



Nurse Support Program I

Final Recommendations for Permanent Renewal and Future Funding

June 8, 2022

This document contains the final staff recommendations for permanent renewal of the NSP I program.

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Introduction

Maryland's unique Nurse Support Program I (NSP I) was designed to address the short-and long-term issues of recruiting and retaining nurses in acute care hospitals. Approximately \$245 million in NSP I funds have been provided to hospitals in rates to support the NSP I initiatives since it was implemented in June 2001.

In 2010, the Institute of Medicine (IOM) published a groundbreaking report which laid out eight (8) recommendations to address the increasing demand for high quality and effective healthcare services and provided an action-oriented blueprint for the future of nursing. The HSCRC incorporated four of the recommendations into the scope of the NSP I program:

- *IOM Recommendation 3:* Implement nurse residency programs
- *IOM Recommendation 4:* Increase the proportion of nurses with a baccalaureate degree to 80 percent by 2020
- *IOM Recommendation 6:* Ensure that nurses engage in lifelong learning
- *IOM Recommendation 7:* Prepare and enable nurses to lead change to advance health

Incorporating the four (4) recommendations from the IOM, the NSP I program focuses on three (3) main areas to provide support and training for Maryland nurses:

1. *Education and Career Advancement.* This area includes initiatives that increase the number of advanced degree nurses, preparing them as future leaders; recruitment and retention of newly licensed nurses through nursing residency programs, and supporting nursing students and experienced RNs who are re-entering the workforce after an extended leave.
2. *Patient Quality and Satisfaction.* This area includes lifelong learning initiatives such as certification and continuing education linked to improved nursing competency and patient outcomes.
3. *Advancing the Practice of Nursing.* These activities in this area advance the nursing practice, for example, nurse-driven evidenced-based research; innovative

organizational structures for clinical nurses to have a voice in determining nursing practice, standards, and quality of care; and American Nurses Credentialing Center's (ANCC) Magnet®, and Pathway to Excellence programs demonstrating nursing excellence.

With input from the NSP I Advisory Committee, staff developed nursing and organizational metrics to assess hospitals' progress in achieving these program aims. This report provides the results of NSP I initiatives since the last report to the Commission in FY 2016, through FY 2021, including program achievements and recommendations for increased funding.

NSP I Accomplishments (FY 2017 – 2021)

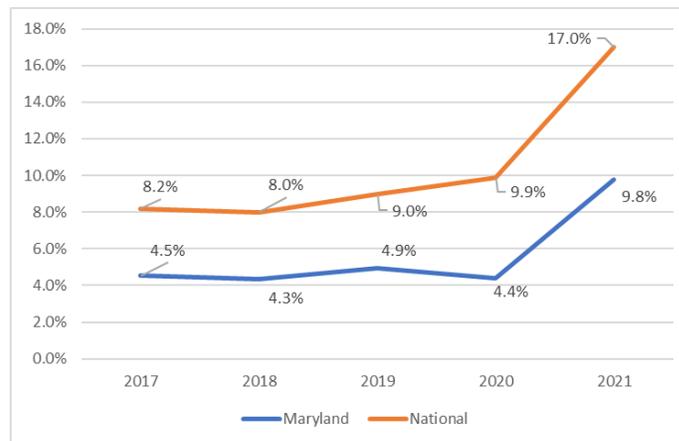
Maintained Low Vacancy and Retention Rates Compared to Nation

Prior to the pandemic (between 2017 and 2019), Maryland was experiencing notably lower vacancies rates (4.6 percent) compared to the nationally (8.4 percent) (NSI, 2022). All national statistics cited for vacancies and retention data are derived from the *National Health Care Retention and RN Staffing Report*, an annual survey of approximately 192 facilities from 32 states, and is published by the Nurse Solution, Inc.

Although the success cannot solely be attributed to NSP I, programs that are funded by the NSP (including nurse residency programs (NRP), continuing education, leadership development and shared governance, preceptorship, and mentorship) are known to attract and retain nurses (Lee, 2008; Trofino, 2003). Not unexpectedly, vacancy rates increased sharply during the height of the pandemic in 2021, both in Maryland and nationally. Despite the challenges, Maryland's average vacancy rates (9.8 percent) remained well below the national average (17 percent) (Graph1).

The vacancy rates reported in this paper differ from vacancy rates being reported by the Maryland Hospital Association. In order to compare to the national data, the number of nursing positions include part-time and per diem staff. The vacancy rates excluding part-time and per diem is closer to 8.5 percent between FYs 2017- 2020.

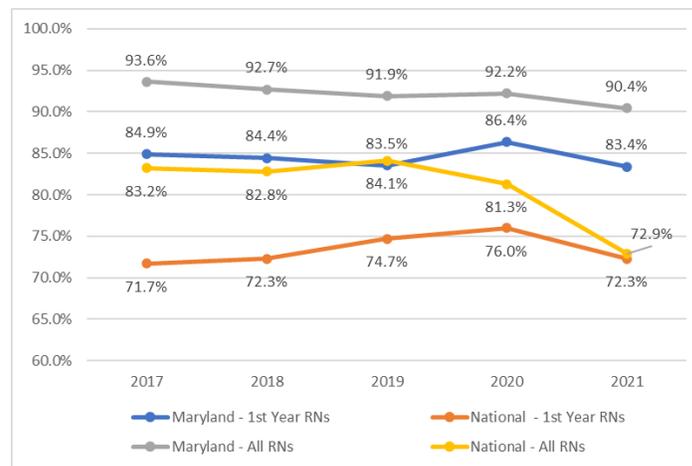
Graph 1. Registered Nurse Vacancy Rates: Maryland vs Nation, 2017 - 2021



Source: Maryland: NSP I Annual Report Data; National: NSI National Healthcare Retention Report

Nursing retention in Maryland has remained above 90 percent since FY 2017, ranging from 94 percent to 90 percent in 2021 (Graph 2). In Maryland, the average post-COVID retention rate was 91 percent, compared to the national average of 77 percent (falling from 83 percent pre-COVID). For first year RNs, the retention rates for Maryland hospitals averaged 85 percent, compared to 73 percent nationally (Graph 2). The retention rates pre versus post-COVID did not change as significantly in Maryland.

Graph 2. First Year and All Registered Nurse Retention Rates: Maryland vs Nation, 2017 - 2021



Source: Maryland: NSP I Annual Report Data; National: NSI National Healthcare Retention Report

Maintained Retention Rates for First Year Nurses with Nurse Residency Programs

Nurse residency programs (NRPs) have been instrumental in retaining first year nurses in Maryland and the success of the program is evidenced by retention rates that are higher than the nation. The purpose of the NRP is to build upon nursing school's foundational knowledge to smoothly transition new nurses into professionals and retain them in the workforce. Nurse residency programs for newly licensed RNs builds confidence and improves their organization, management, communication, and clinical skills (Wagner, 2020). Maryland is the first, and one of three states in the US, to have all acute care hospitals fund and offer nurse residency programs (NRPs) for new nurse graduates.

Additionally, NRPs reduce hospital costs associated with attrition (National Academies of Sciences, Engineering and Medicine, 2015). High retention rates result in significant cost savings to hospitals; the average cost to replace one RN ranges from \$40,038 to upwards of \$88,000 (NSI, 2021; Jones, 2008). Prior to the coronavirus pandemic, Maryland hospitals overall retained more than 88 percent of their new to practice nurses annually (Graph 2) compared to an average of 76 percent nationally (NSI, 2022). Moreover, hospital leaders and nurse residents report they are more confident and competent after completing their 12-month nurse residency program, resulting in better-prepared nurses and significant hospital cost savings.

Increased the Number of Certified and Specialty Care Nurses

The NSP I program funds initiatives that support courses and the associated costs to obtain and maintain certification. Certification offers patients and families the validation that the nurse caring for them has demonstrated the experience and knowledge in the complex specialty of critical care (American Association of Critical-Care Nurses, 2022). The number of certified nurses increased by 10 percent between FYs 2017 and 2021.

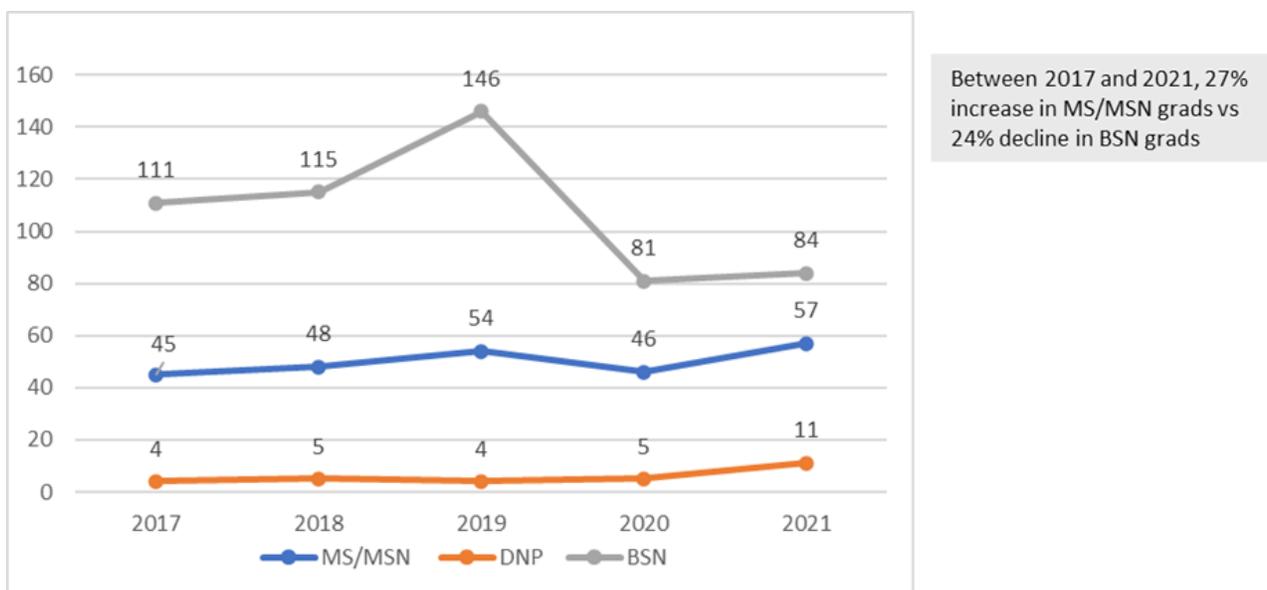
The aim of Transition-to-Specialty Care programs is to address hard-to-fill specialty clinical and critical leadership roles. Specialty care nurses, which include nurses working

in hard-to-fill areas such as ICU, Psych and ED, were especially desirable during the pandemic when these nurses were of critical need. More than 6,100 newly licensed and experienced nurses participated in NSP I funded programs, with average completion rates of 89 percent.

Increased the Number of Nurses with BSN and Advanced Degrees

RNs are in new and expanded roles to provide care across the healthcare continuum with increased focus on health disparities. According to *The Future of Nursing 2020-2030* report, it is imperative for RNs to achieve higher levels of education, as “nurses play multiple roles in acute care, community, and public health settings, through which they can influence the medical and social factors that drive health outcomes, health equity, and health care equity...Nurses have a critical role to play in achieving the goal of health equity, but they need robust education, supportive work environments, and autonomy” (National Academy of Sciences, 2021).

Graph 3. Maryland Registered Nurses by NSP I-Funded Degree Type, FY 2017- 2021



Source: NSP I Annual Report Data

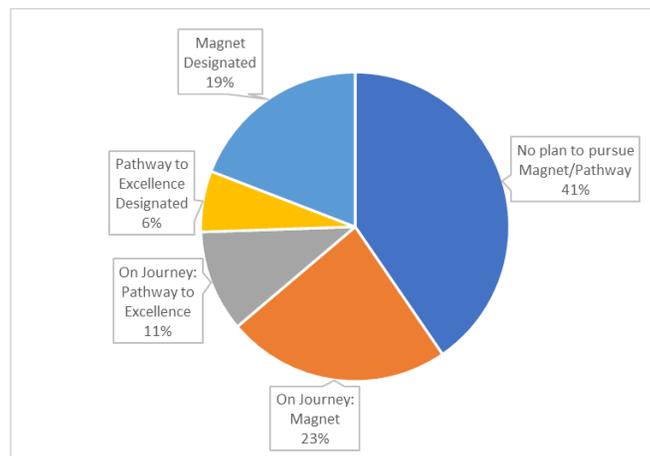
Strong research evidence has linked lower mortality rates, fewer medication errors, and positive outcomes to nurses prepared at the baccalaureate and graduate degree levels (IOM, 2011). Quality patient care hinges on a well-educated, highly functioning,

motivated nursing workforce. The IOM Future of Nursing 2010 report called for 80 percent of RNs to hold a BSN degree by 2020 and a doubling of doctoral-prepared RNs. In 2019, the Commission approved the staff recommendation to amend the goal for Maryland to “80 Percent BSN by 2025”, and the Nurse Support Program II (NSP II) has made steady progress toward that goal. In FY 2021, 67 percent of RNs in Maryland hold a BSN or higher (Final NSP II FY 2023 Report, 2022). Through the NSP I funds, there was a 27 percent increase in the number of hospital-based nurses holding BSN and Advanced degrees between 2017-2019 (Graph 3).

Advanced the Practice of Nursing

The American Nurses Credentialing Center (ANCC) Magnet® Recognition Program recognizes healthcare organizations for quality patient care, nursing excellence, and innovation in professional nursing practice. Between FYs 2017 and 2021, nine (9) hospitals in Maryland have successfully achieved Magnet® and three (3) have achieved Pathway to Excellence® designation with funding from the NSP I program (Graph 4). Sixteen (16) hospitals are pursuing either Magnet® or Pathway to Excellence® designation in FY 2021.

Graph 4. Percent of Maryland Hospitals by ANCC Status, FY 2021



Source: NSP I Annual Report Data

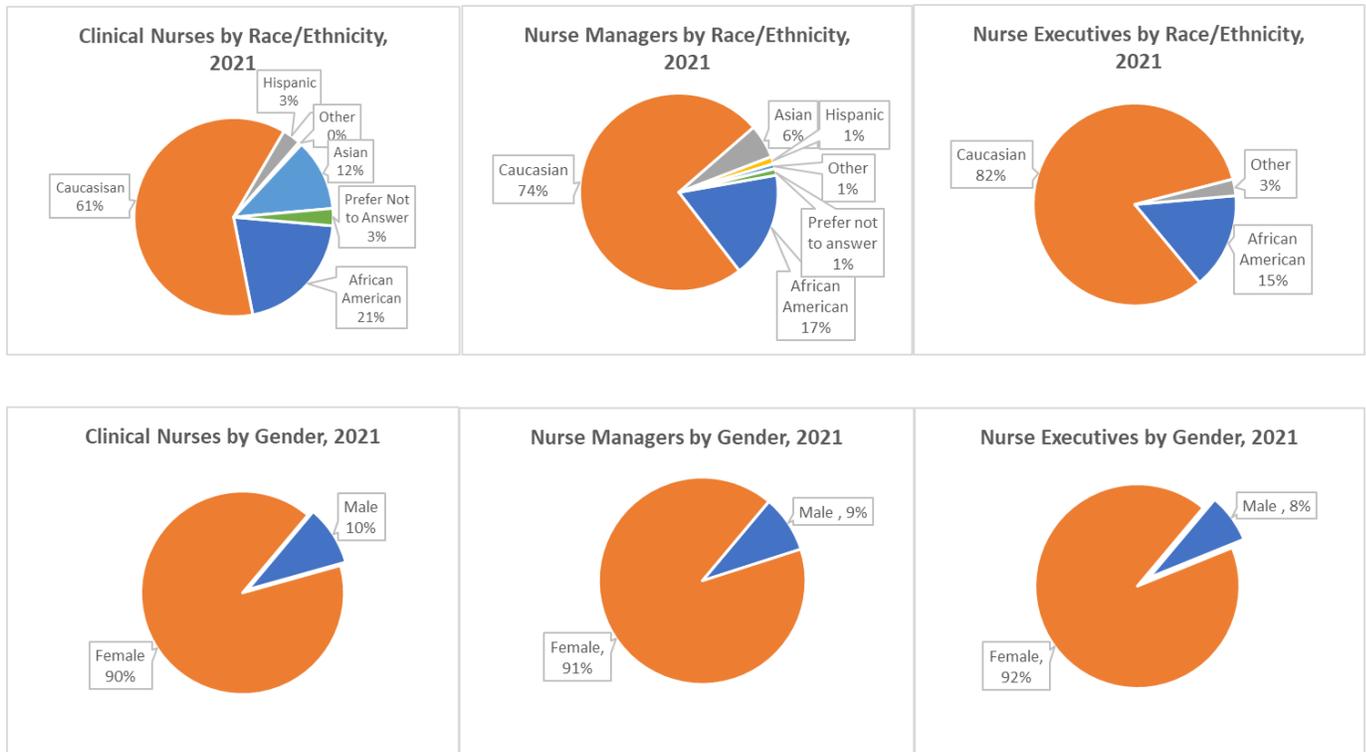
Enhanced Diversity in the Nursing Workforce

According to the American Association of Colleges of Nursing, “*Though nursing has made great strides in recruiting and graduating nurses that mirror the patient population, more must be done before adequate representation becomes a reality. The need to attract students from underrepresented groups in nursing – specifically men and individuals from African American, Hispanic, Asian, American Indian, and Alaskan native backgrounds - is a high priority for the nursing profession*” (2019). As the spotlight has grown on health disparities, the need for providers who look like the patients they are serving has become an important mission for nursing schools and should extend to post graduation as well.

Nationally, 27 percent of RNs are from racial and ethnic minority groups (HRSA, 2019). The HSCRC began collecting data for all clinical nurses, nurse managers and nurse executives employed at Maryland hospitals in FY 2020 (Graph 5). Overall, 36 percent of clinical RNs are represented by ethnic and racial minorities in FY 2021. For Nurse Managers and Executives, ethnic and racial minorities account for 25 and 17 percent, respectively. Similar to the nation, where the percentage of male nurses was around 12 percent in 2021, nurses in Maryland are overwhelmingly female, regardless of position (Graph 5) (BLS, 2021).

The inclusion of minority and male nurses in clinical and management roles is crucial to addressing health disparities. Several studies have concluded that minority nurses leaders are in better positions to “influence resource allocation and the recruitment and retention of a diverse workforce...[as well as] shape organizational and national policies aimed at eliminating health disparities” (Philips and Malone, 2014). Increasing the number of minorities in nursing, especially in leadership positions, is an area of opportunity for the NSP I program to address in the coming years.

Graph 5. Demographics for Clinical Nurses, Nurse Managers and Nurse Executives in Maryland, FY 2021



Source: NSP I Annual Report Data

Impact of COVID on the Nursing Workforce

Nursing Burnout

As illustrated in Graphs 1 and 2 above, vacancy rates increased, and retention suffered in the wake of the COVID pandemic. The repeated surges of COVID made the situation dire for healthcare personnel, increasing burnout and moral distress among nurses (Yang and Mason, 2022). In a recent survey of 2,000 nursing staff, the Maryland Nursing Workforce Center (MNWC) found that over 40 percent of respondents experienced moderate to severe stress, were unable to control worrying, felt hopeless, and had little pleasure in usual things. Close to 50 percent of respondents indicated that they had symptoms of burnout, felt anxious, and had experienced sleep disturbances. Furthermore, 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

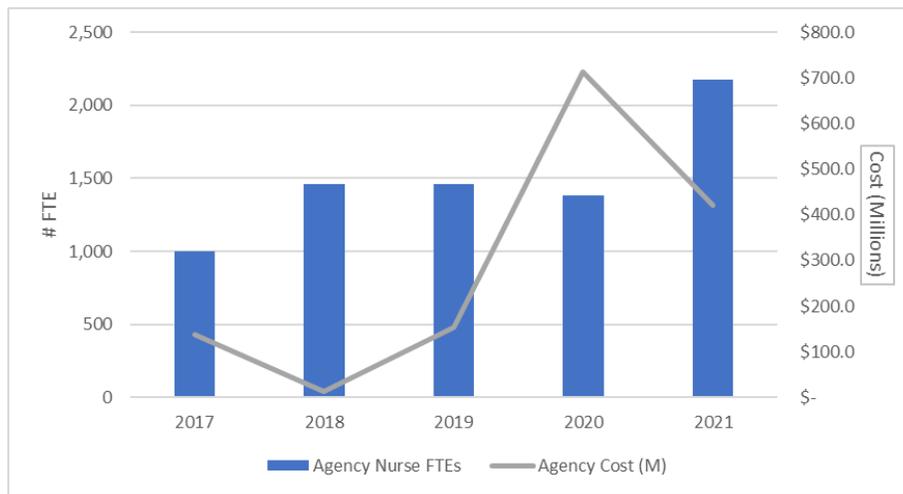
their current nursing job (MNWC, 2021). These findings are echoed in across the nation (Hansen and Tuttas, 2021)

Increased Reliance on Agency Nurses

Anecdotally, nurses were leaving their positions to go to competing hospitals for signing bonuses, or to agencies for better pay, better hours, and less stress (Vesoulis and Abrams, 2022). The increase in agency nurses and the resulting high turnover, creates additional burdens on staff nurses as they must constantly orient the new people. In discussions with nurses from various roles, the main complaint regarding agency nurses is they are paid significantly more than staff nurses but not responsible for regulatory reporting and other burdens that are placed on staff nurses.

As more nurses leave hospitals for agencies, a costly feedback loop is created as hospitals rely more on agencies to backfill the reduction in the workforce. The pandemic exacerbated costs to a high of \$713 million (Graph 6) in Maryland, as reported to the HSCRC in the FY 2020 NSP Annual Reports. Nationally, most hospitals are not anticipating reducing their reliance on agency nurses, while costs continue to increase (NSI, 2022). Several organizations, including the American Hospital Association and the American Health Care Association/National Center for Assisted Living (the major nursing home trade group) are requesting Congressional intervention to help prevent the travel agencies “from exploiting our organizations’ desperate need for health care personnel” (Vesoulis and Abrams, 2022).

Graph 6: Maryland Hospital Agency FTEs and Costs, FY 2017-2021



Source: NSP I Annual Report Data

Addressing the root cause of nurse dissatisfaction is complicated. In addition, the nursing profession faces significant shortages due to an aging workforce, increasingly aging population, nurse burnout, violence in the workplace and other region-specific issues (Haddad et al., 2022). However, there are identified strategies that can reduce turnover, according to an article by the American Sentinel College of Nursing & Health Sciences at Post University (The Sentinel Watch, 2020):

- Reducing overtime and eliminating mandatory overtime.
- Developing shared governance programs that give nurses a voice in scheduling, workflows, and hospital policies.
- Ensuring adequate nurse staffing levels and supporting acuity-based staffing tools.
- Recognizing nurses' need for work-life balance.
- Encouraging and developing a workplace culture of collaboration between nurses and physicians.

Historically, the NSP program has funded similar initiatives, but staff analysis has shown hospitals have shifted their funding priorities. The share of spending on programs for entry-level nurses (such as NRP) increased from 30 percent to 55 percent, compared to spending on programs for experienced nurses (such as continuing education and

Advanced Degrees) that declined from 45 percent to 26 percent. Increasing the amount of NSP funding would allow hospitals to continue to sustain the progress that has been made with new nurses, while making an important investment in experienced nurses.

Future Funding Considerations

To address the issues that have come to the forefront during the pandemic, the NSP I and NSP II Advisory Committee suggest that the two programs be expanded to meet the current demands. With an additional 0.1 percent in funding, the Advisory Committee recommends the following:

- Increasing funding for proven initiatives (as described above) that have shown to increase retention and reduce vacancies.
- Develop initiatives to address health disparities by increasing the number of minorities and men in all nursing roles. Specifically, NSP I programs can implement initiatives to:
 - Increase the number of minority and male mentors and preceptors
 - Increase the number of minority and male nurses in leadership positions.
 - Develop recruitment strategies to target racial/ethnic minorities, particularly in areas with high minority populations.
- Carve out funding specifically aimed at Licensed Practical Nurses (LPN) for internal and external continuing education, leadership/preceptor/mentorship programs, as well as funding advanced nursing degrees and specialty practice programs.
- Funding additional NSP II initiatives that were described in the NSP II FY 2023 Staff Recommendation.

This year, the Maryland legislature passed several bills that focus on the ongoing crisis in the healthcare workforce broadly, though there are several bills that specifically address the issues in nursing. Staff recommends tasking the NSP I and II Advisory Committee with exploring how hospitals and nursing schools can access potential funding through the following legislation:

- **HB 625 / SB 440** (*Commission to Study the Health Care Workforce Crisis in Maryland – Establishment*): Establishes a Commission to study the health care workforce crisis.
- **HB 1208** (*Health Occupations - Health Care Workforce Expansion*): Requires the State Board of Nursing to evaluate the workforce based on data from nursing certificate renewals and promulgate regulations related to requirements for CNAs. Also provides tax benefits for certain activities (such as nurses who act as preceptors to train nurses).
- **SB 518 / HB 821** (*Career Pathways for Health Care Workers Program*): Creates a program in the Department of Labor that provides matching grants to employers for training programs attended by healthcare workers and requires the Governor to provide at least \$1M for the program in the budget.
- **SB 696 / HB 975** (*Maryland Loan Assistance Repayment for Nurses and Nursing Workers - Program Establishment and Funding*): Establishes a Maryland Loan Assistance Repayment Fund for Nurses and “Nursing Workers”. \$400K is provided per year for this fund.

Staff Recommendations

The HSCRC staff present the following recommendations for the NSP I program:

- 1) Continue the Nurse Support Program I (NSP I) as an ongoing program with permanent funding that does not require renewal. The NSP I staff will provide annual reports on the funded activities and accomplishments.
- 2) Consider increasing funding in future years from 0.1 percent to 0.2 percent of total patient revenue for each NSP program to further address the impact of the pandemic on the nursing workforce in FY 2024.
- 3) Charge the NSP I and II Advisory Committee to investigate other potential sources of funding from new legislation that can support nursing initiatives.

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