

 MARYLAND
APPRENTICESHIP
and TRAINING PROGRAM

2023
FINAL REPORT

**HEALTHCARE
APPRENTICESHIP
WORKGROUP**



June 30, 2023

The Honorable Guy Guzzone
Chairman, Senate Budget and Taxation Committee
3 W Miller Senate Office Building
Annapolis, MD 21401

The Honorable Ben Barnes
Chairman, House Appropriations Committee
House Office Building, Room 121
Annapolis, MD 21401

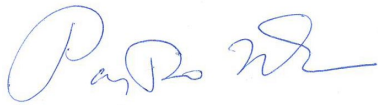
RE: Final Report on Apprenticeships in Healthcare Workgroup – 2022 JCR

Dear Chairmen Guzzone and Barnes,

The Maryland Department of Labor (Labor) is pleased to transmit the enclosed final report on apprenticeships in healthcare. Pursuant to committee narrative included in the 2022 Joint Chairmen’s Report, Labor has worked in close collaboration with the Department of Health, local health departments, and dozens of stakeholders from the workforce system to assess and better understand the role of apprenticeship in healthcare, direct care, and behavioral health.

This final report summarizes the workgroup process, ongoing efforts to establish or grow apprenticeships in healthcare and nursing, and cursory recommendations that can help Maryland build a world-class public-sector healthcare workforce through apprenticeship. We hope that this report can be a catalyst for continued collaboration and innovative thinking as we consider how to best support the vital workers in our public sector healthcare agencies.

Sincerely,



Portia Wu
Secretary

Enclosure
cc: Members, Senate Budget and Taxation Committee
Members, House Appropriations Committee
Laura Herrera Scott, M.D., Maryland Secretary of Health

Report Background

During the 2022 session of the Maryland General Assembly, the Chairmen of the Senate Budget and Taxation Committee and House Appropriations Committee authored the [Report on the Fiscal 2023 State Operating Budget \(SB 290\) and the State Capital Budget \(SB 291\) and Related Recommendations](#). The committee narrative on “Apprenticeship Workgroups for Targeted Occupations,” outlined the Committees’ concern with workforce shortages among government employees in the public safety, health, and transportation sectors. The narrative directed the Maryland Department of Labor to convene workgroups to study and report on the short-term and long-term needs in each respective sector, as well as efforts to:

- identify the extent of vacancies at the State and local level within each sector, specifically including, but not limited to, police officers, correctional officers, parole and probation agents, direct care and public health workers, bus operators, and vehicle maintenance personnel;
- review existing apprenticeships in the United States and elsewhere specifically for occupations in these identified sectors;
- design apprenticeships in the occupations within the identified sectors that have the greatest recruitment challenges and training deficiencies, including estimated costs and potential funding opportunities;
- identify opportunities to start apprenticeships at the high school level consistent with the Blueprint for Maryland’s Future;
- identify opportunities, in coordination with the University System of Maryland (USM), the Maryland Association of Community Colleges (MACC), University of Maryland Global Campus (UMGC), the Maryland Career and Technical Education (CTE) Committee, and the Maryland State Department of Education (MSDE), to create degree apprenticeship programs and other ways to incorporate associate and bachelor’s degrees in apprenticeships; and
- identify potential apprenticeship sponsors in each occupation.

By request of the Chairmen, the Maryland Department of Labor has authored this final report to provide updates on the continued activities and final recommendations of the Maryland Apprenticeship in Healthcare Workgroup.

This final report will focus more narrowly on apprenticeships for nursing and direct care occupations. As discussed in the Interim Report, these critical roles make up a significant number of all healthcare professionals in Maryland and have been deeply affected by workforce shortages, turnover, and attrition. The report will analyze some of the understood constraints on the nursing workforce and review potential applications and recommendations for apprenticeship.

The State of Apprenticeship Programs in Healthcare, Direct Care, and Nursing

The largest formal system for apprenticeship in the United States is Registered Apprenticeship, a long-standing, rigorous, and evidence-backed system of employment and training that remains highly concentrated in the building trades. Occupations outside of the building trades, such as those common in the healthcare industry, are considered “non-traditional” for Apprenticeship. While there are a growing number of Apprenticeship programs in healthcare, nursing, and behavioral health occupations, their non-traditional status in the organized system of Registered Apprenticeship means it often takes additional time and work to get employers, sponsors, and jobseekers acquainted with apprenticeship as a means for training.

For the purposes of this Workgroup, Nursing, including Certified Nursing Assistant (CNA/GNAs), Licensed Practical Nurses (LPNs), Registered Nurses (RNs), and Advanced Practice Nurses, served as useful model occupations to understand the opportunities and limitations for Apprenticeship in healthcare. Specifically, because Nursing occupations, similar to behavioral health professionals and other medical professionals, are generally educated and trained through higher education-based programs with strict legal frameworks. This presents unique challenges not found in the building trades or other sectors where Apprenticeship is a more common system of employment and training.

Successful models for nursing Apprenticeships may be replicable for behavioral health occupations and other direct care medical occupations of interest to the workgroup.

Maryland’s Current Nursing Apprenticeship Programs

As of this report, Maryland has two approved Registered Apprenticeship programs for the occupation of LPN, sponsored by Baltimore Alliance for Careers in Healthcare (BACH), a non-profit organization, and Howard Community College (HCC), one of Maryland’s 16 community colleges. These two programs represent the highest level of direct care professionals that can be trained through Apprenticeship programs in Maryland. Though several sponsors are approved to operate CNA Registered Apprenticeship programs, no CNA Apprentices were active in Maryland at the time of this report.

Both BACH and HCC operate programs with direct connections to existing healthcare and long-term care employers in Maryland. Both entities also use a Maryland Board of Nursing-approved Community College-based Nursing program to offer Related Instruction that would qualify an apprentice for LPN licensure by examination. Where the programs differ is in their employer engagement and instruction delivery.

In May of 2023, BACH reported to the Workgroup that, under its LPN Apprenticeship program, Apprentices must already hold a CNA qualification. The prerequisite allows the Apprentices to function at the competency level of a CNA for the employment portion of the Apprenticeship - a crucial component of the program. Apprentices then must be accepted to the LPN course of study offered by the program’s Related Instruction provider (Community College of Baltimore County)

and complete any requisite coursework. BACH reports that the program's largest employers are nursing homes and assisted living facilities who are using the program to upskill existing CNA/GNA staff.

HCC's program, conversely, has its largest employer relationship with two hospitals, Ascension St. Agnes and Howard County General Hospital, and HCC offers its program's Related Instruction coursework in house. In order to meet scope of practice for employment, Apprentices function as Patient Care Technicians (PCTs) or CNAs - a similar delineation of roles to BACH's program. HCC additionally offers some coursework onsite at the employer (St. Agnes) and assists participants with transportation to campus for other Related Instruction Coursework.

As of this report, HCC reported 35 total program participants across both hospital sites with 13 currently registered with the State as Apprentices. As of December 2022, BACH had 8 active LPN Apprentices registered with the Maryland Department of Labor.

BACH and HCC's LPN programs are model programs for Nursing Apprenticeship in Maryland and by extension, models for how Apprenticeship might fit with Maryland's health occupations regulatory and legal framework. Each program requires Apprentices to possess or acquire another credential or level of competency for Apprentices to function in the workplace as a direct care professional. Similarly, each program delineates time spent working and participating in On the Job Learning from the clinical components of education.

Alabama and the Apprentice Nursing Permit

Discussed at length in the Interim Report, Alabama takes a novel approach to Nursing Apprenticeship enabled by a legislatively created Apprentice Nurse Permit under the Alabama Board of Nursing. The Permit creates a legal role for Registered Nurses to be trained under Registered Apprenticeship, without eliminating the degree and licensure requirements associated with the RN qualification. In contrast with the LPN programs organized under Maryland law, Alabama's permit gives Registered Apprenticeship sponsors and employers the ability to employ Nurse Apprentices without requiring that the Apprentice first possess or earn another credential prior. The Permit helps scope of practice limitations better fit Registered Apprenticeship, reducing a major barrier for nursing occupations.

The Apprentice Nurse Permit has helped enable the Alabama Office of Apprenticeship, institutions of higher education, and Alabama's healthcare employers to rapidly scale Nursing Registered Apprenticeship Programs since the permit's creation. As of this report, the Alabama Office of Apprenticeship reports 70 active LPN Apprentices, 339 active RN Apprentices, 59 employers, and 16 sponsors, all of which are community colleges and universities.

As with Maryland's programs, Alabama's Apprentice Nurses are completing Nursing coursework through colleges and universities that meet both the State and national accreditation body standards for quality. Apprentices Nurses in Alabama, despite being granted the special permit to allow training, must be qualified by examination, be accepted by their nursing program, and comply with the requirements set out by the Board of Nursing.

Factors Constraining the Nursing Workforce in Maryland

In the interest of using Nursing as a model profession to understand vacancies, workforce outcomes, and applications for Apprenticeship, the Workgroup spent considerable time discussing factors which may be limiting the supply of nurses in the workforce. In this section, several of these factors are discussed in relation to how they impact the supply of “new nurses” and how they may impact experienced professionals in the field.

Many of these factors are structural factors stemming from the legal, regulatory, and institutional standards that govern training institutions and the profession. Identification of these factors as “constraints” on the workforce is intended only to drive discussion and analysis and does not represent a recommendation for policy change without further review.

New Nurses

Nursing Education

All levels of nursing licensure require some level of education, all levels above CNA/GNA require a post-secondary credential or degree. Several components of education limit the total number of nurses that can enter the profession each year. Many of these factors are practical or financial constraints associated with the capacity of approved education providers.

Competitive Admission & Performance: Nursing programs are competitive admission programs, applicants must meet institutional admission requirements, prerequisites, and adhere to attendance and performance standards to continue in a program. Not all prospective nursing students will gain admission to their program of choice and not all admitted students will persist to clinicals or completion.

While many Maryland high schools offer CNA/GNA training and biomedical concentrator programs designed to get students connected to careers in healthcare, these resources are not necessarily distributed across the state based on workforce demand.

Program Capacity: Competitive admission is based on the fixed constraints of the institution such as physical facilities, instructor capacity, lab capacity, etc. There are a limited number of accredited programs and the number of students enrolled is constrained by approved program capacity.

Clinical Site Capacity: Clinical education is a foundational component of nursing education. Clinical education requires facility space and staff resources that allow student nurses to be placed. Clinical capacity is limited by healthcare facilities’ staffing capacity, the supply of nurse preceptors, clinical faculty, and the number of healthcare facilities with appropriate resources in a given area. Clinical capacity further constrains program capacity and limits the number of student nurses trained in a given year and geographic area.

Financial and Opportunity Cost: Nursing programs charge tuition and fees in

conjunction with coursework and credit bearing clinical experience. Clinical education is generally unpaid, and the demanding hours may limit a student's ability to work a paying job outside of classes and clinicals. Tuition costs, student debt, family obligations, childcare, cost of living, and many other social and economic factors limit participation in education, deterring some prospective students from entering nursing programs.

Licensure & Examination

Nursing students who complete a nursing program must sit for examination and complete all the required steps for State licensure. Several steps in the examination and licensure process may limit the supply of new qualified nurses entering the workforce.

Examination Process: Prospective nurses must sit for an examination associated with their level of education and licensure. Individual factors such as test anxiety may persistently impact performance and passage rates for certain test-takers, but practical constraints such as the availability of testing dates and seats constrain the overall number of new nurses that can be examined in a given period.

Licensure Process: The State licensure process requires the submission and verification of numerous documents, test scores, and other components. Technological system limitations, data security issues, staffing, and regulator complexity can all impact the rate at which licensure materials are received, processed and approved, limiting the supply of new nurses or prolonging qualified nurses' entry into the workforce.

Financial Costs: There are costs associated with sitting for examination and completing State licensure. While assistance programs exist, some applicants may struggle to afford associated costs, particularly for repeated examination attempts.

Existing Nurses

Attrition from the Field: Nursing is a challenging and demanding profession and external shocks such as the global pandemic of COVID-19 have pushed healthcare systems and frontline workers to new limits. New and existing nurses alike choose to exit the profession every year, whether for concerns over safety, pay, work life balance, or job satisfaction.

Turnover and Churn: As skilled workers with generally portable certifications, nurses may move between employers seeking better pay, more favorable working conditions, or career advancement. Some nurses may also choose temporary or travel-based assignments that offer higher pay over local employment.

Career Advancement:

Advanced nursing practices, specialized roles, and nursing education all require career advancement milestones and often additional education. The constraining factors of education discussed above may continue to impact practicing nurses, limiting their ability to advance their careers and access higher paying positions or more favorable working conditions.

Can Apprenticeship Address Workforce Issues for Nurses and Nursing Employers?

Building upon the previous section, this section further analyzes each potential workforce constraint against some of the central principles and documented benefits of Apprenticeship. The table highlights potential applications where Apprenticeship may prove effective for resolving workforce issues in the nursing field, and areas where Apprenticeship is expected to have little or no impact without additional investment and direction.

	Potential Application for Apprenticeship	Limitations of Apprenticeship
Competitive Admission & Performance	<p>States with higher education sponsored nursing apprenticeship programs report improved academic outcomes for apprentice nurses.</p> <p>To the extent that Youth Apprenticeship and School to Apprenticeship programs can be successfully integrated with high quality science and math education, healthcare focused apprenticeship programs for younger job seekers can reinforce classroom learning with on the job skills.</p>	<p>Apprenticeship cannot reduce the admissions standards for other training programs or increase the seat capacity of a program.</p> <p>Registered Apprenticeship programs in building trades are also competitive and apprentices experience barriers to entry requiring remediation and additional support.</p>
Program Capacity		Apprenticeship cannot increase the capacity of a training program.
Clinical Site Capacity	Apprenticeship is a potential means to educate and train nurse preceptors.	<p>Apprenticeship cannot increase clinical site capacity.</p> <p>The required one to one ratio for supervision under Apprenticeship generally exceeds what is offered in nursing clinicals.</p> <p>Clinical sites that struggle to secure preceptors may similarly struggle to accommodate apprentice nurses.</p>
Financial and Opportunity Cost	Apprentices are employees and are paid progressively increasing wages.	Apprenticeships on their own do not provide resources to pay an

	<p>Restructuring some nursing programs as Apprenticeships would ensure nursing students are compensated for their labor.</p> <p>Costs of Related Instruction, such as tuition and fees, are generally covered or supported by employers, sponsors, or other sources under Apprenticeship.</p> <p>Nursing Apprenticeships are a proven strategy to reduce the cost of nursing education and student debt.</p> <p>Earlier connection to wages would reduce or eliminate the opportunity cost associated with choosing to enter training.</p>	<p>Apprentice’s wages or Related Instruction costs.</p> <p>Employers must be willing and able to invest in the cost of training and employing Apprentices.</p>
<p>Examination Process</p>	<p>Other states and jurisdictions with Nursing Apprenticeship Programs have reported promising examination outcomes for Nursing Apprentices.</p> <p>Apprentices generally have a longer period of clinical/practical education than traditional higher education-based programs, which may benefit some learners and improve outcomes.</p> <p>Apprentice wages may offset the costs of examination fees and employers, sponsors, and unions may cover or assist with fees.</p>	<p>Apprenticeship cannot replace or eliminate examination processes that are required by statute, regulation, or employer policy.</p> <p>Most examination processes and standards in nursing and other healthcare occupations are based on national standards set by accreditation bodies.</p>
<p>Licensure Process</p>	<p>Apprentice wages may offset the costs of licensure and employer, sponsors, and unions may cover or assist with fees.</p>	<p>Apprenticeship cannot replace or eliminate licensure requirements and scope of practice restrictions for healthcare and behavioral health professionals.</p> <p>Most licensure standards in nursing and other healthcare occupations are based on national standards set by accreditation bodies.</p>

		Scope of practice limitations may restrict the functions an Apprentice can perform on the job, with or without supervision.
Attrition from the Field	<p>Registered Apprenticeship programs have strong connections to collective bargaining. To the extent that bargaining units may impact worker retention, Apprenticeship may be a tool to increase worker voice and labor-management partnership.</p> <p>Apprenticeships have a demonstrated positive impact on employee retention in other industries, Apprenticeship may potentially slow attrition in healthcare and behavioral health.</p>	Apprenticeship is unlikely to address some of the most pressing challenges for healthcare workers such as worker pay, working conditions, or safety.
Turnover and Churn	<p>Apprenticeships have a demonstrated positive impact on employee retention in other industries, Apprenticeship may potentially slow attrition in healthcare and behavioral health.</p> <p>Apprenticeships and direct mentorship have been demonstrated to build positive workplace professional relationships.</p>	Apprenticeship is unlikely to address some of the most pressing challenges for healthcare workers, such as worker pay, working conditions, or safety.
Career Advancement	<p>Apprenticeships present opportunities for clear career advancement, regular pay increases, and low or no cost training.</p> <p>Apprenticeships can be developed at all career stages to create ladders of progression that help workers advance, access training, and remain in the field.</p>	Apprenticeship does not guarantee an apprentice higher paid positions or better assignments.

Recommendations for Apprenticeships in Healthcare and Direct Care in Maryland

1. Support and Expand the Existing Nursing Apprenticeship Programs in Maryland

Focus should be placed on supporting and studying Maryland's small number of approved Nursing Apprenticeships (CNA/GNA and LPN). These programs could serve as important models of how the profession can benefit from Registered Apprenticeship, but more data and larger enrollments are needed. In order to achieve larger enrollments more employer engagement and, support for apprentices is needed, and a coordinated effort to expand the programs should be undertaken.

2. Conduct a Systematic Survey on Nursing Education

The Workgroup was able to identify some constraining factors that may impact the supply of new nurses and the retention and advancement of existing nurses. Registered Apprenticeship is likely to be more effective at removing some barriers than others. Without a comprehensive and first-hand understanding of how barriers and constraints really affect prospective students, students in training, preceptors, faculty, employers, and licensing/regulatory bodies, it will be difficult to prioritize resources and identify areas where Registered Apprenticeship may be a workforce solution.

- Survey students on their admission and application experience
- Survey students on their prior work or education experience
- Survey new nurses on their impressions of the field and experience with examination and licensure
- Survey nursing faculty on their perceptions of student attrition
- Survey nursing administrators on their perceptions of new nurse readiness, retention, and attrition
- Survey existing nurses on their career goals, long term outlook, and likelihood of serving as an educator.

3. Invest in the Capacity of Nursing Programs and Clinical Sites

In recent years several pieces of legislation have created new programs to address critical shortages of frontline healthcare workers, including nurses and nursing assistants. However, a proportional share of resources has not been directed to expanding the capacity of nursing programs and creating new nursing faculty and preceptors to staff clinical sites.

4. Work to Improve Academic Readiness among Prospective Students

Nursing is a competitive and rigorous academic discipline. Admitting a greater number of students without compromising qualifications and standards will mean ensuring students are better prepared with educational foundations, prerequisites, and career expectations that

match program requirements. This may include a stronger focus on STEM education for students interested in nursing or more accessible prerequisite coursework pathways for adult learners.

State and Federal Resources and Initiatives to Support the Expansion of Apprenticeship Programs

As Apprenticeship grows as a means of training diverse pools of workers for the modern workforce, local, state, and federal entities have increasingly made more and more resources available to expand Apprenticeship programs. The following new resources or initiatives are expected to begin in 2023 and should be considered tools for implementing the strategies identified in this report:

State Apprenticeship Expansion Formula Grant Funds (US Department of Labor)

In the spring of 2023, the US Department of Labor (USDOL) Employment and Training Administration released an invitation to apply for federal funds to support the expansion of state Apprenticeship programs. This included a portion of formula funds to support operations and modernization, and a competitive fund to support innovative ideas for expansion. MD Labor applied on behalf of the State of Maryland seeking funds for a range of State apprenticeship activities.

MD Labor sought \$3 million from this opportunity to establish a *Public Sector Registered Apprenticeship Innovation Fund*. The Fund would provide apprentice Related Instruction reimbursements, on the job learning assistance funds, and apprentice supportive service alliances for public sector employers, including healthcare agencies. USDOL is expected to make an award announcement in June 2023.

Blueprint for Maryland's Future Investments in College and Career Readiness

The Blueprint, Maryland's sweeping education reform legislation, sets new standards and goals for nearly all dimensions of education in Maryland. One of the Blueprint's College and Career Readiness goals specifies that 45 percent of Maryland high school graduates will complete the high school equivalent of Registered Apprenticeship or another industry recognized credential by the end of the 2030-2031 school year. This ambitious goal has created a mandate for Maryland's Local Education Agencies to invest in and partner with apprenticeship programs.

The career counseling services arrangement with Local Workforce Development Boards is another significant component of the Blueprint reforms affecting the public workforce system. This new program will allocate formula-based funding to Local Workforce Development Boards to cover the cost of career counseling services for students from Local Education Agencies (school districts). As discussed elsewhere in this report, LWDBs are crucial connection points for employers, job seekers, training providers, and Registered Apprenticeship sponsors. The counseling program, paired with other Blueprint investments, could be a significant tool for advancing Youth Apprenticeship and School to Apprenticeship programs.

The Apprenticeship 2030 Commission (Senate Bill 104)

On April 24, 2023, Governor Wes Moore signed SB104 into law, providing for the establishment of the Apprenticeship 2030 Commission. According to statute, the purpose of the Commission is to examine and make recommendations to reduce skill shortages in high-demand occupations and provide affordable training for career pathways for young people by expanding Registered Apprenticeships in industry sectors with skill shortages, growing the number of Registered Apprenticeships to at least 60,000 by 2030, and reaching the Blueprint goal for 45% of high school graduates completing the high school level of a Registered Apprenticeship.

The Commission, which is expected to begin meeting in July 2023, will play an important role in helping Maryland's policy makers and workforce system stakeholders understand the opportunities associated with apprenticeship programs, particularly in regard to the Blueprint for Maryland's Future and the State's youth employment goals. The Commission is positioned to play a significant role in advancing the recommendations and findings of this workgroup for apprenticeships in healthcare.