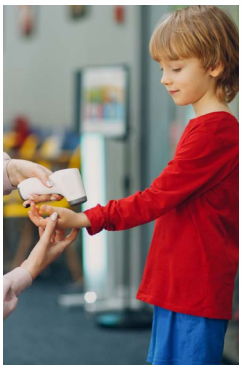
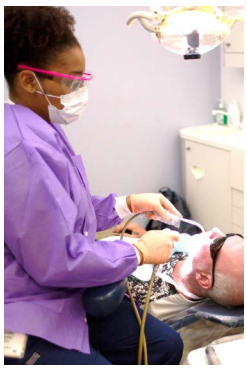




Closing the Primary Care Gap

How Community Health Centers Can Address the Nation's Primary Care Crisis

FEBRUARY 2023

NATIONAL ASSOCIATION OF Community Health Centers®

Executive Summary

Over 100 million Americans face barriers to accessing primary care, according to a new study by the National Association of Community Health Centers (NACHC) and HealthLandscape at the American Academy of Family Physicians (AAFP). The estimated number of Americans who are medically disenfranchised—at risk of lacking access to primary care due to an inadequate supply in their local community—has nearly doubled since 2014.[1] The insufficient number of primary care providers in the United States poses a serious public health threat, leaving nearly one-third of the population vulnerable to preventable chronic diseases and emerging threats like COVID-19 and influenza.

The COVID-19 pandemic amplified the essential role of primary care providers in reaching vulnerable populations and ensuring access to public health interventions, such as vaccinations, treatments, and health education. According to the National Academy of Sciences, Engineering and Medicine, "primary care is the only health care component where an increased supply is associated with better population health and more equitable outcomes."[2] For that reason, access to primary care for all citizens must be a national priority.

Access to primary care in medically disenfranchised communities can be improved through strategic investments, such as incentives for primary care practitioners to train and work in medically underserved communities and additional funding for Community Health Centers to expand their network of providers. For decades, health centers have provided high-quality, cost-effective, comprehensive care to millions of patients in medically underserved communities. The health center model ensures that all individuals can access affordable care that is patient-centered and community-based, regardless of their income or insurance status.

Health centers' reach and impact are growing, but they face critical challenges: a provider shortage, worsened by the COVID-19 pandemic, and a growing patient population with complex needs. These and other factors have led to a net increase in medically disenfranchised patients in the last 10 years. Health centers need additional resources to close the primary care gap by expanding their services in medically disenfranchised communities. The last expansion of health centers occurred in 2019 when the Health Resources and Services Administration (HRSA) awarded more than $50 million to establish 77 new health centers in 23 states. However, hundreds of health center applications were denied due to a lack of sufficient funding, leaving more work to be done to address gaps in access.

This report describes America's medically disenfranchised population and how, with expanded resources, Community Health Centers can begin to address gaps in primary care.

For decades, community health centers have provided high-quality, cost-effective, comprehensive care to millions of patients in medically underserved communities.

Over 100 million Americans—nearly one-third of the nation—do not have access to a usual source of primary care due to a shortage of providers in their local community.

Key Findings

Over 100 million Americans—nearly one-third of the nation—do not have access to a usual source of primary care due to a shortage of providers in their local community. These individuals are considered *medically disenfranchised*.

The medically disenfranchised population is a subset of the medically underserved[3] and includes **people of all income levels, locations, ages, races, ethnicities, and insurance status**.

Only **1 in 10 of the medically disenfranchised population are uninsured**, demonstrating that access to a usual source of primary care requires more than having insurance. Many people who have insurance are still unable to access primary care in their community due to a shortage of providers.

Over half of medically disenfranchised individuals have an income below 200% of the Federal Poverty Level. These individuals face additional cost barriers that may prevent them from traveling long distances to access care.

Almost **a quarter of the medically disenfranchised population are children**. Access to primary care for children is critical, yet too many children are not receiving the care they need to grow up to be healthy and productive citizens.

Thirty-one states have over one million medically disenfranchised individuals.

Without health centers, 15 million more patients would be at risk of not having a usual source of primary care.

The number of health center patients has grown by 6 million since 2015, a 24% increase.

With additional funding, health centers could extend their network of providers into medically disenfranchised communities to provide affordable, high-quality care to more patients.

Background

High-quality primary health care is the foundation of healthy communities, yet a staggering number of Americans face barriers to accessing preventive and primary care. These barriers—such as lack of insurance, prohibitive costs, lack of transportation, language barriers, provider shortages, and more—often force people to delay care for minor health issues and instead rely on costly emergency room visits when minor issues advance to more serious chronic conditions. Unmet primary care needs result in greater burdens on medically underserved patients and their communities, leading to worse health outcomes, wider disparities, and increased health care spending over time.[2] The COVID-19 pandemic amplified the importance of access to primary care; people without access were left more vulnerable to COVID-19 infection, hospitalization, and lasting mental health consequences.

Federally Qualified Health Centers (FQHCs), also called Community Health Centers, are nonprofit, federally supported clinics that serve as the medical home for more than 30 million people who live in medically underserved areas or belong to medically underserved populations [Figure 1].[3, 4] Health centers represent the largest primary care network in the country, offering comprehensive primary and preventive medical care, as well as dental, behavioral health, pharmacy, and other support or 'enabling' services that facilitate access to care.

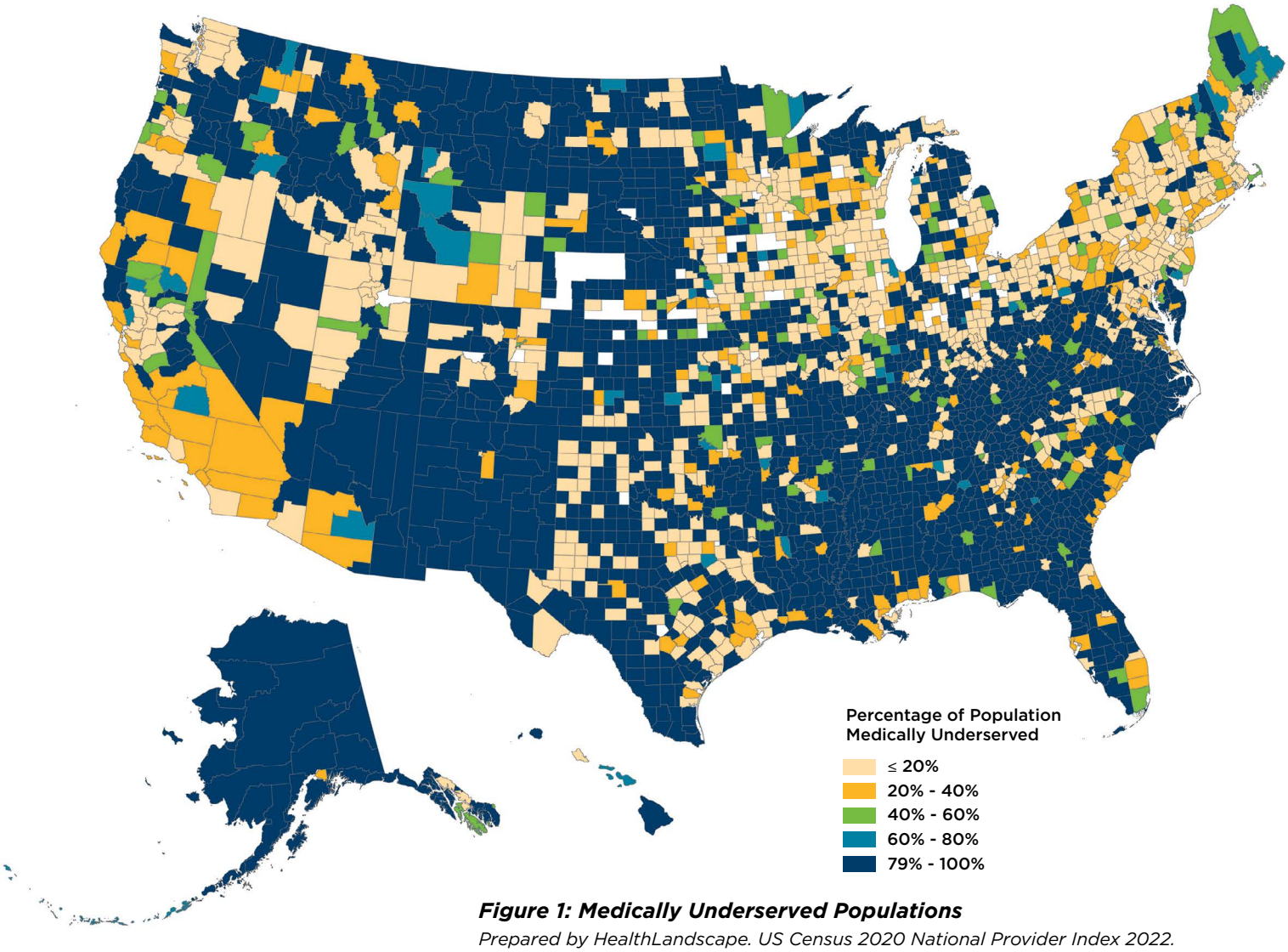


Figure 1: Medically Underserved Populations

Prepared by HealthLandscape. US Census 2020 National Provider Index 2022.

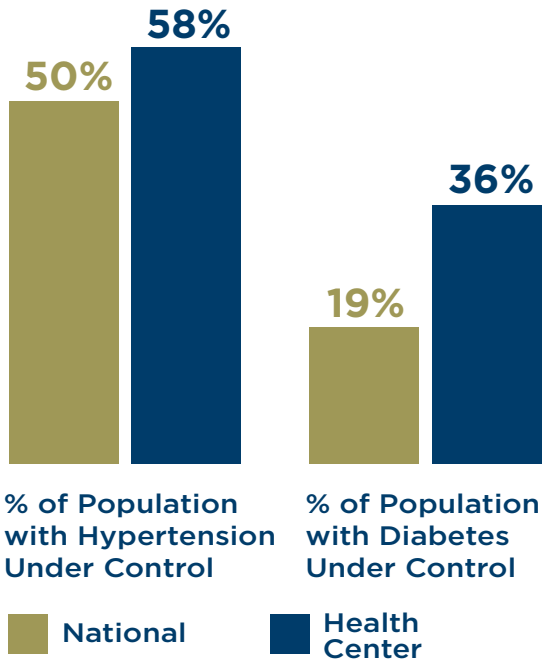


Figure 2a. Health centers acheve higher rates of hypertension and diabetes control than the national average despite serving more at risk patients

Over 90% of all health center patients are low-income, and 67% have an income below the Federal Poverty Level. More than 80% of health center patients are either uninsured or publicly insured (covered by Medicaid, Children's Health Insurance Program, or Medicare). Most health center patients (65%) come from racial and/or ethnic minority backgrounds.

The success of the health center model demonstrates the importance of a usual source of primary care to overall patient health. Health centers provide relationship-based care for everything from basic health needs to chronic disease management and coordination with specialists. The combination of high-quality primary care and enabling services has resulted in a cost-effective care model that drives positive health outcomes [Figure 2a]. Health centers reduce the need for emergency room visits and inpatient care, and health center patients have 24% lower medical expenditures overall.[5] Despite caring for clinically at-risk patient populations, health centers consistently exceed quality measures and achieve higher rates of positive health outcomes than private practices [Figure 2b].[4] Much of this success can be attributed to

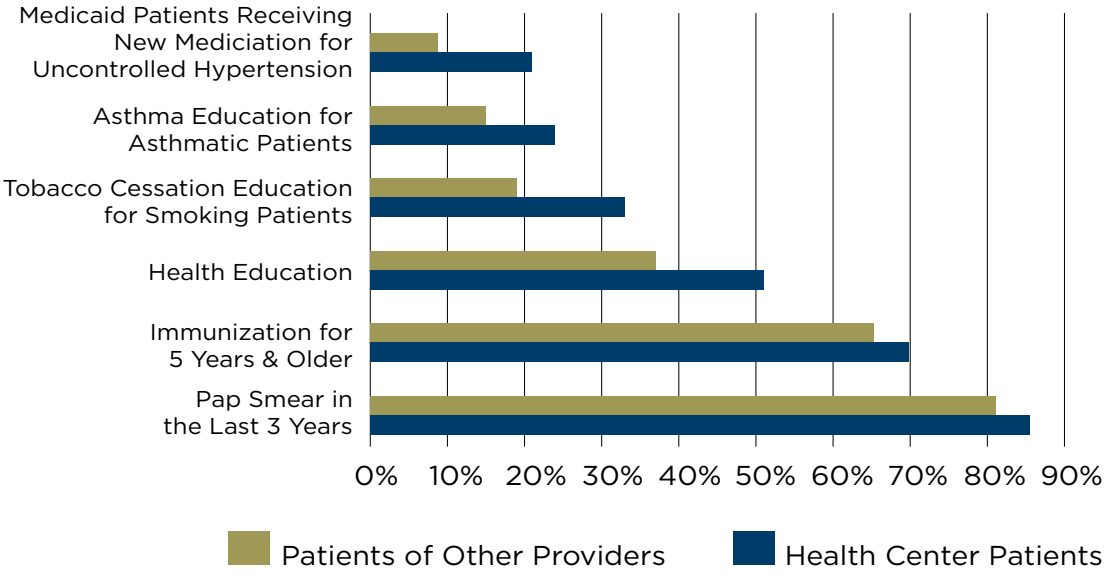


Figure 2b. Health Centers Provide More Preventive Services than Other Primary Care Providers

Health Center Patients Who Used Enabling Services* Had

- 1.9 **more health center visits** in the past year (on average)
- A 16 percentage-point **higher likelihood of getting a flu shoot**
- A 12 percentage-point **higher likelihood of getting a routine checkup**
- An 8 percentage-point **higher likelihood of being satisfied with care**.

**The Health Resources and Services Administration (HRSA) defines enabling services as, "non-clinical services that do not include direct patient services that enable individuals to access health care and improve health outcomes." Examples of enabling services include case management, translation./intepretation, transportation, and health education. (HRSA Health Center Programs Terms and Definitions, n.d.).*

Note: this future compares health center paitents who used enabling services to patients that did not use enabling services.

Source: Yu et al. Enabling Services Improve Access to Care, Preventive Serivces, and Satisfaction Among Health Center Patients. Health Affairs 38(9). September 2019.

Figure 2c. Enabling Services* are a Defining Characteristic of Health Centers and Help Improve Access to Care and Patient Satisfaction

enabling services offered at health centers that facilitate access and address social drivers of health. These services include care coordination, case management, enrollment assistance, transportation, translation, health education, and more [Figure 2c].

Health centers represent the largest primary care network in the country, providing a foundation for health to 30 million people who might otherwise go without. Still, over 100 million Americans are at risk of not having access to these essential services, an increase from 56 million in just 8 years.[1] This growing gap in access to primary care poses a significant public health threat that warrants national attention. According to Dr. George M. Abraham, president of the American College of Physicians, "[the United States] health system has long undervalued primary care. We need changes that better support primary care physicians and recognize the value they bring to patients and our health system."[6] The health center model can serve as a roadmap for necessary change, but the looming crisis in primary care is driven by multiple complex factors and an interdisciplinary national effort is required to address the shortage of primary care providers.

Gaps in primary care persist due to a nationwide primary care provider shortage that is driven by increased medical specialization and an uneven distribution of providers.[2] Clinical trainees are pursuing increased specialization, which has led to a decline in the proportion of medical students and residents entering primary care.[7] Nurse Practitioners (NPs) and Physician Assistants (PAs) are playing an increasingly important role in providing primary care, and while their numbers are steadily increasing, the proportion working in primary care settings has decreased in recent years.[8] Also notable is the growth of primary care specialties, such as family medicine, pediatrics, adolescent medicine, and niche areas such as sleep and sports medicine. While each specialty provides an important service, the generalist role in primary care is essential for addressing the health of a community or population.[2]

The nationwide distribution of all health care workers is becoming increasingly uneven, compounding the overall provider shortage.[9]

Both primary care providers and specialists are more concentrated in highly populated urban areas that are home to higher-income, majority-insured populations.[2,9] This pattern leaves fewer providers to care for rural communities that are more sparsely populated and may have a lower median household income. A variety of factors are also leading to consolidation, and clinic closures across the landscape of primary care practices are exacerbating the problem of unequal distribution.[2] Some areas where this has occurred are left with one primary care practice, if any, to serve an entire county. Providers who remain in these communities can only appropriately treat a limited number of people; the remaining population must negotiate distance, time, and cost barriers to find health services outside their local community. These barriers lead to delays in care, poorer health outcomes, and wider health disparities.[2]

The number of 'Medically Disenfranchised' people was determined using the following calculations:

1. The total number of primary care providers at private practices (including NPs and PAs, excluding hospitalists) was calculated according to NPPES and AMA datasets then linked to census block-level HPSA and MUA/MUP data.
2. The total number of underserved was then calculated at the census block level (total population - 2,000*number of primary care providers) then aggregated up to county, district, and state levels.
3. The total number of disenfranchised was calculated by taking the census block-level underserved numbers, then subtracting the total number of health center patients in each block (health center patient data came from the 2021 Uniform Data System) then aggregated up to the county, district, and state levels.

For full study methodology, please see Appendix A.

Analysis

Over 100 million people in the United States—many of whom are children—lack access to a regular source of primary care.

The nationwide shortage of primary care providers is a critical access barrier for a growing number of Americans. **A recent study by HealthLandscape at the American Academy of Family Physicians, commissioned by NACHC, found that over 100 million people in the United States are medically disenfranchised—meaning, they may not have access to a usual source of primary care due to a shortage of providers in their community.** [Figure 3].

The total number of medically underserved was calculated by subtracting 2,000 patients per primary care provider in each census block, according to AMA and NPPES Masterfiles. The total number of medically disenfranchised people was then calculated by subtracting health center patients from the total number of medically underserved in each census block.

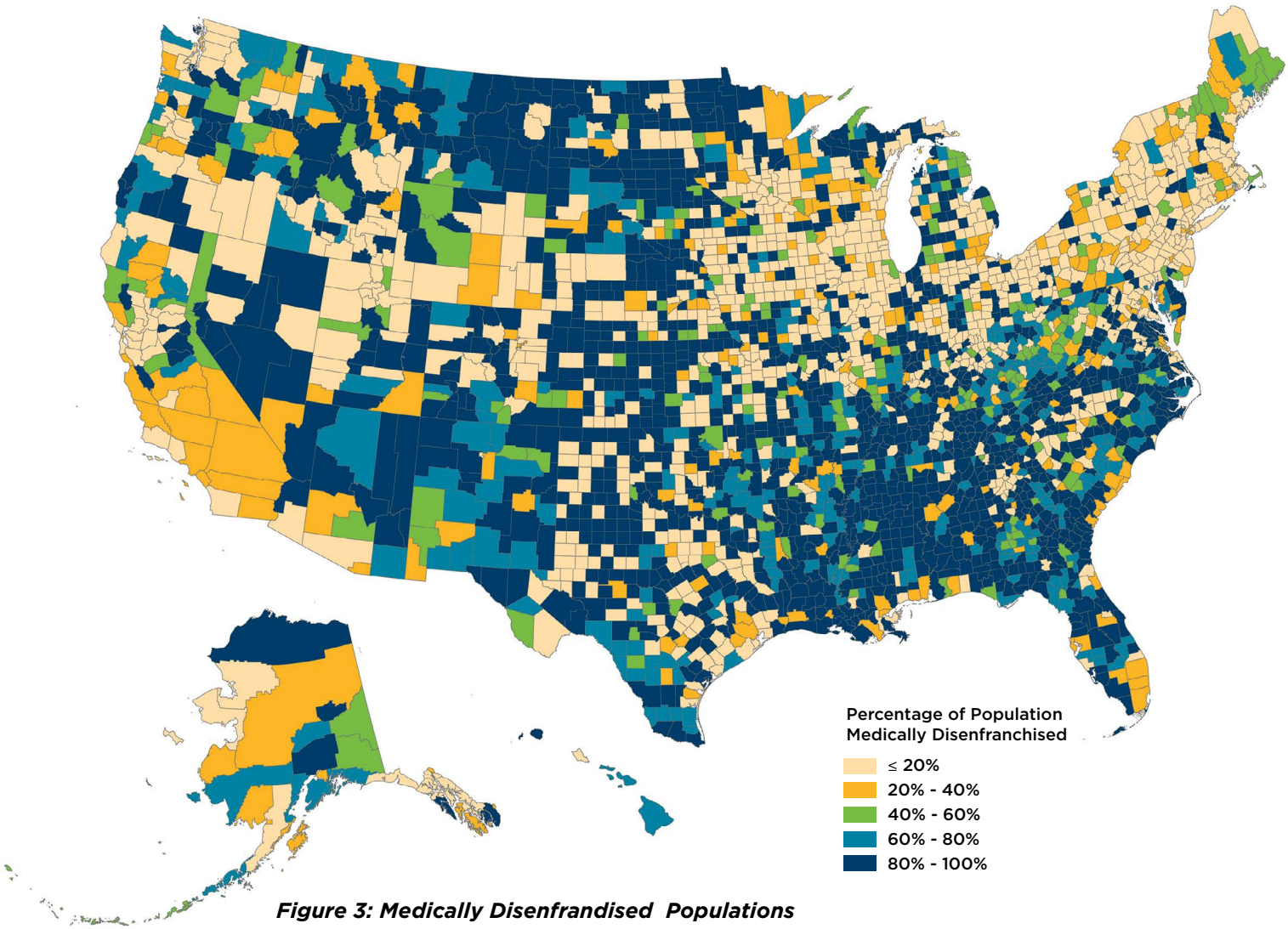


Figure 3: Medically Disenfrandised Populations

Prepared by HealthLandscape. US Census 2020; National Provider Index 2022.

The medically disenfranchised population is a subset of medically underserved Americans, and includes people of all income levels, locations, ages, races, ethnicities, and insurance status.

- Only **11% of the medically disenfranchised population is uninsured**, which demonstrates that access to a usual source of primary care requires more than having insurance. In fact, having a usual source of primary care is a greater predictor than insurance status of the likelihood of receiving care. People who have a usual source of care, but no health insurance, receive more primary care than those with insurance but no usual source of care.[10] Those with both insurance and a usual source of care experience more preventive services and fewer emergency department visits.[11]
- **56% of the medically disenfranchised population have an income below 200% of the Federal Poverty Level (FPL).** Cost barriers pose an additional barrier to care for these individuals, especially when forced to travel to seek care due to a shortage of providers in their community. Some low-income individuals may choose to forgo care altogether due to lack of transportation, or costs associated with travel and unpaid time off work.
- Almost **a quarter of the medically disenfranchised population are children** aged seventeen or younger. Access to primary care for children is critical. Primary care providers help to ensure healthy childhood development, prevent future illness through vaccines and preventive screenings, and manage common chronic conditions like asthma. A usual source of primary care is associated with improved performance in school, better health outcomes, and lower health care costs throughout one's life.[12]
- The medically disenfranchised population includes people of all races and ethnicities, but lack of access to primary care disproportionately affects people of racial and ethnic minority backgrounds.

Table 1: Medically Disenfranchised Populations by Race and Ethnicity

	US Population	Medically Disenfranchised
White	75.8%	68.7%
Black	13.6%	15.7%
Asian American/ Pacific Islander	1.3%	3.5%
Hispanic	18.9%	21.9%

- Though medical disenfranchisement occurs in all states, some states face greater primary care shortages than others. **Thirty-one states have over one million medically disenfranchised people each.** The percentage of medically disenfranchised residents varies widely across states, from 14% in Massachusetts to 78% in New Mexico.[13]

  The states with the greatest number of medically disenfranchised residents are:

  1. Florida
  2. Texas
  3. California
  4. North Carolina
  5. Georgia
  6. New York
  7. Illinois
  8. Tennessee
  9. Michigan
  10. Alabama

  The states with the greatest percent of residents who are medically disenfranchised are:

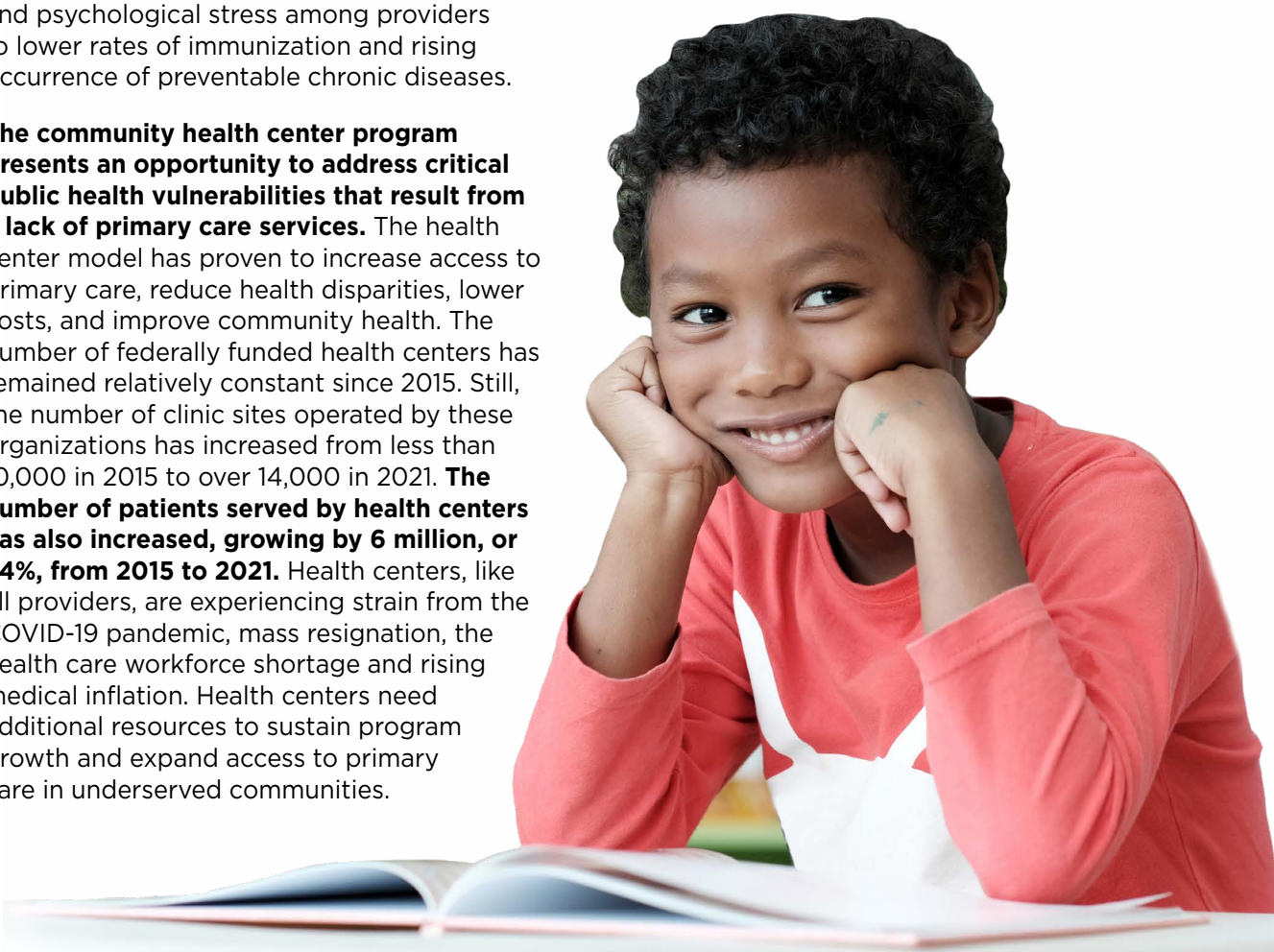
  1. New Mexico
  2. Mississippi
  3. Delaware
  4. Alabama
  5. Montana
  6. Tennessee
  7. Louisiana
  8. Alaska
  9. Arkansas
  10. Florida

Addressing gaps in primary care through Community Health Centers

Health centers play a vital role in closing primary care gaps in underserved communities. This study found that **without health centers, 15 million more patients would be at risk of not having a usual source of primary care**. Health centers provide essential services to these patients who otherwise might not have access to preventive care or treatment for basic health needs. The health center program has grown significantly over the past decade, thanks in part to federal investment and bipartisan congressional support. However, even as the health center program expands into more underserved communities, the number of medically disenfranchised Americans continues to grow. Since 2014, the number of medically disenfranchised people has nearly doubled from 56 million to over 100 million. The public health consequences of this trend are becoming clear, ranging from record burnout and psychological stress among providers to lower rates of immunization and rising occurrence of preventable chronic diseases.

The community health center program presents an opportunity to address critical public health vulnerabilities that result from a lack of primary care services. The health center model has proven to increase access to primary care, reduce health disparities, lower costs, and improve community health. The number of federally funded health centers has remained relatively constant since 2015. Still, the number of clinic sites operated by these organizations has increased from less than 10,000 in 2015 to over 14,000 in 2021. **The number of patients served by health centers has also increased, growing by 6 million, or 24%, from 2015 to 2021.** Health centers, like all providers, are experiencing strain from the COVID-19 pandemic, mass resignation, the health care workforce shortage and rising medical inflation. Health centers need additional resources to sustain program growth and expand access to primary care in underserved communities.

A recent study found that federal funding for health centers is not keeping pace with rising medical costs and patient population growth (Matrix Global Advisors, 2022).[14] While the Community Health Center fund has increased by 14% since 2015, medical care inflation has risen by 25%, leading to a 9.3% decrease in federal health center funding in real terms. Further, growth in the number of patients treated at health centers has led to a 27% decline in per-patient spending. Taken together, per-patient, inflation-adjusted funding has declined by $2.1 billion since 2015 (Matrix Global Advisors, 2022). With additional funding federal funding, health centers could open new sites, attract the workforce they need to serve additional patients and mitigate the impact of inflation.



In addition to providing direct services, health centers serve as the training ground for the next generation of primary care, behavioral health, and oral health providers. Federally funded programs supported by the U.S. Department of Health and Human Services Bureau of Health Workforce provide education and financial incentives, including scholarships and loan repayment programs, to recruit clinicians and other health professionals to train and work in medically underserved communities. These programs include the National Health Service Corps (NHSC), Teaching Health Center Graduate Medical Education (THCGME) program, and health care workforce diversity programs.[15] Health centers provide uniquely valuable training to clinicians in these programs that emphasize team-based, patient-centered care rooted in the local community. These programs often place trainees in communities in which they grew up, providing a deeper level of connection to the patients they serve. Health centers place an emphasis on culturally competent care and intentionally recruit providers who are underrepresented in the medical profession and those who reflect the cultural diversity of their community. This results in providers who represent the diverse racial, ethnic, and linguistic backgrounds of the communities they serve. Continued investments in these programs are necessary to sustainably grow the number of providers working in medically underserved communities and to strengthen the primary care workforce of the future.

Conclusions

Everyone benefits from having a usual source of primary care. Primary care providers can treat the common cold, ensure healthy childhood development, prevent future illness, manage chronic conditions, and connect patients to specialty services. Having a usual source of primary care is associated with decreased emergency department use and lower health care costs throughout the lifetime. On the other hand, a lack of access to primary care can weaken the public health response to future pandemics and could have dire consequences for patients, especially those facing compounding access barriers. Patients with limited access to transportation, financial limitations, and other access barriers may forgo care rather than travel long distances to see a primary care provider. Addressing local provider shortages is critical to meet the needs of patients facing compounding access challenges and to ensure healthy communities.

Health centers have a proven track record of filling primary care gaps in underserved communities, making them well-positioned to fill that need for the more than 100 million Americans who remain medically disenfranchised. The health center program has grown in the last five years to serve more patients and expand specialty services such as behavioral health, dental, and vision services in medically underserved communities. With sufficient resources, the health center program can expand into more underserved communities and continue to close the gap in primary care for America's medically disenfranchised population.

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3 Medically underserved refers to people who live in a federally designated Health Professional Shortage Area (HPSA) or Medically Underserved Area (MUA) or belong to a Medically Underserved Population (MUP). More information about these designations can be found here: ***https://bhw.hrsa.gov/workforce-shortage-areas/shortage-designation***

4 Health centers, as defined by section 330 of the Public Health Service Act (42 U.S.C. § 254b), include outpatient clinics in federally designated underserved areas that qualify for specific reimbursement systems under Medicare and Medicaid. They include (but are not limited to) federally qualified health centers (FQHCs), FQHC look-alikes, rural health clinics, school-based health centers, and tribal and urban Indian health centers. For more information, visit: ***https://bphc.hrsa.gov/about-health-centers***

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13 See Appendix for medically disenfranchised data tables by state

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Appendix A: Methodology

Geography

The key to this analysis is to ensure that all data were available for the same geographic level. Because a variety of geographies were represented in the data it was necessary to take all data down to the US Census Block level, the common denominator of all others. All datasets we used began with the following geographies.

- *County*—Counties are comprised of census tracts. Census tracts are comprised of census block groups. Block groups are comprised of blocks.
- *Health Professional Shortage Area (HPSA)*—HPSAs are comprised of a variety of geographies. These geographies (county, census tracts, and minor civil divisions can all be broken down to see which census blocks are within those geographies. Any geographies composed of Minor Civil Divisions were matched to census block using a conversion tool provided by the Missouri Spatial Data Information Service.
- *Medically Underserved Area/ Population (MUA/P)*—MUA/Ps are comprised of a variety of geographies. These geographies (county, census tracts, and minor civil divisions can all be broken down to see which census blocks are within those geographies. Any geographies composed of Minor Civil Divisions were matched to census block using a conversion tool provided by the Missouri Spatial Data Information Service.
- *Medical Service Study Area (MSSA)*—MSSAs are comprised of census tracts. Census tracts are comprised of census block groups. Block groups are comprised of blocks.
- *ZIP Code Tabulation Area (ZCTA)*—ZCTAs are comprised of census blocks.
- *Congressional Districts*—Congressional districts are comprised of census blocks. A file available from the Missouri Spatial Data Information Service was used as the crosswalk for this analysis.

Data

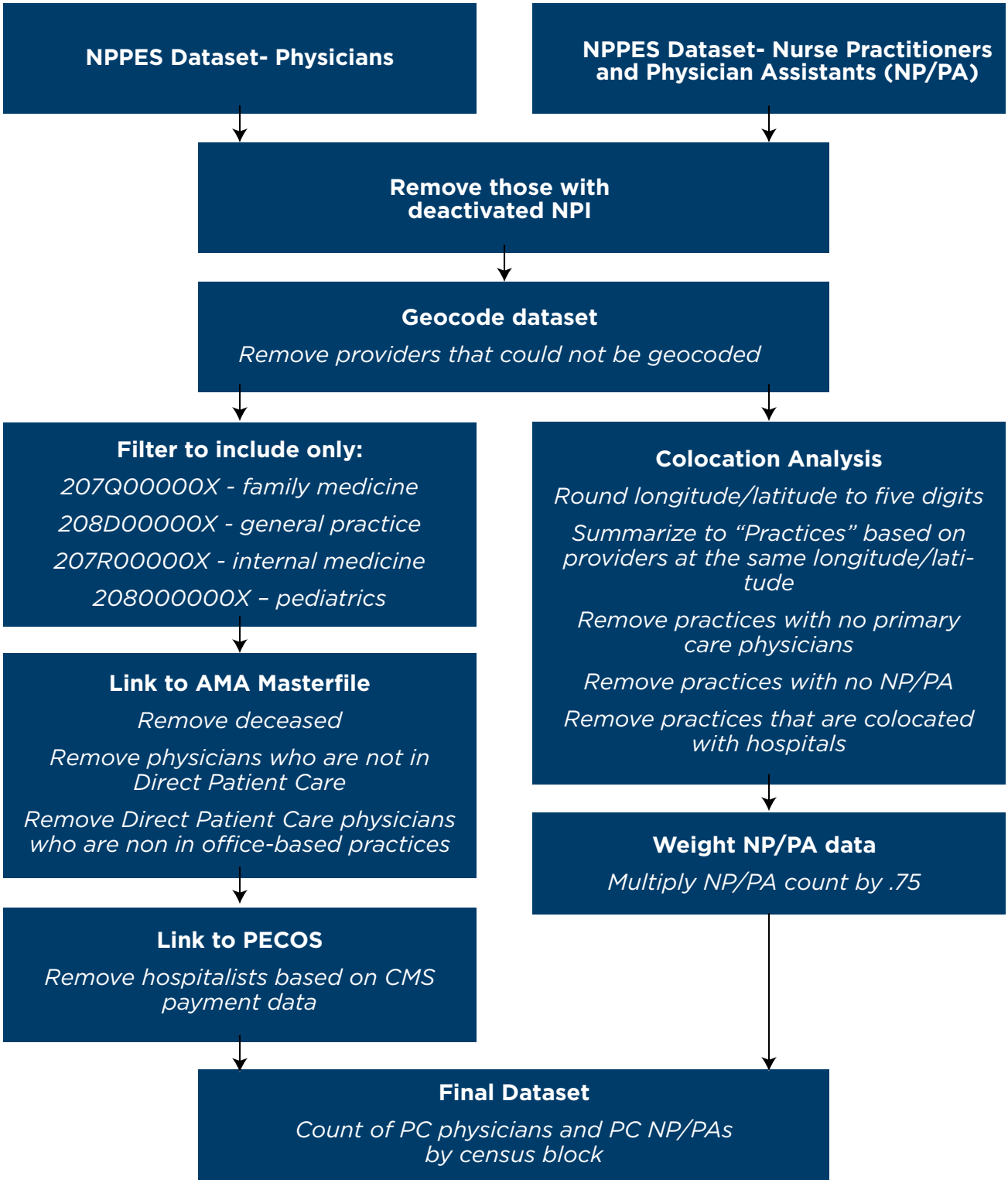
The following datasets were used in this project; any transformation necessary to get those data to the block level is listed.

- *National Plan and Provider Enumeration System (NPPES), from the Centers for Medicare and Medicaid Services (CMS), 2022.*
- *American Medical Association (AMA) Masterfile, 2022.*
- *Provider Enrollment and Chain Ownership System (PECOS), from CMS, 2022.*
- *Health Center Program Patients from the Uniform Data System (UDS) Mapper 2021 data accessed in 2022.* This dataset contains the count of patients who sought services from a Health Center Program awardee or look-alike in 2021 by ZCTA. The count of patients in a ZCTA was assumed to be distributed across the ZCTA according to block population so a weighted number of patients was assigned to each block within a ZCTA. The resulting dataset is a count of Health Center Program patients by census block.
- *HPSA dataset accessed from the HRSA Data Warehouse July 2022.* This dataset contains the geographies of HPSAs. The dataset also contains the count of FTE primary care physicians used by State Primary Care Offices to apply for designation of the HPSA and by HRSA to verify and designate the area. As mentioned above, these data represent a variety of geographies. The FTE count of physicians is weighted across the HPSA by population in each block. The resulting dataset was a list of all census blocks that were part of an HPSA and the FTE count of physicians assigned to each census block.
- *MSSA dataset from* ***https://data.chhs.ca.gov/dataset/mssa-detail*** *accessed June 27, 2022.* This dataset contains the geographies of the MSSAs in California. The resulting dataset was each block in California with a field listing in which MSSA it is.

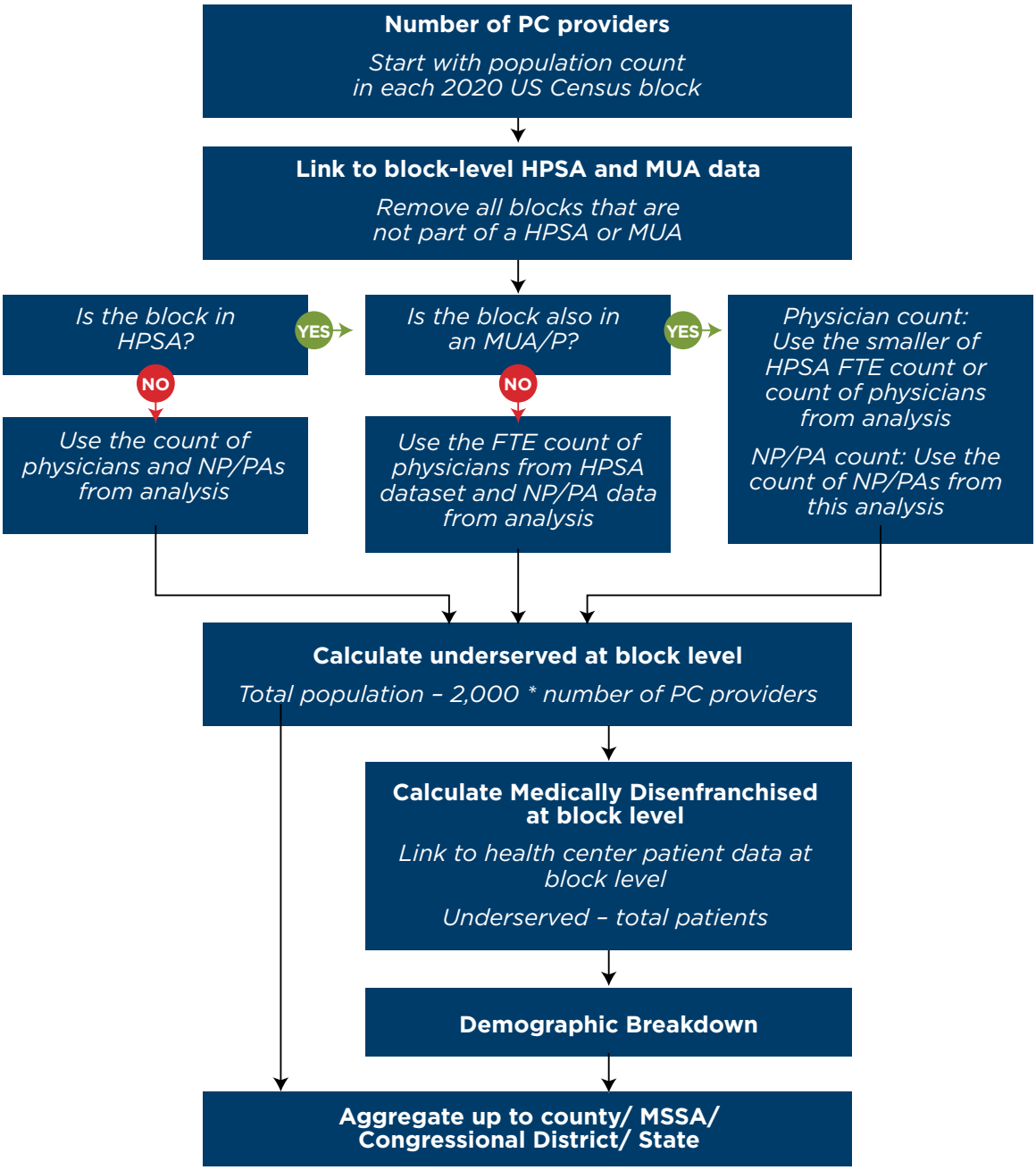
- *MUA/P dataset accessed from the HRSA Data Warehouse July 2022.* This dataset contains the geographies of the MUAs. For this analysis, Governor's Designation MUAs were excluded. The resulting dataset was a list of all census blocks that were part of an MUA/P.

Process

The methodology followed the steps listed below. Step 8 lists how the demographic analysis was done for all geographies.



Note: Using the 0.75 factor accounts for productivity differences between NP/PAs and physicians. The portion of time that NP/PAs spend doing activities that are not billable such as education and broad community prevention activities is removed from the calculation. See: Health Resources and Services Administration, Bureau of Health Professions, National Center for Health Workforce Analysis. Projecting the Supply and Demand for Primary Care Practitioners Through 2020. November 2013. Page 28. ***https://bhw.hrsa.gov/sites/default/files/bureau-health-workforce/data-research/projecting-primary-care.pdf***



Demographic data were calculated as follows:

Demographic	Data Source	Native Geography
Income level • Below 100% FPL • Below 200% FPL	American Community Survey, five-year roll-up (2016-2020)	Census Tract
Race/ ethnicity (total to 100%) • White • Black • Asian/ Pacific Islander • Hispanic • Other	American Community Survey, five-year roll-up (2016-2020)	Census Tract
Age • 0-17 • 18-44 • 45-64 • 65+	American Community Survey, five-year roll-up (2016-2020)	Census Tract

A. Assume rate is evenly distributed across the native geography and apply that rate to the population counts at the census block level.

B. Apply demographic rate to the number of medically disenfranchised to get a count of that demographic at the block level.

C. Aggregate up to the county/ county equivalent/ MSSA or congressional district level Because the calculations at the block level could lead to negative numbers for some of the demographics, adjustments were made:

   a. Zero out any negative numbers

   b. Rescale non-negative numbers to end up with consistent totals for the county/ county equivalent/ MSSA or congressional district level.

D. Aggregate from county/ county equivalent/ MSSA or congressional district level counts up to the state level.

Appendix B: Disenfranchised People by State

State	Medically Underserved	Disenfranchised
Alabama	3,341,869	3,125,759
Alaska	460,274	369,490
Arizona	2,689,996	2,286,101
Arkansas	1,679,351	1,491,378
California	10,007,588	8,019,042
Colorado	1,794,898	1,518,816
Connecticut	828,239	636,851
Delaware	659,473	622,843
District of Columbia	516,589	386,472
Florida	11,609,158	10,453,083
Georgia	4,695,156	4,276,603
Hawaii	556,614	453,622
Idaho	526,141	454,002
Illinois	4,909,280	4,043,272
Indiana	2,657,524	2,347,284
Iowa	574,809	504,082
Kansas	803,719	680,062
Kentucky	1,987,229	1,606,089
Louisiana	2,634,376	2,360,232
Maine	437,034	318,394
Maryland	1,620,871	1,437,042
Massachusetts	1,385,273	1,030,622
Michigan	3,683,164	3,292,251
Minnesota	1,390,049	1,309,149
Mississippi	2,289,551	2,072,931
Missouri	2,294,811	1,973,183
Montana	739,706	651,940
Nebraska	603,346	541,867
Nevada	1,385,405	1,311,101
New Hampshire	465,348	402,016
New Jersey	1,562,569	1,303,899
New Mexico	1,949,967	1,657,376

State	Medically Underserved	Disenfranchised
New York	5,287,172	4,256,412
North Carolina	4,770,503	4,292,783
North Dakota	240,401	231,706
Ohio	2,595,023	2,225,576
Oklahoma	1,718,129	1,528,861
Oregon	1,444,145	1,237,786
Pennsylvania	2,616,232	2,242,573
Rhode Island	337,989	269,513
South Carolina	2,319,165	2,034,719
South Dakota	441,929	391,155
Tennessee	4,072,293	3,765,932
Texas	11,129,697	10,263,019
Utah	988,763	918,208
Vermont	176,465	104,081
Virginia	3,177,567	2,924,157
Washington	2,863,624	2,310,696
West Virginia	1,124,070	772,239
Wisconsin	1,079,998	969,579
Wyoming	207,234	188,710
Puerto Rico	2,836,828	2,469,106