A Report to GO Virginia Region 2 Council on achievements with funding from an Enhanced Capacity Building (ECB) Grant

Blue Ridge Partnership for Health Science Careers

August 2023



Blue Ridge Partnership

for Health Science Careers

By

Cynthia Lawrence, President
Blue Ridge Partnership for Health Science Careers of Virginia, Inc.
Director, Workforce Development, Carilion Clinic
and

George Mason University: Mason Center for Health Workforce
Peggy J. Maddox, Ph.D., Co-Director
Caroline Sutter, DNP, Co-Director
Jenifer A. Meno-Denneny, DNP

Table of Contents

| Section Title | Page Number |
|--|-------------|
| Executive Summary | 3 |
| Overview of Purpose | 4 |
| Background: | 5 |
| The Blue Ridge Partnership for Health Science Careers and Its Local Community | ' |
| Establishment of the Blue Ridge Partnership for Health Science Careers | 8 |
| Purpose of the Partnership: | 9 |
| Mission, Vision, and Guiding Principles | 9 |
| • Goals | 10 |
| Key Initiatives | 11 |
| Implementation of the GO Virginia grant: | 12 |
| Organizational Structure | 16 |
| • Accomplishments | 19 |
| • Lessons Learned | 21 |
| Future Goals | 22 |
| Target Future Outcomes | 24 |
| Conclusion | 25 |
| References | 26 |
| Supplementary content: | |
| Appendix 1: Partnership Stakeholders - Region 2 | 29 |
| Appendix 2: Board of Directors and Committee Chairs | 31 |
| Appendix 3: Charters and Logic Models | 33 |
| Appendix 4: Partnership Website landing page | 51 |
| Appendix 5: High School Draft Degree-Track | 52 |
| Health Sciences Core Curriculum | |
| Appendix 6: Employer Recruitment and Retention Data Measures | 53 |
| Indicating Partnership Effectiveness | |

2

Executive Summary

The Blue Ridge Partnership for Health Science Careers (the Partnership) received a \$100,000 capacity building grant from GO Virginia to support the establishment of a coordinated, sustainable approach to developing health science careers in the region. GO Virginia is a bipartisan, business-led economic development initiative that supports programs to create more high-paying jobs through incentivized collaboration between business, education, and government to diversify and strengthen the economy in every region of the Commonwealth. GO Virginia has defined nine regions in the Commonwealth that are geographically similar and share similar economic development and workforce needs. The Partnership operates in GO Virginia Region 2. (Geographic list provided on page 5.)

The Partnership utilized GO Virginia grant funds to establish the Blue Ridge Partnership Executive Committee and Task Force working groups, conduct a situational assessment and workforce demand analysis, research best practices in health science workforce development, identify existing resources, engage major stakeholders, and develop an informational website and document storage platform. The Partnership engaged the Mason Center for Health Workforce at George Mason University to provide the data and analysis which helped to inform this work.

The project faced challenges due to the COVID-19 pandemic, leading to adjustments in the original goals. However, these unforeseen circumstances also provided new opportunities to address critical health workforce shortages impacting health care providers, academic institutions, employer hiring needs, and evolving job expectations in the Region. Despite the challenges, the Partnership successfully built capacity by creating an organizational model that fosters volunteer collaboration between employers, educators, workforce organizations, and economic development professionals. Together, the coalition successfully addressed the Region's workforce demands by developing tools and processes to provide crucial workforce information to employers and academic institutions from K-12 through post-graduate and facilitating access for students to explore careers in the Life Science and Health industry cluster.

The model that has been created can be scaled and replicated in other GO Virginia regions. For example, the Partnership is actively assisting leaders in GO Virginia Region 3 to establish the Southern Virginia Partnership for Health Science Careers. The model can also be applied to workforce development efforts in other Region 2 industry clusters such as manufacturing, IT, and transportation.

This report highlights the Partnership's achievements with the grant funding and outlines future plans for life science and health workforce development in GO Virginia Region 2. Through ongoing efforts, the Partnership aims to continue its vital role in bridging the gap between employers' needs and educational resources.

Purpose of the Grant

The Blue Ridge Partnership for Health Science Careers (the Partnership) received a GO Virginia capacity building grant of \$100,000 to expedite the development of education-to-employment pathways for the life science and health workforce in GO Virginia Region 2. An initiative from regional employers and grassroots efforts, the Partnership fosters collaboration among private employers, academic institutions, workforce and economic development organizations to address local workforce development needs.

The grant supported various essential aspects of the Partnership's mission, including staff support to operationalize the Blue Ridge Partnership Executive Committee and Task Force working groups, conducting a comprehensive regional situational assessment and workforce demand analysis, researching best practices in health science workforce development, identifying and inventorying existing and required resources for regional health science workforce development, and engaging major stakeholders interested in growing the pipeline for life science and health occupations. Additionally, GO Virginia funds helped to pay for an informational website and information storage platform for working group documents.

However, the onset of the global COVID-19 pandemic disrupted the original project implementation, necessitating adjustments to the work process due to reduced availability of school personnel and volunteers. Consequently, the pandemic led to a modification of some of the initial grant goals. Nevertheless, this challenging situation also provided new opportunities for the Partnership to address significant health workforce shortages, considering the evolving demands of academic institutions, employer hiring needs, and occupation-specific job expectations in the Region. The changing landscape of health science occupations, characterized by high vacancy rates, elevated job turnover, burnout, and job-related stress, further underscored the need for adaptive solutions.

With the guidance and support of GO Virginia project management staff, the Partnership proactively realigned its grant goals to meet the evolving health science workforce demands in the Region. This guidance involved modifying and re-prioritizing projects to better serve the needs of employers and address the diverse spectrum of health science occupations and career development in Region 2. Having concentrated its focus on the most critically needed job roles impacted by the pandemic, the network established by the Partnership is well-positioned to re-prioritize the biotechnology and biosciences career paths and to accelerate the engagement of leading employers in this cluster. The Partnership is pivotal in bridging the gap between employers' needs and workforce development resources in the life sciences and health industry cluster by embracing flexibility and responsiveness.

Background: The Blue Ridge Partnership for Health Science Careers and Its Local Community

The Partnership is strategically located in western Virginia, encompassing Region 2, as designated by Growth and Opportunity for Virginia (GO Virginia) (www.govirginia.com). Region 2 comprises Lynchburg, New River Valley, and Roanoke Alleghany Metropolitan Statistical Area (MSAs), spanning across thirteen counties and five independent cities. The counties include Alleghany, Amherst, Appomattox, Bedford, Botetourt, Campbell, Craig, Floyd, Franklin, Giles, Montgomery, Pulaski, and Roanoke, while the cities encompass Covington, Lynchburg, Radford, Roanoke, and Salem.

The region has a history of successful local cooperation and some experience with interregional collaboration, notably between the New River and Roanoke Valleys. These areas share similar economic characteristics, including strengths in manufacturing, transportation, agriculture, and emerging technology clusters. It is a diverse region with a mix of urban and rural areas. It boasts excellent university resources and high-quality healthcare systems, significantly contributing to the regional economy and employment base. In pursuit of economic development, Region 2 has prioritized Life Science & Health (L S & H) as a crucial component of its Diversification Plan 2021 to enhance its economic vitality within GO Virginia. The plan highlights various demographic characteristics influencing the region's economic strengths and weaknesses.

Table 1: Average employment wages in different business clusters across Virginia, with a focus on the growth and development of L S & H, Information Technology, and Emerging Tech clusters to drive regional economic diversification and prosperity.

| Transportation and Materials and Machinery Autonomy Manufacturing (\$34/hr or \$70K) (\$34/hr or \$70K) | | Life Sciences and Healthcare (\$31/hr or \$65K) | IT and Emerging Tech (\$43/hr or \$91K) | |
|--|---|---|--|--|
| Heavy Duty Trucks Motor Vehicle Parts Automation | Plastics Rubber Iron Foundries Industry Machinery and Tools | Biopharma & Medical Devices Residential Care Eldercare Medical Diagnostics & Support Services | IT & Cybersecurity Electrical Manufacturing Engineering Services | |

Source: Diversification Plan 2021, Virginia Tech Center for Economic and Community Engagement

The region is transforming from a railroad and industrial manufacturing-oriented economy to a more diversified economic landscape, largely driven by the growth of the L S & H industry cluster. According to the Roanoke Regional Partnership, this sector, encompassing clinical, research, biotech, and medical devices, is one of the Region's strongest employers. It employs over 41,000 people across nearly 300 firms, showing robust job growth projections of 7% by 2029.

(<u>https://roanoke.org/targets/life-sciences/</u>) According to the GO Virginia Region 2 diversification plan, the life sciences cluster is expected to lead the region, with 5.7% employment growth forecast.

A collaboration between Carilion Clinic (the largest regional health provider headquartered in Roanoke), and Virginia Tech has led to the establishing an Academic Health Center campus in Roanoke, fostering world-class research, educational, and clinical facilities that contribute to the growth of both organizations. The collaboration also enables emergent companies based on translational academic and clinical research. As projected by the Weldon-Cooper Center for Public Services at UVA (May 2018), employment in the campus core alone is expected to grow to nearly 1,200 employees by 2026 with an expected economic impact of \$486 million. Moreover, the Weldon-Cooper Center (October 2019) reports that Carilion Clinic's total direct and indirect economic contribution within its service area amounts to 23,719 jobs, \$3.17 billion in output, and \$1.64 billion in value-added impacts.

Other leading regional employers in this cluster include acute care health providers HCALewisGale and Centra Health; long-term care providers American Health Care, Commonwealth Care, Friendship Living, Medical Facilities of America, and Richfield Living. Established and emerging biotechnology and bioscience employers include Novozymes, TechLab, Biotherapeutics, CytoRecovery, and others. The growing demand for a skilled workforce within Region 2 significantly impacts other job clusters within the L S & H career fields. However, the current supply of employees needs to meet this demand, leading to challenges in hiring and retaining qualified personnel. Two studies funded by the GO Virginia Region 2 Council in 2020 and 2019 respectively—the "Regional Career & Technical Education Study" conducted by Greater Roanoke Workforce Development Authority and "Blue Ridge Region and Stopping the Brain Drain: Talent Attraction and Retention Situational Awareness" conducted by the Roanoke Regional Partnership—corroborate employers' reports on the difficulty in filling middle-skill, technical, and higher-skill positions, including management roles, due to the region's challenges in retaining talent produced by area colleges and universities.

Table 2: Area 2 Occupational Demand

| | 2021 JOBS | | - | 2026 LQ | 2015-2021 CHANGE | | 2021-2026 CHANGE | |
|---|--------------|-------|-----|------------|------------------|-----------------|------------------|-----------------|
| | | | | | % CHANGE | COMP. EFFECT | % CHANGE | COMP. EFFECT |
| LIFE SCIENCES AND HEALTHCARE | 30,4 | 412 | 1.2 | 1.2 | 11.9% | 2,192 | 5.7% | 308 |
| Biopharmaceutical and Medical Devices | 1,513 | 5.0% | 0.5 | 0.5 | 8.9% | (35) | 7.8% | 50 |
| Residential Care | 17,462 | 57.4% | 1.4 | 1.4 | 20.9% | 2,257 | 5.5% | 221 |
| Elderly Care | 10,696 | 35.2% | 1.2 | 1.2 | 0.6% | (85) | 5.7% | 24 |
| Diagnostic Support | 741 | 2.4% | 8.0 | 0.9 | 3.8% | (33) | 7.9% | 1 |

Source: Diversification Plan 2021, Virginia Tech Center for Economic and Community Engagement

The Region 2 occupational landscape demonstrates significant growth potential within the L S & H cluster, with each sub-cluster experiencing growth from 2015 to 2021. Notably, the residential care sub-cluster accounted for the largest share of industry cluster employment in 2021, comprising 57.4% of the total. There is an expectation that all L S & H sub-clusters will have competitive growth over the next five years.

Table 3: Population Growth Region 2, Virginia, and United States

| | Population (2015) | Population (2021) | Total Change | % Change (2015-2021) |
|---------------|-------------------|-------------------|--------------|-------------------------|
| Region 2 | 775,474 | 785,790 | 10,316 | 1.33% |
| Virginia | 8,367,303 | 8,649,331 | 282,028 | 3.37% |
| United States | 320,738,994 | 331,820,028 | 11,081,034 | 3.45% |

Source: Diversification Plan 2021, Virginia Tech Center for Economic and Community Engagement

Region 2 population has shown modest growth, representing 11% of Virginia's total population with a rate of less than 2% since 2015. While this growth is positive, it challenges building a robust pipeline of skilled medical, allied health, technology, and administrative personnel across various education and professional attainment levels. Current talent development approaches must be scaled up to effectively meet the growing job demands effectively.

Establishment of the Blue Ridge Partnership for Health Science Careers

In the fall 2018, Carilion Clinic initiated a meeting with educational leaders and workforce officials from the Roanoke and New Rivers MSAs, seeking to formalize collaborative efforts for secondary/post-secondary education and workforce training. In 2019, the establishment of the Blue Ridge Partnership for Health Science Careers was focused on developing talent pathways for the health science workforce and life science-related occupations. Senior leaders at Carilion Clinic played a crucial role in supporting the Partnership's formation and continue to provide executive-level oversight and support from internal resources.

The Partnership's scope expanded to include all of Region 2. Members of the Partnership (comprised of volunteers from K-12 schools, higher education entities, local employers, philanthropic organizations, and economic development organizations) collaborate to leverage resources and conduct strategic planning under a collective impact model. The Partnership focuses on expanding and improving academic qualifications and vocational skills of the health science workforce, including attaining industry-recognized credentials and degrees. The Partnership became a 501c4 non-profit designation in early 2023, allowing for public advocacy.

Led by a 19-member Board of Directors with representation from all stakeholder groups, the Partnership operates through six standing committees with approximately 100 volunteer members. An additional seventh committee, Diversity, is in formation to address identified needs. The employer-led model followed by the Blue Ridge Partnership has proven highly effective in engaging community stakeholders and implementing scalable and replicable workforce development initiatives that align with regional needs.

Carilion personnel provide support and expertise in healthcare careers pathways, accounting and enterprise project management. We are pleased to support the work of Blue Ridge Partnership for Health Science Careers and help accelerate the Roanoke Valley's health sciences education and workforce development."

Jeanne S. Armentrout

Executive Vice President and Chief Administration Officer, Carilion Clinic

Purpose of the Partnership

The Blue Ridge Partnership for Health Science Careers aims to enhance and expand workforce development to create a robust talent pipeline for L S & H occupations. The key objectives are:

1) rapidly meeting the needs of regional employers, 2) supporting the region's emerging L S & H ecosystem, and 3) enhancing the region's appeal as a magnet for attracting established companies within the evolving cluster.

Centra's engagement in the Blue Ridge Partnership for Health Science Careers has been instrumental in advancing our long-term strategic objectives around workforce development. The spirit of collaboration within our region has been pivotal, as we truly work together to build a robust workforce and sustainable pipeline."

Amy Carrier
President and CEO, Centra

"I've been able to drive improved recruitment and retention in Centra by involvement in this wonderful Partnership."

Carrie White, MSN, RN, CAPA Nursing Business Strategist, Centra

Partnership Mission, Vision, and Guiding Principles

Mission: The Partnership's mission is to foster widespread collaboration between businesses and education, leveraging existing resources to align curricula and training with the current needs and future growth strategies of Life Sciences & Health (L S & H) employers through trans-disciplinary innovation; we aim is to enhance job readiness, placement, and support economic development.

Vision: To create a dynamic, adaptable, and sustainable model for health workforce development for the Commonwealth of Virginia characterized by widespread business-education collaboration.

Guiding Principles

- 1. **Collaboration**: We prioritize building and nurturing partnerships to achieve mutual success.
- 2. **Innovation:** We embrace creative solutions to address emerging challenges and opportunities.
- 3. **Transparency:** Our relationships, processes, and actions characterize openness, honesty, and accountability.

- 4. **Fiscal Responsibility:** We leverage existing resources and established funding mechanisms to ensure responsible stewardship.
- 5. **Diversity:** We celebrate and respect the uniqueness of thought, abilities, cultures, communities, and beliefs, fostering an inclusive environment.
- **6. Welcoming and Belonging:** We ensure that all individuals and communities have equal opportunity to co-create their futures and contribute to the health and well-being of our community.

Partnership Goals

The overarching goal of the Partnership is to ensure a workforce-ready talent pool that fulfills regional employer needs for L S & H career occupations. Furthermore, we aim to support establishing other employer-led regional partnerships across the Commonwealth, following the GO Virginia-defined regional geography, by adopting the successful Blue Ridge Partnership model for cross-cluster workforce development. The Blue Ridge Partnership actively shares its work product and guides employers and educational institutions in other areas of the Commonwealth. It is also currently engaged with GO Virginia Region 3 to establish the Southern Virginia Partnership for Health Sciences.

The specific goals of the Partnership are as follows:

- 1. Raise the Rigor and Align Health Sciences Education: Work towards aligning health science education in the region with the evolving needs of employers, ensuring high standards and relevance.
- 2. **Establish a Rigorous, Standardized K-16 Health Sciences Curriculum:** Develop a standardized and rigorous K-16 health science curriculum across the Commonwealth to ensure consistency and quality.
- 3. Address Current and Future Qualified Health Workforce Needs: Leverage existing education and training pathways to employment to address the current and future demand for qualified health workforce.
- 4. **Accelerate Certifications and Degrees in High-Need Jobs:** Facilitate the rapid conferring of certifications and degrees in high-demand occupations to meet workforce needs.
- 5. **Establish a Shared Work Appointment Model:** Develop a Shared Work Appointment model to increase the number of healthcare clinicians available for teaching, enhancing the talent pool of educators.
- 6. Address Employee Retention and Career Advancement: Define and communicate career advancement opportunities within the health science industry to improve employee retention.
- 7. **Reduce Barriers to Education and Training:** Advocate for and collaborate with other regions to reduce barriers (e.g., cost, duration, regulations) to education and training, enabling broader access to quality learning opportunities.

"With workforce shortages, it is even more important for students from rural and under-served areas to have access to educational pathways with quality steps forward for their futures. Health science fields also provide what young people are seeking: a sense of meaning in their work, variety in daily tasks, and solid compensation. We are excited to be part of a group advocating for these options. Our local commitment to preparing students for the future is high, and one of our health sciences options was recently honored by the Virginia School Boards Association (VSBA)."

Kim Halterman Superintendent, Alleghany Highlands Public Schools

"Health sciences have become a primary economic driver for the Roanoke region and we need for our students to be prepared for the meaningful career opportunities that will continue to expand in a multitude of related fields. Our partnership with the BRPHSC provides a catalyst and vehicle for enhancing the health science career programs we currently have and harnessing the creative synergy needed to imagine and collaboratively develop the programs that will be needed in the near and distant future."

Ken Nicely, Ed.D. Superintendent, Roanoke County Public Schools

Key Initiatives of the Blue Ridge Partnership for Health Science Careers

The following notable initiatives highlight the Partnership's impactful work:

- 1. **Development of the Region's Cross-Sector Partner Network:** The Partnership has fostered collaboration among diverse stakeholders from different clusters, creating a robust network of partners committed to workforce development in the health science industry.
- 2. **Initiated Employer Workforce Needs Analyses:** Understanding the specific needs of employers is critical for effective talent development. The Partnership has conducted comprehensive workforce needs analyses, identifying essential skills and competencies required by L S & H employers in the region.
- 3. **Expansion of Targeted Career Pathway Programs for Youth and Adults:** The Partnership has worked towards expanding targeted career pathway programs, offering comprehensive training and support for both youth and adults pursuing careers in the health science field.
- 4. **Development of Education-to-Employment Pathway Illustrations:** To facilitate clear communication of career progression, the Partnership has created education-to-employment pathway illustrations, providing students and job seekers with a clear roadmap for skill development and career advancement.

- 5. **Service Alignment/Resource Braiding:** By aligning services and braiding resources, the Partnership maximizes the impact of available resources, ensuring coordinated efforts and streamlined support for workforce development initiatives.
- 6. **Increased Employer Work-Based Workforce Training:** The Partnership has facilitated increased employer participation in work-based workforce training, fostering opportunities for hands-on learning and skill development in real-world settings.
- 7. **Established a System for Future Program Evaluation and Performance Review:** To ensure continuous improvement and accountability, the Partnership has established a robust program evaluation and performance review, focusing on outcomes and results.

"Being part of the Blue Ridge Partnership for Health Science Careers has broadened and deepened my understanding of the variety of career options available to students after graduating high school. The opportunities are abundant."

Mr. Christian J. Kish Principal, Burton Center for Arts and Technology Roanoke County Public Schools

Implementation of the GO Virginia Enhanced Capacity Building (ECB) Grant

The Partnership was awarded the GO Virginia ECB grant in 2021. However, the COVID-19 pandemic significantly impacted the original work plan, necessitating planned actions and funding utilization adjustments. Priorities for workforce development shifted to support public health, resulting in changes to workforce development goals and Partnership initiatives. Despite the challenges posed by the pandemic, it also spurred collaboration between private employers and academic leaders, driving innovative solutions to address immediate workforce gaps. To address these changes, the Partnership strategically re-prioritized its efforts in health workforce development while continuing to plan for life science workforce initiatives. By adapting to employers' needs and expanding talent pathways, the Partnership played a transformative role in creating meaningful and diverse career opportunities in the health science cluster.

Leveraging successful programs at various educational institutions, the Partnership identified and supported several initiatives that accelerated the training and credentialing of high school and community college students, aligning them with in-demand health science jobs in the Region. This approach has proven highly successful, providing an exemplary model for other Regions to follow in combining public and private investment to scale up workforce development programs in high-demand clusters, particularly for high school students in community college health science dual enrollment

career and technical education tracks. Overall, the Partnership's proactive response to the challenges presented by the pandemic and its innovative approach to workforce development have made a significant impact, creating pathways for more individuals to pursue rewarding careers in the health science cluster.

Collaborating and coordinating efforts from multiple organizations has been instrumental to the grant's success. By bringing together stakeholders from various disciplines, the Partnership has created a strong and diverse network of expertise and resources. The transparency and spirit of innovation practiced within and between Committees working with a common vision has built trust, increased mutual understanding between schools and employers, decreased siloed activity and tamped down unproductive, unspoken competition, leading to better collaboration in developing a work-ready health sciences talent pool together. Examples of early-stage initiatives that will be implemented region-wide:

- Assistant Professors of Practice: a shared appointment model for instructors where employed industry professionals in the LS & H cluster are encouraged and enabled to teach at K12 or post-secondary schools while remaining employed. This will include micro-credentialing/badging, and possible financial incentives. Cost sharing models and accreditation requirements are under development with schools. This initiative addresses the shortage of instructors and addresses employee retention by providing career progression for individuals who may be practicing at the top of their license or considering retirement.
- Scholars Named for any of the employer stakeholders (e.g. LewisGale Scholar), seniors in high school or undergraduate students are selected to participate in a clinical or non-clinical multi-year longitudinal learning experience with a L S & H employer. Components of the program include mentor pairing, financial assistance, shadowing rotations throughout the organization, leadership training, guaranteed interview for employment with preferred consideration. This program considers the registered apprenticeship requirements but is intended to provide opportunities for more intensive bi-directional communication and curated curriculum development between education and employers. This program builds on the earn-to-learn model.
- Regional Sonography program based on Region 2 employer need, Roanoke Higher Education Center (RHEC) has partnered with Sovah Health (located in GO Virginia Region 3) to deliver sonography training in Roanoke. RHEC previously secured state funding for lab equipment and, with the assistance of the Partnership, researched capacity for Region 2 to deliver instruction and determined that leveraging Sovah's existing program is more cost effective and efficient. This is an example of inter-regional collaboration.

• Region-wide Health Sciences Career Advisory Summit – The Partnership has focused a great deal of effort in trying to reach school counselors, career coaches, job advisors, youth-serving organizations, and community mentors/influencers (e.g. African American pastors, immigrant communities, United Way, Boys and Girls Club, and others) to provide career pathways information and to invite their participation in the Partnership committee structure. In October 2022 an inaugural summit was held for this audience at the Fralin Biomedical Research Institute at Virginia Tech Carilion. Event attendance was 150 (facility capacity). To continue the momentum created by the event, the Student Engagement Committee established area workgroups to provide additional localized activities with schools and employers to provide information about L S & H career opportunities. A second expanded region-wide summit is planned for October 2023.

The Claude Moore Charitable Foundation (CMCF) has been a significant contributor to the Partnership (www.claudemoorefoundation.org). The Claude Moore Scholars program has supported health sciences courses in K-12 and community colleges since 2007 with the goal of getting high school graduates into a healthcare job upon graduation from high school. CMCF had been investing in the region through community colleges for several years, with funds primarily going to cover dual enrollment tuition for high school students in existing courses. By shifting grant dollars to the Partnership, CMCF funds are more directly supporting the establishment and expansion of health sciences courses at K-12 and enabling strategic engagement initiatives that promote health science careers more broadly. It is noted later in this document that the Partnership successfully advocated for a state budget amendment in 2021 that provides recurring funds to cover tuition for high school students dual enrolled in health sciences courses at three community colleges in Region 2. The investment by GO Virginia in accelerating the work of the Partnership has enabled CMCF funds to directly support the education pathways that meet stated employer needs.

A second key contributor to the Partnership's success has been the support and guidance from the Mason Center for Health Workforce, George Mason University (Center). The Center has provided the Partnership with access to comprehensive data related to the health workforce in the region. The Center aggregates data from all significant available sources at the state and national levels, making it the Commonwealth's sole repository of comprehensive healthcare and life science data. This data has empowered the Partnership with the ability to make strategic decisions based on accurate insights into labor market trends, workforce demographics, skill gaps, and emerging needs as well as comparative data from other Regions in the Commonwealth. By making this information available the Partnership was able to accelerate the work and improve its efficiency and effectiveness.

Armed with data, the Partnership has gained a profound understanding of the present state of the health workforce and skillfully identified critical areas requiring intervention. The unified data framework for decision-making has been instrumental. It ensures that all stakeholders can access

consistent and reliable data, empowering them to make well-informed decisions and seamlessly align their efforts. The collaborative nature of the data framework has further fostered teamwork among stakeholders, providing a shared foundation for discussions and efficient planning.

The coordinated effort between the Partnership and the Center serves as an exemplar, illustrating the importance of dynamic collaborations between diverse stakeholders—regions, institutions, employers, academic institutions, and community organizations. The collaborative efforts between the Partnership and the Center have been instrumental in breaking down barriers and driving impactful change. By pooling knowledge and strengths, an innovative and inclusive approach to workforce development emerged, broadly serving as a translatable model.

"The work of the Partnership aligns with Freedom First's mission, which is helping people prosper and communities thrive. We want to be a part of a collaboration that creates employment opportunities and contributes to financial well-being for families in our region.

Paul Phillips

President and Chief Executive Officer, Freedom First Credit Union

"People are strengthened by charting avenues out tough times far more than simply moved out of them. Accomplishments are far more meaningful when we are an integral part of the solution rather than a beneficiary of a solution and that's what the Blue Ridge Partnership is all about. Providing self-guided paths out of difficult situations and to help those less fortunate reach their goals."

David Tucker

President and Chief Operating Officer, Commonwealth Care of Roanoke, Inc.

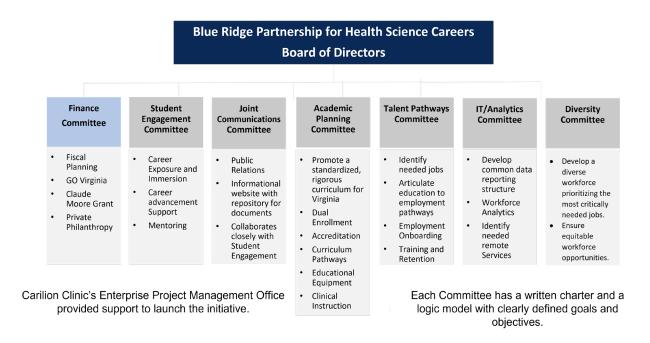
"Virginia Western is a forward-thinking Community College inspiriting individual, community, and economic transformation. Virginia Western has a longstanding history of collaboration with educational partners, employers and economic development professionals and has the third largest allied health program provider in the Virginia Community College System (VCCS). Being a partner in the BRHSC partnership has enhanced our opportunities to expand our life sciences programming, expand and develop new career pathways, dual enrollment and to better engage with middle school age students."

Marilyn Herbert-Ashton Vice President of Institutional Advancement Dean of Nursing Virginia Western Community College

Organizational Structure

As the Partnership has evolved, it has adopted an organizational structure designed to enhance operational effectiveness and ensure sustainability. The structure of the Blue Ridge Partnership Model is described in detail below:

Figure 1: BRPHSC Organizational Structure 2022-2023



Board of Directors (Board): The Board plays a pivotal role in achieving the Partnership's goals by providing oversight and guidance to the organization's committees. It formulates the Partnership's strategy, ensures fiscal accountability, and evaluates outcome measures. Comprised of representatives from diverse stakeholders, the Board actively identifies opportunities and barriers to performance, prioritizes resource allocation, and receives updates on committee work and progress during quarterly meetings. Committee chairs report directly to the Board, ensuring effective communication and coordination. The Board elects board members from a cadre of volunteers representing regional stakeholders who contribute their time and expertise to the Partnership's work. The Board of Directors addresses the following:

- Review and approval of recommended priorities and performance metrics from each committee
- Ensure adherence to stated performance metrics and recommend necessary adjustments
- Affirm or revise career path priorities
- Review the initiative's financial position to leverage resources and ensure shared financial commitments from all stakeholders

- Make program adjustments as needed
- Exchange information regarding health workforce activities across the Commonwealth.

Committees: The Partnership's committees are essential platforms for project development and execution, aligning with initiatives prioritized by the Board. They consist of representatives from private employers, philanthropies, economic development organizations, and educators who volunteer their expertise and time to conduct comprehensive analyses and develop recommendations for increasing the availability of qualified health science employees.

- 1. **Academic Planning Committee:** The APC works to align L S & H curriculum in the Region and raise the rigor of L S & H programs. It conducts assessments, develops core curricula, and addresses areas of improvement for health science education.
- 2. **Diversity Committee:** Formed in 2023, the Diversity Committee ensures that the Partnership engages thoughtfully with diverse communities to promote talent development in the health sciences within proper cultural contexts.
- 3. **Finance Committee:** The Finance Committee ensures financial oversight and resource management, providing rigorous accounting processes for grant funds and financial reporting
- 4. **Information Technology and Analytics Committee:** The ITAC collects and monitors workforce analytics, providing valuable data to facilitate decision-making for the Partnership. It focuses on workforce demand and supply in the L S & H cluster, addressing retention challenges through data-supported research.
- 5. **Joint Communication Committee:** The JCC is responsible for planning and overseeing the Partnership's communication efforts. It designs communication campaigns to promote health science careers and disseminate relevant information to the regional community.
- 6. **Student Engagement Committee:** The SEC plans and oversees interactions with students, parents, and the community, promoting LS & H careers to youth and adults. It organizes various engagement events, workshops, and career fairs to raise awareness about health science opportunities.
- 7. **Talent Pathways Committee:** The TPC promotes business-education collaboration, develops education-to-employment pathways, and explores innovative solutions to address workforce challenges. It supports experiential learning and addresses instructor shortages in the health science field.

Through collaboration and collective action, these committees within the Partnership have been able to harness the power of their combined knowledge and skills to drive transformative outcomes in the L S & H career fields. Their contributions help shape the future of the industry, fostering growth, and addressing emerging challenges. Overall, the committees are a testament to the strength and commitment of employers and the business community in Region 2. Their efforts are instrumental in driving positive change, promoting collaboration, and advancing the goals of the Partnership in the

L S & H workforce. The trans-disciplinary nature of the committees has built trust and facilitated dynamic relationships among stakeholders that have led to the creation of micro-initiatives that further support the mission of the Partnership.

*See Appendix 3 for charters and logic models for each committee.

"The Blue Ridge Partnership for Health Sciences Careers has been a transformative initiative, leveraging existing successful programs at NRCC, CVCC, MGCC, and VWCC and accelerating the training and credentialing of high school and community college students into available, good paying health science jobs that are in demand in our region. The BRPHSC can be a model for other regions in the state to combine public and private investment, and to scale up programs in high demand clusters, particularly for high school students in community college health sciences dual enrollment career and technical education tracks. Elements of the BRPHSC prototype structure could also be considered for workforce development initiatives in other industries."

John Capps, President, Central Virginia Community College Pat Huber, President, New River Community College John Rainone, President, Mountain Gateway Community College Robert Sandel, President, Virginia Western Community College

"The Blue Ridge Partnership for Health Science Careers is a community coalition to be admired, replicated, and most of all enacted. With the leadership Carilion Clinic has offered as an anchor institution, the BRP's collective impact model is steadily creating a dynamic intersection of educational access, workforce development, and economic growth. By putting leaders of school districts, systems of higher education, healthcare employers, workforce experts, and other key community stakeholders together, the BRPHSC is marshaling the collective energies of our area in ways that serve individuals, employers, economies, and the health and wellbeing of our beautiful Roanoke Valley region."

Shannon Latkin Anderson, Ph.D.

Director, Strategic Health Initiatives Coordinator, Public Health Studies

Associate Professor of Sociology

Roanoke College

Accomplishments of the Blue Ridge Partnership for Health Science Careers and Committees (2018-2023)

2018/2019:

- Established a coalition of leaders from private cluster health-related employers, workforce boards, and academic institutions.
- Conducted regional outreach to public and private industry leaders and organizations to discuss the shortage of qualified health science workforce in the region and raised awareness about the workforce shortages in the health science cluster, leading to collaboration among stakeholders.
- Developed an inventory of the most critically needed health science jobs in Region 2 through interviews with stakeholder employers.
- Formed an ad hoc academic task force to conduct an initial inventory of academic courses available from secondary and post-secondary educational institutions in the region, serving as a starting point for further analysis of educational offerings.

2020:

- Formalized and named the business-led consortium of stakeholders as the Blue Ridge Partnership for Health Science Careers.
- Formed an executive committee and five task forces to address identified gaps and priorities.
- Partnered with George Mason University Center for Health Workforce to develop regional data sets for analysis.
- Secured proposed state budget amendment for \$1.7M to support a 2-year pilot covering tuition for high school students dual-enrolled in LS & H courses, which was approved but not funded due to COVID-19.
- Received funding from the Claude Moore Foundation (<u>www.claudemoore.org</u>) to support the expansion of LS & H courses within K-12 districts in Region 2.
- Participated in statewide focus groups hosted by the Claude Moore Foundation, resulting in the establishment of a statewide network of professionals who share best practices, facilitate resources and leverage collaborations.

2021:

- Secured state budget amendment for \$1M (recurring) to Virginia Community College System to cover tuition for high school students dual-enrolled in LS & H courses at three community colleges.
- Completed the Region 2 inventory of secondary and post-secondary courses for health sciences.
- Developed charters, appointed chairs and co-chairs, and initiated gap analyses and projects for the five task forces.
- Held the first Blue Ridge Partnership Executive Committee quarterly committee meeting.

2022:

- Began creating Career Maps for the seven most critically needed job clusters, graphically depicted as a "highway" with multiple on/off ramps and routes to reinforce the analogy that health careers are a journey.
 - By involving all stakeholder groups in the career mapping process, employers have begun
 to adapt the "highway" model to improve the visualization and communication of internal
 career pathways and better coordinate employee transitions. This is a retention strategy.
- Developed Logic Models to guide priorities for the Partnership and each committee.
- Launched the website (<u>www.virginiahealthcareers.org</u>) and made it available in five additional languages. *See Appendix 4 for a screen shot
- Hosted the inaugural Health Science Career Advisory Conference with over 140 high school and post-secondary counselors, job advisors, career coaches, and mentors in attendance.
- Helped to establish the Southern Virginia Partnership for Health Science Careers in GO Virginia Region 3 (based on the Blue Ridge model), providing stakeholders in that region with expertise and working documents. The collaboration is ongoing.

2023:

- Established the Partnership as a 501c (4), Non-Profit Organization.
- Developed a core curriculum for degree-track health science in secondary education in Region 2 that meets state accreditation criteria and shared it with relevant authorities.
 *See Appendix 5
- To expand engagement opportunities, the Partnership hosted two gatherings of African-American pastors, mentors, and community leaders, offering personal development resources and an overview of the health science enterprise leading to the creation of an Ambassadors program to counsel career options.
- Established the Diversity Committee as part of the organizational structure. This work is focused on building trust with historically under-represented communities.
- All committees are contributing to the planning of the second annual summit (October 2023), expanding its scope and participation.

These accomplishments showcase the dedication and collaborative efforts of the Partnership and its committees in addressing the critical shortage of qualified health science workforce, fostering regional collaboration, and supporting educational and career pathways in the L S & H industry. The Partnership's initiatives have resulted in significant positive impacts on workforce development and health science career opportunities in the region.

"Being a part of BRPHSC has benefited Friendship by giving us more recognition in the area school systems."

Angela Hughes
Vice President, Human Resources and Corporate Compliance
Friendship Living

"My students are being connected to opportunities. Virginia Tech improves its town-gown relationship outside of Blacksburg and more regionally. My particular program is fairly young, and extremely unique and innovative – this helps get the word out. The largest benefit I have seen is the connection of VT to regional partners that has led to collaborations and networking towards common regional goals that are in tandem with the BRPHSC."

Veronica van Montfrans, PhD, CPACC
Associate Director, Translational Biology, Medicine, and Health
Research Assistant Professor, Fralin Biomedical Research Institute at Virginia Tech Carilion

Lessons Learned

Health care requires a special policy emphasis because of the extreme involvement of government in regulating health professions and the payment policies that ultimately are the source of wages in the private cluster. In addition, the government is a direct payor for much of health care and is an employer of health professionals at the federal, state, and local levels. Regional workforce planning partnerships are needed to align government regulatory oversight and financing with employers 'workforce needs and educators 'role in preparing the workforce. The Blue Ridge Partnership demonstrates the role and importance of a model for a public-private partnership approach to health workforce development:

- 1. **Emphasize the Role of Industry Employers**: The active participation of industry employers in the Partnership is vital for driving progress. Both in-kind contributions and funded efforts play an equally important role in the success of the initiatives.
- 2. **Effective Organizational Structure and Stakeholder Engagement:** Establishing a neutral fiscal agent and a strong champion/lead are crucial for effective coordination. The inclusive mix of committee chairs and members from all constituencies builds trust and fosters a collaborative environment for meaningful work.
- 3. **Optimize Existing Resources:** Leveraging existing resources from GO Virginia, regional workforce boards, Virginia Hospital and Healthcare Association, Claude Moore Charitable Foundation,

- Delta Dental Foundation, Virginia Community College System (VCCS) FAST Forward, VA READY, Virginia Health Workforce Development Authority, Virginia Department of Health, and other agencies has enhanced the Partnership's impact and efficiency.
- 4. **Foster Collaboration and Shared Resources:** Collaborating on mutually beneficial problem-solving initiatives and sharing resources strengthens the Partnership's effectiveness.
- 5. **Establish a Common Data Framework:** Developing a common data framework for decision-making ensures that all stakeholders have access to relevant and reliable information.
- 6. **Ensure Data Quality Assurance:** Ensuring the quality of collected data, especially regional data, is crucial for accurate reporting and informed decision-making at the state level. The Partnership has demonstrated the need for local data collection for accurate gap analysis.
- 7. **Navigate State Complexities Strategically:** Engaging with state government requires careful consideration and strategic planning to navigate its complexities. Understanding state policies and regulations is essential for successful implementation.
- 8. Address Cultural Change and Post-Pandemic Challenges: Post-pandemic health workforce deficiencies have underscored the need for a cultural shift in addressing workforce challenges. The Partnership model facilitates improved communication and has empowered stakeholders to address these issues together.
- 9. Advocate for Initiatives and Return on Investment (ROI): Advocacy for the Partnership's initiatives and demonstrating ROI are essential for garnering support and sustaining funding and value to the Region.
- 10. **Foster Inter-Regional and Intra-Regional Collaboration:** Many stakeholder employers have operations in multiple Regions. Collaborating with other Regions and aligning grant funding opportunities with employer needs and educational priorities can lead to impactful projects. Multi-regional cooperation is critical to the ability to influence policy change.
- 11. **Formalize Organizational Structure:** Establishing a formal organizational structure with accountability mechanisms ensures the Partnership's long-term viability and enables potential translation to other industries.
- 12. **Prioritize Sustainability and Dissemination:** Continuously disseminating data, resources, and strategies fosters sustainability and facilitates continued progress.

Future Goals of the Blue Ridge Partnership

Immediate (1-2 yrs.):

- Accelerate planning for Life Sciences talent pathways: The Talent Pathways Committee has
 established a working group of life science industry stakeholders to accelerate the development
 of biotechnology and biosciences pathway models and strategic initiatives.
- 2. Coordinate and Sustain Additional Regional Health Workforce Partnerships: The Partnership will continue to work closely with the Virginia Health Workforce Development Authority (VHWDA), the Virginia Board of Workforce Development, and other state agencies and trade

- associations. The Partnership is dedicated to maintaining and sustaining regional health workforce collaborations and serving as a transformative blueprint for other Regions.
- 3. **Increase Accessibility and Standardization of Data:** To support decision-making for GO Virginia regions, the Partnership seeks to increase the accessibility and standardization of data related to health science workforce trends and needs.
- 4. **Enhance the Strategic Communication Plan:** The Partnership will enhance the existing communication plan to address current and future qualified health workforce needs. This plan will leverage enhanced technology to effectively communicate education and training pathways to employment and career advancement opportunities.
- 5. **Expand the Outreach to Diverse Communities**: The Diversity Committee will address the disparities and barriers that historically marginalized communities face in accessing and thriving within the L S & H workforce. By examining and understanding the unique challenges these communities encounter, the committee will work across the organizational structure provided by the Partnership to develop targeted strategies that promote diversity, equity, and inclusion at every level of the regional health workforce. The committee will provide recommendations to education and employer stakeholders in the region and devise practical initiatives that support increased diversity within their localities.

Mid-Range (3-5yrs):

- 1. **Rigorous and Standardized K-16 Health Sciences Curriculum:** The Partnership aims to establish a comprehensive and standardized K-16 Health Sciences Curriculum in Virginia that considers and can adapt to the accelerated pace of technological change in the L S & H industry. This curriculum will increase the pool of qualified employees available in the health science field.
- 2. **Innovative Models for Qualified Instructors:** To address the shortage of qualified instructors, the Partnership will explore and implement innovative models to increase the availability of instructors and mentors in health science education.
- 3. **Data Availability and Quality Improvement:** The Partnership will focus on improving the quality and management of data sets related to health workforce demand and supply and enhancing data availability. This management of data will support the standardization of evaluating available educational opportunities.
- 4. **Accelerate Degree Conferral in High Need Jobs:** To meet the demand for qualified professionals in high-need health science jobs, the Partnership aims to accelerate the process of conferring certifications and degrees.

Long-Range (5-10yrs):

1. **Reduce Barriers for Education and Training:** The Partnership's long-term goal is to reduce barriers, such as cost, duration, and regulations, for education and training in the health science field. A regional model supports a centralized hub of resources.

"Radford University, as a leader in healthcare education, recognizes the importance of shaping the future landscape of health profession education. Overcoming challenges such as aligning terminology and acknowledging varying resources, the BRPHSC's organizational structure brings together diverse constituencies, fostering meaningful dialogue and relationship building. This structure not only addresses immediate and long-term health workforce challenges but also simplifies the decision-making process for students and parents. The success of the BRPHSC demonstrates the applicability of this infrastructure across various industries, providing a positive example of effective deployment. Being involved in the BRPHSC benefits organizations by providing stronger academic preparation, fostering new regional relationships, and facilitating partnerships across clusters."

Glen Mayhew, D.H.Sc., NRP
Associate Dean, Waldron College of Health and Human Services
Radford University

The Partnership's Targeted Future Outcomes

- 1. **Increased Employment Opportunities:** The Partnership's focus on aligning curriculum with regional employer needs and creating education-to-employment pathways design leads to more skilled graduates entering the workforce. This focus, in turn, can result in reduced skill gaps and increase employment rates, contributing to the region's economic growth.
- 2. **Enhanced Workforce Skills:** By improving student retention and attainment through early and systematic engagement, the Partnership can contribute to a more educated, experienced, and credentialed workforce. This can positively impact the productivity and competitiveness of regional industries.
- 3. **Economic Growth and Investment:** The Partnership's advocacy for unified statewide approaches and collaborations with other regions can attract funding and investment to support health science initiatives. Increased funding can drive innovation, create new businesses, and stimulate economic growth.
- 4. **Cost Savings:** The Partnership's emphasis on leveraging existing resources and shared collaborations can result in cost savings for stakeholders, such as academic institutions employers, and families. Efficient use of resources maximizes the impact of investments.
- 5. **Improved Workplace Readiness:** The Partnership's focus on workplace readiness upon graduation can lead to better-prepared employees, reducing the need for additional training and onboarding costs for employers.
- 6. **Long-term Sustainability:** By formalizing the organizational structure and embedding succession planning into the strategic plan, the Partnership can ensure continuity and sustainability of its efforts, maximizing long-term ROI.

- 7. **Social Impact:** The Partnership's commitment to diversity, equity, and inclusion can result in a positive social impact by creating more equitable access to health science education and employment opportunities for underrepresented groups.
- 8. **Enhanced Regional Reputation:** The success of the Partnership's initiatives can enhance the region's reputation as a hub for health science education, research, and industry collaboration. This improved reputation can attract further investments and opportunities.

It is important to note that measuring the ROI of the Partnership is complex and will require ongoing data collection, analysis, and evaluation. Many workforce outcomes (especially related to development and retention) take time to materialize fully. Tracking data and key performance indicators (KPIs) can provide valuable insights into the effectiveness and impact of the Partnership's initiatives and investments. The Partnership's focus on data-driven decision-making revolves around key questions that aim to assess the impact and efficacy of its coordinated approach. A sample of data measures addressing these questions are available in Appendix 6. By consistently monitoring and analyzing these data measures, the Partnership can gauge its progress and make informed adjustments to improve outcomes. The key questions include:

- 1. Are employers experiencing a positive change in the quality and quantity of applicants? The Partnership aims to assess whether employers are witnessing an increase in applicants and, more importantly, whether the applicants are better-qualified for the positions available. By tracking this data measure, the Partnership can determine if its initiatives are successfully attracting and preparing a skilled workforce that meets the needs of employers.
- 2. Are employees who come through the coordinated approach exhibiting higher performance and continuous development? One of the Partnership's core objectives is to facilitate career advancement for employees who enter the workforce through its coordinated approach. By evaluating employees' performance levels and their ongoing f knowledge, skills, and abilities development, the Partnership can ascertain whether its programs are fostering professional growth and preparing individuals for upward mobility.
- 3. Are employees who come through the coordinated approach exhibiting greater job retention? The Partnership seeks to understand if its coordinated approach improves job retention rates. By analyzing data related to employee tenure and turnover, the Partnership can determine if its initiatives are contributing to a more stable and committed workforce within the Region.

Conclusion

This report outlines the development of the Blue Ridge Partnership. The strategic mission, goals, and initiatives detailed in the Blue Ridge Partnership model have evolved over time to support the growth of the health science workforce in Region 2. The evolution of the Partnership highlights the importance of clear goals and initiatives, strong leadership, organizational structure, and effective volunteer engagement in achieving the Partnership's outcomes. To sustain and enhance the Partnership's impact, securing grants from federal, state, and foundation sources will be essential for its sustainability. Leveraging partner resources, supplemented by grants, will provide the necessary funding and momentum to support comprehensive health science workforce development and benefit the Region's economic vitality.

The Blue Ridge Partnership serves as a model for other Regions across Virginia interested in cross-cluster collaboration to enhance workforce development. By adopting a targeted approach tailored to the unique workforce needs of each region, Virginia can lead the nation in supporting health workforce development and bolster critical infrastructure for business and economic growth, as envisioned by GO Virginia. The collaboration exemplified by the Blue Ridge Partnership showcases the power of interdisciplinary cooperation. The success of the Partnership in breaking down silos, strategically utilizing funds for health workforce efforts, and aligning education and training with business needs can serve as a model for workforce development across the Commonwealth. By implementing innovative approaches, fostering strategic partnerships, and adopting a global perspective, Virginia can build a resilient and responsive health workforce, ensuring equitable access to quality care. The support of organizations such as GO Virginia and the Claude Moore Charitable Foundation further strengthens the initiative's impact and its potential to transform workforce development in the region.

"The Blue Ridge Partnership for Health Sciences Careers provides a model not only for Virginia, but for the entire nation of a successful employer-driven ecosystem that unites health providers, educational institutions, philanthropic organizations, and state agencies to support and sustain a robust, forward-thinking health workforce. The Claude Moore Charitable Foundation is pleased to support this initiative."

William A. Hazel, Jr., M.D.

Deputy Executive Director, Claude Moore Charitable Foundation Virginia Secretary of Health and Human Resources, 2010 – 2018

References

- The Diversification Plan 2021, Virginia Tech Center for Economic and Community Engagement.
 Retrieved on 1 May 2023 from:
 https://www.vt.edu/content/vt_edu/en/engagement/community-engagement/diversification-plan.html
- Roanoke Regional Partnership, Virginia Employment Commission (VEC), Occupational Projections, LWIA III 2018-2028. Retrieved on 1 May 2023 from: https://roanoke.org/targets/life-sciences/
- 3. "Economic Impact of the Virginia Tech Carilion Health Sciences and Technology Campus", Terence J. Rephann, Ph.D., Center for Economic and Policy Studies, Weldon Cooper Center for Public Service, University of Virginia, April 2018
- 4. "Carilion Clinic's Economic Contribution to the State and Service Region", Terence J. Rephann, Ph.D., Center for Economic and Policy Studies, Weldon Cooper Center for Public Service, University of Virginia, October 2019
- 5. GO Virginia Region 2 Industry Cluster and Workforce Demand Analysis (2019). Retrieved on 1 May 2023 from: https://cece.vt.edu/GO VIRGINIAR2.html
- 6. Virginia Department of Education (VDOE), Health and Medical Sciences Education. Retrieved on 1 May 2023 from:https://www.doe.virginia.gov/teaching-learning-assessment/k-12-standards-instruction/career-and-technical-education-cte/health-medical-sciences
- 7. "Blueprint Virginia: A Business Plan for the Commonwealth" (2021). Retrieved on 1 May 2023 from:https://www.pilotonline.com/2022/04/11/blueprint-aims-to-keep-virginia-a-top-state-for-business/
- 8. Virginia Hospital and Healthcare Association (VHHA), 2022 Workforce Analysis. Retrieved on 1 May 2023 from:https://www.vhha.com/
- 9. Virginia Health Workforce Development Authority (VHWDA), Health Workforce Analysis (2021). Retrieved on 1 May 2023 from:https://www.vhwda.org/health-workforce/workforce-analysis
- 10. "Virginia's Community Colleges" (2023). Retrieved on 1 May 2023 from:https://www.vccs.edu/
- 11. Virginia Department of Health Professions (DHP). Retrieved on 1 May 2023 from:http://www.dhp.virginia.gov/index.html
- 12. State Council of Higher Education for Virginia (SCHEV). Retrieved on 1 May 2023 from:https://www.schev.edu/

APPENDIX

Appendix 1: Current Partnership Stakeholders GO Virginia Region 2

Stakeholder K12 Districts

Alleghany Highlands Public Schools Amherst County Public Schools Appomattox County Public Schools Bedford County Public Schools

- *Botetourt County Public Schools
- **Campbell County Public Schools**
- *Craig County Public Schools

Covington City Public Schools

Floyd County Public Schools

*Franklin County Public Schools

Giles County Public Schools

Lynchburg City Public Schools

Montgomery County Public Schools

Pulaski County Public Schools

Radford City Public Schools

- *Roanoke City Public Schools
- *Roanoke County Public Schools
- *City of Salem Public Schools
- **Rockbridge County Public Schools
- *(Founding Stakeholder Districts)
- **(Part of GO Virginia Region 8)

Community Colleges

Virginia Western Community College Central Virginia Community College New River Community College Mountain Gateway Community College

Four-year Institutions

Roanoke College
Ferrum College
Virginia Tech
Radford University and Radford University Carilion
Hollins University
Roanoke Higher Education Center

Post-Graduate Institutions

Virginia Tech Carilion School of Medicine Fralin Biomedical Research Institute at VTC Virginia College of Osteopathic Medicine

Founding Stakeholder Employers

Carilion Clinic

LewisGale Regional Health System

Centra Health

Friendship Living

Richfield Living

American Health Care

Commonwealth Care

Medical Facilities of America

Home Instead

- *Freedom First Enterprises
- *(Founding fiscal agent for the BRPHSC)

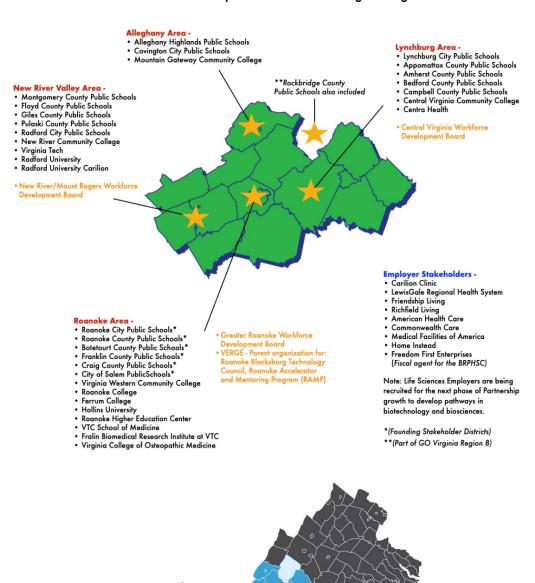
Note: Life Sciences employers are being recruited for the next phase of Partnership growth to help develop pathways in biotechnology and biosciences.

Economic Development

Greater Roanoke Workforce Development Board
New River/Mount Rogers Workforce
Development Board
Central Virginia Workforce Development Board
VERGE – Parent organization for:
Roanoke Blacksburg Technology Council,
Roanoke Accelerator and Mentoring Program
(RAMP)



Current Partnership Stakeholders GO Virginia Region 2



GO Virginia Region 2 consists of the cities of Covington, Lynchburg, Radford, Roanoke, and Salem; and the counties of Alleghany, Amherst, Appomattox, Bedford, Botetourt, Campbell, Craig, Floyd, Franklin, Giles, Montgomery, Pulaski, and Roanoke. (Note: Rockbridge County, shaded light blue, is included in the Partnership's stakeholder group because there is not a similar coalition established in Region 8.)

Appendix 2: 2023 Board of Directors and Committee Chairs

Board of Directors

President - Cynthia Lawrence, Director, Office of Workforce Development, Carilion Clinic

Vice President - Amy Carrier, President and Chief Executive Officer, Centra Health

Treasurer - Paul Phillips, President, Freedom First Enterprises

Secretary - Marilyn Herbert-Ashton, Vice President of Institutional Advancement, Virginia Western Community College

Verletta White, Ed.D.

Superintendent, Roanoke City Public Schools

Ken Nicely, Ed.D.

Superintendent, Roanoke County Public Schools

Jonathan Russ, Ed. D.

Superintendent, Botetourt County Public Schools

Curtis Hicks, Ed. D.

Superintendent, Salem City Schools

Kim Halterman, Ed.D.

Superintendent, Alleghany Public Schools

Bobby Sandel, Ed.D.

President, Virginia Western Community College

Pat Huber, Ed. D.

President, New River Community College

John Rainone, Ed. D

President, Mountain Gateway Community College

John Capps, Ed.D.

President, Central Virginia Community College

Angela Joyner Ed. D.

Executive Director, The Center for Career and Talent Development, Radford University

Kathy Wolfe, Ph.D.

Vice President of Academic Affairs, Roanoke College

Morgan Romeo

Executive Director, Greater Roanoke Workforce Development Authority

Todd Putney

HR Consultant

David Tucker

President and Chief Operating Officer, Commonwealth Care

Kim Frampton

Vice President, Human Resources, HCA LewisGale Regional Health System

Advisors to the board:

Jeanne Armentrout, Chief Administration Officer, Carilion Clinic Dr. William C. Hazel, Claude Moore Charitable Foundation Shirley Bazdar, Claude Moore Charitable Foundation

Blue Ridge Partnership for Health Science Careers Board of Directors

Finance Committee

Chair:

Paul Phillips, Freedom First

Advisors:

Kelly Tester, Freedom First

Anna Millirons & Chris Hendron, Carilion Clinic

Student Engagement Committee

Co-Chairs:

Donna Rhodes, Carilion Clinic

Luann Morrow, VCOM, AHEC

Area Workgroup Leaders:

New River Valley: Megan Atkinson, Pulaski Co. Schools

Alleghany Highlands: Ginni Phillips, Health Educator

Greater Lynchburg: Carrie White, Centra Health

Greater Roanoke: Veronica vans Montfrans, Virginia Tech

Joint Communications Committee

Chair:

Peter Larkin, Carilion Clinic

Academic Planning Committee

Co-Chairs:

Schools

Glen Mayhew, Radford University Archie Freeman, Roanoke City Public

Talent Pathways Committee

Chair:

Morgan Romeo, Greater Roanoke Workforce Development Authority

Workgroup:

Biotechnology/ Biosciences -Brett Malone, VTCRC

Healthcare -Angela Hughes, Friendship Living

IT/Analytics Committee

Chair:

Doug Crowder, Carilion Clinic

Advisor to Chair:

Jen Meno-Denneny, GMU

Diversity Committee

Co-Chairs:

Dr. Mirta Martin, Ferrum College Armed Valles-Klute, Carilion Clinic

Appendix 3: Charters and Logic Models *As of April 2023; reviewed and updated annually

Charter: ORGANIZATIONAL

ORGANIZATION PURPOSE, SCOPE, AND GOALS

PURPOSE OF ORGANIZATION:

Our Partnership's mission is to foster widespread collaboration between businesses and education, leveraging existing resources to align curricula and training with the current needs and future growth strategies of Life Sciences & Health (L S & H) employers through trans-disciplinary innovation. Our aim is to enhance job readiness, placement, and support economic development. We envision collaborative development and scaling up of education-to-employment pathways within the Life Sciences & Health industry. By equipping students (both youth and adults) with education, skills, and workplace experience, we strive to create seamless transitions into promising careers within GO Virginia Region 2, and secondarily, across the Commonwealth. Guided by our core values of collaboration, innovation, impact, inclusivity, responsiveness, and empowerment, we are dedicated to empowering individuals, enriching the region's workforce, and contributing to the overall growth and success of the Life Sciences & Health cluster.

GOAL(S):

Workforce Development: Align and raise the rigor of health and life science education to meet the needs of employers and industry standards.

Awareness and Value: Increase knowledge and awareness of the existence and value of health and life science professionals among stakeholders.

Policy Education: Educate policy/lawmakers, stakeholders, and legislative committees on the challenges faced by the health and life science workforce.

Recruitment and Retention: Identify 5-10 workforce recruitment and retention strategies to increase the health and life science workforce.

Regional Workforce Improvement: Implement strategies to improve the health and life sciences workforce in Go Virginia Region 2.

DELIVERABLE(S):

Align and raise the rigor of health and life science education to meet employer needs and industry standards.

Increase knowledge and awareness of the existence and value of health and life science professionals among stakeholders.

Educate policy/lawmakers, stakeholders, or legislative committees on the challenges faced by the health and life science workforce.

Identify and present workforce recruitment and retention strategies to increase the health and life science workforce.

Implement strategies to improve the health and life sciences workforce in Go Virginia Region 2.

BOARD STRUCTURE AND RESPONSIBILITIES

BOARD MEMBERS:

There shall be no fewer than 3 and no more than 25 members. Members shall consist of representatives from K-12 districts, community colleges, four-year colleges/universities, higher education centers, health and life science employers, relevant community partners delivering training or co-curricular programming, economic development professionals, and philanthropic organizations that support the health and life sciences industry cluster.

See BRPHSC Articles of Incorporation and By-laws for more detail.

REPORTING HIERARCHY:

The Board shall receive reports quarterly from the Committees. Board members shall share progress reports and relevant information with their respective organizations in furtherance of the mission of the BRPHSC.

TERM LENGTH:

Board members serve a term of 3 years.

MEETING CADENCE:

Quarterly or at least three times per year.

Attend meetings and advocate on behalf of the BRPHSC in furtherance of its collective goals.

Identify new committee members and new board members.

RESPONSIBILITIES OF BOARD MEMBERS:

Primary duties:

- Review and approval of recommended priorities and performance metrics from each committee
- Ensure adherence to stated performance metrics and recommend necessary adjustments
- Affirm or revise career path priorities
- Review the initiative's financial position to leverage resources
- Make program adjustments as needed
- Exchange information regarding health workforce activities across the Commonwealth.

Charter: Academic Planning Committee

Blue Ridge Partnership Organizational Logic Model

| TARGET POPULATION Who will directly benefit? | INPUTS Resources dedicated to or consumed by our effort? | ACTIVITIES What will we do in quantifiable terms? | OUTPUTS Direct products of our activities | SHORT TERM OUTCOMES (6-18 mos.) Initial changes in condition, beliefs, skills | LONG TERM OUTCOMES (2 - 5 years) Changes in Policy Programs, Practices | INDICATORS Longer term indicators of impact |
|--|--|--|---|--|---|--|
| PRIMARY: Students of all ages and levels of attainment in Go Virginia Region 2 Communities of GoVirginia Region 2. (www.govirginia.com) K-12, 2-year, and 4-year institutions. Employers from acute care (hospital systems, home care agencies and hospice) Employers from long term care Employers from long term care Employers from bio and life sciences. Employers in emerging fields with current and future intersections to health and life sciences. Children's Behavioral Health (CBHS) service providers. Adult Behavioral Health service providers. Policymakers within the Commonwealth. SECONDARY: Licensure and accreditation bodies. | Health Sciences strategic initiatives. K-12 strategic initiatives. Partnerships with state & community agencies. Collaborations w/ state & local colleges, universities & technical schools. Community collaboratives. Statewide workforce initiatives. Grants for tuition andtraining re-imbursement. | Data collection on: short and long term active licensed workforce, workforce needs, recruitment and retention, cultural and racial representation in the workforce, higher education resources. Formulate and convene Regional Workforce Partnership Wage and policyreviews. Identify state, federal, and community resources to support workforce development initiatives. Identify strategies forthe development of agency-based career ladders. Identify strategies forthe development of shared appointment models. Develop messaging to raise awareness on the Value of the workforce. | A white paper on the current status and impact of gaps and needs with Region 2 workforce and recommendations to address short- and long-term needs, including but not limited to wages, credentialing barriers, and career ladders. Pay rate analysis will be completed. BRPHSC Partnership helps to inform workforce initiatives. Workforce media campaign. Align and raise the rigor or health and life science education to address the needs of employers and reflect industry standards. | Increase knowledge and awareness of the existence and value of Health and health Science Professionals. Through community partnerships and stakeholder engagement, identify and educate policy/law makers, other stakeholders, or legislative committees on the Health and Health Science workforce challenge. Identify 5-10 workforce recruitment and retention strategies aimed at increasing workforce. | Implement strategies for improving Region 2 health and health sciences workforce. Increase in enrollmentand graduation rates inthe health and health sciences field. Increase in educated, experienced, professional, and credentialed workforce. Reduction in wait listtimes for services. Reduction in agency vacancies. Increase in the availability of a broad array of services and supports for all families in Region 2. Increase in racial, ethnic and cultural diversity in the workforce. | PRIMARY: Increased employer satisfaction with the skills and knowledge of the health and life science workforce. Percentage increase in the number of health and life science workforce. Growth in the number of health and life science professionals engaged in continuous professional sengaged in continuous professional development activities. Increase in the number of workforce development programs aligned with industry needs and standards. Increase in the representation of underrepresented racial, ethnic, and cultural groups in the health and life science workforce. Secondary: Percentage of stakeholders in other Go Virginia regions and outside the Commonwealth adopting similar workforce development models. Level of media coverage and public awareness of the importance of a skilled health and life science workforce. Availability and accessibility of workforce data for informed decisionmaking in the health and life science workforce. Percentage increase in external funding and investment attracted to support health and life science workforce initiatives. Number of policy changes at the legislative, licensure, and accreditation levels influenced by workforce data and recommendations. |

| COMMITTEE PU | RPOSE, SCOPE, AND GOALS |
|--------------------------|---|
| PURPOSE OF COMMITTEE: | The Academic Planning Committee will develop a core curriculum that ensures transferability for both the credentialled and XXX. This curriculum will foster an education-to-employment pathway for degree and non-degree programs. Ensure the curriculum meets the rigor required by employers. |
| GOAL(S): | Educational Pathways Availability: Measure the increase in the availability of diverse educational pathways and experiential workplace learning opportunities for all students in Region 2. Employer Engagement: Evaluate the level of engagement of employers in the development and enhancement of academic curriculum. Qualified Instructors Model: Track the implementation and effectiveness of the model established in partnership with employers to increase the number of qualified instructors, including the establishment of a pathway for qualified professionals to become instructors. Enrollment and Certification: Monitor the increase in student enrollment and the acceleration of certifications and degrees in high-need health and life science jobs. Student Retention and Attainment: Measure student retention and levels of attainment in health and life science programs. Educated and Credentialed Workforce: Evaluate the growth in the number of educated, experienced, professional, and credentialed health and life science workforce. Funding Sources for Academic Partners: Track the increase in funding sources available to academic partners. Workplace Readiness: Assess workplace readiness indicators upon graduation, further defining the specific Key Performance Indicators (KPIs) to monitor. Alignment of Pathways: Monitor the continual alignment of education-to-employment pathways with the region's critically needed health and life science jobs. |

DELIVERABLE(S):

Curriculum Inventory: Evaluate the completeness and organization of the inventory of courses taught in GO Virginia Region 2, considering award types, accredited sites, average tuition, and expected salary ranges.

Core Curriculum Recommendations: Assess the development and recommendation of core curriculum health sciences for dual-enrolled high school students.

Advocacy Efforts: Monitor the effectiveness of advocacy efforts for a unified statewide approach and standardized K-16 curriculum in Virginia.

Stakeholder Engagement: Measure the level of knowledge and awareness among stakeholders about the value of Health and Health Science Professionals through community partnerships and engagement.

Policy and Practice Changes: Track changes in policies and programs resulting from the committee's efforts over the long term.

COMMITTEE STRUCTURE AND RESPONSIBILITIES

| COMMITTEE MEMBERS: | Members shall consist of representatives from K-12 districts, community colleges, four-year colleges/universities, higher education centers, health and life science employers and relevant community partners delivering training or co-curricular programming. |
|-------------------------|--|
| REPORTING HIERARCHY: | The Academic Planning Committee will report to the Blue Ridge Partnership for Health Science Careers Board of Directors. |
| TERM LENGTH: | Committee members will serve for 3 years. |
| MEETING CADENCE: | The Academic Planning Committee will meet regularly, with the goal of meeting once per month. |

RESPONSIBILITIES OF COMMITTEE MEMBERS:

Leverage knowledge, experience, role, and organization to support the stated purpose of the BRPHSC.

Academic Planning Logic Model

| GoVirginia Region 2. Employers from acute care Health Sciences strategic Advocacy for unified statewide Advocacy for unified statewide | TARGET POPULATION Who will directly benefit? | INPUTS Resources dedicated to or consumed by our effort? | ACTIVITIES What will we do in quantifiable terms? | OUTPUTS Direct products of our activities | SHORT TERM OUTCOMES (6-18 mos.) Initial changes in condition, beliefs, skills | LONG TERM OUTCOMES (2 - 5 years) Changes in Policy Programs, Practices | INDICATORS Longer term indicators of impact |
|--|--|--|---|--|---|---|---|
| The physical systems, nome care agencies and hospice | Communities of GoVirginia Region 2. Employers from acute care (hospital systems, home care agencies and hospice) Employers from long term care Employers from bio and life science Student learners of all ages within Region 2 Employers in emerging fields with current and future intersections to health and life sciences. Children's Behavioral Health(CBHS) service providers. Adult Behavioral Health service providers. Policymakers within the Commonwealth. SECONDARY: | taught in the GO Virginia Region 2. Health Sciences strategic initiatives. K-12 strategic initiatives. Partnerships with state & community agencies. Collaborations w/ state & local colleges, universities & technical schools. Community collaboratives. Statewide workforce initiatives. Grants for tuition and training re- imbursement. Curriculum models that represent best practices (i.e. Texas Education Agency) | related to student enrollment and performance. Coordinate with Talent Pathways and IT/Analytics to ensure student learner is accounted for in employment data. Tuition and policyreviews including licensure and credentialling agencies. Identify state, federal, and community resources to support curriculum development initiatives. Identify strategies forthe development of education-to-employment pathways. Identify strategies forthe development of shared appointment models. Coordinate with Joint Communications to raise awareness of health and life science education-to-employment pathways. | taught in the GO Virginia Region 2, organized by award, accredited site, average tuition and expected salary ranges. Recommended core curriculum health sciences for dual- enrolled high school students. Continual alignment of education-to-employment pathways for critically | regional employer needs. Advocacy for unified statewide approach. Advocacy for a standardized and rigorous K-16 curriculum in Virginia. Increase knowledge and awareness of the existence and value of Health and health Science Professionals. Through community partnerships and stakeholder engagement, identify and educate policy/law makers, other stakeholders, or legislative committees on the Health and Health Science education priorities and barriers. Ensure access and considerations for racial, ethnicand cultural diversity in the development of education-to-employment | aligning curriculum for health and life sciences with the appropriate licensures and credential processes to help meet the needs of employers. Ensure pathways for most critically needed jobs, prioritized by timeframe needed (i.e. 3-5 years, 5+). Increase in the availability of a broad array of educational pathways and experiential workplace learning opportunities for all students in Region 2. Engage employers in academic curriculum. Develop model in partnership with employers to increase number of qualified instructors, such as dual-appointment. Establish pathway for qualified professionals to enter instructor | Increase in the availability of a broad array of educational pathways and experiential workplace learning opportunities for all students in Region 2. - Engage employers in academic curriculum. - Develop a model in partnership with employers to increase the number of qualified instructors, such as dual-appointment. - Establish a pathway for qualified professionals to enter the instructor role. - Secondary: - Increase enrollment and accelerate the conferring of certifications and degrees in high-need jobs. - Student retention and levels of attainment. - Increase in educated, experienced, professional, and credentialed workforce. - Increase in funding sources for academic partners. - Improved workplace readiness upon graduation (further define which KPIs within workplace readiness to monitor). - Continual alignment of education-to-employment pathways for |

Charter: Talent Pathways

| COMMITTEE PU | RPOSE, SCOPE, AND GOALS | | | | | | | |
|--------------------------|--|--|--|--|--|--|--|--|
| PURPOSE OF COMMITTEE: | The Talent Pathways Committee will promote business-education collaboration, oversee the development of practical education-to-employment pathways, assist in curriculum design to enhance job readiness and placement, and develop workplace experiences for students and instructors. | | | | | | | |
| GOAL(S): | Website and Outreach: Develop and maintain a website (www.virginiahealthcareers.org) and create collateral materials for BRPHSC to promote health and life science career opportunities. Career Mapping: Develop education-to-employment career maps for critical health sciences job clusters to guide students and employers. Data Collection and Coordination: Facilitate data collection related to student enrollment and performance, and coordinate student learner data with employment data for better alignment. Policy Reviews and Resources: Conduct tuition and policy reviews, identify resources for curriculum development initiatives, and develop education-to- employment pathways. Collaboration and Awareness: Coordinate awareness campaigns for education-to-employment pathways and collaborate with other regions for curriculum assessments. Promotion and Conferences: Promote annual conferences and regional mini-conferences to increase awareness and collaboration among stakeholders. | | | | | | | |

DELIVERABLE(S):

Website and Materials: Deliver a functional <u>www.virginiahealthcareers.org</u> website and produce collateral materials for BRPHSC promotion.

Assist in Career Maps and Documentation: Provide education-toemployment career maps for critical health sciences job clusters and document education-to-employment pathways.

Data Framework and Resources: Assist the IT/Analytics Committee to establish a data framework for student enrollment and performance, align student learner data with employment data, and document tuition and policy reviews.

Curriculum Support: Identify resources to support curriculum development initiatives and create shared appointment models documentation.

Awareness Campaign: Develop awareness campaign materials to raise awareness of health and life science career opportunities

Conference Promotion: Produce promotion materials for annual conferences and regional mini-conferences.

COMMITTEE STRUCTURE AND RESPONSIBILITIES

COMMITTEE MEMBERS:

Members shall consist of representatives from K-12 districts, community colleges, four-year colleges/universities, higher education centers, health and life science employers, relevant community partners delivering training or co-curricular programming, economic development professionals and philanthropic organizations.

REPORTING HIERARCHY:

The Talent Pathways Committee will report to the Blue Ridge Partnership for Health Science Careers Board of Directors.

TERM LENGTH:

Committee members will serve for 3 years.

MEETING CADENCE:

The Talent Pathways Committee will meet regularly, with a cadence of at minimum quarterly meetings.

RESPONSIBILITIES OF COMMITTEE MEMBERS:

Leverage knowledge, experience, role, and organization to support the stated purpose of the BRPHSC.

Talent Pathways Logic Model

| TARGET POPULATION Who will directlybenefit? | INPUTS Resources dedicated toor consumed by our effort? | ACTIVITIES What will we do in quantifiable terms? | OUTPUTS Direct products of our activities | SHORT TERM OUTCOMES (6 - 18 mos.) Initial changes in condition, beliefs, skills | LONG TERM OUTCOMES (2 - 5 years) Changes in Policy Programs, Practices | INDICATORS Longer term indicators of impact |
|--|---|---|---|---|---|---|
| PRIMARY: Communities of GoVirginia Region 2. Employers from acute care (hospital systems, home care agencies and hospice) Employers from long term care Employers from bio and life science Student learners of all ages within Region 2 Employers in emerging fields with current and future intersections to health and life sciences. Children's Behavioral Health (CBHS) service providers. Adult Behavioral Health service providers. Policymakers within the Commonwealth. SECONDARY: Other GO Virginia Regions. | Inventory of courses taught in the GO Virginia Region 2. Health Sciences strategic initiatives. K-12 strategic initiatives. Partnerships with state& community agencies. Collaborations w/ state& local colleges, universities & technical schools. Community collaboratives. Statewide workforce initiatives. Grants for tuition and training re- imbursement. Curriculum models that represent best practices (i.e. Texas Education Agency) | Facilitate the data collection related to student enrollment and performance. Coordinate with Academic Planning and IT/Analytics to ensure student learner is accounted for in employment data. Tuition and policyreviews including licensure and credentialling agencies. Identify state, federal, and community resources to support curriculum developmentinitiatives. Identify strategies forthe development of education-to-employment pathways. Identify strategies forthe development of shared appointment models. Coordinate with Joint Communications to raise awareness of health and life science education-to-employment pathways. Work collaboratively with other regions to help support in their curriculum assessments. | In partnership Academic Planning, review health sciences courses for rigor and relevance. In partnership with Student Engagement, address/create opportunities for internships, externships. In partnership with Academic Planning, develop sharedappointment models to address instructor shortages. In partnership with IT/ Analytics, review longitudinal and regional data for accuracy. | Ensure curriculum aligns with regional employer needs. Advocacy for unified statewide approach. Increase knowledge andawareness of the existence and value of Health and health Science Professionals. Through community partnerships and stakeholder engagement, identify and educate policy/law makers, other stakeholders, or legislative committees on the Health and Health Science education priorities and barriers. Ensure access and considerations for racial, ethnicand cultural diversity in the development of education-to-employment pathways. | Implement strategies for aligning curriculum for health and life sciences with the appropriate licensures and credential processes to help meet the needs of employers. Ensure pathways for most critically needed jobs, prioritized by timeframe needed (i.e. 3-5 years, 5+). Increase in the availability of a broad array of educational pathways and experiential workplace learning opportunities for all students in Region 2. Engage employers in academic curriculum. Develop model in partnership with employers to increase number of qualified instructors, such as dual-appointment. Establish pathway for qualified professionals to enter instructor role. | Primary: Increase enrollment and accelerate the conferring of certifications and degrees in high-need jobs. Student retention and levels of attainment. Increase in funding sources for academic partners. Continual alignment of education-to-employment pathways for critically needed jobs. Secondary: Increase in educated, experienced, professional, and credentialed workforce. Improved workplace readiness upon graduation (further define which KPIs within workplace readiness to monitor). |

Charter: Student Engagement Committee

| COMMITTEE PU | RPOSE, SCOPE, AND GOALS |
|--------------------------|--|
| PURPOSE OF COMMITTEE: | The Student Engagement Committee will plan and oversee interactions with students, parents, and the community that promote health and life science careers to youth and adults. |
| GOAL(S): | Stakeholder Engagement: Increase awareness of the regional ecosystem among stakeholders and provide networking opportunities for employers and educators. Curriculum Development: Improve understanding of curriculum needs and gaps and strengthen alignment between education and employment needs. Policy Advocacy: Raise awareness of health and life science professions among policymakers to support workforce development initiatives. Student Pathways: Improve pathways for health and life science education and enhance workforce readiness and skills development. Academic Support: Increase enrollment and attainment in high-need health and life science programs and expand funding sources for academic partners. Alignment and Standards: Align curriculum with employer needs and industry standards for better outcomes. |
| DELIVERABLE(S): | Annual Conference: Produce an annual conference for counselors, career coaches, job advisors, and health sciences educators. Sub-Geography Conferences: Create and sustain mini-conferences in sub-geographies of Go Virginia Region 2. Student Engagement Calendar: Develop a master calendar of recurring student engagement events for the region. Data Framework: Facilitate data collection related to student enrollment and performance and align student learner data with employment data. Policy and Curriculum Reviews: Conduct tuition and policy reviews, identify resources for curriculum development initiatives, and develop education-to-employment pathways. Collaboration and Awareness: Coordinate awareness campaigns for education-to-employment pathways and collaborate with other regions for curriculum assessments. |

| COMMITTEE STR | COMMITTEE STRUCTURE AND RESPONSIBILITIES | | | | | | | |
|--|---|--|--|--|--|--|--|--|
| COMMITTEE MEMBERS: Members shall consist of representatives from K-12 districts, community colleg four-year colleges/universities, higher education centers, health and life scient employers and relevant community partners delivering training or co-curricular programming. | | | | | | | | |
| REPORTING HIERARCHY: | The Student Engagement Committee will report to the Blue Ridge Partnership for Health Science Careers Board of Directors. | | | | | | | |
| TERM LENGTH: | Committee members will serve for 3 years. | | | | | | | |
| MEETING CADENCE: | The Student Engagement Committee will meet regularly, with the goal of meeting once per month. | | | | | | | |
| RESPONSIBILITIES OF COMMITTEE MEMBERS: | Leverage knowledge, experience, role, and organization to support the stated purpose of the BRPHSC. | | | | | | | |

Student Engagement Logic Model

| TARGET POPULATION Who will directlybenefit? | INPUTS Resources dedicated to or consumed by our effort? | ACTIVITIES What will we do in quantifiable terms? | OUTPUTS Direct products of our activities | SHORT TERM OUTCOMES (6-18 mos.) Initial changes in condition, beliefs, skills | LONG TERM OUTCOMES (2 - 5 years) Changes in Policy Programs, Practices | INDICATORS Longer term indicators of impact |
|---|---|--|---|---|--|--|
| PRIMARY: Communities of GoVirginia Region 2. Employers from acute care (hospital systems, home care agencies and hospice) Employers from long term care Employers from bio and life science: Student learners of all ages within Region 2 Employers in emerging fields with current and future intersections to health and life sciences. Children's Behavioral Health(CBHS) service providers. Adult Behavioral Health service providers. Policymakers within the Commonwealth. SECONDARY: Other GO Virginia Regions. | Inventory of courses taught in the GO Virginia Region 2. Health Sciences strategic initiatives. K-12 strategic initiatives. Partnerships with state & community agencies. Collaborations w/ state & local colleges, universities & technical schools. Community collaboratives. Statewide workforce initiatives. Grants for tuition and training re- imbursement. Curriculum models that represent best practices (i.e. Texas Education Agency) | Facilitate the data collection related to student enrollment and performance. Coordinate with Talent Pathways and IT/Analytics to ensure student learner is accounted for in employment data. Tuition and policyreviews including licensure and credentialling agencies. Identify state, federal, and community resources to support curriculum development initiatives. Identify strategies forthe development of education-to-employment pathways. Identify strategies forthe development of shared appointment models. Coordinate with Joint Communications to raise awareness of health and life science education-to-employment pathways. Work collaboratively with other regions to help support in their curriculum assessments. | Production of an annual conference for counselors, career coaches, job advisors, health sciences educators showcasing regional ecosystem and providing networking opportunities for employers and educators. Create and sustain miniconferences in the subgeographies of the GO Virginia Region 2. In partnership with Joint Communications, develop a master calendar of recurring student engagement events for the region. | Professionals. Through community partnerships and stakeholder engagement, identify and educate policy/law makers, other stakeholders, or legislative committees on the Health and Health Science education priorities and barriers. Ensure access and considerations for racial, ethnicand cultural diversity in the development of education-to-employment pathways. | Implement strategies for aligning curriculum for health and life sciences with the appropriate licensures and credential processes to help meet the needs of employers. Ensure pathways for most critically needed jobs, prioritized by timeframe needed (i.e. 3-5 years, 5+). Increase in the availability of a broad array of educational pathways and experiential workplace learning opportunities for all students in Region 2. Engage employers in academic curriculum. Develop model in partnership with employers to increase number of qualified instructors, such as dual-appointment. Establish pathway for qualified professionals to enter instructor role. | PRIMARY: Increase in student enrollment in high-need health and life science programs. Increase in student retention and levels of attainment. Growth in the number of educated, experienced, professional, and credentialed workforce. Increase in funding sources for academic partners. SECONDARY: Improvement in workplace readiness indicators. |

Charter: Joint Communications Committee

| COMMITTEE PURPOSE, SCOPE, AND GOALS | | | | | | |
|-------------------------------------|--|--|--|--|--|--|
| PURPOSE OF COMMITTEE: | The Joint Communications Committee will oversee and plan communications for the Blue Ridge Partnership for Health Science Careers. | | | | | |

GOAL(S): Brand Awareness: Measure the reach and recognition of the regional branding campaign among the target population. Communications Strategy Implementation: Assess the execution of the annual communications strategy plan and its effectiveness in reaching stakeholders. Stakeholder Engagement: Monitor the frequency and quality of stakeholder engagement through various media channels. Distribution of Information: Track the dissemination of BRPHSC activities and health and life science career content through different media pathways. Community Engagement: Measure the level of community engagement in each geographic sub-region. Underserved Population Reach: Evaluate the effectiveness of communication strategies in reaching underserved populations. Testimonials Collection: Monitor the collection and use of testimonials from stakeholders for promotional purposes. Mission and Vision Statements Adoption: Assess the adoption and integration of formalized mission and vision statements within BRPHSC materials. Timeline Adherence: Evaluate the Committee's adherence to the timeline for implementing the communications plan. Collaboration with Student Engagement: Measure collaboration efforts with the Student Engagement Committee to engage communities effectively. **DELIVERABLE(S):** Committee Progress Reports: Monitor Committee progress and milestones

Committee Progress Reports: Monitor Committee progress and milestones through regular written reports to the BRPHSC Executive Committee.

Timely Deliverables: Assess the timely delivery of recommendations and communications plans.

Committee Attendance and Participation: Track Committee members' attendance and active engagement in meetings and activities.

Implementation of Recommendations: Measure the implementation of Committee recommendations by the BRPHSC.

COMMITTEE STRUCTURE AND RESPONSIBILITIES

| COMMITTEE MEMBERS: | Members shall consist of marketing and communications representatives from K-12 districts, community colleges, four-year colleges/universities, higher education centers, health and life science employers and relevant community partners delivering training or co-curricular programming. |
|--|---|
| REPORTING HIERARCHY: | The Joint Communications Committee will report to the Blue Ridge Partnership for Health Science Careers Board of Directors. |
| TERM LENGTH: | Committee members will serve for 3 years. |
| MEETING CADENCE: | The Joint Communications Committee will meet regularly, with a cadence of at minimum quarterly meetings. |
| RESPONSIBILITIES OF COMMITTEE MEMBERS: | Leverage knowledge, experience, role, and organization to support the stated purpose of the BRPHSC. |

Joint Communications Logic Model

| TARGET POPULATION Who will directlybenefit? | INPUTS Resources dedicated to or consumed by our effort? | ACTIVITIES What will we do in quantifiable terms? | OUTPUTS Direct products of our activities | SHORT TERM OUTCOMES (6-18 mos.) Initial changes in condition, beliefs, skills | LONG TERM OUTCOMES (2 - 5 years) Changes in Policy Programs, Practices | INDICATORS Longer term indicators of impact |
|---|---|--|---|--|--|---|
| PRIMARY: Communities of GoVirginia Region 2. Employers from acute care (hospital systems, home care agencies and hospice) Employers from long term care Employers from bio and life science Student learners of all ages within Region 2 Employers in emerging fields with current and future intersections to health and life sciences. Children's Behavioral Health(CBHS) service providers. Adult Behavioral Health service providers. Policymakers within the Commonwealth. SECONDARY: Other GO Virginia Regions. | Inventory of courses taught in the GO Virginia Region 2. Health Sciences strategic initiatives. K-12 strategic initiatives. Partnerships with state & community agencies. Collaborations w/ state & local colleges, universities & technical schools. Community collaboratives. Statewide workforce initiatives. Grants for tuition and training re- imbursement. Curriculum models that represent best practices (i.e. Texas Education Agency) | Facilitate the data collection related to student enrollment and performance. Coordinate with Talent Pathways and IT/Analytics to ensure student learner is accounted for in employment data. Tuition and policyreviews including licensure and credentialling agencies. Identify state, federal, and community resources to support curriculum development initiatives. Identify strategies forthe development of education-to-employment pathways. Identify strategies forthe development of shared appointment models. Coordinate with Joint Communications to raise awareness of health and life science education-to-employment pathways. Work collaboratively with other regions to help support in their curriculum assessments. | Develop and maintain a website: www.virginiahealthcaree rs.org Develop collateral materials for BRPHSC. Promote annual conference and regional mini-conferences. In partnership with Academic Planning and Talent Pathways, develop education-to-employment career maps for the most critically needed health sciences job clusters in the region. | Ensure curriculum aligns with regional employer needs. Advocacy for unified statewide approach. Increase knowledge andawareness of the existence and value of Health and health Science Professionals. Through community partnerships and stakeholder engagement, identify and educate policy/law makers, other stakeholders, or legislative committees on the Health and Health Science education priorities and barriers. Ensure access and considerations for racial, ethnic and cultural diversity in the development of education-to-employment pathways. | Implement strategies for aligning curriculum for health and life sciences with the appropriate licensures and credential processes to help meet the needs of employers. Ensure pathways for most critically needed jobs, prioritized by timeframe needed (i.e. 3-5 years, 5+). Increase in the availability of a broad array of educational pathways and experiential workplace learning opportunities for all students in Region 2. Engage employers in academic curriculum. Develop model in partnership with employers to increase number of qualified instructors, such as dual-appointment. Establish pathway for qualified professionals to enter instructor role. | PRIMARY: Improved Website Traffic and Engagement Improved Employer and Student Feedback Alignment with Employer Needs Improve Policy Maker Engagement Success of Regional Conferences Secondary Collaboration with Other Regions Education-to-Employment Pathway Adoption Improvement in Workplace Readiness Indicators Increase in Funding Sources Student Placement Rates Employer Satisfaction with Graduates |

| COMMITTEE PUR | POSE, SCOPE, AND GOALS |
|--------------------------|--|
| PURPOSE OF COMMITTEE: | The IT/Analytics Committee will develop, collect, and monitor health and life science workforce analytics to drive decision making for BRPHSC. |
| GOAL(S): | Data-Driven Pathways: Measure the development of data-driven pathways aligned with state and regional economic development strategies in the health and life science cluster. Funding Requests Success: Track the increase in successful funding requests based on data insights. Performance Monitoring: Evaluate the ability to monitor performance and outcomes using data-driven approaches. Program Development: Monitor the implementation of programs and practices based on data-driven decisions to meet the needs of the health and life science cluster. Alignment of Education with Industry Needs: Assess the alignment of educational programs with industry needs and future growth opportunities. Unified Data Framework: Measure progress toward establishing a unified data framework for all stakeholders across the Commonwealth. |

DELIVERABLE(S):

Current State Snapshot: Assess the creation of a comprehensive snapshot of the current state of the health and life science workforce and education data.

Data Collection Plan: Evaluate the identification of gaps in existing data inputs and the establishment of a plan for capturing needed information.

Stakeholder Support: Monitor the engagement and support of stakeholder groups in data collection efforts.

Data Repository: Measure the success in collecting and storing data in a readily accessible form, such as the BRPHSC Repository.

Data Visualization: Evaluate the development of a dashboard visualization of relevant data in collaboration with the George Mason Center for Health Workforce.

Data Review and Updates: Track the conduct of an annual review of the data framework and sources to ensure relevance and accuracy.

Assist in the development of education-to-career pathways in IT and analytics in healthcare, biotechnology, and biosciences employers.

COMMITTEE STRUCTURE AND RESPONSIBILITIES

COMMITTEE MEMBERS:

Members shall consist of representatives from K-12 districts, community colleges, four-year colleges/universities, higher education centers, health and life science employers and relevant community partners delivering training or co-curricular programming.

REPORTING HIERARCHY:

The IT/Analytics Committee will report to the Blue Ridge Partnership for Health Science Careers Board of Directors.

TERM LENGTH:

Committee members will serve for 3 years.

MEETING CADENCE:

The IT/Analytics Committee will meet regularly, with a cadence of at minimum quarterly meetings.

RESPONSIBILITIES OF COMMITTEE MEMBERS:

Leverage knowledge, experience, role, and organization to support the stated purpose of the BRPHSC.

IT/Analytics Logic Model

| TARGET POPULATION Who will directlybenefit? | INPUTS Resources dedicated toor consumed by our effort? | ACTIVITIES What will we do in quantifiable terms? | OUTPUTS Direct products of our activities | SHORT TERM OUTCOMES (6 - 18 mos.) Initial changes in condition, beliefs, skills | LONG TERM OUTCOMES (2 - 5 years) Changes in Policy Programs, Practices | INDICATORS Longer term indicators of impact |
|--|--|--|---|---|---|--|
| PRIMARY: Communities of GoVirginia Region 2. Employers from acute care (hospital systems, home care agencies and hospice) Employers from long term care Employers from bio and life science Student learners of all ages within Region 2 Employers in emerging fields with current and future intersections to health and life sciences. Children's Behavioral Health(CBHS) service providers. Adult Behavioral Health service providers. Policymakers within the Commonwealth. SECONDARY: Other GO Virginia Regions. | Inventory of courses taught in the GO Virginia Region 2. Health Sciences strategic initiatives. K-12 strategic initiatives. Partnerships with state & community agencies. Collaborations w/ state & technical schools. Community collaboratives. Statewide workforce initiatives. Grants for tuition and training re- imbursement. Curriculum models that represent best practices (i.e. Texas Education Agency) | Facilitate the data collection related to student enrollment and performance. Coordinate with Talent Pathways and IT/Analytics to ensure student learner is accounted for in employment data. Tuition and policyreviews including licensure and credentialling agencies. Identify state, federal, and community resources to support curriculum development initiatives. Identify strategies forthe development of education-to-employment pathways. Identify strategies forthe development of shared appointment models. Coordinate with Joint Communications to raise awareness of health and life science education-to-employment pathways. Work collaboratively with other regions to help support in the fir curriculum assessments. | Document outlining data framework and assumptions. Dashboard visualization of relevant data in collaboration with George Mason Center for Health Workforce. Quarterly summary and analysis of relevant industry and region-specific data. Annual assessment and updates to data framework and sources. Completion of data framework and sources. Delivery of a dashboard for data visualization. Industry and Region-Specific data summary. Leverage data to drive activities of BRPHSC task forces. Analyze regional alignment. Leverage data to support funding and investment. Leveraging data to drive policy change (legislative, licensure, accreditation). | Ensure curriculum aligns with regional employer needs. Advocacy for unified statewide approach. Increase knowledge and awareness of the existence and value of Health and health Science Professionals. Through community partnerships and stakeholder engagement, identify and educate policy/law makers, other stakeholders, or legislative committees on the Health and Health Science education priorities and barriers. Ensure access and considerations for racial, ethnic and cultural diversity in the development of education-to-employment pathways. | Implement strategies for aligning curriculum for health and life sciences with the appropriate licensures and credential processes to help meet the needs of employers. Ensure pathways for most critically needed jobs, prioritized by timeframe needed (i.e. 3-5 years, 5+). Increase in the availability of a broad array of educational pathways and experiential workplace learning opportunities for all students in Region 2. Engage employers in academic curriculum. Develop model in partnership with employers to increase number of qualified instructors, such as dual-appointment. Establish pathway for qualified professionals to enter instructor role. | PRIMARY: Increase in data-driven pathways aligned with economic development strategies. Increase in successful funding requests based on data insights. Improved monitoring of performance and outcomes. Implementation of programs and practices based on data-driven decisions. Secondary: Alignment of educational programs with industry needs and future growth opportunities. Establishment of a unified data framework for all stakeholders across the Commonwealth. |

Appendix 4: Blue Ridge Partnership Health Science Careers Landing Page

Education

Employer & Workforce

Partners

BRPHSC Website: www.virginiahealthcareers.org

Health

Site translates to:

- Spanish
- Arabic
- Nepali
- Dari Swahili



Leadership

Partner Logir

Newsroom

Job Opportunities



There is a career for everyone. Learn More 7

> The Blue Ridge Partnership for Health Science Careers is a collaboration of educators, employers, and economic development professionals in the Roanoke and New River Valleys, the Alleghany Highlands, and the greater Lynchburg region. As members of GO Virginia Region 2, we're committed to improving health sciences education and aligning instruction to meet the urgent workforce needs of the region's health employers, including hospitals, health systems, long-term care facilities, and emerging biomedical companies.

Our Partnership uses a new model for health sciences education and workforce development

Appendix 5: Draft Health Sciences Core Curriculum for Degree-Track Students Finalized 1/24/23 by Academic Planning Committee

| Course Name | Credit Hrs. | Course Category |
|-------------------------------|-------------|-------------------------------|
| BIO 101 or SCI ELE | 4 | Natural Science |
| ENG 111 | 3 | Written Communication |
| HLT 143 or HLT 230 or BIO 230 | 3 | Health or Science |
| PHI 220 or HUM ELE | 3 | Humanities |
| PSY 230 or PSY/SOC ELE | 3 | Social and Behavioral Science |
| SDV 100 or SDV 101 | 1 to 2 | Student Development |
| ELE (TR) | 3 to 5 | Elective |
| Total Credits | 20 to 23 | |

(Note 1: This core curriculum serves as a foundational curriculum. Therefore, courses may not be removed from the core, however, courses may be added to meet regional needs and priorities.)

(Note 2: Regionally available CTE courses will be added to this core in the Academic Planning Committee s next phase of work)

The curriculum that we have approved is very close to the passport course milestone established by SCHEV and falls into the Uniform Certificate of General Studies established by SCHEV. The only exception is the Med Term class, but that is certainly appropriate for an introductory health curriculum. From this point of view, the curriculum should transfer easily to any community college or four-year college, fulfilling basic gen ed requirements for health sciences. So from this point of view, I think that we are on target."

Elizabeth Wilmer, Ed.D.

Vice President of Academic and Student Affairs

Virginia Western Community College

Appendix 6: Inital draft of Employer Recruitment and Retention Data Measures Indicating Partnership Effectiveness

- 1. Demographics
 - 1. Education program completed
 - 2. Level of education/degree/certification
 - 3. Ethnicity
- 2. Efficiency (volumes/transactions)
 - 1. Number of applicants per role
 - 2. Applicant-to-hire ratio per role
 - 3. Offer acceptance rate per role
 - 4. Orientation time
 - 5. Time-to-fill per role
 - 6. High demand vacancies filled
- 3. Effectiveness (quality/performance/outcomes)
 - 1. Manager perceptions for performance, onboarding, etc.
 - 2. Need for additional education/skills training (reduction in training costs)
 - 3. Turnover/retention per role (1 year, etc.)
 - 4. Employee career progressions (promotions)
 - 5. Employee performance (meeting or exceeding standards)
 - 6. Formal recognition received
 - 7. Reduction in recruitments costs