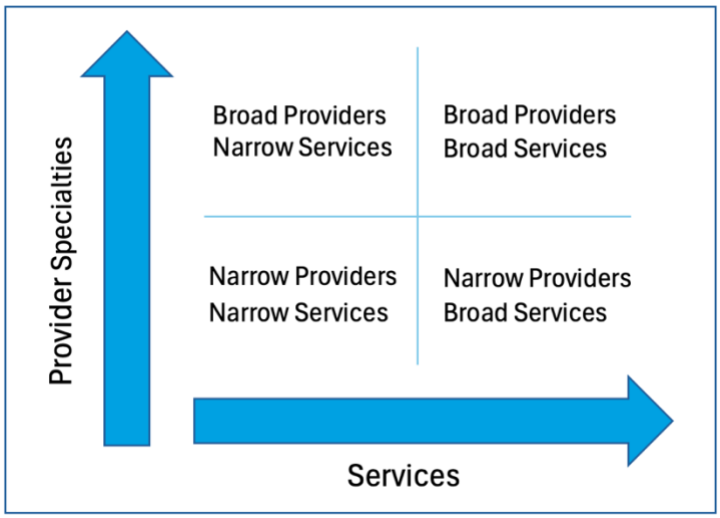
Primary Care Scorecard Dashboard Methodology

The primary care scorecard was developed by the Virginia Center for Health Innovation on behalf of the Virginia Task Force on Primary Care (VTFPC). Measurement categories were selected based on input from a multi-stakeholder advisory council.

Section 1. Defining Primary Care

The Virginia Task Force on Primary Care (VTFPC) established a 4-quadrant approach to defining primary care based on provider specialties and service codes. For the purposes of this dashboard, the "narrow" definition is based on the narrow providers and narrow specialties quadrant, and the "broad" definition is based on the broad providers and broad services quadrants.



The *narrow definition* includes professional services for primary care office visits, immunizations, physical exams, well visits, and preventive services provided by physicians with the following specialties:

- Family medicine
- Pediatrics
- Geriatrics
- Adolescent medicine
- Palliative care
- Internal medicine (if provider had > = 10 wellness visits per year)

The *broad definition* includes all professional and outpatient services provided by the following specialties:

- All specialties included in the narrow definition
- Nurse practitioners and physician assistants (regardless of practice area)
- OB/GYNs (if provider had > = 10 wellness visits per year)
- Community Health Centers (e.g. Federally Qualified Health Centers and Rural Health Centers)
- School Health Clinics
- Urgent care facilities (note: professional services may be included in narrow definitions due to cross-specialty of providers)

Section 2. Expenditures

Primary care expenditures are based on paid claims for services identified as primary care per the definitions provided in Section 1. Data come from the 2019 – 2022 Virginia All-Payers Claims Database (APCD) (https://www.vhi.org/APCD/), based on all-payer submissions. All medical and pharmacy claims are included in the denominator for primary care spend as a

percent of healthcare expenditures. No projections are adjustments are made to account for missing populations. Instead VCHI reports expenditures based on Medicaid, Medicare, Medicare Advantage, and Commercial payers for the Commonwealth, excluding ERISA, federal employee benefits, and military benefits. Estimates are developed by VCHI staff in collaboration with VHI and Milliman MedInsight.

For more information on definitions and expenditures, see Virginia Primary Care Investment Report (https://www.vahealthinnovation.org/wp-content/uploads/2024/07/Virginia-Primary-Care-Spend-Report-June-2024.pdf).

Section 3. Workforce

Estimates for the total number of primary care physicians per county, change over time in the number of physicians, and population estimates are based on County Health Rankings and Roadmaps data, 2022-2024 (https://www.countyhealthrankings.org/hea lth-data/virginia?year=2024). Population estimation is used to calculate number of primary care physicians per 100,000 residents and for estimating provider shortages. Advanced practice practitioners are not included in these estimates.

Estimates of the percent of advanced practice providers and physicians practicing in primary care are based on the Milbank Memorial Fund "The Health of US Primary Care: 2024 Scorecard Data Dashboard" (https://www.milbank.org/ primary-care-scorecard/). Data come from the 2016 – 2021 CMS NPPES data.

Estimates of primary care physician shortages combine County Health Rankings data on total number of primary care physicians with research conducted by VCU Department of Family Medicine Ambulatory Care Outcomes Research Network (ACORN) (https://acorn.square space.com/primary-care). ACORN estimates that the average primary care physician panel is 1,368 patients. To identify areas with shortages, VCHI used populations estimates and total number of primary care physicians as reported in County Health Rankings to determine if each county had at least 1 primary care physician per 1,368 residents. This estimation assumes that all individuals should be on a primary care physician's panel and does not include APPs in this estimation.

Section 4. Primary Care Use

Primary care utilization is based on claims paid and submitted to the 2022 Virginia All-Payers Claims database (https://www.vhi.org/APCD/). Primary care services are based on the narrow and broad definitions as described in Section 1. County is based on county of patient residence.

Estimates for the total number of behavioral health providers per county and population estimates are based on County Health Rankings and Roadmaps data, 2022-2024 (https://www.countyhealthrankings.org/hea lth-data/virginia?year=2024). Use and expenditure data come from the APCD, with behavioral health services defined using the AHRQ Clinical

Classification Software (CCS). Only outpatient and professional services are included for the purposes of the primary care scorecard. Telehealth use is defined based on procedure codes, place of service codes, and procedure modifiers. See Table 1.

Table 1. Telehealth Definition

Code Type	Code
CPT/HCPCS	Telephonic: 99441, 99442, 99443, 98966, 98967, 98968 Virtual check-in: G2012, G2010 Online e-visit: 99421, 99422, 99423, G2061, G2062, G2063, 98970, 98971, 98972 Remote physiologic monitoring: 99453, 99457, 99458
Modifiers	95, G1, GT
Place of Service	02, 10

Section 5. Outcomes

Avoidable emergency department use is calculated by VHI and Milliman MedInsight based on data from Virginia APCD. Data is reported on the VCHI Health Value Dashboard (https://www.vahealthinnovation.org/valuedashboard/). Life expectancy and quality of life estimates and scores are based those reported by County Health Rankings (https://www.countyhealthrankings.org/hea lth-data/virginia?year=2024).

Section 6. Patient Experience

Estimates for patients with a usual source of care is based on data from the 2021 Agency for Healthcare Research and Quality (AHRQ) Medical Expenditures Panel Survey (MEPS) data as reported by Milbank Memorial (https://www.milbank.org/ primary-care-scorecard/). Benchmarks for adults are based on Center for Disease Control and Prevention (CDC)'s Healthy People 2030 (https://health.gov/healthypeople/objectives-and-data), which sets a goal of 84% of the total adult population reporting a usual source of care. Health People 2030 does not have a goal for specific to children.

Average wait time in Virginia is based on research published by the Journal of General Internal Medicine (Auty and Griffith, 2022) (https://www.ncbi.nlm.nih.gov/pmc /articles/PMC9360377/). The study uses data from the Veterans Health Administration for Virginia and Maine, assessing wait times from calling a provider to appointment date. Study and wait times are limited to the dates reported on the dashboard (2016-2018 to 2019).

Medicaid access to primary care is based on a report published by the Virginia Department of Medical Assistance Services (https://www.dmas.virginia.gov/media/ern mrksw/2023-2025-quality-strategy.pdf). The Department's External Quality Review Organization conducted a secret shopper survey in which individuals called practices requesting an appointment for a routine or urgent issue. The secret shopper survey is conducted annually.

Section 7. Scorecard by locality

Using the measures described in previous sections, localities are ranked based on their average score across 4 distinct categories:

1. **Primary Care Expenditures** – Measures include percent spend on primary care based on the narrow and broad definitions. The overall expenditures rank is based on the average rank for each of these two measures compared to other localities.
2. **Primary Care Workforce** – Measures include ranks for number of primary care physicians per 100,000 residents, number of primary care physicians above or below a shortage cutoff proportional to overall primary care physician count, and change in number of primary care physicians overtime. The overall workforce rank is based on the average rank for each of these 3 measures compared to other localities.
3. **Primary Care Use –** Measures include the percent of the population using primary care based on the narrow and broad definition. The overall primary care use rank is based on the average rank for each of these 2 measures compared to other localities
4. **Outcomes** – Measures include life expectancy, percent of emergency department visits considered potentially avoidable, and quality of life score based on County Health Rankings. Quality of life is based on the percent of the population reporting poor or fair health, number of days spent in poor or fair health, number of days with poor mental health, and % of live births with low birth weights. The overall outcome rank is based on the average rank for each of these 3 measures compared to other localities

Overall county rank is based on the average rank across all 4 measures compared to other localities. Patient experience data is not available by county, and therefore, is not included in the rankings.

Acknowledgments

The dashboard was developed by Zelda Hinkle, Lauryn Walker, and Beth Bortz as VCHI staff on behalf of VTFPC. Special thank you to the VTFPC Data Analytics Committee for your support on measure and data selection. Additionally, we want to thank VHI and Milliman MedInsight for analytic support and Emma Ford for her support on analytics and dashboard development.