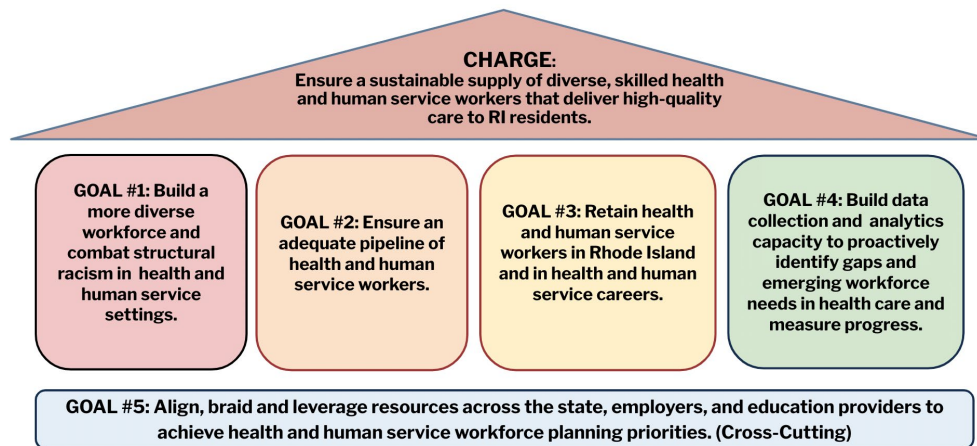**Preparing for a Stronger, Post-Pandemic RI Nursing Workforce**
Response to the Warren Alpert Foundation Request for Information submitted by
Rhode Island's Health Workforce Planning Initiative
December 15, 2023

INTRODUCTION

In 2022, Executive Office of Health & Human Services (EOHHS), Department of Labor & Training (DLT), and Office of the Postsecondary Commissioner (OPC) joined forces to lead an interagency, public-private planning process - known as the RI Health Workforce Planning Initiative ("Initiative") - to identify and address RI's health & human services workforce challenges. The Initiative held its first annual Health Workforce Summit in June 2022, which led the Initiative's public/private planning team to establish the following initial charge and goals.

CHARGE:
Ensure a sustainable supply of diverse, skilled health and human service workers that deliver high-quality care to RI residents.

GOAL #1: Build a more diverse workforce and combat structural racism in health and human service settings.

GOAL #2: Ensure an adequate pipeline of health and human service workers.

GOAL #3: Retain health and human service workers in Rhode Island and in health and human service careers.

GOAL #4: Build data collection and analytics capacity to proactively identify gaps and emerging workforce needs in health care and measure progress.

GOAL #5: Align, braid and leverage resources across the state, employers, and education providers to achieve health and human service workforce planning priorities. (Cross-Cutting)

The Initiative's first-year accomplishments were shared at the second annual Health Workforce Summit in June, 2023. In addition, the initiative produced a "Rhode Map" (APPENDIX B) for the year ahead to "attract, train, and retain" the future healthcare workforce through further collaboration, investment, and innovation.

Since the first Summit, over 500 individuals from 160+ organizations have participated in workgroups, subcommittees, and events to develop and implement health workforce solutions. The planning process has included stakeholders from the following areas:

- Career & Tech schools
- Advocates
- Behavioral health providers
- Community-based health providers
- Higher education

- Home care
- Hospitals
- Labor organizations
- Long-term care
- Payors
- Philanthropy

- Professional associations
- Social service agencies
- State agency leaders
- Trade associations
- Training providers

The Nursing Workforce

One occupation that has been a constant focus of the Initiative is nursing. Nurses are the largest group of health professionals in RI. When the COVID pandemic hit in 2020, the nursing workforce was already under strain due to a variety of factors including pressures to address the mounting mental and physical health needs of an aging and vulnerable population in the face of growing workforce shortages. During the pandemic, departures from the nursing workforce accelerated, even as population health needs increased. This combined with other existing factors considerably worsened the nursing shortage and the workplace challenges nurses face.

Nursing Professions
Registered nurses (RNs) and Licensed Practical Nurses (LPNs) are licensed professionals who provide and coordinate patient care and educate patients and the public about various health conditions. They work in hospitals, physicians' offices, home healthcare services, nursing care facilities, outpatient clinics, and schools. Aspiring RNs usually take one of two education paths: a Bachelor's degree in nursing (BSN) or an Associate's degree in nursing (ADN). Aspiring LPNs seek a diploma from an approved nursing program.

Some RNs continue on to become Advanced Practice Registered Nurses (APRN) such as nurse practitioners, nurse midwives, and nurse anesthetists. APRNs are licensed professionals who coordinate patient care and may provide primary and specialty healthcare. They work in a variety of healthcare settings, including hospitals, physicians' offices, and clinics. APRNs must earn at least a Master's degree in one of the APRN roles. They must also be licensed by the state and pass a national certification exam.

The charts in APPENDIX A show a typical pathway to becoming an RN or APRN.

A Focus on RNs
The following responses to this RFI address issues primarily pertaining to RNs. This is because most nurses in RI are RNs, and the most significant nursing workforce challenges involve the education, recruitment, and retention of RNs. Limited information related to APRNs and LPNs is also included. Additional information about APRNs and LPNs can be provided upon request.

Nursing Assistants (aka Certified Nursing Assistants or CNA) are commonly considered to be part of the nursing workforce. While Nursing Assistants must be licensed in RI, they do not need a higher education degree or diploma, their scope of practice is much more limited than that of an LPN, RN, or APRN, and they must work under the direct supervision of a licensed nurse. There are numerous workforce issues pertaining to Nursing Assistants; however, they are not the subject of this response. Additional information about Nursing Assistants can be provided upon request.

Data Sources

Our responses (below) to the RFI share data about the characteristics of the nursing workforce, as well nursing supply and demand in Rhode Island, from the following public data sources:

Rhode Island Ecosystem Health Workforce Data Dashboard: The Ecosystem dashboard links demographic data with RI DLT wage record data sets, health professional licensure data, and robust race/ethnicity data over a 12-year period (starting in 2010). The Ecosystem dashboard is useful for trends and provides information that has not been available before such as age, gender and racial and ethnic patterns, the number of active versus

inactive licenses by license type, and how many of the licensees are working and in what settings. This dashboard is still in review and is not yet available to the public.

DLT Occupational Data Dashboard: The DLT dashboard brings together data that is already publicly available and presents it together in a single dashboard that can be filtered by occupation and setting. The data sources include:

- RI Occupational Projections 2020-2030 (Labor Market Division, RI DLT)
- 2022 Occupational Employment & Wage Statistics (Labor Market Information Division, RI DLT)
- Professional Licensing Data (RI Department of Health)
- IPEDS U.S. Department of Education Data (RI Longitudinal Data System)

This dashboard is still in review and is not yet available to the public. Both the Ecosystem and DLT dashboard have caveats and limitations that are important to understand (see APPENDIX C)

State Longitudinal Data System: The Rhode Island Longitudinal Data System (RILDS) is a state repository for linked, inter-agency, longitudinal data. It integrates and links data across early childhood, K-12 and higher education, and workforce. It centralizes three-plus decades of previously siloed Rhode Island state education, employment, and health data using a custom-built machine learning algorithm.

IPEDS: The Integrated Postsecondary Education Data System (IPEDS) is a system of survey components that collects data from all institutions that provide postsecondary education and are eligible to receive Title IV funding.

RESPONSE TO RFI

1. Current status of employment of the total workforce of nurses in RI

Registered Nurses - Total Number Licensed and Employed in RI

Since 2018, the number of licensed RNs in RI has grown dramatically, while the number working in healthcare has grown only modestly. In 2022, there were 31,933 Registered Nurses who held active licenses in Rhode Island – a 66% increase over the 25,222 RNs with active licenses in 2018. And yet, despite the increase in the number of licensed nurses in Rhode Island (yellow bar), the number of RNs employed in healthcare (green bar) has remained relatively stable, growing by only 4.6% since 2018. This rapid growth in total licensees was most likely a consequence of RI leaving the interstate nursing compact in 2018, thereby eliminating licensure reciprocity and, instead, requiring out-of-state nurses to obtain a RI license to work in RI. This increase in out-of-state license holders was further fueled by the increase in telehealth and utilization of travel nurses.

As a percentage of all licensed RNs, the percentage of those working in RI has been falling since 2018. In 2022, only 48.2% (15,399) of all RN licensees worked in Rhode Island and only 41.6% (13,293) worked in healthcare

settings in Rhode Island.[1] [It is important to note that employment data includes only the setting and not the job title, so it is not possible to determine whether an RN is working in a clinical or administrative role.] The declining percentage of RNs working in healthcare settings in RI is not only a reflection on the growing number of out-of-state licensees, but may also reflect the impact of the "great resignation" that was brought about by the COVID pandemic across the U.S., leading many workers, including RNs, to reduce their work hours, temporarily leave the workforce to attend to personal and family needs, or take an early retirement. This is likely to account for the persistent nursing workforce shortages, even in the face of growing numbers of licensed nurses.
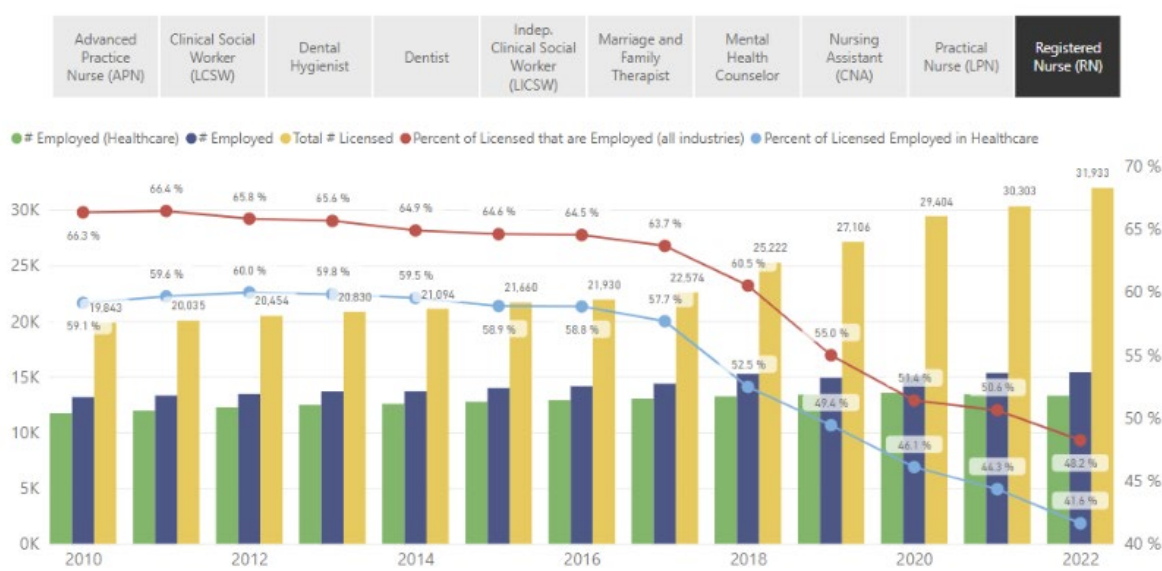

Chart 1: Number of Licensed RNs Working in RI and Working in Healthcare 2010-2022, Rhode Island Ecosystem

Registered Nurses - Race & Ethnicity

89% of RNs licensed and working healthcare settings in Rhode Island are white compared to 67% of the general Rhode Island population, while Black and Hispanic RNs are significantly underrepresented compared to their percentages statewide. The percentage of RNs identifying as Hispanic and Black has increased only slightly since 2010.

Median Annual Wage differentials by race and ethnicity in various settings will be discussed in response to Question #3.

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[1] Healthcare settings include the following NAICS (three digit) codes: 621 (Ambulatory Health Care Services), 622 (Hospitals), 623 (Nursing and Residential Care Facilities), 624 (Social Assistance).
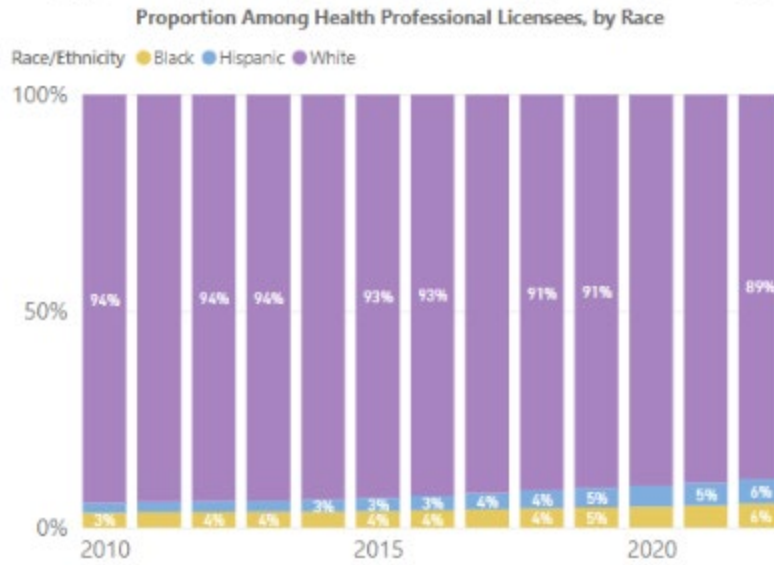
Proportion Among Health Professional Licensees, by Race

Chart 2: Percent of Licensed RNs Working in Healthcare in RI By Race and Ethnicity 2010-2022, Rhode Island Ecosystem

Registered Nurses - Age

The median age of licensed RNs has slightly decreased from 47.1 in 2010 to 45.5 in 2022. While the percentage of RNs age 55 and older has remained constant since 2010, the percentage of RNs who are 45 to 55 has decreased during the same period and the proportion of RNs between the ages 24 To 34 has increased. Industry partners have suggested that the steady numbers of older nurses might reflect a pattern where older nurses reduce their hours, therefore remaining in the workforce and showing up in this data set, while creating a functional vacancy at the same time.

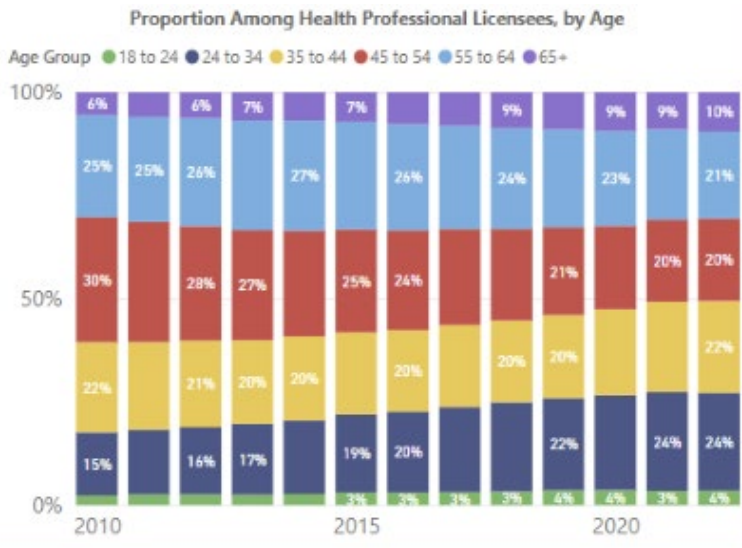Median Annual Wage differentials by age in various settings will be discussed in response to Question #3.

Proportion Among Health Professional Licensees, by Age

Chart 3: Percent of Licensed RNs Working in Healthcare in RI By Age 2010-2022, Rhode Island Ecosystem

Registered Nurses - Gender

Finally, the overwhelming majority of registered nurses working in healthcare settings in Rhode Island identify as female. While the number of RNs identifying as male increased by 50% between 2010 and 2022, the percentage of all RNs who identify as male was still only 9% in 2022.

Median annual earnings of male RNs working in healthcare settings have been consistently higher than median wages of female RNs from 2010 to 2022. [Note: Annual earnings are not the same as hourly wages and reflect total hours worked as well as hourly wages.]

Median Annual Wage differentials by gender in various settings will be discussed in response to Question #3.

Table 1: Median Annualized Wages for RNs Working in Healthcare in RI By Gender 2010-2022, Rhode Island Ecosystem

Gender	2010	2022
Male	$62,986	$78,388
Female	$56,692	$70,308

Registered Nurses - Annualized Median Wage Trends

Wage record data show that the median annual wages for RNs working in healthcare settings have grown by 24.3% since 2010. It is important to note that median annual wages are not equivalent to hourly wages and are not adjusted for total hours worked or FTEs, since this info is not available. As such, median annual wages are likely to appear lower than they are because they include part-time work as well as full-time. Also, individuals who work multiple jobs for a given quarter, whether it is multiple jobs at the same time or if they transitioned from one job to another job, will have each job wage reported separately. This will also skew median wages downward since it may include part-time work or it may include full-time for only part of the quarter.

Another point of reference for understanding RN wages is data from the Occupational Employment and Wage Statistics (OEWS) survey which asks employers to report employment and wage data. The most recent survey indicates that the entry level hourly wage for RNs is $32.50 and the experienced wage is $44.20 with a median wage of $39.10. This is a point-in-time survey taken annually during the week of May 12th.

While RNs working in RI appear to be relatively well paid, our healthcare partners tell us that other factors such as the emotional and physical stress of the job, and non-traditional shifts (e.g. weekend, evening or night hours) make recruitment and retention difficult.

Chart 4: Median Annualized wages for RNs Working in Healthcare in RI 2010-2022, Rhode Island Ecosystem

While median annual wages have grown comparably across all racial groups, RN's identifying as Hispanic still earn less than Black or White RNs (below) and less than the median for all RNs (above). Median Annual Wage differentials in various settings will be discussed in response to Question #3.
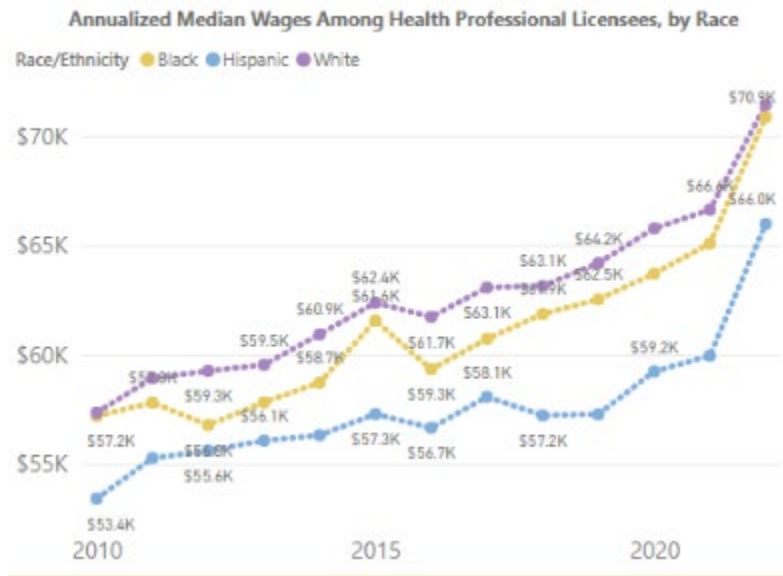

Chart 5: Median Annualized wages for RNs Working in Healthcare in RI by Race and Ethnicity 2010-2022, Rhode Island Ecosystem

Registered Nurses - Workforce Projections

Healthcare providers, professional associations, trade associations, labor and community organizations, educators, insurers, patient advocates, and policymakers have all voiced serious concerns about the state's

ability to attract, train, and retain a sufficient RN workforce to fill the number of job openings projected by the DLT between 2020 - 2030. The DLT has projected that there will be 7,411 open RN positions between 2020 and 2030. Of these, an estimated 91% will be due to exits from the labor force and transfers to different occupations. The balance will be due to growth in total RN employment.

- 44% (3,471) of employed RNs are projected to leave the labor force entirely between 2020 and 2030, due to retirement, death, or for personal reasons. (Exits)

- 47% (3,273) employed RNs are projected to leave an occupation to enter a different occupation between 2020 and 2030. (Transfers)

- **To fill the 7,411 total RN job openings (Exits+Transfers+Growth) projected between 2020 and 2030, RI will need to train (or recruit) and retain approximately 741 new RNs per year.** *[Note: Projected total employment is not based on full-time equivalents (FTE) and does not distinguish between part-time and full-time employees.]*

Registered Nurses - Current supply and demand

Another proxy for understanding the current demand and supply for registered nurses is a quarterly comparison of the number of Unemployment Insurance (UI) claimants in a particular occupation (as an indicator of the able and available supply of trained workers who are currently seeking work) to the number of online postings for that occupation (as an indicator of the current demand for labor detailing the types of occupations). The DLT publishes this data on a quarterly basis. During the third quarter of 2023, EmployRI (the State's official job board) recorded 1,272 postings for RN positions and 49 unemployed RNs, or a ratio of 26 RN job vacancies for every one unemployed RN job seeker – indicating a significant labor shortage.

2. Data regarding nursing specialties and subspecialties.

To our knowledge, there is no public or private source of data that aggregates nursing employment data by specialties. Unlike physicians, RNs are not licensed in a medical specialty. Some RNs may obtain specialty certifications from various national nursing organizations (e.g., emergency, oncology, pediatric, cardiac, etc.), but these credentials are not publicly available and are not typically a requirement for employment.

There is, however, some information available about Advanced Practice Registered Nurse (APRN) specialties, who are categorized by RIDOH as Certified Nurse Practitioners, Clinical Nurse Specialists, and Certified Registered Nurse Anesthetists. CNP and CNS are further categorized by "population focus", including adult/gerontology, family, neonatal, pediatric, psychiatric, and women's health. The total number of licensees in each of these categories can be obtained on the RIDOH licensee database; however, this data is not currently shared with the EOHHS Data Ecosystem, so employment status and demographic information about APRNs is not yet available.

According to the RI Care Transformation Collaborative, fewer medical (MD), nurse practitioner (NP), and physician assistant (PA) students and residents are pursuing primary care as a career due to lower salaries, high student loans, increased administrative burden, perceived lower status and increased burn-out. Data on graduates of Rhode Island-based NP and PA programs from 2022-2023 showed that only 33% entered primary care and remained in Rhode Island.

Table 2: Count of Graduates of RI-based Nurse Practitioner and Physician Assistant Programs 2022-2023, Care Transformation Collaborative

Program Name	Discipline	# of New Trainees Per Year (AY 2023-2024)	Total Student Enrollment - All Years (AY 2023-2024)	# Graduates from AY 2022-2023	2022-2023 Trainees Entering Primary Care		2022-2023 Trainees Entering Primary Care, Stayed in RI	
					#	%	#	%
URI Nurse Practitioner Program	Family Medicine and Adult Gerontology	30	61	23	19	83%	19	83%
Salve Regina Graduate Nursing and Professional Studies	Family Medicine	150	170	30	10	33%	5	17%
Bryant University PA Program	Primary Care	47	94	45	14	31%	14	31%
Johnson & Wales University PA Program	Primary Care	36	70	35	7	20%	3	9%
New England Institute of Technology	Family Medicine	11	22	11	11	100%	7	64%
Totals		274	417	144	61	42%	48	33%

3. Data regarding all institutional settings, both acute and chronic, and other diverse settings where nurses are currently employed.

RN total employment and wages (by setting)

The majority of RNs work in hospital settings - representing 58% of all RNs working in healthcare settings in 2022. The number of RNs working in hospital settings has slightly grown from 7,200 in 2010 to 7,718 in 2022. Annualized median wages for RNs working in hospitals increased by 19% between 2010 - 2022, with a significant increase (7.2%) between 2021 - 2022.

Table 3: Total RN Employment and Wages by Setting, Rhode Island Ecosystem (see graphs for each setting in APPENDIX D)

Setting	% of all RNs working in Healthcare Setting	# of RNs Working in Setting - 2010	# of RNs Working in Setting - 2022	% Increase/ Decrease	% Increase in Annualized Wages 2010 - 2022
Hospital	58%	7,200	7,718	7.2%	19%

Ambulatory	29.8%	2,900	4,000	37.9%	52.8%
Nursing and Residential Care	13.7%	2,085	1,837	-11.9%	39.5%
Educational Services	8.6%	691	1,146	65.8%	14.7%
Social Assistance	3.6%	324	477	47.7%	66.8%

Ambulatory settings employed the second highest percent of RNs in 2022. The number of RNs working in ambulatory settings has grown by 37.4% between 2010 to 2022 while the number of RNs employed in nursing homes has declined by 11.9% since 2010 most likely due to nursing home closures. Only 13.7% of all RNs working in healthcare settings work in nursing settings. Employment of RNs in educational settings has increased the most between 2010 and 2022 followed by social assistance (although total employment remains small). Median annual earnings grew significantly in both educational services and social assistance but are the lowest across all the settings, perhaps due, in part, to many part-time employees.

Finally, RNs working in Employment Services represented 9.9% of all working RNs (in any healthcare and non-healthcare setting) in 2022. Employment services is a proxy for the number of temporary workers such as contract labor and travel nurses. The number of RNs working in Employment Services and the wages in this setting have increased dramatically since the start of the COVID pandemic, which has likely contributed to RN staffing challenges in hospitals and other settings.

RN Race & Ethnicity (by setting)

According to the U.S. Census Bureau, Rhode Island's population (ie, not just the workforce) was 68.7% White, 5.7% Black, and 16.6% Hispanic/Latino (any race) in 2020. In 2022, compared to their percentage of the total population, White RNs were overrepresented in all healthcare settings other than Employment Services, while Black RNs were underrepresented in Hospitals and Educational Services, and Hispanic RNs were significantly underrepresented in all healthcare settings.

Table 4: Total RN Employment By Setting, Race and Ethnicity, Rhode Island Ecosystem, Rhode Island Ecosystem

	2022		
	White (not Hispanic)	*Black (not Hispanic)*	*Hispanic (any race)*
RI Population	*68.7%*	*5.0%*	*16.6%*
Hospitals	*89.3%*	*4.9%*	*5.8%*
Ambulatory	*88.2%*	*5.6%*	*6.3%*

	2022		
	White (not Hispanic)	*Black (not Hispanic)*	*Hispanic (any race)*
Nursing and Residential Care	*82.9%*	*11.2%*	*5.9%*
Educational Services	*94.3%*	*2.6%*	*3.1%*
Social Assistance	*83.4%*	*9.3%*	*7.3%*
Employment Services	*66.9%*	*21.8%*	*11.3%*

As the data above indicates, the nursing workforce does not reflect the racial, ethnic, linguistic, and cultural diversity of the Rhode Island population. This is important because perceptions of a shared identity between patients and their providers is one way to improve the patient-provider relationship, foster trust and better communication, and reduce racial inequities and disparities in health outcomes among BIPOC populations in Rhode Island. Evidence indicates that having a health care provider of the same race or who speaks the same language has been associated with a greater likelihood of patients agreeing to and receiving preventive care, better patient experience ratings, and higher ratings on patient-reported measures of care quality. [2]
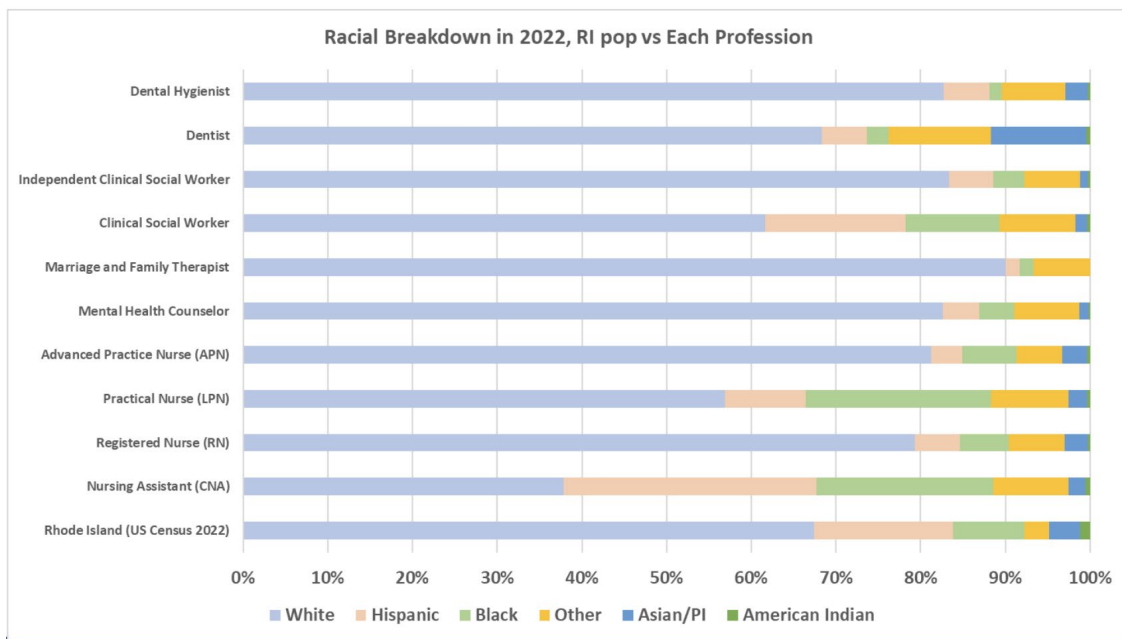

Chart 6: Race and Ethnicity by Occupation, Rhode Island Ecosystem

[2]https://www.rwjf.org/en/insights/our-research/2022/03/racial-ethnic-and-language-concordance-between-patients-and-their-usual-healthcare-providers.html

Because nurses of color are underrepresented in the workforce, improving the diversity of the workforce will require dismantling historical and ongoing barriers to training and education among underrepresented groups, particularly for entry-level paraprofessionals.

As the chart above shows, the nursing assistant (CNA) workforce is disproportionately people of color - unlike RNs. This is due in part to a lack of upward mobility and career advancement opportunities for paraprofessionals.   For example, as compared to other nursing occupations, CNA has minimal entry requirements. As such, CNA is a more accessible occupation for individuals who face barriers to higher education, including those from underrepresented minority groups. We also know from Ecosystem data that RNs who used to be CNAs are more likely to be nurses of color. But, as indicated in the following chart, only a small percentage of CNAs advance along the career pathway towards Licensed Practical Nurse (LPN) or RN.
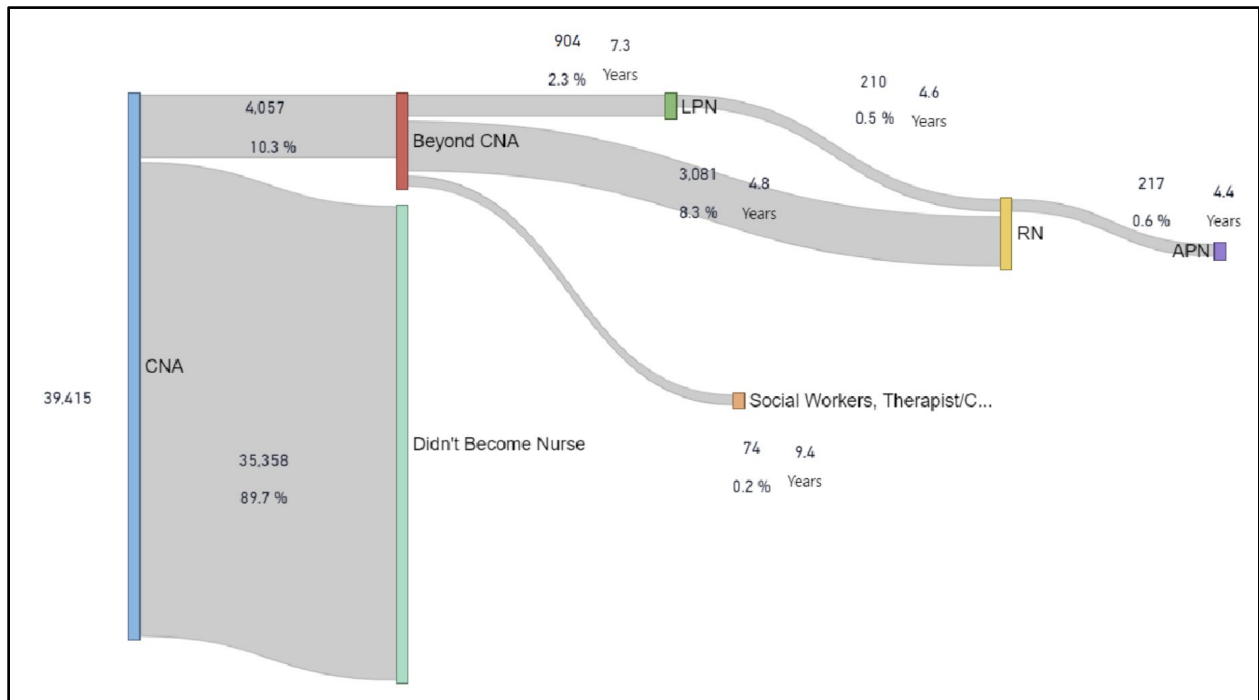

Chart 7: Percent of CNA Who Advance to Professional Occupations, Rhode Island Ecosystem

In addition, the data below shows that RNs who were previously CNAs are more likely to identify as Hispanic, American Indian, Black, or Asian. Investments to address nursing shortages should prioritize increasing the diversity of the workforce, and a key strategy in doing this will be to address barriers to career advancement among CNAs and other paraprofessionals.
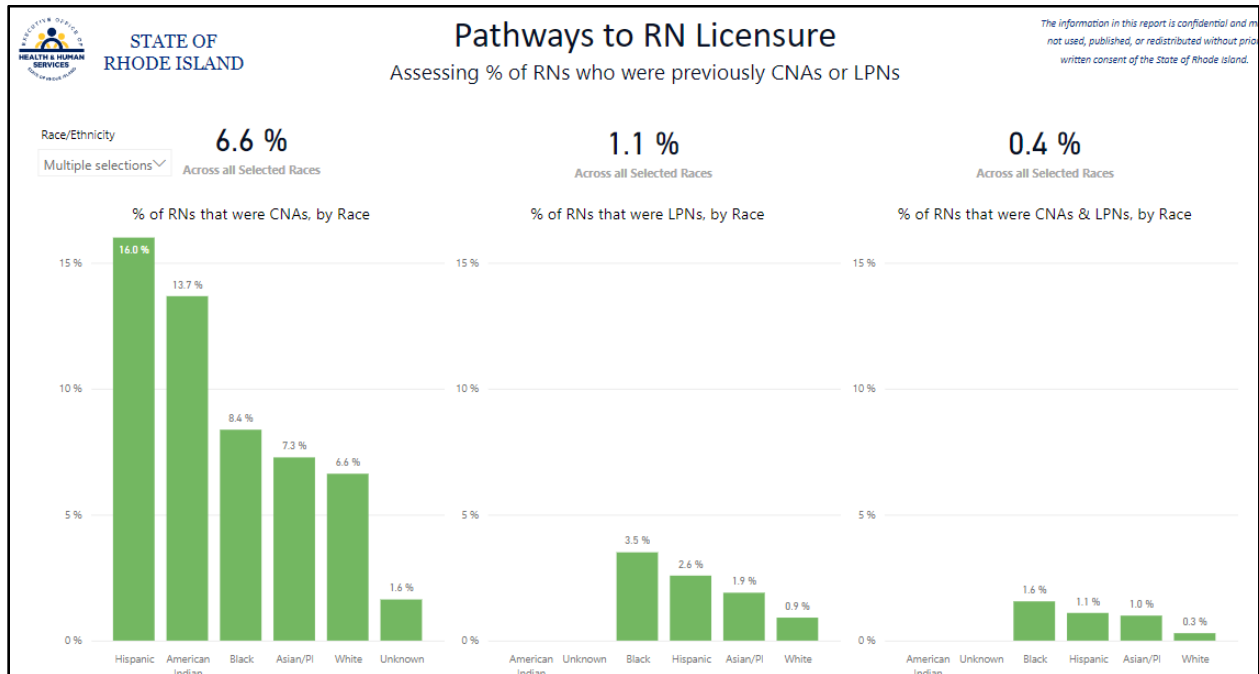

Chart 8: Percent of RNs who were previously CNAs or LPNs by Race and Ethnicity

RN Age (by setting)

In 2022, the median age for RNs working in a healthcare setting was 45.5. The percentage under 35 years old was 28% and the percentage aged 55 or more was 31%. The median age has declined more rapidly in Hospitals since 2010 than in other settings, *perhaps* because older RNs are leaving hospitals to work in less physically demanding settings. Age characteristics by setting are as follows:

Table 5: Total RN Employment By Setting and Age, Rhode Island Ecosystem, Rhode Island Ecosystem

	2010			*2022*		
	Median Age	*Under 35*	*55 and older*	*Median Age*	*Under 35*	*55 and older*
Hospitals	*45.3*	*21.7%*	*24.3%*	*43.3*	*34%*	*25%*
Ambulatory	*49.5*	*13.2%*	*34.4%*	*46.8*	*31%*	*25%*
Nursing and Residential Care	*47.8*	*17.5%*	*30.5%*	*48.9*	*19%*	*35%*
Educational Services	*53.1*	*19.2%*	*44.8%*	*51.4*	*12%*	*44%*
Social Assistance	*50.9*	*11.4%*	*39.7%*	*48.3*	*23%*	*35%*

Employment Services	*48.2*	*14.2%*	*31.8%*	*40.2*	*44%*	*15%*

RN Gender (by setting)

In 2022, 91.3% of RNs working in a healthcare setting identified as female and 8.7% identified as male. The median annual earnings of male RNs were higher than those of female RNs in all settings except Educational Services. The gender breakdown by setting is as follows:

Table 6: Total RN Employment By Setting and Gender, Rhode Island Ecosystem, Rhode Island Ecosystem

	2022	
	Female	*Male*
Hospitals	*90.6%*	*9.4%*
Ambulatory	*91.3%*	*8.7%*
Nursing and Residential Care	*91.7%*	*8.3%*
Educational Services	*72.6%*	*27.4%*
Social Assistance	*93.3%*	*6.7%*
Employment Services	*86.4%*	*13.6%*

4. Data regarding nursing school applications, graduates and degrees in RI and where outside schools may provide significant nurse graduates into the RI workforce.

The RI Longitudinal Data System has produced an analysis of the employment outcomes of healthcare graduates from RI's public institutions of higher education (by matching graduation data (IPED) with DLT wage records. As is evidenced below, RI is heavily reliant upon CCRI, RIC, and URI for RN graduates to produce the future RN workforce. Below is a chart indicating the total number of RN graduates (ADN, BSN, and MSN) from these nursing programs for the five academic years between 2015 - 2020, and the number and percentage of graduates who were employed in RI in a healthcare setting 18 months post-graduation. This data shows that approximately 494 or 69% of ADN, BSN, and MSN graduates from public institutions of higher education obtain employment in Rhode Island annually.

Table 7: Total ADN, RN, and MSN Graduates from Public IHE Employed in Rhode Island-Based Healthcare Settings, Rhode Island Longitudinal Data System

School	ADN, BSN and MSN Graduates (2015 to 2020)			Estimated Number of Graduates Employed in RI-Based Healthcare Setting Annually
	# graduates (2015-2020)	Employed in Healthcare in Rhode Island (2015 to 2020)		
		Number	Percent	
CCRI	1,237	1048	85%	209
RIC	804	595	74%	119
URI	1,523	832	55%	166
TOTAL	**3,564**	**2475**	**69%**	**494**

DLT Occupational Projections (below) however, show that public nursing school graduates who remain in the RI workforce meet only 62.9% of the projected annual need for 785 RNs, NPs, and Nurse Educators. Based on the 2030 Occupational Projections, Rhode Island needs an additional 291 RN graduates per year who are placed in employment in Rhode Island.

Table 8: ADN, RN, and MSN Combined Occupational Projections, DLT Occupational Projections

DLT Occupation Projections	RNs, Nurse Practitioners, and Nurse Educators Combined
Average Employment (2020)	13, 794
Projected Employment (2030)	14, 664
Transfers	3, 655
Exits	3,525
Growth	674
Total Openings	7,854
Estimated Annual Need	785

There are approximately 306 additional graduates from private RI-based nursing programs each year. However, even if 20% of these enter the RI workforce (which we believe is a high estimate), this would result in only 61 additional RNs per year, further indicating that RI is are not producing/retaining enough RNs to meet the projected demand. Finally, while some RNs do move to Rhode Island, contributing to the supply, others move away. We cannot yet quantify the net impact of transfers in and out of the state, but we estimate that it is insufficient to meet demand.

5. Data regarding teaching faculty at RI schools and hospitals.

Our higher education partners report that faculty shortages at their nursing schools are limiting student capacity at a time when the need for professional RNs continues to grow. Budget constraints, an aging faculty, and inability to compete with salaries in clinical settings have all contributed to this crisis.

To our knowledge, there is no public source of data that reports the number of nursing faculty in RI nor current or projected shortages of nursing faculty. However, Ecosystem data indicate that the median age of APRNs employed in Educational Services (which would include most nursing faculty) is 49.2, and 38% are age 55 or older. This is significantly older than APRNs employed in any other setting and suggests that aging nurse educators are likely to add to nursing faculty shortages.

In addition, a recent survey of health professional higher education programs in RI explored the adequacy of clinical faculty / preceptors to provide clinical education to health professional students in clinical settings. The survey respondents reported difficulty in finding clinical placement sites and available preceptors due to:

- Lack of supports for clinical preceptors, including logistical support, supervision, training, and compensation
- Challenges in finding preceptors; preceptors only allowed or willing to precept for particular schools; not enough volunteers; competition for preceptors between nurse practitioner, physician assistant, and medical programs
- Lack of total number of sites; many programs need a specific site at the same time.

6. Data regarding nursing retirements and departure from the active nursing fields in RI.

To our knowledge, there is no public source of data that projects retirement of workers in nursing occupations. But the RI Ecosystem does have trend data on the ages of licensed nurses working in health care settings. This data shows that across all settings, 10% of the RN workforce is 65 or older and unlikely to be working much longer. In hospitals, fewer RNs are 65 or older (6%) reflecting feedback from our hospital partners that many older nurses working in hospitals remain in the workforce but leave hospital settings for less demanding work in ambulatory settings or educational services. This is supported by the data - approximately 12% of nurses that work in ambulatory settings and 18% that work in educational services are 65 and older.

Lifespan, RI's largest health system and largest employer of RNs, has contributed proprietary data for inclusion in this response. Their data provides insight into the urgency of current and anticipated RN hiring needs. Specifically, Lifespan reports the following:

- Current RN Workforce: 3,532 (includes FT, PT and per diem; excludes non-employees like travelers)
- Current number of RN vacancies: 249 (FT, PT, and per diem)
- Current RN turnover rate: 13.7% (annualized turnover rate)
- An estimated 325 RNs are projected to retire over the next five years.
- An additional 2,400 RNs are projected to leave Lifespan for other reasons over the next five years
- An estimated 2,500 RNs will need to be hired over the next five years

7. Challenges and roadblocks to providing a future strong nurse workforce in RI

There are many forces at play that affect both the supply and retention of the nursing workforce, including:

- *Aging Population:* A significant proportion of Rhode Island's RN workforce are 55 and older and projected to retire from the nursing profession soon, while at the same time entering a life stage with increased health care needs. With not enough people entering the occupation, there is a growing strain on the workforce, contributing to turnover and limiting access to care.

- *High Rates of Turnover and Burnout:* In addition, the COVID pandemic greatly increased the physical and emotional demands of the occupation leading to burnout and a reduction in the appeal of nursing careers. As a result, many nurses left the profession (the "great resignation"). In the current tight labor market, many alternative competitive job opportunities exist outside of health and human services that are often better paying and less stressful. In addition, job opportunities in other industries are often more family-friendly (requiring no weekend, evening or night shifts) and less emotionally and physically demanding. These factors are compounded for nurses of color who often experience structural racism and implicit bias across systems (education, healthcare, human services, public safety, housing, etc.), which can exert a heavy psychological toll, adding to burnout and negative impacts on mental health. Given relatively tight labor markets today and in the future, rebalancing nursing workforce supply and demand will require adjustments that ultimately enhance the attractiveness of the position.

- *Structural Barriers to Accessing Post Secondary Education for Working Adults:* In addition, Rhode Island needs to do more to improve access to postsecondary education leading to RN positions, especially for working adults. Currently, it takes 7.3 on average to progress from a nursing assistant to a licensed practical nurse and another 4.3 years to progress from a licensed practical nurse to a registered nurse. Stakeholders report barriers such as:

  o Lack of structured career pathways supporting advancement in the field, especially for working adults. Rhode Island needs more nursing higher education programs that offer flexible and/or reduced work schedules to support adult learners who are balancing work, family, and school obligations and more employers willing to offer paid high-quality job opportunities with career-building work experience while people are in school. There is also a need for more financial and social safety net support for working adults.

  o Internationally-trained RNs and other healthcare professionals who want to become nurses often face language barriers and other challenges in navigating Rhode Island's licensing system and process.

  o The increasing cost of higher education makes it very difficult to work one's way through college - especially while supporting a family. While there are numerous tuition supports and scholarships for traditional students, there are almost no options for non-traditional students who are also working adults.

  o Lack of opportunities to "earn while you learn", such as apprenticeship programs that enable employees to attend school and earn credits while working and also provide financial incentives for advancement (i.e., wage increases tied to credential attainment). These opportunities make it possible for working adults to support themselves and their families while working and going to school.

o Need for stronger organization of higher education and other services in a manner that accelerates the educational and career advancement of the individual to the extent practicable - including recognizing prior experience and learning and strengthening dual enrollment approaches/articulation for secondary students seeking to transition directly into a community college career pathway program.

KEY TAKEAWAYS AND RECOMMENDATIONS

The RI Health Workforce Planning Initiative greatly appreciates the interest and commitment of the Warren Alpert Foundation to help address Rhode Island's nursing workforce issues. As described above, RI healthcare providers, workers, and patients are experiencing a confluence of challenges that have produced gaps at every stage of the nursing workforce pipelines a result of:

- stress, burnout, and turnover
- accelerating retirements and reduction of hours worked
- limited interest in nursing careers among those entering the workforce
- limited advancement opportunities for those in lower-wage, entry-level roles
- systemic cultural, linguistic, and racial barriers
- insufficient numbers of faculty and preceptors needed to educate and train nursing students
- tight labor market that offers careers that are less stressful, less dangerous, and more family-friendly than nursing.

For all of the above reasons, and based on the data included in this responses and qualitative evidence obtained at dozens of meetings from hundreds of stakeholders, we recommend that WAF consider making investments in the following priorities:

Recommendation: Invest in Nursing Career Ladders

Despite the historically high number of RNs licensed to practice in RI, the number of posted nursing vacancies significantly exceeds the available supply of licensed RNs. This is because 1) many licensees do not actually live or work in RI; 2) many licensees do not work full-time; 3) many licensees do not work in clinical roles; and 4) many licensees are 65 years of age or older and have left the workforce or have transferred from hospitals to less physically demanding settings. In addition, enrollment and graduation at the state's nursing programs is insufficient to meet current and projected demand due in part to stagnant or declining enrollments resulting from shortages of faculty, difficulties in finding enough clinical sites and volunteer preceptors, and/or diminishing numbers of qualified applicants. In addition, the pandemic has damaged the appeal of nursing careers to the emerging workforce, many of whom seek jobs that are more family-friendly and better work-life balance.

As such, career ladders that support healthcare paraprofessionals to pursue a nursing degree and license *while working* have emerged as a leading strategy to "grow the nursing workforce from within." However, while the RI Promise and Hope Scholarship programs provide free tuition and other support for full-time students, no such comprehensive programs exist to support working adults to pursue higher education as part-time students.

EOHHS has recently invested American Rescue Plan Act (ARPA) funds in a unique partnership between EOHHS and OPC called the Health Professional Equity Initiative (HPEI). This initiative currently supports more than 100 paraprofessional healthcare workers to enroll in higher education to pursue a health professional degree and

license. The program has just entered its second year, and is producing promising results. However, the duration of the program (through March 31, 2025) and eligibility requirements (only those working in Home and Community-Based Services) are constrained by ARPA. Investments by the WAF would enable state, higher education, and industry partners to build upon the success of HPEI by helping to pay for expenses such as tuition, reduced work schedules, books and supplies, transportation, childcare, uniforms, tutoring, and technology for paraprofessional healthcare workers employed in <u>all</u> healthcare settings (including, for example, hospitals and nursing homes).

Recommendation: Invest in Health Professional Loan Repayment

The State of RI operates a Health Professional Loan Repayment Program (HPLRP) that helps to cover the cost of student debt for eligible health professions (including Registered Nurses and Advanced Practice Registered Nurses) who obtain employment for eligible healthcare organizations in Health Professional Shortage Areas. HPLRP has been an effective means to recruit and retain healthcare providers, increase the diversity of health professionals, and expand access to care in underserved areas.

Between 2013 and 2022, HPLRP has supported 209 health professionals, the largest number of whom are Registered Nurses (44) and Advanced Practice Registered Nurses (34). In addition to improving access to care during their year loan repayment work obligation (two years of full-time work or four years of part-time work), HPLRP participants report are projected to keep working in Rhode Island for an average of 7.5 years in their current practice, 12.6 years in their current community, 14.3 years in medically-underserved areas; and, importantly, 16.7 years in the State of Rhode Island.

In addition to improving access to care through the recruitment and retention of health care providers, HPLRP provides an opportunity for the State to meet broader strategic goals in increasing the diversity of the primary care workforce by reducing financial barriers to entry for individuals from disadvantaged backgrounds. Specifically, between 2019 and 2021, 30% of HPLRP participants self-identified to be of a race other than White. In addition, 19% of clinicians enrolled in the program identified their ethnicity as Hispanic/Latino. These percentages exceed the percentages for the overall population of RI, thereby helping to reduce the underrepresentation of health professionals of color and improving access to culturally and linguistically competent care, particularly in underserved and marginalized communities.

Regrettably, demand for HPLRP exceeds its ability to support all eligible and qualified applicants. Between 2013 and 2022, the HPLRP was unable to fund 54% of eligible applicants (247 clinicians) due to insufficient funds. (Average awards during that time period were $33,072 per loan repayment recipient.) An investment in HPLRP by WAF would enable the State to better address nursing workforce shortages – particularly in primary care – where an aging workforce, uncompetitive salaries, and provider burnout have created a worsening primary care crisis.

Recommendation: Invest in primary care and community-based clinical placements

All Registered Nurse and Advanced Practice Registered Nurse degree programs in RI require students to obtain hands-on experience in clinical settings. However, in a recent survey of higher education institutions in RI, nursing education programs reported increasing difficulty in recruiting clinical placement sites and preceptors (supervisors) for nursing students – particularly in primary care and community-based (ie, non-institutional) settings. The lack of clinical placement sites and preceptors has been cited by RI nursing schools as one of the factors limiting the number of students who can be admitted into their programs.

At the same time, healthcare provider organizations (particularly primary care and community-based) have noted increased challenges in precepting nursing students because of the time and resources that are needed to properly supervise and educate students. (A survey of clinical sites and preceptors will be conducted this winter to further identify and quantify these challenges.) The costs, or lost revenue, associated with precepting health professional students have led some healthcare organizations to reduce or discontinue providing clinical placements for students. While a small number of health professional education programs in RI are able to pay primary care and community-based providers for clinical placements, most are unable to do so. An investment by WAF to offset the cost of clinical placements for RNs and APRNs, particularly for primary care and community-based providers, would help to facilitate primary care and community-based clinical experience, support primary care and community-based healthcare providers, expand access to primary care and community-based services, and expand the number of students who can be admitted into nursing programs.

Enhanced Health Workforce Data Collection and Analytics
Better data collection and an improved information infrastructure is critical for effective workforce planning and policy making. The right data can help identify workforce trends and gaps, inform decisions about where resources are needed, and measure progress. Through the Health Workforce Planning Initiative, we have made significant progress in this area. Prior to 2023, state, industry, and education leaders were unable to determine the employment status, career trajectory, retention, demographics, and other important characteristics of RI's licensed health professionals. To address this, the RI Department of Health (RIDOH) agreed to share its licensure dataset with the EOHHS Data Ecosystem to enable better analysis and inform policy development, planning, and evaluation. The initial RIDOH dataset includes information on multiple occupations including nurses, nursing assistants, social workers, mental health counselors, marriage and family therapists, dentists, and dental hygienists. (Licensure data for physicians, physician assistants, and other professions will be added in the coming months.) Incorporating this data into the Ecosystem has enabled the State to link individual data across twenty or more public data sets, providing new insights into the status and characteristics of RI's licensed health professions. The Ecosystem has developed an interactive PowerBI dashboard tool to support analysis of the data that will soon be made publicly available.
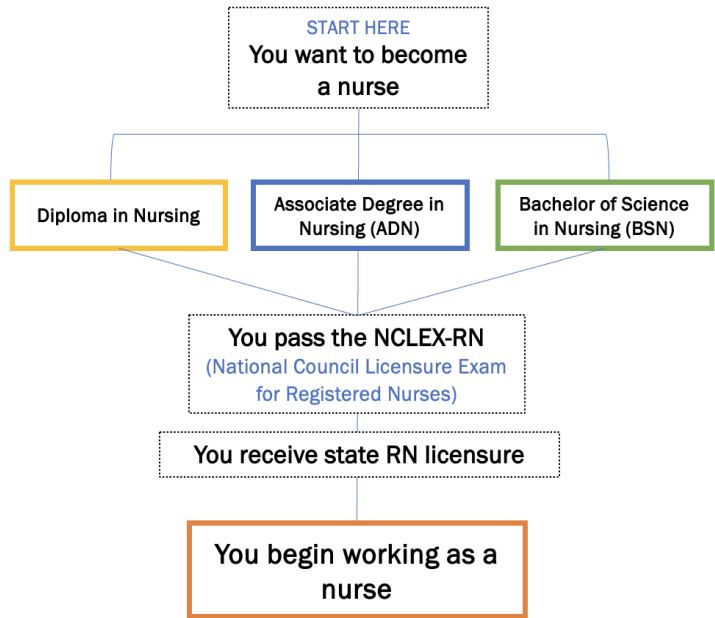
This is a big step forward - one that has made our response to this RFI possible. But the available data is still incomplete and the state's capacity to analyze the data is limited. For example, we are not yet able to answer several important questions, such as:
- For those nurses that are licensed and working, what languages do they speak?
- How many registered nurses working in RI in healthcare settings intend to be working in 5 years?
- How many registered nurses are leaving RI? And where are they going?
- For those working in healthcare settings, what is their employment status (FT, PT, contract, etc.)
- What are the job titles or roles of RNs who are working in RI? (e.g., clinical or administrative?)
- What is the rate of attrition among licensed nurses?
- How should investments in expanding the nurse workforce be prioritized? Where do we have the greatest need for nurses based on demographics, geography, population health, utilization trends, etc.?

Investments by WAF would improve the capacity and quality of the state's health workforce data collection and analytics and help to inform public and private sector health workforce policy and planning. Examples include:
- Industry-specific labor market surveys and analytics
- A dedicated healthcare workforce data analyst for the EOHHS Data Ecosystem
- A healthcare labor market researcher housed at an institution of higher education, similar to [The Bowen Center for Health Workforce Research and Policy](#) at the University of Indiana Medical School.

APPENDIX A: Pathways to Nursing

START HERE
You want to become a nurse

Diploma in Nursing

Associate Degree in Nursing (ADN)

Bachelor of Science in Nursing (BSN)

You pass the NCLEX-RN
(National Council Licensure Exam for Registered Nurses)

You receive state RN licensure

You begin working as a nurse

****

START HERE
You want to become an APRN

Nurse Practitioner (NP)

You pass the NP certification exam.
You apply for NP state licensure.
You start working as an NP.

Clinical Nurse Specialist (CNS)

You pass the CNS certification exam.
You apply for CNS state licensure.
You start working as an CNS.

Certified Registered Nurse Anesthetist (CRNA)

You pass the CRNA certification exam.
You apply for CRNA state licensure
You start working as an CRNA

Certified Nurse Midwife (CNM)

You pass the CNM certification exam.
You apply for CNM state licensure.
You start working as an CNM.

Clinical Nurse Leader (CNL)

You pass the CNL certification exam.
There is not a state licensure process for CNL
You start working as an CNL

THE RHODE AHEAD

Rhode Island Health & Human Services Workforce Initiative

Attract — **Train** — **Retain** — **A DIVERSE, SKILLED, SUSTAINABLE HEALTH AND HUMAN SERVICE WORKFORCE**

PARTNER

Leverage existing public-private partnerships and collaboration between:

- Long term care
- Behavioral healthcare
- Home care
- Hospitals
- Primary care
- Social service agencies
- Trade associations
- Professional associations
- Advocates
- State agency leaders
- Higher education
- Training providers
- K-12 Schools
- Philanthropy
- Labor
- Payors

INCENTIVIZE

Increase the diversity of RI's health and human service workforce by supporting paraprofessionals to become licensed health professionals with tuition and supports.

Attract more people to the health and human service field through tuition support for students to obtain degrees leading to licensed health and human service occupations.

Retain nursing and behavioral health professionals in the state by providing loan repayment support after a period of service in Rhode Island.

Grow the health and human service paraprofessional workforce with expanded pre-employment training.

Expand the capacity of higher education programs to graduate health and human service professionals by increasing the number of faculty and expanding the number of quality clinical placements.

Attract students and job seekers to health and human service careers through career awareness and outreach efforts.

INNOVATE

Inspire and fund career ladder pilot programs that reimagine and create pathways to high-demand jobs and careers.

Collaborative pilots of employers, higher education, labor, CTE programs, and community partners and will prioritize:

- Attracting new workers to the field.

- Increasing access for underrepresented populations.

- Incorporating anti-racist and culturally responsive practices.

- Creating strong linkages with CTE and higher education.

- Removing barriers to education for working adults.

- Using apprenticeship models to create education and training pathways tied to wage increases.

- Engaging multi-employer and/or multi-higher education partners.

APPENDIX C: Ecosystem Dashboard Definitions and Caveats

The Ecosystem is an integrated data system that combines data from professional licensing, wages, unemployment records, enrollments into DHS programs (SNAP, TANF, etc.), vitals (births & deaths), homelessness data, and robust and complete race/ethnicity data over a 12 year period (starting in 2010).

The dashboard is able to look at licensed occupations and match licensee data with wage, education, and other relevant data. It is not able to look at unlicensed occupations because RIDOH does not collect data on unlicensed occupations.

Data Element	Definition	Source	Notes/Caveats
Total Licensees	Total number of individuals with a Rhode Island license required to enter the occupation.	RIDOH License Data	Includes counts of active licenses regardless of residency for: Nursing Assistant Practical Nurse Registered Nurse Advanced Practice Nurse Clinical Social Worker Independent Clinical Social Worker Marriage and Family Therapist Mental Health Counselor Dental Hygienist Dentist Eventually physician assistant, physician, chemical dependency professionals, and applied behavioral analyst data will be shared with the Ecosystem.
# Employed in Health Care	Count of licensed individuals who had at least 1 quarter of wage data from a health care setting in Rhode Island during the time period. Wage data provides NAICS industry codes. Combining licensure and wage data allows for an approximation of the number of licensed individuals who worked in the healthcare industry.	RIDOH License Data and DLT Wage Record Data	DLT wage record data does not have information on a person's occupation so it cannot show if the licensed individual was working in a particular occupation (only the setting). For example, not all RN's working in a healthcare setting are working as clinical RNs. If a person is working in multiple jobs in the same occupation, they would be reported for both jobs. Healthcare industry includes NAICS (three digit) codes: 621 (Ambulatory Health Care Services), 622 (Hospitals), 623 (Nursing and Residential Care Facilities), 624

Data Element	Definition	Source	Notes/Caveats
# Employed	Count of licensed individuals who had at least 1 quarter of wage data from any setting in Rhode Island during the time period.	RIDOH License Data and DLT Wage Record Data	(Social Assistance). Not Healthcare includes NAICS code 62 (Government), 5613 (Employment Services) and "All Other Industries". Note: 5613: Employment Services was used to approximate the number of temp workers such as travel nurses.
% Employed in Health Care	Percent of total licensed individuals who had at least 1 quarter of wage data from a health care setting in Rhode Island during the time period.	RIDOH License Data and DLT Wage Record Data	
# Employed	Percent of total licensed individuals who had at least 1 quarter of wage data from any setting in Rhode Island during the time period.	RIDOH License Data and DLT Wage Record Data	
Annualized Median Wage	Wages are reported on a quarterly basis for each individual whose employer submits wage data to Rhode Island Department of Labor and Training (DLT). Median annual wage is calculated by multiplying quarterly wages by four.	DLT Wage Record Data	Wages are not adjusted for hours worked or FTEs since this info is not available. This skews median wages downward since part-time work is included. Individuals who work multiple jobs for a given quarter, whether it is multiple jobs at the same time or if they transitioned from one job to another job, will have each job wage reported separately. This will also skew median wages downward since it may include part-time work, or it may include full-time for a part of the quarter.

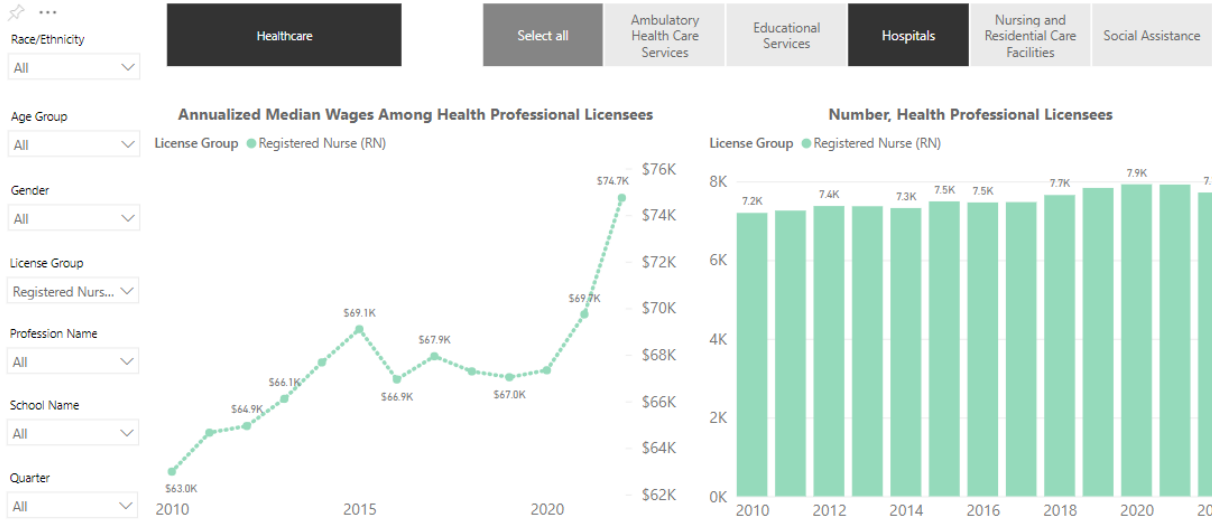# APPENDIX D: RN wages and employment by setting

Hospitals

Ambulatory

Nursing and Residential Care Facilities

Educational Services

Social Assistance

Median Annualized Wages for Healthcare Workers
Among those that have valid license record with the State of RI

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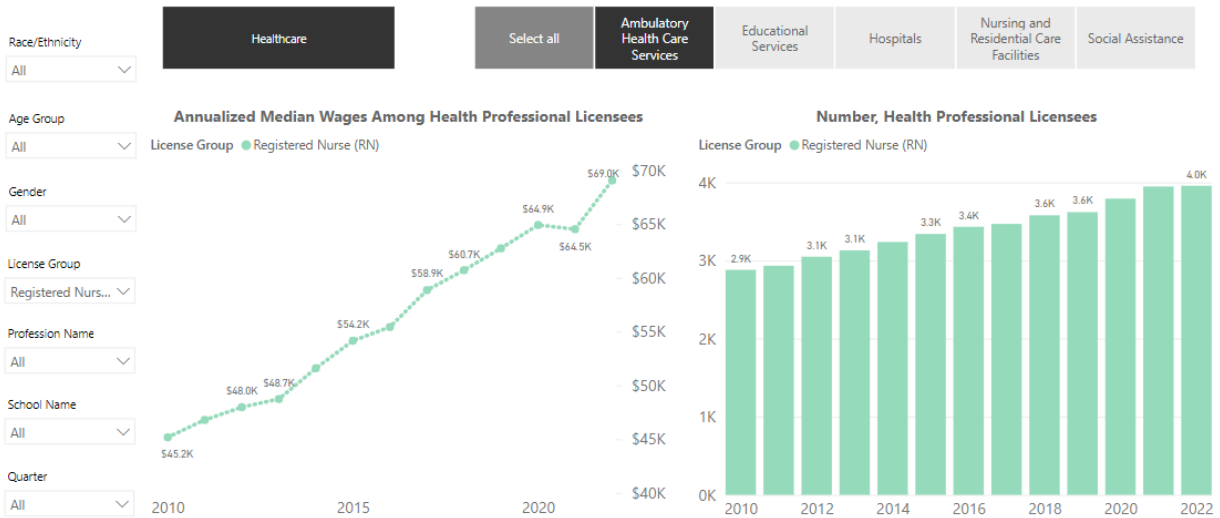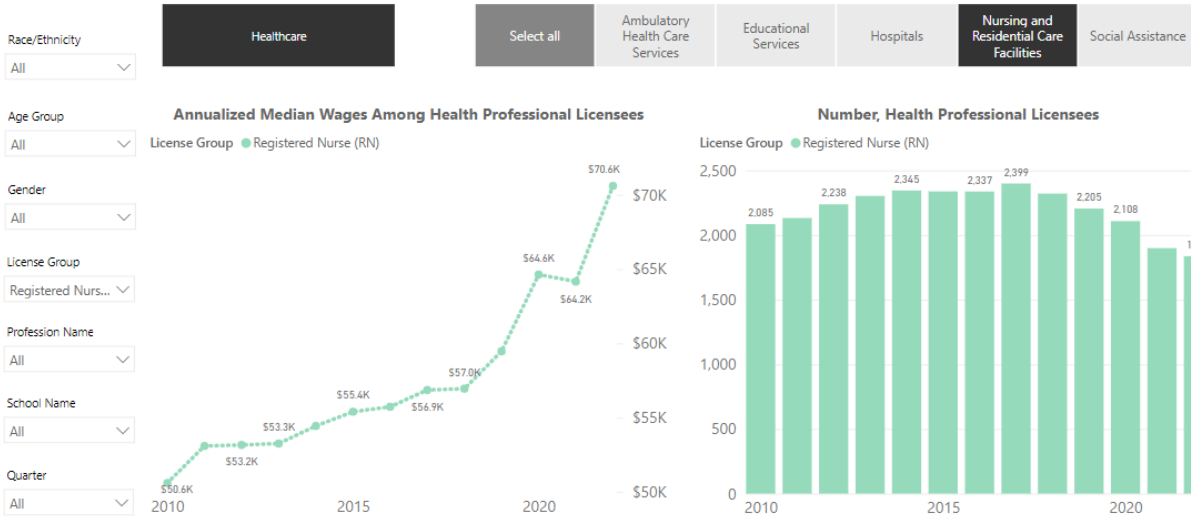
STATE OF RHODE ISLAND
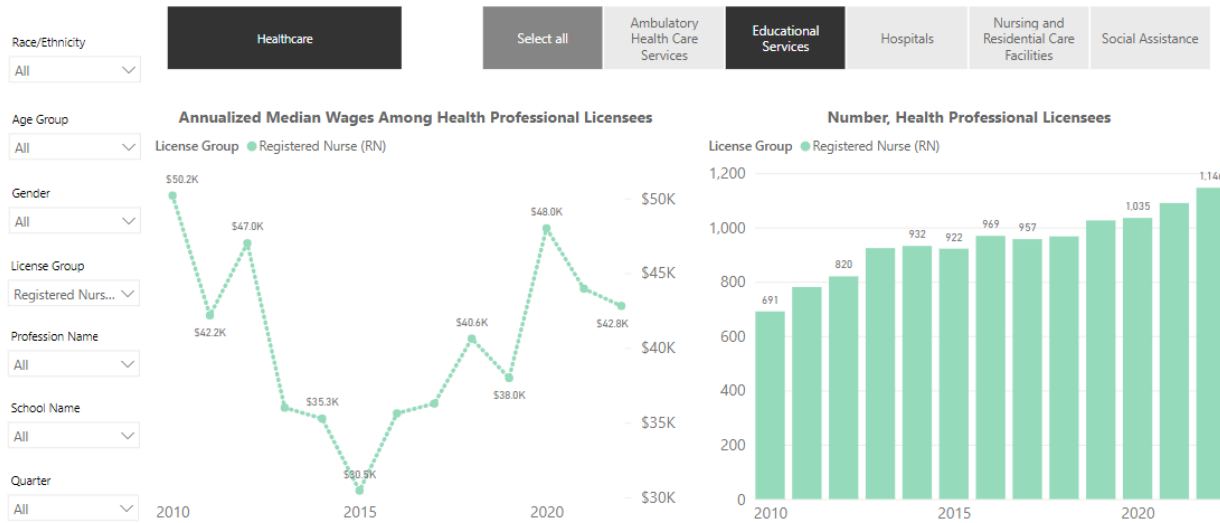
Tabs: Healthcare | Select all | Ambulatory Health Care Services | Educational Services | Hospitals | Nursing and Residential Care Facilities | Social Assistance

Filters:
- Race/Ethnicity: All
- Age Group: All
- Gender: All
- License Group: Registered Nurs...
- Profession Name: All
- School Name: All
- Quarter: All

Annualized Median Wages Among Health Professional Licensees
License Group ● Registered Nurse (RN)

Data points: $24.4K, $27.7K, $21.3K, $23.6K, $28.4K, $26.9K, $34.2K, $33.6K, $40.7K

Number, Health Professional Licensees
License Group ● Registered Nurse (RN)

Data points: 324, 317, 350, 373, 425, 439, 428, 435, 470, 503, 454, 477, 477