<tr>
<td><strong>Contraception Use</strong> (7 studies)</td>
<td><strong>Received Prenatal Care</strong> (4 studies)</td>
</tr>
<tr>
<td>Females and Males Combined (4 studies):</td>
<td>Median 27.8% increase in number of prenatal visits (9.4% and 46.2%); 2 studies</td>
</tr>
<tr>
<td>Median increase of 7.8% (Range: -21.2% to 46.7%)</td>
<td>26 percentage points increase in percent of pregnant students receiving 12 or more visits; 1 study</td>
</tr>
<tr>
<td>Females only (3 studies):</td>
<td>87 percentage point increase in percent of pregnant students who received prenatal care; 1 study</td>
</tr>
<tr>
<td>Median increase of 17.8% (Range: -8.5% to 54.9%)</td>
<td><strong>Low Birth Weight</strong> (3 studies)</td>
</tr>
<tr>
<td>Males only (3 studies):</td>
<td>Median decrease of 58.3% (Range: -60.4% to -14.4%)</td>
</tr>
<tr>
<td>Median decrease of 3.1% (Range: -6.2% to 14.4%)</td>
<td><strong>Pregnancy Complications</strong> (3 studies)</td>
</tr>
<tr>
<td><strong>Sexual Activity</strong> (5 studies)</td>
<td>Median increase of 25% (Range: -16.1% to 76.3%)</td>
</tr>
<tr>
<td>Females and Males Combined (3 studies):</td>
<td></td>
</tr>
<tr>
<td>Median increase of 19.6% (Range: -0.9% to 83.2%)</td>
<td></td>
</tr>
<tr>
<td>Females only (2 studies):</td>
<td></td>
</tr>
<tr>
<td>Median decrease of 3.6% (-16.0% and 8.9%); 2 studies</td>
<td></td>
</tr>
<tr>
<td>Males only</td>
<td></td>
</tr>
<tr>
<td>Median decrease of 8.5% (-12.0% and -4.9%); 2 studies</td>
<td></td>
</tr>
<tr>
<td><strong>Becoming pregnant or causing pregnancy</strong> (5 studies)</td>
<td></td>
</tr>
<tr>
<td>Females only (5 studies):</td>
<td></td>
</tr>
<tr>
<td>Median decrease of 40.0% (IQI: -47.5% to 17.6%)</td>
<td></td>
</tr>
<tr>
<td>Males only (1 study):</td>
<td></td>
</tr>
<tr>
<td>Increase 21.5%</td>
<td></td>
</tr>
<tr>
<td><strong>Month of initiation of prenatal care</strong> (3 studies)</td>
<td></td>
</tr>
<tr>
<td>Pregnant students received prenatal care 0.45 months earlier; 2 studies</td>
<td></td>
</tr>
<tr>
<td>15.1 percentage point increase in percent of pregnant students registered for prenatal care during 1st trimester; 1 study</td>
<td></td>
</tr>
<tr>
<td><strong>Source:</strong> Community Preventive Services Task Force</td>
<td></td>
</tr>
</tbody>
</table>
School-based health centers (SBHCs) are considered one of the most effective strategies for delivering preventive care to adolescents — a population long considered difficult to reach. The majority of those served are Medicaid-insured or have no insurance. Numerous evaluations have shown that SBHCs achieve marked improvements in adolescent healthcare access vs. adolescent utilization in other settings, such as community health centers (CHCs).

1. **Primary & Preventive Care**: Adolescents with access to SBHCs are more likely to schedule routine health visits
   - **Montefiore Medical Center #1, 2003**: Visits were 1.6x more likely to be initiated in SBHCs vs. CHCs for health maintenance reasons.
   - **Mathematica Policy Research, 1996**: 71% of students reported a health care visit in the past year vs. 59% of students without access to an SBHC.
   - **University of Colorado, 2007**: Although only 37% of SBHC users were insured (vs 73% of users using other health providers), 52 had >3 primary care visits (% vs. 34%). They were also more likely to have received a health maintenance visit (47% vs 33%), an influenza vaccine (45% vs 18%), a tetanus booster (33% vs 21%), and a hepatitis B vaccine (46% vs 20%).

2. **Mental Health**: SBHCs decrease barriers to mental health, which is frequently stigmatized and underutilized
   - **Montefiore Medical Center #1, 2003**: Visits to SBHCs were 66% medical and 34% mental health vs. 97% medical at CHCs. Additionally, adolescents were 21x more likely to be initiated for mental health reasons at SBHCs vs. CHCs.

3. **School Attendance**: Asthma is a leading cause of chronic disease-related school absenteeism. The number of reported missed school days among children with asthma was 13.8 million in 2013. SBHCs increase attendance by diagnosing and treating students
   - **Montefiore Medical Center #2, 2003**: Access to SBHCs was associated with a gain of 3 days of school for schoolchildren who have asthma.

4. **Emergency Visits**: SBHCs decrease the likelihood of children going to the ER
   - **Montefiore Medical Center #1, 2003**: Urgent and emergent care use was 4x more likely for adolescents who never used a SBHC.
   - **University of Cincinnati, 2005**: Relative risks of hospitalization and ED visits due to asthma in the SBHC group decreased 2.4x and 33.5%. Additionally, the cost of hospitalization per child decreased significantly over time for children in SBHC schools.
Education Plus Health highlights 5 core positive impacts based on national data.²

1. **School & Quality of Life**: Students who use SBHCs have better grade point averages, better attendance, get more physical activity, and eat more healthy foods than their counterparts.

2. **Primary & Preventive Care**: School-based health centers increase the use of primary care, particularly for vulnerable youth who live in poverty, and for adolescents, one of the groups most likely to lack routine preventive care.

3. **Asthma Management**: Asthma management in school-based health centers decreases hospitalization rates by up to 75-85% and improves the use of peak flow meters and inhalers, saving approximately $970 per asthmatic child per school year.

4. **Reproductive Care**: Students with access to school-based health centers are more likely to get reproductive preventive care, be screened for a sexually transmitted disease or infection, receive sexual health education, and use protection or abstain from sexual activity.

5. **Mental Health**: Mental health counseling has been repeatedly identified as the leading reason for student visits. One study found that “inner-city students were 21 times more likely to make mental-health related visits to school-based health centers than to community health centers.”

Additionally, it calculated a cost reduction in national health-related spending.²

1. **Medical Cost Reduction**: SBHCs reduce emergency room utilization, hospitalization, and Medicaid costs overall—particularly for children with chronic health conditions like asthma.

2. **Medicaid Spending**: School-based health centers reduce Medicaid expenditures related to inpatient, drug, and emergency department use.

Source: Education Plus Health
Education Plus Health published 3 metrics from Philadelphia SBHCs, focused on asthma.\textsuperscript{1,4} Asthma is the leading cause of absenteeism.\textsuperscript{5} Chronic absenteeism rates are high in large PA cities: Scranton (28%), Pittsburgh (30%), and Philadelphia (38%).\textsuperscript{6} Philadelphia is rated as the 9\textsuperscript{th} “most challenging place to live with asthma” by the Asthma and Allergy Foundation of America (AAFA) due to the high rate of asthma prevalence and asthma-related deaths.\textsuperscript{2} Considered one of the nation’s poorest cities, poverty is no doubt the top risk factor. High ozone and high levels of spring pollen can make asthma in the city even worse. Pittsburgh ranks 50\textsuperscript{th}.

1. \textbf{% Asthmatic Students Chronically Absent}: 22\% in 2019, down from 30\% in 2017
2. \textbf{Mean ER Visits Among Asthmatic Students}: .61 in 2019, down from .159 in 2017
3. \textbf{Asthmatic Student ACT Score}: 85\% of asthmatic students saw an increase in ACT score (Asthma Control Test) pre to post-intervention

In 2020, Pennsylvania ranked 3\textsuperscript{rd} in a survey of US states with the highest prevalence of asthma among children (11.5\%)\textsuperscript{3}, only falling below Connecticut (11.8\%) and Washington, DC (11.7\%). Two other PA cities top the AAFA list.\textsuperscript{2} Allentown is ranked 3\textsuperscript{rd} due to its high rates of asthma prevalence and asthma-related ER visits. Harrisburg is ranked 6\textsuperscript{th}. Its high use of asthma medication implies its population may have a high rate of uncontrolled asthma. Heavy particle pollution and few smoking laws may contribute its asthma outcomes.
Education Plus Health continues to grow as it increases the size and scope of the program and identifies unmet needs via screening tools. This insight into local health trends can be leveraged to direct future initiatives and partnerships. 2021 highlights include:

- **3,117** total SBHC visits
- **319** COVID tests
- **28%** Students identified with mental health symptoms on PHQ9
- **8%** Students identified with substance abuse risk on S2Bi
- **55%** Asthmatic students identified with uncontrolled asthma
- **50%** Students identified with sexual health risk
- **34%** Students screened in the obese percentile

The program is supported by a large variety of organizations including, hospitals, health plans, foundations, and multiple PA State Departments/Commissions. Additionally, the Pennsylvania School-based Health Alliance was awarded a **$2.85M** health equity grant to expand mental health services provided in PA SBHCs, illustrating a strong increase in state-level interest.
### Types of Organizations SBHCs Collaborate with Nationally to Address the Social Determinants of Health

<table>
<thead>
<tr>
<th>Types of Organizations</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Food/Nutrition Services</td>
<td>54%</td>
</tr>
<tr>
<td>Education/Academic Support</td>
<td>48%</td>
</tr>
<tr>
<td>Community Involvement/Volunteering</td>
<td>47%</td>
</tr>
<tr>
<td>Physical Activity and Recreation</td>
<td>44%</td>
</tr>
<tr>
<td>Health Literacy</td>
<td>42%</td>
</tr>
<tr>
<td>Housing or Utilities</td>
<td>25%</td>
</tr>
<tr>
<td>Legal Services</td>
<td>11%</td>
</tr>
<tr>
<td>Juvenile/Criminal Justice</td>
<td>11%</td>
</tr>
<tr>
<td>Employment</td>
<td>11%</td>
</tr>
<tr>
<td>Other</td>
<td>7% - 25%</td>
</tr>
</tbody>
</table>

Source: National School-Based Health Alliance chartbook - slightly outdated utilizing data from 2017; The 2022 census is underway
In PA, SBHCs exist in only seven cities or counties, serving less than 10,000 low-income students.²

The Pennsylvania School-Based Health Alliance only lists one health center in Western PA at the Girard High School in Erie.¹

The majority of SBHCs are located in Philadelphia and other of PA’s large cities:

- #1 Philadelphia: 1,585,010 population
- #3 Allentown: 121,252 population
- #7 Scranton: 75,961 population
- #8 Lancaster: 58,981 population
- #10 Harrisburg: 49,395 population
- #11 York: 49,395 population

Julie Cousler Emig, the director of Education Plus Health, reported that SBHCs existed around Pittsburgh but closed due to funding issues.
The National School-Based Health Alliance lists no SBHCs in southwest PA.¹

The closest listed SBHCs are located in:
- Weirton, WV
- Morgantown, WV
- Hagerstown, MD
- Harrisburg, PA

HRSA reported one SBHC in southwest PA:
Cornerstone Care, an FQHC with multiple locations around Pittsburgh.² It is unknown if this SBHC is still functioning.

Source: School-Based Health Alliance. HRSA
While healthcare reform has expanded insurance coverage, many barriers to regular healthcare remain, especially for vulnerable populations. Mobile health units help underserved communities overcome common barriers to accessing health care including time, geography, trust, and have demonstrated improvements in health outcomes and reductions in costs.

A 2017 survey of clinics participating in Harvard’s Mobile Health Map analyzed the target populations of participating MHCs.¹

1. **Insurance:** The average percentage of uninsured clients was ~41%. The average percentage of clients covered by Medicaid/CHIP was 30% per clinic and by Medicare was 15% per clinic. The average reported percentage of clients with private insurance was 25% per clinic, some of whom also have coverage with public insurance (N=146)

2. **Age:** The majority of patients are between the ages of 0-17 and 45-65. This contrasts FQHCs, where patients under 17 represent only 20% (N=183)

3. **Race:** Compared to the national racial distribution in 2019 (60% White, 18% Hispanic, 12% Black, 6% Asian), Black and Hispanic individuals make up 35% and 27% of the MHC population, respectively (N=186)

4. **Sex:** Female clients make up a slight majority with each mobile clinic serving an average of 55% female clients and 44% male clients (N=92)

**Source:** Harvard Medical School “Mobile Health Clinics in the US”. *Clinics were allowed to select more than one option.*

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**Mobile Health Clinic Target Populations (N=291; 2017)**

- **Uninsured:** 56%
- **Low Income:** 55%
- **Homeless:** 38%
- **Rural:** 36%
- **Veterans:** 18%
- **Migrants:** 17%
- **Minorities:** 14%
- **Schools:** 14%
- **Public Housing:** 14%
- **LGBTQ:** 13%
- **Employee Wellness:** 13%
- **Other:** 21%

Uninsured and low-income groups are the most frequently targeted. These two categories are the broadest and include many of the other smaller subgroups (ex: Homeless are uninsured).
The average percentage of clients between 0-17 years was 41%. The lowest utilization is found in the age group 65+. This contrasts FQHCs, where patients <17 years represent only 20%.

Compared to the national racial distribution in 2019 (60% White, 18% Hispanic, 12% Black, 6% Asian), Black and Hispanic individuals make up 35% and 27% of the MHC population, respectively.

Source: Harvard Medical School “Mobile Health Clinics in the US”. *Clinics were allowed to select more than one option.
Mobile health clinics deliver a wide variety of health services and may be staffed by a combination of physicians, nurses, community health workers, and other health professionals.¹

Of the 724 MHC members in the Mobile Health Association, many clinics provide preventative and primary care.² Dental was the most common specialty service, twice as common as mammography, the second most common specialty. About 10-15% of clinics provide mammography, pediatric, and mental health services.

Harvard’s “Case for Mobile” report highlighted that diverse revenue streams, including the area of focus, are crucial for mobile clinics.² For example, one mobile clinic operator described how specialty care generated revenue for services with lower reimbursement rates, such as primary care: “We knew that the business case was there, but we were also using cardiology as a way to be able to balance our mission against our margin. ...the point of the mobile is to reach those underserved populations. Although some are not going to make money, we do find ways to be self-sustainable.”

![Services Types (N=724; 2017)](chart.png)

The “other specialty” category includes asthma, maternal and infant health, disaster, homelessness, and other services.

Source: Harvard Medical School “Mobile Health Clinics in the US”. *Clinics were allowed to select more than one option.
Screening Services (2017)¹

- Hypertension: 31%
- Diabetes: 31%
- Cholesterol: 27%
- Breast Cancer: 19%
- Colorectal: 13%
- Cervical: 13%
- Osteoporosis: 9%

Specialty Services (2017)¹

- Diet Counseling: 28%
- Depression: 25%
- Obesity: 25%
- Smoking Cessation Advice: 25%
- Alcohol Screening & Brief Counseling: 15%
- Vision: 13%
- Daily Aspirin Discussion: 13%
- Folic Acid Use: 13%
- Calcium Supplementation: 12%
- Hearing: 6%

Hypertension and diabetes are the most common screenings.

Source: Harvard Medical School "Mobile Health Clinics in the US". "Clinics were allowed to select more than one option."
Though 29% of clinics in Harvard’s Mobile Health Map were independent programs, mobile clinics are often part of a larger organization. The most common of these affiliations were with hospital systems (29%) and universities (24%).

Hospital networks and universities are well-equipped to run MHCs as they have a complementary infrastructure and generate income from other programs, which makes an MHC program sustainable. For example, hospitals already employ medical staff and personnel with outreach and program management experience. They are comfortable with HIPPA, reimbursement, and marketing/fundraising. Medical schools also have access to medical staff – students – and mobile programs can be built into curriculums.

Additionally, hospitals and medical schools tend to have internal funding reserves to draw upon. This allows them to more comfortably launch a new enterprise and have enough resources to address unforeseen issues that are likely to occur.

This contrasts with independent programs, which must the entire recruit staff, set up programs from scratch, and raise all the funding necessary to launch and maintain a mobile program.

Source: Harvard Medical School “Mobile Health Clinics in the US”. *Clinics were allowed to select more than one option.
Mobile health clinics depend heavily on philanthropy and government funding.¹ Harvard’s Mobile Health Map found that between 30-50% of mobile programs obtained funding from philanthropy, federal grants, insurance, self-pay, and state grants.

However, grant funding, whether from private or public sources, can be unpredictable.² It can be difficult to sustain a clinic on insurance reimbursements alone, especially if clients are uninsured.

Harvard’s “The Case of Mobile” highlighted that diverse revenue streams, including insurance, are crucial for mobile clinics.² Although many reported insurance reimbursement as an important revenue source, others described difficulties with billing due to state policies or regulations. Some clinics, especially those relying on philanthropy, lacked the necessary billing infrastructure.

“Billing is a beast. There are tons of rules. [For an] program that does small volume it is really hard.” - The Case for Mobile Interview

Harvard’s Mobile Health Map found that there is a large range of funding requirements for different types of programs.¹ For example, dental MHCs are >3x as expensive as prevention MHCs.

Source: Harvard Medical School “Mobile Health Clinics in the US”. ‘Clinics were allowed to select more than one option.'
The pandemic sparked innovation in health care, including greater interest in mobile programs. Health care providers have adopted or scaled up other innovations, including telemedicine, drive-through testing and vaccination sites, and "pop-up" clinics. Innovations will likely continue in various forms long after the crisis has ended. For example, many mobile clinics that began to expand access to COVID testing or vaccinations are planning to continue operating and adjusting their service offerings to meet other community needs.

1. Medicaid State Planning Grants for Mobile Crisis Intervention Services: In September 2021, Centers for Medicare & Medicaid Services (CMS) released $15 million in authorized state planning grants to 20 state Medicaid agencies (including Pennsylvania) to develop state plan amendments or waiver requests to provide coverage of mobile crisis services, highlighting the school-based programs specifically.

2. Medicaid Mobile Coverage: In January 2022, the CMS released new guidance to states on the American Rescue Plan Act’s new Medicaid state option to provide qualifying community-based mobile crisis intervention services to individuals experiencing mental health or substance use disorder crises and receive an enhanced federal matching rate of 85% for the first three years. The option was available to states starting April 1, 2022, for a period of five years. If passed, the Build Back Better Act would make the option permanent.

3. MOBILE Health Care Act: In September 2022, Congress passed legislation to support the expansion of Mobile Health Programs run by Federally Qualified Health Centers. The “Maximizing Outcomes through Better Investments in Lifesaving Equipment” for (MOBILE) Health Care Act allows health centers to utilize federal funds through the New Access Points Grants program to establish new, mobile healthcare delivery sites. A 40% growth in FQHC mobile units since 2019, spurred by the need for COVID-19 testing and immunizations, supported the need for funding. "Mobile clinics have been essential in the fight against COVID. Over the last six months, health centers have held nearly 7,000 mobile COVID events to test and vaccinate patients.” said Rachel Gonzales-Hanson, Interim President and CEO of the NACHC.

Source: National Association of Community Health Centers. Georgetown
In December 2022, Senator Haywood announced $10 million for state-wide mobile and community clinics.\(^1\) Funding came from the COVID-19 Public Health Equity Initiative (PHEI), made possible by State Fiscal Recovery Funds/American Rescue Plan.

1. **PA Hearing**: In September 2022, Senators Haywood and Katie Muth hosted a public hearing to discuss strategies to enhance statewide mobile health clinics

2. **Pennsylvania PHEI Funding**: Benefits 45 awardees across the state\(^3\)
   - $5 million for mobile health clinics to provide jobs (19 awardees)
   - 100% of this funding went to the east half of Pennsylvania
   - $3 million for health equity to improve accessibility (15 awardees)
   - $2 million for trauma-informed care in communities of color (11 awardees)

3. **Mobile Clinic Registry**: Senator Haywood developed the first mobile clinic registry in the state to determine where MHCs were needed\(^3\)

According to the National Association of Community Health Centers, there has been a 40% increase in the number of mobile clinics nationwide since 2019.\(^8\)

“Mobile clinics take health care to the people and make it much more accessible. It’s the wave of the future,” said Haywood, 2022 chair of the PA State Senate’s Health and Human Services Committee. “Funding and expanding mobile health clinics and community health centers will help communities obtain access to health care.”\(^8\)

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### Mobile Health Clinic Awardees\(^8\)

<table>
<thead>
<tr>
<th>Location</th>
<th>Clinic Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Southeast(^4)</td>
<td>Child Guidance Resource Centers</td>
</tr>
<tr>
<td>Southeast(^4)</td>
<td>Covenant House Health Services, Inc.</td>
</tr>
<tr>
<td>Southeast(^4)</td>
<td>EMIRE Healing Center</td>
</tr>
<tr>
<td>Southeast(^4)</td>
<td>Esperanza Health Center, Inc.</td>
</tr>
<tr>
<td>Southeast(^4)</td>
<td>Family Practice and Counseling Network</td>
</tr>
<tr>
<td>Southeast(^4)</td>
<td>Greater Philadelphia Health Action, Inc.</td>
</tr>
<tr>
<td>Southeast(^17)</td>
<td>Jaisohn Medical Center</td>
</tr>
<tr>
<td>Southeast(^26)</td>
<td>Jefferson Health: TJUH COVID Vaccine and Testing Mobile Health Clinic</td>
</tr>
<tr>
<td>Southeast(^18)</td>
<td>Northwest Victim Services</td>
</tr>
<tr>
<td>Southeast(^9)</td>
<td>Philadelphia FIGHT</td>
</tr>
<tr>
<td>Southeast(^10)</td>
<td>Project HOME</td>
</tr>
<tr>
<td>Southeast(^14)</td>
<td>Public Health Management Corp.</td>
</tr>
<tr>
<td>Southeast(^15)</td>
<td>Sayre Family Health Center</td>
</tr>
<tr>
<td>Southeast(^12)</td>
<td>Sidney Kimmel Cancer Center: Mobile Cancer Screening</td>
</tr>
<tr>
<td>Southeast(^12)</td>
<td>Spectrum Health Services, Inc.</td>
</tr>
<tr>
<td>Southeast(^13)</td>
<td>Temple Health: Begin the Turn Mobile Unit</td>
</tr>
<tr>
<td>Southeast(^10)</td>
<td>Temple Health: Center for Population Health Mobile Unit</td>
</tr>
<tr>
<td>Southeast(^10)</td>
<td>Temple Health: Fox Chase Cancer Center Mobile Screening</td>
</tr>
<tr>
<td>Southeast(^10)</td>
<td>Temple Health: Miriam-Zion-Temple (MZT) Mobile Clinic</td>
</tr>
<tr>
<td>Southeast(^14)</td>
<td>Tower Health: Ronald McDonald Care Mobile Dental Program</td>
</tr>
</tbody>
</table>

Source: The Philadelphia Inquirer, The White House, Senator Haywood, NACHC
In their 2022 report “The Case for Mobile”, the Mobile Health Association and Harvard’s “Mobile Health Map” highlight that mobile healthcare is not only good for communities, but it is also good for business.¹ The reality is that most successful health programs must be able to illustrate impact but also present a strong business case aligned with business-related incentives, otherwise, they will struggle to stay afloat financially. Partners incentivized to run mobile clinics include:

1. **Local Government**: State and local health officials may see the potential for mobile health care to lower expenses associated with avoidable medical emergencies¹

2. **Accountable Care Organizations**: Accountable care organizations may be interested in mobile programs that help them connect with their members, especially those who are not accessing health care services¹

3. **Health Systems**: Leaders of major health systems may be motivated by opportunities to build community trust or to advance other business goals such as community engagement or brand awareness and loyalty¹

**Business principles increasingly drive healthcare decisions**. As a result, any effort to establish, sustain, or expand a mobile health program must consider the larger business strategy of the parent organization, collaborators, and funders. Grant funding, whether from private or public sources, can be unpredictable, and it can be difficult to sustain a primary care clinic on insurance reimbursements alone, especially if clients are uninsured.¹

Source: Mobile Healthcare Association and Harvard’s Mobile Health Map
The Business Case for Mobile Health - the Mobile Health Association and Harvard’s “Mobile Health Map” (2022)

### Organizational Culture

**Strong organizational culture and employee engagement**, two topics that have received increased attention in recent years, work synergistically. We heard from experts in the field about the positive influence mobile programs can have on both areas.

<table>
<thead>
<tr>
<th>Reinforcing Mission</th>
<th>Mobile health programs not only contribute to an organization’s mission, they also reinforce their values within their paid and volunteer workforce.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Employee Engagement</strong></td>
<td>Staff burnout, high turnover rates, and absenteeism are costly and disruptive. That is why so many healthcare organizations care about employee engagement. Many people we spoke to talked about the positive effect on morale for all staff, not just those working on the mobile unit.</td>
</tr>
<tr>
<td></td>
<td>“When we … got approval to do this mobile unit… there was so much excitement around the support that leadership provided to this new form of care. They were so encouraged to see the institution take a new, innovative approach to provide health care.”</td>
</tr>
<tr>
<td></td>
<td>A mobile program can bolster efforts to recruit, train, and retain staff. Mobile clinics offer trainees, physicians, and other staff opportunities to put their ideals into action. While many healthcare professionals chose their careers because they wanted to help people, their day-to-day work may not fulfill that desire. Working on a mobile clinic in close contact with the community often brings inspiration and job satisfaction</td>
</tr>
<tr>
<td></td>
<td>“Experiences that students or other folks have on a mobile unit in a community are so valuable in understanding whom they’re eventually going to take care of in hospitals… Without that platform, we wouldn’t have recruited those two providers and maybe they would have never kind of realized what their niche is, that community medicine is the thing that they’re passionate about.”</td>
</tr>
</tbody>
</table>

### Business Strategy

Health care organizations use mobile programs to advance their business priorities in a variety of ways including positioning their brand, establishing credibility, and promoting new business development.

<table>
<thead>
<tr>
<th>Brand Positioning</th>
<th>Mobile clinics help organizations strategically position themselves in communities. They can be especially valuable for organizations seeking to build trust. Mobile clinic leaders sometimes find allies in their organization’s marketing and communications department.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>“Mobile clinics establish the trusted relationship where then you can help patients get to the next step, to start your primary care and then get connected someplace for the long term.” “Our marketing team… was all over this, they thought this was a great idea, of the feel-good sense that, we’re not going to wait for someone to get so sick that they have to take an Uber to come to us. We’re going to go out to them and park on their street and provide them the care that they need. And we thought that was a really good story to tell.”</td>
</tr>
<tr>
<td>Differentiation</td>
<td>Mobile clinics also help with marketing and differentiation in a competitive healthcare marketplace. Patients’ experiences with a mobile clinic can influence decisions on where to receive future care.</td>
</tr>
<tr>
<td></td>
<td>“I can go into hospital A, or I could go to hospital B, but I’m choosing hospital B because I went to their mobile program, and they took good care of me.”</td>
</tr>
<tr>
<td>New Business Development</td>
<td>For organizations hoping to expand, mobile clinics offer longer-term business development. We heard from several interviewees about how mobile clinics helped healthcare organizations serve new communities and expand their reach.</td>
</tr>
<tr>
<td></td>
<td>“How do you get to the people that are in greatest need? You don’t do that by building a great big building because oftentimes we don’t know where the greatest need is. And you also find that the areas of need change.” “They’ve used their mobile dental clinic to go to a town which doesn’t have a dental clinic, provide services there. Build up a patient base, and then apply for a new access point grant through the federal government. They then built a fixed site clinic to create a permanent resource, then moved their mobile on to another location where they can build up a patient base there as well.”</td>
</tr>
</tbody>
</table>

Source: Mobile Healthcare Association and Harvard’s Mobile Health Map
# The Business Case for Mobile Health - the Mobile Health Association and Harvard’s “Mobile Health Map” (2022)

## Budget Impact

Mobile clinics can help healthcare organizations meet their financial goals. We heard from interviewees that budget impact is closely related to start-up costs, the adaptability and efficiency of mobile clinics, opportunities for revenue, and contributions to value-based care goals.

### Lower Start-Up Costs

Interviewees explained that some healthcare decision-makers perceive mobile clinics to be more costly due to upfront investment, maintenance, and operational costs; however, actual costs for a mobile clinic can be lower compared to those for fixed sites.

> "From a business standpoint, my starting cost is brought down to half, if not more [compared to a physical clinic]. The ability for us to move from concept to action is much easier."

### Flexibility and Efficiency

Mobile clinics can also adapt to changing needs of populations and are appealing investments for organizations seeking flexibility.

> "You have much more flexibility. You can get up and move. You can be in many locations during a week and bring in patients and close care gaps and address social determinants of health by moving around."

### Performance Incentives

As the health care system shifts towards more value-based care, financial incentives may stimulate new types of programs that focus on the quality of care—decreasing costs, lowering hospitalization rates, and reaching more patients. With their flexibility, mobile clinics are well-suited to our ever-changing healthcare system. Mobile programs were described as significant contributors to health quality and value-based care.

> "Mobile clinics improve compliance with certain medications and allow for greater follow up and engagement over time... A mobile clinic can also help decrease adverse events like heart failure exacerbation, COPD exacerbations, improve A1C scores — things that health systems will be interested in..."

## Community Benefits Requirement

For mobile programs affiliated with nonprofit hospitals, it is useful to understand policies that affect the organization’s nonprofit status. This includes guidelines by the Internal Revenue Service, state policies such as determination of need, and local regulations, such as city and county property tax waivers. Mobile clinics can help hospitals that operate as nonprofit organizations to satisfy their community benefit requirements and maintain tax exemptions. By linking their work to community benefit contributions, mobile programs are better positioned to sustain and grow their programs.

## Health Equity

In many communities, mobile clinics are the only accessible and acceptable option for underserved patients. Barriers to care, range from fear or mistrust of the health care system to immigration status to the practicality of getting to a clinic with demanding work or family responsibilities.

### Trust and Patient Experience

Mobile clinics establish patient trust that is difficult to cultivate and worth maintaining once earned. Many interviewees, like the one quoted here, described how mobile clinics build trust with underserved populations:

> "For communities that have been disinvested or marginalized by our health care system through generations, being able to go to them, make the effort to get right where they are... It's a good way to be able to bring them into a healthcare system that maybe they are distrustful of."

### Patient Centered Care

"Mobile has flipped health care on its head and we provide care at the convenience of the patient, whereas our health care system has evolved such that we make it very hard to access health care for a variety of reasons, whether it’s insurance or other things. I think that the other advantage of mobile is the providers allow themselves to become more personally connected and knowledgeable about people’s lives and know their stories."

### Racial Equity

Mobile clinics can reach a broad range of patients, which can reduce gaps in care, including those exacerbated by the COVID-19 pandemic. Mobile health programs can help turn the intent to address inequities into visible action.

> "Communities of color are not getting vaccinated at the same rates and the opportunity to engage and build trust with untrusting communities is huge. It’s about not just a connection to a person, but a connection to a community."
There are ~2,000 mobile health clinics nationally, supported by a decade of data proving their efficacy across multiple endpoints and demonstrating a strong return on investment.

1. Increase healthcare access: MHCs provide geographical/logistical convenience and increase access to minorities/vulnerable communities. They deliver services right to clients’ doorsteps, often without fees and complex paperwork, serving individuals who may not have the time or resources to travel to traditional clinics. One of the most critical features of MHCs is their ability to build trust with the communities and link them with clinical settings\textsuperscript{3,4,5,8}

2. Improve health outcomes: MHCs have demonstrated a statistically significant impact on screening rates, preventive care, chronic disease management, and patient self-efficacy\textsuperscript{3}

3. Reduce healthcare costs: MHCs reduce avoidable ER visits, hospitalization/readmission rates, and the length and cost of hospital stays while increasing symptom-free days and quality-adjusted life years. Dr. McShane at Penn State College estimates MHCs save $1.1B in healthcare costs annually\textsuperscript{3,4,6,8,10}

COVID-19 highlighted the unique benefits of MHCs, resulting in a wave of support from the federal and state government.
1. Geographical and logistical convenience: MHCs deliver services right to clients’ doorsteps, often without fees and complex paperwork, serving individuals who may not have the time, resources, and motivation to travel to traditional clinics; eliminates many logistical barriers to traditional forms of healthcare, such as transportation issues, difficulties making appointments, long waiting times and complex administrative processes, helping and encouraging vulnerable populations to receive the necessary health services. 

- **HOMES – Dallas, TX 2015**: Despite Parkland Health/Hospital System’s size and resources, many homeless people in the greater metropolitan region would not have access to care without the health system’s HOMES mobile health program. Mobile clinics to go to locations where homeless people congregate. In 2015, HOMES served 9,377 patients (>3/4 uninsured).

2. Provide access to minorities/vulnerable communities: MHCs can reach minorities and vulnerable communities such as the homeless, displaced populations, immigrants, migrant workers, the under-insured, and children.

- **Mobile Health Map – Boston, MA 2016**: 52.2% of clients seen by MHCs nationwide identify as non-White and 40% identify as Hispanic. MHCs mainly serve the uninsured (60%) and the publicly insured (31%) and generally operate in low-income communities

3. Trusting provider-client relationships: Individuals become disenfranchised from their healthcare sources due to a lack of trust in a system seemingly not designed for the client’s best interest. MHCs, by their patient-centric design, are well-positioned to regain the trust of these individuals and reconnect them to regular health providers.

- **Circle Health Services – Cleveland, OH 2016**: A small health organization in Ohio, employs a mobile needle exchange to help combat the spread of HIV and other diseases. The exchange is staffed by clinicians as well as two nonclinical workers who are former addicts. The two nonclinical workers help build trust with addicts who rely on the mobile unit for clean needles and help convince them to use the mobile unit’s clinical services, such as HIV and hepatitis C screenings, flu vaccinations, and health education. In 2016, the mobile clinic exchanged ~495,000 needles with ~4,000 individuals—a 38% increase in exchanged needles and a 25% increase in clients served from 2015.

1. **Emergency coverage:** Because MHCs can be flexibly tailored to meet the needs of target communities, they can be used in emergency situations when care is disrupted.¹
   - **Children’s Health Fund/Hurley’s Children Clinic - Flint, MI 2016:** MI declared a state of emergency due to water contamination with lead. The MHC quickly adapted and was equipped to offer multiple levels of services, from basic screenings for lead poisoning and developmental issues to comprehensive primary care, and provides a source of medical care for children living in underserved communities of the affected area.
   - **National Mobile Healthcare Association & Mobile Health Map - 2020:** In a COVID adaptation survey (>336 individuals representing 121 unique mobile clinics), all 121 programs repurposed their operations to serve a variety of needs specific to their patient populations and communities:
     - Many adopted telehealth/telecare (Family Van; Morehouse School of Medicine)
     - 10% provided COVID testing (Parkland Health and Hospital System in Dallas; FQHC in Austin; Cincinnati Children’s)
     - 7% provided emergency food distribution (Vision to Learn)
     - One program in the Philippines distributed personal protective equipment to first responders

2. **Community integration:** Collaborating with local agencies such as churches, community health centers, and other hospitals and clinics, MHCs connect community members with both medical and social services.¹

1. **Screenings:** MHCs reach high-risk or stigmatized populations, such as the homeless and individuals with multiple risk factors for diseases. 
   
   - **MHC – Baltimore, MD 2003:** A study comparing an MHC with a comparable traditional clinic found that the percentage of clients who agreed to undergo HIV screening was higher at the MHC (54.4% in MHC vs. 7.1% in traditional clinic) and that the percent of HIV tests that turned out positive was also higher at the MHC (5.4% in MHC vs. 2.0% in traditional clinic).

2. **Initiate preventive care:** MHCs provide more opportunities for underserved populations to screen for conditions and learn to manage their health.
   
   - **MHC – Miami, FL 2010:** Among expectant mothers living in a Miami-based minority community, clients of MHCs were significantly more likely to start receiving prenatal care services earlier vs. traditional clinics; mothers accessing the MHCs reported significantly lower rates of pre-term and low-birth-weight infant births (4.4% vs. 8.8%).

3. **Manage chronic diseases:** MHCs can help patients sustain adherence to the necessary medications and lifestyle changes.
   
   - **Family Van – Boston, MA (Harvard) 2014:** 5900 patients visited the Family Van between 2010 and 2012. Patients who initially presented with high blood pressure exhibited average reductions of 10.7 mmHg and 6.2 mmHg, in systolic and diastolic blood pressures respectively, during their follow-up visits. These reductions are associated with a 32.2% and a 44.6% lower relative risk of myocardial infarction and stroke, respectively.
   
   - **HABITS for Life – NM, 2014:** The MHC improved its clients’ cholesterol status by significantly decreasing their low-density lipoprotein (LDL) levels and increasing their high-density lipoprotein (HDL) levels after 4 visits over the course of 9 months.
   
   - **The Health Hut – Ruston, LA 2015:** 30% of its patients initially presenting with high blood pressure at the MHC saw decreased readings over three-month periods, and several diabetic patients saw a decrease of 20% or more in their glycated hemoglobin (HbA1c) levels.

4. **Enable self-efficacy:** Patients report an increased sense of confidence, ability to manage chronic conditions, and navigate the healthcare system.
   
   - **The Eagles Eye Mobile – Pittsburgh, PA 2015:** Relationships clients fostered on the mobile clinic motivated patients to adopt healthier behaviors.
   
   - **HABITS for Life – NM, 2014:** Mobile screening program noted 78% of screening participants engaged in healthier behavior changes as a result of having participated in the screening.

1. **Return on Investment:** MHCs in the United States are getting more “bang for their buck” in providing quality care at a lower cost. The average return on investment for mobile health is 12:1. That means for every $1 spent, $12 are saved. Individual MHCs have also shown their cost-effectiveness based on the ROI calculator on the Mobile Health Map website.

2. **Avoidable emergency department (ED) visits:** MHCs reducing unnecessary ED visits, which can be the only source of readily available care for those who face ongoing barriers to primary care services, such as long waiting times, copayments, complexities of navigating the system, and intimidation.

   - **Massachusetts Health Policy Commission – Boston, MA 2015:** Over 40% of ED visits between FY 2010 - 2014 were either non-emergency or could have been managed in primary care. In FY2010, the average cost per preventable/avoidable visit was $474, and the over 1.1 million avoidable ED visits accrued a cost >$558 million. Residents from communities with the lowest average incomes had >3x the avoidable ED rate than those from communities with the highest average incomes, and rates of avoidable ED visits were higher amongst minorities.

   - **Mobile Health Map – Boston, MA 2016:** Aggregate data from 16 national MHCs indicated ~$561,220 was saved on avoidable ED visits per MHC per year, suggesting a total saving of over $1.1 billion per year by MHCs across the nation. It is estimated that each mobile clinic results in 600 fewer ED visits every year, meaning that each visit to a mobile clinic saves on average $200 (approximately one fifth of an emergency visit).

   - **Breathmobiles - Los Angeles, CA 2013:** This MHC offers medical care and monitoring for children living with asthma in underserved populations. Staff analyzed 88,865 visits by 15,986 patients from November 1995 to December 2010 on 4 of their mobile clinics in Southern California, and approximated the annual cost reduction in ED visits was $2,541,639.

   - **Family Van – Boston, MA 2013:** Visits to this MHC avoided 2851 ED trips, saving about $1.4 million from January 2010 - June 2012.

   - **Family Van – Boston, MA 2017:** A study by the Advisory Board Company, a health care consulting company, found that 12% of Family Van patients learned about a previously undiagnosed condition, such as diabetes or glaucoma, and a quarter were referred to follow-up services.

   - **Mobile Care Chicago’s Asthma Van – Chicago, MI:** This MHC identifies asthma-related issues early on, diverting patients from the emergency room. Over 60% of the program’s patients had been using an ER as their primary treatment site for asthma before going to the Asthma Van. Of those who relied on the mobile clinic for their asthma care needs for a year or more, <5% ended up back in the ER producing at least $450,000 a year in savings through ER diversions alone.

1. **Hospitalization and hospital readmission rates:** MHC care is associated with a reduction in their clients' hospitalizations costs, which is brought about by the shorter lengths of hospitalization periods.1
   - **Farber et al - 2011:** Elderly who utilized traditional services averaged a hospital stay of 7.9 days costing approximately $13,187, while those who utilized mobile services averaged a shorter hospital stay of 5.8 days costing approximately $10,315
   - **Hines et al – 2011:** Reductions in 7-day and 30-day readmission rates are also potential areas to explore for savings in hospitalization-related healthcare costs. In 2011, over 17% of Medicare patients and over 14% of Medicaid patients returned to the hospital within 30 days after being discharged, resulting in governmental costs of over $31 billion

2. **Symptom-free days:** This endpoint incorporates costs associated with both ED visits and hospitalizations.1
   - **Breathmobile - Los Angeles, CA 2010:** An overall increase in symptom-free days among their pediatric asthma patients, an average of 199 SFDs at baseline to 243 SFDs post-intervention, resulted in cost-savings of $79.43/day for children between 5 and 11 years old

3. **Quality-adjusted life years (QUALY):** Tolley and colleagues estimated that the economic value of a statistical life year is $70,000.1
   - **Mobile Health Map – Boston, MA:** ~$71,714,286 in QALYs is saved per year through the collective efforts of 16 MHCs
   - **HABITS for Life – NM 2011:** ~ $10 million worth of QALYs were saved based on their screening efforts in the 2011 fiscal year, with an ROI of $15 per dollar invested
   - **Breathmobile – Los Angeles, CA:** ~ $24,381,000 worth of QALYs were saved by their services within 5 years, with an ROI of $6.73 per dollar invested

4. **Less expensive vs. Medicare:** In several mobile clinics in the southern US, the costs of delivering healthcare were lower than the costs of providing care to Medicare beneficiaries in federally funded health centers.1

Harvard’s Mobile Health Map is a network of mobile clinics working together to advance health equity. By uniting local resources with national best practices, “we innovate, evaluate, and communicate our impact”.

1. Conducts research in collaboration with MHCs
2. Provides tools and resources to measure impact
3. Communicates the impact of mobile programs to healthcare leaders, funders, and policymakers

The Mobile Health Map is led by executives who run Harvard’s Family Van. The Family Van reduces health disparities in Boston by bringing curbside screenings, health coaching, and referrals for health and social services to the people. Mollie Williams is the Executive Director of both The Family Van and Mobile Health Map, as well as a Lecturer of Global Health and Social Medicine at Harvard Medical School.

Harvard’s key partners include the Mobile Healthcare Association, Health Resources in Action, and the Leon Lowenstein Foundation.
28 mobile clinics registered with The Mobile Health Map in Pennsylvania.

Compared to the national average:

1. **Race**: They serve a significantly larger portion of Black individuals vs. the US average (67% vs. 22%)

2. **Age**: Patients are typically older, with almost none below the age of 17 and 52% between the ages of 45-64

3. **Insurance**: Significantly more patients with Medicaid and multiple insurances. Only 15% were uninsured in PA vs. the national average of 42%

4. **Preventive Services**: Focus on alcohol, mammography, and STI/cholesterol screening over the past 5 years

Source: Harvard’s Mobile Health Map
Six mobile clinics registered with The Mobile Health Map in southwest Pennsylvania. Half of them are based in Allegheny. Cornerstone Care works across 4 southwest PA counties.

There are several other local mobile clinics (in the form of a built-out van) such as the Primary Care Network, Sto-Rox, Squirrel Hill, UPMC Guerilla Eye Service, and Vision to Learn. The Mercy Operation Safety Net program is on hold for unknown reasons. This illustrates how difficult it is to get an accurate grasp on the presence of mobile clinics. Unlike the FQHC network, there are no financial incentives to join national organizations.

<table>
<thead>
<tr>
<th>Focus</th>
<th>Counties Served</th>
</tr>
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<tbody>
<tr>
<td><strong>Accessible Dental Services</strong></td>
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<tr>
<td>Passavant Memorial Homes</td>
<td>Dental</td>
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<tr>
<td><strong>Braddock Dental Mobile Unit UPMC</strong></td>
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<tr>
<td></td>
<td>Dental</td>
</tr>
<tr>
<td><strong>Ronald McDonald Care Mobile UPMC</strong></td>
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</tr>
<tr>
<td></td>
<td>Pediatrics</td>
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<td><strong>John Barranger</strong></td>
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<td>Cornerstone FQHC Network</td>
<td>Primary Care</td>
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<tr>
<td><strong>Cornerstone Care Community</strong></td>
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</tr>
<tr>
<td>Cornerstone FQHC Network</td>
<td>Dental</td>
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Source: Harvard’s Mobile Health Map
The Mobile Health Association is the leading membership-based organization for mobile healthcare professionals. It is an educational, scientific, and charitable organization under section 501(c)(3) of the Internal Revenue Code, dedicated to the promotion of the mobile healthcare sector.

1. **Mission**: To promote and serve the Mobile Healthcare sector to increase access to care for all
2. **Vision**: A world in which all people have equitable access to quality healthcare
3. **Purpose**: To equip the mobile healthcare sector with the knowledge and skills to reduce health disparities and increase equity
4. **Services**: Education, networking, promoting best practices, research, and funding opportunities

In 2019 (year ending 12/13/2019), the organization reported a total revenue of $443,377.

The Corporate Leadership Circle includes custom vehicle builders and VSP

**Vision**: Builders include Farber, Winnebago, Wakaruba Coach, Mobile Specialty Vehicles, ADI Mobile Health, CGS Premier, Matthews30, and LDV custom specialty vehicles.

Mobile Healthcare Association Coalitions are regional grassroots communities of mobile healthcare providers and allied organizations. While affiliated with Mobile Healthcare Association on a national basis, Coalitions offer a regional forum for sharing proven ideas, strategies, and resources for programming and operations.

Participants in the Regional Coalitions celebrate innovation, diversity, and collaboration - integrating these values into serving their communities. Notably, Pennsylvania does belong to a Coalition.

Source: Mobile Health Association
<table>
<thead>
<tr>
<th>Health Provider Membership</th>
<th>Details</th>
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<tbody>
<tr>
<td>Access to Member’s Only section of the Mobile Healthcare Association site</td>
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<tr>
<td>Annual Forum..</td>
<td>Registration group discounts Program proceedings Speaking opportunities</td>
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<tr>
<td>Community Relations..</td>
<td>Your organization press releases/ announcements on Mobile Healthcare Association website Your Organization Listing On MobileHealthMap.org</td>
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<tr>
<td>Management Resources..</td>
<td>Funding opportunities Publications/articles of interest Calendar of Meetings</td>
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<td>Member Communications..</td>
<td>Networking coordination Regional Coalitions</td>
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<td>Mobile Health Networking..</td>
<td>Member/program profiles</td>
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<td>News Forum..</td>
<td>Current alerts &amp; news briefs</td>
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<td>Newsletter..</td>
<td>Mobile Healthcare Association news alerts</td>
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<tr>
<td>Program Development &amp; Operations Assistance</td>
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<td>Purchasing Discounts..</td>
<td>Annual Forum registration Educational material Management tools</td>
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<tr>
<td>Special Interest Groups (SIGs)..</td>
<td>Emergency response Regional Coalitions Conference Development Program Advocacy</td>
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<table>
<thead>
<tr>
<th>Corporate Membership</th>
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<tr>
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<tr>
<td>Complimentary membership for key staff personnel</td>
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<tr>
<td>Complimentary membership for customers</td>
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<tr>
<td>Corporate listing (hot-linked) on Mobile Healthcare Association website</td>
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<td>Corporate profile on Mobile Healthcare Association website</td>
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<tr>
<td>Annual Forum..</td>
<td>Exhibit discounts Complimentary registration Program sponsorships Exclusive sponsorships of Mobile Healthcare Association project initiatives</td>
</tr>
<tr>
<td>Corporate Leadership Circle</td>
<td>All the above benefits plus other exclusive opportunities</td>
</tr>
<tr>
<td>Current Role</td>
<td>Organization Type</td>
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<tr>
<td>--------------------------------------</td>
<td>-------------------</td>
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<tr>
<td></td>
<td>Title</td>
</tr>
<tr>
<td>Jesse Simmons</td>
<td>Senior Evaluation Officer</td>
</tr>
<tr>
<td>Susan Finn, MSN, APRN</td>
<td>Program Director</td>
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<tr>
<td>Gabrielle Sauder DNP, MSN, PNP-BC</td>
<td>Senior Director, Health Center Planning and Operations</td>
</tr>
<tr>
<td>Sanghamitra Misra, MD, FAAP, ABHHM</td>
<td>Medical Director, Mobile Clinics</td>
</tr>
<tr>
<td>Lorraine Nowakowski, RN, MA Secretay</td>
<td>Clinical Director of Operations</td>
</tr>
<tr>
<td>Sonia Booker MSN, RN Board Member</td>
<td>Manager, Wellness on Wheels Women's Health and Primary Care Programs, Program Director Mobile Vaccine Equity Project</td>
</tr>
<tr>
<td>James Comeaux, LCSW Board Member</td>
<td>Senior Vice President, Operations Access Health Louisiana</td>
</tr>
<tr>
<td>Michele Rigby Pauley, RN, MSN, CPNP</td>
<td>Community Advisor</td>
</tr>
<tr>
<td>Jennifer Snow, MBA Board Member</td>
<td>Assistant Vice President, Community Health Strategy</td>
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<tr>
<td>Anthony Vavasis, MD Board Member</td>
<td>Director of Medicine</td>
</tr>
<tr>
<td>Verian Wedeking Board Member</td>
<td>Outreach Program Administrator</td>
</tr>
</tbody>
</table>

Source: Mobile Health Association
Ronald McDonald House Charities (RMHC) is a nonprofit 501(c)(3) corporation with McDonald’s as its largest corporate partner.¹

1. **Mission**: Create, find, and support programs that directly improve the health and well-being of children and their families

2. **Vision**: A world where all children have access to medical care and their families are supported and actively involved in their children’s care

Ronald McDonald House Charities runs 3 core programs:²

1. **Ronald McDonald House programs (N=380)**: “A home away from home that provides comfort, support, and resources to families who travel far from home for the medical care their child needs”

2. **Ronald McDonald Family Room Programs (N=265)**: “Provide comfort to families right in the hospital, giving them a private place to relax or decompress”

3. **Ronald McDonald Care Mobile Programs (N=40)**: “Bring medical, dental, and health care resources to underserved communities where they’re needed the most”

### 2021 Financials³

<table>
<thead>
<tr>
<th>Revenue</th>
<th>Expenses</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total</strong></td>
<td><strong>Total</strong></td>
<td></td>
</tr>
<tr>
<td>$80,649,000</td>
<td>$74,210,000</td>
<td>99% from contributions</td>
</tr>
<tr>
<td></td>
<td>Program</td>
<td>79% of total</td>
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<tr>
<td>$58,363,000</td>
<td>Management</td>
<td>8% of total</td>
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<tr>
<td></td>
<td>Fundraising</td>
<td>13% of total</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Ronald McDonald House</td>
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<tr>
<td></td>
<td>Ronald McDonald Family Room</td>
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<td></td>
<td>Ronald McDonald Care Mobile</td>
<td>1% of total</td>
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<tr>
<td></td>
<td>RMHC Local Chapter Grants and Support</td>
<td>69% of total</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td></td>
</tr>
</tbody>
</table>

Source: Ronald McDonald House Charities
Ronald McDonald Care Mobiles cost about $500K and are run through local organizations. Occasionally, they are also staffed by the Ronald McDonald.¹

1. **Purpose:** Services provided on a Ronald McDonald Care Mobile are not meant to replace regular visits to a doctor or a dentist. Rather, they provide an entry point into a regular pattern of health care for vulnerable children, to connect the child and his or her family to a medical or dental home. In some cases, a Ronald McDonald Care Mobile will need to be the medical or dental “home” for the child because of a severe lack of healthcare providers in the community or the limited number of providers that will accept children with Medicaid. However, this type of situation has been more of the exception than the rule.

2. **Cost:** Each Ronald McDonald Care Mobile vehicle costs around $500,000.

3. **Staffing:** Staffing varies based on the scope of services provided but might include a pediatrician, a pediatric nurse, a dental hygienist, a dentist, and a program manager. Other staff members might include a social worker and other pediatric specialists. In most cases, these staff members are full- or part-time workers hired by local healthcare organizations. Most Ronald McDonald Care Mobiles choose to supplement their staff with a rotating base of volunteers and medical, dental, and nursing students. To provide continuity of care, however, there is always a core staff that serves the community regularly. The rotating staff complements the core staff.

Source: Ronald McDonald House Charities

Americas Care Mobile Geography¹

Ronald McDonald Care Mobiles currently operate in nine countries in Argentina, Canada, Latvia, New Zealand, Poland, Thailand, Indonesia, Australia and the US.
Each Ronald McDonald Care Mobile is designed with a “holistic approach to health care to deliver on the needs of underserved communities”. Services fall into 4 categories.

1. **Prevention**: Health education reduces overall medical costs, addresses behavior and lifestyle choices, and helps motivate families to improve and maintain their health.
   - Examples: Wellness checks and physicals, Oral health and hygiene education, Health and developmental screenings, Childhood health promotion and injury prevention education, Nutrition education

2. **Treatment and Services**: Services range from immunizations and preventive check-ups to dental care and treatment for chronic and acute illnesses

3. **Specialty Care**: Examples include pediatric specialty care, such as oncology, cardiology, otolaryngology, and care for special needs children

4. **Referral**: Staff works closely with families to help them get access to the appropriate health care professionals and specialty care
   - Examples: Ongoing care with a primary doctor or dentist, Mental health assessment and referral. Social service resource referral

Source: Ronald McDonald House Charities
The Ronald McDonald House Charities of Pittsburgh and Morgantown runs three local programs:¹

1. **Pittsburgh House**: Opening in 1979, it provides 74 family apartments, housing 750 guests annually

2. **Morgantown House**: Opening in 1990, it provides 16 bedrooms, housing 300 guests each year

3. **UPMC Ronald McDonald Care Mobile**: Ronald McDonald House Charities of Pittsburgh and Morgantown partnered with UPMC Children’s Hospital of Pittsburgh to provide the Ronald McDonald Care Mobile, a 40-foot vehicle designed and built specifically for the delivery of pediatric care
   - **Location**: Visits underserved communities in Allegheny County
   - **Staff**: Pediatricians, nurses, nurse practitioners, and respiratory therapists from UPMC Children’s Hospital provide medical care to children who are unable to visit the doctor regularly
   - **Impact**: Provides services to 980 patients per year
   - **Support**: Supported in part by contributions from The Pittsburgh Penguins Foundation and Mylan Foundation
   - **Services**: Wellness/sick visits, immunizations, sports physicals, and dental exams
   - **Distraction Therapy Program**: This alleviates the stress children experience when going to the doctor’s office. When children enter the exam rooms, they are transformed into a Pittsburgh Penguins-themed igloo or under-the-sea adventure. The children then focus on what is going on around them rather than the reason they are there. Games have even been designed for these rooms during the medical visit

Source: Ronald McDonald House Charities
<table>
<thead>
<tr>
<th>School Site</th>
<th>Other Site</th>
<th>Visits in Feb/March 2023</th>
</tr>
</thead>
<tbody>
<tr>
<td>Barrett Elementary</td>
<td>Allegheny</td>
<td>Lawrence</td>
</tr>
<tr>
<td>221 E 12th Ave, Homestead, PA 15120</td>
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<td>X</td>
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<tr>
<td>Clairton Family Dollar</td>
<td>Allegheny</td>
<td>Lawrence</td>
</tr>
<tr>
<td>533 Miller Ave, Clairton, PA 15025</td>
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<td>X</td>
</tr>
<tr>
<td>Duquesne City School District</td>
<td>Allegheny</td>
<td>Lawrence</td>
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<tr>
<td>300 Kennedy Ave, Duquesne, PA 15110</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Homewood Family Center</td>
<td>Allegheny</td>
<td>Lawrence</td>
</tr>
<tr>
<td>4219 Kelly St, Pittsburgh, PA 15208</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>New Castle School District – Jr/Sr HS</td>
<td>Allegheny</td>
<td>Lawrence</td>
</tr>
<tr>
<td>300 E Lincoln Ave, Newcastle, PA 16101</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>New Castle School District – Lockley</td>
<td>Allegheny</td>
<td>Lawrence</td>
</tr>
<tr>
<td>900 E Main St, Newcastle, PA 16101</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Penn Hills Family Care Connection</td>
<td>Allegheny</td>
<td>Lawrence</td>
</tr>
<tr>
<td>10 Duff Rd., Penn Hills, PA 15235</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Riverview H.S.</td>
<td>Allegheny</td>
<td>Lawrence</td>
</tr>
<tr>
<td>100 Hulton Rd, Oakmont, PA 15139</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Steel Valley Sr High School</td>
<td>Allegheny</td>
<td>Lawrence</td>
</tr>
<tr>
<td>3113 Main St, Munhall, PA 15120</td>
<td></td>
<td>X</td>
</tr>
</tbody>
</table>

Source: Ronald McDonald House Charities
<table>
<thead>
<tr>
<th>Unit</th>
<th>Primary Health Network¹</th>
<th>Cornerstone Care²,³,⁴</th>
<th>Cornerstone Dental⁵</th>
<th>Squirrel Hill⁶</th>
<th>Sto-Rox⁷</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Mobile Health</strong></td>
<td>![Image](Cornerstone Care.png)</td>
<td>![Image](Cornerstone Dental.png)</td>
<td>![Image](Squirrel Hill.png)</td>
<td><img src="Sto-Rox.png" alt="Image" /></td>
<td></td>
</tr>
<tr>
<td><strong>Staff</strong></td>
<td>Nurse, Supervising Assistant, Medical Assistant &amp; Medical Receptionist</td>
<td>Dentists &amp; Hygienists</td>
<td>Medical Assistant, Physician or Nurse Practitioner &amp; Pittsburgh Health Corps member</td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td><strong>Location</strong></td>
<td>Fayette, Greene, Washington Counties &amp; 7 northern/ panhandle counties of West Virginia</td>
<td>Local Head Start programs, schools (Greene, Washington, Fayette, Allegheny), businesses, and other community locations</td>
<td>Pittsburgh, Moon Township &amp; Duquesne</td>
<td>McKees Rocks &amp; Hilltop in Pittsburgh</td>
<td></td>
</tr>
<tr>
<td><strong>Medical Services</strong></td>
<td>Preventative services, including COVID testing and vaccinations</td>
<td>Physicals, lab and testing services, reproductive health, screenings, minor injuries/illnesses/acute care</td>
<td>Dental screenings, exams &amp; cleanings</td>
<td>COVID-19 testing</td>
<td>Blood pressure, glucose screenings, COVID-19 vaccinations &amp; free COVID-19 tests</td>
</tr>
</tbody>
</table>
81 Free Clinics are located throughout PA.\(^1,2\) Many of them are members of either the local “Free Clinic Association of Pennsylvania” (FCAP) network or the “National Association of Free & Charitable Clinics” (NAFC). 20 are in southwest PA.

<table>
<thead>
<tr>
<th>County</th>
<th>Location</th>
<th>FCAP Member</th>
<th>NAFC Member</th>
<th>City</th>
</tr>
</thead>
<tbody>
<tr>
<td>Allegheny</td>
<td>Birmingham Free Clinic (Program for Health Care to Underserved Populations)</td>
<td>X</td>
<td>X</td>
<td>Pittsburgh</td>
</tr>
<tr>
<td>Allegheny</td>
<td>Catholic Charities Free Health Care Center</td>
<td>X</td>
<td>X</td>
<td>Pittsburgh</td>
</tr>
<tr>
<td>Allegheny</td>
<td>FOCUS Pittsburgh Free Health Clinic</td>
<td>X</td>
<td></td>
<td>Pittsburgh</td>
</tr>
<tr>
<td>Allegheny</td>
<td>Free Clinic at Braddock</td>
<td></td>
<td>X</td>
<td>Braddock</td>
</tr>
<tr>
<td>Allegheny</td>
<td>McKeesport 6th Street Clinic</td>
<td>X</td>
<td></td>
<td>McKeesport</td>
</tr>
<tr>
<td>Allegheny</td>
<td>Neighborhood Resilience Project Free Health Center</td>
<td></td>
<td>X</td>
<td>Pittsburgh</td>
</tr>
<tr>
<td>Allegheny</td>
<td>Operation Safety Net, Mercy Hospital</td>
<td></td>
<td>X</td>
<td>Pittsburgh</td>
</tr>
<tr>
<td>Allegheny</td>
<td>RMU Wellness Center at Center for Hope</td>
<td></td>
<td>X</td>
<td>Ambridge</td>
</tr>
<tr>
<td>Allegheny</td>
<td>Ronald McDonald Care Mobile (UPMC Children’s Hospital of Pittsburgh)</td>
<td></td>
<td>X</td>
<td>Pittsburgh</td>
</tr>
<tr>
<td>Allegheny</td>
<td>Sheep Inc Health Care Center</td>
<td></td>
<td>X</td>
<td>Penn Hills / Verona</td>
</tr>
<tr>
<td>Allegheny</td>
<td>The 9th Street Clinic</td>
<td></td>
<td>X</td>
<td>McKeesport</td>
</tr>
<tr>
<td>Allegheny</td>
<td>Traveler’s Aid of Pittsburgh</td>
<td></td>
<td>X</td>
<td>Pittsburgh</td>
</tr>
<tr>
<td>Blair</td>
<td>Through Health Clinic</td>
<td>X</td>
<td></td>
<td>East Freedom</td>
</tr>
<tr>
<td>Butler</td>
<td>Community Health Clinic of Butler County</td>
<td>X</td>
<td></td>
<td>Butler</td>
</tr>
<tr>
<td>Butler</td>
<td>Jean B. Purvis Community Health Center</td>
<td>X</td>
<td></td>
<td>Butler</td>
</tr>
<tr>
<td>Cambria</td>
<td>Highlands Health Clinic</td>
<td></td>
<td>X</td>
<td>Johnstown</td>
</tr>
<tr>
<td>Fayette</td>
<td>Wesley Church Health Center</td>
<td></td>
<td>X</td>
<td>Connellsville</td>
</tr>
<tr>
<td>Somerset</td>
<td>Highlands Health Clinic - Somerset</td>
<td></td>
<td>X</td>
<td>Somerset</td>
</tr>
<tr>
<td>Westmoreland</td>
<td>Majesty Care Clinic</td>
<td></td>
<td>X</td>
<td>Greensburg</td>
</tr>
</tbody>
</table>

Free Clinic Association of Pennsylvania (FCAP) Partners\(^3\)

- National Association of Free & Charitable Clinics (NAFC)
- Volunteers in Medicine America
- National Center for Quality Assurance (NCQA)
- PA Department of Health
- PA Association of Nonprofit Organizations (PANO)
- The Health Care Improvement Foundation
- PA Health Law Project
- ECRI Institute
- PA Coalition for Oral Health
- PA Vision Foundation

Southwest PA Counties: Allegheny, Armstrong, Beaver, Bedford, Blair, Butler, Cambria, Fayette, Greene, Indiana, Lawrence, Somerset, Washington, Westmoreland
The total workforce – including both volunteers and staff – is 146,000. More than 90% of the workforce are volunteers.

Source: National Association for Free and Charitable Clinics
There is no clear definition of a safety-net hospital (SNH). However, almost all have a mission or mandate of serving a low-income population, regardless of patients’ insurance coverage, ability to pay, or immigration status.1,2,3 They treat high numbers of uninsured and Medicaid patients and provide expensive but unprofitable care (ex: emergency and psychiatric care). Many also provide community-health programs targeting issues like food insecurity and homelessness.

In 2016, the Department of Health and Human Services studied defining factors of SNHs2

1. **Inpatient Stays**: Representing 25% of hospitals reviewed, SNHs accounted for 33% of all inpatient stays, ~50% of all stays paid by Medicaid or were uninsured (50% & 45%, respectively), and 43% of all mental health stays. SNHs also had higher proportions of pediatric and material/neonatal stays.

2. **Common Features**: SNHs were more likely to be teaching hospitals, to have a large number of inpatient beds, and to be located in large central metropolitan areas.

When it comes to federal and state funding, what often matters is whether hospitals serve a substantial, though undefined, percentage of Medicaid or uninsured patients1

1. **Medicaid**: Medicaid rarely covers the actual patient cost. Medicaid is jointly funded by federal and state governments. As states have a lot of discretion in how payments are distributed, that gap varies by state.

2. **Disproportionate Share Hospital (DSH) Payments**: To help address the gap, Medicaid gives some hospitals supplemental funding, including the DSH payments. States must distribute some of this DSH funding to every hospital that meets one of two federal standards: either by serving a higher percentage of Medicaid patients than the state average or by having at least 25% of their patients qualify as low-income.

3. **DSH Issues**: The congressional commission overseeing Medicaid found there’s no clear relationship between the hospitals that get DSH payments and hospitals with the highest proportions of low-income or uninsured patients.
The Safety-Net Association of Pennsylvania (SNAP) indicates there are 37 private safety net hospitals in 23 of the state’s 67 counties, which provide a significant proportion of care to PA’s 1M uninsured residents and its 3.2M Medical Assistance recipients. SNAP defines a safety net hospital as:

1. **Patient Population**: Provide more care to Medical Assistance patients than the three-year state-wide average (21.6% of inpatient days)
2. **Care**: Deliver babies and/or provide inpatient behavioral health services

![Pennsylvania Safety Net Hospitals (2019)](image)

Source: H Safety Net Association of Pennsylvania
<table>
<thead>
<tr>
<th>Location</th>
<th>Initiation</th>
<th>2019 Rev</th>
<th>EOY Net Assets</th>
<th>FQHC</th>
<th>NAFC</th>
<th>SBHC</th>
<th>Hospital</th>
<th>Legislation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wormleysburg, PA</td>
<td>1987</td>
<td>$2,436,443</td>
<td>$1,301,146</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>State College, PA</td>
<td>2013</td>
<td>$26,150</td>
<td>$10,177</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Philadelphia, PA</td>
<td>2009</td>
<td>$2,022,737</td>
<td>$183,642</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Philadelphia, PA</td>
<td>2016</td>
<td>$1,122,044</td>
<td>$693,151</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
</tbody>
</table>

*The PA school-based health alliance was accepted by the national School-Based Health Alliance as the official affiliate and gained official non-profit status in 2021.
Historically, FQHCs were often deterred from creating telehealth programs due to reimbursement issues. Both Medicare and Medicaid set regulations that made telehealth programs financially unsustainable. Additionally, Medicaid policies vary by state, further complicating the situation.

A 2020 study by the Center for Connected Policy Research analyzed the policies affecting FQHCs pre vs. post-COVID-19 to understand the barriers and challenges of FQHC use of telehealth for substance abuse disorder. Notably, Medicaid in Pennsylvania now fully reimburses telehealth visits with physician assistants and FQHCs and covers some visits with social workers. Telephone visits are now covered in addition to live videos. SUC Screening and brief intervention and group psychotherapy are covered. Visits from home and an FQHC are covered, but not from school or shelters.

<table>
<thead>
<tr>
<th>WHO</th>
<th>Kentucky</th>
<th>Ohio</th>
<th>Maine</th>
<th>Maryland</th>
<th>Pennsylvania</th>
<th>Medicare</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physician</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Nurse Practitioner</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Physician Assistant</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Clinical Psychologist</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Licensed Clinical Social Worker</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>FQHC</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>HOW</th>
<th>Kentucky</th>
<th>Ohio</th>
<th>Maine</th>
<th>Maryland</th>
<th>Pennsylvania</th>
<th>Medicare</th>
</tr>
</thead>
<tbody>
<tr>
<td>Live Video</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Store &amp; Forward</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Telephone</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>eVisit</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Virtual Check-in</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Asynchronous Eval.</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>

Source: Public Health Institute
The Center for Connected Policy Research identified gaps and provided recommendations to increase the use of telehealth in FQHCs

<table>
<thead>
<tr>
<th>Gap</th>
<th>Recommendation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reimbursement</td>
<td>Allow FQHCs and RHCs to bill normally and receive their full PPS reimbursement rate for the services delivered, as they would have, had they delivered those services in person. (Requires a statutory change)</td>
</tr>
<tr>
<td></td>
<td>Expand the definition of telehealth/telemedicine to allow all modalities to be used to deliver the service, as long as the standard of care is met. (May require state statute change, or may be done administratively, depending on where states’ telehealth policy is housed. States may also need to submit state plan amendments if they are reimbursing in a different way/amount as services delivered face-to-face)</td>
</tr>
<tr>
<td>In Medicaid programs, although all of the states have now allowed for reimbursement of some type of audio-only service, reimbursement for remote monitoring and store-and-forward is still limited.</td>
<td></td>
</tr>
<tr>
<td>Equipment</td>
<td>Expand funding for grant and subsidy programs that provide increased access to broadband and telehealth equipment. (Can be implemented administratively by the FCC but may require additional federal funding).</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Insurance</td>
<td>Update FTCA guidance documents to clarify whether or not telehealth models of care, especially ones where the patient is located outside of the FQHC, are covered under FTCA. (HRSA FTCA guidance document can be updated administratively)</td>
</tr>
<tr>
<td>Drug Prescription</td>
<td>Simplify state requirements around prescribing controlled substances to align with federal laws/regulations. (Likely requires a change in state statute and/or regulation)</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Public Health Institute. Center for Connected Policy Research
The Center for Connected Policy Research identified gaps and provided recommendations to increase the use of telehealth in FQHCs

<table>
<thead>
<tr>
<th>Gap</th>
<th>Recommendation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patient Perception</td>
<td></td>
</tr>
<tr>
<td>Extra requirements to deliver telehealth services, such as Pennsylvania Medicaid’s ‘Telehealth Self Attestation Form’ and telehealth-specific consent requirements create the perception of telehealth as a separate riskier form of healthcare delivery.</td>
<td>Eliminate requirements to obtain extra approvals for use of telehealth or consent forms in state policies. (May require state statute change, or may be done administratively, depending on where states’ telehealth policy is housed.)</td>
</tr>
<tr>
<td>Although the use of telehealth to deliver care has quickly become increasingly ubiquitous due to COVID-19, there is still a need to educate patients about the benefits of telehealth so that they can feel comfortable connecting with their providers.</td>
<td>Create educational materials (i.e. posters, brochures, webpages, online videos) that promote the use of telehealth and its benefits and prepare patients for what to expect during a telehealth consultation. (May be done by providers, insurers, state or local health departments, non-profit associations/organizations)</td>
</tr>
<tr>
<td>Provider &amp; Staff Training</td>
<td></td>
</tr>
<tr>
<td>Providers who have rapidly adapted to telehealth in light of COVID-19 may require training to deliver care most effectively via telehealth and understand how to scale their telehealth programs to make them enduring in light of rapidly changing policies and circumstances. Additionally, staff in FQHC settings may also need training on how to handle patients suffering from OUD or co-occurring mental health disorders.</td>
<td>Provide training opportunities for providers and their staff wanting to improve their telehealth programs and adapt to changes in the telehealth policy and COVID-19 environment. (May be done by schools/universities, state or local health departments, non-profit associations/organizations, or federal funding for training programs)</td>
</tr>
<tr>
<td>Inclusivity</td>
<td></td>
</tr>
<tr>
<td>With the use of telehealth becoming more widespread, certain communities, such as non-English speakers and those with hearing or sight disabilities, have expressed difficulty in the way it is commonly implemented.</td>
<td>Conduct research and interviews with patient groups experiencing these difficulties to learn how to make telehealth more accessible and friendly for all diverse populations. (May be done by schools/ universities, state or local health departments, non-profit associations/organizations)</td>
</tr>
</tbody>
</table>

Source: Public Health Institute. Center for Connected Policy Research
A case study by Unity Health Care, Inc, an FQHC in Washington, D.C., reviewed the telehealth model that emerged during COVID in 2020. Reimbursement is a well-documented barrier for telehealth programs in safety net clinics which Washington D.C. overcame via an emergency rule.

1. **COVID Impact:** By mid-March of 2020 patient visits had plummeted to one-third of the normal rates as the nation went in to lock down

2. **Key Barriers:** The FQHC reimbursement model, coupled with the District’s telehealth regulations that did not recognize a patient’s home as an originating site, made direct-to-patient telehealth a financially unsustainable model
   - **Legislative Amendment:** The Medicaid Authority in D.C. implemented an emergency rule recognizing the patient’s home or location as a reimbursable telehealth (video and audio) originating site. Due to the D.C. Medicaid parity law, audio and video telehealth visits are reimbursed at the same rate as in-person visits. This facilitated the ability to conduct direct-to-patient telehealth visits
   - **Legislative Impact:** With the change in the reimbursement model, the organization went from conducting nearly zero telehealth visits to over 800 visits daily within a space of 30 days

3. **Challenges and Solutions:** The FQHC encountered both organizational and patient challenges during the deployment
   - **Organizational:** There were challenges getting staff set up, and ensuring that they understood the application, the technology, the workflows, and the rapidly changing laws allowing for telehealth. The creation of a portal dedicated to communicating all aspects of how to conduct a telehealth visit, which included regulations, workflows, documentation, technology, and use of the applications, helped address this
   - **Patient:** Lack of access to devices and connectivity and limited tech literacy can create new barriers. Some applications require several steps such as the patient having to download an app to their phone and log into the app or requiring an email address to conduct the visit. Unity experienced more success with patients and televideo visits when the application could send patients SMS messages with links to connect. The majority of visits have been conducted using audio-only technology

Source: HIMSS, California Healthcare Association
A unique and sudden need for virtual medical visits created by the COVID pandemic has led to an unprecedented expansion of telemedicine across nearly all medical specialties in the US.¹

In addition to providing essential medical services during the pandemic, telemedicine has the potential to expand healthcare access to underserved populations by eliminating traditional barriers to care such as transportation needs, distance from specialty providers, and approved time off from work.¹

However, the literature regarding telehealth accessibility for low-income, non-English-speaking, and minority patients remains limited. A 2020 study at UMass Memorial Medical Center demonstrates specialty-specific changes in patient demographics:¹

1. Younger population
2. Fewer non-English-speaking patients
3. Relative preservation of minority, Medicaid, and Medicare patients among telehealth visits in comparison to clinic visits

The no-show rate for all 2019 clinics was 11.8%, whereas the no-show rate for all 2020 televisits was 11.5%. When separated by specialty type, primary care, and adult nonsurgical specialties demonstrated significant reductions in no-shows with 2020 televisits as compared with 2019 clinic visits.¹

Source: Telemedicine and E-Health
A retail clinic is a walk-in clinic located in retail stores, supermarkets, and pharmacies that treat uncomplicated minor illnesses and provide preventative health care services. In the early-to-mid 2000s, the first retail clinics emerged and quickly proliferated.

1. **Staff**: Physician assistants or nurse practitioner
2. **Hours**: 7 days/week (M-F: 12 hours/day; S-S: 8 hours/day)
3. **Care**: Rapid access to basic health care services for minor illnesses (ex: sore throats or skin conditions), along with immunizations, pregnancy testing, and preventive care like routine lab tests (ex: cholesterol and diabetes screenings)

More data are needed to assess impact, but studies to date indicate that these clinics:

1. **Access**: May provide care to patients without a medical home
2. **Cost**: May decrease out-of-pocket costs for patients
3. **Quality**: May provide care equal in quality to traditional clinics without decreasing receipt of preventive care

However, a 2016 RAND study concluded that retail clinics are not improving access to care for the medically underserved as retail clinics are more likely to be located in relatively affluent sections of large urban areas.

---

**US Retail Health Clinics (2019)**

<table>
<thead>
<tr>
<th>Pharmacy</th>
<th>Count</th>
<th>Growth Factor</th>
</tr>
</thead>
<tbody>
<tr>
<td>CVS</td>
<td>1021</td>
<td>2.5x</td>
</tr>
<tr>
<td>Walgreens</td>
<td>402</td>
<td>4.6x</td>
</tr>
<tr>
<td>Kroger</td>
<td>224</td>
<td></td>
</tr>
<tr>
<td>Target</td>
<td>94</td>
<td></td>
</tr>
<tr>
<td>Walmart</td>
<td>54</td>
<td></td>
</tr>
<tr>
<td>HEB</td>
<td>36</td>
<td></td>
</tr>
<tr>
<td>Rite Aid</td>
<td>31</td>
<td></td>
</tr>
<tr>
<td>All Others</td>
<td>86</td>
<td></td>
</tr>
</tbody>
</table>

**CVS and Walgreens**, the two largest chains representing >70% of the market, are retail pharmacies. They are followed by Kroger and Target, a grocery store and big box department store, respectively.

---

Source: Statistica
Each grid point denotes a ten-mile radius where a retail clinic dominates. **CVS, Walgreens, and RiteAid are the dominant retail clinics in Pennsylvania.**

Based on the location of the retail clinics, the impact on western PA’s underserved communities is questionable.

1. **Presence:** Only CVS and Walgreens are present
2. **Location:** Clinics are clustered around Pittsburgh
3. **Competition:** Safety net clinics are far more numerous and provide care for free or on a sliding scale
While retail health clinics do not greatly impact underserved populations today, the retail health clinic market is rapidly evolving and they may play a larger role in the future. By 2028, the retail healthcare market is expected to become an $8 billion business.¹

1. **Funding**: Unlike the FQHC/NAFC, retail clinics are not dependent on grants or donations. In contrast, they are powered by for-profit companies with deep pockets such as Walmart and CVS, which rank 1st and 4th on the Fortune 500 2021 Listing.

2. **Convenience**: Three of the largest retail clinic operators (Walmart, Kroger, and CVS Health) are also major grocery stores, offering consumers a "one-stop-shop".

3. **Innovation**: In 2019, Walmart unveiled its first health center⁴
   - **Medical Care**: A variety of services including primary care, labs, X-ray and EKG, counseling, dental, optical, hearing, community health (nutritional services, fitness) and health insurance education and enrollment all in one facility.
   - **Presence**: As of April 2021, the company boasts more than 5000+ stores in the US. If Walmart can expand its healthcare offerings to 25% of its stores, it could change the face of primary care in hundreds of communities.

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**Top Grocery Stores by Year End Sales (2020)³**

<table>
<thead>
<tr>
<th>Company</th>
<th>Stores</th>
<th>Revenues ($M)</th>
<th>Rev % Change</th>
<th>Profits ($M)</th>
<th>Profit % Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Walmart US</td>
<td>4,756</td>
<td>341,004,000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Amazon</td>
<td>6</td>
<td>354,581,000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The Kroger Co.</td>
<td>2,757</td>
<td>122,286,000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Walgreens Boots Alliance</td>
<td>5,277</td>
<td>104,632,000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Costco (US)</td>
<td>543</td>
<td>103,694,000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CVS Health</td>
<td>9,900</td>
<td>86,608,000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Target</td>
<td></td>
<td>77,130,000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Albertsons Cos</td>
<td></td>
<td>77,130,000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sam's Club</td>
<td></td>
<td>58,792,000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alimentation Couche-Tard</td>
<td>46,189,000</td>
<td>77,130,000</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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Source: CNBC, Fortune, BizVibe, Forbes
Online pharmacy services have the potential to revolutionize the industry. Amazon may become a major player in this area. Amazon’s interest in disrupting drugstores is decades old.2

1. 1999: Amazon bought 40% of Drugstore.com (at the time, a pre-product and pre-revenue company)
2. 2016: Amazon reportedly received its first licenses to sell pharmaceutical products and drugs from various state boards across the United States
3. June 2018: Amazon acquired the online pharmacy service PillPack. Now, it’s building out a nationwide network of pharmacy licenses and distribution with its Amazon Pharmacy product
4. 2021: After the failed joint venture with Berkshire Hathaway and JPMorgan, Amazon announced a new partnership with pharmacy benefit manager Prime Therapeutics. Prime’s Blue Plan members will be able to receive their medications via delivery through Amazon Pharmacy

The PillPack purchase was Amazon’s first significant move not just against the major drug store chains, but against the powerful pharmacy benefit managers (PBMs) that manage the dispensation of drugs for major employers, etc.2

Effect of Amazon’s Acquisition of PillPack on Pharmaceutical Companies2

![Chart showing the effect of Amazon's acquisition of PillPack on pharmaceutical companies' market caps.](chart)

Amazon's acquisition of a PillPack with pharmacy licenses in all 50 states caused the tickers of Walgreens, CVS, and Rite-Aid to lose ~$11B in value overnight.1,2

Investors anticipate that Amazon will offer better convenience and customer experience while leveraging its pre-existing customer base and distribution capabilities.2 Additionally, with the acquisition of Whole Foods in 2017, it also acquired ~450 physical locations where it could theoretically dispense prescriptions the same way that CVS and Rite Aid do.2

Source: CB Insights
In the long-term, Amazon’s skillset and scale could give it the power to disrupt and simplify this supply chain — first in the form of pharmacies themselves, and later, by targeting wholesalers and PBMs.1

1. **Flow of Drugs**: patients pay pharmacies for drugs, which pay wholesalers, which in turn pay manufacturers or distributors

2. **Services Offered Through the Supply Chain**: Pharmacy benefit managers (PBMs) negotiate with distributors and manufacturers for better prices on bulk drugs — a service they offer to payers (insurance companies). They also receive a copay from individual patients and get paid by manufacturers to market their drugs to payers

3. **Pharmacy Benefit Managers**: Among the different middlemen, PBMs make the lion’s share of the profit from your typical drug transaction
   - On the sale of a drug with a sticker price of $100, the profit breakdown is roughly: wholesaler ($1), pharmacy ($5), PBM ($6)
   - Virtually every insurance provider outsources its drug procurement to a PBM. Major employers use PBMs to negotiate better rates for employees
   - PBMs collect from every party along the pharmaceutical supply chain. They increase their margins, while end patients pay higher drug costs because of how complex and inefficient the process is

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Source: CB Insights

CB Insights: Pharmaceutical Supply Chain

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Source: CB Insights
The current pharma supply system hits uninsured patients especially hard. In 2018, Consumer Reports published illustrated how cash prices can vary greatly by location, sometimes saddling patients with astronomical out-of-pocket costs.¹

1. **Range**: Prescription prices ranged from $66 to $1,351—a nearly 2,000% difference

2. **Retail Chains**: The big three retail drugstore chains—CVS, Walgreens, and Rite Aid—consistently had higher average prices vs. those of other pharmacies
   - Some CVS and Rite Aid locations use store coupons to offer our shoppers much lower prices, while others provided modest discounts or none at all

3. **Independent Pharmacies**: Independent pharmacies had some of the lowest prices, but also some of the highest prices

Pharmacies price this way to ensure they make a profit from patients with insurance. such high “usual and customary” (U&C) retail list prices because a third-party payer will not reimburse a pharmacy above the pharmacy’s U&C list price.¹ Consequently, pharmacies typically establish U&C prices that exceed the maximum expected reimbursement from any payer. In doing so, the pharmacy eliminates the risk that it could be reimbursed an amount less than what a third-party payer would have been willing to pay.

---

1. Range: Prescription prices ranged from $66 to $1,351—a nearly 2,000% difference

Source: Drug Channels

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**Drug Pricing for 1 Month Supply (2018)¹**

<table>
<thead>
<tr>
<th>RETAILER</th>
<th>Pioglitazone (Actos)</th>
<th>Celecoxib (Celebrex)</th>
<th>Duloxetine (Cymbalta)</th>
<th>Atorvastatin (Lipitor)</th>
<th>Clopidogrel (Plavix)</th>
<th>TOTAL PRICE</th>
</tr>
</thead>
<tbody>
<tr>
<td>HealthWarehouse.com</td>
<td>$12</td>
<td>$22</td>
<td>$13</td>
<td>$10</td>
<td>$10</td>
<td>$66</td>
</tr>
<tr>
<td>Costco (1)</td>
<td>$16</td>
<td>$26</td>
<td>$35</td>
<td>$13</td>
<td>$16</td>
<td>$105</td>
</tr>
<tr>
<td>Independents (2)</td>
<td>$19 ($15-$49)</td>
<td>$34 ($11-$296)</td>
<td>$31 ($20-$287)</td>
<td>$15 ($8-$197)</td>
<td>$15 ($8-$240)</td>
<td>$107</td>
</tr>
<tr>
<td>Sam’s Club (1)</td>
<td>$20</td>
<td>$38</td>
<td>$31</td>
<td>$20</td>
<td>$20</td>
<td>$153</td>
</tr>
<tr>
<td>Walmart</td>
<td>$132</td>
<td>$203</td>
<td>$123</td>
<td>$30</td>
<td>$30</td>
<td>$518</td>
</tr>
<tr>
<td>Kroger</td>
<td>$160</td>
<td>$185</td>
<td>$120</td>
<td>$35</td>
<td>$35</td>
<td>$535</td>
</tr>
<tr>
<td>Grocery Stores (2)</td>
<td>$113 ($100-$249)</td>
<td>$189 ($110-$200)</td>
<td>$170 ($100-$229)</td>
<td>$32 ($17-$17)</td>
<td>$36 ($17-$224)</td>
<td>$565</td>
</tr>
<tr>
<td>Walgreens</td>
<td>$167</td>
<td>$204</td>
<td>$251</td>
<td>$65</td>
<td>$65</td>
<td>$752</td>
</tr>
<tr>
<td>Rite Aid</td>
<td>$255</td>
<td>$194</td>
<td>$170</td>
<td>$128</td>
<td>$119</td>
<td>$866</td>
</tr>
<tr>
<td>CVS/Target</td>
<td>$270</td>
<td>$187</td>
<td>$195</td>
<td>$135</td>
<td>$141</td>
<td>$928</td>
</tr>
</tbody>
</table>

¹ Prices in parentheses are the ranges across sampled stores.

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Source: Drug Channels
Big technology companies are racing to enter the healthcare space. Globally, healthcare spending climbed to $8.3T by the close of 2018 and is expected to climb at a 3.9% CAGR between 2020 and 2024. This cost burden weighs on payers, risk-bearing providers, employers, and consumers and creates an opportunity for industry outsiders to establish healthcare vertical offerings.

While the impact on underserved communities is unknown, these companies are expected to revolutionize the industry.

CB Insights: Big Tech in Healthcare (2022)

Both investor and executive attention to healthcare peaked over the last year...

- Earnings calls mentions of "healthcare" peaked in 2020 as the businesses grappled with protecting their workforces during the pandemic.
- Venture capital funding to healthcare companies has also surged. In fact, healthcare funding had a record quarter in Q1’21, where companies raised a total of $31.6B.
- Big tech has invested in deals worth a cumulative $6.8B since the start of 2020.

Big tech companies took new steps to increase their market opportunity in healthcare...

- **Facebook** launched a preventative health solution in the US and a provider search tool to help users find affordable care in their communities. Meanwhile, the company’s Oculus team is working with teaching hospitals to deploy VR-based medical education tools.
- **Apple** updated Watch and iOS to capture even more health metrics, including blood oxygen level, and created a data sharing feature so users can share medical data with providers. The company also launched a subscription-based streaming platform with exercise classes.
- **Microsoft** dropped $19.7B to acquire **Nuance**, a leader in conversational AI for healthcare. The company also launched **Microsoft Cloud for Healthcare**, a tech stack for enterprise healthcare organizations that combines AI, automation, and low-code app development.
- **Google** launched a camera-based search tool that uses AI to diagnose skin conditions. The company also launched an EHR search solution for providers, an interoperability solution for payers, and a return-to-work test and trace program for employers.
- **Amazon** launched **Amazon Care**, **Amazon Pharmacy**, and **AmazonDx** in the past year, all consumer-focused healthcare services. The company also unveiled **AWS for Health**, a suite built to support data science efforts within enterprise healthcare organizations.
In 2022, Amazon rolled out a new virtual medical clinic that aims to treat common conditions like allergies, hair loss, and skin conditions.\(^1\,^2\)

- **How it works**: “It’s easy. Just choose an online clinic and fill out an intake questionnaire—no need to pick up the phone or have a video call. In some cases, you may need to upload a few pictures of the affected area”
  - A US-licensed clinician will review your information and message you with a treatment plan that can include things like prescriptions and behavioral recommendations. After you get your treatment plan, you can message your clinician with follow-up questions at no additional cost for up to 14 days”

- **Flat Fee**: “Each online clinic sets its prices, and prices vary for each treatment. To compare prices, visit the condition page for the treatment you’re interested in. The cost of medication isn’t included in your visit. If a clinician writes you a prescription, you can buy your medication from the pharmacy of your choice”
  - Amazon Clinic doesn’t accept health insurance at this time. Instead, you pay a flat fee for the care you receive. You can pay with your FSA or HSA debit card, or submit your receipt to your insurer for reimbursement”
  - “Please note: At this time, Amazon Clinic isn’t intended for individuals who receive coverage from federal or state healthcare payors. We encourage you to visit a covered provider who is contracted with your health plan for services.”

Source: Amazon. Fierce Pharma Healthcare
Other examples of healthcare innovation:

1. **Meta**: In October 2022, Meta unveiled a speech translator for unwritten or primarily spoken languages. That came shortly after Meta showed what its text-to-image and text-to-video solutions were capable of.

2. **Amazon**: Amazon revealed its new Prime Air delivery drone design, coined the MK30, which is set to come into service in 2024. The drone is lighter, smaller, and quieter than its predecessor, the MK27-2. Amazon aims to sustainably deliver a vast selection of goods in under an hour using the technology.

3. **Microsoft**: Microsoft aims to position itself as the backbone of healthcare IT at hospitals. Healthcare cloud computing is a $45B market. Rather than competing with hospitals and providers directly – the way Amazon Care and Amazon Clinic are – Microsoft is aiming for dominance in healthcare cloud tech through partnerships with hospitals and providers
   - Now, close to the end of a 5-year strategic partnership targeting cloud computing and AI for retail applications, Microsoft and Walmart have announced healthcare cloud services that are currently in use at over 30 Walmart locations. The VMware Horizon Cloud on Azure will host the Epic EHR for all the current and new Walmart clinics
   - Walmart has stated plans to have 4,000 branded primary care centers by 2029. That would make it the largest primary care provider in the US. If Walmart extends its current partnership with Microsoft, the latter could power the underlying cloud infrastructure at all future clinics
   - Microsoft is also positioning Azure as a go-to platform for all things life sciences. It’s not trying to develop drugs or run clinical trials. It wants to own the supporting tools everyone else is using
   - Microsoft is automating match-making for clinical trials, building a turn-key biomedical research platform, and building generative AI tech for gene therapy design – a whole set of investments, tools, and partnerships where Microsoft is providing essential infrastructure and cloud support

Source: CB Insights
According to the Distressed Communities Index* by the Economic Innovation Group, Pennsylvania scores almost exactly the national average.¹

1. Top Prosperous States: Hawaii, Vermont, Washington, Oregon, Iowa
2. Top Distressed States: Mississippi, West Virginia, Louisiana, Kentucky

16.5% of the PA population live in a distressed community and 25% live in a prosperous community vs. the national averages of 16% and 26%, respectively.

PA’s score is influenced by proximity to:
1. Prosperous east coast cities
2. Central Appalachians

This map illustrates the clear divide between the northern and southern regions of the US, a gap that emerged after the civil war in the 1860s.

¹DC Index 7 core components: no high school diploma, housing vacancy rates, adults not working, poverty rate, median income ratio, change in employment and change in establishments.
Share of the population age 25-64 who lack a high school diploma or equivalent.

Share of individuals living below the federal poverty line.

Share of the population age 25-54 not working (i.e., either unemployed or not in the labor force).

The share of housing units that are vacant, adjusted for recreational, seasonal, or occasional use vacancies.

Median household income as a percent of metro area or state median household income.

Change from 2014-2018 in the number of employees working in the geography.

Change from 2014-2018 in the number of establishments located in the geography.

Source: Distressed Community Index
For the 10.6 million Americans constituting the working poor, hard work and employment do not provide a route out of poverty.² 
The University of Pittsburgh states that “the working poor population is likely to consist of individuals who are women, Hispanic or Black, work part-time, have low levels of education and have children. Transition into the middle class is difficult because of several factors, including stagnant wages, unavoidable periods of unemployment, and involuntary part-time employment.”

“In recent decades, the US has seen a structural shift in poverty in its geography. Although traditionally viewed as an urban issue, over the past decade poverty has been increasingly concentrated in the suburbs.”¹² As of 2021, suburbs continue to lag behind cities in growth in education, income, and home values.⁴

Reasons behind this trend include stagnant wages, faster population growth in suburbs than in cities, low-wage workers becoming increasingly suburban, more affordable housing options available in suburban communities, an increasing population of immigrants settling in the suburbs, and the suburbs being affected first and hardest by the Great Recession.”¹²

Source: University of Pittsburgh ‘Poverty: Beyond the Urban Core’; Brookings ‘The Changing Geography of US Poverty’
The US Health Map by IHME closely echoes the Distressed Communities Index, illustrating how economic stability is closely interwoven with population health.¹

1. **Highest Life Expectancy**: Hawaii, California, New York, Minnesota
2. **Lowest Life Expectancy**: West Virginia, Mississippi, Alabama, Kentucky

Life expectancy is lowest along the southern Mississippi river, central Appalachians, and Dakota Indian Reservations.

**Major risk factors** deviate by region:

1. **Diabetes/Obesity**: Southeast, south Texas, and Indian Reservations
2. **Hypertension**: Southeast
3. **Smoking**: Central Appalachians and along the Mississippi river
4. **Substance Abuse**: Central Appalachians

Source: IHME US Health Map
Counts where Race-Ethnic Minority Groups are Highly Represented (2018)²

Expected Racial Change (2020-60)³

Source: Visual Capitalist. Brookings. AI/AN: American Indian / Alaska Native; A/NH/PI: Asian / Native Hawaiians / Pacific Islander
Philadelphia was highlighted as a major metropolitan area with a high representation of 2+ races. Despite being a relatively non-diverse state, two minority groups grew by over >200% the national minority-specific growth rate in PA cities from 2010-2018:

- **Hispanic**: 7 PA cities
- **Asian**: 2 PA cities

Source: Brookings
Opioid overdose deaths accounted for nearly 70% of all drug overdose deaths in 2018, largely driven by Fentanyl.\textsuperscript{1,2,3} Each generation of opioids has gotten stronger. Opioids are often compared to morphine: Heroin is 2-5x, fentanyl is 50-100x, and carfentanil is ~1,000x stronger than morphine.

A UN Drug Report examined drug-related mortality rates across countries. With 314.5 deaths per million, the US by far had the highest proportion of drug-related deaths per million people in 2018. It also had the highest overall number of 67.4K deaths.\textsuperscript{1}

One DALY (disability-adjusted life year) is equal to one lost year of “healthy” life.
Wave 1: Opioid over-prescription for pain relief
- Started in the 1990s
- Pharmaceutical: natural, semi-synthetic, methadone
- US deaths from these opioids (excluding heroin) increased by ~1,000 each year, increasing from ~3K to >15K by 2010

Wave 2: Heroin-related overdose deaths on fire
- Gained momentum in 2010
- US deaths due to heroin increased more each year, increasing from ~3K to 15K between 2010-2018

Wave 3: Synthetic opioid deaths on fire
- Gained momentum in 2013
- Synthetic: fentanyl, tramadol
- US deaths from this class (excluding methadone) grew exponentially each year, increasing from ~3K to ~30K in 2018
- By 2016, this opioid group was responsible for the majority of opioid-related deaths
National Drug-Involved Overdose Deaths Across All Ages (1999-2020)²

- Synthetic opioids other than methadone (primarily fentanyl)
- Psychostimulants (primarily methamphetamine)
- Cocaine
- Prescription Opioids (natural & semi-synthetic & methadone)
- Heroin & Benzodiazepines
- Antidepressants

Source: National Institute of Drug Abuse
We are currently in the middle of an unprecedented 4th wave, triggered by COVID-19, new formulations of illicit opioids, and added stimulants. In 2020, 78% of all drug overdoses were opioid-related.

1. **35% Increase vs. 2020**: There were ~75,673 opioid overdose deaths in the US during the 12 months ending in April 2021, an increase of 35% vs. the 56,064 deaths during the same period in 2020.

2. **Carfentanil & Added Stimulants**: This is driven by COVID-19 and the addition of stimulants like methamphetamines and cocaine to the illicit opioid supply, as well as increasing abuse of carfentanil, an opioid used by veterinarians to anesthetize large animals. Carfentanil is 50-100x more potent than fentanyl and ~1,000x more potent than morphine.

3. **Lack of Powerful Counter-Agents**: The new slurry is powerful enough to diminish the life-saving effects of overdose-reversing drugs like Naloxone.

The 30% increase in drug overdose deaths from 2019 to 2020 disproportionally affected minority groups. Disparities in overdose deaths, particularly among Black persons, were larger in counties with greater income inequality.

1. **Minorities**: Drug overdose death rates increased by 44% and 39% among non-Hispanic Black and non-Hispanic American Indian or Alaska Native people, respectively.

2. **Minorities ≥65**: The rate in 2020 among Black males aged ≥65 years (52.6 per 100,000) was nearly 7x that of non-Hispanic White males aged ≥65 years (7.7).
In 2020, there were 26,557 total overdoses in men across the US. White men represented 70% of male overdose deaths in the US. Black individuals represent -12% of the US population. In 2020, ~20% of overdoses were black men.

Opioid deaths increased the most in the Black (50%) and AI/AN (60%) populations. Subgroups with the greatest increases include:
- **White**: 15-24 (33%), 25-44 (60%)
- **Black**: 15-24 (92%), 25-44 (57%), 45-64 (47%)
- **Hispanic**: 15-24 (47%)
- **AI/AN**: 25-44 (47%), 45-64 (35%)
- **A/PI**: 45-64 (86%)

In 2020, there were 11,228 total overdoses in women across the US. White individuals represent ~60% of the US population. Black individuals represent ~18% of female overdoses were black women.

Similar to men, white women represent ~70% of female overdoses in 2020. ~20% of female overdoses were Black women.

Again, opioid deaths increased the most in Black (40%) and AI/AN (60%) populations. Subgroups with the greatest increases include:
- **Black**: 15-24 (43%), 25-44 (35%)
- **Hispanic**: 15-24 (42%)
- **AI/AN**: 25-44 (47%)

Source: CDC. AI/AN: American Indian / Alaska Native; A/PI: Asian / Pacific Islander
Pennsylvania’s health department describes the prescription opioid and heroin overdose epidemic as the worst public health crisis in PA.\(^1\)

1. Pennsylvania has the 8\(^{th}\) highest age-adjusted drug overdose death rate in the country\(^1\).
2. In 2020, ~14 Pennsylvanians died every day from a drug overdose. PA logged 5,075 fatal drug overdoses in 2020, up 14% from 2019.\(^2,3\)
3. 4,314 (85\%) of drug overdose deaths were confirmed to be opioid-related. Of the opioid-related deaths, 44\%(1,887) also involved a stimulant such as cocaine or methamphetamine contributing to death, a 22\% increase vs. 2019.\(^3\)

**Drug Overdose Mortality by State (2020)\(^1\)**

In 2020, 1,217 overdose deaths occurred in Philadelphia county followed by 683 in Allegheny.\(^3\) The next 5 highest counties included York (204), Luzerne (169), Washington (100), Erie (81), and Fayette (65). Of the 9 counties with >4.51 rate per 10,000 population, 4 were located in southwestern PA.

**Preliminary Accidental and Undetermined Overdose Deaths (Any Drug) (2020)\(^3\)**
Opioid overdose deaths in PA dramatically increased across all age groups ≥ 25yrs during the 3rd and 4th waves, starting in 2015.

Of ~4K opioid deaths, the majority were in the 35-44 group (28%), followed by the 25-34 group (26%). Ages 0-24 represented 6%.

Compared to other groups, opioid deaths in the 0-24yr population remained low.

Obesity rates in the US, the South Pacific, and the Persian Gulf are among the highest in the world – more than ¼ of Americans are obese.

1. “Food” Evolution: The growing availability of high-calorie, nutrient-poor foods is generating a new type of malnutrition, causing people to be both overweight and undernourished

2. Global Growth Rates: Over the last 36 years, obesity, defined as having a body mass index over 30, has grown the fastest in countries throughout Latin America, Africa, and Asia
   - Packaged Foods: For a growing number of nutritionists, the obesity epidemic is inextricably linked to the sales of packaged foods, which grew 25% worldwide from 2011 to 2016, compared with 10% in the US
   - Soft Drinks: An even starker shift took place with carbonated soft drinks; sales in Latin America have doubled since 2000, overtaking sales in North America in 2013, the World Health Organization reported

Source: WHO, New York Times
The CDC reported that the national obesity rate reached 42.4% in 2017-2018—surpassing 40% for the first time. Severe obesity increased from 9.2%. Obesity-related conditions commonly manifest as heart disease and diabetes but also include high blood pressure, arthritis, high cholesterol, and stroke.

**Self-Reported Obesity Among US Adults (2020)**

<table>
<thead>
<tr>
<th>% Obese</th>
<th>White</th>
<th>Black</th>
<th>Hispanic</th>
<th>Asian</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;20%</td>
<td>17.2%</td>
<td>17.0%</td>
<td>17.6%</td>
<td>17.9%</td>
</tr>
<tr>
<td>20-29%</td>
<td>43.7%</td>
<td>43.3%</td>
<td>44.0%</td>
<td>44.7%</td>
</tr>
<tr>
<td>30-39%</td>
<td>45.7%</td>
<td>45.6%</td>
<td>47.0%</td>
<td>45.7%</td>
</tr>
<tr>
<td>40-49%</td>
<td>47.2%</td>
<td>46.9%</td>
<td>48.0%</td>
<td>44.9%</td>
</tr>
<tr>
<td>50-64%</td>
<td>49.0%</td>
<td>48.6%</td>
<td>51.9%</td>
<td>49.8%</td>
</tr>
<tr>
<td>65+</td>
<td>56.9%</td>
<td>56.6%</td>
<td>59.0%</td>
<td>57.7%</td>
</tr>
</tbody>
</table>

**Age-Adjusted Prevalence of Obesity in Adults by Race & Age (2017-2018)**

Source: CDC
Roughly one in six youth have obesity, according to the newest available data. The data, from the National Survey of Children’s Health, show that in 2019-2020, 16.2% of youth ages 10 to 17 had obesity. That rate has held steady for the last five years.

1. **Disparity by race and ethnicity persists.** In 2019-2020, non-Hispanic Asian children had the lowest obesity rate (8.1%) followed by non-Hispanic White children (12.1%). Obesity rates were significantly higher for non-Hispanic Black (23.8%), Hispanic (21.4%), and non-Hispanic American Indian/Alaska Native (28.7%) children.

2. **There were also significant differences based on household income.** In 2019-2020, obesity rates ranged from 8.6% among youth in the highest income group to 23.1% among youth in the lowest income group.

According to the 2019 Youth Risk Behavior Surveillance System (YRBSS), 15.5% of high school students had obesity and an additional 16.1% were overweight. State obesity rates among high school students ranged from a low of 9.8% in Utah to a high of 23.4% in Mississippi. 21.3% of Native American high schoolers had obesity, the highest among all racial and ethnic groups.
In 2020, Pennsylvania ranked 27th at 31.5% for adult obesity and 30th at 15.1% for childhood obesity (ages 10-17), according to a nationwide report by the State of Childhood Obesity. The higher the obesity rate, the higher the rank.

1. **Race**: Obesity fall disproportionately on children (ages 10-17) of color: Black (22%), Hispanic (19%), White (11%), Asian (7%)

2. **Poverty**: In households living below the federal poverty level, the childhood obesity rate was nearly 22%; families with incomes at least 400% above the poverty level have a rate of 9.4%
In the decade spanning 2012 to 2022, only two of Pennsylvania's 67 counties reduced their populations' obesity percentages — Cambria and Columbia — by a single point.¹ Allegheny held its obesity percentage static at 29%. The other 64 counties all saw an increase in their populations' obesity percentage.

Four of the 14 counties with >37% obesity rates are located in the southwestern quadrant of the state. Green and Westmoreland in particular grew >8% in the past decade.

In 2022, 14 counties have obesity rates >37%, five counties have obesity rates >40% and five counties have obesity rates >39%.

2022 Obesity Level (%): <30% 31-33% 34-36% 37-39% ≥40%

Obesity Increase (%): <0% 0-1% 2-4% 5-7% 8-10%
Firearm deaths continue to be a significant and growing public health problem in the United States. In 2020, 79% of all homicides and 53% of all suicides involved firearms.

1. **Growth**: From 2019 to 2020, the firearm homicide rate increased by about 35%, and the firearm suicide rate stayed high. The firearm homicide rate in 2020 was the highest recorded in over 25 years.

2. **Racial Disparity**: The largest increase in firearm homicides was among Black people (39%). The largest increase in firearm suicides was among American Indian and Alaska Native people (42%).

3. **Economic Disparity**: In 2020, counties with the highest poverty level had firearm homicide rates 4.5 times as high and firearm suicide rates 1.3 times as high as counties with the lowest poverty level.

**Firearm Homicide & Suicide Rates Over Time (2011-2020)**

**Firearm Homicides (2020)**

*Rate per 100,000*

- The Black homicide rate shot up from 19 to 27.

**Firearm Suicides (2020)**

*Rate per 100,000*

- The American Indian / Alaska Native suicide rate increased from 8 to 11, surpassing White levels.

Source: CDC
The epidemic of gun violence is a public health crisis affecting communities throughout Pennsylvania. More than 1,500 Pennsylvanians die each year from gun violence — one person every 6 hours.¹

1. **Racial Disparity**: Despite representing just 6% of PA’s population, Black men account for nearly 64% of the state’s gun homicide victims¹

2. **Suicide**: >900 Pennsylvanians commit suicide by firearms annually, making guns our most lethal means of suicide. Nearly 2/3 (61.8%) of firearm-related deaths in PA since 2012 were suicides³

3. **Injury-Related Death**: Firearm-related injuries are among the leading causes of injury-related deaths for adults and the leading cause of injury-related death among children and teens in PA. In 2018, more Pennsylvanians died by firearms than in motor vehicle accidents (1,654 vs. 1,303)³

4. **Economic Cost**: The annual economic cost of gun violence in PA is $8.5BN, or $665 per resident, when considering factors like lost income, employer costs, healthcare, and law enforcement and criminal justice involvement³

5. **State Preemption**: PA currently preempts the authority of political subdivisions from adopting local firearm or ammunition laws¹

Source: PA Health Policy Coalition. Johns Hopkins
Lead poisoning is preventable, yet each year thousands of children in Pennsylvania are sickened by the toxic metal. Children must be tested as they show no symptoms of lead poisoning until considerable damage is done.

1. Presence: Harmful levels of lead are present in all 67 Pennsylvania counties — in old homes, crumbling schools, aging water service lines, and soil near former industrial sites.
   - National Rank: PA ranks 6th nationwide with 71% of its housing stock built before 1978.
   - County Water Systems: Lead was detected in 80% of water systems in Allegheny County, Pennsylvania, which encompasses Pittsburgh, in 2019, according to a new two-year analysis.
   - Schools: As of 2021, much of the Commonwealth is considered “at-risk” for lead exposure and some counties in South Central Pennsylvania have some of the highest rates of childhood lead poisoning in the state.

2. Impact: Lead exposure in children damages the brain and nervous system, slows growth and development and can lower IQ and cause learning, behavior, hearing, and speech problems.
   - Intergenerational Transmission: Lead is stored in the bones, and it can be released later in life. During pregnancy, the child receives lead from the mother’s bones, which may affect brain development.

Source: PA Department of Environmental Protection
Per- and Polyfluoroalkyl Substances (PFAS) were identified as key Contaminants of Emerging Concern (CEC) by the PA Department of Environmental Protection.\(^2\) PFOA and PFOS are the two most notorious PFAS chemicals.

1. **Detection:** CECs are any contaminants that are new to the environment or have been around for a long time but are just now able to be studied due to advances in laboratory techniques\(^2\).

2. **Growth:** The number of US communities confirmed to be contaminated with PFAS continues to grow at an alarming rate. As of August 2021, 2,854 locations in 50 states and two territories are known to be contaminated\(^1\).

3. **PA Analysis:** Highest PFOS + PFOA discrete water concentrations were found at WQN stations 121 (Neshaminy Creek), 154 (Valley Creek near Valley Forge), and 193 (Wissahickon Creek)\(^3\).
   - **EPA Advisory:** All PFOS + PFOA results were below the drinking water lifetime health advisory level for PFOS + PFOA of 70 ng/L established by the US EPA in 2016. However, the EPA re-set the thresholds to near zero in 2022\(^4\).

Other CECs include contaminants in sediment, endocrine-disrupting compounds (EDCs), and neonicotinoid insecticides.\(^2\).
Smoking is estimated to cause nearly 1 of every 5 deaths in the United States and more than 1 of every 4 deaths in Pennsylvania.¹

1. Smoking is the leading cause of preventable deaths in Pennsylvania: It kills more people than alcohol, AIDS, car crashes, illegal drugs, murders, and suicides combined
   • Thousands more dying from other tobacco-related causes — such as fires caused by smoking and smokeless tobacco use
   • On average, smokers live 10 years fewer than non-smokers

2. Alternative Tobacco Use in Youth: As cigarette smoking has declined, the tobacco industry has developed new products to deliver nicotine, ranging from inexpensive small cigars to e-cigarettes. While cigarette use among youth has decreased nationally, use of these alternative tobacco products is skyrocketing
   • For the first time in decades, overall tobacco use among youth increased in 2018 due to the use of e-cigarettes with high nicotine content, appealing flavors, and the ability to be easily concealed and used discreetly
   • 244,000 children under age 18 in Pennsylvania can expect to die prematurely from smoking

Source: PA Health Policy Coalition. County Health Rankings. America’s Health Rankings
More Pennsylvanians are covered by their employers and enrolled in Medicare vs. the US national average.

Source: Kaiser Family Foundation. Statistica
Pennsylvania has the 8th highest number of uninsured kids in the nation, with nearly 128,000 children who do not have health insurance. Pennsylvania’s uninsured rate for children increased slightly from 4.4% to 4.6% in 2019.

Factors such as age, poverty level, race and ethnicity, and geographic region impact children’s access to health insurance in PA. Children younger than six years of age and children from low-income families are more likely to be uninsured. Children who identify as American Indian and Alaska Native, Asian, Black or African American, or White have increasing uninsured rates compared to the prior year. Children who identify as Hispanic or Latino children, Some Other Race, or Two or More Races have decreased uninsured rates compared to the prior year.
Major depression is substantially more common in individuals <25, with children 12-17 at the highest risk historically.

Prevalence decreases with age.

Females are 1.6x more likely to suffer from mental illnesses.

White individuals tend to suffer more from mental illness than other specified minorities in this analysis.

% Population with Major Depressive Episode in Past Year (2008-2020)

% Adult Population with Any Mental Illness (2020)

Source: The White House
% Children with Mental Health Disorders (2018-2019)¹

Currently Have Depression
Currently Have Anxiety
Currently have ADD/ADHD

Sources of Mental Health Services among Adolescents (Ages 12-17) in the Past Year (In Millions; 2020)¹

Specialty and educational settings are by far the most common method by which youth receive mental health services.

Share of Patients Reporting Worsening Mental Health For Their Children Ages 5-12 (2020)³

Mental Health Service Utilization Rates Per 1K Medicaid/CHIP Child Beneficiaries (Feb vs. Oct 2020)¹

Source: Kaiser Family Foundation
Little progress has been made in mental health and suicide-related behaviors and experiences reported by high school students over the past decade. In fact, almost all of the indicators of mental health and suicide showed increasing trends across the board. Poor mental health can result in serious negative outcomes for the health and development of adolescents. It can lead to risky sexual behavior, illicit substance use, adolescent pregnancy, truancy/school dropout, and other delinquent behaviors.

**Highschool Sadness / Hopelessness Growth (2019)**

**Highschool Suicide Consideration Growth (2019)**

Source: CDC
COVID-19 Adult Impact (2021)^2

Pandemic Causes Spike in Anxiety & Depression
% of U.S. adults showing symptoms of anxiety and/or depressive disorder*

<table>
<thead>
<tr>
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<th></th>
<th></th>
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</thead>
<tbody>
<tr>
<td>Symptoms of anxiety disorder</td>
<td>31.7%</td>
<td>26.4%</td>
<td>26.4%</td>
<td>25.1%</td>
<td>34.0%</td>
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<tr>
<td>Symptoms of depressive disorder</td>
<td>8.1%</td>
<td>6.5%</td>
<td>6.5%</td>
<td>6.5%</td>
<td>4.2%</td>
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<tr>
<td>Symptoms of anxiety or depressive disorder</td>
<td>36.9%</td>
<td>31.8%</td>
<td>31.8%</td>
<td>31.7%</td>
<td>30.4%</td>
</tr>
</tbody>
</table>

COVID-Related Distress by Subgroup (2021)^2

Income, age and gender are associated with higher levels of psychological distress
% of U.S. adults who fall into each category of psychological distress

<table>
<thead>
<tr>
<th></th>
<th>High distress</th>
<th>Medium distress</th>
<th>Low distress</th>
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</thead>
<tbody>
<tr>
<td>February 2021</td>
<td>21</td>
<td>24</td>
<td>54</td>
</tr>
<tr>
<td>April 2020</td>
<td>23</td>
<td>25</td>
<td>50</td>
</tr>
<tr>
<td>March 2020</td>
<td>24</td>
<td>26</td>
<td>49</td>
</tr>
<tr>
<td><strong>Men</strong></td>
<td>16</td>
<td>22</td>
<td>61</td>
</tr>
<tr>
<td><strong>Women</strong></td>
<td>24</td>
<td>25</td>
<td>46</td>
</tr>
<tr>
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<td>21</td>
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<tr>
<td><strong>Black</strong></td>
<td>19</td>
<td>25</td>
<td>54</td>
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<tr>
<td><strong>Hispanic</strong></td>
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<td>24</td>
<td>52</td>
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<tr>
<td><strong>Asian</strong></td>
<td>15</td>
<td>19</td>
<td>65</td>
</tr>
<tr>
<td><strong>Ages 18-29</strong></td>
<td>32</td>
<td>31</td>
<td>36</td>
</tr>
<tr>
<td><strong>30-49</strong></td>
<td>21</td>
<td>24</td>
<td>54</td>
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<tr>
<td><strong>50-64</strong></td>
<td>19</td>
<td>23</td>
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<td><strong>65+</strong></td>
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<td>10</td>
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<td>65</td>
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<tr>
<td><strong>Middle income</strong></td>
<td>16</td>
<td>24</td>
<td>56</td>
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<tr>
<td><strong>Lower income</strong></td>
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<td>25</td>
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<tr>
<td><strong>Has a disability</strong></td>
<td>38</td>
<td>23</td>
<td>40</td>
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<tr>
<td><strong>No disability</strong></td>
<td>17</td>
<td>24</td>
<td>57</td>
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</table>

Parent-Reported New or Worsening Problems in US Teenagers (2021)^3

1/3 teen girls and 1/5 teen boys experienced new or worsening anxiety since March 2020

<table>
<thead>
<tr>
<th></th>
<th>Girls</th>
<th>Boys</th>
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<tbody>
<tr>
<td>Anxiety</td>
<td>35%</td>
<td>30%</td>
</tr>
<tr>
<td>Depression</td>
<td>30%</td>
<td>25%</td>
</tr>
<tr>
<td>Sleep issues</td>
<td>15%</td>
<td>10%</td>
</tr>
<tr>
<td>Withdrawing from family</td>
<td>10%</td>
<td>8%</td>
</tr>
<tr>
<td>Aggressive behavior</td>
<td>5%</td>
<td>3%</td>
</tr>
</tbody>
</table>

COVID-Related Distress in Individuals 18-29yr (2021)^4

Young adults, especially women and those with lower incomes, are experiencing higher levels of distress
% of U.S. adults who fall into each category of psychological distress

<table>
<thead>
<tr>
<th></th>
<th>High distress</th>
<th>Medium distress</th>
<th>Low distress</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>U.S. adults</strong></td>
<td>21</td>
<td>24</td>
<td>54</td>
</tr>
<tr>
<td><strong>Ages 18-29</strong></td>
<td>32</td>
<td>31</td>
<td>36</td>
</tr>
</tbody>
</table>

Ages 18-29: Gender

<table>
<thead>
<tr>
<th></th>
<th>Men</th>
<th>Women</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Ages 18-29</strong></td>
<td>27</td>
<td>36</td>
</tr>
<tr>
<td><strong>21-29yrs</strong></td>
<td>30</td>
<td>31</td>
</tr>
<tr>
<td><strong>30-39yrs</strong></td>
<td>42</td>
<td>32</td>
</tr>
</tbody>
</table>

Ages 18-29: Income

<table>
<thead>
<tr>
<th></th>
<th>Lower income</th>
<th>Middle income</th>
<th>Upper income</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Ages 18-29</strong></td>
<td>39</td>
<td>32</td>
<td>26</td>
</tr>
<tr>
<td><strong>21-29yrs</strong></td>
<td>31</td>
<td>32</td>
<td>29</td>
</tr>
</tbody>
</table>

Barriers to mental healthcare remain an issue across the US.1,2,3

1. Adults: 24.7% of adults with a mental illness report an unmet need for treatment. This number has not declined since 2011. Over half of adults with a mental illness do not receive treatment, totaling over 27M adults. 11.1% of Americans with a mental illness are uninsured.1

2. Children: Over 60% of youth with a major depression do not receive any mental health treatment. Even in states with the greatest access, nearly 1/3 are going without treatment. Even among youth with severe depression who receive some treatment, only 27% receive consistent care. In states with the least access, only 12% receive consistent care. 8.1% of children had private insurance that did not cover mental health services.2

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**Top 5 Reasons for not Receiving Mental Health Services (2020)**

- **Could not afford cost**: 46%
- **Don’t know where to go for services**: 29%
- **Concerns about confidentiality**: 25%
- **Could handle without treatment**: 24%
- **Insurance doesn’t pay enough for mental health services**: 19%

**Access and stigma remain major issues in 2020.**

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**Reasons for Not Receiving Mental Health Services in the Past Year (2008 vs. 2018)**

- **Could not afford cost**: 2008: 39%, 2018: 40%
- **Thought could handle the problem without treatment**: 2008: 26%, 2018: 25%
- **Did not want others to find out**: 2008: 17%, 2018: 21%
- **Did not have time**: 2008: 14%, 2018: 18%
- **Concerned about confidentiality**: 2008: 10%, 2018: 10%

**Key reported barriers to mental health remained remarkably consistent over the past decade.**

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**Source:** Mental Health America. The White House. American Psychological Foundation
The 2020 Mental Health America (MHA) ranks Pennsylvania as 3rd in an analysis of state mental health systems. The analysis includes 15 factors measuring the need and provision of mental healthcare. PA’s overall ranking remained stable from vs. 2021, dropping from 2nd to 3rd.

Pennsylvania scored:
• Overall: 3rd
• Adults: 8th
• Children: 1st
• Prevalence of Mental Illness: 6th
• Access to Care: 8th

While frequently scoring in the top 20 states, PA also scored 28th for adults with serious thoughts of suicide (4.8%), 31st for adults with AMI reporting unmet need (25.7%), 21st for youth with major depression (MDE) who did not receive mental health services (55.2%), and 21st for children with private insurance that did not cover mental or emotional problems (6.8%).

Source: Mental Health America. ‘States with rankings 1-13 have lower prevalence of mental illness and higher rates of access to care for youth.’
The 2020 Kids Count Data Book by the Annie E. Casey Foundation ranked Pennsylvania 20th in the 2022 state-to-state comparison of youth healthcare.¹ Health indications included:

1. **Low birth-weight babies** is the percentage of live births weighing less than 5.5 pounds (2,500 grams). The data reflect the mother’s place of residence, not the place where the birth occurred.

2. **Children without health insurance** is the percentage of children under age 19 not covered by any health insurance.

3. **Child and teen deaths per 100,000** is the number of deaths, from all causes, of children between ages 1 and 19 per 100,000 children in this age range. The data are reported by the place of residence, not the place where the death occurred.

4. **Children and teens who are overweight or obese** is the percentage of children and teens ages 10 to 17 with a Body Mass Index (BMI)-for-age at or above the 85th percentile.

The Annie E. Casey Foundation is a national nonprofit organization that works to create a future where children and families thrive. Founded in 1942, the Foundation has invested $4 billion to help build a better future for children, youth, and families and has supported 70,000 organizations and initiatives.

Source: Annie E. Casey Foundation

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¹ Comparison of Youth Health (2022) 

The Annie E. Casey Foundation ranked Pennsylvania 20th in the 2022 state-to-state comparison of youth healthcare. Health indications included:

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Source: Annie E. Casey Foundation
The median age in Pennsylvania is 40.9 years, ~10% higher than the national median (38.2%).
The number of residents between the ages of 60-74 grew significantly over the past decade.
In 2019, Pennsylvania’s White population was 15% higher than the national average.1,3 Except for Philadelphia, all of PA’s most diverse counties are less diverse than the 2019 US national average. Black is the second most common race in PA vs. Hispanic nationally. Allegheny is the only racially diverse county in the southwestern quadrant.1

PA Counties where Race-Ethnic Minority Groups are Highly Represented (2018)¹

Source: Data USA; AI/AN: American Indian / Alaska Native; A/NH/PI: Asian / Native Hawaiians / Pacific Islander
The southwestern quadrant is less diverse vs. the Pennsylvania average.\textsuperscript{1,2} Allegheny, the most diverse county in southwestern PA, is 78% White, followed by 13% Black.

Excluding Allegheny, all the counties in southwestern PA are >89% White, with an average of 92%\textsuperscript{1} This is 18% above the PA average at 76\textsuperscript{2}. On average, southwestern counties are 4% Black, 2% Hispanic, 1% multi-race, and <1% Asian or American Indian/Alaska Native.

Racial diversity does not have a clear direct correlation with economic health on a county level in southwest PA.\textsuperscript{3} All at-risk counties are 2-3% above the quadrant average of White individuals. Fayette, the distressed county, is exactly the average of 92%. Racial disparity more clearly impacts the Zip Code Index, which covers a smaller geography.
Western PA contains the majority of economically distressed/at-risk counties. In the western segment, comfortable and prosperous counties are clustered around Pittsburgh.

1. Distressed: 100%
2. At Risk: ~55%
3. Comfortable: ~32%
4. Prosperous: ~7%
However, Greene county also held the highest median household income of the non-prosperous/comfortable counties ($54.1K).

Only 3 factors varied by >10%: adults not working (19%), change in number of individuals locally employed (18%), and change in local establishments (11%) from 2014-2018. The wide range in all three metrics is partially due to Greene county. Excluding Greene from the analysis, the range would be 14%, 16%, and 8%, respectively. Factors varying by ≤10% include: no high school diploma (8%), the poverty rate (10%), and housing vacancy rate (6%).
Three factors highly influence economic opportunity: population density, prosperous neighbors, and access.

1. **Population Density:** 86% (12/14) of prosperous counties in PA are in the southeast quadrant of the state (Southeast & Lehigh/Capital regions)
   - **Population:** The southeast quadrant holds ~58% of the PA population, with 33% living in only 5 counties
   - **Cities:** 8 of PA’s 15 largest cities (53%) are in the southeast quadrant. With a 2021 population of 1,585,010, the city of Philadelphia is 5x more populous than Pittsburgh, the second-largest city

2. **Prosperous Neighbors:** Eastern PA borders prosperous states with large cities in commuting distance <2 hours
   - **Southeast:** Maryland (Baltimore & Washington, DC)
   - **Southeast/Northeast:** New Jersey and New York (New York City)
   - **Southwest/Northwest:** Cleveland and Columbus are >2 hours

3. **Access:** Eastern PA is better connected by major roadways (ex: 81, 80, 476, 78, and 76) providing easy access to prosperous neighbors. The southwest and southeast quadrants are also better connected by intercity busses, which are explored later in the deck

Source: Distressed Community Index. PA Department of Human Services. World Population Review
There is a large disparity in economic community health via race in a state-wide analysis of Pennsylvania. Across the state, Black and Hispanic individuals tend to live in significantly more distressed or at-risk communities vs. other subgroups.

1. **Prosperous/Comfortable**: ~50% of White and Asian individuals live in prosperous communities vs. 20% of Black individuals

2. **Distressed/At-Risk**: 50-70% of Black and Hispanic individuals live in distressed/at-risk communities, vs. only 24% of white individuals

3. **Distressed**: Almost 40-50% of PA’s Black and Hispanic individuals live in distressed communities, $\geq 4x$ that of white individuals

Data are not broken down by PA county, but numerous sources indicate that there is substantial racial economic disparity across the state.

*Source: Distressed Community Index. US Census Bureau*
in 2021, Pennsylvania’s median household income was $72,627 vs. the national median of $70,784.

Median Household Income in PA (1980 – 2020)

American Community Survey 5-Year Estimates

Source: US Census Bureau. FRED Economic Data
Southwestern Pennsylvania is experiencing a shift of more than 740,000 living in poverty and near poverty away from its urban core in Pittsburgh to the suburbs, a trend that is occurring in suburban areas across the country.1

- **Allegheny Suburban Poverty**: 61% of the people living in poverty in Allegheny County and 79% of those living in poverty in the entire Pittsburgh metropolitan statistical area reside in suburbs.

- **Allegheny Poverty Growth**: Between 2002-2013, Allegheny County experienced a 3% rise in poverty occurring outside the city of Pittsburgh.

Even with this shift, the City of Pittsburgh has almost 23% of its residents living at the poverty level, and 43% of its residents are living near poverty. Poverty levels in the city are still well above the poverty levels in the Pittsburgh region (12.1%) and the commonwealth (13%).1

Between 2010 and 2014, more than 14% of all households in rural Pennsylvania still had incomes that fell below the poverty level. Moreover, in 2008, 19% of individuals living in rural areas were classified as working poor.1

Although Allegheny County’s poverty rate is below the rate for the commonwealth as a whole, it is greater than the rate in nearly half of the counties in Pennsylvania.1
While there is an emerging need to address poverty in the suburbs, poverty remains a concern within the City of Pittsburgh.¹

- The city has almost 23% of its residents living at the poverty level, and 43% of its residents are within 200% of the poverty level. One reason for this is that many Pittsburgh neighborhoods are subject to similar issues and trends as suburban municipalities, including the loss of traditional job centers, underperforming schools, and violence.¹

- The greatest concentration of suburban poverty is along the rivers, especially in the Steel Valley municipalities in Allegheny County and several municipalities bordering Pittsburgh.¹

The Community Needs Index is based on the percentage of the population below 100% and 200% of the federal poverty line, families headed by single females, youth ages 16–19 without a high school diploma and not enrolled in school; males ages 16–64 who are unemployed, houses vacant, and households with no available vehicle.¹

Source: University of Pittsburgh

Allegheny County Department of Human Services Community Needs Index¹
PA unemployment rates are higher than the national average and surrounding states.¹

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<thead>
<tr>
<th>Unemployment Rate</th>
<th>Total Unemployed People</th>
<th>Unemployment Insurance Claims</th>
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</thead>
<tbody>
<tr>
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</tr>
<tr>
<td>PA</td>
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<td>328K</td>
</tr>
<tr>
<td>MD</td>
<td>5%</td>
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</tr>
<tr>
<td>NY</td>
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<tr>
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<tr>
<td>WV</td>
<td>3.9%</td>
<td>31K</td>
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</table>

US Unemployment (March 2022)²

Source: Bureau of Labor Statistics. United States Department of Labor
According to the U.S. Census Bureau, public transportation commuters in Pittsburgh spend an average of 32 minutes traveling to work, the 11th-fastest transit commute time of the 136 cities in the analysis.²

The majority of transit riders in Pittsburgh use buses. Bus trips account for about 180,000 of 214,000 riders on a typical weekday.²
A 2018 Penn State study found that there is a severe lack of connectivity to high-speed broadband internet for much of Pennsylvania. The problem is “far worse than initially estimated”, with ~11 million people across PA lacking high-speed broadband. In ~95% of Pennsylvania's land area, <½ the population receives high-speed broadband.

In 2021, the Pennsylvania Department of Community and Economic Development launched the “Unserved High-Speed Broadband Funding Program” to further support the deployment of high-speed broadband infrastructure to unserved areas with $10 million in funding.

In 2022, Governor Wolf created the “Pennsylvania Broadband Authority” which will manage at least $100 million in federal aid to coordinate the rollout of broadband across Pennsylvania. While rural counties are especially vulnerable, communities outside of Pennsylvania’s biggest cities are also left behind because of inaccessibility or affordability.
Pennsylvania ranks 45th in state funding share for education.¹

1. PA has the widest funding gap between wealthy and poor school districts of any state in the country, with the wealthiest school districts spending 33% more on each student than the poorest districts.¹

2. Most Pennsylvania public schools are inadequately funded. As a result, four of every five of the state’s school districts, serving 1.4 million students, are not getting their fair state share. Nearly half of the school districts are spending below the amount needed to educate students. That underspending is a direct result of inadequate state support.¹

3. That means lost opportunities for students to participate in valuable science, technology, and math programs; receive enough personal attention from their teachers due to growing class sizes; get extra help when they need it; have access to up-to-date books and technology; or participate in vocational training and extracurricular activities.¹

Economic disparities are wide between the richest and the poorest school districts in the Pittsburgh region and state, with 12% local and statewide earning more than $80,000 in median household income and more than 30% having household incomes below $50,000.²

Source: Pittsburgh Business Times, PA Schools Work
Title I is a 100% Federally funded supplemental education program that provides financial assistance to local educational agencies to improve educational opportunities for educationally deprived children.¹

Title I programs are designed to help children meet the state content and performance standards in reading, language arts, and mathematics.¹

1. **Buildings > 40% poverty**: LEAs may use the funds to upgrade the entire curriculum of the school and are Schoolwide Programs

2. **Buildings with < 40% poverty**: Programs are designed to help specific children and are targeted assisted programs. LEAs and schools are subject to consequences of school choice and supplemental education services if they do not meet adequate yearly progress as determined by the SEA

Source: PA Department of Education. Zipmaps
It is not always a given that individuals can easily access fresh and nutritious food through supercenters, supermarkets, and large grocery stores.\(^1\)

**However, this issue is limited in PA.** Most “food deserts” are located in distressed or at-risk communities in the rural areas of the state, with small urban sections around Pittsburgh. Additionally, recent studies indicate 90% of people living in “food deserts,” has access to food delivery through at least one of four major players — Amazon, Instacart, Uber Eats, or Walmart.\(^2\)

**Green Zones:** Low-income census tracts where a significant number or share of residents is more than 1 mile (urban) or 10 miles (rural) from the nearest supermarket.


USDA The Food Access Research Atlas (FARA) (2019)\(^1\)
Eight large national foundations spent ≥ $300m in total grant expenses as per the most recent 990s (2019 or 2020).

All of them designated a portion of their 2018 grants to western PA (western PA-specific data from 2019/2020 are not available). With an established interest in the region, these giants may represent an opportunity.

Three local organizations (UPMC, Richard King Mellon, and the Allegheny Regional Asset District) spent > $100M. 79% of organizations spending $100M - $1M in 2019 or 2020 were local.

Source: Pennsylvania Foundation Center. Grant Makers of Western PA
In 2018, Richard King Mellon donated 2x the amount of grant money to western PA vs. Heinz, the second largest local donor*.

Mellon, Heinz, PNC, Colcom, and Hillman were the 5 largest local givers, donating > $40M each.

Every foundation that granted > $5M to local organizations was based in PA, except the Gates Foundation. ~70% of foundations giving between $5M-1M were based outside of PA.

Source: Pennsylvania Foundation Center. Grant Makers of Western PA. Assumes western PA foundations donated to local organizations.
4 categories fall inside the H.I.D.E framework, representing ~700M in local 2018 grants.

Source: Pennsylvania Foundation Center. Grant Makers of Western PA. Assumes western PA foundations donated to local organizations.
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