

# Assessing the Effectiveness of Policies to Improve Access to Primary Care for Underserved Populations

CASE STUDY ANALYSIS: KANAWHA COUNTY, WEST VIRGINIA

Funding for this report was provided by the National Institute for Health Care Reform.

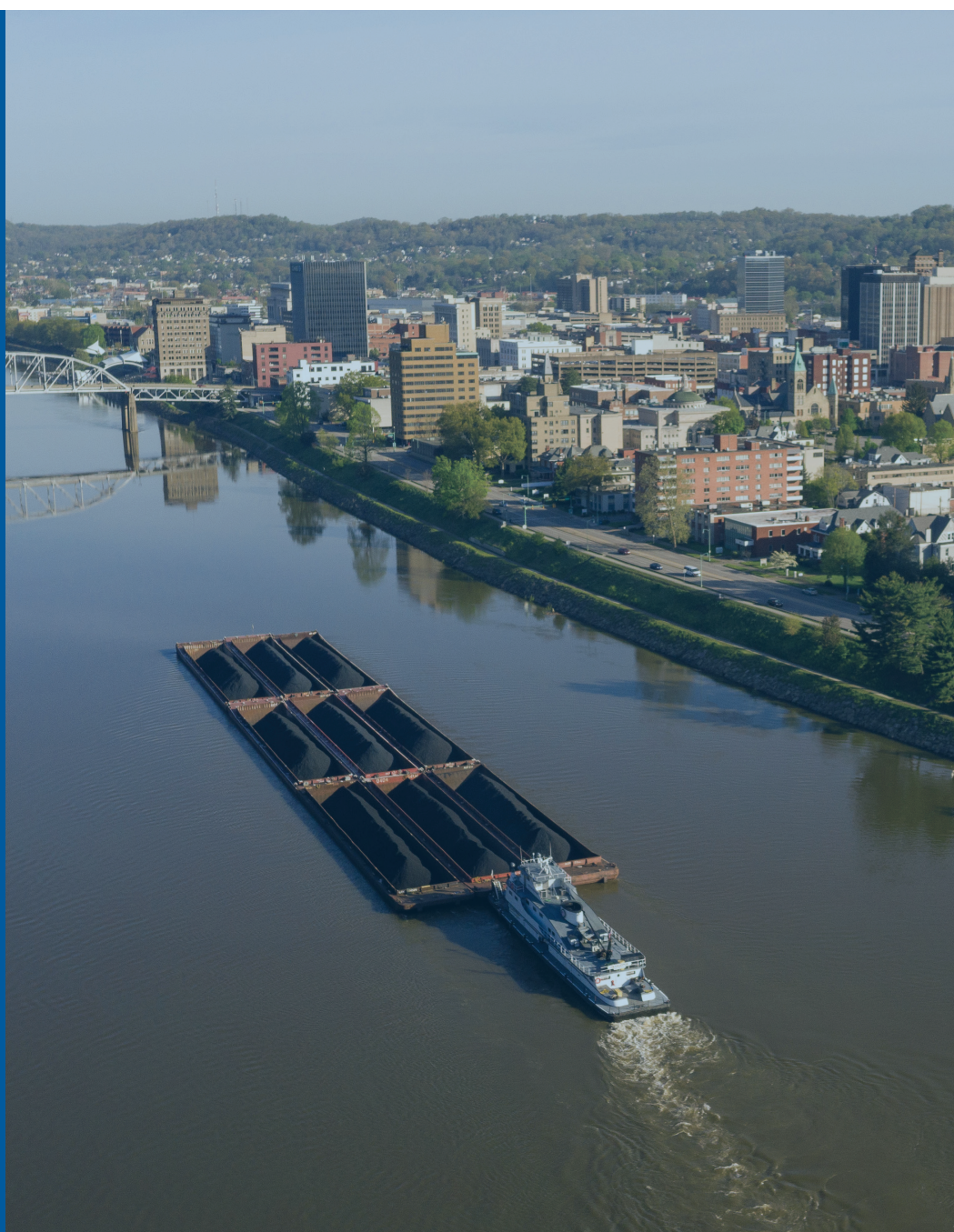
JUNE 2023

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## ABSTRACT

This case study of Kanawha County, West Virginia, the fifth in a series, assesses the effectiveness of various policy initiatives to expand access to primary care in the region, particularly for underserved populations. Kanawha County is designated by the federal government as a primary care health professional shortage area for low-income residents, and a variety of policy initiatives have been implemented to make primary care more accessible. They have met with mixed success.

The state government has been particularly proactive in efforts to improve the recruitment and retention of primary care clinicians in the state. More specifically, the state funds several loan repayment and scholarship programs for health professions students, and closely monitors the effectiveness of these programs. However, retaining those professionals has been challenging, and the county continues to experience a shortage of clinicians who serve low-income populations. The state has also made efforts to expand access to affordable health insurance for low-income populations. The decision to expand Medicaid has been especially beneficial.

On the other hand, the state and local governments have taken a hands-off approach toward the federally qualified health centers (FQHCs) and school-based health centers (SBHCs) that provide vital safety net services to the county. State resources and leadership could help them deploy their services to more effectively meet the population health needs of the county.

Like many other rural areas, Kanawha County residents also struggle with lack of access to transportation and barriers to the use of telehealth. While state leaders have taken an interest in dedicating resources to fix the latter, local safety net providers have been left to cobble together their own fixes for the former. State and local leadership could also be leveraged more effectively to help build and sustain trust between underserved communities and the providers who serve them. For example, community health workers (CHWs) have the ability to serve as liaisons between patients and providers and improve health outcomes, but the state has not yet invested in the CHW workforce.

## INTRODUCTION

It is difficult to overstate the importance of primary care to ensure robust population health outcomes. Evidence shows that not only can primary care prevent illness and death,<sup>1</sup> but it is also associated with a reduction in health disparities.<sup>2</sup> Countries with strong primary care systems experience better health outcomes than those with weak primary care systems, including reduced unnecessary hospitalization and less socioeconomic inequality,<sup>3</sup> as well as improved management of chronic diseases.<sup>4</sup> Unfortunately, the United States falls short on many indicators that demonstrate the strength of a nation's primary care system.<sup>5</sup>

Improving access is key to strengthening a primary care system. Primary care access can be divided into five composite and interconnected dimensions, known as the five As: (1) *avail-*

*ability* of primary care clinicians, (2) *accessibility* of primary care services geographically, (3) *accommodation*, such as appointment availability and hours, (4) *affordability*, and (5) *acceptability*, such as comfort and communication between patient and clinician.<sup>6</sup>

In a Milbank Memorial Fund issue brief<sup>7</sup> and five accompanying fact sheets,<sup>8</sup> we assessed the evidence to determine whether policy initiatives that target primary care access have reduced health care disparities. Now, in this series of five case studies, we assess the impact of these policy initiatives at a local level to better understand implementation challenges and successes. The first four case studies focused on Grant County, New Mexico,<sup>9</sup> Baltimore City, Maryland,<sup>10</sup> Columbia County, Arkansas,<sup>11</sup> and Detroit, Michigan.<sup>12</sup>

This case study, the fifth and final in the series, focuses on efforts to improve access to primary care in Kanawha County, West Virginia.

## BACKGROUND

### Geography and Demographics

Kanawha County is West Virginia's most populous county with about 175,000 residents.<sup>13</sup> It is home to the state capital, Charleston, where one-fourth of the county's population resides.<sup>14</sup> Though the county is not federally designated as rural because it includes Charleston,<sup>15</sup> it becomes rural within just a few miles of the city's limits. About one-fourth of the county's population lives in an area with a low population density (500 or fewer people per square mile).<sup>16</sup>

Kanawha County's population has declined by about 9% since the 2010 census.<sup>17</sup> In fact, West Virginia experienced the highest percentage of population decline in the country between



2010 and 2020. Lack of opportunity and low pay are often cited as primary contributors to the state's dwindling population.<sup>18</sup>

Kanawha County's population is primarily white (88.6%). However, the county has a higher (but still small) proportion of Black residents (7.5%) than the rest of West Virginia (3.7%),

and most of the county's Black residents live in the city of Charleston. Even though Kanawha County has an unemployment rate of only 3.4%<sup>19</sup> (which is roughly the same as the national rate of 3.6%),<sup>20</sup> when compared to the rest of the country, Kanawha County residents tend to earn less and experience more poverty. County households have a median income of \$50,574, which is significantly below the national median (\$69,021).<sup>21</sup> Almost 16% of Kanawha County residents fall below the poverty line, which exceeds the national average of 11.6%.

West Virginia and Kanawha County generally have high rates of health insurance coverage when compared to the rest of the country. In 2021, Kanawha County had an uninsurance rate of 7.9%, compared to the national rate of 9.8%.<sup>22</sup> Given the high proportion of low-income residents in the county, stakeholders largely attribute their high rate of health insurance coverage to the state's decision to expand Medicaid eligibility to low-income adults under the Affordable Care Act (ACA). After the passage of the ACA in 2013, Medicaid enrollment in West Virginia increased by over 50%, and has remained high since.<sup>23</sup> Today, West Virginia has one of the highest rates of enrollment in Medicaid across the country.<sup>24</sup> According to the latest available county-level data, total Medicaid enrollment in Kanawha County was just shy of 62,000 people, roughly one-third of the total county population.<sup>25</sup>

Despite high levels of health insurance coverage, West Virginia is currently ranked 47<sup>th</sup> in the country in terms of overall population health.<sup>26</sup> West Virginia has the highest prevalence of opioid-involved overdose deaths of all states<sup>27</sup> and has been described as "the epicenter" of the opioid epidemic in the country.<sup>28</sup> Further, a 2018 study by the state also found that West Virginia had the highest prevalence of obesity and cardiovascular diseases, and the second highest prevalence of diabetes in the country.<sup>29</sup> County-level data shows that about one-quarter of adults in Kanawha County reported poor or fair health in 2019, compared to 17% of adults nationally.<sup>30</sup>

However, the state outperforms the country in terms of the number of primary care providers (PCPs) available per capita. Compared to a national ratio of 1,320 patients per PCP, West Virginia has only 1,280 patients per PCP.<sup>31</sup> While the numbers of PCPs in the state might be high, low-income populations still face difficulties accessing primary care,<sup>32</sup> suggesting a lack of equity in the distribution or availability of these PCPs. Almost 44% of West Virginians live in a federally designated primary care health professional shortage area (HPSA).<sup>33</sup> The federal government uses two main designations for areas and populations experiencing primary care physician shortages: primary care HPSA and medically underserved area/population (MUA/P). Kanawha County is designated as a shortage area under both measures.

### Primary Care Provider Shortage Designations

HPSA scores provide a basis for determining eligibility and resources for several federal and state programs targeting primary care access across the country. The federal government designates areas as primary care HPSAs when they have (1) a high population-to-primary-care-physician ratio, (2) a high percentage of population below the federal poverty line, (3) poor infant health quality, and (4) longer travel times to the nearest source of care. The federal government scores HPSAs from 0 for the areas with the lowest need to 25 for those with the highest need. With a score of 13, Kanawha County is a federally designated primary care HPSA, specifically for low-income populations.<sup>34</sup>

MUA/P designations are the basis of eligibility for the federally qualified health center program and the federally qualified health center look-alike program. MUA/P designations depend on an Index of Medical Underservice (IMU) score, which is based on (1) number of primary care physicians per 1,000 people, (2) percentage of population at the federal poverty level, (3) percentage of population over 65, and (4) infant mortality rate. IMU scores fall between 0 and 100, and a score of 62 or below results in a MUA/P designation. Since 1994, various parts of Kanawha County have been designated as MUAs with IMU scores of 49.2, 56.7 and 61.3.<sup>35</sup>

### Key Stakeholders

A number of state and local entities are involved in Kanawha County's primary care landscape.

#### Government Agencies

The West Virginia Department of Health and Human Resources (DHHR) is home to two offices that administer primary care-related initiatives and programs.

- The **Division of Primary Care** is responsible for designating HPSAs and MUAs throughout the state and conducting a primary care needs assessment. It also administers federal and state grant funding for free clinics and the federal Black Lung Clinics Program. While the division used to oversee state funding for federally qualified health centers (FQHCs) in the past,<sup>36</sup> state officials said that the state eliminated this line of funding after expanding Medicaid.
- The **State Office of Rural Health (ORH)** administers a few state and federal health care workforce development programs, including the state loan repayment program and the Conrad 30 program, which provides certain visa flexibilities to foreign physicians. It also administers funding for critical access hospitals in the state and supports the development of community-based efforts to improve access to health care. For instance, ORH provides funding to small rural communities to conduct their own health care needs assessments and build capacity as needed.

The **West Virginia Higher Education Policy Commission (WVHEPC)** is an executive branch agency that develops policy for and advocates on behalf of the state's public colleges and universities. The Commission collaborates with medical schools and graduate medical education (GME) programs on a number of initiatives to improve the recruitment and retention of the health care workforce in the state. Through its Rural Health Initiative, WVHEPC provides funding to three medical schools in the state to operate programs to improve recruitment and retention in rural areas specifically. It also administers the "Choose West Virginia" program, which incentivizes out of state medical students to remain in West Virginia after graduation through tuition waivers,<sup>37</sup> as well as a nursing scholarship program.<sup>38</sup>

The **Kanawha-Charleston Health Department** is responsible for monitoring and responding to public health trends in the county, providing health education and basic preventive services such as screenings and immunizations, as well as planning and implementing health and wellness initiatives in partnership with local and state stakeholders.<sup>39</sup> The Health Department also oversees a county-wide HIV Task Force tasked with expanding access to HIV testing and care in the county.<sup>40</sup>

### Primary Care Providers

- There are five hospital systems with locations in Kanawha County. **Charleston Area Medical Center (CAMC)** is the largest not-for-profit hospital in West Virginia and operates a primary care clinic in the county for patients of all ages.<sup>41</sup> CAMC is also a teaching hospital.<sup>42</sup> **Thomas Health System** operates two longstanding community hospitals<sup>43</sup> and five primary care centers in the Charleston metro area.<sup>44</sup> Both systems have recently undergone structural changes: CAMC joined with Mon Health System, a hospital network based near the state's northern border, to form Vandalia Health,<sup>45</sup> while Thomas Health announced a formal affiliation with West Virginia University Health Systems in 2022.<sup>46</sup> Other hospitals serving the county include **Montgomery General Hospital**, which operates an outpatient clinic providing primary care services,<sup>47</sup> and **Highland Hospital**, which is an addiction treatment and recovery center.<sup>48</sup>
- There are four **FQHC** systems currently active in Kanawha County—**Cabin Creek Health Systems, FamilyCare, Valley Health Association**, and **Southern West Virginia Health System (SWVHS)**.<sup>49</sup> Together they operate about 18 clinical sites and 3 mobile health units throughout the county.<sup>50</sup> Another safety net provider in the area, Hygeia Facilities Foundation, was previously designated as an FQHC Look-Alike and Black Lung Clinic,<sup>51</sup> but joined SWVHS's FQHC network in early 2023.<sup>52</sup>
- There are 10 **school-based health center (SBHC)** clinics located in Kanawha County, all of which are sponsored by local FQHC systems.<sup>53</sup> Cabin Creek Health Systems sponsors 7 SBHCs,<sup>54</sup> while FamilyCare sponsors three SBHCs as well as one mobile unit that serves four local schools.<sup>55</sup>
- **West Virginia Health Right** is the state's oldest and largest **free clinic** system. It provides primary care and specialty care to over 40,000 West Virginians regardless of insurance status and ability to pay.<sup>56</sup> WV Health Right currently operates three clinical sites within the city of Charleston, a community wellness center, a mobile medical unit, and a mobile dental unit.

## Other Organizations

- Funded under the federal Area Health Education Center (AHEC) grant, **West Virginia's AHEC** program is operated by West Virginia University through the WV AHEC Program Office in Charleston, which manages five regional centers, including the Central Counties AHEC, which is based out of an FQHC in Kanawha County. The program aims to strengthen the state's health care workforce by supporting pipeline programs for 9-12 students interested in health professional career tracks, providing continuing education for health care professionals, and interprofessional training for health professions students, and administering the AHEC Rural Community Health Scholars Program.
- The **West Virginia Rural Health Association (WVRHA)** is a non-profit membership organization that advocates for rural health access and equity in the state. WVRHA serves as a resource hub with information on rural health disparities in West Virginia for policymakers, health care providers, and community leaders. WVRHA recently advocated for the creation of a new tax credit to improve health professional participation in rural primary care academic mentoring networks.
- The **West Virginia Primary Care Association (WVPCA)** is a non-profit membership organization representing the state's safety net health care health professionals, including 32 community health centers and one rural health center.<sup>57</sup> WVPCA conducts training, provides technical assistance, and advocates on issues affecting safety net health professionals, such as school-based health, health insurance enrollment, and patient-centered medical home (PCMH) accreditation.
- The **Kanawha Coalition for Community Health Improvement (KCCHI)** is a coalition funded by two local health systems—Thomas Health and the Charleston Area Medical Center—to conduct a Community Health Needs Assessment for Kanawha County every three years.<sup>58</sup> KCCHI is also tasked with bringing together stakeholders to develop a centralized health improvement strategy.

## Methodology

To better understand the impact of policy interventions and stakeholder efforts on primary care access in Kanawha County, we conducted qualitative interviews with 12 local and state stakeholders including health care health professionals, advocates, researchers, and government officials with ties to Kanawha County and/or knowledge of primary care in West Virginia. Interviews occurred between February 1, 2023, and March 2, 2023.

## DESCRIPTIVE ANALYSIS AND FINDINGS

### 1. Availability of Primary Care Providers

#### State Is Investing in Recruitment and Retention Programs, but Can't Match Incentives Offered in Neighboring States

As mentioned above, the numbers of PCPs in West Virginia might be high relative to other states, but low-income populations still face difficulties accessing primary care,<sup>59</sup> suggesting a lack of equity in the distribution or availability of these PCPs. Consequently, almost 44% of West Virginians live in a federally designated primary care HPSA.<sup>60</sup>

West Virginia has invested heavily in programs to help recruit and retain primary care health professionals in the state's underserved areas to address the low ratios of PCPs to patients in these areas. Between the Office of Rural Health (ORH) within the Department of Health and Human Resources and the West Virginia Higher Education Policy Commission (WVHEPC), the state funds at least four different scholarship and loan repayment programs that obligate medical students, primary care residents, and physicians to practice in underserved areas within West Virginia:

- The **Health Sciences Services Program** administered by WVHEPC is a loan repayment program for students in their final year of training at a health professions school. The program awards \$30,000 to medical students and \$15,000 to other health professions students, such as those training to become nurse practitioners (NPs) or physician assistants (PAs).<sup>61</sup> The program provides a total of 15 awards every academic year and recipients are required to work in an underserved community full-time for two years or part-time for four years.<sup>62</sup> Since 1995, 231 participants have completed their service obligations, and in the 2021-2022 academic year, participants included three medical students and one nurse practitioner student in addition to certain other health professionals.<sup>63</sup>
- The **Choose West Virginia Practice Program**, also administered by WVHEPC, provides tuition waivers to out-of-state medical students enrolled in a West Virginia medical school who choose to practice in West Virginia.<sup>64</sup> Two medical students from each of the three medical schools in the state are eligible to receive the waiver per year.<sup>65</sup> Participants are required to return to West Virginia after completing their residency and/or fellowship training and practice in the state for the same number of years for which they received their tuition waiver.<sup>66</sup> The first round of awards were provided in 2019-2020, and in 2020-2021, awards were provided to six new students and eight returning students.<sup>67</sup> The state legislature is considering a bill to double the number of eligible participants in this program.<sup>68</sup>
- The **Recruitment and Retention Communities Program** administered by ORH is a loan repayment program that provides up to \$10,000 (with a matching \$10,000 provided by the community or practice site where the participant will work) for every year that a primary care resident or physician works full-time in a HPSA or MUA.<sup>69</sup> Participants are eligible to apply for this program for up to five years.<sup>70</sup>
- The **State Loan Repayment Program** (SLRP) administered by ORH is similar to the SLRPs offered by most other states. The federal government and state government both fund the program to provide \$40,000 in loan repayment to primary care physicians who agree to serve in a HPSA for a minimum of two years. Participants can choose to extend their commitments for two additional years for an additional loan repayment amount of \$25,000 per year.

In addition to these, the state administers a number of federal National Health Service Corps scholarship and loan repayment programs. However, a number of stakeholders representing both providers and the state government expressed concern about the inadequacy of the

award amounts for these programs. Stakeholders said that local providers face fierce competition from larger health systems in bigger cities like Nashville and Charlotte that can cover the entirety of an applicant's medical school loans outright.

Talking specifically about the Student Loan Repayment program, state officials said that they have had difficulty finding physicians to apply, potentially because the \$40,000 amount for a two-year commitment is not competitive in light of offers from other health systems. The American Rescue Plan Act of 2021 increased the funding for this program from \$125,000 to about \$690,000.<sup>71</sup> The state is using this additional federal funding to increase the award amount to \$50,000 for physicians, up to \$40,000 for PAs and NPs, and up to \$25,000 for those with a Bachelor's of Science in Nursing.<sup>72</sup> The bigger awards will be available beginning in 2023, and state officials hope that they will help recruit more health professionals into the program.

Candidates can stack awards from various federal and state programs to get a majority, if not all, of their loans paid off. However, the patchwork of funding can be complicated to navigate, and many medical students do not understand their options. State officials visit medical schools once a year to make students aware of these programs, but most of the programs are for residents and physicians, and thus of little immediate interest to medical students. A stakeholder who works with medical students believes that scholarship programs that pay for medical school upfront and obligate the student to service would have more success than loan repayment programs that must compete with other, potentially more lucrative, offers.

Aside from low award amounts, eligibility criteria for these programs can also serve as a barrier for local safety net providers trying to recruit physicians using these programs. Safety net providers in Charleston are sometimes unable to qualify as eligible service sites for some of the programs described above because the presence of multiple health systems in the city reduces their HPSA and MUA scores. One FQHC provider said that "there is a need in the population, but it does not show up in the numbers." Another safety net provider said that though they are located in Charleston, they also serve people who travel to them from the rural areas right outside of Charleston, but current rules are unable to fully account for this expanded service area.

### FQHCs Face Special Challenges in Recruitment

Multiple FQHC providers spoke about additional challenges that safety net sites face recruiting primary care clinicians. One FQHC provider found that the burden of treating a complex patient population, with patients presenting with four to five chronic illnesses each, can drive away potential recruits. This problem is especially compounded by an environment driven by fee-for-service payments where "volume is important to keep the doors open and pay people." A provider told us that their volume-based business model has forced them to "schedule a new patient every 15 to 20 minutes, and that creates a lot of burnout for doctors." This is an issue common among all FQHCs.

Local FQHC providers do serve as clinical sites for medical student rotations, but at least one provider told us that this has not really helped in terms of recruitment. A medical school faculty member said that it is unclear whether their medical students really understand what an FQHC is even if they rotated through one. They said that if “FQHCs were a bit more aggressive about following up with students about their experience, inviting them to apply for a job and telling them that they will pay their loans, that would certainly pique interest.”

Studies show that physicians who receive their graduate medical education or residency training at FQHCs are far more likely to work in an FQHC,<sup>73</sup> but local FQHC providers in Kanawha County have struggled to establish their own residency programs. One local FQHC provider told us about previous attempts to partner with a local health system to serve as a secondary site for their family medicine residents when the federal Teaching Health Center grants were first announced. However, accreditation standards put an end to those efforts. For example, the standards required family medicine residents to perform a certain number of deliveries, but there were never enough babies for them to deliver (this particular rule seems to have been relaxed recently<sup>74,75</sup>).

Local FQHC providers also spoke of the intense competition they face from local hospitals and health systems in recruiting those finishing up their residency programs. One FQHC provider mentioned a nearby hospital system with a family medicine residency training program that would seem to be a promising source of physicians, but because these residents are trained primarily in a hospital setting, they tend to be hired by their training hospital before an FQHC can try to recruit them. Compounding this issue is the fact that hospital systems can pay these newly minted physicians a lot more than an FQHC can. This has left the local FQHCs competing against one another for the small pool of applicants who are interested in FQHC placements, increasing costs for all FQHCs.

### Recruitment Is Hard, Retention May Be Even Harder

Between 2012 and 2017, the state’s three medical schools graduated almost 2,000 medical students, but only 20% of them practice in the state post-residency (3% in Kanawha County), with 12% practicing primary care in West Virginia (1.25% in Kanawha County) and 6% practicing in rural West Virginia.<sup>76</sup> As one state official put it, even when state “loan repayment programs [get] people to West Virginia....they [do] not keep them there.” The state lacks data on the extent to which practitioners who complete their service obligations stay in the state. Although the state conducts a survey of such providers, the response rate is “less than 50%.” West Virginia, like many other states, is working to develop a better survey process.

State officials attributed these low resident retention numbers to a few different factors. First, they said that it was important for communities, especially rural ones, to make the residents and physicians serving out their obligations feel welcome and encouraged to build a life there. Communities cannot just rely on the “golden handcuffs” of loan repayment. Activities such as hosting monthly dinners and providing housing can make residents and physicians feel more integrated.

Second, state officials find that most medical students who graduate from a West Virginia medical school end up leaving the state for their residency training. According to their esti-

mates, 76% of West Virginia medical school graduates who go on to train at in-state primary care residency programs continue to practice in the state, compared to only 1% of those who leave the state to complete their residency.<sup>77</sup> There is one major obstacle preventing West Virginia residency programs from directly recruiting West Virginia medical students. Almost all graduating medical students who want to enroll in a residency program must participate in the National Resident Matching Program (NRMP), which allows residency programs and graduating medical students across the country to rank one another through a complex algorithm that matches the positions with the applicants.<sup>78</sup> One state policymaker defined the matching algorithms as a “crapshoot.” While some West Virginia residency programs informally coordinate with in-state medical students to rank one another highly, the process is still imprecise. However, at least one medical school in the state has been able to bypass the match to try and improve recruitment and retention of physicians in the state (See sidebar).

### West Virginia University Residency Programs Opt Out of the Match to Improve Provider Recruitment and Retention

West Virginia University (WVU) School of Medicine has two programs that allow their residency programs to directly recruit WVU medical school graduates instead of going through the NRMP.

The Mountaineer Accelerated Track to Enter Residency (MATTER) Program creates an accelerated track for medical students who are prepared to commit to a specialty, such as family medicine, after their first year of medical school.<sup>79</sup> Students apply for a specialty track at the beginning of their second year, and if they are accepted, they take on an accelerated medical school curriculum, which allows them to graduate in the August after their third year, saving them a year’s worth of tuition.<sup>80</sup> However, this August graduation date makes these students ineligible to participate in the NRMP, because those matched through the NRMP must be available to start their residency in July.<sup>81</sup> According to school officials, NRMP granted the MATTER program a waiver to allow WVU’s residency training programs to directly accept graduating MATTER track students. Interest in the program is high, especially from out-of-state students, who can save close to \$65,000 in tuition. While the new program hasn’t yet graduated its first cohort of residents, program officials expect to see a high retention rate given the state’s past success in retaining those who stay in the state for their residency programs.

The Rural Scholars Program is an older program that began in WVU School of Medicine’s family medicine department. Medical students apply in their third year of medical school and, if accepted, have a tailored fourth year curriculum to give them more rural medicine experience. WVU School of Medicine’s family medicine department has had a waiver from the NRMP for many years to help them improve the recruitment and retention of physicians in rural West Virginia. However, those familiar with the Rural Scholars Program said that when WVU School of Medicine’s pediatrics and internal medicine departments wanted to participate in the program for similar reasons, they were denied waivers until recently, when the NRMP’s organizing body finally approved the waiver for the pediatrics department.

## Influx of Investment in the Area Health Education Centers Program Helps It Expand Reach

The federal Area Health Education Centers (AHEC) program was established in the 1970s to “develop and enhance health professional education and training networks within communities, academic institutions, and community-based organizations.”<sup>82</sup> In turn, these networks are meant to “increase diversity among health professionals, broaden the distribution of the health workforce, enhance health care quality, and improve health care delivery” to underserved areas and populations.<sup>83</sup>

West Virginia’s AHEC program (WV AHEC) is run by the WVU School of Medicine and recently received a federal grant renewal of \$1.4 million per year for five years.<sup>84</sup> The federal grant for AHECs required a 1:1 non-federal funding match, and according to stakeholders familiar with the program, WV AHEC has always exceeded that requirement thanks to investment from the state’s Higher Education Policy Commission (WVHEPC) and the host university, WVU. Program officials find that “to do everything [they] want to do, they require more than the 1:1 match.”

WV AHEC conducts community-based pipeline programs for K-12 students, continuing education for trained professionals, and implements the AHEC Scholars Program (called the Rural Community Health Scholars Program in WV), which brings together students from different health professional schools for education and experiential training on a number of core topics including interdisciplinary training, social determinants of health, and cultural competency.<sup>85</sup> In addition, the WV AHEC offers an Interprofessional Education rotation (IPE) that brings together a team of health professions students and a preceptor to participate in a team project designed to target a specific need in a rural community.

Program officials said that the additional state funding has helped “support and match” AHEC’s many initiatives, which have a relatively large reach. In 2021-2022, 4,500 students and professionals participated in WV AHEC’s programs throughout the state: about 1,400 through pipeline programs, 1,200 through clinical training programs, 1,700 through continued education, and 94 in the Scholars Program. WV AHEC has also been able to support the development of “other professions that do not get a lot of attention in rural health, like community health workers.” WV AHEC is in the process of conducting a CHW workforce survey and standardizing CHW education and reimbursement.

According to program officials, their “heavy emphasis on program evaluation” has helped garner support and funding from the state. WV AHEC has a dedicated program evaluator and a tracking system to help them meet reporting requirements. However, program officials expressed frustration over the difficulty of tracking program participants once they leave the program or the state.

## State Efforts to Bolster the Non-Physician Provider Workforce Is Helping Alleviate Physician Shortage Issues

Several safety net providers reported that mid-level or advanced practice providers (APPs) like NPs and PAs have been “very helpful in alleviating the [physician] workforce shortage.” One FQHC provider said that they are currently staffed 60% by APPs and 40% by physicians, and that their APPs manage their own patient panels. Another free clinic provider has implemented team-based care with a family medicine-trained NP running the team. Though they are unable to afford full-time physicians and rely on volunteer physicians, having an NP lead the team has helped create “continuity of care, a reduction of errors. . . and increased compliance.”

Despite how helpful they can be, recruiting APPs can also be a challenge for local providers. One local community leader said that though a local community college recently graduated about 100 nurses, the majority of them were not going to stay in Kanawha County or West Virginia. The national nursing shortage, accelerated by the COVID-19 pandemic,<sup>86</sup> has made it difficult for some local providers to compete with what large health systems in bigger cities are willing to pay.<sup>87</sup> Local safety net providers have taken advantage of state and federal loan repayment programs to attract more APPs, and one provider reported that most APPs on their staff have taken advantage of these programs. Local providers also said they have had some success recruiting nurses through a temporary state program that gave nurses a \$30,000 stipend if they were willing to relocate and sign a two-year employment contract.

Policy advocates and safety net providers in the state are also operating, or in the process of establishing, training programs for APPs in rural areas or underserved settings. One FQHC recently established a family medicine NP residency program that operates out of their outpatient clinics. State health policy advocates described their work with two PA programs in the state to create long-term rural rotations, where students will spend eight weeks in a rural primary care setting. State advocates said that since “there is no good data right now [on whether such a rural rotation] “will be a predictor for PA students entering the primary care workforce in a rural area,” they are hoping that these types of initiatives will help them better understand what works and what does not.

Looking beyond APPs, one local FQHC provider described a recent collaboration with the state and local community colleges called “learn and work.” Under this program, the state pays local candidates to go to school for health-related professions, such as medical assistants. They hope that these efforts will help further build the strength of their primary care workforce.

## 2. Improving Access to Outpatient Clinics for Underserved Communities

### Despite Lack of State Funding, Local FQHCs Find Opportunities to Expand

Kanawha County has four FQHC systems operating at least 18 clinical sites across the county. The two largest local FQHC providers are primarily funded through the revenue they make from billing insurers, both public and private. These FQHCs also rely on grant funding to maintain operations. However, one FQHC said that federal grant funding only covers about 15% of their budget, while another attributed 30% of its revenue to grants from both the federal government and other private sources. When West Virginia expanded Medicaid, it ended state funding for FQHCs and diverted it to the Medicaid program.

Although FQHCs traditionally serve primarily Medicaid enrollees and the uninsured, in Kanawha County, almost 40% of FQHC patients are privately insured. Insured patients likely seek care at FQHCs because private practices in certain parts of the county are not taking new patients. FQHC respondents also said that many of their patients were on Medicaid at some point in their lives, and continued their relationship with the health center after they left Medicaid.

One state-level policy expert said that local FQHCs have been expanding the sites in which they operate. Local FQHC providers told us that their expansion strategy is frequently dictated by opportunity, like when academic health centers or physicians running private practices want to sell their practices, especially ones that are struggling financially. That said, sometimes, FQHCs do expand directly in response to community need—one FQHC provider told us of plans to expand into an “economically depressed” area at the edge of Kanawha County because of the lack of providers. However, without adequate state or local leadership to steer the development of new clinical sites in a way that can better meet the community’s population health needs, these expansion efforts are likely to keep taking place in an ad hoc way. Providing funding to safety net providers, such as FQHCs, would give West Virginia the opportunity of not just establishing robust communication between the state and these entities but also to incentivize the development of the state’s safety net provider network in ways that can more effectively work toward the state’s broader population health goals.

### Community Support Bolsters the School-based Health Centers Model in Kanawha County

School-based health centers (SBHCs) help children from underserved areas and their families overcome barriers to primary care such as lack of transportation, inability of parents to get time off from work, and lack of affordability.<sup>88</sup> Kanawha County is home to 10 of the 160 or so SBHCs in the state.<sup>89</sup> Like FQHCs, the SBHCs in West Virginia receive no state funding. However, SBHCs in the state receive some federal funding and bill Medicaid for the services they provide, which has helped them remain sustainable. One FQHC sponsor said that though they bill insurance when they can, as a policy they collect no copays from any of the students. In addition to health centers located within schools, which are typically only available to the children enrolled at the school, local FQHC sponsors also run portable or mobile school health

vans, which can serve one or more schools without a full-time clinic. These mobile school health clinics primarily cater to the students, but are sometimes also open to the community at large.

In Kanawha County, every SBHC is sponsored by one of two large FQHC systems in the region. One FQHC sponsor told us, “Over the years, [FQHCs] have added more SBHCs as people have come to respect the model, and more schools are asking to be part of that initiative.” Though SBHCs initially faced pushback from school nurses and leadership because of lack of clarity on how it would fit into the school, SBHC sponsors have found that “once a school nurse or principal works at a school with an SBHC and sees the benefits,” they are likely to try and establish SBHC services again when they go to another school. Given how critical it is to have community support to establish a SBHC,<sup>90</sup> one FQHC sponsor found that it was much easier for communities to support a new or proposed SBHC when it was affiliated with a parent FQHC organization with a preexisting relationship with the community. Despite this community support and the important need that SBHCs fulfill, the county currently has SBHCs serving only 10 of its 62 public schools.

#### Local Spotlight: West Virginia Health Right Demonstrates the Role that Free Clinics Can Play in Underserved Areas

West Virginia Health Right (WVHR), the state’s oldest and largest free and charitable clinic was founded in 1982 by local physicians who recognized the unmet health needs in the county. Today, WVHR operates three clinical sites, a community wellness center, and a mobile medical clinic serving Kanawha County. WVHR cares for 42,500 patients annually, about 55% of whom are uninsured. (The uninsured rate in the county is 7.9%.) WVHR described this population as “the working poor—those who make too much for Medicaid but are only offered catastrophic or unaffordable employer coverage.” Clinic staff said that a lot of the patients they see are on eight to ten medications, costing them thousands of dollars a month, so WVHR tries to “fill the gap by providing free medication and services so they can stay healthy enough to work.”

The WVHR sites fill gaps in services that the county’s many FQHCs cannot provide. For example, patients come for dental or other services that their insurance will not cover, or because they need to see a specialist. WVHR also finds that a lot of physicians who do not see Medicaid patients at their private practices will work as volunteers with those patients at WVHR, because the clinic does the patient management, helping them avoid missed appointments.

WVHR is primarily funded through grants, and clinic staff described their efforts to find enough funding to stay afloat as “throwing spaghetti against the wall to see what sticks.” With 80 paid staff members (including RNs, NPs, and pharmacy technicians), WVHR has an operating budget of \$8 million and gets only a little over \$1 million from a state appropriation for uncompensated care. Given the high proportion of

uninsured patients they see, only about 10% of their budget comes from billing Medicaid or Medicare. The rest of the shortfall is made up through a patchwork of federal and private grants, and the clinic has two members on staff whose full-time job is to secure and manage grants.

Despite the lure of the federal grant funding, discounted drug pricing, and free liability insurance that FQHCs receive, WVHR would have to give up a lot of benefits to become an FQHC. First, they would have to give up their base of volunteer doctors, including specialists. Second, becoming an FQHC would require them to charge a sliding fee scale when they would prefer not to charge their patients anything. Third, not having to adhere to the strict regulations governing FQHCs allows them to be agile in serving their patients.

WVHR has been able to provide many invaluable services to their patients. They offer both primary and specialty care through 600 volunteer physicians. WVHR has implemented team-based care, with every patient assigned to a team led by a NP, who maintains continuity of care for the patient while coordinating with a slew of volunteer physicians and specialists. They provide walk-in appointments, run their own van service to transport people to and from appointments, and provide short-term childcare so parents can bring their kids to their appointments. They also partner with a local health system to pay a state DHHR employee to be present on site at two of their locations to enroll patients in Medicaid or marketplace plans, which saves patients a trip to the DHHR office to enroll, because “some will never go.”

WVHR also serves as a clinical site for medical student rotations and finds that these rotations have been instrumental in “instilling early the concept of giving back and the challenges faced by underserved populations.” Many times, these medical students have come back to WVHR to donate their time as volunteer physicians. WVHR similarly also partners with local pharmacology programs, nursing programs, and is even poised to have public health students come in to perform on-site research. In the past WVHR struggled with retention of their full-time staff because of low pay. In recent years, paying staff a living wage, along with better benefits, including paid time off for maternity leave, has significantly improved retention.

### 3. Removing Structural Barriers to Primary Care

#### Transportation Barriers Persist, Especially in Rural Areas

Transportation is a major barrier to primary care access, particularly in the rural portions of Kanawha County. According to one county resident, “anytime you leave our urban setting [of Charleston], transportation becomes an issue.” The local public transportation system mostly caters to the Charleston metro area,<sup>91</sup> and some bus routes have further been cut due to the COVID-19 pandemic, leaving those in the county’s more remote areas dependent on family and friends for transportation, or walking to the nearest clinic.

Since 2018, West Virginia has contracted with a third-party broker to provide non-emergency medical transportation (NEMT) services to Medicaid beneficiaries.<sup>92</sup> However, consistent with reports from other rural states,<sup>93</sup> many local providers find this NEMT service unreliable, citing anecdotes of patients missing appointments due to vans running hours behind schedule. Patients also face administrative barriers to using this benefit. NEMT rides generally have to be scheduled five days in advance, and drivers are authorized only to transport patients from the home address on record with the Medicaid agency.<sup>94</sup>

Local safety net providers have spearheaded efforts to fill these transportation gaps. Some community clinics offer their own van services to patients, while others partner with ride-sharing companies. One provider noted that Uber Health is an important resource, especially for their addiction recovery patient population. Some senior services organizations and other non-profit organizations help patients get to and from appointments. Nonetheless, lack of funding remains an obstacle for providers looking to develop and maintain comprehensive transportation assistance programs.

Some providers also emphasized the importance of going to the patients instead of transporting them back and forth to a facility. For example, one local FQHC had its staff routinely visit community sites in Charleston to provide “street medicine,” which helped them build trust with patients outside of traditional clinical spaces. Federal and state COVID-relief funding spurred an expansion of mobile health in the region as mobile health units were launched to provide COVID-19 vaccines and testing in Kanawha County. In 2022, Congress created additional grant funding opportunities for the development of mobile health in rural and underserved areas.<sup>95</sup> Local providers expressed optimism about the role that mobile units can continue to play in reaching vulnerable populations. However, at least one state policy expert cautioned against viewing mobile health units as a “silver bullet” in rural primary care, expressing concerns about the high costs of operating mobile units, and how they may not be the most efficient use of safety net providers’ already limited resources.

### Safety Net Providers Have to Be Flexible to Meet the Needs of Low-Income Patients

Safety net providers have found that many patients are unable to attend primary care appointments during the work day because they either cannot take time off work or arrange childcare. Most private practices in the county provide primary care services by appointment only, and this lack of flexibility can be a barrier, especially for low-income patients. As a result, they said that some Kanawha County residents use the emergency department for their primary care. Multiple FQHCs in Kanawha County have responded by remaining open later in the evenings, providing walk-in appointments, or opening their own urgent care center to provide after-hours primary care services. One local safety net provider told us that they also work on educating their patients about when to go to the emergency department versus the clinic.

## COVID-19 Increased the Adoption of Telehealth, But Its Future Is Uncertain

In line with trends across the country, many Kanawha County providers and patients turned to telehealth during the pandemic. However, providers describe mixed experiences with the continued use of telehealth. One local FQHC provider noted that while about 97% of patient visits were completed over video or phone at the height of pandemic restrictions, this “flipped overnight” once in-person visits resumed—now, most patients want to be seen in person. However, providers also noted that telehealth has been especially helpful for improving access to behavioral health services because patients tend to be more comfortable discussing issues like substance use disorder treatment over the phone than face to face. At least one Kanawha County provider is approaching telehealth as a more permanent strategy to increase access to care, stating that their clinics “should have been doing [telehealth] all along,” because it helps rural patients overcome transportation barriers.

State policy experts noted that the flexibilities in regulations governing telehealth implemented by the federal government during the pandemic—some of which expired with the end of the public health emergency in May 2023<sup>96</sup>—have helped boost the effectiveness of telehealth in West Virginia. Various policy groups are advocating to make some of these flexibilities permanent in the state. For example, the West Virginia Rural Health Association is advocating to maintain payment parity for audio-only telehealth visits at FQHCs and rural health clinics. Researchers at West Virginia State University are partnering with the state Medicaid agency to evaluate how maintaining pandemic flexibilities can potentially benefit the state’s Medicaid population.<sup>97</sup>

Still, significant barriers to the broad adoption of telehealth in West Virginia and Kanawha County persist. Local providers have difficulty reaching older patients, who can be more hesitant to adopt telehealth. Some initiatives have shown promise in making telehealth more accessible to these patients. A pilot program led by West Virginia University has helped former nursing home residents successfully transition back to their homes through the use of remote patient monitoring and telephone or tablet-based access to a nurse who can coordinate their care.<sup>98</sup> One state policymaker hoped that such tools can be deployed more broadly to aid vulnerable populations with disease management.

The other major barrier to the use of telehealth is the lack of necessary infrastructure. Local providers told us that portions of Kanawha County lack access to broadband and cell service, making telehealth impossible to implement in these regions. State representatives have been working on this issue. In 2022, Senators Joe Manchin and Shelley Moore Capito led the effort to appropriate about \$900,000 in federal funds to support the telehealth infrastructure of four health systems in the state.<sup>99</sup> The senators have also been focused on expanding broadband access, facilitating a \$5 million investment in closing the state’s digital divide.<sup>100</sup> Whether these investments will help further establish telehealth as a point of access to primary care for underserved populations in Kanawha County and West Virginia remains to be seen.

## 4. Making Primary Care More Affordable

### Medicaid Expansion Improved Access to Insurance but Not Always Access to Care

West Virginia adopted the ACA's Medicaid expansion in 2014. In the year following, the state's Medicaid enrollment increased by more than 50%.<sup>101</sup> Today, West Virginia ranks among the states with the highest levels of Medicaid enrollment per capita,<sup>102</sup> with over one-third of residents enrolled in Medicaid and the Children's Health Insurance Program.<sup>103</sup> Local providers and state policy experts pointed to the prevalence of Medicaid coverage as the reason for the low uninsured rate in both the state and in Kanawha County. The county also has a high rate of insurance coverage because Charleston is the seat of state government, which employs and provides health insurance to many local residents.

Nevertheless, as one safety net provider put it, "insurance does not always equal access." Many families, particularly those with incomes just above the Medicaid affordability threshold, face considerable financial barriers to services. Indeed, compared to other states, West Virginia has a disproportionately high percentage of under-65 residents experiencing high out-of-pocket medical costs relative to their income.<sup>104</sup>

One provider found that despite the premium subsidies available to these low-income families through the ACA marketplace, many purchase cheap catastrophic plans, which saddle them with high deductibles. The provider observed that low-income families transitioning out of Medicaid, which does not have deductibles, find it hard to understand the concept once they move on to marketplace or job-based insurance. One state policy expert said that "as folks transition from Medicaid where they don't get bills to a commercial payer, there is a learning curve" because the cost sharing is more than they are used to. (The West Virginia Legislature is currently considering a bill that would allow individuals ineligible for Medicaid or Medicare to sign up for a new state health insurance option that mirrors the benefits of the Medicaid program and sets premiums and cost-sharing amounts for families under 200% of the federal poverty level on a sliding scale.<sup>105</sup> )

Generally, Medicaid is more generous than private insurance, providing more comprehensive care with lower out-of-pocket costs.<sup>106</sup> For example, West Virginia's Medicaid program limits prescription drugs copays to \$0 - \$3.<sup>107</sup> In contrast, commercial plans frequently require enrollees to reach their deductible before providing coverage of expensive prescription drugs, and then require high levels of cost-sharing. A local advocate told us about a patient who became ineligible for Medicaid when he got a new job, and ended up having to forgo his insulin for four months because of his new plan's high deductible. (Since this interview was conducted, West Virginia has enacted legislation limiting the cost of a 30-day supply of insulin to \$35, regardless of the person's deductible.<sup>108</sup> )

The complexities and expenses related to private insurance put West Virginians straddling the Medicaid eligibility threshold in a conundrum. A stakeholder involved with enrolling individuals in insurance spoke about people who forgo work promotions in order to remain eligible for Medicaid.

## 5. Improving Comfort and Communication between Providers and Patients

### State Lags in Providing Support to Its CHW Workforce, but Other Stakeholders Are Trying to Fill In

Community health workers can improve access to care by improving communication between local communities and medical providers, and helping residents navigate medical and social services. Several providers and state policy experts said that the state government has yet to focus on building and supporting the CHW workforce, and that the state is “very far behind” surrounding states. For example, although other states have started to establish certification and/or formal training standards for CHWs,<sup>109</sup> West Virginia has not. One organization working on the CHW workforce said that this issue “needs a champion in the governor’s office to lead efforts and bring together the different [stakeholders].”

Some non-governmental stakeholders have stepped in to build up the state’s CHW infrastructure. A recently established CHW consortium meets quarterly to discuss and collaborate on related issues. WV AHEC is undertaking a survey “to find out where the CHWs are and what they are doing.” The medical schools in the region have also stepped up to contribute in a few different ways. The West Virginia School of Osteopathic Medicine’s Center for Rural and Community Health now offers a CHW training program.<sup>110</sup> Faculty at the Marshall University School of Medicine procured federal funding to study the impact of CHWs on health outcomes and costs for diabetes patients.<sup>111</sup> When this federal funding ended, the team partnered with local FQHCs to continue their research and designed a system to incorporate CHWs into a care team.<sup>112</sup>

Despite the lack of standardization or state leadership, several Kanawha County providers have been employing CHWs, primarily paying them through grant funding. One prominent FQHC employs CHWs to help with chronic disease management for hypertension and diabetic patients by reaching out to patients and making sure they are adhering to their treatment plan. Their CHWs also help patients with social determinants of health, such as lack of access to food or housing. Several stakeholders mentioned that they are concerned about continuing to pay their CHWs once their COVID-19 funding runs out.

### Despite Challenges, Local Providers Make Efforts to Reach Patients Experiencing Substance Use Disorders

Given the scale of the opioid epidemic in the state, local providers have focused on finding ways to remove stigma associated with substance use disorders (SUD) and to find ways to reach this vulnerable patient population. For example, the WV AHEC runs a rural immersion program for medical students on rural opioid misuse that dismantles the misperceptions students may have about SUD.<sup>113</sup> According to a program official, though some students presented with certain prejudices at the beginning of the program, after actually meeting patients in recovery homes, they “realized they were making assumptions.”

When the city of Charleston's health department established a syringe service program (providing sterile needles and other drug paraphernalia to reduce needle sharing and spread of infectious diseases), one local FQHC established an office in the same building to build a relationship with the program's patients. Unfortunately, the program was shut down in 2018, which eliminated the FQHC's opportunity to engage with this vulnerable population. Following the closure of the program, cases of Hepatitis C and HIV in Kanawha County soared.<sup>114, 115</sup> After patients stopped coming into their clinic in the health department building, the FQHC staff quickly realized they would have to "get outside of the four walls of the health center" to administer primary care. Providers took to practicing street medicine and later using mobile clinics to meet patients where they are and begin the long process of gaining trust. One staff member shared that "it takes a lot of time and effort" to treat persons with SUD. "It is a lot of listening and trying to get the patient's story, and then you can actually start providing care."

### Local Providers Ramp Up Efforts to Provide Culturally Competent Care to the County's Underserved Black Population

African Americans make up less than 10% of the Kanawha County population, but in some neighborhoods in the western side of the county, Black people make up more than 40% of the population.<sup>116</sup> The director of a clinic operating in the area observed that having a diverse workforce was key to building trust with the community. The organization also hired a director of diversity, equity, and inclusion (DEI) to help find ways to combat the generational mistrust of health care providers within the community. One major accomplishment by the director of DEI was developing a partnership with a network of Black churches in the region, which allowed information about the clinic and crucial health messaging to be shared within the Black community.

## 6. Building a Local Table

Several providers and state policy advocates spoke to us about the importance of having a central convener to bring together providers, social services organizations, state and local government officials, patient representatives, and payers to plan for the county's population health and primary care needs. There is evidence that such community health partnerships can be "an effective means of improving population health, [and] help communities prioritize health needs and streamline resources to address them."<sup>117</sup>

According to a local community advocate, while there are many resources available in Kanawha County, "everyone has been working in siloes so nobody knows what is happening." A recent community health assessment report by the Kanawha Coalition for Community Health Improvement (KCCHI) found that one of the greatest challenges that Kanawha County faces is the general lack of community or cohesion across its government and businesses.<sup>118</sup>

KCCHI was formed in 1994 by two local health systems to pool some of their resources. The health systems count their contributions to the coalition as a community benefit, which helps them maintain their tax exemption status as non-profit hospitals. KCCHI produces its community health assessment report every three years. Local community advocates said

that the local health department relies on this report instead of conducting its own needs assessment. However, the funding for KCCHI is limited, and currently, the coalition only has one employee. Further, there is little to no funding to help KCCHI act on its findings.

State and local governments have occasionally stepped up to convene primary care stakeholders in Kanawha County but these efforts have been piecemeal and generally have had a narrow focus. For example, responding to an uptick in HIV cases in the county, the local health department convened local providers and community-based organizations to develop a cohesive response. Similarly, the COVID-19 pandemic brought in funding and a reason for state and local stakeholders to meet regularly and coordinate efforts. Still, according to those involved in the county's health care landscape, broader efforts to tackle population health and primary care issues are currently lacking.

## CONCLUSION

As the seat of state government and home to the capital of the state, Kanawha County has more resources to provide primary care services than other, more rural parts of West Virginia, but gaps remain.

In some ways, the state has made strides toward improving access to primary care for underserved populations. For example, the state has dedicated significant funding and technical resources to its workforce development programs, particularly for physicians. However, while the state has many loan repayment and scholarship programs, both recruitment and retention for these programs have generally lagged. Young doctors are reluctant to live and work in rural areas and local providers face tough competition for the primary care workforce. Additionally, this case study finds that there might be variation in the effectiveness of these state programs. One medical school faculty member spoke of the effectiveness of scholarship programs over loan repayment programs, because the latter compete with far more lucrative offers from larger health systems. For example, with the help of state funding, the state's medical schools have developed training programs like the Rural Scholars Program designed to nurture expertise in and enthusiasm about rural health care, which has shown promise in helping recruit and retain physicians in these areas. Beyond physician workforce development, the state has also invested in loan repayment, scholarship, and curricular programming for non-physician providers like nurse practitioners and physician assistants to build out the state's primary care workforce.

Given the WV Higher Education Policy Commission's focus on program evaluation, the state is well-positioned to finetune their loan repayment, scholarship, and curricular program offerings and decide which programs and which elements of those programs are worth investing in.

West Virginia's decision to expand Medicaid has helped remove affordability barriers for the high proportion of low-income residents in the county who qualify for the program. However, many stakeholders expressed concern about challenges for those whose income is slightly

too high for Medicaid. These people have had trouble finding affordable private insurance that does not leave them with significant cost-sharing responsibilities. This challenge is not unique to West Virginia and many states are working on finding ways to protect this “churn” population, which transitions into and out of Medicaid eligibility because of a fluctuating income.<sup>119</sup>

Despite these steps forward, there are some missed opportunities in state action preventing bigger strides in primary care access for underserved populations. First, while FQHCs and SBHCs have made creative use of their resources and community support to deliver critical primary care services to underserved communities, increased funding and oversight from the state could further expand the impact of these safety net clinics. Second, West Virginia has been slower than many other states to invest in its CHW workforce, which is critical in bridging the gap between patient and provider communities.

Local safety net providers work overtime to meet the complex needs of the vulnerable populations they serve, but many stakeholders find that their efforts tend to be siloed. There is no entity with the resources and ability to convene all local health and social service providers to better plan for the population health needs of the county. Developing such community health partnerships could help streamline and magnify the impact of the relatively robust resources ostensibly available to the low-income residents of Kanawha County compared to the rest of the state.

## NOTES

- <sup>1</sup> Basu S, Berkowitz SA, Phillips RL, Bitton A, Landon BE, Phillips RS. Association of primary care physician supply with population mortality in the United States, 2005-2015. *JAMA Intern Med.* 2019;179(4):506-514. doi:10.1001/jamainternmed.2018.7624. Accessed February 18, 2022.
- <sup>2</sup> Starfield B, Shi L, Macinko J. Contribution of primary care to health systems and health. *Milbank Q.* 2005;83(3):457-502. doi:10.1111/j.1468-0009.2005.00409.x. Accessed February 18, 2022.
- <sup>3</sup> Kringos DS, Boerma W, van der Zee J, Groenewegen P. Europe's strong primary care systems are linked to better population health but also to higher health spending. *Health Aff (Millwood).* 2013;32(4):686-694. doi:10.1377/hlthaff.2012.1242. Accessed February 18, 2022.
- <sup>4</sup> Hansen J, Groenewegen P, Boerma W, Kringos DS. Living in a country with a strong primary care system is beneficial to people with chronic conditions. *Health Aff (Millwood).* 2015;34(9):1531-1537. doi:10.1377/hlthaff.2015.0582. Accessed February 18, 2022.
- <sup>5</sup> Tikkanen R, Abrams MK. U.S. Health Care from a Global Perspective, 2019: Higher Spending, Worse Outcomes? Commonwealth Fund; 2020. doi:10.26099/7avy-fc29. Accessed February 18, 2022.
- <sup>6</sup> Penchansky R, Thomas JW. The concept of access: definition and relationship to consumer satisfaction. *Med Care.* 1981;19(2):127-140. doi:10.1097/00005650-198102000-00001. Accessed February 18, 2022.
- <sup>7</sup> Kona M, Houston M, Gooding N. The Effectiveness of Policies to Improve Primary Care Access for Underserved Populations: An Assessment of the Literature. Milbank Memorial Fund; 2021. [https://www.milbank.org/wp-content/uploads/2022/01/Georgetown\\_6.pdf](https://www.milbank.org/wp-content/uploads/2022/01/Georgetown_6.pdf). Accessed February 18, 2022.
- <sup>8</sup> Kona M, Houston M, Walsh-Alker E. Evaluating the Effectiveness of Policies to Improve Primary Care Access for Underserved Populations: Fact Sheets. <https://www.milbank.org/publications/the-effectiveness-of-policies-to-improve-primary-care-access-for-underserved-populations/#factsheets>. Accessed February 18, 2022.
- <sup>9</sup> Kona M, Houston M, Clark J, Walsh-Alker E. Assessing the Effectiveness of Policies to Improve Access to Primary Care for Underserved Populations: Case Study Analysis of Grant County, New Mexico. Milbank Memorial Fund; 2022. <https://www.milbank.org/publications/assessing-the-effectiveness-of-policies-to-improve-access-to-primary-care-for-underserved-populations-case-study-analysis-of-grant-county-new-mexico/>. Accessed June 13, 2022.

- <sup>10</sup> Kona M, Houston M, Clark J, Walsh-Alker E. Assessing the Effectiveness of Policies to Improve Access to Primary Care for Underserved Populations: A Case Study Analysis of Baltimore City, Maryland. Milbank Memorial Fund; 2022. <https://www.milbank.org/publications/assessing-the-effectiveness-of-policies-to-improve-access-to-primary-care-for-underserved-populations-a-case-study-analysis-of-baltimore-city-maryland/>. Accessed September 2, 2022.
- <sup>11</sup> Kona M, Houston M, Clark J, Walsh-Alker, E. Assessing the Effectiveness of Policies to Improve Access to Primary Care for Underserved Populations: A Case Study of Columbia County, Arkansas. Milbank Memorial Fund; 2023. <https://www.milbank.org/publications/assessing-the-effectiveness-of-policies-to-improve-access-to-primary-care-for-underserved-populations-a-case-study-analysis-of-columbia-county-arkansas/>. Accessed January 13, 2023.
- <sup>12</sup> Kona M, Houston M, Walsh-Alker E, Torres Carrillo Y. Assessing the Effectiveness of Policies to Improve Access to Primary Care for Underserved Populations: A Case Study of Detroit, Michigan. Milbank Memorial Fund; 2023. <https://www.milbank.org/publications/assessing-the-effectiveness-of-policies-to-improve-access-to-primary-care-for-underserved-populations-case-study-analysis-detroit-michigan/>. Accessed May 23, 2023.
- <sup>13</sup> Kanawha County, West Virginia. United States Census Bureau QuickFacts website. <https://www.census.gov/quickfacts/fact/table/kanawhacountywestvirginia/PST045221>. Accessed April 13, 2023.
- <sup>14</sup> Charleston City, West Virginia; Kanawha County, West Virginia. United States Census Bureau QuickFacts website. <https://www.census.gov/quickfacts/fact/table/charlestoncitywestvirginia,kanawhacountywestvirginia/PST045221>. Accessed April 13, 2023.
- <sup>15</sup> List of Rural Counties and Designated Eligible Census Tracts in Metropolitan Counties. Health Resources & Services Administration data website. <https://data.hrsa.gov/Content/Documents/tools/rural-health/forhpeligibleareas.pdf>. Accessed April 13, 2023.
- <sup>16</sup> Kanawha, WV County Health Rankings. <https://www.countyhealthrankings.org/explore-health-rankings/west-virginia/kanawha?year=2022>. Accessed April 13, 2023.
- <sup>17</sup> Kanawha County, West Virginia. United States Census Bureau QuickFacts website. <https://www.census.gov/quickfacts/fact/table/kanawhacountywestvirginia/PST045221>. Accessed April 13, 2023.
- <sup>18</sup> Raby J. Leaving home: West Virginia population drop is largest in US. AP News. May 22, 2021. <https://apnews.com/article/al-state-wire-west-virginia-lifestyle-census-2020-business-9b94594a74d6b7ab1bee153a425981d9>. Accessed April 13, 2023.
- <sup>19</sup> Unemployment Rates by County: February 2023. Workforce West Virginia website. <http://lmi.workforcewv.org/DataRelease/CountyRelease.html>. Accessed April 13, 2023

- <sup>20</sup> The Employment Situation—March 2023. U.S. Bureau of Labor Statistics website. <https://www.bls.gov/news.release/pdf/empisit.pdf>. Accessed April 13, 2023.
- <sup>21</sup> West Virginia; Kanawha County, West Virginia. United States Census Bureau QuickFacts website. <https://www.census.gov/quickfacts/fact/table/WV,kanawhacountywestvirginia/PST045221>. Accessed April 13, 2023.
- <sup>22</sup> United States; Kanawha County, West Virginia. United States Census Bureau QuickFacts website. <https://www.census.gov/quickfacts/fact/table/US,kanawhacountywestvirginia/PST045221>. Accessed April 13, 2023.
- <sup>23</sup> Medicaid 101: An Overview of West Virginia’s Medicaid Program. West Virginia Department of Health & Human Resources website. <https://dhhr.wv.gov/bms/BMSPUB/Documents/Medicaid%20101.pdf>. Accessed April 13, 2023.
- <sup>24</sup> Percentage of Population Enrolled in Medicaid or CHIP by State. Medicaid.gov website. <https://www.medicaid.gov/state-overviews/scorecard/percentage-of-population-enrolled-medicaid-or-chip-state/index.html>. Accessed April 13, 2023.
- <sup>25</sup> County Profiles – West Virginia Enrollee Rates and Rate of Enrollees Receiving Managed Care in 2020. West Virginia University Health Affairs Institute website. <https://dhhr.wv.gov/bms/BMSPUB/Documents/Analysis%20Brief%20-%202020%20County%20Profiles%20%282022-03-03%20v1%20AA%29%20%281%29.pdf>. Accessed April 13, 2023.
- <sup>26</sup> 2022 Annual Report. America’s Health Rankings website. <https://www.americahealthrankings.org/learn/reports/2022-annual-report>. Accessed April 13, 2023.
- <sup>27</sup> West Virginia Opioid Summary. National Institute on Drug Abuse website. <https://nida.nih.gov/sites/default/files/21991-west-virginia-opioid-summary.pdf>. Accessed April 13, 2023.
- <sup>28</sup> Merino R, Bowden N, Katamneni S, Coustasse A. The Opioid Epidemic in West Virginia. *Health Care Manag.* 2019;38(2):187-195. doi: 10.1097/HCM.0000000000000256. Accessed April 13, 2023.
- <sup>29</sup> Statistics about the population of West Virginia. West Virginia Department of Health and Human Resources website. [https://dhhr.wv.gov/hpcd/data\\_reports/pages/fast-facts.aspx](https://dhhr.wv.gov/hpcd/data_reports/pages/fast-facts.aspx). Accessed April 13, 2023.
- <sup>30</sup> Kanawha, WV County Health Rankings. <https://www.countyhealthrankings.org/explore-health-rankings/west-virginia/kanawha?year=2022>. Accessed April 13, 2023.
- <sup>31</sup> West Virginia: 2021 State Level Data and Ranks. County Health Rankings website. [https://www.countyhealthrankings.org/sites/default/files/media/document/CHR2021\\_WV.pdf](https://www.countyhealthrankings.org/sites/default/files/media/document/CHR2021_WV.pdf). Accessed April 13, 2023.

- <sup>32</sup> Corcoran KE, Scheitle CP, Remsburg T. Having a Primary Care Provider in West Virginia: West Virginia Social Survey Report. West Virginia University Survey Research Center. November 16, 2020. <https://survey.wvu.edu/files/d/698149f8-bf28-47ff-ad50-a57f8ab51a97/primary-care-physician-accessible.pdf>. Accessed April 13, 2023.
- <sup>33</sup> Primary Care Health Professional Shortage Areas (HPSAs). Kaiser Family Foundation. September 30, 2022. <https://www.kff.org/other/state-indicator/primary-care-health-professional-shortage-areas-hpsas/?currentTimeframe=0&sortModel=%7B%22colId%22:%22Location%22,%22sort%22:%22asc%22%7D>. Accessed April 13, 2023.
- <sup>34</sup> HPSA Find. HRSA Data Warehouse website. <https://data.hrsa.gov/tools/shortage-area/hpsa-find>. Accessed April 13, 2023.
- <sup>35</sup> MUA Find. HRSA Data Warehouse website. <https://data.hrsa.gov/tools/shortage-area/mua-find>. Accessed April 13, 2023.
- <sup>36</sup> State Funding to Health Centers: Overview 2004–2010. National Association of Community Health Centers website. <https://www.nachc.org/wp-content/uploads/2015/11/State-Funding-Fact-Sheet-04-10.pdf>. Accessed April 13, 2023.
- <sup>37</sup> Choose West Virginia Practice Program. College for WV website. <https://www.collegeforwv.com/programs/choose-west-virginia-practice-program/>. Accessed April 13, 2023.
- <sup>38</sup> West Virginia Nursing Workforce Expansion Program website. <https://wvnursingworkforce.org/>. Accessed April 13, 2023.
- <sup>39</sup> Kanawha-Charleston Health Department website. <https://www.kchdwv.org>. Accessed April 13, 2023.
- <sup>40</sup> HIV Task Force. Kanawha-Charleston Health Department website. <https://www.kchdwv.org/hiv-task-force/>. Accessed April 13, 2023.
- <sup>41</sup> Family Medicine Center. Charleston Area Medical Center website. <https://www.camc.org/services/family-medicine-center>. Accessed April 14, 2023.
- <sup>42</sup> About CAMC. Charleston Area Medical Center website. <https://www.camc.org/about-camc>. Accessed April 14, 2023.
- <sup>43</sup> About Us. WVU Medicine website. <https://wvumedicine.org/thomas-hospitals/about-us/>. Accessed April 14, 2023.
- <sup>44</sup> Primary Care. WVU Medicine website. <https://wvumedicine.org/thomas-hospitals/services/thomas-health-cares/>. Accessed April 14, 2023.
- <sup>45</sup> Vandalia Health website. <https://vandaliahealth.org/>. Accessed April 14, 2023.

- <sup>46</sup> Thomas Health to become full member of the WVU Health System. WVU Medicine website. November 11, 2022. <https://wvumedicine.org/news/article/thomas-health-to-become-full-member-ofwvu-health-system/>. Accessed April 14, 2023.
- <sup>47</sup> Montgomery Physician's Clinic. Montgomery General Hospital website. <https://mghwv.com/physicians-clinic>. Accessed April 14, 2023.
- <sup>48</sup> About Us. Highland Hospital website. <https://highlandhosp.com/about-highland/>. Accessed April 14, 2023.
- <sup>49</sup> Health Center Program Uniform Data System Data: West Virginia. HRSA Data Warehouse website. <https://data.hrsa.gov/tools/data-reporting/program-data?-type=AWARDEE&state=WV>. Accessed April 17, 2023.
- <sup>50</sup> Health Center Program Uniform Data System Data: West Virginia. HRSA Data Warehouse website. <https://data.hrsa.gov/tools/data-reporting/program-data?-type=AWARDEE&state=WV>. Accessed April 17, 2023.
- <sup>51</sup> Facility Details: Hygeia Facilities Foundation, Inc. West Virginia Department of Health and Human Resources website. <https://dhhr.wv.gov/dpc/Services/Pages/facility.aspx?Facility=Hygeia%20Facilities%20Foundation,%20Inc>. Accessed April 17, 2023.
- <sup>52</sup> Perry P. SWVHS and Hygeia to merge. Coal Valley News. October 5, 2022. [https://www.coalvalleynews.com/news/swvhs-and-hygeia-to-merge/article\\_c9fc-bea2-4df3-5c31-9104-be615be5ca07.html](https://www.coalvalleynews.com/news/swvhs-and-hygeia-to-merge/article_c9fc-bea2-4df3-5c31-9104-be615be5ca07.html). Accessed April 14, 2023.
- <sup>53</sup> Directory of West Virginia School-Based Health Center Services and Other Useful Resources: 2019-2020. Marshall University School of Medicine School Health Technical Assistance Center. <https://wvde.us/wp-content/uploads/2019/10/WV-SBHC-Directory-2019-2020-Oct-10-Version.pdf>. Accessed April 17, 2023.
- <sup>54</sup> School Based Health Centers. Cabin Creek Health Systems website. <http://cabin-creekhealth.com/school-based-health-centers/>. Accessed April 14, 2023.
- <sup>55</sup> School-Based Health Programs. FamilyCare Health Centers website. <https://familycarewv.org/service/school-based-health-programs/>. Accessed April 14, 2023.
- <sup>56</sup> About. West Virginia Health Right website. <https://wvhealthright.org/about/>. Accessed April 14, 2023.
- <sup>57</sup> Organizational Members. WV Primary Care Association website. [https://www.wvpca.org/organizational\\_members](https://www.wvpca.org/organizational_members). Accessed April 14, 2023.
- <sup>58</sup> About Us. Kanawha Coalition for Community Health Improvement website. <https://www.kcchi.info/about>. Accessed April 14, 2023.

- <sup>59</sup> Corcoran KE, Scheitle CP, Remsburg T. Having a Primary Care Provider in West Virginia: West Virginia Social Survey Report. West Virginia University Survey Research Center. November 16, 2020. <https://survey.wvu.edu/files/d/698149f8-bf28-47ff-ad50-a57f8ab51a97/primary-care-physician-accessible.pdf>. Accessed April 13, 2023.
- <sup>60</sup> Primary Care Health Professional Shortage Areas (HPSAs). Kaiser Family Foundation. September 30, 2022. <https://www.kff.org/other/state-indicator/primary-care-health-professional-shortage-areas-hpsas/?currentTimeframe=0&sortModel=%7B%22colId%22:%22Location%22,%22sort%22:%22asc%22%7D>. Accessed April 13, 2023.
- <sup>61</sup> Health Sciences Service Program: How It Works. College for WV website. <https://www.collegeforwv.com/programs/health-sciences-service-program/how-it-works/>. Accessed April 14, 2023.
- <sup>62</sup> Health Sciences Service Program: Service Obligations. College for WV website. <https://www.collegeforwv.com/programs/health-sciences-service-program/service-obligations/>. Accessed April 14, 2023.
- <sup>63</sup> 2022 West Virginia Health Sciences and Rural Health Report. West Virginia Higher Education Policy Commission. [https://www.wvhepc.edu/wp-content/uploads/2022/12/wvhepc003957-2022-Health-Science-Report\\_digital.pdf](https://www.wvhepc.edu/wp-content/uploads/2022/12/wvhepc003957-2022-Health-Science-Report_digital.pdf). Accessed April 17, 2023.
- <sup>64</sup> Choose West Virginia Practice Program. College for WV website. <https://www.collegeforwv.com/programs/choose-west-virginia-practic-program/>. Accessed April 14, 2023.
- <sup>65</sup> Choose West Virginia Practice Program. College for WV website. <https://www.collegeforwv.com/programs/choose-west-virginia-practic-program/>. Accessed April 14, 2023.
- <sup>66</sup> Choose West Virginia Practice Program. College for WV website. <https://www.collegeforwv.com/programs/choose-west-virginia-practic-program/>. Accessed April 14, 2023.
- <sup>67</sup> 2022 West Virginia Health Sciences and Rural Health Report. West Virginia Higher Education Policy. [https://www.wvhepc.edu/wp-content/uploads/2022/12/wvhepc003957-2022-Health-Science-Report\\_digital.pdf](https://www.wvhepc.edu/wp-content/uploads/2022/12/wvhepc003957-2022-Health-Science-Report_digital.pdf). Accessed April 13, 2023.
- <sup>68</sup> WV HB. 2989 (2023). [https://www.wvlegislature.gov/Bill\\_Status/bills\\_history.cfm?IN-PUT=2989&year=2023&sessiontype=RS](https://www.wvlegislature.gov/Bill_Status/bills_history.cfm?IN-PUT=2989&year=2023&sessiontype=RS)
- <sup>69</sup> RRCP Program Details. State Office of Rural Health website. <https://dhhr.wv.gov/rural-health/repayment/Pages/RRCP-Program-Details.aspx>. Accessed April 13, 2023.
- <sup>70</sup> RRCP Program Details. State Office of Rural Health website. <https://dhhr.wv.gov/rural-health/repayment/Pages/RRCP-Program-Details.aspx>. Accessed April 13, 2023.
- <sup>71</sup> State Loan Repayment Program Awards. HRSA website. <https://nhsc.hrsa.gov/loan-repayment/state-loan-repayment-program/awards>. Accessed April 13, 2023.

- <sup>72</sup> State Loan Repayment Program: Policy and Guideline. West Virginia Department of Health and Human Resources. <https://dhhr.wv.gov/ruralhealth/Documents/SLRP%20Guidelines-Policy%202023.pdf>. Accessed April 13, 2023.
- <sup>73</sup> Health Centers' Contributions to Training Tomorrow's Physicians: Case Studies of FQHC-Based Residency Programs and Policy Recommendations for the Implementation of the Teaching Health Centers Program. National Association of Community Health Centers, Inc. <https://www.nachc.org/wp-content/uploads/2015/06/THCReport.pdf>. Accessed April 13, 2023.
- <sup>74</sup> ACGME Program Requirements for Graduate Medical Education in Family Medicine. Accreditation Council for Graduate Medical Education (ACGME). [https://www.acgme.org/globalassets/pfassets/reviewandcomment/rc/120\\_familymedicine-\\_2021-12\\_rc.pdf](https://www.acgme.org/globalassets/pfassets/reviewandcomment/rc/120_familymedicine-_2021-12_rc.pdf). Accessed April 13, 2023.
- <sup>75</sup> ACGME Program Requirements for Graduate Medical Education in Family Medicine. Accreditation Council for Graduate Medical Education (ACGME). [https://www.acgme.org/globalassets/pfassets/programrequirements/120\\_familymedicine\\_2022.pdf](https://www.acgme.org/globalassets/pfassets/programrequirements/120_familymedicine_2022.pdf). Accessed April 13, 2023.
- <sup>76</sup> 2022 West Virginia Health Sciences and Rural Health Report. West Virginia Higher Education Policy. [https://www.wvhepc.edu/wp-content/uploads/2022/12/wvhepc003957-2022-Health-Science-Report\\_digital.pdf](https://www.wvhepc.edu/wp-content/uploads/2022/12/wvhepc003957-2022-Health-Science-Report_digital.pdf). Accessed April 13, 2023.
- <sup>77</sup> 2022 West Virginia Health Sciences and Rural Health Report. West Virginia Higher Education Policy. [https://www.wvhepc.edu/wp-content/uploads/2022/12/wvhepc003957-2022-Health-Science-Report\\_digital.pdf](https://www.wvhepc.edu/wp-content/uploads/2022/12/wvhepc003957-2022-Health-Science-Report_digital.pdf). Accessed April 13, 2023.
- <sup>78</sup> The Matching Algorithm. The National Resident Matching Program website. <https://www.nrmp.org/intro-to-the-match/how-matching-algorithm-works/>. Accessed April 13, 2023.
- <sup>79</sup> Program Overview. West Virginia University School of Medicine. <https://medicine.hsc.wvu.edu/md-admissions/programs/mountaineer-accelerated-track-to-enter-residency/program-overview/>. Accessed April 13, 2023.
- <sup>80</sup> Program Overview. West Virginia University School of Medicine. <https://medicine.hsc.wvu.edu/md-admissions/programs/mountaineer-accelerated-track-to-enter-residency/program-overview/>. Accessed April 13, 2023.
- <sup>81</sup> Program Overview. West Virginia University School of Medicine. <https://medicine.hsc.wvu.edu/md-admissions/programs/mountaineer-accelerated-track-to-enter-residency/program-overview/>. Accessed April 13, 2023.

- <sup>82</sup> Kona M, Houston M, Gooding N. The Effectiveness of Policies to Improve Primary Care Access for Underserved Populations: An Assessment of the Literature. January 24, 2022. <https://www.milbank.org/publications/the-effectiveness-of-policies-to-improve-primary-care-access-for-underserved-populations/>. Accessed January 11, 2023.
- <sup>83</sup> Area Health Education Center. Health Resources and Services Administration. <https://www.hrsa.gov/grants/find-funding/HRSA-22-053>. Accessed January 11, 2023.
- <sup>84</sup> WVU strengthens rural, underserved health care workforce through \$7.2 million grant, West Virginia Area Health Education Centers website. December 15, 2022. <https://www.hsc.wvu.edu/west-virginia-area-health-education-center/news/story?headline=wvu-strengthens-rural-underserved-health-care-workforce-through-7-2-million-grant>. Accessed April 13, 2023.
- <sup>85</sup> Rural Community Health Scholars Program Overview. West Virginia Area Health Education Centers website. <https://www.hsc.wvu.edu/west-virginia-area-health-education-center/rural-community-health-scholars/program-overview/>. Accessed April 13, 2023.
- <sup>86</sup> Berlin G, Lapointe M, Murphy M, and Wexler J, “Assessing the lingering impact of COVID-19 on the nursing workforce,” McKinsey & Company. <https://www.mckinsey.com/industries/healthcare/our-insights/assessing-the-lingering-impact-of-covid-19-on-the-nursing-workforce>. Accessed April 13, 2023.
- <sup>87</sup> Wright A, “Rural Hospital Can’t Find the Nurses They Need to Fight COVID,” Pew Trusts. September 1, 2021. <https://www.pewtrusts.org/en/research-and-analysis/blogs/state-line/2021/09/01/rural-hospitals-cant-find-the-nurses-they-need-to-fight-covid>. Accessed April 13, 2023.
- <sup>88</sup> Kona M, Houston M, Gooding N. The Effectiveness of Policies to Improve Primary Care Access for Underserved Populations: An Assessment of the Literature. The Milbank Memorial Fund; 2021. [https://www.milbank.org/wp-content/uploads/2022/01/Georgetown\\_6.pdf#page=23](https://www.milbank.org/wp-content/uploads/2022/01/Georgetown_6.pdf#page=23). Accessed February 18, 2023.
- <sup>89</sup> School-Based Health. WV Primary Care Association website. <https://www.wvpca.org/content.asp?contentid=168>. Accessed April 13, 2023.
- <sup>90</sup> Kona M, Houston M, Gooding N. The Effectiveness of Policies to Improve Primary Care Access for Underserved Populations: An Assessment of the Literature. The Milbank Memorial Fund; 2021. [https://www.milbank.org/wp-content/uploads/2022/01/Georgetown\\_6.pdf#page=23](https://www.milbank.org/wp-content/uploads/2022/01/Georgetown_6.pdf#page=23). Accessed April 8, 2023.
- <sup>91</sup> About Kanawha Valley Regional Transportation Authority. KRT website. <https://rideonkrt.com/about/>. Accessed April 10, 2023.

- <sup>92</sup> Non-Emergency Medical Transportation (NEMT) Information for Members. West Virginia Bureau for Medical Services website. [https://dhhr.wv.gov/bms/Members/transportation/Pages/Non-Emergency-Medical-Transportation-\(NEMT\)%20Information%20for%20Members.aspx](https://dhhr.wv.gov/bms/Members/transportation/Pages/Non-Emergency-Medical-Transportation-(NEMT)%20Information%20for%20Members.aspx). Accessed April 13, 2023.
- <sup>93</sup> Kona M, Houston M, Clark J, Walsh-Alker E. Assessing the Effectiveness of Policies to Improve Access to Primary Care for Underserved Populations: Case Study Analysis of Grant County, New Mexico. Milbank Memorial Fund; 2022. <https://www.milbank.org/publications/assessing-the-effectiveness-of-policies-to-improve-access-to-primary-care-for-underserved-populations-case-study-analysis-of-grant-county-new-mexico/>. Accessed April 13, 2023.
- <sup>94</sup> How to Access Non -Emergency Medical Transportation (NEMT) Services. r West Virginia Department of Health & Human Resources 2021. <https://dhhr.wv.gov/bms/Members/Documents/transportation/ModivCare%20Facility%20Brochure%20-%20WVA%20Health%20and%20Human%20Resources%200323.2021.pdf> Accessed April 14, 2023.
- <sup>95</sup> S.958 – 117th Congress (2021-2022): Maximizing Outcomes through Better Investments in Lifesaving Equipment for (MOBILE) Health Care Act, 117th Cong. (2022), <https://www.congress.gov/bill/117th-congress/senate-bill/958/text>.
- <sup>96</sup> Cubanski J, Kates J, Tolbert J, Pollitz K, Freed M. What Happens When COVID-19 Emergency Declarations End? Implications for Coverage, Costs, and Access. KFF; 2023. <https://www.kff.org/coronavirus-covid-19/issue-brief/what-happens-when-covid-19-emergency-declarations-end-implications-for-coverage-costs-and-access/#telehealth>. Accessed April 13, 2023.
- <sup>97</sup> Bias T and Mueller C. Aiding Medicaid: WVU researchers partner with state to evaluate pandemic policy changes. WVU Today. August 25, 2023. <https://wvutoday.wvu.edu/stories/2022/08/25/aiding-medicare-wvu-researchers-partner-with-state-to-evaluate-pandemic-policy-changes>. Accessed April 13, 2023.
- <sup>98</sup> Telehealth pilot program shows promise in helping former nursing home, long-term care facility residents remain safe and healthy in their homes. WVUToday. June 30, 2021. <https://wvutoday.wvu.edu/stories/2021/06/30/telehealth-pilot-program-shows-promise-in-helping-former-nursing-home-long-term-care-facility-residents-remain-safe-and-healthy-in-their-homes>. Accessed April 13, 2023.
- <sup>99</sup> Manchin, Capito Announce \$899K To Expand Telehealth Services Through Four Healthcare Providers in West Virginia. Joe Manchin website. February 8, 2022. <https://www.manchin.senate.gov/newsroom/press-releases/manchin-capito-announce-899k-to-expand-telehealth-services-through-four-healthcare-providers-in-west-virginia>. Accessed April 13, 2023.

- <sup>100</sup> Capito, Manchin Announce \$5 Million From Bipartisan Infrastructure Law For Broad-Band Expansion Across West Virginia. Shelly Moore Capito website. November 14, 2022. <https://www.capito.senate.gov/news/press-releases/capito-manchin-announce-5-million-from-bipartisan-infrastructure-law-for-broadband-expansion-across-west-virginia>. Accessed April 13, 2023.
- <sup>101</sup> Medicaid 101. West Virginia Department of Health and Human Resources Bureau for Medical Services website. <https://dhhr.wv.gov/bms/BMSPUB/Documents/Medicaid%20101.pdf>. Accessed April 13, 2023.
- <sup>102</sup> Percentage of Population Enrolled in Medicaid or CHIP by State. Medicaid.gov. <https://www.medicaid.gov/state-overviews/scorecard/percentage-of-population-enrolled-medicaid-or-chip-state/index.html>. Accessed April 13, 2023.
- <sup>103</sup> DHHR's Bureau for Medical Services Seeks to Help Members with Healthcare Coverage. West Virginia Department of Health & Human Resources. March 8, 2023. <https://dhhr.wv.gov/News/2023/Pages/DHHR%E2%80%99s-Bureau-for-Medical-Services-Seeks-to-Help-Members-with-Healthcare-Coverage-.aspx>. Accessed April 13, 2023.
- <sup>104</sup> Individuals under age 65 with high out-of-pocket medical costs relative to their annual household income (2020-2021). The Commonwealth Fund Health System Data Center. <https://www.commonwealthfund.org/datacenter/individuals-high-out-pocket-medical-spending>. Accessed May 23, 2023.
- <sup>105</sup> WV HB 3274 (2023).
- <sup>106</sup> Katch H, Cross-Call J, and Broaddus M. Frequently Asked Questions About Medicaid. Center on Budget and Policy Priorities. November 22, 2019. <https://www.cbpp.org/research/health/frequently-asked-questions-about-medicaid#:~:text=Medicaid%20provides%20more%20comprehensive%20benefits,make%20the%20program%20very%20efficient>.
- <sup>107</sup> Guide to Medicaid 2022. West Virginia Department of Health and Human Resources, Bureau of Medical Services. 2022. <https://dhhr.wv.gov/bms/BMSPUB/Documents/Guide%20to%20Medicaid%202022.pdf>. Accessed April 13, 2023.
- <sup>108</sup> DeBolt C. House Passes Insulin Cost Cap Bill. Wrap Up: The Official Blog of the West Virginia Legislature. March 3, 2023. <https://blog.wvlegislature.gov/house-floor-session/2023/03/03/house-passes-insulin-cost-cap-bill/#:~:text=Senate%20Bill%20577%20reduces%20the,a%20blood%20test%20for%20ketones>. Accessed April 13, 2023.
- <sup>109</sup> State Approaches to Community Health Worker Certification. Association of State and Territorial Health Officials. June 14, 2022. <https://www.astho.org/topic/brief/state-approaches-to-community-health-worker-certification/>. Accessed April 18, 2023.

- <sup>110</sup> What is a CHW?. WVSOMCRCH website. <https://crch.wvsom.edu/CHW>. Accessed April 14, 2023.
- <sup>111</sup> Crespo R, Hatfield V, Hudson J, Justice M. Partnership With Community Health Workers Extends the Reach of Diabetes Educators. *AADE in Practice*. 2015;3(2):24-29. doi:10.1177/2325160315569046.
- <sup>112</sup> Crespo R, Christiansen M, Tieman K, Wittberg R. An Emerging Model for Community Health Worker-Based Chronic Care Management for Patients With High Health Care Costs in Rural Appalachia. *Prev Chronic Dis* 2020;17:190316. DOI: <http://dx.doi.org/10.5888/pcd17.190316>.
- <sup>113</sup> Program Overview. West Virginia Area Health Education Centers website. <https://www.hsc.wvu.edu/west-virginia-area-health-education-center/rural-community-health-scholars/program-overview/>. Accessed April 13, 2023.
- <sup>114</sup> Ferrell Knisely A. Hepatitis C numbers soar in Kanawha following syringe exchange closure. *The Charleston Gazette-Mail*. October 1, 2019. [https://www.wvgazettemail.com/news/health/hepatitis-c-numbers-soar-in-kanawha-following-syringe-exchange-closure/article\\_0577f072-4b6e-5dc3-821f-b4d4479f4e26.html](https://www.wvgazettemail.com/news/health/hepatitis-c-numbers-soar-in-kanawha-following-syringe-exchange-closure/article_0577f072-4b6e-5dc3-821f-b4d4479f4e26.html). Accessed April 14, 2023.
- <sup>115</sup> Lekhtman A. As HIV Outbreak Grips WV, Elected Move to Cripple Syringe Programs. *Filter Magazine*. March 8, 2021. <https://filtermag.org/hiv-outbreak-wv-syringe-programs/>. Accessed April 14, 2023.
- <sup>116</sup> Race and Ethnicity in Kanawha County, West Virginia. Statistical Atlas. <https://statisticalatlas.com/county/West-Virginia/Kanawha-County/Race-and-Ethnicity>. Accessed April 14, 2023.
- <sup>117</sup> Hostetter M & Klein S. Improving Population Health Through Communitywide Partnerships. The Commonwealth Fund. <https://www.commonwealthfund.org/publications/newsletter-article/improving-population-health-through-communitywide-partnerships>. Accessed April 18, 2023.
- <sup>118</sup> Kanawha County Community Health Improvement Survey. Kanawha County Health Department website. <https://www.kchdwv.org/kanawha-county-community-health-improvement-survey/>. Accessed April 14, 2023.
- <sup>119</sup> Murphy N & Millender S. How States Can Build Bridges by Smoothing Medicaid-to-Marketplace Coverage Transitions. The Center for American Progress. February 14, 2023. <https://www.americanprogress.org/article/how-states-can-build-bridges-by-smoothing-medic-aid-to-marketplace-coverage-transitions/>. Accessed May 23, 2023.

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