

Virginia's Growing Health Workforce Needs

Evaluating the supply and demand for entry-level
and paraprofessional health occupations



Office of Health Workforce Studies



Claude Moore®
SCHOLARS

A HEALTHCARE EDUCATION PROGRAM

Agenda



INTRODUCING THE
PROBLEM



VIRGINIA HEALTH
WORKFORCE OUTLOOK



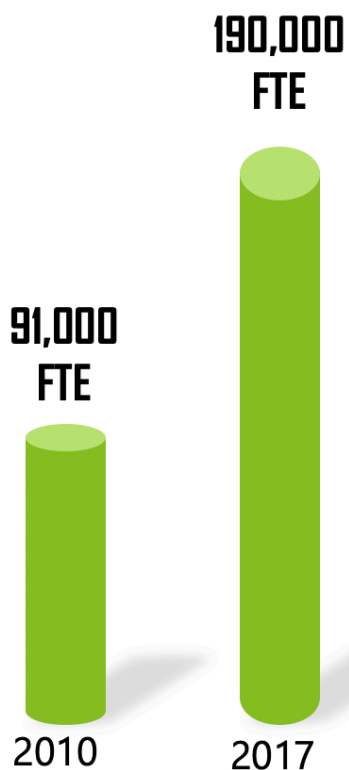
WHAT IS CLAUDE
MOORE DOING?



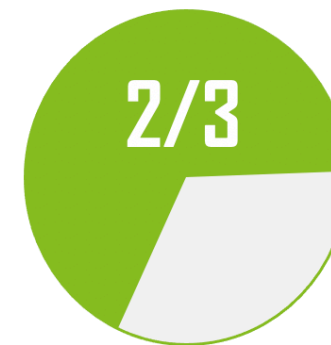
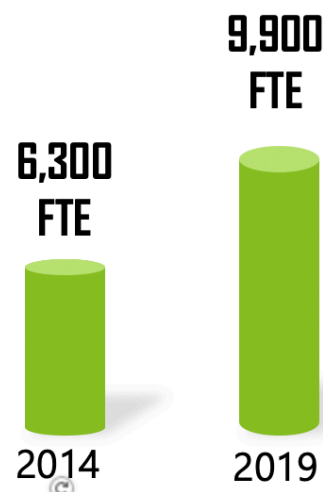
WHAT CAN THE
COMMONWEALTH DO?

Lack of supply of health workers

United States 2010 to 2017:
109% Growth in Nurse
 Practitioner Workforce¹



Virginia 2014 to 2019:
57% Growth in Nurse
 Practitioner Workforce²



A 2012 Pew Research Center analysis of Census data reveals that **two-thirds of young Americans** in the age group of 25-29 are without a college degree and lack the necessary skills or qualifications **needed to enter the job market**³

1. Auerback, Buerhause, Staiger: Implications of Rapid Growth of the Nurse Practitioner Workforce in the US. *Health Affairs*, 39 (2), 2020: 273-279

2. Virginia Department of Health Professions Healthcare Workforce Data Center: *Virginia's Licensed Nurse Practitioner Workforce*, 2019.

3. Nash-Hoff, M. (2013, April 20). Innovative Programs Provide Career and Technical Education in High Schools. *IndustryWeek*.

The Perfect Storm: Factors Causing Health Workforce Shortages

*'According to an Institute of Medicine (IOM) report in 2008, "Retooling for an Aging America," the demand for direct-care workers will increase with population aging, but their wages tend to be low and turnover high; up to 80-90% over their first two years.'*⁵

- Increased demand for health services
 - Aging population – increased share of population, longevity, higher utilization¹
 - Expanded health insurance coverage²
- Healthcare is 10% of total employment in Virginia³
- Aging health workforce (retirement)
- Barriers to increasing educational capacity/supply of health workers
 - Only 3% of Career & Technical Education programs in health science⁴
 - Not enough qualified teachers - low paying jobs not competitive w/ health sector jobs
- HS students not prepared in science and math
- Entry level jobs less attractive⁵
 - Competition for shrinking labor pool
 - Low wages compared to other fields
 - Limited career opportunities
 - Lack of prestige

Virginia's Health Workforce Outlook

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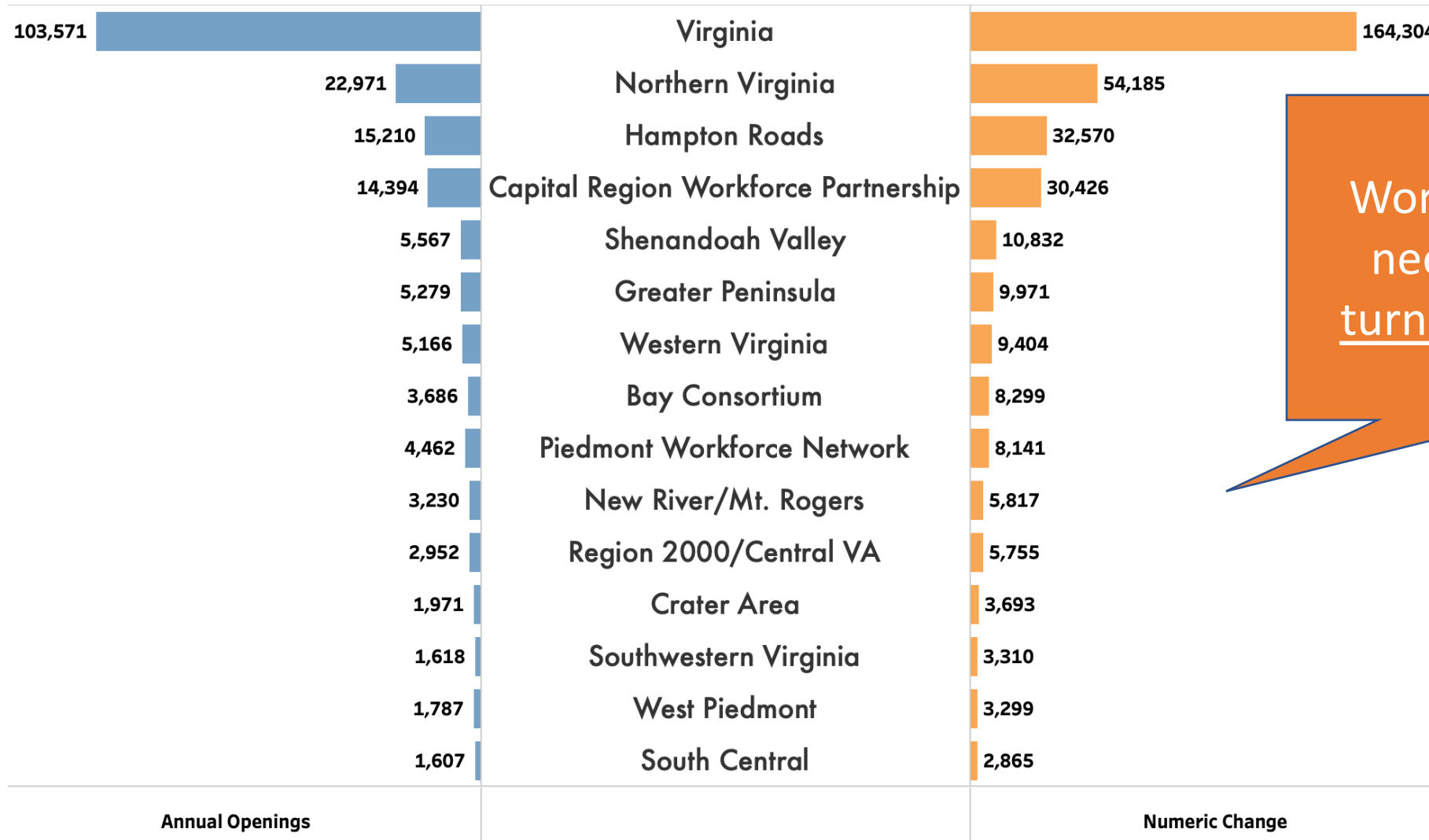
Growing
4 times faster
than all other
occupations

Occupation	Percent Change	Annual Change	Annual Openings	Education Required
Personal Care Aides	36.87	1,580	8,656	Less than high school
Phlebotomists	35.02	124	566	Post-secondary non-degree
Veterinary Technologists and Technicians	34.08	67	252	Associate's degree
Veterinary Assistants and Laboratory Animal Caretakers	33.83	135	889	High school diploma or equivalent
Occupational Therapy Assistants	33.55	31	149	Associate's degree
Physician Assistants	32.62	84	254	Master's degree
Home Health Aides	32.09	325	1,641	Less than high school
Veterinarians	31.27	93	226	Doctoral or professional degree
Nurse Practitioners	30.76	150	451	Master's/doctoral degree
Genetic Counselors	27.96	3	9	Master's degree
Physical Therapist Assistants	27.74	75	457	Associate's degree
Speech-Language Pathologists	26.1	85	281	Master's degree

Entry-level occupations make up much of this list and are essential to maintain system capacity and provide a source of new health and social service professionals.

Virginia Projections for Health Science Occupations

Annual Openings vs Numeric Change (2018-2028)



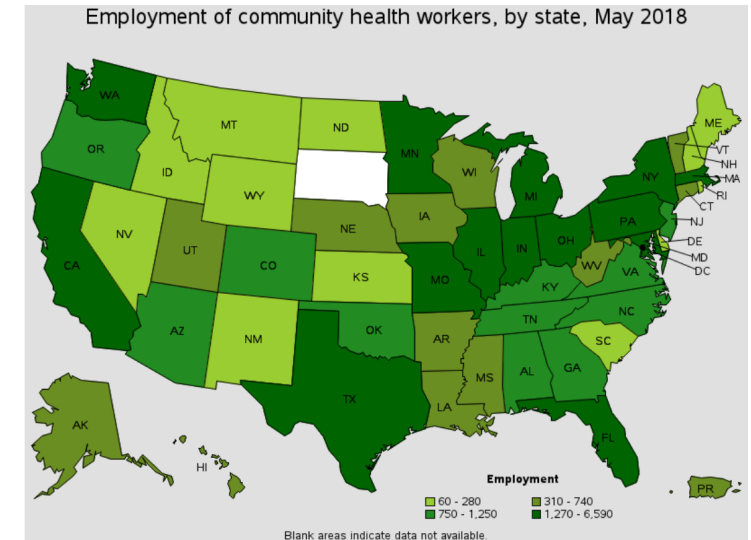
Workforce strategies
needed to address
turnover AND growth

Low Supply of Community Health Workers Per Capita

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Occupation Description: Assist individuals and communities to adopt healthy behaviors. Conduct outreach for medical personnel or health organizations to implement programs in the community that promote, maintain, and improve individual and community health.

	Employment	Employment per 1,000 jobs	Location quotient*	Mean hourly wage	Annual mean wage
U.S.	58,950	0.40	n/a	\$21.34	\$44,390
Virginia	890	0.23	0.57	n/a	n/a
Maryland	1,680	0.62	1.55	\$23.96	\$49,850
North Carolina	860	0.19	0.48	\$18.34	\$38,160



*The location quotient is the ratio of the area concentration of occupational employment to the national average concentration. A location quotient greater than one indicates the occupation has a higher share of employment than average, and a location quotient less than one indicates the occupation is less prevalent in the area than average.

VA SUPPLY

890 CHWs

Assumptions: BLS, as of May 2019

VA DEMAND

667 CHWs
index scenario

2,002 CHWs
high social need scenario

2,670 CHWs
rural scenario

Assumptions: Index scenario=1 CHW per 10,000 adults, High social need=3 CHWs per 10,000 adults, Rural scenario=4 CHWs per 10,000 adults. 6,674,776 [adults in Virginia](#), as of July 2019

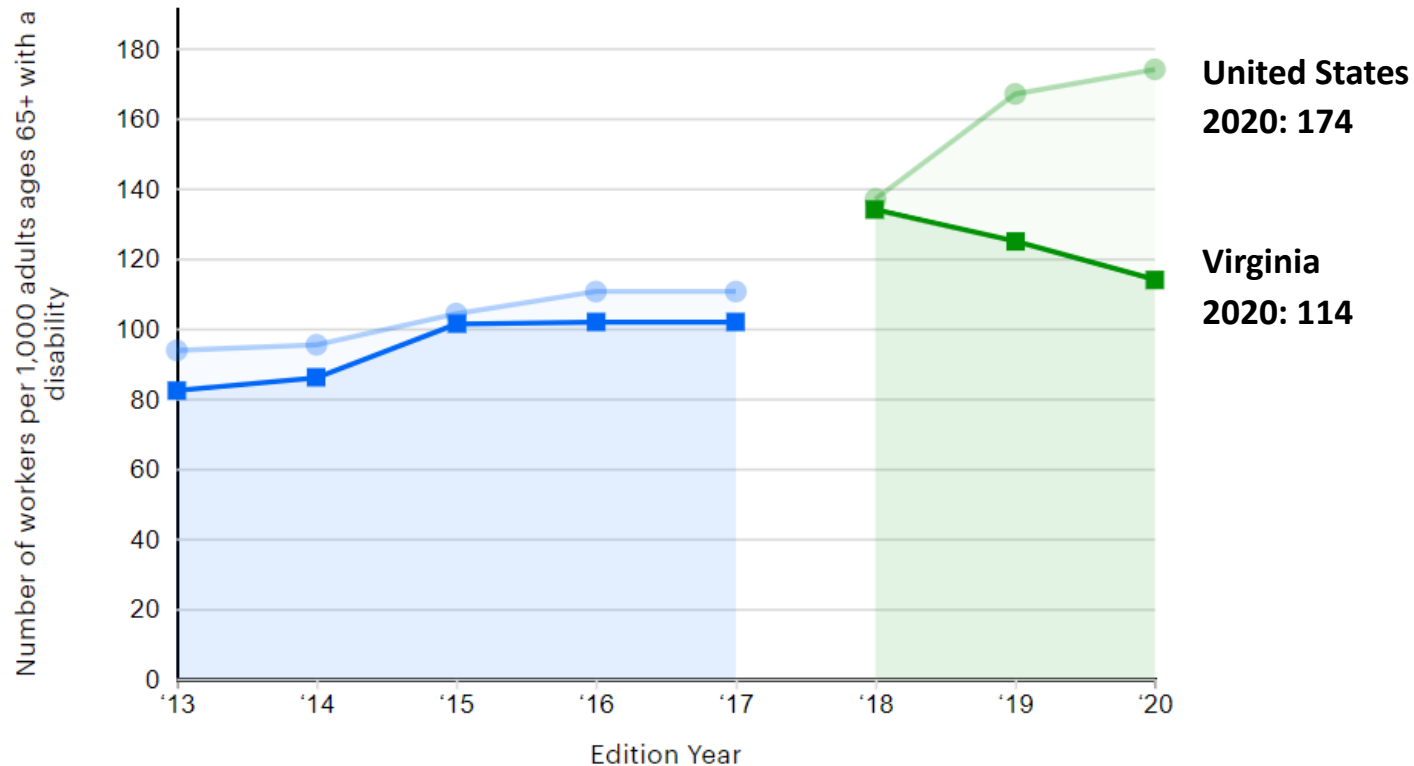
Question: What portion of the VA adult population lives in “index,” “high social need,” and “rural” areas?

George Mason University

Virginia Ranked 33 of 50 States for Home Health Providers

Shift to home and community-based care exacerbate demand for direct care workers²

Number of workers per 1,000 adults ages 65+



Blue: Number of personal care and home health aides per 1,000 adults ages 75 and older

Green: Number of personal care and home health aides per 1,000 adults ages 65 and older with a disability

Home health care workers enable seniors to remain in their homes longer

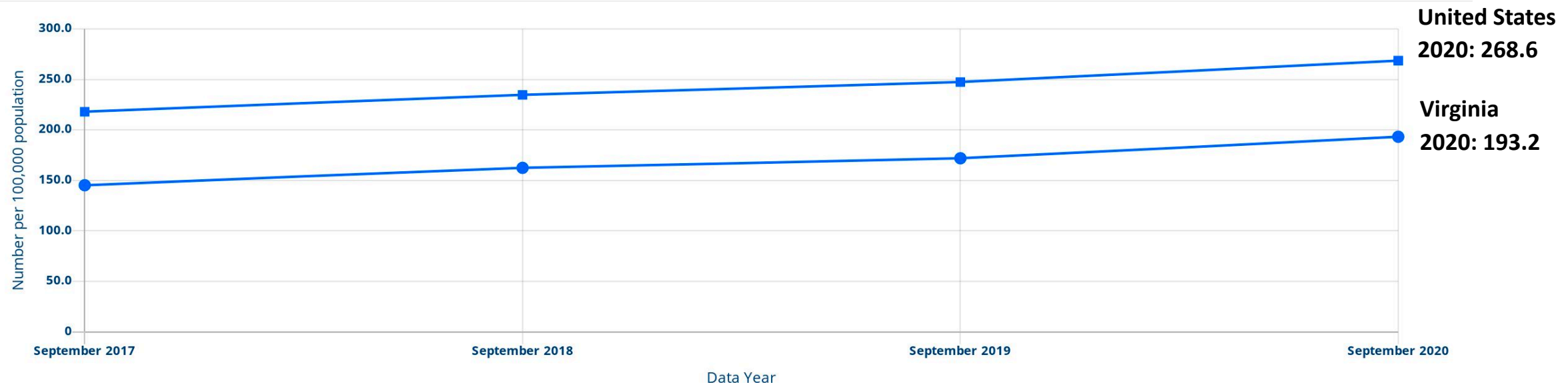
Seniors aged 65+ make up majority of patients who use home health services

Home- & community-based services are less expensive than institutional care

Short Supply of Mental Health Providers

Communities most affected by poor access to mental health care:

- [Rural communities](#) where individuals are less likely to have a mental health treatment facility than metropolitan counties.
- [Higher percentage of Black or Hispanic individuals](#) are less likely to have a mental health treatment facility.
- [Low-income communities](#) where individuals are less likely to have mental health treatment resources and mental health professionals than high-income communities.



Source: U.S. HHS, Centers for Medicare & Medicaid Services, National Plan and Provider Enumeration System, September 2020

Number of psychiatrists, psychologists, licensed clinical social workers, counselors, marriage and family therapists, advanced practice nurses specializing in mental health care as well as providers that treat alcohol and other drug abuse per 100,000 population

What is Claude Moore doing?



Building capacity in Career & Technical Education by catalyzing partnerships between Virginia **public school systems, post-secondary academic institutions, and healthcare employers**



Investing in health workforce research to identify areas of greatest need and inform prioritization our efforts



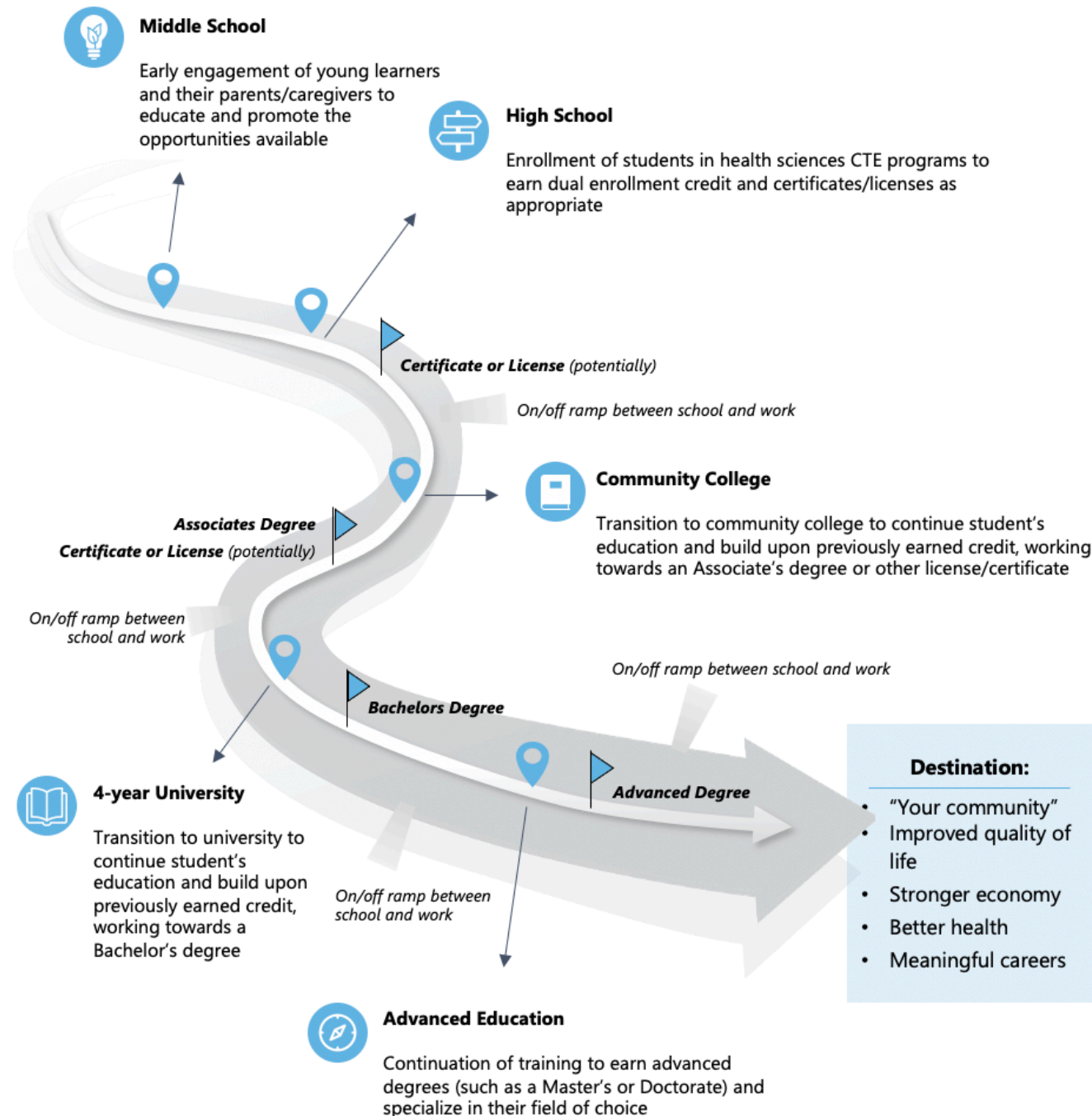
Encouraging early STEM education in VA to prepare students for entrance into health occupations – needs introduction before high school



Piloting collective impact model with employer led initiatives in high need areas of Virginia

Proposed Solution: Health Sciences Highway to Support Economic Development

The health sciences workforce highway enables **continuous learning**, beginning with early engagement in middle school and continuing throughout with professional education. It also facilitates **on and off ramps** as students transition between school and work and contribute to the **economic development in local communities**.



Career & Technical Education in Health Sciences

School Year 2018-2019

12



10,000 enrolled



80% female

48% persons of color

68% disadvantaged



3,200 completed programs



650 entered health
labor market



1,500 transitioned to post-secondary
education in health-related field

What the Commonwealth Can Do

Inter Agency Leadership	Establish a collective vision for health workforce planning Support adoption of Claude Moore Model for entry level workforce development state-wide
Research	Fund a technical assistance center for health workforce research (inform commonwealth policy and prioritize use of limited resources) Analyze impact of commonwealth and regional workforce initiatives (public and private sector)
Career & Technical Education	Incentivize expansion of CTE programs in health sciences
Address Disparities	Prepare K-8 students with skills (math and science) needed to succeed in health sciences careers Incentivize employment in rural communities Implement strategies to reduce turnover in entry-level health occupations (esp. public sector)

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Workforce Supply Data Sources

- Virginia Career and Technical Education, 2017-2020
- Virginia Employment Commission, Labor Market Information 2018-2028
- Health Resources & Services Administration, Health Professional Shortage Areas, 2019