**628th Meeting of the Health Services Cost Review Commission**

**February 12, 2025**

(The Commission will begin in public session at 12:00 pm for the purpose of, upon motion and approval, adjourning into closed session. The open session will resume at 1:00 pm)

**CLOSED SESSION**
**12:00 pm**

1. Update on Administration of Model - Authority General Provisions Article, §3-103 and §3-104

**PUBLIC MEETING**
**1:00 pm**

1. Review of Minutes from the Public and Closed Meetings on January 8, 2025

**Specific Matters**

For the purpose of public notice, here is the docket status.

Docket Status – Cases Closed

2. Docket Status – Cases Open

    2668R  Johns Hopkins Howard County Medical Center

**Informational Subjects**

3. Presentation:  Advancing Innovation in Maryland (AIM) Winners

**Subjects of General Applicability**

4. Report from the Executive Director

    a. Staff Retirement Announcement
    b. Model Monitoring
    c. New Paradigms in Care Delivery Update
    d. High Value Care Plans

5.  Final Recommendation:  Nurse Support Program II - Program Renewal

6.  Draft Recommendation:  Readmission Reduction Incentive Program (RRIP) for RY 2027

7.  Presentation:  Episode Quality Improvement Program (EQIP) and Care Transformation Initiatives (CTI) Results

8.  Legislative Update

9.  Medicare Advantage Discussion

10. Hearing and Meeting Schedule

# Nurse Support Program II

# Competitive Institutional Grants Program

Outcomes Evaluation FY 2021 - FY 2025 and Final Recommendations for Future Funding

February 12, 2025

This document contains the final staff recommendations for the Nurse Support Program II.

# Table of Contents

# Introduction

This report presents an update on program outcomes for the Nurse Support Program II (NSP II), an update on the current state of the nursing workforce, and recommendations for future funding. Program updates will include an analysis of activities that occurred during FY 2021 through FY 2025. This report and its recommendations are jointly submitted by the staff of the Maryland Higher Education Commission (MHEC) and the Maryland Health Services Cost Review Commission (HSCRC or Commission).

# Background

The HSCRC initiated nurse education support funding (formerly titled the Nurse Education Support Program or NESP) in 1986 through the collaborative efforts of hospitals, payers, and nursing representatives. In 2000, HSCRC implemented the Nurse Support Program I (NSP I) to address the issues of recruiting and retaining nurses in Maryland hospitals. In 2005, seventy-nine percent (79 percent) of the RN programs reported that they had met or exceeded their enrollment capacity. The shortage of qualified nursing faculty was identified as the fundamental obstacle to expanding the enrollments in nursing programs, thereby exacerbating the nursing shortage. The HSCRC proactively created Nurse Support Program II (NSP II) to address the barriers to nursing education through statute with the Annotated Code of Maryland, Education Article § 11-405 Nurse Support Program Assistance Fund. The HSCRC established the NSP II on May 4, 2005, to increase Maryland's academic capacity to educate nurses.

NSP II is distinct from, and in addition to, the NSP I hospital-specific program but shares a mutual goal to increase the number of nurses in Maryland hospitals. NSP II focuses on expanding the capacity to educate more nurses through increasing faculty and strengthening nursing education programs at Maryland higher education institutions. Provisions included a continuing, non-lapsing fund with a portion of the competitive and statewide grants earmarked for attracting and retaining minorities in nursing and in nurse faculty careers in Maryland. The Commission approved funding of up to 0.10 percent of regulated gross patient revenue to increase nursing graduates and mitigate barriers to nursing education through institutional and faculty-focused statewide initiatives. MHEC was selected by the HSCRC to administer the NSP II programs as the coordinating board of higher education. After the conclusion of the first ten years of funding, the HSCRC continued to renew the NSP II funding, through June 30, 2025.
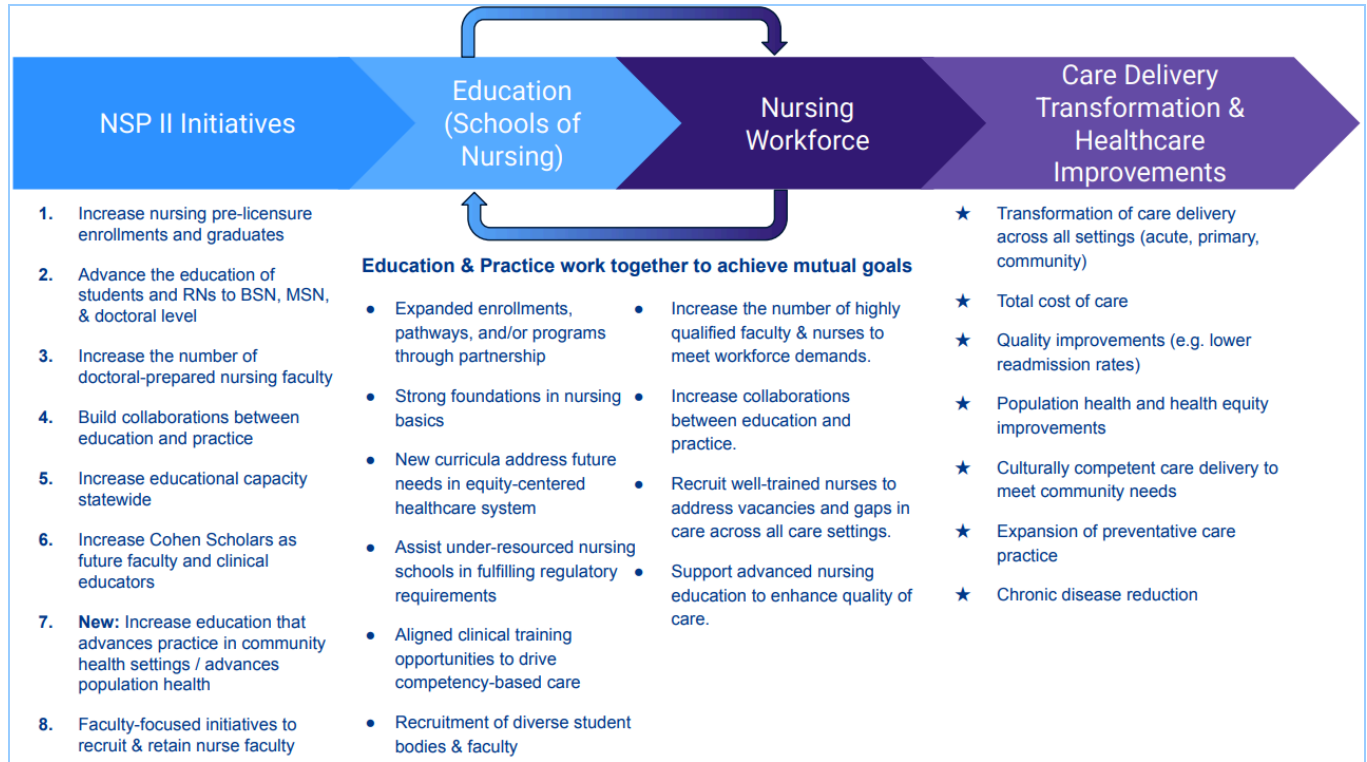
NSP II works closely with NSP I and stakeholders in hospitals and schools of nursing in Maryland to ensure that grant funding is addressing current needs of the state's nursing workforce. Since its inception, the NSP II program has gone through several revisions, including:

- The Annotated Code of Maryland, Education Article § 11-405 Nurse Support Program Assistance Fund [2006, chs. 221, 222] was amended in 2016 to delete "bedside" to ensure the best nursing skills mix for the workforce was not limited to just bedside nurses.

- In 2012, the NSP II program was modified to include support for development of new and existing nursing faculty through doctoral education grants. Revisions to the Graduate Nurse Faculty Scholarship (GNF) included renaming the nurse educator scholarship in honor of Dr. Hal Cohen and his wife Jo, and sunsetting the living expense grant component.

- In 2012, the NSP I and NSP II initiatives were aligned with the National Academy of Medicine (NAM), formerly the Institute of Medicine, *Future of Nursing* report recommendations (2010). In 2021, the NAM released the *Future of Nursing 2020-2030* to chart the path over the next decade. The NSP I and NSP II Advisory Group met to consider how the new recommendations should be incorporated into the NSP programs and agreed that nurse retention should be the critical takeaway item to focus the joint efforts.

- In Spring 2020, the GNF was renamed the Cohen Scholars (CS) program. Additionally, the evaluation responsibility for this program was transitioned from the MHEC Office of Student Financial Assistance (OSFA) to the NSP II staff for future oversight. During the transition, NSP II staff clarified the NSP II eligible service facilities and standardized the teaching obligation for all GNF/CS recipients.

## Conceptual Framework

NSP II funding is to be used to support nursing education initiatives at all of the schools of nursing in Maryland with the goal of increasing educational capacity to meet the needs of the Maryland nursing workforce and improve the delivery and quality of care in all settings (Figure 1). Through NSP II funded initiatives, leaders in nursing education and nursing practice work together to increase the capacity to educate more nurses to grow the nursing workforce in Maryland. The collaboration between nursing schools and hospitals is a vital and interdependent one, where each supports the other's mission. Hospitals rely on nursing schools to supply them with skilled nurses, while nursing schools rely on hospitals to provide practical, clinical training to their students. NSP II initiatives are focused on supporting the essential educational components that underpin nursing practice, including the development of clinical skills, the integration of evidence-based practices, and the cultivation of leadership abilities, all of which are critical to bridging the gap between classroom learning and real-world healthcare environments. The result of a strong relationship between education and practice is a highly trained, qualified and diverse nursing workforce that is prepared to transform the quality of care in all settings.

*Figure 1. Conceptual Framework for Nurse Support Program II*



**NSP II Initiatives**

1. Increase nursing pre-licensure enrollments and graduates
2. Advance the education of students and RNs to BSN, MSN, & doctoral level
3. Increase the number of doctoral-prepared nursing faculty
4. Build collaborations between education and practice
5. Increase educational capacity statewide
6. Increase Cohen Scholars as future faculty and clinical educators
7. **New:** Increase education that advances practice in community health settings / advances population health
8. Faculty-focused initiatives to recruit & retain nurse faculty

**Education (Schools of Nursing)** → **Nursing Workforce** → **Care Delivery Transformation & Healthcare Improvements**

**Education & Practice work together to achieve mutual goals**

- Expanded enrollments, pathways, and/or programs through partnership
- Strong foundations in nursing basics
- New curricula address future needs in equity-centered healthcare system
- Assist under-resourced nursing schools in fulfilling regulatory requirements
- Aligned clinical training opportunities to drive competency-based care
- Recruitment of diverse student bodies & faculty

- Increase the number of highly qualified faculty & nurses to meet workforce demands.
- Increase collaborations between education and practice.
- Recruit well-trained nurses to address vacancies and gaps in care across all care settings.
- Support advanced nursing education to enhance quality of care.

★ Transformation of care delivery across all settings (acute, primary, community)
★ Total cost of care
★ Quality improvements (e.g. lower readmission rates)
★ Population health and health equity improvements
★ Culturally competent care delivery to meet community needs
★ Expansion of preventative care practice
★ Chronic disease reduction

## NSP II Initiatives

NSP II employs a three-prong strategy for increasing the number of nurses through strengthening nursing faculty and nursing educational capacity in the state with the ultimate goal of increasing the quality of care and reducing hospital costs. These goals are achieved by (1) increasing the number of nursing lecture and clinical faculty, (2) supporting schools and departments of nursing in expanding academic capacity and curriculum, and (3) providing support to enhance nursing enrollments and graduation for an adequate supply of nurses to meet the demands of Maryland's hospitals and health systems.

In 2012, the Nurse Support Program I and II initiatives were aligned with the Institute of Medicine (IOM) recommendations in its *Future of Nursing* report and included the following aims:

1. Ensuring nursing educational capacity for Nursing Pre-Licensure Enrollments and Graduates, including Associate Degree in Nursing (ADN), Bachelor of Science in Nursing (BSN), Master of Science Entry and Second Degree BSN Entry preparation for licensure by the National Council Licensure Examination for Registered Nurses (NCLEX-RN) to determine safety of new graduate nurses to enter practice.

2. Advancing academic preparation of entry-level nurses and experienced nurses to meet the needs of hospitals and health systems for a higher proportion of registered nurses with a Baccalaureate (BSN) or higher degree in Nursing.

3. Increasing the number of nurses and nurse faculty with graduate education and doctoral degrees to prepare them as leaders, researchers, and educators in academic and clinical settings, and advanced practice nurses.

4. Building collaborations between nursing education and practice for improved nursing competency through seamless academic progression and lifelong learning to improve patient outcomes and satisfaction.

5. Developing statewide resources and models for clinical simulation, leadership, interprofessional education, alternative clinical practice sites, and clinical faculty preparation.

6. Ensuring a cadre of qualified faculty and clinical nursing instructors with efforts to provide graduate educational support, recruit new faculty, retain experienced educators, and increase the number of certified nurse faculty in the specialty practice of nursing education.

7. Advancing the practice of nursing in provision of primary services as nurse practitioners, nurse midwives, nurse anesthetists, and clinical nurse specialists.

8. Providing for the nursing workforce data infrastructure for future workforce analysis.

In addition, with Maryland's current Total Cost of Care (TCOC) Model and the implementation of the new States Advancing All-Payer Health Equity and Development (AHEAD) Model, it is essential to prioritize initiatives that advance population health goals and prepare nurses to practice in community health settings. In accordance with the NSP II statute, the program must also track, analyze, and prioritize initiatives that support the recruitment and retention of underrepresented nursing groups. Through investments in NSP II-funded initiatives, Maryland has established itself as a leader in developing a sustainable, successful model for growing a diverse nursing workforce, while advancing progress toward national goals (Table 1). This report will update the Commission on the current state of nursing, highlight the progress of the NSP II program, and provide key recommendations for its future direction.

*Table 1. Pathway for NSP II Initiatives to Achieve State & National Goals*

| NSP II Initiative | Related NSP II Grant Outcome | Related Statewide & National metrics (data source) |
| --- | --- | --- |
| **1. Increase nursing pre-licensure enrollments and graduates** | # Additional nursing pre-licensure graduates | Location Quotient, RN employment & wages (U.S. Bureau of Labor Statistics) |
| | | NCLEX-RN pass rates (MBON; NCSBN) |
| | | Nurse residency turnover & retention rates (MONL/MNRC; NSI) |
| **2. Advance the education of students and RNs to BSNs, MSN and Doctoral level** | # Additional nursing higher degrees completed | National Nursing Workforce Survey (NCSBN) |
| **3. Increase the number of Doctoral-prepared nurse faculty** | # Additional nursing faculty at Doctoral level | Proportion of nurses & nurse faculty with Doctoral degree (AACN; HRSA) |
| **4. Build collaborations between education and practice** (*Examples:* clinical education models, dedicated education units, pipelines to nursing, community-based health partnerships) | Collaborative results are specific to grant initiative (*Examples:* # of additional clinical education spots, # of additional partnerships) | Specific to grant initiative |
| **5. Increase capacity statewide** (*Examples:* faculty professional development, statewide simulation resources, nursing workforce center, nurse resiliency program) | Statewide results are specific to grant initiative (*Examples:* # of additional resources, workshops, activities or modules) | Specific to grant initiative |
| **6. Increase Cohen Scholars as future faculty and clinical educators** | # Additional Cohen Scholars | Nurse faculty vacancy rates (NSP II Mandatory Data Tables; AACN) |
| *New:* **7. Increase education that advances practice in community health settings / advances population health** | Community / Population health results are specific to grant initiative (*Examples:* # of additional providers, community services provided, patient encounters) | Mortality rates, chronic disease prevalence, health behaviors, access to care (County Health Rankings & Roadmaps) |
| | | Hospital readmission rates (HSCRC Casemix Data) |
| **8. Faculty-focused initiatives to recruit & retain nurse faculty** | # Nurse faculty recruited & retained, # Certified nurse educators | Nurse faculty vacancy rates (NSP II Mandatory Data Tables; AACN); CNE® data (NLN's CNE® portal) |

RN = Registered Nurse; MBON = Maryland Board of Nursing; NCSBN = National Council of State Boards of Nursing; MONL = Maryland Organization of Nurse Leaders; MNRC = Maryland Nurse Residency Collaborative; NSI = Nursing Solutions Inc.; BSN = Bachelor of Science in Nursing; MSN = Master of Science in Nursing; AACN = American Association of Colleges of Nursing; HRSA = Health Resources and Services Administration; AHRQ = Agency for Healthcare Research and Quality; CNE® = Certified Nurse Educator; NLN = National League for Nursing.

# Major NSP II Achievements

The funding designated for the Nurse Support Program II (NSP II) is used for competitive grants and statewide initiatives aimed at increasing the capacity for schools of nursing in Maryland to produce additional qualified nurses to practice in Maryland. This report contains the analysis of program outcome data to assess progress in achieving the aims of NSP II during the last five year program cycle. Major program achievements are highlighted below and in the following sections of this report.

- Participation in the Competitive Institutional Grants program from 89 percent of all schools of nursing in Maryland.
- Participation in the Faculty-Focused Statewide Initiatives program from 96 percent of all schools of nursing in Maryland.
- Increased Maryland's first-time pass rates for the NCLEX-RN licensure exam by 6 percent since FY 2018.
- The number of candidates taking the NCLEX-RN licensure exam in Maryland increased by 22 percent since FY 2018.
- Increased the ability for schools of nursing to graduate an additional 1,545 nurses.
- Recruited 193 new nurse faculty into full-time positions at higher education institutions in Maryland.
- As of October 2024, Maryland had 299 CNE®-credentialed nurse educators, ranking sixth in the nation for total CNE®-credentialed faculty and tied for the lead in the proportion of nursing instructors with the credential.
- Established Cohen Scholars Programs at six universities in Maryland that provided graduate tuition and mentorship to approximately 250 future and existing nurse educators.
- Produced 186 Cohen Scholars graduates prepared to teach in Maryland as nurse faculty and hospital educators.
- Provided tuition support and course release time for 58 full-time nurse faculty in Maryland to complete the terminal doctoral degree.

## Competitive Institutional Grants Program

The Competitive Institutional Grants Program builds educational capacity and increases the number of nurse educators to adequately supply hospitals and health systems with well-prepared nurses. These grants are designed to increase the structural capacity of Maryland nursing schools through shared resources; innovative educational designs; and streamlined processes to produce more nurse faculty, and undergraduate and graduate nurses. Activities may include the establishment of new degree programs, curriculum enhancement and redesign, simulation and other productivity-enhancing instructional technologies. These grants also contribute to the creation of a more diverse nursing faculty and workforce as well as preparing graduate-level nurses to serve as lecturers and/or clinical faculty at Maryland's higher

education institutions. All grant recipient project directors are required to disseminate their work through publications in peer-reviewed journals or presentations to fellow nurses at professional nursing conferences in Maryland and nationally. Grant proposals are scored with a consistent rubric by an expert review panel. Strong consideration is given to the feasibility of the proposal's budget, the sustainability of the initiative, and the potential return on investment. A total of 120 proposals were reviewed over the five-year period. A total of $58.9 million was awarded through a competitive review process for 87 multi-year projects. Twenty-eight of the grant projects awarded between FY 2021 and FY 2025 have completed and 59 of the grant projects remain in progress.

## Progress by Geographic Location, Amount and Project Type

Five rounds of competitive institutional grants have been conducted since July 2020. All current institutions with schools of nursing in Maryland were encouraged to submit proposals for competitive institutional grant funding during the FY 2021 - FY 2025 program cycle. Grant proposals were scored with a consistent rubric by an expert review panel. Strong consideration was given to the feasibility of the proposal's budget, the sustainability of the initiative, and the potential return on investment. A total of 131 proposals were reviewed over the five-year period and 87 multi-year projects were awarded a total of $58.9 million through a competitive review process.

The types of NSP II Competitive Grants fall under one of four categories:

1. **Planning grants** are available to develop detailed proposals for initiatives that will increase the enrollment and graduation of nurses who will then practice in Maryland and/or increase the supply of qualified nursing faculty required to expand the capacity of Maryland's nursing programs. Planning projects are limited to one (1) to two (2) years of funding.
2. **Implementation grants** are available for projects that will (1) increase the enrollment and graduation of nurses who will then practice in Maryland hospitals and/or (2) increase the supply of qualified nursing faculty required to expand the capacity of Maryland's nursing programs.
3. **Resource grant awards** are available for small projects that align with the goals of the NSP II but would not qualify as planning or implementation grants and cannot be reallocated within an existing open grant. The funding request must have no other option for funding within the program and this must be supported with details on why the NSP II resource grant is being requested.
4. **Continuation grants** are by invitation only and available for projects with proven outcomes and high potential to impact state level needs. Consideration for continuation grants will include a review of project impact, progress towards stated goals and objectives, financial management of funds, and compliance with reporting requirements.

The majority (44 percent) of funding ($42.4 million) was awarded to 38 implementation grants aimed at producing measurable outcomes over a period of one to up to four years. Eleven planning grants were awarded a total of $1.4 million to assess feasibility and prepare for future project implementation. Resources that lacked alternative sources of funding were supported through a total of 29 one-year grants totaling $2.7 million. Nine successful initiatives, each yielding significant statewide impact, were chosen to submit continuation grant applications totaling $12.3 million.

The distribution of awards was geographically diverse (Table 2). Thirteen community colleges and thirteen universities received this funding, which represents a total participation rate of 89 percent from all eligible schools of nursing in Maryland (26/29). Grant recipients included schools or departments of nursing at public universities, including the State's historically black institutions, independent colleges, universities and community colleges. The majority of the institutions that received funding were located in the central region of the State and Baltimore City. No proposals were received from Southern Maryland.

*Table 2. Geographical Distribution of Competitive Institutional Grants from FY 2021 - FY 2025*

| Geographical region | # of grants awarded | # of Institutions awarded | $ of funding awarded |
|---|---|---|---|
| Capital Region MD | 9 | 6 | $4,155,026 |
| Central MD | 57 | 13 | $40,343,557 |
| Eastern Shore MD | 11 | 4 | $6,628,117 |
| Western MD | 10 | 3 | $7,835,833 |
| TOTAL | 87 | 26 | $58,962,533 |

*Note.* Regions defined by Maryland Office of Tourism (visitmaryland.org) and categorized by physical address.
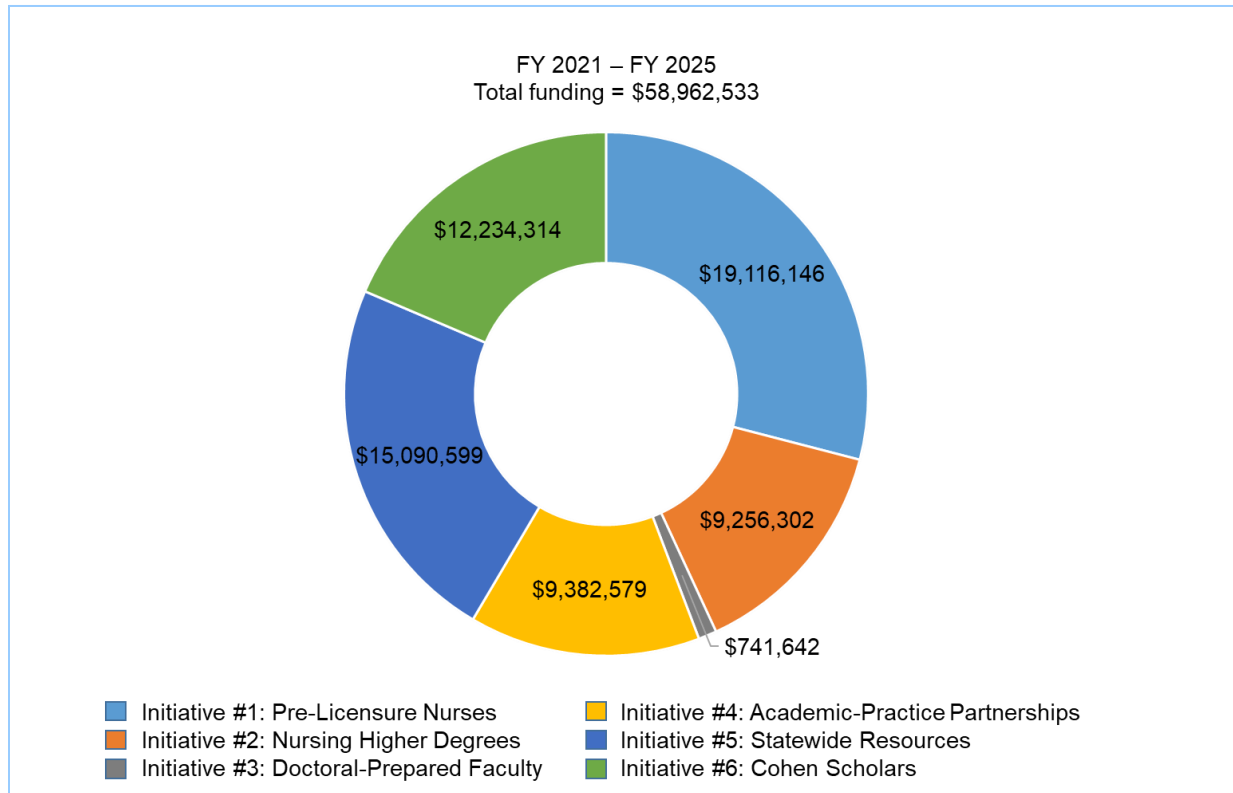
## Progress by Initiative

Competitive institutional grants were awarded for projects addressing the following initiatives:

1. Increasing nursing pre-licensure enrollments and graduates;
2. Advancing the education of students and nurses to BSN, MSN & doctoral level;
3. Increasing the number of doctoral-prepared nursing faculty;
4. Building collaborations between nursing education and practice,
5. Increasing educational capacity statewide; and
6. Increasing Cohen Scholars as future nurse faculty and clinical educators.

The distribution of competitive institutional grant award funding by initiative is presented in Figure 2. The majority of funding was awarded to increase the capacity for nursing pre-licensure enrollments and graduates, followed by the development of statewide resources. In FY 2021, $12.2 million was awarded to

six schools of nursing for the Cohen Scholars program, which has currently produced 186 graduates as future nurse educators. Progress on each initiative is presented in the paragraphs below.

*Figure 2. NSP II Competitive Institutional Grants Awarded by Initiatives: FY 2021 - FY 2025*

FY 2021 – FY 2025
Total funding = $58,962,533

$12,234,314

$19,116,146

$15,090,599

$9,256,302

$9,382,579

$741,642

- Initiative #1: Pre-Licensure Nurses
- Initiative #2: Nursing Higher Degrees
- Initiative #3: Doctoral-Prepared Faculty
- Initiative #4: Academic-Practice Partnerships
- Initiative #5: Statewide Resources
- Initiative #6: Cohen Scholars

*Note.* Grants may address more than one initiative.

### *Initiative # 1: Increase Nursing Pre-Licensure Enrollments and Graduates*

The U.S. Bureau of Labor Statistics estimates that by 2031, there will be a need for over 200,000 additional registered nurses annually to meet the healthcare needs of an expanding and aging population. Yet, many nursing schools report turning away qualified applicants due to capacity limitations. Increasing enrollments would directly address this gap, helping to meet the demand for healthcare services while ensuring that nursing students are adequately trained and prepared. The primary goal of this NSP II initiative is an increased number of nursing graduates across all pre-licensure nursing programs to successfully pass the NCLEX-RN nursing licensure examination and enter the Maryland nursing workforce. Maryland higher education institutions, consortia of institutions and/or hospitals implement sustainable strategies to combine and integrate their resources to allow for immediate expansion of nursing enrollments and graduates. This is an opportunity for expanding current cohorts, adding cohorts, and engaging in alternate delivery methods.

From FY 2021 to FY 2025, a total of 32 competitive institutional grants were aimed at addressing initiative #1 to increase nursing pre-licensure enrollments and graduates with the ultimate goal to produce 1,545 additional pre-licensure nursing graduates eligible to take the NCLEX-RN licensure exam. A total of 568 additional nurse graduates have been produced to date. An analysis of the completed grants addressing this initiative reveals that the NSP II cost to produce each additional graduate was about $4,266.19 ($1,040,950 in grant funding / 244 graduates produced from eight grants that ended in 2023 & 2024). This demonstrates a cost-effective investment in expanding the nursing workforce. Current progress on this initiative is represented in Table 3.

*Table 3. Progress toward Initiative #1: Increase Nursing Pre-Licensure Enrollments & Graduates*

| Year Ending | Projected # Additional Pre-Licensure Nurses | Actual # Additional Pre-Licensure Nurses | % to Goal |
|---|---|---|---|
| 2023 (Completed) | 32 | 86 | 269% - Exceeded Goal |
| 2024 (Completed) | 96 | 158 | 165% - Exceeded Goal |
| 2025 (In Progress) Final Data in Sept. 2025 | 298 | 201 | 67% |
| 2026 (In Progress) Final Data in Sept. 2026 | 456 | 60 | 13% |
| 2027 (In Progress) Final Data in Sept. 2027 | 264 | 63 | 24% |
| 2028 (In Progress) Final Data in Sept. 2028 | 399 | no data | no data |
| **Total** | **1,545** | **568** | **37%** |

*Note.* Grants ending in 2028 began in FY 2025 and have not yet reported annual data.

### *Initiative #2: Advance the Education of Students and RNs to BSN, MSN & Doctoral Level*

Ongoing research findings confirm a hospital's proportion of BSN nurses, regardless of educational pathway, are associated with lower odds of 30-day inpatient surgical mortality (Porat-Dahlerbruch, et al., 2022). A summary of feedback shared with NSP II staff from Chief Nursing Officers (CNOs) in Maryland support the continued importance of the bachelor's degree in nursing (BSN):

- The BSN is perceived as the minimum standard of education for nurses;
- The proportion of BSNs is a criteria that is assessed when hospitals are looking to demonstrate excellence through the Magnet Recognition Program®; and
- Nurses with a BSN or higher are more skilled in leadership, quality improvement, critical thinking, evidence-based practice, professionalism, case management, and teamwork/collaboration.

While all Maryland hospitals hire new graduate nurses with an Associate Degree in Nursing (ADN), almost all require that they obtain a BSN degree within a certain timeframe. According to data from Maryland nurse residency programs, new graduates with a BSN degree have a lower turnover rate (17 percent) than those prepared in any other way (19 percent). As patient acuity levels rise and patients require more complex care, it is imperative to support advanced degrees in nursing.

Data from NCSBN's National Nursing Workforce Survey showed that the proportion of BSN or higher prepared nurses in the US increased to 71.7 percent in 2022 and 51.5 percent of nurses entered the profession with a BSN or higher degree (AACN). In Maryland, 75 percent of nurses responding to the National Nursing Workforce Survey had a BSN or higher degree in 2022, exceeding the national rate. (Source: MNWC). Data from the Robert Wood Johnson Foundation's Campaign for Action showed that the percentage of nurses in Maryland with a BSN or higher degree increased from 55 percent in 2010 to 69 percent in 2020, which was 10 percent higher than the 2020 national average of 59 percent (Brassard, 2023). This demonstrates that steady progress is being made towards achieving the 80 percent goal of nurses holding a BSN by 2025.

Advancing the education of students and registered nurses (RNs) to the BSN, MSN, and doctoral levels is essential for improving the quality of care, expanding leadership capabilities, and enhancing the overall effectiveness of the nursing workforce. Higher education levels in nursing contribute to a deeper understanding of clinical practices, evidence-based care, and health systems management. By advancing nursing education, the profession will be better equipped to address the increasing complexity of patient care needs, adapt to healthcare innovations, and take on leadership roles in both clinical and policy settings. Moreover, it will help to meet the growing demand for advanced practice nurses, such as nurse practitioners and nurse educators, ensuring that the healthcare system is supported by highly skilled and diverse professionals prepared to tackle future challenges.

From FY 2021 to FY 2025, a total of 16 competitive institutional grants were aimed at addressing initiative #2 to advance the education of students and nurses with the ultimate goal for an additional 795 higher nursing degrees to be completed. A total of 566 additional higher degrees have been completed to date. Current progress on this initiative is represented in Table 4.

*Table 4. Progress toward Initiative #2: Advance the Education of Students and RNs to BSN, MSN & Doctoral Level*

| Year Ending | Projected # Additional Nursing Higher Degrees | Actual # Additional Nursing Higher Degrees | % to Goal |
|---|---|---|---|
| 2024 (Completed) | 32 | 65 | 203% - Exceeded Goal |
| 2025 (In Progress) Final Data in Sept. 2025 | 435 | 386 | 89% |
| 2026 (In Progress) Final Data in Sept. 2026 | 350 | 115 | 33% |
| 2028 (In Progress) Final Data in Sept. 2028 | 28 | no data | no data |
| Total | 845 | 566 | 67% |

*Note.* There were no grant projects for initiative #2 ending in 2023 or 2027. Grants ending in 2028 began in FY 2025 and have not yet reported annual data.

## Initiative #3: Increase the Number of Doctoral-Prepared Nursing Faculty

The demand for nurses is growing, yet a shortage of doctoral-prepared nursing faculty limits the ability to educate the next generation of nurses and expand enrollment to meet healthcare needs. Increasing the number of doctoral-prepared faculty is crucial for training a skilled nursing workforce, as these faculty members are essential for conducting research that drives evidence-based practices, improves patient outcomes, and shapes healthcare policies. They also serve as mentors, preparing students to become practitioners, researchers, and leaders. Doctoral-prepared faculty play a key role in developing innovative curricula that reflect the latest advances in nursing practice, technology, and healthcare delivery, ensuring that nursing programs remain relevant and of high quality. Additionally, they support the professional development of practicing nurses through continuing education and mentorship, strengthening the nursing profession overall. By expanding the pool of doctoral-prepared faculty, nursing schools ensure the highest clinical and academic standards, directly impacting patient care and outcomes. Accrediting bodies emphasize the importance of faculty qualifications to maintain program quality and accreditation. Furthermore, doctoral-prepared faculty address health disparities by focusing on health equity, cultural competence, and social determinants of health, ensuring nursing students are equipped to provide equitable care in diverse healthcare settings.

Between FY 2021 and FY 2025, a total of $741,642 was awarded to initiative #3, funding two grants aimed at producing an additional 30 doctoral-prepared faculty, along with one planning grant focused on developing a PhD in nursing program at an HBCU by 2025. A total of 33 additional doctoral-prepared faculty have been produced to date, already exceeding the target goal of 30 additional doctoral-prepared faculty by 2026. Current progress on this initiative is represented in Table 5.

*Table 5. Progress toward Initiative #3: Increase the Number of Doctoral-Prepared Nursing Faculty*

| Year Ending | Projected # Additional Doctoral-Prepared Faculty | Actual # Additional Doctoral-Prepared Faculty | % to Goal |
|---|---|---|---|
| 2024 (Completed) | 10 | 33 | 330% - Exceeded Goal |
| 2026 (In Progress) | 20 | no data | no data |
| **Total Completed** | **30** | **33** | **110% - Exceeded Goal** |

*Note.* There were no grant projects for initiative #3 ending in 2023, 2025, 2027 or 2028. Grant ending in 2026 began in FY 2025 and has not yet reported annual data.

### *Initiative #4: Build Collaborations Between Education and Practice*

Building collaborations between nursing education and practice is essential for developing skilled, competent, and adaptable nursing professionals. These partnerships provide students with real-world experience, enhancing clinical skills and helping them apply theoretical knowledge in practical settings. Working alongside experienced professionals fosters critical thinking and problem-solving, which are crucial for quality patient care. Additionally, collaborations ensure nursing curricula remain relevant by incorporating feedback from healthcare organizations, addressing current challenges in patient care, technology, and delivery. Students engaged in dynamic learning experiences like clinical rotations, internships, and mentorship gain a clearer understanding of their role in healthcare, boosting motivation and engagement. These partnerships also integrate evidence-based practices (EBPs) into both education and clinical settings, ensuring students learn the latest research while practicing nurses refine their skills. Furthermore, such collaborations bridge the gap between theory and practice, preparing students to navigate complex patient scenarios. Educational-practice collaborations promote smoother transitions into the workforce, enhance nurse retention, and provide ongoing professional development. Ultimately, they improve patient outcomes by preparing nurses with the skills, knowledge, and leadership to deliver high-quality, evidence-based care.

A total of $9.3 million was awarded between FY 2021 and FY 2025 to support initiative #4 to foster academic-practice partnerships. Grant projects implemented under this academic-practice partnership initiative were designed to address the needs of nursing schools and nursing students, as well as practicing nurses and the communities they serve. The outcomes of these initiatives offer essential resources and

assets to support a competent, highly skilled nursing workforce, prepared to deliver evidence-based care across all settings. Key examples are outlined in Table 6.

*Table 6. Initiative #4: Examples of Grant Projects to Build Collaborations Between Education & Practice*

| Title | Description | Outcomes |
|---|---|---|
| Supporting Nursing Advanced Practice Transitions (SNAPT) | Nurse Practitioner Fellowship program that seamlessly transitions students into the workforce to increase primary care providers | 24 Nurse Practitioner Fellows in Maryland |
| R3-Renewal, Resilience and Retention for Maryland Nurses | Statewide initiative to strengthen resiliency curriculum for academic faculty, nursing students, Nurse Residency educators, and novice nurses | Over 1500 participants; 38 online modules created; Online repository of tools/resources; Annual Statewide Conference |
| An Academic-Practice Partnership to Create a Home Healthcare Transition-to-Practice Model | Build the infrastructure for a statewide program to support new nurse graduates as they transition into home healthcare practice | Established a consortium of academic & practice stakeholders; Developed a Home Healthcare Residency toolkit with modules |
| Care Coordination Educational-to-Practice Scale-Up | Promote competency in care coordination and patient-centered care across Maryland hospitals while expanding the CC/HIT focus within schools of nursing | 70 RN-BSN graduates with CC/HIT expertise; 91 nurses completed care coordination modules; Exposure to care coordination at 6 hospitals |
| Head Start Partnership to Expand Pediatric Clinical Opportunities | Build the capacity to provide additional pediatric clinical experiences for entry-level & DNP/APRN students through an innovative partnership with Maryland Family Network and Early Head Start of Maryland | 37 clinical sites received services; 3,029 children received services; 505 DNP/APRN & 1,141 entry-level student encounters; 2,086 student clinical hours |
| The Nurse Leadership Institute | Through a year-long leadership program with mentorship, reflective exercises, and a leadership project, nurse faculty & clinicians develop the skills to lead change and advance health | 204 new nurse leaders; 193 mentors trained; 32 academic-practice collaborative projects |
| Academic Practice: Pilot DEU Model | Use an innovative approach to clinical education for pre-licensure students with the Dedicated Education Unit (DEU) pilot, where staff nurses serve as clinical instructors | Implemented DEU model on two medical-surgical units; Two clinical groups established |
| Enhancing Clinical Education Through Partnerships | Increase the number of employee nurses serving as clinical instructors and provide professional development and graduate education to instructors | 25 clinical instructors hired from hospital partners; 59 graduates hired by partners (247% increase) |

CC/HIT = Care Coordination supported by Health Information Technology; DNP = Doctor of Nursing Practice; APRN = Advanced Practice Registered Nurse.

## *Initiative #5: Increase Capacity Statewide*

Increasing nursing education capacity statewide is crucial for meeting the growing healthcare demand, improving patient care, and addressing public health challenges. Initiative #5 aims to provide resources to support nurses across both academic and practice settings. This initiative focuses on preparing future nurse

educators, promoting lifelong learning through statewide professional development models, and empowering nurses to lead change and advance health in advanced practice roles. Additionally, it works to build an infrastructure for the collection and analysis of nursing workforce data by establishing the Maryland Nursing Workforce Center. Between FY 2021 and FY 2025, $15.1 million was awarded to develop statewide resources that enhance the state's capacity to educate and graduate more nurses. Table 7 highlights the key resources made available to all Maryland nurses through this funding.

*Table 7. Initiative #5: Examples of Grant Projects to Increase Capacity Statewide*

| Title | Description | Outcomes |
|---|---|---|
| Maryland Clinical Simulation Resources Consortium (MCSRC) | Strengthens the quality and quantity of simulation used in nursing education statewide through faculty and hospital educator preparation | 390 simulation education leaders; 11 simulation educator certifications; 17 simulation videos created |
| The Faculty Academy and Mentorship Initiative of Maryland (FAMI-MD) | Introductory and Advanced Academies that prepare expert clinicians as clinical educators across the state | 370 newly prepared faculty; 45.68% participation from underrepresented groups in nursing; 77% of participants accepted teaching positions at 28 SON; 43 nurse educator certifications; 6 statewide CNE® preparatory workshops |
| Preparing Clinical Nursing Faculty Across Maryland | Increase the number of competent clinical nursing faculty across the state through faculty workshops, ongoing professional development, and national certification exam support | 277 clinical faculty prepared; 41% engagement in ongoing professional development; 20 clinical nurse educator certifications |
| Lead Nursing Forward | Establish a comprehensive web resource with easy-to-access information about becoming a registered nurse and nurse educator in Maryland | www.LeadNursingForward.org created; 43,398 unique visitors and 176,016 total page views since launch in 2019; 874 registered users, 148 contributors, and 75 organizations |
| Nurse Managed Wellness Center | Implement the nurse managed health center model and build capacity for nurse education with clinical training opportunities designed for nurses and primary care NPs | 80 additional pre-licensure graduates; 20 additional DNP Primary Care APRN graduates |
| Igniting Faculty Capacity | Enhance Maryland's nursing workforce readiness through the increased integration of competency-based education (CBE) best practices in the state's nursing programs | 100 kickoff event attendees; 200 regional CBE workshop participants from MD nursing programs; 100 CBE Networking Summit attendees; 60 faculty engage in follow-up activities |
| Maryland Nursing Workforce Center (MNWC) | Work with partners across the state on current nursing workforce issues with a focus on data collection, analysis and dissemination | MNWC Website & Data Dashboards; Universal Onboarding Project; NextGen-NCLEX statewide Summit & faculty workshops, Faculty case studies, NextGen-NCLEX Test bank |

SON = School of Nursing; CNE® = Certified Nurse Educator; NP = Nurse Practitioner; DNP = Doctor of Nursing Practice; APRN = Advanced Practice Registered Nurse; NCLEX= National Council Licensure Examination.

*Initiative #6: Increase Cohen Scholars as Future Faculty and Clinical Educators*

Increasing the number of future faculty and clinical educators is essential to sustaining high-quality education in nursing and clinical training. This can be achieved by establishing a pipeline of qualified educators while ensuring their preparation to teach, mentor, and guide the next generation of students. Promoting advanced degrees in education, such as Doctoral or Master's programs, equips nurses with essential teaching skills, while specialized programs focused on pedagogy, student supervision, feedback, and assessment design can enhance teaching effectiveness, ultimately improving nursing student outcomes.

The Cohen Scholars (CS) program plays a vital role in this effort by providing tuition support for graduate education and offering mentoring from experienced faculty members to nurses aspiring to assume a teaching role. This program supports registered nurses in completion of their Master's and Doctoral degrees, post-graduate teaching certificate, and coursework to become nurse faculty. Funding for Cohen Scholars is selective and supports tuition and fees for Maryland residents to attend a Maryland program, with a service obligation to teach in an in-state nursing program or hospital education department upon graduation. As part of the program's 1:1 service obligation requirement, graduates must work as nurse faculty at nursing schools in Maryland or as hospital educators at NSP-participating Maryland hospitals/affiliates for a duration equal to the amount of tuition support received. Recipients who are unable to meet the service obligation must repay the graduate tuition support received through a repayment plan.

Between FY 2021 and FY 2025, a total of $12.2 million was awarded to initiative #6 to fund the establishment of the Cohen Scholars program at six schools of nursing in the state. A total of 186 Cohen Scholars have graduated to date, representing significant progress toward the goal to produce an additional 216 nurse educators prepared to teach in Maryland. Cohen Scholar tuition support has been provided to approximately 250 Cohen Scholars and an analysis of service obligation status data shows that 79 percent are on track to fulfill the teaching service obligation.

## Statewide Initiatives Program

The Statewide Initiatives Program supports national and state NSP II goals that are focused on faculty initiatives that increase the quality of nursing education in the state to meet the needs of the future nursing workforce. The statewide initiatives are faculty focused with multiple opportunities for all schools of nursing in Maryland to:

- Recruit, retain and recognize a diverse nursing faculty,
- Increase the number of doctoral-prepared nursing faculty,
- Increase research competence and completion of terminal degrees for existing faculty, and

- Strengthen the professional development and expertise of nurse faculty.

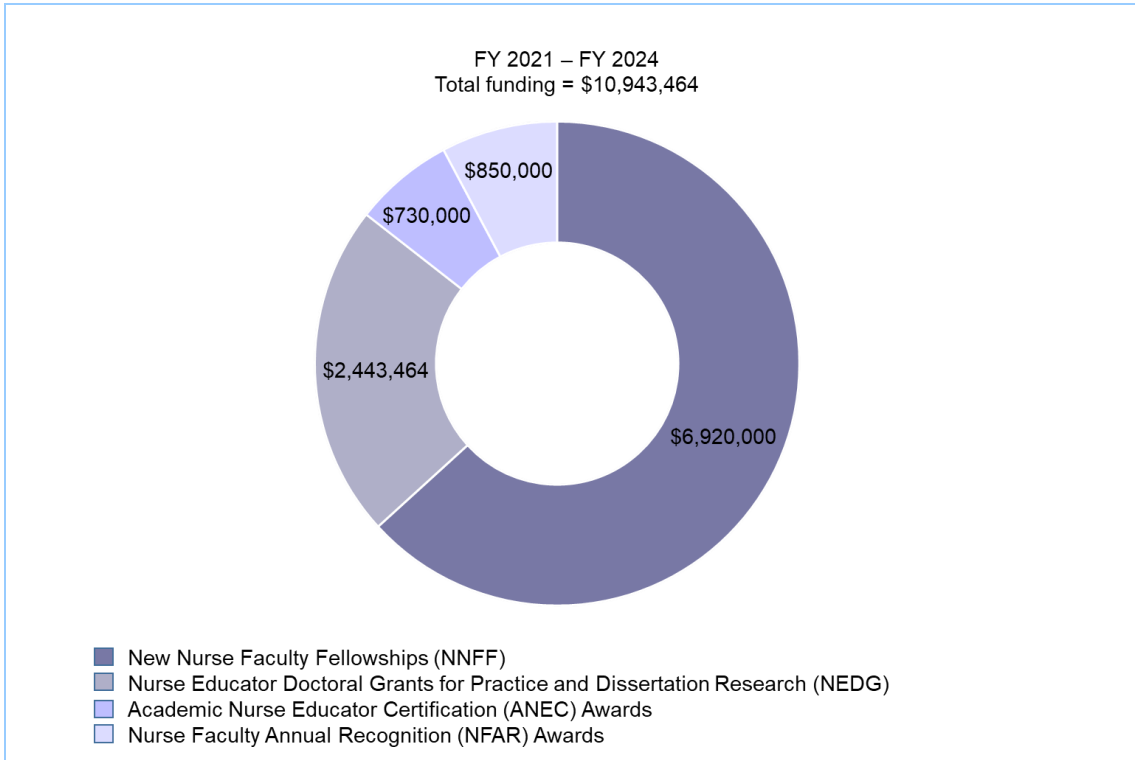Current faculty-focused statewide initiative programs include:

1. New Nurse Faculty Fellowships (NNFF), for new nurse faculty hired by Maryland institutions to expand enrollments in their nursing programs;
2. Nurse Educator Doctoral Grants for Practice and Dissertation Research (NEDG) for existing faculty to expedite doctoral degree completions;
3. Academic Nurse Educator Certification (ANEC) Awards, for nurses who demonstrate excellence as an academic nurse educator through achieving and maintaining the National League for Nursing's Certified Nurse Educator (CNE®) credential; and
4. Nurse Faculty Annual Recognition (NFAR) Awards to recognize faculty demonstrating excellence in education in one of five areas of expertise.

As a requirement of the programs, recipients commit to advancing their careers through earning doctoral degrees; joining an institution as a new faculty member; or demonstrating expertise in the specialty practice of nursing education through national certification. Deans and Directors of nursing schools in Maryland are responsible for reviewing the eligibility criteria and nominating faculty for statewide faculty-focused award programs. Each nomination is carefully evaluated by a review panel, which uses consistent scoring and eligibility criteria to ensure a fair and objective selection process. This structured approach helps highlight the contributions of outstanding nursing faculty across the state.

## Progress by Geographic Location and Amount and Program Type

From FY 2021 to FY 2024, a total of $10.9 million was awarded to nurse faculty in Maryland through the statewide faculty-focused awards program. A total of 560 nominations were received and 482 faculty-focused awards were made. The distribution of funding for the faculty-focused Statewide Initiatives by program is presented in Figure 3. The majority of funding was awarded to New Nursing Faculty Fellowships (NNFF) to recruit and retain 274 new full-time faculty to fill vacancies in 22 schools of nursing in Maryland. Progress on each initiative is presented in the paragraphs below.

*Figure 3. NSP II Statewide Initiatives Program by Faculty-Focused Awards: FY 2021 - FY 2024*



FY 2021 – FY 2024
Total funding = $10,943,464

$850,000

$730,000

$2,443,464

$6,920,000

■ New Nurse Faculty Fellowships (NNFF)
■ Nurse Educator Doctoral Grants for Practice and Dissertation Research (NEDG)
■ Academic Nurse Educator Certification (ANEC) Awards
□ Nurse Faculty Annual Recognition (NFAR) Awards

*Note.* FY 2025 funding is not included because the awarding cycle for FY 2025 is not complete.

The distribution of faculty-focused awards was geographically diverse (Table 8). Fifteen community colleges and twelve universities received this funding, which represents a total participation rate of 96 percent from all eligible schools of nursing in Maryland (27/28).

*Table 8. Geographical Distribution of Faculty-Focused Awards from FY 2021 - FY 2024*

| Geographical region | # of faculty awards | # of Institutions awarded | $ of funding awarded |
|---|---|---|---|
| Capital MD | 93 | 6 | $2,172,350 |
| Central MD | 288 | 13 | $6,666,114 |
| Eastern Shore MD | 50 | 4 | $915,000 |
| Western MD | 36 | 3 | $960,000 |
| Southern MD | 15 | 1 | $230,000 |
| **TOTAL** | **482** | **27** | **$10,943,464** |

*Note.* Regions defined by Maryland Office of Tourism (visitmaryland.org) and categorized by physical address.

## New Nursing Faculty Fellowships (NNFF)

The Nurse Support Program II provides funding for New Nursing Faculty Fellowships (NNFF) to faculty newly hired to expand Maryland's nursing programs. Maryland institutions with nursing degree programs may nominate newly hired full-time, tenured, tenure-track or non-tenured faculty members for fellowships. Individuals who are offered a full-time, long-term contract to serve as clinical-track nursing faculty also may be eligible. Funding is distributed to awardees over a five-year period contingent on continuous employment as full-time faculty in good standing at the nominating institution.

Fellowships for new nursing faculty include support for professional development activities and provide an effective way to promote mentorship and retention in the profession by easing the transition into the faculty role. These fellowships offer new faculty the opportunity to engage in ongoing learning, skill-building, and peer collaboration, ensuring they feel well-prepared and supported as they take on teaching, research, and leadership responsibilities. By fostering strong mentorship relationships and offering targeted development resources, these programs help faculty build confidence, improve job satisfaction, and enhance their teaching and research capabilities. This support not only increases retention by reducing burnout and feelings of isolation but also strengthens the overall quality of nursing education, ensuring that new faculty are equipped to contribute meaningfully to their students' success and the advancement of nursing practice. These fellowships assist Maryland nursing programs in recruiting and retaining new nursing faculty to produce the additional nursing graduates required by Maryland's hospitals and health systems.

Between FY 2021 and FY 2024, a total of $6.9 million in funding was awarded to support the recruitment and retention of 274 full-time nurse faculty in Maryland. Of this total, $1.9 million was allocated for new awards, while $5 million was provided to support faculty who remained employed. During this period, 249 nominations for new fellowships were reviewed, and 193 faculty members were awarded fellowships to assist in their transition to the nurse faculty role. An analysis of data from FY 2019 to FY 2021 shows that, on average, 88 percent of awardees remained employed in their faculty positions after one year, and 64 percent remained employed after five years.

The inclusion of recent data from FY 2025 shows promising trends for the NNFF award. A total of 24 out of 29 nursing schools (83 percent) participated in the NNFF awards program between FY 2021 and FY 2025, including a newly established pre-licensure baccalaureate nursing program located in a rural county in Maryland. Notably, the FY 2025 awards reveal a trend of recruiting faculty from outside regional states, with 14 percent of recipients coming from non-regional areas. There have also been improvements in diversity, with the proportion of awardees from racial/ethnic minorities rising from 37 percent in FY 2021 to 49 percent in FY 2025, and those aged over 60 or under 30 increasing from 6 percent in FY 2024 to 12 percent in FY 2025.

*Nurse Educator Doctoral Grants for Practice and Dissertation Research (NEDG)*

The Nurse Support Program II provides funding for the Nurse Educator Doctoral Grant for Practice and Dissertation Research (NEDG) to full-time nurse faculty at Maryland's nursing programs who are currently enrolled in or who have recently completed a doctoral degree. Maryland institutions with nursing degree programs may nominate existing faculty pursuing doctoral degrees within the final two years of a program of study.

The growing demand for nurses is hindered by a shortage of doctoral-prepared nursing faculty, limiting the ability to expand enrollment and meet healthcare needs. Increasing the number of doctoral-prepared faculty members is vital for advancing research, developing evidence-based practices, and training the next generation of nurses, researchers, and leaders. Doctoral-prepared faculty also play a critical role in shaping curricula, promoting health equity, and supporting professional development, all of which ensure high-quality nursing education and improved patient outcomes. The DNP (Doctor of Nursing Practice) focuses on clinical practice and leadership in healthcare, preparing nurse faculty to translate research into practice and improve patient outcomes; the EdD (Doctor of Education) emphasizes educational leadership and teaching, equipping nurse faculty to design curricula and lead nursing education programs; while the PhD (Doctor of Philosophy) is research-oriented, training nurse faculty to conduct original studies that advance nursing science and inform policy.

A total of 74 nominations were received between FY 2021 and FY 2024 from 20 schools of nursing in Maryland, with 24 percent coming from Historically Black Colleges and Universities (HBCUs). The institution with the highest number of nominations and awardees was an HBCU located in Baltimore City. A total of $2.4 million was awarded to 18 schools of nursing in Maryland to support the expedited completion of 20 DNP, 28 PhD, and 10 EdD degrees for 58 full-time nursing faculty. Of these awards, 52 percent (30 out of 58) went to faculty members who identified as racial or ethnic minorities. The scholarly work produced by NEDG recipients included 23 education-focused and 35 practice-focused projects, with the majority addressing issues affecting minority and underrepresented groups in nursing (Table 9). Other significant topics focused on community and population health, particularly promoting healthy behaviors to support chronic disease prevention.

*Table 9. Scholarly Work Produced by NEDG Awardees: FY 2021 - FY 2024*

| NEDG awardees FY 2021 - FY 2024<br>Doctoral dissertation topics | # scholarly<br>works produced |
|---|---|
| Underrepresented groups/ racial/ethnic minorities | 13 |
| Community/ population health/ chronic disease prevention | 12 |
| Vulnerable populations (maternal/child, adolescents, women, older adult) | 12 |
| Organizational behaviors/ staff well-being and performance | 9 |
| Student success | 9 |
| Simulation/ educational technology | 7 |
| Transition to nursing practice/ faculty role | 5 |
| Mental health | 3 |
| Genetics & genomics | 2 |
| Academic integrity | 2 |
| Graduate education | 2 |
| Evidence-based practice | 1 |

*Note.* Scholarly work may address multiple dissertation topics.

### Academic Nurse Educator Certification (ANEC) Award

The National League for Nursing's Certified Nurse Educator (CNE®) credential is a mark of excellence for nurse educators. CNE® certification distinguishes nursing education as a specialty area of practice and demonstrates competency as a nurse educator.

The advanced credentialing of nurse educators plays a crucial role in enhancing the quality of nursing education. By earning the CNE® credential, nurse educators demonstrate their expertise and commitment to best practices in teaching, ensuring that they are highly skilled in delivering effective, evidence-based instruction. This level of certification signifies a mastery of both the science of nursing and the art of education, which allows nurse educators to develop curricula that are aligned with the latest healthcare standards and advances. As a result, students receive a higher quality education that is rooted in current research and best practices, equipping them with the critical thinking and clinical skills needed to provide superior patient care. Ultimately, by fostering well-prepared, competent nursing professionals, advanced credentialing in nursing education directly contributes to improved patient outcomes and the overall quality of healthcare delivery.

The Academic Nurse Educator Certification (ANEC) award is for faculty who demonstrate excellence as an academic nurse educator through achieving and maintaining the CNE® credential. For academic nurse educators, this certification establishes nursing education as a specialty area of practice and creates a means for faculty to demonstrate their expertise in this role. It communicates to students, peers and the academic and health care communities that the highest standards of excellence are being met. By becoming credentialed as a certified nurse educator, you serve as a leader and a role model.

Between FY 2021 and FY 2024, a total of $730,000 was awarded to 146 full-time nurse faculty in Maryland who achieved or maintained the NLN CNE® credential. A total of 150 nominations were received from 25 schools of nursing in Maryland, which represents 89 percent participation from 28 eligible nominating institutions. Funding from the ANEC award program supported 107 initial certifications and 39 renewals. Program data indicates improvements in the achievement of the NLN CNE® credential from underrepresented groups in nursing. The percentage of awards given to faculty who identified as a racial/ethnic minority group almost doubled from 21 percent in FY 2021 to 41 percent in FY 2025.

Data from June 2024 reveals that 181 of the 277 nurse educators in Maryland holding the CNE® credential were ANEC award recipients (NLN). According to the NSP II Data (Daw, Ford, & Schenk), the number of faculty holding CNE® credentials increased by more than 50 percent since 2018, exceeding the goal to double the number of faculty in Maryland holding the CNE credential by 2025. This includes first-time credentialed and existing credentialed nurse educators completing the required continuing education and advancement to maintain the CNE® credential, renewed every 5 years. Recent data from October 2024 indicates that the number of CNE®-credentialed nurse educators in Maryland has risen to 299, positioning the state as sixth in the nation for the highest number of CNE®-credentialed nurse educators (NLN). When considering the proportion of nursing instructors with the CNE® credential in the state, Maryland is tied for the lead, surpassing all other states (NLN; U.S. Bureau of Labor Statistics).

*Nurse Faculty Annual Recognition (NFAR) Award*

Deans and Directors of all nursing programs may nominate one nurse faculty for each recognition area each year (five in total) who demonstrates excellence, innovation and leadership in their nursing programs for this annual award. The nominated nurse faculty members demonstrate excellence in teaching, engage in the life of the nursing program and college or university, and contribute to the profession as a nurse educator. There are five categories for recognition: 1. Excellence in Teaching, 2. Impact on Students, 3. Engagement in the Nursing Program and Employing Institution, 4. Innovation in Education & Technology, and 5. Contributions to Nursing Education.

This annual award program offers valuable recognition for nurse faculty and highlights the diverse and significant contributions that nurse educators make to the profession and to their academic institutions. The diversity in recognition areas ensures that faculty members who excel in various aspects of their role are

recognized for their dedication to student success, program development, and the advancement of nursing education. This recognition not only celebrates individual achievements but also fosters a culture of excellence and continuous improvement across nursing programs, inspiring faculty to continue innovating and engaging in meaningful ways with their students, institutions, and the broader nursing community.

From FY 2021 to FY 2024, a total of $850,000 was awarded to 85 full-time faculty to recognize their demonstrated commitment to excellence in teaching. A total of 87 nominations for the NFAR award were received. Faculty who received this recognition award had an average of 16.5 years of teaching experience as nurse educators. This data demonstrates that the recognition award program actively supports diversity, with an average of 29% of the faculty who received the award identifying with a racial or ethnic minority group. The greatest area of recognition was for engagement in the nursing program and employing institution (36 percent), followed by excellence in teaching (22 percent) and contributions to nursing education (15 percent). The NFAR award program was expanded in FY 2024 to allow faculty to be nominated in other categories throughout their careers as nurse educators. This expansion aims to support the retention of experienced nurse faculty, who play a crucial role in the success of nursing programs across the state.

## Diversity of the Maryland Nursing Workforce

The diversity of the Maryland nursing workforce has evolved significantly over time, reflecting broader societal changes and ongoing efforts to address disparities in healthcare. Maryland's nursing workforce includes a mix of racial, ethnic, gender, and age groups, and these factors influence healthcare delivery, patient outcomes, and nursing practice across the state.

The diversity of the nursing workforce has a direct impact on healthcare delivery. A more diverse nursing staff can improve patient care by:

- **Better cultural competence**: Nurses from diverse backgrounds can offer more culturally sensitive care, improving patient satisfaction and outcomes.
- **Increased access to care**: Nurses who share the same cultural or linguistic backgrounds as patients can help bridge communication gaps, leading to better understanding and trust.
- **Addressing health disparities**: A diverse nursing workforce is better equipped to identify and address health disparities in underserved and minority communities.

The nursing workforce is becoming younger and more diverse. The average age of nurses in the US in 2022 was 47.9 years compared to 48.7 years in 2018. In 2022, more than 65 percent of nurses were less than 55 years old and the largest age group was 35-44. The proportion of nurses less than age 55 in 2018 was 62 percent and nurses aged 55-64 represented the largest age group. Data regarding the race/ethnicity

of nurses shows that the proportion of RNs that identified as non-hispanic Black increased by 3 percent and the proportion of RNs that identified as non-Hispanic Asian increased by 4 percent. Additionally, male nurses represent 12 percent of the nursing workforce, compared to 10 percent in 2018. There were similar increases to the age and diversity of nurses in Maryland from 2018 to 2022. Maryland's nursing workforce is even younger and more diverse. The average age of nurses in Maryland in 2022 was 46.2 and 69 percent were less than 55 years old. The data from 2022 also shows that 33 percent of RNs in Maryland identify as non-Hispanic Black and 11 percent identify as non-Hispanic Asian. (HRSA, Nursing Workforce Dashboard).

The diversity of nursing students and faculty should align to ensure nursing education reflects the broader population. When faculty mirror students' racial, ethnic, and gender backgrounds, it fosters inclusion, motivation, and a richer learning environment. Diverse faculty offer varied perspectives, helping students connect with the diverse patient populations they will serve. Additionally, diverse faculty serve as role models, encouraging underrepresented students to pursue and advance in nursing, ultimately contributing to a workforce that can better address health disparities. Data from 21 reporting Maryland institutions (75% response rate) shows promising progress toward a more diverse nursing workforce (Table 10). Notably, the diversity of nurse faculty in the capital region aligns closely with that of the student population. However, further growth is needed in other regions and among male nursing students. Collecting diversity metrics from all nursing schools in Maryland would help NSP II better support efforts to build a more diverse nursing workforce.

*Table 10. A Comparison of Nursing Faculty & Nursing Student Diversity in Maryland: 2023*

| Region | Average % Students: Non-White | Average % Faculty: Non-white | Average % Students: Male | Average % Faculty: Male |
|---|---|---|---|---|
| Capital MD | 90% | 90% | 12% | 7% |
| Central MD | 53% | 32% | 19% | 9% |
| Eastern Shore MD | 26% | 9% | 15% | 1% |
| Western MD | 27% | 10% | 12% | 5% |

*Note.* Data is from 21 reporting institutions in Maryland. Data was not available for Southern MD.

# State of Nursing and Future Issues

This section of the report will provide an overview of current trends in the nursing workforce, highlighting key data on the challenges and opportunities within nursing education and practice. It examines the evolving landscape of nursing, including workforce shortages, educational capacity, and the growing

demand for skilled nursing professionals. This section also addresses the critical factors shaping the future of nursing, including emerging health care needs and advancements in clinical practice.

## Nursing Workforce Trends: Maryland vs Nation

The registered nurse (RN) is the single largest group of health professionals, with more than three million employed nationally and 49,770 RNs employed in Maryland (US Bureau of Labor Statistics, 2023). The demand for RNs is expected to be significant in the coming years, with a projected 193,100 open positions annually until 2032 due to nurses retiring or leaving the profession (US Bureau of Labor Statistics, 2023). If current workforce trends persist, the nation can anticipate a shortage of 337,970 full-time equivalent RNs by the year 2036 which represents a 9 percent shortage (HRSA).

The projected shortage of RNs varies geographically and by state, with non-metropolitan areas expected to experience the greatest shortages (HRSA). To better understand Maryland's supply of RNs, researchers use a Location Quotient (LQ) to quantify how concentrated the nursing industry is in this region as compared to the nation. A LQ greater than one (1) indicates the occupation has a higher share of employment than average. Maryland's share of nurses in 2023 (LQ= 0.89) was less than the national average and most neighboring states, which represents a 2 percent decline from 2022 (Table 11). The annual mean wage for registered nurses in Maryland in 2023 was higher than the average for neighboring states (Table 10).

*Table 11. RN Employment and Wages for Maryland and Neighboring States*

|  | Location Quotient (LQ) | RN Employment | Annual Mean Wage |
|---|---|---|---|
| **Maryland** | 0.89 | 49,770 | $92,090 |
| **West Virginia** | 1.45 | 20,860 | $75,990 |
| **Delaware** | 1.20 | 11,810 | $94,670 |
| **Pennsylvania** | 1.16 | 144,100 | $87,530 |
| **New Jersey** | 0.94 | 82,950 | $101,960 |
| **Virginia** | 0.85 | 70,650 | $88,350 |

**Source:** U.S. Bureau of Labor Statistics, May 2023.

The Commission to Study the Health Care Workforce Crisis ("Workforce Commission"), established by the Maryland General Assembly during the 2022 session, recently released a final report detailing its findings. Of note, Maryland is not recovering to pre-pandemic workforce levels at the same rate and lags the region. That Maryland is not recovering at a similar pace to the region aligns with current vacancy and turnover rates, wherein the State is improving but at a slower pace than the nation (Maryland Department of Health, 2023).
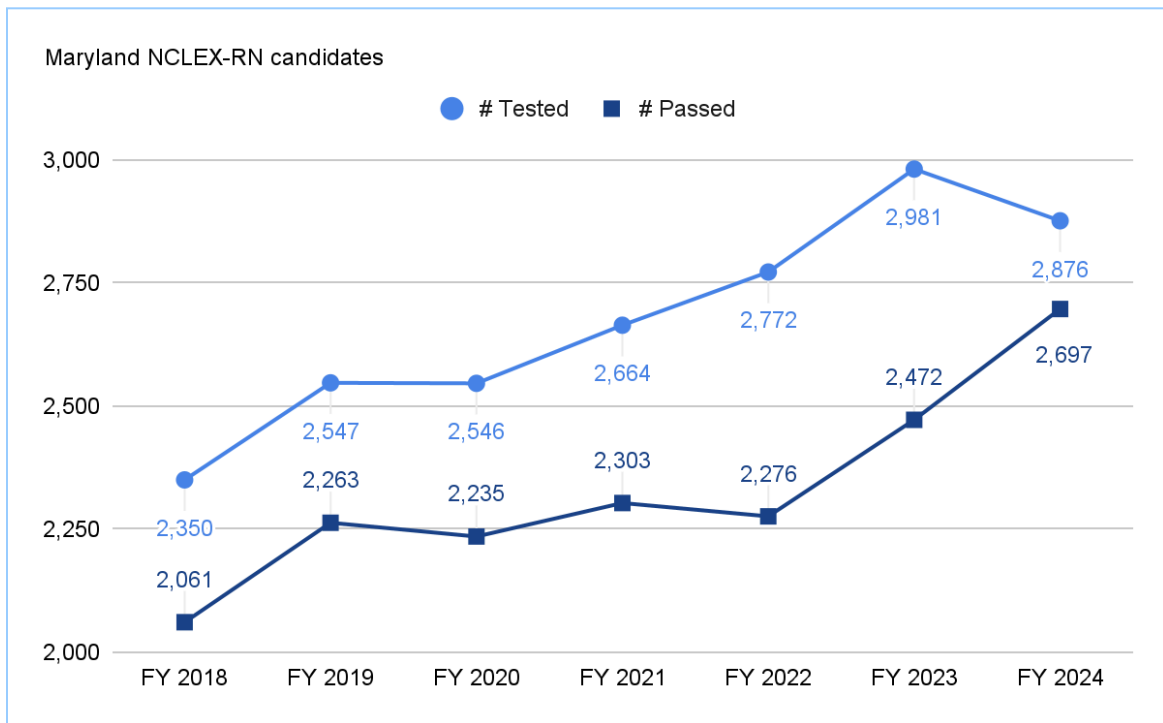
# Nursing Education Trends

This section highlights the challenges and opportunities within nursing education, including the impact of faculty shortages on program capacity and the success of new graduates in achieving licensure. Key data is explored regarding entry-to-practice in Maryland, focusing on NCLEX-RN pass rates and trends in nurse faculty rates. It provides a snapshot of the current state of nursing education and the factors influencing its future.

## Entry-to-Practice in Maryland

According to researchers, caution should be used when the basis of policy modeling and decision making is employment trends, as nursing shortages are highly sensitive to multiple variables and complex to pinpoint beyond regional trends. A better reflection of the state of Maryland's workforce may be trends in RN entry-to-practice, as it is the most important factor affecting projections of the nursing workforce supply (Auerbach, et al., 2017, pg. 294). In Maryland, the best indicator of entry-to practice is first-time passing rates for the National Council Licensure Examination – Registered Nurse (NCLEX-RN), available through the Maryland Board of Nursing (MBON). The number of graduates who pass the licensing exam can be a good indication of how many additional nurses are entering the workforce, since it is the last step to become a RN.

The number of nursing graduates taking the NCLEX-RN licensure exam has steadily increased in recent years (Figure 4). The number of nursing graduates tested in FY 2024 (2,876) was 22 percent higher than in FY 2018 (2,350). This provides evidence that the capacity to educate more nurses has increased. The number of nursing graduates who passed and became licensed RNs in FY 2024 (2,697) was 30 percent higher than FY 2018 (2,061). This equates to the addition of 636 RNs licensed to work in the state. Maryland is well positioned to continue this upward trend due, in part, to NSP II funding of the expansion of existing nursing programs and the development of new programs that provide a pathway to produce additional nursing graduates eligible to take the NCLEX-RN licensure exam.

*Figure 4. Maryland's First Time NCLEX-RN Rates, FY 2018 – 2024*

Maryland NCLEX-RN candidates

● # Tested    ■ # Passed

| FY | # Tested | # Passed |
|----|----------|----------|
| FY 2018 | 2,350 | 2,061 |
| FY 2019 | 2,547 | 2,263 |
| FY 2020 | 2,546 | 2,235 |
| FY 2021 | 2,664 | 2,303 |
| FY 2022 | 2,772 | 2,276 |
| FY 2023 | 2,981 | 2,472 |
| FY 2024 | 2,876 | 2,697 |

*Source:* Maryland Board of Nursing. National Council State Boards of Nursing, and Pearson Vue. All Maryland RN 1st time candidates who graduated from a Maryland nursing program and tested in any US jurisdiction.

Since FY 2018, NCLEX-RN passing rates in Maryland have been comparable to the overall passing rates in the U.S. and exceeded the nation in FY 2021, FY 2022 and FY 2024 (Table 12). Starting on April 1, 2023, entry-to-practice nursing graduates began testing with the Next Generation NCLEX (NGN) model for registered nursing licensure. This format focuses on clinical judgment and includes a variety of question types with related case studies that go beyond the usual multiple-choice options. Through the Maryland Nurse Workforce Center $1.9 million grant, NSP II funded the creation of a statewide NGN test bank in addition to over eleven free workshops utilizing in-state faculty with expertise to meet the demand for additional resources to prepare faculty and students for this change. A variety of on-demand resources are also made available to Maryland schools of nursing at no cost on the Maryland Nursing Workforce Center website (MNWC). Maryland's NCLEX-RN pass rates from FY 2023 include three months of data from graduates who tested with the NGN model for the NCLEX-RN exam (April 1, 2023 - June 30, 2023). The FY 2024 NCLEX-RN pass rate for Maryland, which reflects the performance of nursing graduates assessed solely with the NGN model, demonstrates the state's exceptional results, surpassing the national average with a 93.78 percent pass rate for first-time test takers.

*Table 12. Maryland's First Time NCLEX-RN Rates, FY 2018 – 2024*

| Fiscal Year | Maryland BSN Programs | | Maryland ADN Programs | | Maryland MS Entry Programs | | Total For All Maryland Programs | | Passing Rates | |
|---|---|---|---|---|---|---|---|---|---|---|
| | No. Tested | No. Passed | No. Tested | No. Passed | No. Tested | No. Passed | No. Tested | No. Passed | MD | US |
| 2018 | 773 | 676 | 1,316 | 1,145 | 261 | 240 | 2,350 | 2,061 | 87.70% | 87.81% |
| 2019 | 867 | 743 | 1,375 | 1,245 | 305 | 275 | 2,547 | 2,263 | 88.85% | 88.36% |
| 2020 | 775 | 650 | 1,467 | 1,299 | 304 | 286 | 2,546 | 2,235 | 87.78% | 87.93% |
| 2021 | 926 | 755 | 1,376 | 1,218 | 362 | 330 | 2,664 | 2,303 | 86.45% | 84.48% |
| 2022 | 965 | 747 | 1,433 | 1,205 | 374 | 324 | 2,772 | 2,276 | 82.11% | 80.83% |
| 2023 | 1,027 | 796 | 1,542 | 1,324 | 412 | 352 | 2,981 | 2,472 | 82.93% | 83.21% |
| 2024 | 1,007 | 912 | 1,472 | 1,407 | 397 | 378 | 2,876 | 2,697 | 93.78% | 92.18% |

*Source:* Maryland Board of Nursing. National Council State Boards of Nursing, and Pearson Vue. All Maryland RN 1st time candidates who graduated from a Maryland nursing program and tested in any US jurisdiction.

## Nurse Faculty Vacancy Rates

An adequate supply of new graduate nurses is dependent upon enrollment and graduation rates at schools of nursing. The shortage of qualified nursing faculty has long been cited by nursing programs as a primary reason that prevents the admission of additional nursing students. Due to a multitude of factors, including anticipated faculty retirements, faculty vacancies will remain an ongoing issue and should continue to be a priority for Nurse Support Program II (NSP II).

Over recent years, the outlook for Maryland faculty has been comparable to the nation and remained stable. According to data collected for the NSP II program, the average full-time nurse faculty vacancy rate was 9 percent in 2021, which was slightly higher than the national average of 8 percent (AACN; NSP II Data Tables). The Maryland full-time nurse faculty vacancy rate remained steady at 9 percent in 2023 (NSP II Data Tables). Nationally, the average full-time faculty vacancy rate decreased slightly to 7.8 percent in 2023 (AACN). The most common contributing factors reported by schools of nursing in Maryland with faculty vacancies were a lack of qualified candidates (lack of experience in the right specialty area, competition, or unavailable in geographic area), followed by retirements/resignations and non-competitive faculty salaries. This matches national trends regarding the most common issues schools reported related to faculty recruitment (AACN). This data supports the need for Maryland to continue its efforts to grow the nurse faculty pipeline and support the recruitment and retention of qualified educators.

The number of nurses with a doctoral degree has a direct impact on faculty vacancy rates. National data indicated in AY 2022-2023 that 85 percent of U.S. schools of nursing had faculty vacancies that required or

preferred a doctoral degree (AACN). Insufficient funds to hire new faculty were reported as the top barrier by 63.3 percent of schools of nursing in AY 2022-2023 (AACN). In Maryland nursing programs, the majority (61.5 percent) of faculty were doctoral prepared, compared to national estimates that approximately 50 percent of faculty are doctorally-prepared (AACN). National data shows that only 17.3 percent of registered nurses hold a graduate degree and 2.9 percent of nurses hold a terminal doctoral degree (HRSA).

Aging of the nursing workforce continues to be a state and national concern. The number of FT faculty aged 60+ increased in Maryland nursing programs. The AONL Guiding Principles for the Aging Workforce outlines how employers can invest in the productivity of the older RNs including:

- Adapting work environments: providing environmental modifications for injury prevention; reducing the physical demands with bedside computers, automated beds, and non-professional staff assistance;
- Re-designing jobs: developing new and emerging roles; promoting a culture that supports older nurses and post-retirement options to avoid leaving gaps in advanced skill levels and years of expertise at the bedside; and
- Other incentives: generational motivators in health benefits, and flexible schedules.

Older RNs are needed to guide new nurses and maintain patient safety and quality of care.

## Nursing Practice Trends

Nursing practice in Maryland is evolving to meet the needs of a diverse and growing population, responding to advances in healthcare technology, and addressing changes in healthcare policy. Maryland has made significant advancements in nursing practice, particularly with regard to Advanced Practice Registered Nurses (APRNs). In 2018, the state passed legislation allowing Nurse Practitioners (NPs) to practice independently, including prescribing medications and managing patients without physician supervision. This expansion of APRN roles addresses the growing demand for primary care and helps mitigate workforce shortages.

Telehealth has also seen a rapid rise in Maryland, especially during the COVID-19 pandemic, with nurses increasingly providing virtual consultations, remote care, and chronic disease management.

In addition, Maryland nurses are assuming leadership roles in healthcare organizations, driving innovation in patient care. There is also a growing focus on cultural competence to address the diverse population, including training nurses to work sensitively with different cultural groups. Other key trends include integrating mental health services, promoting community-based nursing, supporting continuous education, and advocating for health policies that improve healthcare access and reduce disparities.

## New Nursing Graduate Retention

The recruitment and retention of nurses is a critical issue at national and state levels. From 2020 to 2022, Maryland hospitals saw a 5 percent and 10 percent increase in RN turnover and vacancy rates, respectively (NSP I, 2023). According to the "2024 NSI National Health Care Retention & RN Staffing Report," the national RN turnover rate in 2023 was 18.4 percent, which represents a 4.1 percent decrease from 2022 (NSI, 2024). The report shows a national RN vacancy rate of 9.9 percent in 2023, which was 5.8 percent lower than 2022. While this demonstrates some improvement nationally, it is important to recognize the impact that turnover and vacancy rates have on hospital systems. According to the NSI report, the average cost to replace one RN is $56,300 and reflects labor expenses including overtime, increases to salary, critical staffing pay and travel/agency fees. On average, hospitals lost $4.82 million in 2023 due to turnover. Compounding the problem of nurse turnover/vacancies is the time that it takes to recruit a replacement. According to NSI's data, it can take up to three months for a hospital to recruit a qualified nurse, with medical-surgical positions being the most difficult to fill. In the northeast region, which includes Maryland, it takes an average of 106 days to recruit a new nurse, which is 20 days longer than the national average. This data demonstrates how crucial it is to focus on retention efforts. The retention of nurses can result in significant cost savings to hospitals. Each percentage improvement in turnover rates could save a hospital $262,500 annually (NSI, 2024).

As a nationally recognized leader in nurse residency programs, Maryland became the first state in the US to have all acute care hospitals fund and offer nurse residency programs (NRPs) for new nurse graduates in 2018. The purpose of the residency program is to build upon nursing school's foundational knowledge to smoothly transition new nurses into professionals and retain them in the workforce. The Maryland Organization for Nurse Leaders (MONL) tracks data for the Maryland Nurse Residency Collaborative (MNRC) regarding outcomes of nurse residency programs in Maryland. Between 2013 and 2016, retention rates for Maryland hospitals offering an NRP ranged between 91 and 93 percent. Prior to the coronavirus pandemic, Maryland hospitals overall retained more than 88 percent of their new to practice nurses annually (Table 13) compared to an average of 76 percent nationally (NSI, 2021). Moreover, hospital leaders and nurse residents reported that they are more confident and competent after completing their 12-month nurse residency program, resulting in better-prepared nurses and significant hospital cost savings.

Not unexpectedly, the retention rate declined in 2020 due to the coronavirus pandemic. Additionally, staff shortages and safety requirements forced more than half the hospitals to stop their residency programs in April 2020. Maryland hospitals reinvigorated their programs in 2022 and the retention rate of Maryland new nurse graduates increased to 89 percent. The retention rate for Maryland nurse residents in 2023 was 91 percent, significantly higher than the national average which shows that 34 percent of newly hired nurses

left their positions within one year, representing a 66 percent national retention rate (NSI, 2024). However, persistent staff shortages continue to impact these programs for nurse residents. National trends show that the nursing profession is becoming younger with fewer average years of experience, which supports the continued need for mentoring through nurse residency programs. With an increasingly novice workforce, hospitals cannot rely solely on nurse preceptors on the unit to mentor new graduates to the nursing profession.

*Table 13. MNRC Data on Retention of New Nurse Graduates*

| | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023[1] |
|---|---|---|---|---|---|---|---|
| **Number of Residents Hired** | 1,573 | 1,513 | 1,846 | 1,995 | 2,417 | 2,603 | 3,422 |
| **Turnover Rate[2]** | 8% | 12% | 11% | 17% | 9% | 11% | 9% |
| **Retention Rate** | 92% | 88% | 89% | 83% | 91% | 89% | 91% |

*Source:* Vizient/ AACN NRP Data for MONL, Inc. /MNRC, April 16, 2024.
[1]2023 turnover and retention data is preliminary; data is finalized after 12 months of employment.
[2]Turnover rate includes voluntary and involuntary termination of employment.

## New Nursing Graduate Employment

Examining the employment of new nursing graduates is critical when assessing the state of the nursing workforce in Maryland, as it directly reflects the ability of the healthcare system to absorb and retain newly licensed professionals. The transition from education to practice is a pivotal phase in a nurse's career, and the availability of jobs for new graduates is influenced by factors such as workforce demand, job market saturation, and the quality of workplace environments. Analyzing employment trends among new graduates provides valuable insights into potential gaps in staffing, identifies areas where the healthcare system may be struggling to meet demand, and helps to forecast future workforce needs. Understanding these patterns is essential for shaping workforce development strategies and ensuring that nursing programs align with the evolving needs of the healthcare sector.

A key goal of the Nursing Support Program II (NSP II) is to ensure that nurses trained in Maryland remain in the state to practice upon graduation. By encouraging in-state employment, the program aims to address the growing demand for qualified nurses within Maryland's healthcare system, particularly in underserved regions and specialty areas. Collecting and analyzing data on the in-state employment of new nursing graduates is essential for evaluating the success of this initiative. This data will help measure whether Maryland's nursing workforce is effectively retaining its newly trained professionals and highlight areas where additional support or policy changes may be needed to increase in-state employment rates, ultimately contributing to a stronger, more sustainable nursing workforce in the state.

In 2023, a total of 2,810 nurse residents were hired into Maryland hospitals and enrolled in Maryland Nurse Residency Programs (NRPs). The majority of these residents, 73 percent, came from Maryland nursing

schools (Figure 5). Among the residents who graduated from Maryland nursing schools, the majority came from schools in the central region (72%), followed by the capital region (13%), the eastern shore (8%), southern Maryland (4%), and western Maryland (3%). Additionally, 14% of the residents came from bordering states, 10% from other states, and 1% from non-US nursing schools, which accounted for 21 individuals. A small portion of the data, 2 percent, were invalid entries. Pennsylvania and Virginia were the largest contributors outside of Maryland. In terms of educational background, 43 percent of the residents held an Associate Degree in Nursing (ADN), 49 percent held a Bachelor's degree, 7 percent held a Master's degree, and 1 percent had unknown or diploma-level education. Demographically, 44.28 percent of the residents identified as a racial or ethnic minority, and 10.57 percent were male. The median age of the residents was 26 years.

*Figure 5. Educational Preparation of Maryland Nurse Residents Hired in 2023*
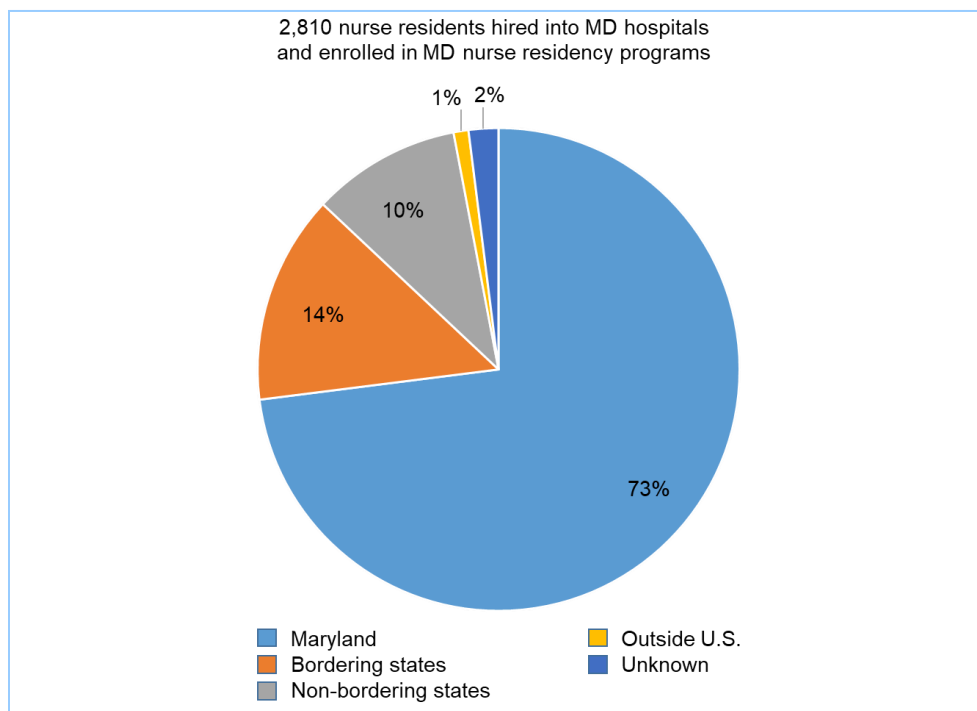


*Source:* Vizient/ AACN NRP Data for MONL, Inc. /MNRC, October 11, 2024.

## Nurse Burnout & Impact of COVID-19 Pandemic

Recent surveys have demonstrated, both nationally and in Maryland, that nurse well-being and their intent to remain in the profession were being negatively affected by pandemic-related stress, staffing levels, working conditions, increased violence in the workplace, and day-to-day uncertainties with changing patient acuity. In a three-part longitudinal study, the American Organization for Nursing Leadership (AONL) documented continually worsening job satisfaction, burnout, and intent to leave the profession by nursing

leaders. A 2021 Washington Post-Kaiser Family Foundation survey found that 30 percent of healthcare workers were considering leaving their profession altogether. Exacerbating the losses is the imminent retirement of all baby boomers that will reach the traditional retirement age of 65 by 2030, leaving a gap in accumulated skills, knowledge, and experience. Unfortunately, this loss in the RN workforce coincides with the increased healthcare needs of our aging population who have more acute and chronic conditions.

The National Council of State Boards of Nursing recently examined the impact of the COVID-19 pandemic on the nursing workforce in the U.S. and found that 100,000 nurses left during the pandemic and one-fifth intend to leave by 2027 due to stress, burnout, and retirement (NCSBN, 2023). In 2021, the Maryland Nursing Workforce Center surveyed nearly 2,000 nursing staff about the impact of the COVID-19 pandemic and the results are alarming. Many nurse respondents reported that they were physically exhausted:

- 48 percent had experienced sleep disturbances,
- 40 percent experienced moderate to severe stress,
- 48 percent felt anxious,
- 43 percent were unable to control worrying, felt hopeless, and had little pleasure in usual things, and
- 49 percent had symptoms of burnout.

Additionally, about 62 percent of nurses felt their physical health and safety were compromised without their consent, and more than 60 percent indicated an intent to leave their current nursing job. When asked what would make them more willing to remain in the Maryland nursing workforce, 83 percent said that financial incentives with salary increases, annual bonuses, hazard pay, and/or increased retirement contributions, while 74 percent indicated improved staffing and nurse to patient ratios, the ability to self-schedule and flexibility in shift work would make a difference. Other motivators were acknowledgements, wellness resources, and personal protection during large-scale emergencies.

A recent study conducted by Auerbach et al. (2024) showed that nursing workforce projections have rebounded to pre-pandemic levels despite a decrease of more than 100,000 RNs during the COVID-19 pandemic. Additionally, the study found a shift in nurse employment to non-hospital settings, which represented almost all of the growth in workforce from 2018 to 2023 (Auerbach et al., 2024). For this reason, hospitals may still be experiencing nurse shortages despite growths overall. Nurse burnout and intent to leave the profession also persists and adds to the challenges of a looming nursing shortage.

The state faces significant nursing workforce shortages, exacerbated by burnout and an aging workforce. Maryland is addressing this by investing in nursing education and improving workplace environments to retain nurses.

# Stakeholder Engagement

Nursing workforce stakeholder engagement refers to the collaborative efforts of various groups (such as nurses, healthcare leaders, policymakers, educators, and patients) to address issues affecting the nursing workforce. The goal is to identify challenges, propose solutions, and create policies that support the recruitment, retention, and development of nurses. This process ensures that the voices and perspectives of all relevant parties are considered in decision-making. Effective stakeholder engagement leads to improved policies that enhance the nursing workforce, ensure better care delivery, and help address nursing shortages and job satisfaction.

In April 2024, MHEC and HSCRC staff initiated a comprehensive program review to guide the program renewal process. Throughout this process, staff regularly engaged with key stakeholders to assist with completing a comprehensive program renewal and end-cycle progress report. Examples of stakeholder engagement activities included:

1. **NSP I/II Advisory Group:** This pre-established group meets tri-annually to discuss current issues affecting the nursing workforce. The meeting dates, times, and agendas are public and posted to the NSP website. Membership includes select leadership from the following organizations:
   - Maryland Hospital Association,
   - Maryland Action Coalition,
   - Maryland Organization of Nurse Leaders,
   - Maryland Nurse Residency Collaborative,
   - Maryland Nurses Association,
   - Maryland Council of Deans and Directors of Nursing Programs,
   - Maryland Nursing Workforce Center,
   - Maryland Board of Nursing, and
   - HSCRC NSP I Advisory Board
2. **NSP II Program Renewal Committee:** This new committee was established in 2024 and primarily tasked with coordinating a plan and analyzing program data for the combined program renewal and end-cycle progress report. A total of five strategic planning sessions were conducted leading up to the program renewal. Membership included leadership from schools of nursing in Maryland, and representation from the Maryland Hospital Association, Maryland Nurse Residency Collaborative, Maryland Nursing Workforce Center, and HSCRC.
3. **MD Deans/Directors:** The Maryland Deans and Directors group meet every other month to discuss issues affecting schools of nursing in Maryland and membership includes leadership from all schools of nursing in the state. NSP II is invited to attend all meetings and has the ability to engage in group discussions.

4. **MD Nursing Workforce Center:** The Maryland Nursing Workforce Center Advisory Committee meets quarterly to discuss the goals/initiatives of this NSP II-funded statewide initiative. NSP II is a member of the Advisory committee and regularly collaborates with this group to conduct data analysis relevant to program renewal.

Outside of the activities mentioned above, NSP II program staff regularly attended and/or presented at relevant national and statewide meetings and conferences to gather input about key problems affecting the nursing workforce. This included attendance at the following events during the past two years:

- National League for Nursing's Annual Nursing Education Summit
- National League for Nursing's Nursing Education Research Conference
- Organization for Associate Degree Nursing Annual Conference
- Maryland Nurses Association Annual Conference
- Maryland Action Coalition Annual Summit
- National Council for State Boards of Nursing NCLEX Conference
- Maryland Nurse Residency Collaborative Inaugural Conference
- Maryland Nursing Workforce Center Symposium
- University of Maryland School of Nursing Institute for Educators Spring Conference

To further increase participation from stakeholders in Maryland and solicit feedback to guide the NSP II program renewal and recommendations, HSCRC and MHEC staff conducted an online survey that was sent electronically to leaders in nursing education, nursing practice, and healthcare organizations in the state, including all Maryland Deans & Directors, NSP II Program Renewal Committee members, NSP I/II Advisory Group members, the Project Directors of current statewide NSP II grant projects, Nurse Support Program I Coordinators, and all Chief Nursing Officers at Maryland hospitals. The survey was conducted via Google Forms and accepted responses over a three-week period. A total of 21 leaders responded to the survey, including 15 education partners and 6 practice partners. The majority of respondents (90 percent) answered "very well" or "well" when asked how effectively NSP II has met its overarching goal of increasing the number of nurses in Maryland by strengthening nursing faculty and educational capacity, ultimately improving the quality of care and reducing hospital costs. Additionally, 95 percent of respondents felt that NSP II aligned with their organization's or community's goals. When asked what observable impacts or benefits the program has provided to the nursing workforce and their organization or community, common positive themes from respondents emerged, including (in order of prevalence):

1. Faculty development and retention;
2. Leadership and professional development;
3. Expansion of nursing programs and enrollment;
4. Collaboration and academic-practice partnerships;

5.  Development of advanced nursing roles;

6.  Support for critical workforce needs; and

7.  Support for diversity and underrepresented groups in nursing.

When asked what the most pressing needs and challenges of their organization were, common responses included:

● The recruitment and retention of nurse faculty;

● The need for more diverse and innovative clinical training opportunities;

● The ongoing need for resources, including funding, simulation equipment, and classroom/lab space, to expand nursing programs; and

● The desire to develop academic-practice partnerships to prepare nursing graduates to practice in community and population health settings.

Survey respondents were asked to provide feedback on the recommendations for future program funding. A summary of the feedback received from survey respondents regarding potential areas for expansion of the program is provided in Figure 7.

*Figure 7. NSP II Stakeholder Engagement Survey: Summary of Feedback re: Program Renewal*
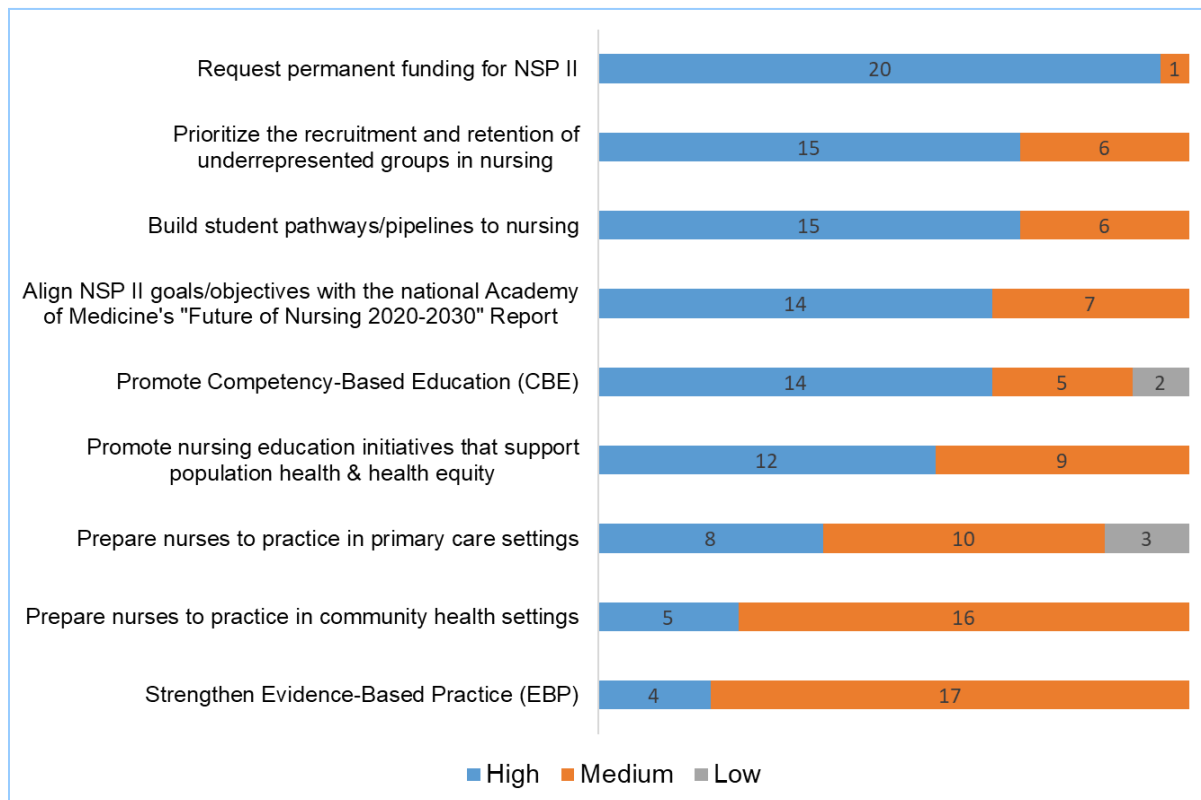


*Note.* Total respondents = 21.

## Public Comment Letters

Comments from the public were solicited and a summary of this feedback is provided with this final report with recommendations. The call for public comments was initiated with the draft report with recommendations that was presented to the Commission on December 11, 2024. A total of eleven letters were received by January 21, 2025, which included feedback from the following organizations/individuals:

1. Bowie State University;
2. Johns Hopkins School of Nursing;
3. Morgan State University;
4. University of Maryland School of Nursing;
5. University System of Maryland;
6. Maryland Hospital Association;
7. National League for Nursing;
8. Maryland Action Coalition;
9. Dr. Mary Etta Mills, Professor Emerita, University of Maryland School of Nursing;
10. Dr. Rita F. D'Aoust, Associate Professor, Johns Hopkins School of Nursing; and
11. Dr. Diane M. Billings, Chancellor's Professor Emeritus, Indiana University School of Nursing.

All of the letters conveyed strong support for continued funding of NSP II, highlighting its crucial role in addressing Maryland's nursing shortage and improving healthcare delivery. Some of the common themes from the public comments received included:

- **Faculty Development:** NSP II funding supports essential faculty development programs (such as the CNE® course), enhancing teaching quality and preparing nursing educators to address evolving challenges.
- **Innovative Projects and Collaborations:** Projects like the Maryland NextGen Test Bank and community-based initiatives have been instrumental in improving nursing education and expanding access to care.
- **Workforce Diversity and Health Equity:** There is a consistent emphasis on increasing diversity within the nursing workforce to better serve Maryland's diverse populations, with a strong focus on addressing health disparities and promoting equity.
- **Community and Population Health:** Many letters stress the need to prepare nurses for community health and primary care roles, helping alleviate pressures on hospitals and improving overall public health outcomes.
- **Outcomes and Results:** NSP II has led to positive outcomes, including improved NCLEX pass rates, increased nursing school enrollments, and stronger faculty expertise, demonstrating its effectiveness.

- **Long-term Sustainability:** Many letters express support for making NSP II a permanent program, with ongoing funding and annual reporting to ensure continued success and efficient use of resources.

These themes collectively underscore the importance of NSP II in strengthening nursing education, improving health equity, and addressing Maryland's healthcare workforce needs.

The Maryland Hospital Association's (MHA) public comment letter emphasized the need to retain NSP II's focus on preparing nurses for bedside roles in acute care, as hospitals report a continued high demand for nurses, particularly in medical-surgical units. Based on this feedback from MHA, which represents Maryland's acute care hospitals, the staff recommendations were revised to demonstrate NSP II's continued commitment to supporting nursing education initiatives that address workforce needs in acute care settings.

# Staff Recommendations for Program Renewal

The current cycle for NSP II program funding concludes at the end of FY 2025. Based on the available data presented in this report, there is a demonstrated need to continue funding for the NSP II program. HSCRC and MHEC staff present the following targeted strategies to strengthen the support for hospitals and schools of nursing in Maryland with the NSP II program renewal, including:

- Request to continue NSP II as an ongoing program with permanent funding with the requirement of annual reports on funded activities and accomplishments, replacing the five-year program renewal cycle.
  - In 2022, the Commissioners approved NSP I as an ongoing program with an annual reporting requirement, replacing the previous five-year program renewal cycle. This recommendation aims to align both programs under a similar funding and reporting structure, while also supporting goals and activities that foster clinical training and employment pipelines between NSP I and II. Aligning the two programs will improve grant planning by preventing duplication of efforts, ensuring more efficient use of resources, and maximizing outcomes across the state.
  - Approving NSP II as an ongoing program with annual reporting would support competitive institutional grant planning. Permanent funding ensures grant projects are fully planned and executed with the right scope and timelines, eliminates funding gaps, and allows for efficient resource allocation. It also encourages innovation, supports more expansive projects, retains talent, and attracts diverse proposals. Permanent funding for NSP II promotes high-quality, evidence-based programs, enhances impact and sustainability, and fosters long-term partnerships.
- Update the following NSP II Initiatives:

- ○ Increase educational initiatives that aim to prepare nurses to address health equity and practice in community/ population health settings in support of ongoing care delivery transformation and the goals of the Maryland Model while still prioritizing support to address nurse vacancies in acute care areas; and
- ○ Revise existing initiatives related to the goals in the National Academy of Medicine's *Future of Nursing 2020-2030* report based on state/national progress, adjusting the weight of proposal scoring criteria to prioritize areas where greater improvements are needed. This will ensure that resources and efforts are focused on the most critical areas for advancing the *Future of Nursing* objectives.
- Identify intentional opportunities to prioritize funding to underrepresented groups in nursing:
  - ○ Revise the scoring criteria for grant proposals to promote projects that are focused on improving student and faculty diversity;
  - ○ Develop a category of resource grants to support underrepresented nursing student success;
  - ○ Expand and create statewide resources to promote ongoing mentorship of underrepresented faculty; and
  - ○ Create a new category of the Nurse Faculty Annual Recognition (NFAR) award that recognizes faculty who demonstrate excellence in mentoring underrepresented students, fostering a diverse and inclusive educational environment, or conducting research on diversity and healthcare equity.
- Collaborate with HSCRC and stakeholders to align NSP I and NSP II goals:
  - ○ Build student pathways/pipelines to nursing with consideration for filling nursing vacancies in understaffed specialty units and care settings, to include acute care, primary care and community health;
  - ○ Strengthen the evidence-based practice (EBP) of new graduate nurses; and
  - ○ Promote competency-based education (CBE).
- Enhancements to the infrastructure for the collection and analysis of program data to promote greater accountability in the reporting of statewide data, including:
  - ○ Electronic submission of data from potential grant recipients as a requirement for funding consideration with the goal to receive data from all schools of nursing to allow a more robust statewide analysis of key metrics (faculty/student demographics, graduation rates, employment, faculty vacancy, advanced credentials of faculty, academic progression of students, etc.);
  - ○ Collaborate with NSP I and the Maryland Nurse Residency Collaborative (MNRC) to collect data regarding new graduate employment in Maryland; and

○ Improve the collection and analysis of data related to underrepresented groups in nursing to demonstrate the impact NSP II initiatives have on promoting diversity in nursing education and practice.

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January 21, 2025

Erin Schurmann, MPA, PMP
Associate Director, Strategic Initiatives
Medical Economics and Data Analytics
Health Services Cost Review Commission
4160 Patterson Ave.
Baltimore, MD 21215

Dear Ms. Schurmann,

As the Chair of the Department of Nursing at Bowie State University, the oldest Historically Black College/University (HBCU) in the state of Maryland, I support the Nursing Support Program II (NSP II). In January 2020, I moved from a state that did not have the resources that Maryland has for Nursing education, so was amazed over the many financial benefits the Nursing Support Program II offered. I immediately began informing my faculty of these opportunities.

As a result of the New Nurse Faculty Support (NNFF) program, seven faculty were hired and retained; the Certified Nurse Educator workshop resulted in going from zero Certified Nurse Educators (CNE) to 12; eight CNE's received the Academic Nurse Educator Certification (ANEC) award; four faculty became recipients of the Nursing Faculty Annual Recognition (NFAR) award; eight were awarded funds and three faculty were able to benefit from the Nurse Education Doctoral Grants (NEDG). These types of incentives not only assisted in the retention of faculty (88%), but they also contributed to increasing the NCLEX-RN pass rate. Within the past 5 years the scores increased from 56% to 85.71%. Therefore, it is without hesitation that I highly recommend the continuation of the NSP II program.

Sincerely,

*Jacqueline J. Hill*
Jacqueline J. Hill, PhD, RN, CNE
Chair & Professor
Department of Nursing
Bowie State University

January 15, 2025

To:     The Maryland Health Services Cost Review Commission (HSCRC)

From:  Sarah Szanton, Dean, Johns Hopkins School of Nursing;
        Natalia Barolin, Sr. Health Policy Adviser, Johns Hopkins School of Nursing

Re:     New NSPII conceptual framework & staff recommendations

Dear Colleagues,

We are writing to commend the HSCRC and support the staff recommendations for updates to the NSPII program. The changes that prioritize education that advances practice in community health settings and population health will strengthen Maryland's nurse workforce to meet the goals in the AHEAD model and improve the future of Maryland's health while also working more efficiently in the face of budget challenges.

Specifically, we would like to support the following recommendations:
- Educating and retaining nurses in primary care and community health
- Promoting competency-based learning

At the Johns Hopkins School of Nursing (JHSON) we are implementing programs in alignment with these new recommendations. These changes in NSPII funding will help us expand opportunities for student nurses and nurses already in the workforce. We also anticipate that these changes will help catalyze and support similar changes at schools of nursing across Maryland. Below are some current and emerging programs at the JHSON that align with the recommended changes:

Educating and retaining nurses in primary care and community health

As the pressures and demands on acute care settings increase and spiral out of control, more care is moving to the community. Consequently, we need a nurse workforce prepared to meet these challenges and changes to how care is delivered through a renewed focus on primary care, community-based care and population health. The challenges of an aging population, more need for primary care access, behavioral health, high maternal mortality and morbidity, and growing health inequities require that we train nurses to function in the community at high levels of competency.

At Johns Hopkins we allow our nursing students to apply to a cohort for which all of their clinical training is out in the community. This is not public health alone. It is also in cancer infusion, center-based hospice, palliative care and dialysis. They receive 1:1 preceptorship with

preceptors who understand the competencies they are working towards. These students not only gain quality clinical training in a variety of outpatient and community-based settings but are exposed to employment opportunities beyond the inpatient hospital setting. Many hospitals, like our own at Hopkins, are health systems with health care delivery in a variety of settings facing workforce challenges beyond the inpatient setting.

In addition to outpatient and community based clinical training, the JHSON is developing and staffing community-based models of care to create more job opportunities for nurses interested in addressing health care challenges in the community. These programs also help alleviate pressures on our acute care and hospital-based systems and workforce by bringing preventive care, improved chronic disease management, behavioral health and social needs care to people in the community where they live, love, work, learn, worship and play.

For example, the schools of nursing at Morgan State, Coppin State and Johns Hopkins have joined together to staff nurses in Baltimore city schools and to design and implement a Neighborhood Nursing program across Maryland. Through **Neighborhood Nursing,** Maryland residents will have access to a nurse and community health workers to address health and social needs of individuals, households, and communities block-to-block and family-to-family. The nurse and community health worker will help Marylanders establish goals for their health, and then achieve them while preventing illness, building social connections and improving overall health. The goal is to reduce total cost of care through primary, secondary and tertiary prevention while engaging all people in ways meaningful to them to better manage their health and overall well-being.

Promoting competency-based learning

Competency-based education (CBE) will allow learners to progress by mastering competencies rather than adhering to rigid timelines and testing. This isn't just a shift in methodology; it's a revolution in efficiency and stewardship of resources. Time, once a rigid opponent, becomes a flexible ally, adapting to the pace of each learner. The economic implications are equally profound. Costs shrink, yet our capacity to educate nurses expands. But the most significant outcome is that nursing school graduates complete their programs with both a degree and the necessary readiness to practice in the evolving health care environment that will demand our workforce to address complex needs across health and social factors in new settings outside of the hospital. To meet these changes and evolving demands, the JHSON is currently designing a new CBE curriculum to be launched in 2027.

Taken together, the competency-based education, emphasis on community-based care and population, the changes to the NSPII will help usher in the nursing workforce of the future. This workforce will be equipped to support the health of all Marylanders across all stages of life and across the whole health spectrum from population to acute, chronic and restorative.

**Office of the Dean**
525 North Wolfe Street Suite N515 Baltimore, MD 21205
410-955-7548
www.nursing.jhu.edu

We look forward to ongoing collaboration.

Sincerely,

Sarah L. Szanton, PhD, ANP, FAAN
Dean
Patricia M. Davidson Health Equity and Social Justice Endowed Professor

Natalia Barolín, BA, BSN, RN
Sr. Health Policy Adviser

**Office of the Dean**
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15 January 2025

Joshua Sharfstein, MD
Chairman
Maryland Health Services Cost Review Commission
4160 Patterson Avenue
Baltimore, MD 21215

RE: Letter of Support for Continued NSP II Funding

Greetings,

I am writing to express my strong support for continued funding of Nurse Support Program II (NSP II) initiatives. The transformative impact of NSP II funding on the Morgan State University Nursing Program underscores its critical role in advancing nursing education and addressing workforce needs.

Before my arrival as Program Director in 2015, the pre-licensure program faced significant challenges. Limited resources hampered our ability to ensure adequate outcomes for graduates, leading to suboptimal NCLEX-RN® pass rates, constrained employment opportunities post-graduation, and the program's failure to achieve initial accreditation in 2013.

Upon assuming leadership, I utilized the limited NSP II funds available to begin turning the program around. These funds enabled us to build a dedicated team of faculty and support staff, which led to remarkable improvements within the first year. Inspired by our mantra, *Semper Ad Meliora* ("Always Towards Better Things"), we leveraged additional NSP II funding—notably the SAM II initiative—to drive further progress. Over the years, this support has facilitated:

1. **Reaccreditation of the Master of Science in Nursing program** in 2016 for the maximum ten-year period.
2. **Preparation for the initial accreditation site visit** for the pre-licensure program in 2017.
3. **Comprehensive professional development** for faculty, fostering enhanced student outcomes.
4. **A statewide mentoring initiative**, enriching the professional growth of nursing educators and students.

The outcomes speak volumes:

- In 2017, the pre-licensure program achieved initial accreditation, and in 2023, it was reaccredited for another ten years.
- Our first-time NCLEX-RN® pass rate soared to 100% in FY 2018, a benchmark of excellence. While the challenges of COVID-19 caused a temporary dip, the strategies funded by NSP II enabled recovery, with our FY 2024 first-time pass rate reaching 90.6%.

Building on this success, we are now expanding both our graduate programs and the capacity of our pre-licensure program. These achievements would not have been possible without NSP II funding.

Morgan State University's Nursing Program is a testament to the transformative power of NSP II support. We enthusiastically endorse continued investment in this vital program, which has not only improved our outcomes but also strengthened the nursing workforce to meet the healthcare challenges of today and tomorrow.

Thank you for your unwavering commitment to advancing nursing education.


Semper Ad Meliora,

Maija Anderson, DNP, APRN, FNE-A/P
Chair
Department of Nursing

Cc: K. Ford, L. Schenk, K. Sydnor

**Susan L. Bindon, DNP, RN, NPD-BC, CNE, ANEF, FAAN**
Associate Professor and Director, Institute for Educators
Associate Dean for Faculty Development
Suite 311
655 W. Lombard Street
Baltimore, MD 21201
410.706.8049
sbindon@umaryland.edu

Erin Schurmann, MPA, PMP
Associate Director, Strategic Initiatives
Health Services Cost Review Commission
4160 Patterson Avenue
Baltimore, MD 21215

January 11, 2025

Dear Ms. Schurmann,

As a faculty leader and project director on multiple NSP II grants, I am writing to provide support for the December 2024 *NSP II Outcomes Evaluation and Draft Recommendations for Future Funding* report. Thank you for the opportunity to review and comment.

I read the report in its entirety and want to offer my full support for the identified trends and future priorities for the NSP II program. The impact of NSP II grants over past funding cycles, and particularly in the past five years, has put Maryland in the forefront of nursing education across the country in terms of workforce data, nurse faculty certification, creative academic/practice partnerships, and faculty development. Each time my colleagues and I share our NSP II project outcomes, peers from around the country are impressed by (and sometimes even envious of) the tremendous opportunities and results this resource provides us.

I appreciate the program's current and future focus on mentoring and supporting underserved populations. The program has always prioritized diversity and inclusion and I am happy to see this continue. The program also provides faculty with the opportunity to learn grantsmanship and stewardship while implementing much needed projects in Maryland's nursing programs. I commend the grant administrator team of Dr. Schenk and Ms. Ford for their tireless efforts to support nursing education and the project teams across the state as they do their work.

Thank you again for this invaluable resource, I hope to see NSP II continue far into the future. I am proud to be an NSP II grant recipient and program champion. Please let me know how I can support this effort going forward.

 Sincerely,

Susan L. Bindon

CC: Laura Schenk, DNP, RN, CNE, Grant Administrator NSP II
    Kimberly Ford, BS, Assistant Grant Administrator NSP II

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January 15, 2025

Nurse Support Program II
Maryland Higher Education Commission
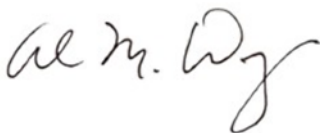6 N Liberty Street, 10th Floor
Baltimore, MD 21201

Dear Members of the Nurse Support Program II Review Committee,

Thank you for the opportunity to write a letter of support for the Nurse Support Program II (NSP II). The University System of Maryland (USM) fully supports the continued funding of the NSP II. USM recognizes the critical importance of fostering a highly skilled and diverse nursing workforce to meet the growing healthcare needs of our state and the System fully aligns with the NSP II's mission to increase the number of nursing faculty and enhance diversity within the nursing profession.

The NSP II initiatives are essential to addressing the ongoing nursing shortage in Maryland. By providing funding for faculty development and educational programs, the NSP II enables nursing schools across the state to foster the next generation of nurses and nursing educators. Funding for the NSP II not only supports current healthcare needs, but helps ensure a pipeline of qualified, diverse professionals that will improve nursing and healthcare across the state into the future.

We encourage the continued investment in the NSP II program to strengthen the nursing profession in Maryland.  Thank you for your consideration of our support for this crucial program.

Sincerely,

Alison M. Wrynn, Ph.D.
Senior Vice Chancellor for Academic and Student Affairs
University System of Maryland

**INSTITUTIONS //** BOWIE STATE UNIVERSITY · COPPIN STATE UNIVERSITY · FROSTBURG STATE UNIVERSITY · SALISBURY UNIVERSITY TOWSON UNIVERSITY · UNIVERSITY OF BALTIMORE · UNIVERSITY OF MARYLAND, BALTIMORE · UNIVERSITY OF MARYLAND, BALTIMORE COUNTY UNIVERSITY OF MARYLAND CENTER FOR ENVIRONMENTAL SCIENCE · UNIVERSITY OF MARYLAND, COLLEGE PARK · UNIVERSITY OF MARYLAND EASTERN SHORE · UNIVERSITY OF MARYLAND GLOBAL CAMPUS **REGIONAL CENTERS //** UNIVERSITIES AT SHADY GROVE · UNIVERSITY SYSTEM OF MARYLAND AT HAGERSTOWN · UNIVERSITY SYSTEM OF MARYLAND AT SOUTHERN MARYLAND

**Maryland Hospital Association**

January 21, 2025

Dr. Jon Kromm
Executive Director
Health Services Cost Review Commission
4160 Patterson Avenue
Baltimore, MD 21215

Dear Dr. Kromm,

On behalf of the Maryland Hospital Association (MHA) and its member hospitals and health systems, I am providing feedback on the Health Services Cost Review Commission draft recommendation for Nurse Support Program II: Competitive Institutional Grants Program. We appreciate HSCRC's request for the hospital field's feedback on this program and for ensuring the field's inclusion in the Nurse Support Program II Advisory Group to help shape the draft recommendation.

Maryland hospitals proudly support the Nurse Support Program II. As outlined in the staff's conceptual framework, aligning the goals of the hospital field with our academic partners is essential to grow the nursing workforce pipeline.

We support the following staff recommendations:
1. Request for NSP II permanent funding with annual reports on program performance
   o Providing permanent funding will align this program with NSP I and provide stability for the program
2. Focus on retaining graduates in Maryland through alignment with NSP I goals, by building student pathways to nursing that address vacancies in understaffed specialties and care settings in Maryland, including primary care and community health
3. Identify new opportunities to prioritize funding to underrepresented groups in nursing through both competitive institutional grants and faculty-focused programs
4. Promote curriculum updates to strengthen Evidence-Based Practice (EBP) and promote Competency-Based Education (CBE) to reduce learning gaps and promote retention of new graduates
5. Enhance data collection infrastructure and analysis to promote greater accountability in reporting statewide data and support responsiveness of NSP II to Maryland nursing education and workforce trends
   o We support collecting data on new graduate employment in Maryland
6. Based on data results, prioritize funding initiatives that best support the needs of Maryland's health care system
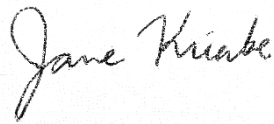
We offer suggestions on the following staff recommendations:

- Add new and updated NSP II funding initiatives, prioritizing education that prepares nurses to address health equity and practice in community/population health settings to align with AHEAD Model goals
    - While it is important to focus on community health nursing and care delivered outside the hospital walls, we encourage HSCRC to maintain NSP II's emphasis on preparing nurses to practice at the bedside in acute care settings
    - Our hospital members continue to identify bedside nurses as being in high demand, especially those working in medical-surgical units

Maryland hospitals fully support the Nurse Support Program II's goals and the staff recommendations. We appreciate HSCRC and the Maryland Higher Education Commission for providing us with the opportunity to engage in work group discussions on NSP II.

Should you have any questions or wish to discuss our recommendation further, please do not hesitate to contact me.

Respectfully,

Jane Krienke
Director, Government Affairs & Policy
Maryland Hospital Association

January 13,2025

Erin Schurmann
Health Services Cost Review Commission
Baltimore, Maryland
erin.schurmann@maryland.gov

Dear Erin Schurmann,

Over the last four years, the National League for Nursing (NLN) has experienced the pleasure of collaborating with the Maryland Higher Education Commission Nurse Support Program II (NSP II). The outstanding individuals working within the NSP II and the Maryland Higher Education Commission are to be commended for the dedication and the excellent work that has supported this program.

The collaboration that the NLN has established has been related to activities by the NSP II to support nurse educator faculty in the progression of careers and attaining the certifications offered by the NLN, including the Certified Nurse Educator (CNE®) and the Certified Clinical Nurse Educator (CNE®cl) certifications, which indicate a level of excellence in the roles of nurse educators. Working with the NSP II, the NLN has provided preparatory review courses, which enhance the faculty understanding of the competencies and task statements related to each of the roles. The program sponsored by the NSP II has been very successful and now Maryland has become #6 state in the nation for numbers of certified nurse educator faculty.

The NLN has also collaborated with the NSP II for the establishment of a database that is aimed at tracking the outcomes of faculty receiving financial support for achieving higher levels of academic education in nursing education. In 2024, 108 faculty receiving this financial support used the database to document their achievements and outcomes being achieved that are supported by the program.

The NLN Certification Program had established a Certification Star Award. This award is given periodically to faculty and programs that are identified as providing excellence in the support of nurse faculty wishing to achieve nurse educator certification. Twice since inception of this award, the staff at the NSP II program have been recognized for dedication and excellence in providing this type of support. The first ever Star Award was given to Peg E. Daw. In her honor, the Star Award was renamed as the Peg E. Daw Certification Star Award. In 2024, the Award was presented to Kimberly Ford of the NSP II program.

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NLN.org

The NLN provides this letter of support for the NSP II program and the excellence it demonstrates in performance for the State of Maryland. We are looking forward to our future collaboration encouraging the further education and certification achievements of nurse educator faculty in the State of Maryland.

Best regards,

Beverly L. Malone, PhD RN FAAN
President & CEO
National League for Nursing

January 15, 2025

Jon Kromm, PhD
Executive Director
Health Services Cost Review Commission
4160 Patterson Avenue
Baltimore, MD 21215

Dear Dr. Kromm,

On behalf of the Maryland Action Coalition (MDAC), we are writing in our capacity as the Co-Chairs of the Coalition, to express strong support for the report and draft recommendations regarding the renewal of the authorization for the Nurse Support II Program, as presented by the Maryland Higher Education Commission at the HSCRC meeting on December 11, 2024.

The Maryland Action Coalition was formed in 2010, following the release of the Institute of Medicine's report on *The Future of Nursing: Leading Change, Advancing Health.* The seminal report detailed the challenges facing the nursing profession in preparing the nursing workforce to provide care to an increasingly diverse and aging population in the context of the growing complexity of the health care system. Following the release of that report, The Robert Wood Johnson Foundation, and the AARP, launched a national initiative – the *Future of Nursing: Campaign for Action* – to implement the IOM recommendations through coalitions in each of the 50 states and the District of Columbia. The Maryland Action Coalition has been an active participant in this nationwide effort since its inception.

The NSP II programs of the Maryland Higher Commission have been instrumental to the State of Maryland's successful response to the challenges of the initial IOM report and its ongoing work to meet the recommendation of the successor report from the National Academies of Medicine, *The Future of Nursing 2020-2030: Charting a Path to Achieve Health Equity.* Through the guidance, support, and funding provided by the NSP II program, Maryland has been able to successfully meet critical goals, including:

- Expanding the number of nursing school graduates;
- Increasing the number of baccalaureate-educated nurses to 80%;
- Increasing the number of doctorally-prepared nurses and Advanced Practice Registered Nurses able to provide vital care, particularly in underserved areas;
- Increasing the diversity of the nursing profession to better meet the needs of our highly diverse communities; and
- Addressing the need for better workforce data through the establishment of the Maryland Nursing Workforce Center.

Through support for nurse faculty, the NSP II program has made it possible to increase nursing school enrollments, as sufficient, well-prepared faculty is a critical element. The NSP II program has also provided competitive institutional grants that have fostered new and innovative efforts to develop new curriculum, initiate community-based projects and increase academic and clinical practice partnerships. It is through partnerships such as these that we are addressing critical needs such as the coordination of patient care from the hospital setting to the community. And, developing new approaches to addressing the social determinants of health and health disparities in our communities.

Each year, the Maryland Action Coalition holds an Annual Summit, which draws participation from 200-400 members of Maryland nursing profession, including nurse faculty, clinical practitioners, and nurse leaders from institutions throughout the State. We have utilized these meetings to share the results of projects and activities funded by the NSP II program, thereby ensuring significant dissemination of information and findings from NSP II funded initiatives and fostering replication of promising approaches throughout the State. This annual event is representative of the important ongoing strategic relationship between the NSP II program and Maryland's nursing profession as we jointly seek to address critical issues facing healthcare delivery in Maryland and nationally.

We strongly support the recommendation contained in the draft report to continue NSP II as an ongoing program with permanent funding and a requirement for annual reports in lieu of the current five-year program renewal cycle. As indicated, this would align the NSP I and NSP II programs and improve grant planning and efficient use of resources, as well as support competitive institutional grant planning, and ensure continuity with respect to strategic initiatives.

We also strongly support the proposed prioritization of initiatives to prepare nurses to address health equity and increase practice in community/population health settings; this is in keeping with the national needs articulated the Academy of Medicine's *Future of Nursing: 2020-2030: Charting a Path to Achieve Health Equity.* In addition, the MHEC proposal to revise existing initiatives in accord with this latest report will be of tremendous benefit in focusing attention and effort on meeting the challenges of the future. Finally, the proposed focus on strengthening Evidence-Based Practice and promoting Competency-Based Education is very appropriately aligned with national objectives and reflects changes being made in the content and approach to nursing education nationwide and with it, the preparation for licensure for nursing practice.

Given the proven track record of success for the NSP II program and its demonstrated experience and expertise in executing vital projects, the Maryland Action Coalition urges the HSCRC to continue its funding support of NSP II as we collectively address the ongoing and pressing need to prepare our nursing workforce. Nurse colleagues and leaders throughout the U.S. regularly express their envy with respect to Maryland's NSP II program. The Health Services Cost Review Commission and the Maryland Higher Education Commission can be justifiably proud of the unique contributions that this program makes to strengthening the nursing workforce in our State.

We appreciate the opportunity to comment on the draft recommendations. We commend the Maryland Higher Education Commission for its steadfast and ongoing support of the nursing profession in Maryland and we appreciate the commitment of the Health Services Cost Review Commission to ensuring that Maryland has a nursing workforce that is well-equipped to meet the needs of the diverse communities within our State.

Thank you for your thoughtful consideration of the draft report and recommendations.


Sincerely,

*The Co-Chairs of the Maryland Action Coalition*


Yolanda Ogbolu, PhD, NNP, FNAP, FAAN
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Patricia Travis, PhD, RN, CCRP
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cc: Dr. Joshua Sharfstein, Chairman
    Dr. James Elliott
    Ricardo Johnson
    Dr. Maulik Joshi
    Adam Kane
    Nicki McCann
    Dr. Farzaneh Sabi
    William Henderson
    Erin Schurmann, HSRC Associate Director of Strategic Initiatives

4513 Weitzel Ave.
Baltimore, MD 21214


January 6, 2025


Erin Schurmann
Health Services Cost Review Commission


This letter is in response to the opportunity for public comment regarding continuation of the Nurse Support Program II now being reviewed by the Health Services Cost Review Commission. I have been associated with the Nurse Support Program II since 2001.  In addition to receiving grant funding through the NSP II program, I have been involved in several five year evaluation periods whereby outcomes of the program were reviewed and funding continued by HSCRC. I have also had the privilege of working with the NSP II leadership as program initiatives have evolved over time to address statewide nursing needs through the development of successful, innovative and creative actions.

Funding from NSP II grants across the State of Maryland has significantly benefited the development of exceptionally well prepared nurses able to address the needs of hospitals to provide healthcare across diverse locations and populations of patients. Furthermore, the NSP II program has become a national model for the generation of new programs to achieve statewide advancements in nursing education, academic-practice partnerships to develop outstanding nurse clinicians and faculty, and successful approaches to retain nurses in both education and clinical practice settings.  As a result of the NSP II program, the State of Maryland has seen an increase in the enrollment and graduation of new nurses, advanced education of nurses, collaboration between education and practice, and development of outstanding nurse faculty.

Importantly, the NSP II has served as the critical ingredient to bring together nurse educators, clinicians and leaders from Maryland schools of nursing and hospitals to address, develop and support programs designed to increase the number and quality of nurses in the State of Maryland.  This in itself is a major achievement that deserves to be recognized and supported.

Looking to the future, I fully endorse the proposed recommendations for program renewal to continue NSP II as an ongoing program with permanent funding, thereby replacing the five-year program renewal cycle. Furthermore, as proposed, future NSP II initiatives should prioritize educational preparation of nurses to address health equity and practice in community and population health settings as well as continuing to prioritize areas where improvements are needed.  As proposed in the evaluation document, the alignment of NSP I and NSP II goals could

further advance the objectives and goals of both programs through collaboration with HSCRC and stakeholders.

In summary, the NSP II program is critical to continuing the development and advancement of a qualified nursing workforce in the State of Maryland. I strongly endorse continuation of the program and the staff recommendations included in the evaluation report.


Sincerely:

Mary Etta Mills, ScD, RN, NEA-BC, FAAN
Professor Emerita
University of Maryland School of Nursing

Rita F. D'Aoust
9565 Morning Mews
Columbia, MD 21046

January 6, 2025

To: Erin Schurmann, MPA, PMP
     Associate Director, Strategic Initiatives

I have carefully reviewed the proposal (pp 162-212) and offer a couple of thoughts:

- I love the proposed framework, especially how academic-practice collaboration has been conceptualized.
- The move to community-based care and competency of nurses is crucial given our new state model for total cost. The lack of access contributes to poor health and avoidable hospital based or specialty care.
- The move to community-based care offers an opportunity for faculty practice and ability to have first-hand clinical experience for population health and community-based care. This offers faculty the full spectrum of practice and not only acute care and machinery skills.
- Population health initiatives should be measurable, even if it's a process measure until impact measures are obtained. This should be aligned with competency-based education.
- The growth in faculty support programs (NNF) should be balanced with actual need and performance return on investment measures.
- I support the NSP II move to quality, not just quantity, and retention.
- The recognition for advanced practice nurse education (APRNs) is well supported, especially given the shortage to primary care providers in our state. In Maryland, Nurse Practitioners have full scope of practice and meet crucial access needs for our population.

Thank you for the opportunity to review and provide public comment.

Sincerely,

Rita D'Aoust

**Diane M. Billings**

10843 East County Road 750 North
Brownsburg, IN 46112
317.626.5751
dbillin@iu.edu

January 13, 2025

Erin Schurmann, MPA, PMP
Associate Director, Strategic Initiatives
Medical Economics and Data Analytics
Health Services Cost Review Commission
4160 Patterson Avenue
Baltimore, MD 21215


Dear Ms. Schurmann,

I am writing to offer the strongest support possible for the renewal of the Nurse Support Program II (NSPII). For over more than 15 years, I have served on grant review panels; provided consultation for programing for NSPII grants; served as faculty for the Certified Nurse Educator (CNE) Review Course that Maryland Higher Education Commission collaborates with the National League for Nursing to offer two or three times a year; and was a co-project director for the grant that funded the development of the NextGen NCLEX Test Bank, a repository of test questions that faculty and students in Maryland and worldwide can use at no cost to prepare students to pass the licensing exam. Because of my involvement in these programs, I know firsthand the impact of the NSPII funding has meant for nursing and nursing education in Maryland.

In my opinion, one of the most impactful projects supported by NSPII funding was the Maryland NextGen Test Bank which was developed in response to a request from the Maryland Council of Deans and Directors to provide training and resources for faculty who were preparing to write new and very complex forms of test questions (NextGen questions) that would be used on the upcoming new nursing licensing exam. The goal for this project was to develop test questions that could be used by faculty to prepare their students to pass the licensing exam. Because the Testbank was designed as an open-source resource, the Testbank ultimately served faculty and students worldwide. The outcomes from this project included 1) teaching faculty to write test questions in the new style; 2) developing a peer review process that established validity of the test questions; 3) developing resources to assist faculty integrate the test questions into their teaching and evaluation processes; and 4) most importantly, achieving a high first time pass rate for the students who ultimately took the licensing exam.

My current involvement in NSPII funded programs is to offer the CNE Review Course. The course is now offered virtually, and thus able to reach faculty throughout the state. Each offering of the course fills to capacity with active participation by those attending. While passing the certification exam is the goal, the course also prepares attendees to integrate best practices in nursing education into their own courses, a dual outcome that improves teaching capacity for all nursing schools in Maryland.

Maryland is the only state that provides resources for nursing and nursing education and as a result of this investment, the state has benefited from increased nursing faculty expertise in teaching and learning; improved student pass rates on the licensing exam; and is the state with the highest percentage of Certified Nurse Educators! Because of the engagement of the students and faculty in Maryland and the demonstrable outcomes of the NSPII funding, I urge the commission to renew the funding.

Sincerely,

Diane M. Billings, Ed.D, RN, FAAN, ANEF
Chancellor's Professor Emeritus
Indiana University School of Nursing
Indianapolis, Indiana

# Draft Recommendation for the Readmission Reduction Incentive Program for Rate Year 2027

February 12, 2025

This document contains staff draft recommendations for the RY 2027 Readmission Reduction Incentive Program. Comment letters are due by COB Wednesday, March 12, 2025 and may be submitted to hscrc.quality@maryland.gov.

# Table of Contents

# List of Abbreviations

| | |
|---|---|
| ADI | Area Deprivation Index |
| AMA | Against Medical Advice |
| APR-DRG | All-patient refined diagnosis-related group |
| CMS | Centers for Medicare & Medicaid Services |
| CMMI | Center for Medicare and Medicaid Innovation |
| CRISP | Chesapeake Regional Information System for Our Patients |
| CY | Calendar year |
| eCQM | Electronic Clinical Quality Measure |
| EDAC | Excess Days in Acute Care |
| FFS | Fee-for-service |
| HCC | Hierarchical Condition Category |
| HRRP | Hospital Readmissions Reduction Program |
| HSCRC | Health Services Cost Review Commission |
| HWR | Hospital-Wide Readmission Measure |
| MCDB | Medical Claims Database |
| MPR | Mathematica Policy Research |
| MSA | Metropolitan Statistical Area |
| NQF | National Quality Forum |
| PAI | Patient Adversity Index |
| PMWG | Performance Measurement Workgroup |
| PQI | Prevention Quality Indicators |
| RRIP | Readmissions Reduction Incentive Program |
| RY | Rate Year |
| SIHIS | Statewide Integrated Healthcare Improvement Strategy |
| SOI | Severity of illness |
| TCOC | Total Cost of Care |
| YTD | Year-to-date |

# Key Methodology Concepts and Definitions

**Diagnosis-Related Group (DRG):** A system to classify hospital cases into categories that are similar in clinical characteristics and in expected resource use. DRGs are based on a patient's primary diagnosis and the presence of other conditions.

**All Patients Refined Diagnosis Related Groups (APR-DRG):** Specific type of DRG assigned using 3M software that groups all diagnosis and procedure codes into one of 328 All-Patient Refined-Diagnosis Related Groups.

**Severity of Illness (SOI):** 4-level classification of minor, moderate, major, and extreme that can be used with APR-DRGs to assess the acuity of a discharge.

**APR-DRG SOI:** Combination of diagnosis-related groups with severity of illness levels, such that each admission can be classified into an APR-DRG SOI "cell" along with other admissions that have the same diagnosis-related group and severity of illness level.

**Observed/Expected Ratio**: Readmission rates are calculated by dividing the observed number of readmissions by the expected number of readmissions. Expected readmissions are determined through case-mix adjustment.

**Case-Mix Adjustment:** Statewide rate for readmissions (i.e., normative value or "norm") is calculated for each diagnosis and severity level. These statewide norms are applied to each hospital's case-mix to determine the expected number of readmissions, a process known as indirect standardization.

**Prevention Quality Indicator (PQI):** a set of measures that can be used with hospital inpatient discharge data to identify quality of care for "ambulatory care sensitive conditions." These are conditions for which good outpatient care can potentially prevent the need for hospitalization or for which early intervention can prevent complications or more severe disease.

**Area Deprivation Index (ADI):** A measure of neighborhood deprivation that is based on the American Community Survey and includes factors for the theoretical domains of income, education, employment, and housing quality.

**Patient Adversity Index (PAI):** HSCRC-developed composite measure of social risk incorporating information on patient race, Medicaid status, and the Area Deprivation Index.

**Excess Days in Acute Care (EDAC):** Capture excess days that a hospital's patients spent in acute care within 30 days after discharge. The measures incorporate the full range of post-discharge use of care (emergency department visits, observation stays, and unplanned readmissions).

# Policy Overview

| Policy Objective | Policy Solution | Effect on Hospitals | Effect on Payers/Consumers | Effect on Health Equity |
|---|---|---|---|---|
| The quality programs operated by the Health Services Cost Review Commission, including the Readmission Reduction Incentive Program (RRIP), are intended to drive improvements in patient outcomes and to ensure that any incentives to constrain hospital expenditures under the Total Cost of Care Model do not result in declining quality of care on an all-payer basis. Thus, HSCRC's quality programs reward quality improvements and achievements that reinforce the incentives of the Total Cost of Care Model, while guarding against unintended consequences and penalizing poor performance. | The RRIP policy is one of several pay-for-performance quality initiatives that provide incentives for hospitals to improve and maintain high-quality patient care and value over time. | The RRIP policy currently holds up to 2 percent of hospital revenue at-risk for performance relative to predetermined attainment or improvement goals on readmissions occurring within 30-days of discharge, applicable to all payers and all conditions and causes. | This policy affects a hospital's overall GBR and so affects the rates paid by payers at that particular hospital. The HSCRC quality programs are all-payer in nature and so improve quality for all patients that receive care at the hospital. | Currently, the RRIP policy measures within-hospital disparities in readmission rates, using an HSCRC-generated Patient Adversity Index (PAI), and provides rewards for hospitals that meet specified disparity gap reduction goals. The broader RRIP policy continues to reward or penalize hospitals on the better of improvement and attainment, which incentivizes hospitals to improve poor clinical outcomes that may be correlated with health disparities. It is important that persistent health disparities are not made permanent. |

# Recommendations

These are the draft recommendation for the Maryland Rate Year (RY) 2026 Readmission Reduction Incentives Program (RRIP):

1. Maintain the all-payer, 30-day, all-cause readmission measure.
2. Improvement Target - Maintain the statewide 4-year improvement target of -5.0 percent through 2026 with a blended base period of CY 2022 and CY 2023
3. Retroactively apply a blended base period of CY 2022 and CY 2023 to the RY 2026 policy
4. Attainment Target - Maintain the attainment target whereby hospitals at or better than the 65th percentile of statewide performance receive scaled rewards for maintaining low readmission rates.
5. Maintain maximum rewards and penalties at 2 percent of inpatient revenue.
6. Provide additional payment incentive (up to 0.50 percent of inpatient revenue) for reductions in within-hospital readmission disparities. Scale rewards:
   a. beginning at 0.25 percent of IP revenue for hospitals on pace for 50 percent reduction in disparity gap measure over 8 years, and;
   b. capped at 0.50 percent of IP revenue for hospitals on pace for 75 percent or larger reduction in disparity gap measure over 8 years.
7. Monitor emergency department and observation revisits by adjusting readmission measure and through all-payer Excess Days in Acute Care measure. Consider future inclusion of revisits of EDAC in the RRIP program.
8. Update the RRIP policy in future years to align with statewide AHEAD model goals for readmissions.

# Introduction

Maryland hospitals are funded under a population-based revenue system with a fixed annual revenue cap set by the Maryland Health Services Cost Review Commission (HSCRC or Commission) under the All-Payer Model agreement with the Centers for Medicare & Medicaid Services (CMS) beginning in 2014, and continuing under the current Total Cost of Care (TCOC) Model agreement, which took effect in 2019. Under the global budget system, hospitals are incentivized to shift services to the most appropriate care setting and simultaneously have revenue at risk in Maryland's unique, all-payer, pay-for-performance quality programs; this allows hospitals to keep any savings they earn via better patient experiences, reduced hospital-acquired infections, or other improvements in care. Maryland systematically revises its quality and value-based payment programs to better achieve the state's overarching goals: more efficient, higher quality care, and improved population health.  It is important that the Commission ensure that any incentives to constrain hospital expenditures do not result in declining quality of care. Thus, the Commission's quality programs reward quality improvements and achievements that reinforce the incentives of the global budget system, while guarding against unintended consequences and penalizing poor performance.

The Readmissions Reduction Incentive Program (RRIP) is one of several quality pay-for-performance initiatives that provide incentives for hospitals to improve patient care and value over time that targets unplanned readmissions.  While some hospital readmissions are unavoidable, other hospital readmissions within 30 days result from ineffective initial treatment, poor discharge planning, or inadequate post-acute care and result in poor patient outcomes and financially strained healthcare institutions.[1] The RRIP currently holds up to 2 percent of hospital revenue at-risk in penalties and rewards based on achievement of improvement or attainment targets in 30-day case-mix adjusted readmission rates.  In addition, the disparity gap component of the RRIP policy rewards hospitals up to 0.5% of their IP revenue for reducing disparities in readmissions

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[1] Rammohan R, Joy M, Magam S, et al. (May 15, 2023) The Path to Sustainable Healthcare: Implementing Care Transition Teams to Mitigate Hospital Readmissions and Improve Patient Outcomes. Cureus 15(5): e39022. doi:10.7759/cureus.39022

based on race (Black vs Non-Black), ADI (high area deprivation vs low deprivation), and Medicaid status (Medicaid beneficiary vs Non-Medicaid beneficiary).

For RRIP, as well as the other State hospital quality programs, updates are vetted with stakeholders and approved by the Commission to ensure the programs remain aggressive and progressive with results that meet or surpass those of the national CMS analogous programs (from which Maryland must receive annual exemptions). For purposes of the RY 2027 RRIP Draft Policy, staff vetted the updated proposed recommendations with the Performance Measurement Workgroup (PMWG), the standing advisory group that meets monthly to discuss Quality policies.

Additionally, with the onset of the Total Cost of Care Model Agreement, each program was overhauled to ensure they support the goals of the Model. For the RRIP policy, the overhaul was completed during 2019, which entailed an extensive stakeholder engagement effort. The major accomplishments of the RRIP redesign were modifications to the inclusion and exclusion criteria for the readmission measure, development of a 5-year (2018-2023) improvement target, adjustment of the attainment target, and the addition of an incentive to reduce within hospital disparities in readmissions.

This draft policy recommends extending the four-year improvement target but with an updated base period, discusses the issue of revisits to the emergency department/observation following an inpatient admission, and continues the incentive for reductions in within-hospital disparities. The draft policy does not recommend any changes to the current case-mix adjustment readmission measure, and recommends no updates to the disparity gap measurement. In future years, the RRIP policy will be updated to align with the new AHEAD model and any statewide readmission improvement targets.

# Background

## Brief History of RRIP program

Maryland made incremental progress each year throughout the All-Payer Model (2014-2018), ultimately achieving the Model goal for the Maryland Medicare FFS readmission rate to be at or below the unadjusted national Medicare readmission rate by the end of Calendar Year (CY) 2018. Maryland historically performed poorly compared to the nation on readmissions; it ranked 50th

among all states in a study examining Medicare data from 2003-2004.[2] In order to meet the All-Payer Model requirements, the Commission approved the inaugural RRIP program in April 2014 to further bolster the incentives to reduce unnecessary readmissions beyond the incentives already inherent in the global budget system. Under the TCOC model, CMMI requires the State's readmission measure to be all-payer. Using this all-payer readmission measure, the State's goal was to improve readmissions by 7.5 percent in 2023 compared to 2018. Additional discussion on current Maryland performance is included below in the assessment section.

As recommended by the Performance Measurement Work Group (PMWG), the RRIP is more comprehensive than its federal counterpart, the Medicare Hospital Readmission Reduction Program (HRRP), as it is an all-cause, all-condition measure that includes all eligible discharges regardless of payer.[3] Furthermore, it assesses both improvement and attainment and provides an incentive to focus on disparities.

## RRIP Methodology

Figure 1 provides an overview of the current RRIP methodology (also see Appendix I) that converts hospital performance to payment adjustments.  In Maryland, the RRIP methodology evaluates all-payer, all-cause inpatient readmissions using the CRISP unique patient identifier to track patients across Maryland hospitals. The readmission measure excludes certain types of discharges (e.g., pediatric oncology, patients who leave against medical advice, rare diagnosis groups) from consideration, due to data issues and clinical concerns.  Readmission rates are adjusted for case-mix using all-patient refined diagnosis-related group (APR-DRG) severity of illness (SOI), and the policy determines a hospital's score and revenue adjustment by the better of improvement or attainment.[4]  The disparity gap methodology is separate and provides hospitals with the opportunity to earn rewards (no penalties) based on improvement.

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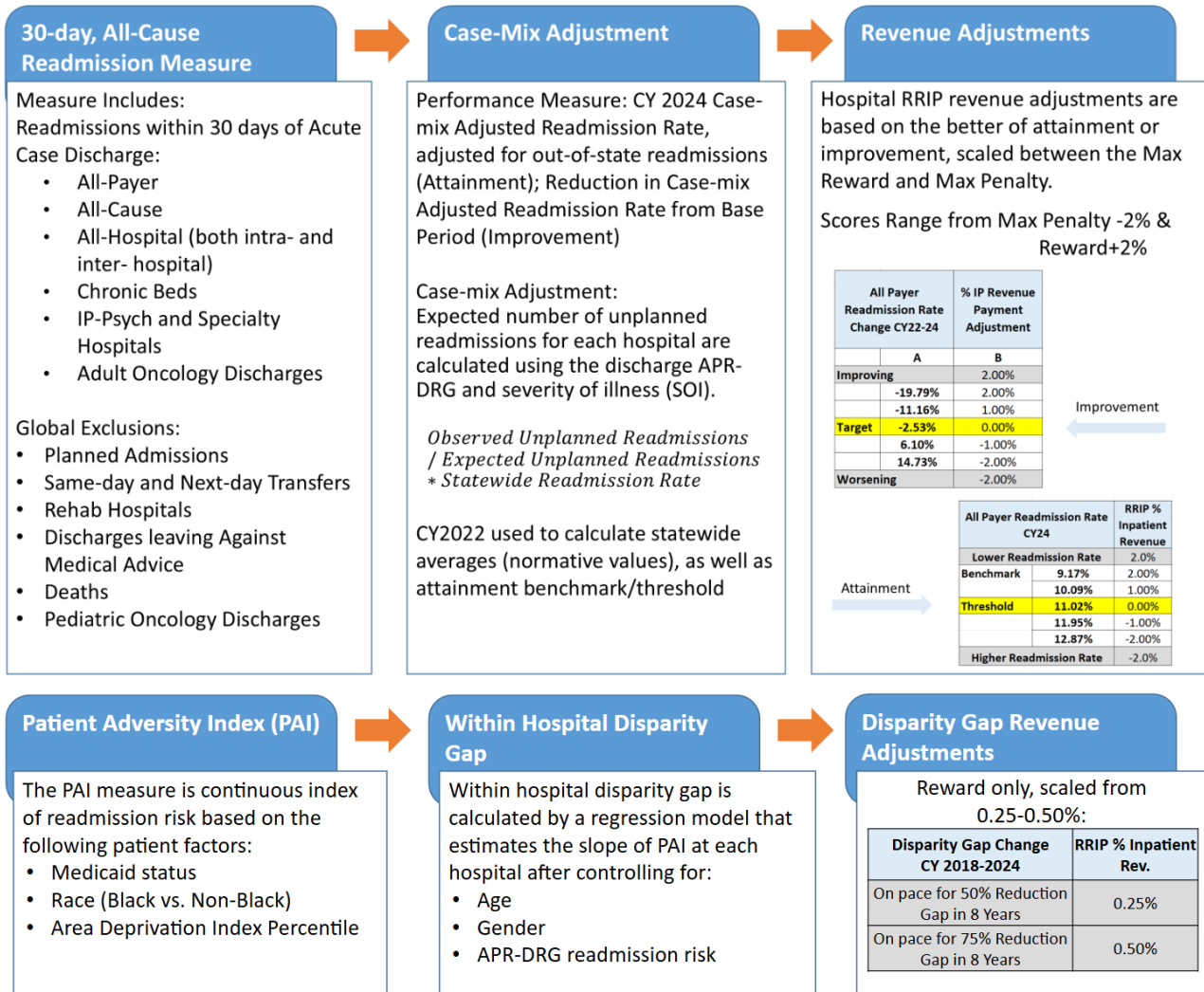
[2] Jencks, S. F. et al., "Hospitalizations among Patients in the Medicare Fee-for-Service Program," *New England Journal of Medicine* Vol. 360, No. 14: 1418-1428, 2009.
[3] For more information on the HRRP, please see: https://www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/AcuteInpatientPPS/Readmissions-Reduction-Program
[4] See Appendix I for details on the current RRIP methodology.

Figure 1. RRIP Methodology RY26



**30-day, All-Cause Readmission Measure**

Measure Includes:
Readmissions within 30 days of Acute Case Discharge:
- All-Payer
- All-Cause
- All-Hospital (both intra- and inter- hospital)
- Chronic Beds
- IP-Psych and Specialty Hospitals
- Adult Oncology Discharges

Global Exclusions:
- Planned Admissions
- Same-day and Next-day Transfers
- Rehab Hospitals
- Discharges leaving Against Medical Advice
- Deaths
- Pediatric Oncology Discharges

**Case-Mix Adjustment**

Performance Measure: CY 2024 Case-mix Adjusted Readmission Rate, adjusted for out-of-state readmissions (Attainment); Reduction in Case-mix Adjusted Readmission Rate from Base Period (Improvement)

Case-mix Adjustment:
Expected number of unplanned readmissions for each hospital are calculated using the discharge APR-DRG and severity of illness (SOI).

*Observed Unplanned Readmissions / Expected Unplanned Readmissions * Statewide Readmission Rate*

CY2022 used to calculate statewide averages (normative values), as well as attainment benchmark/threshold

**Revenue Adjustments**

Hospital RRIP revenue adjustments are based on the better of attainment or improvement, scaled between the Max Reward and Max Penalty.

Scores Range from Max Penalty -2% & Reward+2%

| All Payer Readmission Rate Change CY22-24 | % IP Revenue Payment Adjustment |
|---|---|
| A | B |
| Improving | 2.00% |
| -19.79% | 2.00% |
| -11.16% | 1.00% |
| Target  -2.53% | 0.00% |
| 6.10% | -1.00% |
| 14.73% | -2.00% |
| Worsening | -2.00% |

Improvement

| All Payer Readmission Rate CY24 | | RRIP % Inpatient Revenue |
|---|---|---|
| Lower Readmission Rate | | 2.0% |
| Benchmark | 9.17% | 2.00% |
| | 10.09% | 1.00% |
| Threshold | 11.02% | 0.00% |
| | 11.95% | -1.00% |
| | 12.87% | -2.00% |
| Higher Readmission Rate | | -2.0% |

Attainment

**Patient Adversity Index (PAI)**

The PAI measure is continuous index of readmission risk based on the following patient factors:
- Medicaid status
- Race (Black vs. Non-Black)
- Area Deprivation Index Percentile

**Within Hospital Disparity Gap**

Within hospital disparity gap is calculated by a regression model that estimates the slope of PAI at each hospital after controlling for:
- Age
- Gender
- APR-DRG readmission risk

**Disparity Gap Revenue Adjustments**

Reward only, scaled from 0.25-0.50%:

| Disparity Gap Change CY 2018-2024 | RRIP % Inpatient Rev. |
|---|---|
| On pace for 50% Reduction Gap in 8 Years | 0.25% |
| On pace for 75% Reduction Gap in 8 Years | 0.50% |

# Assessment

For RY 2027, the main policy decision is to determine the base period from which to assess improvement for CY 2025 readmission rates. In order to assess the most appropriate base year for improvement, this section assesses readmissions performance and provides improvement scenarios for consideration. While there are no proposed changes to the readmission measure, staff is recommending that additional analytics continue to be conducted over the coming year to assess hospital revisits to the emergency department and/or observation, which staff believes will

complement some of the other workstreams the Commission currently is engaging in to improve emergency room length of stay and address concerns raised by CMMI about higher use of observation status in Maryland.  Finally, staff provides performance on the disparity gap measure and recommends to continue this targeted focus on high adversity patients.

## Current Statewide Year To Date Performance

Readmission performance is assessed in several ways. First, we present data on the unadjusted, all-cause Medicare Readmission Rate (the original "Waiver Test"), which shows that Maryland currently has a slightly lower unadjusted readmission rate than the nation. Next, Maryland and the Nation's performance within the Hospital-Wide Readmission measure is presented (the new "Waiver Test"). Last, we present the all-payer, case mix adjusted readmission results used for the RRIP.

### Medicare FFS Performance

At the end of 2018, Maryland had an unadjusted FFS Medicare readmission rate of 15.40 percent, which was below the national rate of 15.45 percent.  This is the measure that CMMI used to assess Maryland's successful performance on readmissions under the All-payer Model.  Under the TCOC model, Maryland is required to maintain a Medicare FFS readmission rate that is below the nation. The most recent readmission data, which is presented in Figure 2, shows Maryland's readmission rate at 15.47 percent which is slightly lower than the Nation's performance at 15.66 percent.

Figure 2. Maryland and National Medicare FFS Unadjusted Readmission Rates



Unadjusted Medicare Readmissions - Through September 2024

| | CY 2012 | CY 2013 | CY 2014 | CY 2015 | CY 2016 | CY 2017 | CY 2018 | CY 2019 | CY 2020 | CY 2021 | CY 2022 | CY 2023 | CY 2024 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| National | 15.76% | 15.38% | 15.50% | 15.46% | 15.40% | 15.43% | 15.45% | 15.52% | 15.55% | 15.37% | 15.40% | 15.54% | 15.66% |
| Maryland | 17.41% | 16.60% | 16.48% | 15.97% | 15.65% | 15.24% | 15.40% | 14.94% | 15.17% | 15.68% | 15.56% | 15.86% | 15.47% |
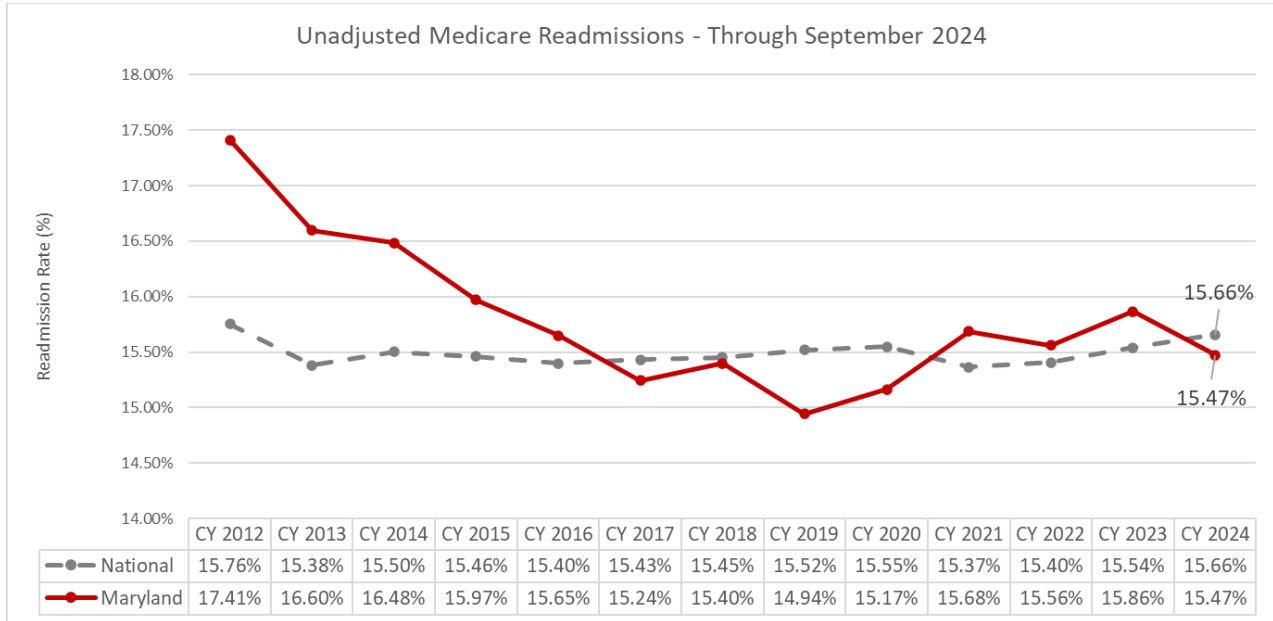
## Hospital Wide Readmission Measure Performance

Below in Figure 3, Maryland and the Nation's performance within the HWR measure is presented. The presented statistic is the Standardized Risk Ratio which indicates how observed readmission rates compare to the expected rates; a ratio less than 1 indicates lower than expected readmission rates. Since Maryland's SRR and confidence intervals for all years[5] are below 1, the State performed better than the Nation within this measure in CYs 2018-2023.

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[5] When this analysis was provided to Staff, Lewin was in the process of calculating 2018 confidence intervals, but the 2018 SRR was 0.9700, which is also better than the Nation's.

Figure 3. Maryland and National Medicare FFS Hospital-Wide Readmission Measure Performance
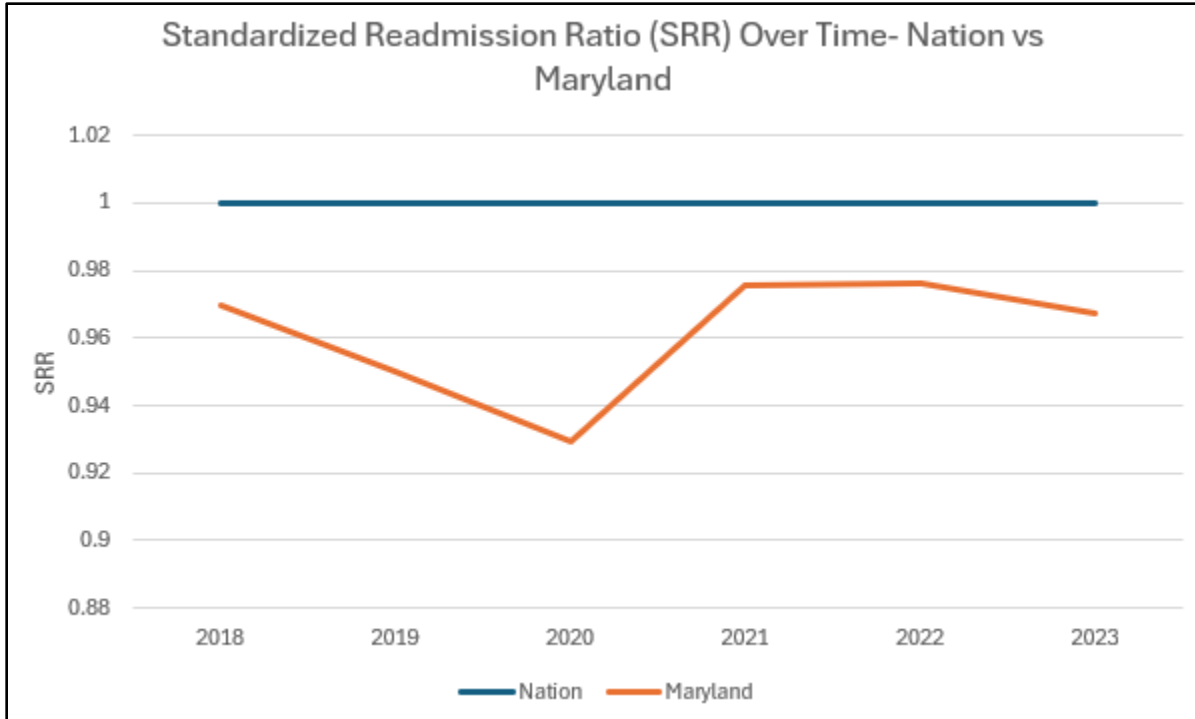


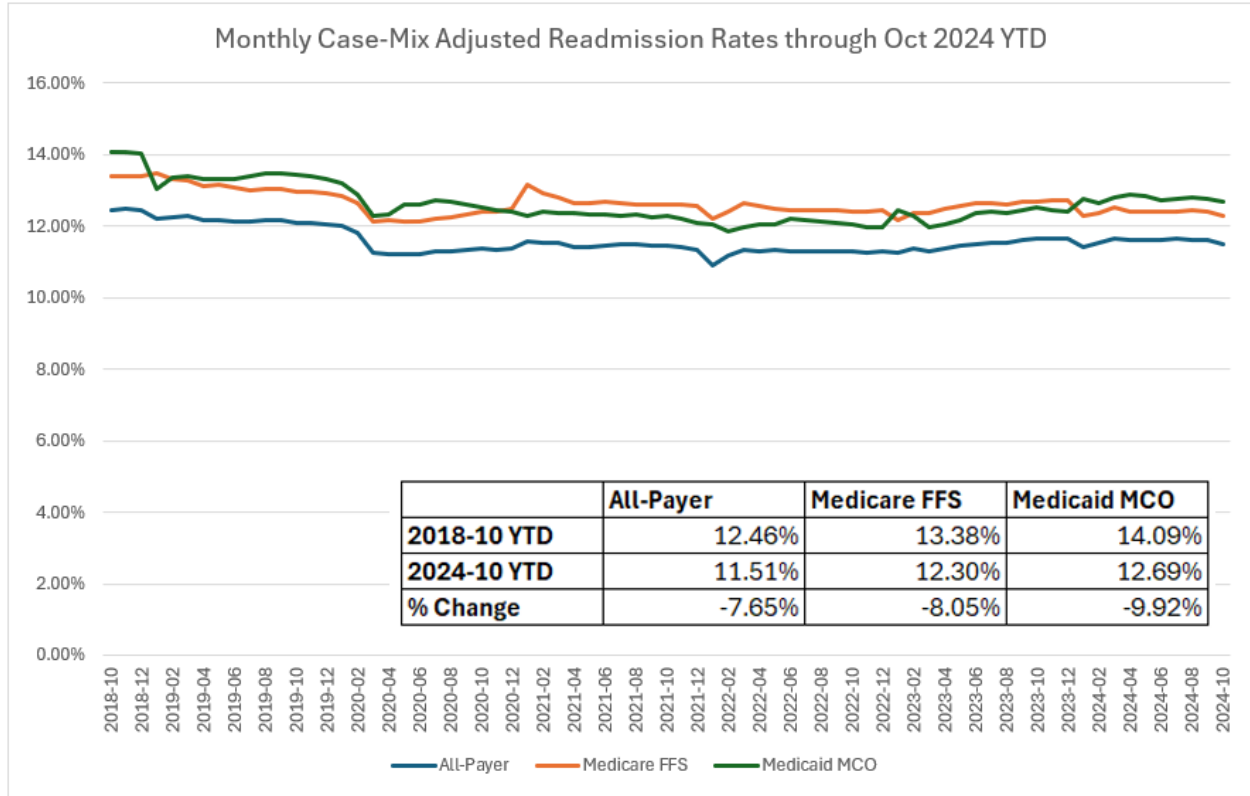**All-Payer Readmission Performance**

Maryland has also performed well statewide over time on RRIP performance standards as shown in Figure 4, with All-payer, Medicare FFS, and Medicaid MCO readmission reductions of 7.65 percent, 8.05 percent and and 9.92 percent from October 2018 YTD respectively.

Figure 4. Statewide Improvement in Case-Mix Adjusted Readmission Rates by Payer, October 2018 YTD through October 2024 YTD



| | All-Payer | Medicare FFS | Medicaid MCO |
|---|---|---|---|
| **2018-10 YTD** | 12.46% | 13.38% | 14.09% |
| **2024-10 YTD** | 11.51% | 12.30% | 12.69% |
| **% Change** | -7.65% | -8.05% | -9.92% |

The RY 2026 RRIP program assesses improvement from CY 2022 to CY 2024, and attainment performance in CY 2024 based on historical standards. As illustrated in Figure 5 below, 13 hospitals are on target to reach the improvement goal of 2.53 percent, and as shown in Figure 6, 7 hospitals are on target to have a readmission rate below the threshold of 11.02 percent. Hospitals performing well on both improvement and attainment will receive a revenue adjustment equal to the better of these evaluations, in line with the policy aim of simultaneously incentivizing excellent performance and constant improvement. Overall there are 14 unique hospitals on track to receive a scaled reward for CY 2024 performance, which concerns staff given that the State performs better than the Nation on an unadjusted basis and that the overall improved performance relative to the Nation is not driven by improvement of a few large facilities (i.e., some of the largest facilities have higher/worse readmission rates in 2024 than they did in CY 2022

despite the State performing better than the Nation over the same time period). CY 2024 YTD performance indicates that most hospitals are experiencing an increase in readmissions from CY 2022 (N=26/43), as illustrated in Figure 5 below. To address this concern, staff, with input from the PMWG, is recommending changing the base period which is discussed further in the next section.

Figure 5. By-Hospital Change in All-Payer Case Mix Adjusted Readmission Rates, 2022-YTD 2024
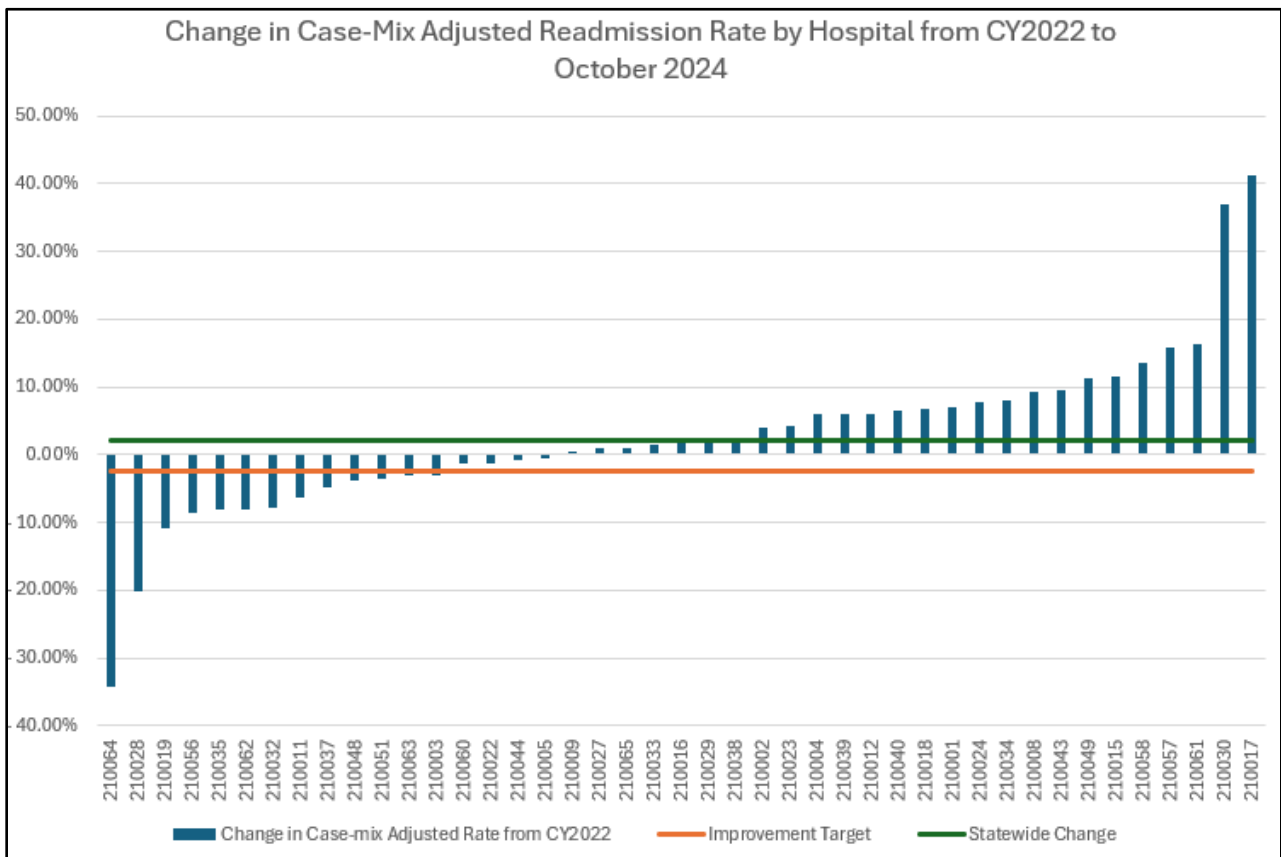
Figure 6. By-Hospital Case Mix Adjusted Readmission Rates, YTD 2024



By Hospital Case-Mix Adjusted Readmission Rates, CY 2024 YTD Through October

Legend:
- Case-Mix Adjusted Readmission Rate with OOS Adjustment (Lower is better)
- Attainment Target (Hospitals under this line are rewarded)
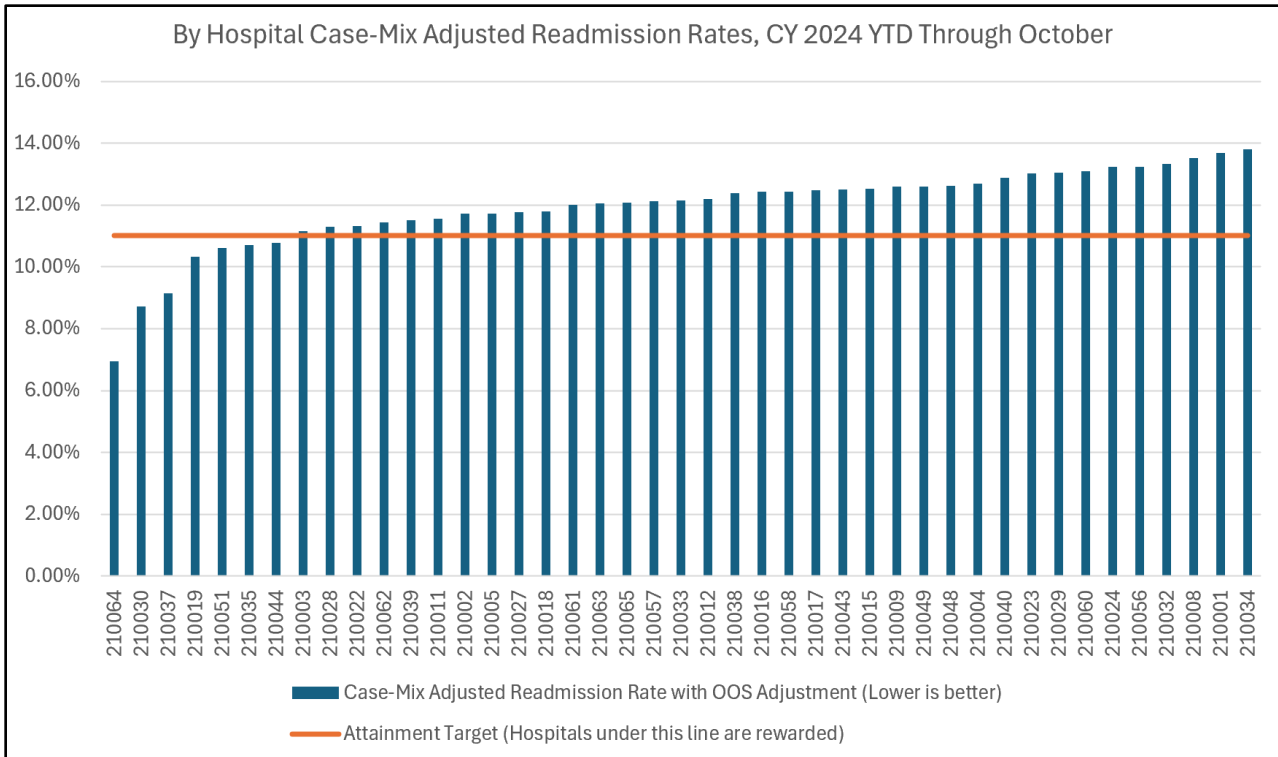
## Base Period Concerns

Historically, readmission improvement has been measured over multiple years with a fixed base (e.g., 2013-2018 in the All-Payer Model, 2018-2023 in the TCOC Model). This was used to address concerns that hospitals may not be able to make incremental annual improvements and so that large improvements in one year that are maintained receive credit under the policy. In the RY 2026 policy, a 5 percent improvement target over 4 years from 2022 to 2026 was approved.

Under the RY 2026 policy, hospitals have worse performance in the RRIP than has been seen in previous years and hospitals have raised whether using a static year to assess improvement (unlike other quality programs) is appropriate in general and whether CY 2022 is a representative year to use in particular. Members of PMWG expressed concern with the use of CY 2022 as the base period due to its historically low volumes and low readmission rate, which is illustrated in

Figure 7 below.[6] Staff agrees with the concerns expressed by the stakeholder workgroup and is recommending a blended base period of CY 2022 and CY 2023 for the RY 2027 policy and to apply this base period retroactively to the RY 2026 policy, which also uses CY 2022 as the base period. This recommendation is the only deviation from last year's approved policy. Future iterations of the policy, which will have to consider rebasing due to a new statewide improvement goal, may consider rebasing beyond CY 2022 and CY 2023

Figure 7. Statewide Case-Mix Adjusted Readmission Rate, CY 2018-2024 YTD
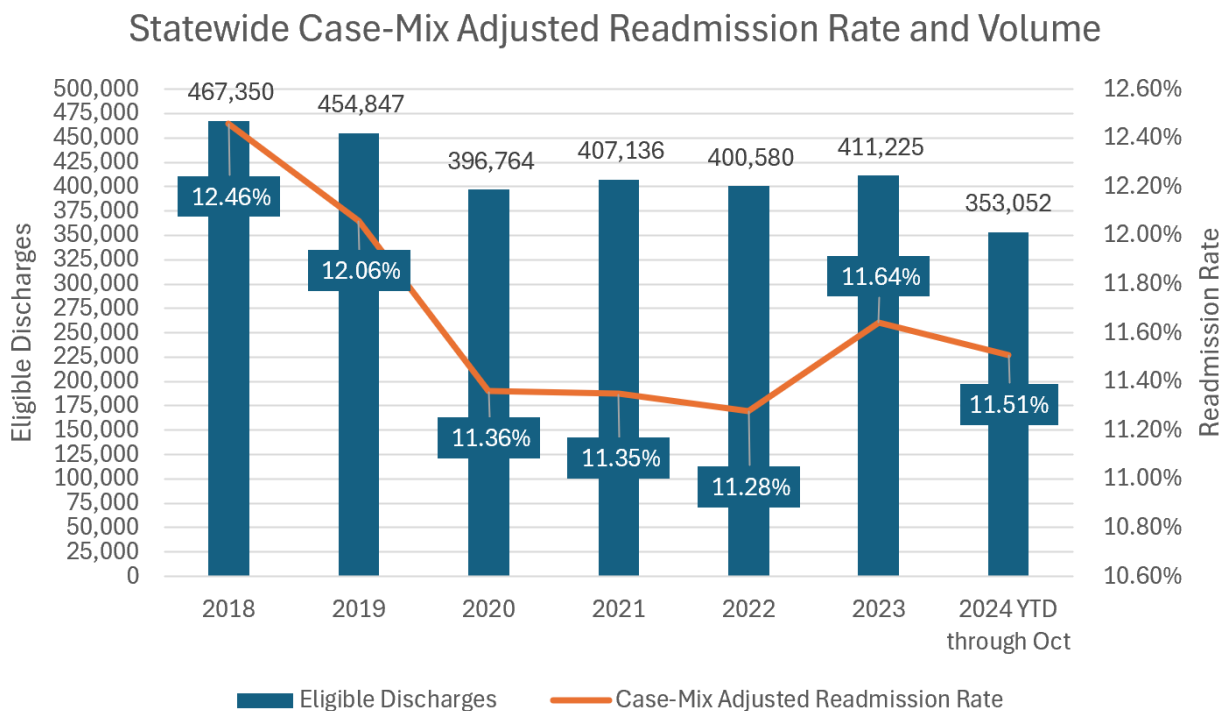


As shown below in Figure 8, both Maryland and the Nation experienced a degradation in readmission rates in CY 2023 on both an unadjusted and risk-adjusted basis. While both the Nation and the State saw a degradation in readmission rates from CY 2022 to CY 2023, the State saw a greater degradation while simultaneously performing worse than the Nation in both years, which led staff to reject the idea of moving the base period to CY 2023. Staff believes that blending CY 2022 and CY 2023 takes into account the secular degradation in readmission rates

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[6] Due to the COVID-19 PHE, CY 2020 readmission performance has not been evaluated in RRIP policies and therefore should not be considered as a potential base period.

that occurred in CY 2023 without excusing the worsening rates and poor performance compared to the Nation. Further, blending CY 2022 and CY 2023 for the base period provides more stable norms by using a longer time period to establish them; this approach was approved in the RY 2021 MHAC policy to address an identical concern of unstable rates.[7] Modelled revenue adjustments with base period of CY 2022 only and a blended two year base period for RY 2026 YTD and estimated RY 2027 are presented in Appendix II.

Figure 8. Maryland and National Readmissions Performance, Unadjusted and Risk-Adjusted[8]
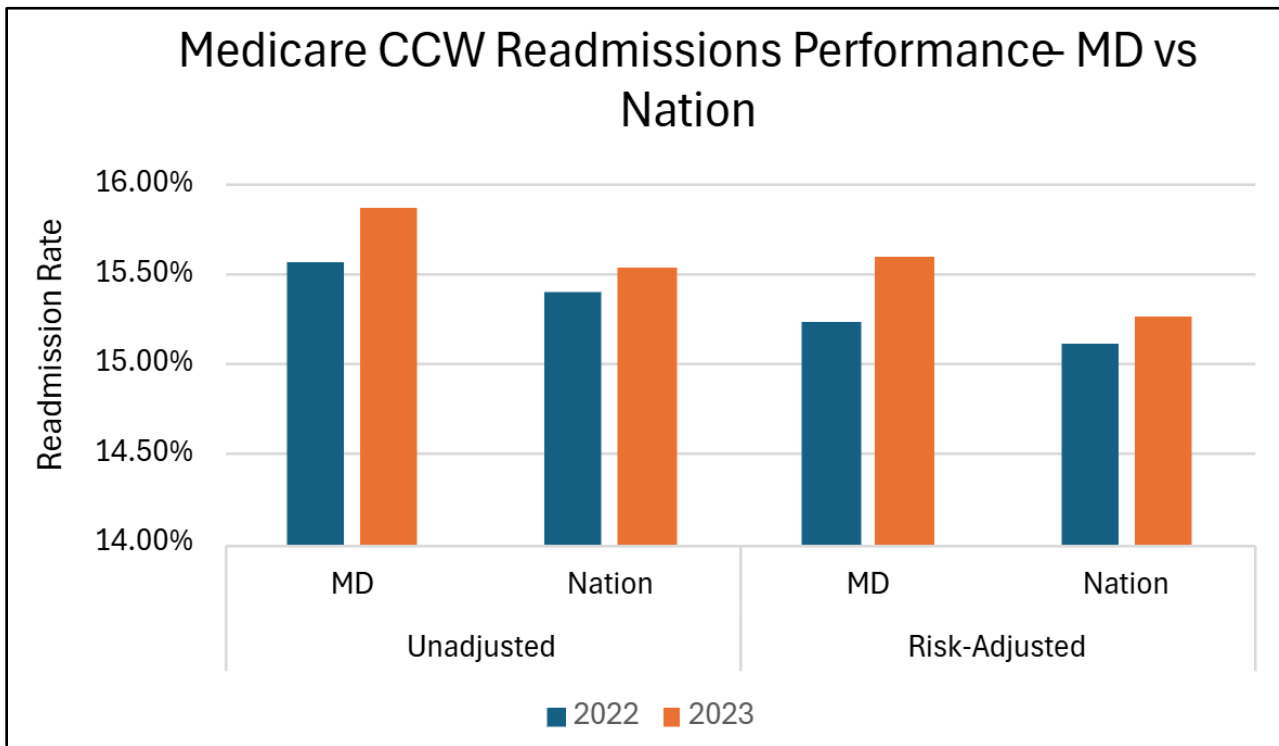


## Revisits to Emergency Department and Observation Stays

Improvement in readmission rates under the model should result in better patient experience. However, the current readmission measure only counts a readmission if the patient returns to the hospital and is admitted into an inpatient bed. Thus, revisits to the emergency department or for

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[7] RY 2021 MHAC Policy, two year base period decision is detailed on pages 20-21.
[8] The unadjusted readmission rates are provided monthly by CMMI. The risk-adjusted rates presented here are HSCRC calculated based on CCW data for all ages captured and risk-adjusted for 38 Elixhauser comorbidity flags (ICD-10 Version) and not the newer CMMI risk adjusted measure as we do not have 2024 readmission rates under this methodology.

an observation stay after an initial inpatient admission are not considered; revisits that occur after an initial or index ED visit or an observation stay are also not considered. This potentially has an impact on hospital throughput and ED boarding as ED hospital staff have anecdotally indicated that they are doing more testing and diagnostics in the ED that previously may have been done during the inpatient admission to determine whether an admission is really necessary. While this might be appropriate clinically, if these revisits represent quality of care or care coordination concerns, these are not being identified for payment incentives at this time (only exception is PAU, which includes observation stays >=24 hours as inpatient stays). When staff looked at this previously for just observation stays, we found that while readmission rates increased when observation stays were included, the correlation between the readmission rates with and without observation stays was 0.986 in 2018.  More recently, staff have been working with MPR to explore observation revisits on a risk-adjusted basis and continue to discuss with stakeholders and experts the clinical rationale for observation use.  Also, it should be noted that at this time the national program does not include observation stays in their readmission measures.  Thus for RY 2027, staff recommends that the RRIP readmission measure remain an inpatient only measure. However, staff is continuing to assess this issue to ensure that hospitals are not being rewarded for "gaming" through use of observation, discuss clinical and operational factors impacting patient status during revisits, and will continue to collaborate with CMMI to better understand observation use in Maryland.  As discussed below in the AHEAD section, the inclusion of observation is recommended by CMMI so staff will need to address this concern in the coming year.   .

### Excess Days in Acute Care (EDAC)

As discussed above, stakeholders remain concerned about emergency department and observation revisits, especially given the global budget incentives to avoid admissions.  Another approach for addressing this issue would be to adopt the Excess Days in Acute Care measure into payment.  The EDAC measure captures the number of days that a patient spends in the hospital within 30 days of discharge, and includes emergency department and observation stays by assigning ED visits a half-day length of stay and assigning observation hours rounded up to

half-day units.[9]  Staff have worked with our methodological contractor to adapt the Medicare Excess Days in Acute Care (EDAC) condition-specific measures to an all-cause, all-payer measure for potential program adoption in future years.  This work was completed and monitoring reports for this measure are posted on the CRISP portal on a monthly basis for hospital monitoring and input.  However, the EDAC measure has been criticized by some PMWG members because of the time element associated with the readmission.  Specifically, the concern is that  readmissions with a longer length of stay (which would represent worse performance) may indicate a less preventable readmission.  While staff will consider this concern, it could also be countered that a longer readmission represents a more serious quality of care issue from the initial admission.  As staff continue to assess observation revisits, EDAC should be monitored.

## Digital Measures/Electronic Clinical Quality Measure (eCQM)

Under the Inpatient Quality Reporting program, CMS transitioned from the claims-based 30-day Hospital Wide Readmission (HWR) measure to the digital Hybrid HWR measure.  Initially, the July, 1 2023-June 30, 2024 reporting of the hybrid measure for Medicare patients for Federal Fiscal Year 2026 payment year was mandatory; however, CMS shifted the requirement to be voluntary reporting, with mandatory reporting postponed to the July 2024 to June 2025 reporting period. The HWR 30-day readmission hybrid measure merges electronic health record data elements with a set of 13 Core Clinical Data Elements (CCDE) consisting of six vital signs and seven laboratory test results; hospitals must map these 13 CCDE to the patient electronic health record (EHR).  The claims and CCDE data are then submitted and used to calculate measure results.  For the initial year beginning July 1, 2023, HSCRC required hospitals to submit the hybrid HWR measure data to the State for Medicare patients. Beginning with July 1, 2024 discharges, Maryland expanded the measure submission to include all-payers and patients aged 18 and above. To prepare for this update, CRISP and Medisolv (CRISP's digital measure subcontractor) have updated the data collection infrastructure and are ready to receive data on the expanded measure with the first submission scheduled to begin in January 2025.  However, some hospitals and stakeholders have previously signaled that some hospitals' EHRs may not be ready to submit data on the expanded measure.  HSCRC staff will continue to monitor the issues voiced by

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[9] Additional information on the EDAC measures and methodology can be found here:
https://www.qualitynet.org/inpatient/measures/edac/methodology

hospitals and identify strategies as needed to progress on expansion of the Hybrid measure, and will also consider options for augmenting the RRIP all-payer measure with EHR data elements in the future.

## Reducing Disparities in Readmissions

Racial and socioeconomic differences in readmission rates are well documented[10,11] and have been a source of significant concern among healthcare providers and regulators for years. In Maryland, the 2018 readmission rate for Blacks was 2.6 percentage points higher than for whites, and the rate for Medicaid enrollees was 3.4 points higher than for other patients. A 2019 Annals of Internal Medicine paper co-authored by HSCRC staff[12] reported a 1.6 percent higher readmission rate for patients living in neighborhoods with increased deprivation. Maryland hospitals, as well as CMS and the Maryland Hospital Association, identify reduction in disparities as a key priority over the near term. Thus, staff developed and the Commission approved adding a within-hospital disparity gap improvement goal to the RRIP in RY2021.

Specifically, the RRIP within hospital disparity methodology assesses patient-level socioeconomic exposure using the Patient Adversity Index (PAI), a continuous measure that reflects exposure to poverty, structural racism, and neighborhood deprivation. As shown in Figure 9, the relationship between PAI and readmissions is then assessed for each hospital for the base and performance period, and improvements in the slope of the line or in the difference in readmission rates at two points on the line (e.g., PAI = 1 vs PAI = 0) are compared for the base and performance period to calculate improvement. Hospitals that improve on the within hospital disparity gap and improve on overall readmissions, are eligible for a scaled reward up to 0.50 percent of inpatient revenue. Additional information on the development of the within-hospital disparity metric can be found in the RY 2021 RRIP policy.[13]

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[10] Tsai TC, Orav EJ, Joynt KE. Disparities in surgical 30-day readmission rates for Medicare beneficiaries by race and site of care. *Ann Surg*. 2014;259(6):1086–1090. doi:10.1097/SLA.0000000000000326;
[11] Calvillo–King, Linda, et al. "Impact of social factors on risk of readmission or mortality in pneumonia and heart failure: systematic review." *Journal of general internal medicine* 28.2 (2013): 269-282.
[12] Jencks, Stephen F., et al. "Safety-Net hospitals, neighborhood disadvantage, and readmissions under Maryland's all-payer program: an observational study." Annals of internal medicine 171.2 (2019): 91-98.

[13] RY 2021 RRIP Policy

Figure 9. Hypothetical Example of Relationship between PAI and Readmission Rates
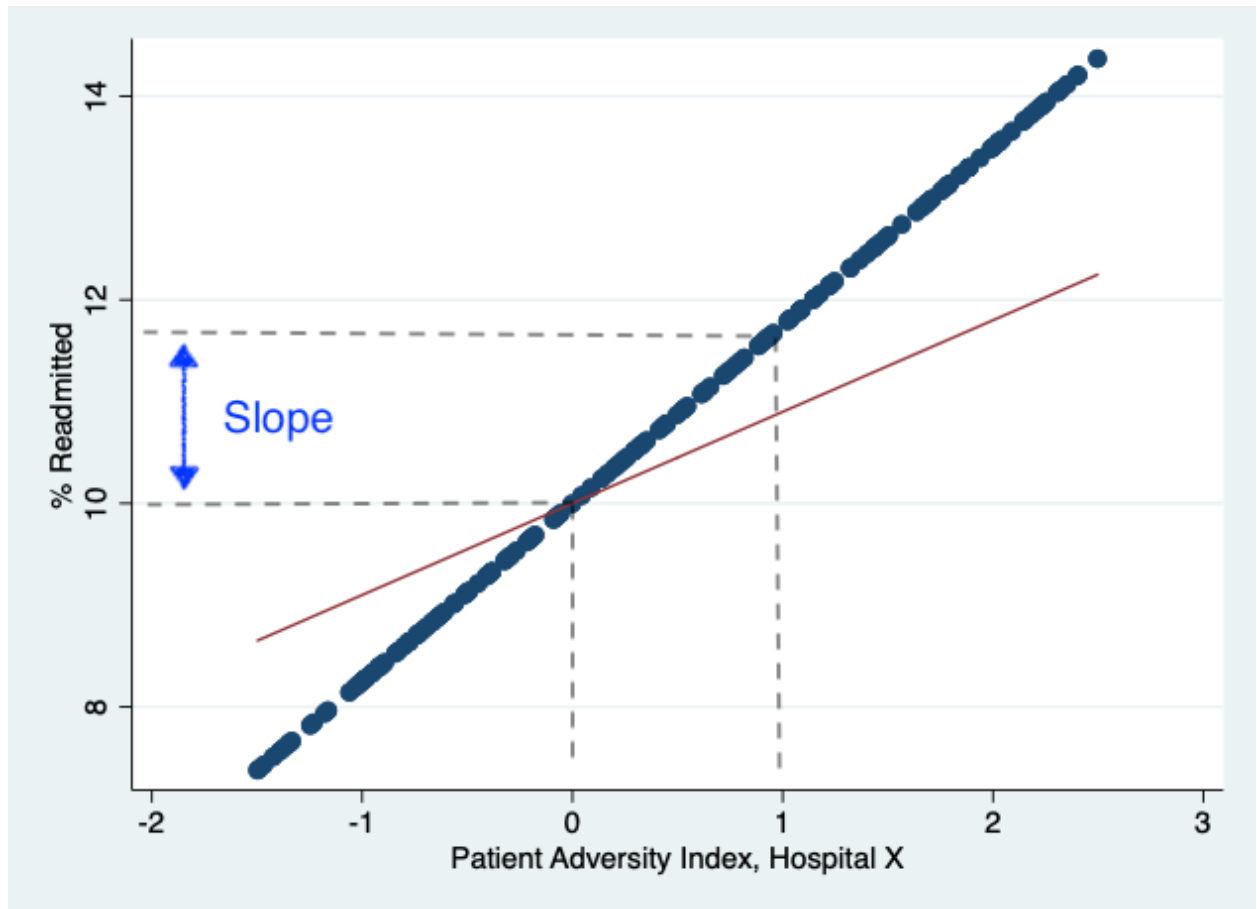


The RRIP disparity gap improvement goal was set through the end of the TCOC model (CY2026) and aligns with one of the goals in the Statewide Integrated Improvement Strategy.  The SIHIS goal is to have half of eligible hospitals achieve a 50 percent reduction in readmission disparities. CY 2023 data shows that 22 hospitals saw a reduction in their within-hospital disparities in readmissions, ranging from a 0.55% reduction to a 34.87% reduction, compared to CY 2018. Through the RY2025 RRIP-Disparity Gap Program (CY 2023 performance), scaled rewards were provided to two of these hospitals for reducing their disparities in readmissions by the required

minimum of 29.29 percent while simultaneously reducing their overall readmission rate; the range of revenue adjustments was 0.27 percent to 0.32 percent for a statewide total of about $1.8 million in rewards.

The State remains committed to ensuring hospitals are advancing health equity by continuing to financially incentivize reductions in disparities through the Readmissions Reduction Incentive Program (RRIP) policy and other policies. The ability to set hospital payment incentives specifically for advancing health equity is an important hallmark of the TCOC Model and exemptions from national quality programs.  In the RY 2026 Quality Based Reimbursement program, this disparity gap methodology was adapted to the Timely Follow-Up post hospitalization measure and the Commission approved financial incentives for reductions in disparities in follow up for Medicare patients.

For RY 2027, the RRIP disparity gap draft recommendation uses the previously calculated improvement targets pushed forward to CY 2025 performance.


## AHEAD Model Considerations

The AHEAD model will begin on January 1st, 2026.  As part of the AHEAD model, the state must set Statewide Quality and Equity targets for five mandatory domains and one optional domain.  As shown in Table 1 below, CMMI has provided recommended measures for each of the domains. Within the Utilization and Quality Domain, CMMI has recommended readmissions as the measure and at this time the HSCRC and MDH are not proposing a different area of focus for this domain (i.e., State is in agreement to focus on readmissions).  However, CMMI has specifically recommended that the National Committee for Quality Assurance's Plan All-Cause Readmission (NCQA PCR) measure be used by AHEAD states to assess statewide performance over the 9-year model.  Currently, HSCRC staff are working with Maryland Department of Health, Maryland Commission on Health Equity's Data Advisory Committee, and contractors to review the NCQA PCR measure specifications in comparison to the RRIP, CMS HWR measure, and the current CMMI developed readmission measure for MD.  Based on this assessment, the state will need to pick a readmission measure and develop biannual statewide targets for improvement.  The NCQA readmission measure differs from the RRIP and HWR measure in that it includes observation

stays as eligible for a readmission and as a readmission from inpatient. Other differences include differences in inclusion/exclusion criteria and risk adjustment approach. In addition, the data source (claims from payers, HSCRC case-mix) for calculating the readmission measure needs to be determined. Currently staff plan to assess whether it is feasible to use the NCQA specifications with the HSCRC case-mix data and if modifications would need to be made. Staff are also working to compare Medicare results using claims versus HSCRC case mix data. The advantage of using HSCRC case mix data is that it is more timely than claims and is thus used for RRIP so that hospitals can monitor progress during the performance year. However, CMMI will need to approve any measure adaptations to the NCQA readmission measure, including changes to the type of data used to calculate the measure, or approve the use of an alternative measure for this domain through the process outlined in the CMMI contract with Maryland. Ultimately, the staff believes that the RRIP measure and goals should be aligned with the statewide targets as much as possible, while recognizing there may be reasons to have a more aggressive hospital target (e.g., front loading of improvement, need to ensure statewide target is met). Thus, in future years, staff recommends that the RRIP policy be updated to provide as much alignment as possible, set goals for hospitals to try and ensure that the statewide improvement goal is met, while maintaining the ability to provide hospitals with performance results during the performance period.

Table 1.

|  | Domain | Measure |
|---|---|---|
| 1 | Population Health | <ul><li>CDC HRQOL- 4 Health Days Core Module</li></ul> |
| 2 | Prevention and Wellness<br>*Choose at least 1 measure* | <ul><li>Colorectal Cancer Screening (CCS-AD)</li><li>Breast Cancer Screening: Mammography (BCS-AD)</li></ul> |
| 3 | Chronic Conditions<br>*Choose at least 1 measure* | <ul><li>Controlling High Blood Pressure (CBP-AD)</li><li>Hemoglobin A1c Control for Patients with Diabetes (HBDAD)</li></ul> |
| 4 | Behavioral Health | <ul><li>Use of Pharmocotheraphy for Opioid</li></ul> |

| | | |
|---|---|---|
| | *Choose at least 1 measure* | Use Disorder<br>● Antidepressant Medication Management (AMMAD)<br>● Follow-Up After Hospitalization for Mental Illness (FUHAD)<br>● Follow-Up After ED Visit for Substance Use |
| 5 | Health Care Quality and Utilization | ● Plan All-Cause Unplanned Readmission (PCRAD) |
| | *Must choose at least 1 focus area* | |
| 6 | Focus Area 1- Maternal Health Outcomes<br>*Choose at least 1 measure* | ● Live Births Weighing Less Than 2500 Grams (LBWCH)<br>● Prenatal and Postpartum Care: Postpartum care (PPC-AD) |
| | Focus Area 2- Prevention Measures<br>*Choose at least 1 measure* | ● Adult Immunization Status<br>● Prevalence of Obesity<br>● Medical Assistance with Smoking and Tobacco Use Cessation (MSC)<br>● ED Visits for Alcohol and Substance Use Disorders |
| | Focus Area 3- Social Drivers of Health<br>*Choose at least 1 measure* | ● Food Insecurity<br>● Housing Quality |

# Recommendations

These are the draft recommendation for the Maryland Rate Year (RY) 2026 Readmission Reduction Incentives Program (RRIP):

1. Maintain the all-payer, 30-day, all-cause readmission measure.
2. Improvement Target - Maintain the statewide 4-year improvement target of -5.0 percent through 2026 with a blended base period of CY 2022 and CY 2023
3. Retroactively apply a blended base period of CY 2022 and CY 2023 to the RY 2026 policy

4. Attainment Target - Maintain the attainment target whereby hospitals at or better than the 65th percentile of statewide performance receive scaled rewards for maintaining low readmission rates.
5. Maintain maximum rewards and penalties at 2 percent of inpatient revenue.
6. Provide additional payment incentive (up to 0.50 percent of inpatient revenue) for reductions in within-hospital readmission disparities. Scale rewards:
    a. beginning at 0.25 percent of IP revenue for hospitals on pace for 50 percent reduction in disparity gap measure over 8 years, and;
    b. capped at 0.50 percent of IP revenue for hospitals on pace for 75 percent or larger reduction in disparity gap measure over 8 years.
7. Monitor emergency department and observation revisits by adjusting readmission measure and through all-payer Excess Days in Acute Care measure.  Consider future inclusion of revisits of EDAC in the RRIP program.
8. Update the RRIP policy in future years to align with statewide AHEAD model goals for readmissions.

# Appendix I. RRIP Readmission Measure and Revenue Adjustment Methodology

## Introduction: RRIP Redesign Subgroup

As part of the ongoing evolution of the All-Payer Model's pay-for-performance programs to further bring them into alignment under the Total Cost of Care Model, HSCRC convened a work group to evaluate the Readmission Reduction Incentive Program (RRIP). The work group consisted of stakeholders, subject matter experts, and consumers, and met six times between February and September 2019. The work group focused on the following six topics, with the general conclusions summarized below:

1. Analysis of Case-mix Adjustment and trends in Eligible Discharges over time to address concern of limited room for additional improvement;
   - Case-mix adjustment acknowledges increased severity of illness over time
   - Standard Deviation analysis of Eligible Discharges suggests that further reduction in
   - readmission rates is possible
2. National Benchmarking of similar geographies using Medicare and Commercial data;
   - Maryland Medicare and Commercial readmission rates and readmissions per capita are on par with the nation
3. Updates to the existing All-Cause Readmission Measure;
   - Remove Eligible Discharges that left against medical advice (~7,500 discharges)
   - Include Oncology Discharges with more nuanced exclusion logic
   - Analyze out-of-state ratios for other payers as data become available
4. Statewide Improvement and Attainment Targets under the TCOC Model;
   - 7.5 percent Improvement over 5 years (2018-2023)
   - Ongoing evaluation of the attainment threshold at 65th percentile
5. Social Determinants of Health and Readmission Rates; and
   - Methodology developed to assess within-hospital readmission disparities
6. Alternative Measures of Readmissions
   - Further analysis of per capita readmissions as broader trend; not germane to the RRIP policy because focus of evaluation is clinical performance and care management post-discharge
   - Observation trends under the All-Payer Model to better understand performance given variations in hospital observation use; future development will focus on incorporation of Excess Days in Acute Care (EDAC) measure in lieu of including observations in RRIP policy
   - Electronic Clinical Quality Measure (eCQM) may be considered in future to improve risk adjustment

## Methodology Steps

**1) Performance Metric**

The methodology for the Readmissions Reduction Incentive Program (RRIP) measures performance using the 30-day all-payer all hospital (both intra- and inter-hospital) readmission rate with adjustments for patient severity (based upon discharge all-patient refined diagnosis-related group severity of illness [APR-DRG SOI]) and planned admissions.[14]  Unique patient identifiers from CRISP are used to be able to track patients across hospitals for readmissions.

The measure is similar to the readmission rate that is calculated by CMMI to track Maryland performance versus the nation, with some exceptions. The most notable exceptions are that the HSCRC measure includes psychiatric patients in acute care hospitals, and readmissions that occur at specialty hospitals.  In comparing Maryland's Medicare readmission rate to the national readmission rate, the Centers for Medicare & Medicaid Services (CMS) will calculate an unadjusted readmission rate for Medicare beneficiaries. Since the Health Services Cost Review Commission (HSCRC) measure is for hospital-specific payment purposes, an additional adjustment is made to account for differences in case-mix. See below for details on the readmission calculation for the RRIP program.

**2) Inclusions and Exclusions in Readmission Measurement**
- Planned readmissions are excluded from the numerator based upon the CMS Planned Readmission Algorithm V. 4.0. The HSCRC has also added all vaginal and C-section deliveries and rehabilitation as planned using the APR-DRGs, rather than principal diagnosis.[15] Planned admissions are counted as eligible discharges in the denominator, because they could have an unplanned readmission.
- Discharges for newborn APR-DRG are removed.[16]
- Exclude bone marrow transplants and liquid tumor patients by making these discharges not eligible to have an unplanned readmission or count as an unplanned readmission.[17]
- Exclude patients with a discharge disposition of Left Against Medical Advice (PAT_DISP = 71, 72, or 73 through FY 2018; 07 FY 2019 onward)
- Rehabilitation cases as identified by APR-860 (which are coded under ICD-10 based on type of daily service) are marked as planned admissions and made ineligible for readmission after readmission logic is run.
- Admissions with ungroupable APR-DRGs (955, 956) are not eligible for a readmission, but can be a readmission for a previous admission.

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[14] Planned admissions defined under [CMS Planned Admission Logic version 4 – updated March 2018].

[15] **Rehab** DRGs: 540, 541, 542, 560, and 860; **OB Deliveries and Associated DRGs**: 580, 581, 583, 588, 589, 591, 593, 602, 603, 607, 608, 609, 611, 612, 613, 614, 621, 622, 623, 625, 626, 630, 631, 633, 634, 636, 639, 640, and 863.

[16] **Newborn APR-DRGs:** 580, 581, 583, 588, 589, 591, 593, 602, 603, 607, 608, 609, 611, 612, 613, 614, 621, 622, 623, 625, 626, 630, 631, 633, 634, 636, 639, 640, and 863.

[17] **Bone Marrow Transplant:**  Diagnosis code Z94.81 or CCS Procedure code 64; **Liquid Tumor:** Diagnosis codes C81.00-C96.0.  See section below for additional details on the oncology logic.

- APR-DRG-SOI categories with less than two discharges statewide are removed.
- A hospitalization within 30 days of a hospital discharge where a patient dies is counted as a readmission; however, the readmission is removed from the denominator because the case is not eligible for a subsequent readmission.
- Admissions that result in transfers, defined as cases where the discharge date of the admission is on the same or next day as the admission date of the subsequent admission, are removed from the denominator. Thus, only one admission is counted in the denominator, and that is the admission to the transfer hospital (unless otherwise ineligible, i.e., died). It is the second discharge date from the admission to the transfer hospital that is used to calculate the 30-day readmission window.
- Beginning in RY 2019, HSCRC started discharges from chronic beds within acute care hospitals.
- In addition, the following data cleaning edits are applied:
  - Cases with null or missing CRISP unique patient identifiers (EIDs) are removed.
  - Duplicates are removed.
  - Negative interval days are removed.
    HSCRC staff is revising case-mix data edits to prevent submission of duplicates and negative intervals, which are very rare. In addition, CRISP EID matching benchmarks are closely monitored. Currently, hospitals are required to make sure 99.5 percent of inpatient discharges have a CRISP EID.

**Additional Details on Oncology Logic:**

Flow Chart for Revised Oncology Logic
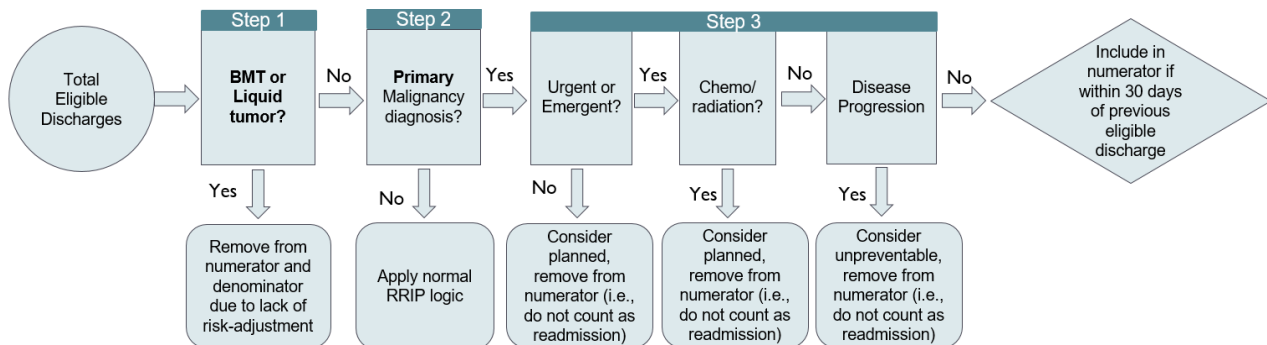


*Items that are **bolded** are adaptations from NQF measure

This updated logic replaces the RY 2021 measure logic that removes all oncology DRGs from the dataset, such that an admission with an oncology DRG cannot count as a readmission or be eligible to have a readmission.

**Step 1:** Exclude discharges where patients have a bone marrow transplant procedure, bone marrow transplant related diagnosis code, or liquid tumor diagnosis. This logic varies from the NQF cancer hospital measure which risk-adjusts for bone marrow transplant and liquid tumors. HSCRC staff recommended removing these discharges (similar to current DRG exclusion) because the current indirect standardization approach did not allow for additional risk-adjustment but based on conversations with clinicians staff agreed these cases were significantly more complicated and at-risk for an unpreventable readmission.

**Step 2:** Flag discharges with a primary malignancy diagnosis to apply cancer specific logic for determining readmissions. This varies from the NQF cancer hospital measure that flags patients with primary or secondary malignancy diagnosis being treated in a cancer specific hospital. Staff think we should only flag those with a primary diagnosis since in a general acute care hospital there may be differences in the types of patients with a secondary malignancy diagnosis. Further, we remove the bone marrow and liquid tumor discharges regardless of malignancy diagnosis, thus ensuring the most severe cases are removed. Last, our initial analyses did not show a large impact on overall hospital rates when primary vs primary and secondary malignancies were flagged. It should be noted however that the current modeling in this policy uses readmission rates where both primary and secondary are flagged.

**Step 3:** Flag planned admissions using additional criteria beyond the CMS planned admission logic:

   a) Nature of admission of urgent or emergent considered unplanned, all other nature of admission statuses are planned
   b) Any admission with primary diagnosis of chemotherapy or radiation is considered planned
   c) Any admission with primary diagnosis of metastatic cancer is not considered preventable, and thus gets excluded from being a readmission

In step 3, admissions are deemed not eligible to be a readmission but they are eligible to have a subsequent unplanned readmission.

**3) Details on the Calculation of Case-Mix Adjusted Readmission Rate**

**Data Source:**
To calculate readmission rates for RRIP, inpatient abstract/case-mix data with CRISP EIDs (so that patients can be tracked across hospitals) are used for the measurement period, with an additional 30 day runout. To calculate the case-mix adjusted readmission rate for CY 2023 performance period, data from January 1 through December 31, plus 30 days in January of the next year are used. CY 2022 data are used to calculate the normative values, which are used to determine a hospital's expected readmissions, as detailed below.

Please note that, the base year readmission rates are not "locked in", and may change if there are CRISP EID or other data updates. The HSCRC does not anticipate changing the base period data, and does not anticipate that any EID updates will change the base period data significantly; however, the HSCRC has decided the most up-to-date data should be used to measure improvement. For the performance period, the CRISP EIDs are updated throughout the year, and thus, month-to-month results may change based on changes in EIDs.

**SOFTWARE:** APR-DRG Version 42 for CY 2018-CY 2025.

**Calculation:**

Case-Mix Adjusted        (Observed Readmissions)
Readmission Rate =        ----------------------------------        * Statewide Base Year
Readmission Rate                (Expected Readmissions)

**Numerator:** Number of observed hospital-specific unplanned readmissions.

**Denominator**: Number of expected hospital specific unplanned readmissions based upon discharge APR-DRG and Severity of Illness. See below for how to calculate expected readmissions, adjusted for APR-DRG SOI.

**Risk Adjustment Calculation:**
Calculate the Statewide Readmission Rate without Planned Readmissions.

- o  Statewide Readmission Rate = Total number of readmissions with exclusions removed / Total number of hospital discharges with exclusions removed.

For each hospital, enumerate the number of observed, unplanned readmissions.

For each hospital, calculate the number of expected unplanned readmissions at the APR-DRG SOI level (see Expected Values for description). For each hospital, cases are removed if the discharge APR-DRG and SOI cells have less than two total cases in the base period data.

Calculate at the hospital level the ratio of observed (O) readmissions over expected (E) readmissions. A ratio of > 1 means that there were more observed readmissions than expected, based upon a hospital's case-mix. A ratio of < 1 means that there were fewer observed readmissions than expected based upon a hospital's case-mix.

Multiply the O/E ratio by the base year statewide rate, which is used to get the case-mix adjusted readmission rate by hospital. Multiplying the O/E ratio by the base year state rate converts it into a readmission rate that can be compared to unadjusted rates and case-mix adjusted rates over time.

**Expected Values:**
The expected value of readmissions is the number of readmissions a hospital would have experienced had its rate of readmissions been identical to that experienced by a reference or normative set of hospitals,

given its mix of patients as defined by discharge APR-DRG category and SOI level. Currently, HSCRC is using state average rates as the benchmark.

The technique by which the expected number of readmissions is calculated is called indirect standardization. For illustrative purposes, assume that every discharge can meet the criteria for having a readmission, a condition called being "eligible" for a readmission. All discharges will either have zero readmissions or will have one readmission. The readmission rate is the proportion or percentage of admissions that have a readmission.

The rates of readmissions in the normative database are calculated for each APR-DRG category and its SOI levels by dividing the observed number of readmissions by the total number of eligible discharges. The readmission norm for a single APR-DRG SOI level is calculated as follows:

Let:

N = norm
P = Number of discharges with a readmission
D = Number of eligible discharges
i = An APR DRG category and a single SOI level

$$N_i = \frac{P_i}{D_i}$$

For this example, the expected rate is displayed as readmissions per discharge to facilitate the calculations in the example. Most reports will display the expected rate as a rate per one thousand.

Once a set of norms has been calculated, the norms are applied to each hospital's DRG and SOI distribution. In the example below, the computation presents expected readmission rates for a single diagnosis category and its four severity levels. This computation could be expanded to include multiple diagnosis categories, by simply expanding the summations.

Consider the following example for a single diagnosis category.

| A Severity of Illness Level | B Eligible Discharges | C Discharges with Readmission | D Readmissions per Discharge (C/B) | E Normative Readmissions per Discharge | F Expected # of Readmissions (A*E) |
|---|---|---|---|---|---|
| 1 | 200 | 10 | .05 | .07 | 14.0 |
| 2 | 150 | 15 | .10 | .10 | 15.0 |
| 3 | 100 | 10 | .10 | .15 | 15.0 |
| 4 | 50 | 10 | .20 | .25 | 12.5 |
| Total | 500 | 45 | .09 | | 56.5 |

For the diagnosis category, the number of discharges with a readmission is 45, which is the sum of discharges with readmissions (column C). The overall rate of readmissions per discharge, 0.09, is calculated by dividing the total number of eligible discharges with a readmission (sum of column C) by the total number of discharges at risk for readmission (sum of column B), i.e., 0.09 = 45/500. From the normative population, the proportion of discharges with readmissions for each severity level for that diagnosis category is displayed in column E. The expected number of readmissions for each severity level shown in column F is calculated by multiplying the number of eligible discharges (column B) by the normative readmissions per discharge rate (column E) The total number of readmissions expected for this diagnosis category is the sum of the expected numbers of readmissions for the 4 severity levels.

In this example, the expected number of readmissions for this diagnosis category is 56.5, compared to the actual number of discharges with readmissions of 45. Thus, the hospital had 11.5 fewer actual discharges with readmissions than were expected for this diagnosis category. This difference can also be expressed as a percentage or the O/E ratio.

4) **Revenue Adjustment Methodology**

The RRIP assesses improvement in readmission rates from base period, and attainment rates for the performance period with an adjustment for out-of-state readmissions. The policy then determines a hospital's revenue adjustment for improvement and attainment and takes the better of the two revenue adjustments, with scaled rewards of up to 2 percent of inpatient revenue and scaled penalties of up to 2 percent of inpatient revenue. The figure below provides a high level overview of the RY 2026 RRIP methodology for reference.

## 30-day, All-Cause Readmission Measure

Measure Includes:
Readmissions within 30 days of Acute Case Discharge:
- All-Payer
- All-Cause
- All-Hospital (both intra- and inter- hospital)
- Chronic Beds
- IP-Psych and Specialty Hospitals
- Adult Oncology Discharges

Global Exclusions:
- Planned Admissions
- Same-day and Next-day Transfers
- Rehab Hospitals
- Discharges leaving Against Medical Advice
- Deaths
- Pediatric Oncology Discharges

## Case-Mix Adjustment

Performance Measure: CY 2024 Case-mix Adjusted Readmission Rate, adjusted for out-of-state readmissions (Attainment); Reduction in Case-mix Adjusted Readmission Rate from Base Period (Improvement)

Case-mix Adjustment:
Expected number of unplanned readmissions for each hospital are calculated using the discharge APR-DRG and severity of illness (SOI).

*Observed Unplanned Readmissions / Expected Unplanned Readmissions ∗ Statewide Readmission Rate*

CY2022 used to calculate statewide averages (normative values), as well as attainment benchmark/threshold

## Revenue Adjustments

Hospital RRIP revenue adjustments are based on the better of attainment or improvement, scaled between the Max Reward and Max Penalty.

Scores Range from Max Penalty -2% & Reward+2%

| All Payer Readmission Rate Change CY22-24 | % IP Revenue Payment Adjustment |
|---|---|
| A | B |
| Improving | 2.00% |
| -19.79% | 2.00% |
| -11.16% | 1.00% |
| Target -2.53% | 0.00% |
| 6.10% | -1.00% |
| 14.73% | -2.00% |
| Worsening | -2.00% |

Improvement

| All Payer Readmission Rate CY24 | | RRIP % Inpatient Revenue |
|---|---|---|
| Lower Readmission Rate | | 2.0% |
| Benchmark | 9.17% | 2.00% |
| | 10.09% | 1.00% |
| Threshold | 11.02% | 0.00% |
| | 11.95% | -1.00% |
| | 12.87% | -2.00% |
| Higher Readmission Rate | | -2.0% |

Attainment

## Patient Adversity Index (PAI)

The PAI measure is continuous index of readmission risk based on the following patient factors:
- Medicaid status
- Race (Black vs. Non-Black)
- Area Deprivation Index Percentile

## Within Hospital Disparity Gap

Within hospital disparity gap is calculated by a regression model that estimates the slope of PAI at each hospital after controlling for:
- Age
- Gender
- APR-DRG readmission risk

## Disparity Gap Revenue Adjustments

Reward only, scaled from 0.25-0.50%:

| Disparity Gap Change CY 2018-2024 | RRIP % Inpatient Rev. |
|---|---|
| On pace for 50% Reduction Gap in 8 Years | 0.25% |
| On pace for 75% Reduction Gap in 8 Years | 0.50% |

# Appendix II. Modelled RY 2026 and RY 2027 Revenue Adjustments

## RY 2026 YTD Modelled Revenue Adjustments, CY 2022 Base Period vs CY 2022 & 2023 Base Period

| HOSPITAL ID | HOSPITAL NAME | FY 24 Estimated Permanent Inpatient Revenue** | CY 2022 Base — Modelled Adjustment | | | CY22/23 Blended Base — Modelled Adjustment | | |
|---|---|---|---|---|---|---|---|---|
| | | | $ Better of Attainment or Improvement | RY 26 Prelim % Revenue Adjustment | Revenue Adjustment Based on Improvement or Attainment | $ Better of Attainment or Improvement | RY 25 Prelim % Revenue Adjustment | Revenue Adjustment Based on Improvement or Attainment |
| 210001 | Meritus | $251,995,786 | -$2,696,355 | -1.07% | Imp | -$2,393,960 | -0.95% | Imp |
| 210002 | UMMS- UMMC | $1,473,072,120 | -$13,846,878 | -0.94% | Att | -$5,450,367 | -0.37% | Att |
| 210003 | UMMS- Capital Region | $309,492,831 | -$680,884 | -0.22% | Imp | $464,239 | 0.15% | Att |
| 210004 | Trinity - Holy Cross | $413,940,590 | -$4,346,376 | -1.05% | Imp | -$3,684,071 | -0.89% | Imp |
| 210005 | Frederick | $254,562,530 | -$381,844 | -0.15% | Imp | -$1,603,744 | -0.63% | Imp |
| 210008 | Mercy | $220,664,524 | -$3,199,636 | -1.45% | Imp | -$2,030,114 | -0.92% | Imp |
| 210009 | JHH- Johns Hopkins | $1,818,903,395 | -$5,274,820 | -0.29% | Imp | -$3,637,807 | -0.20% | Imp |
| 210011 | St. Agnes | $254,764,484 | $1,120,964 | 0.44% | Imp | -$101,906 | -0.04% | Imp |
| 210012 | Lifebridge- Sinai | $519,012,883 | -$4,982,524 | -0.96% | Imp | -$4,515,412 | -0.87% | Imp |
| 210015 | MedStar- Franklin Square | $371,862,302 | -$6,544,777 | -1.76% | Imp | -$4,536,720 | -1.22% | Att |
| 210016 | Adventist- White Oak | $242,890,872 | -$922,985 | -0.38% | Imp | -$48,578 | -0.02% | Imp |
| 210017 | Garrett | $28,988,189 | -$579,764 | -2.00% | Att | -$579,764 | -2.00% | Att |
| 210018 | MedStar- Montgomery | $96,052,028 | -$1,258,282 | -1.31% | Att | -$1,181,440 | -1.23% | Att |
| 210019 | Tidal- Peninsula | $350,375,491 | $4,169,468 | 1.19% | Imp | $4,134,431 | 1.18% | Imp |
| 210022 | JHH- Suburban | $249,484,035 | -$99,794 | -0.04% | Imp | $948,039 | 0.38% | Imp |
| 210023 | Luminis- Anne Arundel | $367,930,454 | -$2,943,444 | -0.80% | Imp | -$3,164,202 | -0.86% | Imp |
| 210024 | MedStar- Union Mem | $267,917,283 | -$3,188,216 | -1.19% | Imp | -$1,366,378 | -0.51% | Imp |
| 210027 | Western Maryland | $183,379,829 | -$696,843 | -0.38% | Imp | -$825,209 | -0.45% | Imp |
| 210028 | MedStar- St. Mary's | $100,479,485 | $1,969,398 | 1.96% | Imp | $1,406,713 | 1.40% | Imp |
| 210029 | JHH- Bayview | $471,786,218 | -$2,736,360 | -0.58% | Imp | -$3,208,146 | -0.68% | Imp |
| 210030 | UMMS- Chestertown | $7,562,394 | $151,248 | 2.00% | Att | $151,248 | 2.00% | Att |
| 210032 | ChristianaCare, Union | $84,802,922 | $678,423 | 0.80% | Imp | $474,896 | 0.56% | Imp |
| 210033 | Lifebridge- Carroll | $162,844,959 | -$602,526 | -0.37% | Imp | -$65,138 | -0.04% | Imp |
| 210034 | MedStar- Harbor | $128,234,465 | -$1,782,459 | -1.39% | Imp | -$1,141,287 | -0.89% | Imp |
| 210035 | UMMS- Charles | $97,586,229 | $800,207 | 0.82% | Imp | $985,621 | 1.01% | Imp |
| 210037 | UMMS- Easton | $123,617,439 | $2,472,349 | 2.00% | Att | $2,027,326 | 1.64% | Att |
| 210038 | UMMS- Midtown | $140,418,656 | -$688,051 | -0.49% | Imp | $224,670 | 0.16% | Imp |
| 210039 | Calvert | $80,925,064 | -$517,920 | -0.64% | Att | -$388,440 | -0.48% | Att |
| 210040 | Lifebridge- Northwest | $160,861,387 | -$1,672,958 | -1.04% | Imp | -$1,045,599 | -0.65% | Imp |
| 210043 | UMMS- BWMC | $325,584,009 | -$4,558,176 | -1.40% | Imp | -$3,190,723 | -0.98% | Imp |
| 210044 | GBMC | $263,774,655 | $105,510 | 0.04% | Att | $184,642 | 0.07% | Att |
| 210048 | JHH- Howard County | $220,287,562 | $704,920 | 0.32% | Imp | $594,776 | 0.27% | Imp |
| 210049 | UMMS-Upper Chesapeake | $236,862,562 | -$3,766,115 | -1.59% | Imp | -$2,108,077 | -0.89% | Att |
| 210051 | Luminis- Doctors | $187,232,106 | $1,142,116 | 0.61% | Att | $1,479,134 | 0.79% | Att |
| 210056 | MedStar- Good Sam | $186,628,391 | $1,772,970 | 0.95% | Imp | $1,343,724 | 0.72% | Imp |
| 210057 | Adventist- Shady Grove | $333,973,100 | -$4,341,650 | -1.30% | Att | -$2,104,031 | -0.63% | Att |
| 210058 | UMROI | $80,968,088 | -$59,512 | -0.07% | Att | -$1,295,489 | -1.60% | Att |
| 210060 | Adventist-Ft. Washington | $37,782,970 | -$226,698 | -0.60% | Imp | -$298,485 | -0.79% | Imp |
| 210061 | Atlantic General | $47,434,007 | -$588,182 | -1.24% | Att | -$493,314 | -1.04% | Att |
| 210062 | MedStar- Southern MD | $210,921,411 | $1,708,463 | 0.81% | Imp | $1,919,385 | 0.91% | Imp |
| 210063 | UMMS- St. Joe | $292,568,045 | -$672,907 | -0.23% | Imp | -$1,960,206 | -0.67% | Imp |
| 210064 | Lifebridge- Levindale | $68,147,842 | $1,362,957 | 2.00% | Att | $1,362,957 | 2.00% | Att |
| 210065 | Trinity - Holy Cross Germantown | $94,710,748 | -$331,488 | -0.35% | Imp | -$227,306 | -0.24% | Imp |
| STATEWIDE | | $11,821,284,339 | -$56,029,431 | | | -$34,944,112 | | |
| Penalty | | | -$74,188,424 | | | -$52,645,913 | | |
| Reward | | | $18,158,993 | | | $17,701,801 | | |

# RY 2027 Modelled Revenue Adjustments, CY 2022 Base Period vs CY 2022 & 2023 Base Period

| HOSPITAL ID | HOSPITAL NAME | FY 24 Estimated Permanent Inpatient Revenue** | CY 2022 Base — Final Adjustment: $ Better of Attainment or Improvement | RY 26 Prelim % Revenue Adjustment | Revenue Adjustment Based on Improvement or Attainment | CY 2022/23 Blended Base — Final Adjustment: $ Better of Attainment or Improvement | RY 25 Prelim % Revenue Adjustment | Revenue Adjustment Based on Improvement or Attainment |
|---|---|---|---|---|---|---|---|---|
| 210001 | Meritus | $251,995,786 | -$3,049,149 | -1.21% | Imp | -$2,746,754 | -1.09% | Imp |
| 210002 | UMMS- UMMC | $1,473,072,120 | -$16,351,101 | -1.11% | Att | -$7,365,361 | -0.50% | Att |
| 210003 | UMMS- Capital Region | $309,492,831 | -$1,145,123 | -0.37% | Imp | $123,797 | 0.04% | Att |
| 210004 | Trinity - Holy Cross | $413,940,590 | -$4,925,893 | -1.19% | Imp | -$4,304,982 | -1.04% | Imp |
| 210005 | Frederick | $254,562,530 | -$763,688 | -0.30% | Imp | -$1,934,675 | -0.76% | Att |
| 210008 | Mercy | $220,664,524 | -$3,530,632 | -1.60% | Imp | -$2,339,044 | -1.06% | Imp |
| 210009 | JHH- Johns Hopkins | $1,818,903,395 | -$8,003,175 | -0.44% | Imp | -$6,184,272 | -0.34% | Imp |
| 210011 | St. Agnes | $254,764,484 | $764,293 | 0.30% | Imp | -$458,576 | -0.18% | Imp |
| 210012 | Lifebridge- Sinai | $519,012,883 | -$5,761,043 | -1.11% | Imp | -$5,242,030 | -1.01% | Att |
| 210015 | MedStar- Franklin Square | $371,862,302 | -$7,065,384 | -1.90% | Imp | -$5,020,141 | -1.35% | Att |
| 210016 | Adventist- White Oak | $242,890,872 | -$1,287,322 | -0.53% | Imp | -$412,914 | -0.17% | Imp |
| 210017 | Garrett | $28,988,189 | -$579,764 | -2.00% | Att | -$579,764 | -2.00% | Att |
| 210018 | MedStar- Montgomery | $96,052,028 | -$1,431,175 | -1.49% | Att | -$1,315,913 | -1.37% | Att |
| 210019 | Tidal- Peninsula | $350,375,491 | $3,678,943 | 1.05% | Imp | $3,643,905 | 1.04% | Imp |
| 210022 | JHH- Suburban | $249,484,035 | -$449,071 | -0.18% | Imp | $573,813 | 0.23% | Imp |
| 210023 | Luminis- Anne Arundel | $367,930,454 | -$3,458,546 | -0.94% | Imp | -$3,679,305 | -1.00% | Imp |
| 210024 | MedStar- Union Mem | $267,917,283 | -$3,590,092 | -1.34% | Imp | -$1,768,254 | -0.66% | Imp |
| 210027 | Western Maryland | $183,379,829 | -$971,913 | -0.53% | Imp | -$1,081,941 | -0.59% | Imp |
| 210028 | MedStar- St. Mary's | $100,479,485 | $1,828,727 | 1.82% | Imp | $1,255,994 | 1.25% | Imp |
| 210029 | JHH- Bayview | $471,786,218 | -$3,396,861 | -0.72% | Imp | -$3,915,826 | -0.83% | Imp |
| 210030 | UMMS- Chestertown | $7,562,394 | $151,248 | 2.00% | Att | $151,248 | 2.00% | Att |
| 210032 | ChristianaCare, Union | $84,802,922 | $559,699 | 0.66% | Imp | $347,692 | 0.41% | Imp |
| 210033 | Lifebridge- Carroll | $162,844,959 | -$846,794 | -0.52% | Imp | -$309,405 | -0.19% | Imp |
| 210034 | MedStar- Harbor | $128,234,465 | -$1,961,987 | -1.53% | Imp | -$1,333,638 | -1.04% | Imp |
| 210035 | UMMS- Charles | $97,586,229 | $663,586 | 0.68% | Imp | $849,000 | 0.87% | Imp |
| 210037 | UMMS- | $123,617,439 | $2,336,370 | 1.89% | Att | $1,903,709 | 1.54% | Att |
| 210038 | UMMS- Midtown | $140,418,656 | -$884,638 | -0.63% | Imp | $14,042 | 0.01% | Imp |
| 210039 | Calvert | $80,925,064 | -$647,401 | -0.80% | Att | -$485,550 | -0.60% | Att |
| 210040 | Lifebridge- Northwest | $160,861,387 | -$1,898,164 | -1.18% | Imp | -$1,270,805 | -0.79% | Imp |
| 210043 | UMMS- BWMC | $325,584,009 | -$5,013,994 | -1.54% | Imp | -$3,679,099 | -1.13% | Imp |
| 210044 | GBMC | $263,774,655 | -$316,530 | -0.12% | Att | -$131,887 | -0.05% | Att |
| 210048 | JHH- Howard County | $220,287,562 | $374,489 | 0.17% | Imp | $286,374 | 0.13% | Imp |
| 210049 | UMMS-Upper Chesapeake | $236,862,562 | -$4,121,409 | -1.74% | Imp | -$2,415,998 | -1.02% | Att |
| 210051 | Luminis- Doctors | $187,232,106 | $879,991 | 0.47% | Att | $1,273,178 | 0.68% | Att |
| 210056 | MedStar- Good Sam | $186,628,391 | $1,493,027 | 0.80% | Imp | $1,063,782 | 0.57% | Imp |
| 210057 | Adventist- Shady Grove | $333,973,100 | -$4,909,405 | -1.47% | Att | -$2,504,798 | -0.75% | Att |
| 210058 | UMROI | $80,968,088 | -$78,944 | -0.10% | Att | -$1,400,748 | -1.73% | Att |
| 210060 | Adventist-Ft. Washington | $37,782,970 | -$279,594 | -0.74% | Imp | -$355,160 | -0.94% | Imp |
| 210061 | Atlantic General | $47,434,007 | -$673,563 | -1.42% | Att | -$554,978 | -1.17% | Att |
| 210062 | MedStar- Southern MD | $210,921,411 | $1,392,081 | 0.66% | Imp | $1,624,095 | 0.77% | Imp |
| 210063 | UMMS- St. | $292,568,045 | -$1,082,502 | -0.37% | Imp | -$2,369,801 | -0.81% | Imp |
| 210064 | Lifebridge- Levindale | $68,147,842 | $1,362,957 | 2.00% | Att | $1,362,957 | 2.00% | Att |
| 210065 | Trinity - Holy Cross Germantown | $94,710,748 | -$473,554 | -0.50% | Imp | -$369,372 | -0.39% | Imp |
| STATEWIDE | | $11,821,284,339 | -$73,463,000 | | | -$51,057,405 | | |
| Penalty | | | -$88,948,411 | | | -$65,530,991 | | |
| Reward | | | $15,485,411 | | | $14,473,586 | | |