

Presentation of Interactive Dashboard and Discussion

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Interactive Health Workforce Data Session

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June 6, 2023

10:15-11:10 am

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Gain Insights on the Healthcare Workforce through Integrated Data

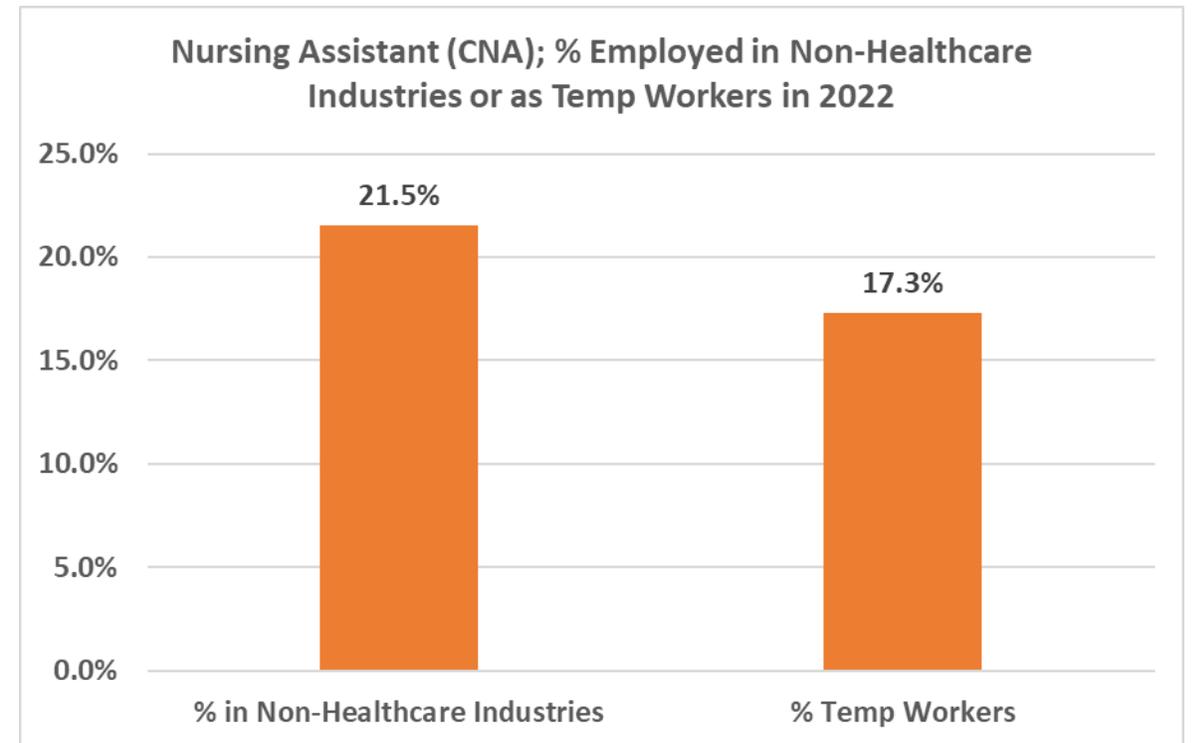
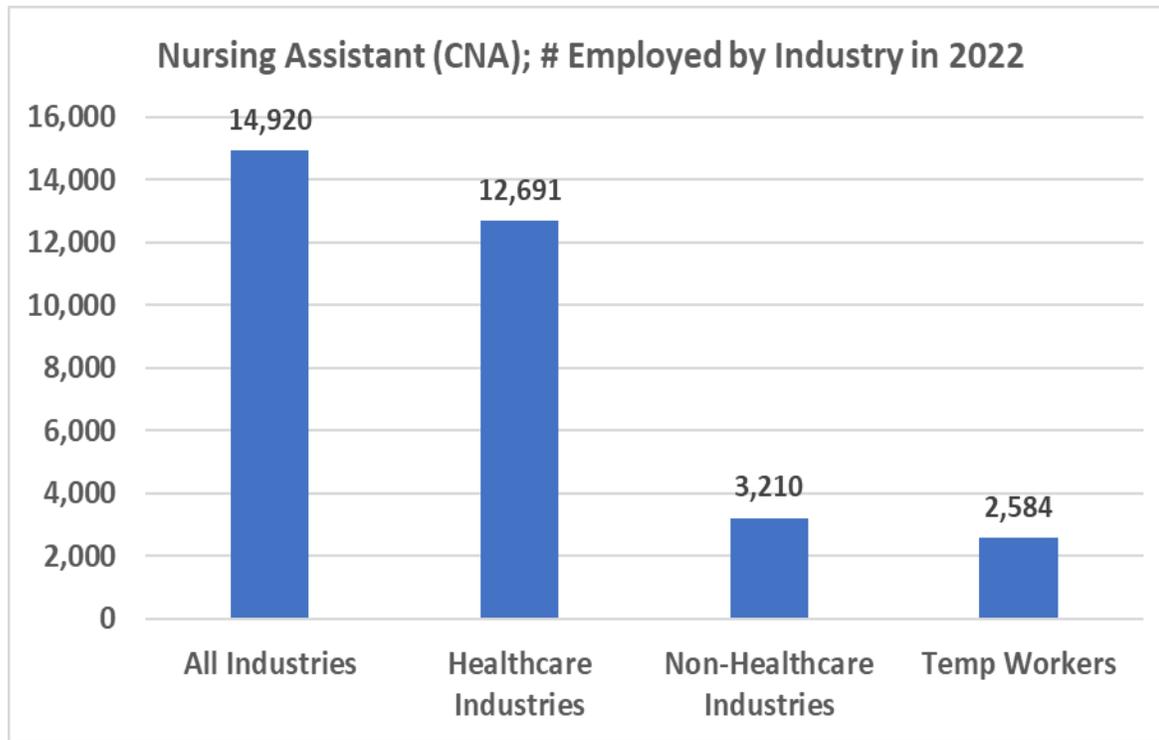
- Changes in the healthcare workforce, macroeconomic factors, and evolving trends in healthcare have prompted questions on **whether there is an adequate and thriving workforce available to address the health needs of RI'ers**. Relevant data is needed to answer these questions.
- **EOHHS's Ecosystem** provides an opportunity to answer questions about RI's healthcare workforce. The Ecosystem is an integrated data system that **combines** data from **medical claims, wages, unemployment records, enrollments into DHS programs (SNAP, TANF, etc.), vitals (births & deaths), homelessness data, robust and complete race/ethnicity data, and more**. The Ecosystem has been used to provide analysis that are accurate, efficient, actionable, and that were otherwise previously untenable.
- Recently, **healthcare workforce licensure data** was **added to the Ecosystem**.
- We have built a **dashboard** that utilizes the Ecosystem to provide several **insights in RI's healthcare workforce**. While still a work-in-progress, it is an example of how the Ecosystem can be used to deliver timely and actionable findings.
 - For select professionals, we show the overall and by industry **number employed** and their **wages**.
 - We provide a snapshot of **career progression among nursing assistant**.
 - It allows for comparison by race/ethnicity, age group, and gender.
- We will first share some insights gained from the dashboard and then do a brief walk through of the dashboard.

Caveats before diving in

- **Wages** are reported on a **quarterly basis** for each individual whose employer submits wage data to Rhode Island Department of Labor and Training (DLT)
 - To calculate **median annual wages**, we **multiplied quarterly wages by four**
 - Wages are not adjusted for hours worked or FTEs since this info is not provided. 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**.
- Licensure data provided issue and expiration date for a valid professional license. In addition to quarterly wages, wage data provided NAICS industry codes. Combining **licensure and wage data** enabled us to approximate the **number of licensed individuals who worked in the healthcare industry**.
 - **Healthcare industry** includes NAICS (three digit) codes: 611 (**Educational Services**), 621 (**Ambulatory Health Care Services**), 622 (**Hospitals**), 623 (**Nursing and Residential Care Facilities**), 624 (**Social Assistance**).
 - NAICS (four digit) code 5613 (**Employment Services**) was used to approximate **number of temp workers** such as travel nurses

Snapshot, # Employed by Industry: Nursing Assistants

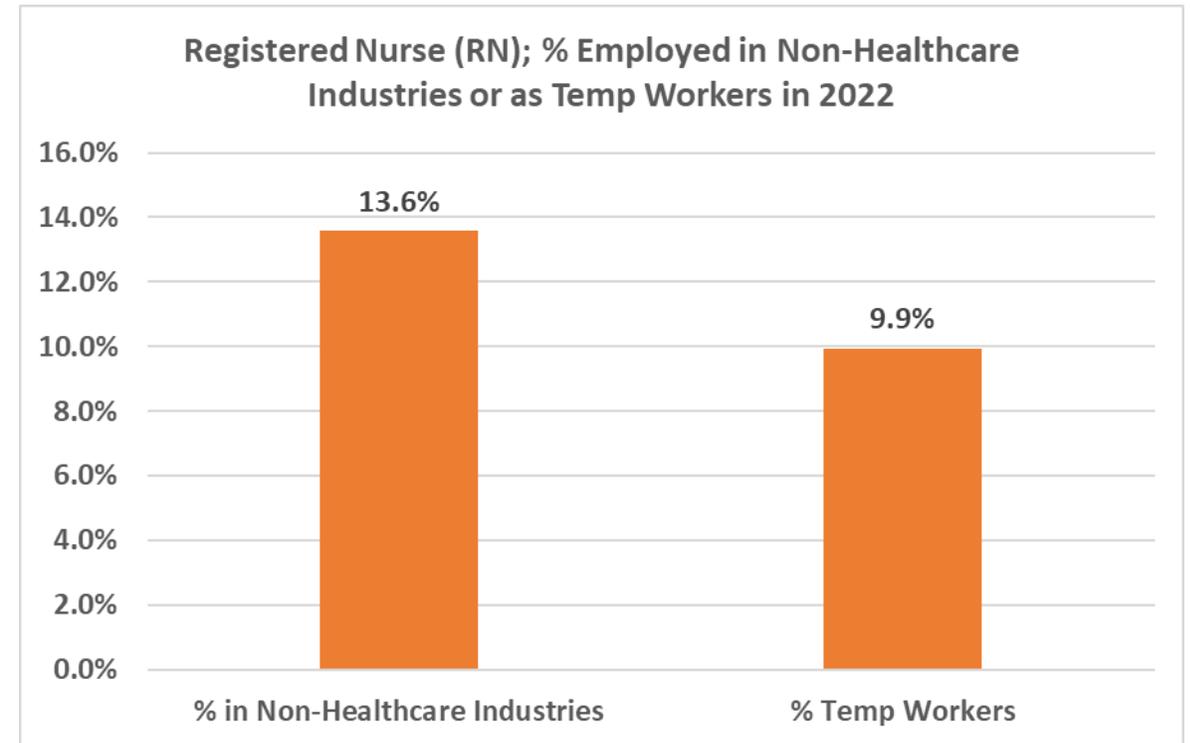
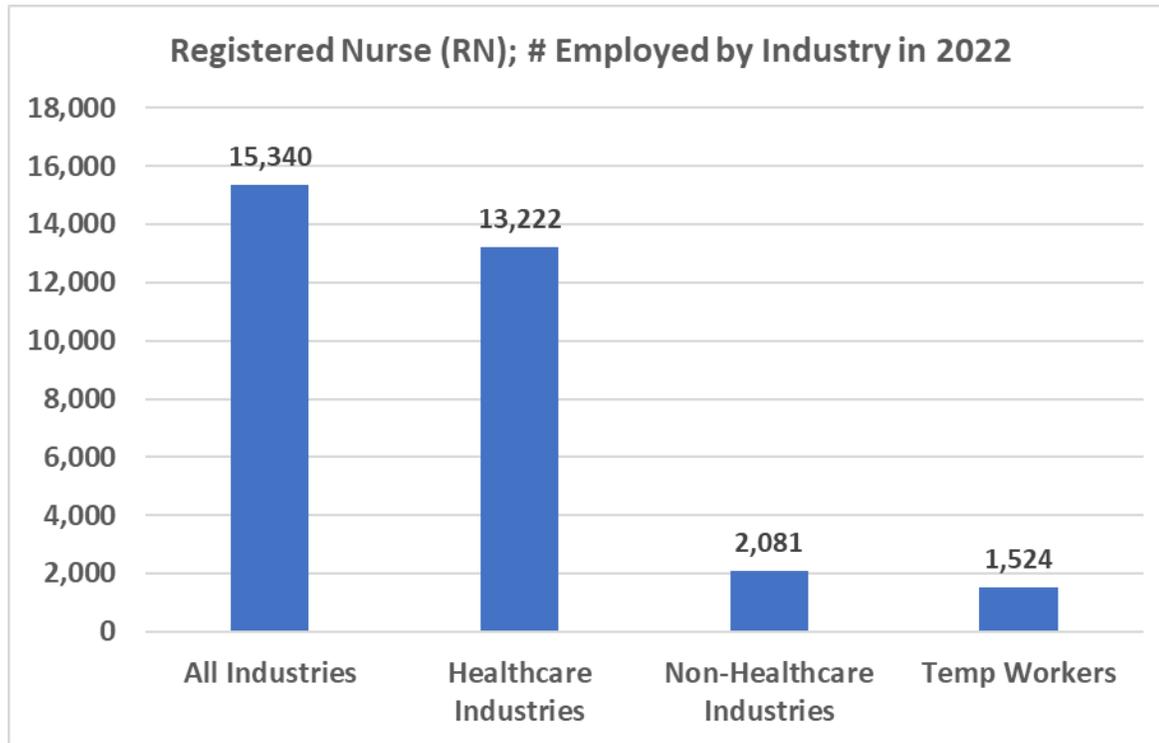
Nearly 15K RI'ers that were employed had a CNA license, with more than one out of five working in non-healthcare industries, and nearly one in six were temp workers. The visuals are based on figures in the dashboard.



Notes & caveats: Employment data is recorded at the quarterly level. Those working in more than one industry per quarter were counted in each industry designation. The employment data does not indicate whether work was part-time, full-time, or overlapping with other work. Healthcare industry includes NAICS codes 611, 621-624. Temp worker includes NAICS code 5613.

Snapshot, # Employed by Industry: Registered Nurses

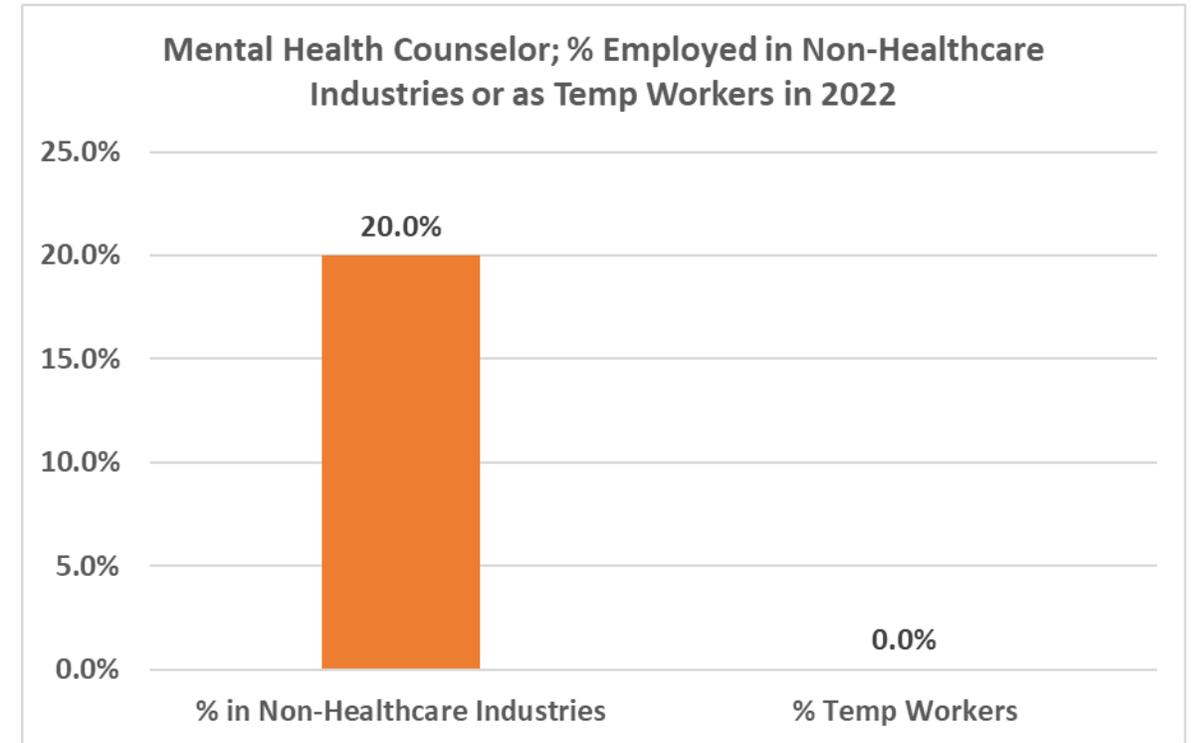
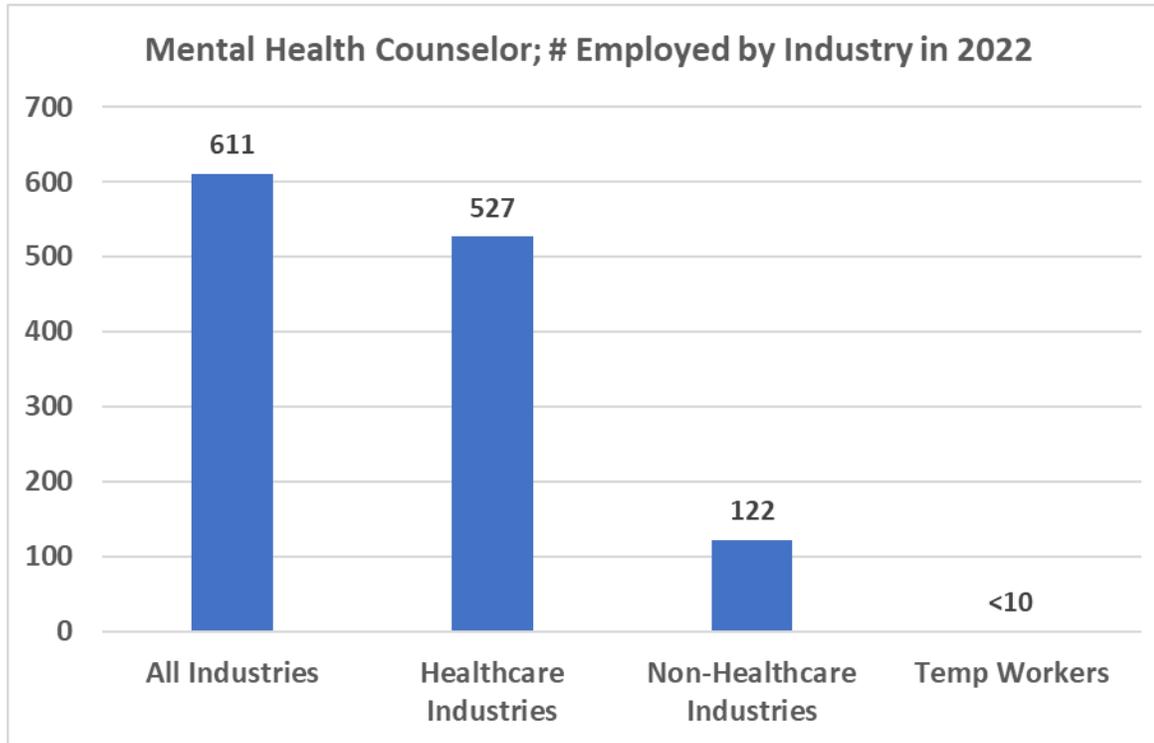
Over 15K RI'ers that were employed had a RN license, with more than one out of eight working in non-healthcare industries, and nearly one in ten were temp workers. The visuals are based on figures in the dashboard.



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Snapshot, # Employed by Industry: Mental Health Counselors

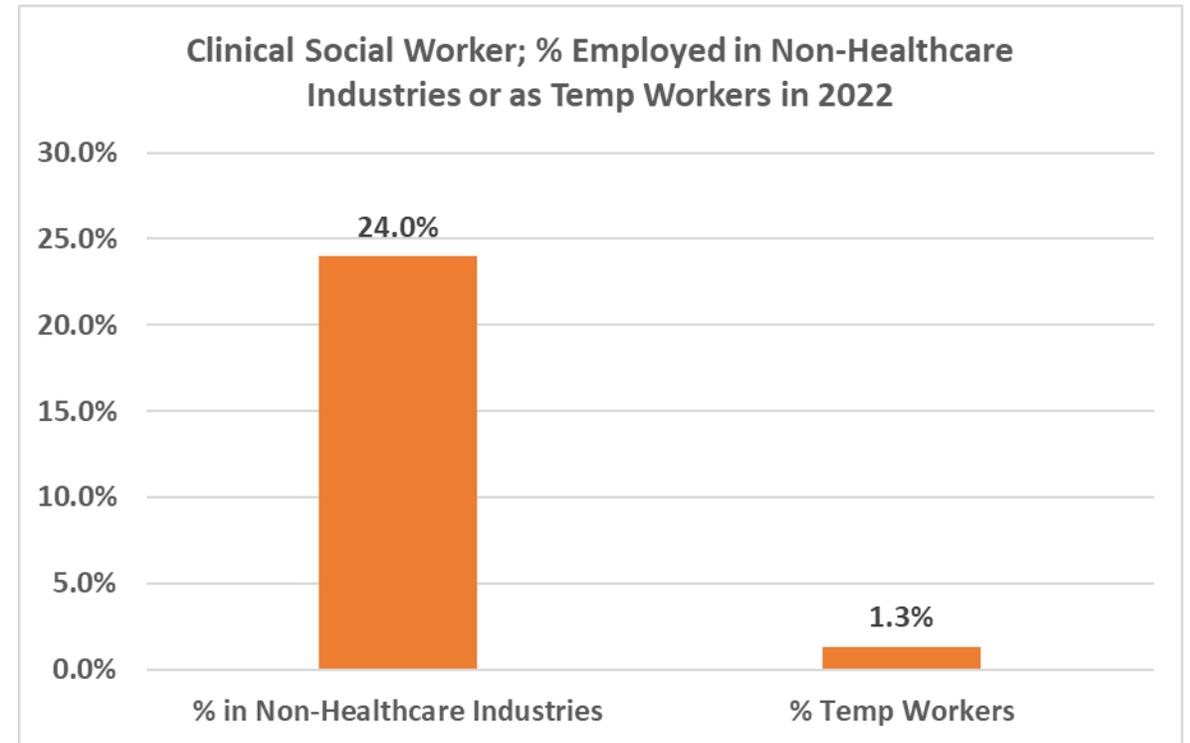
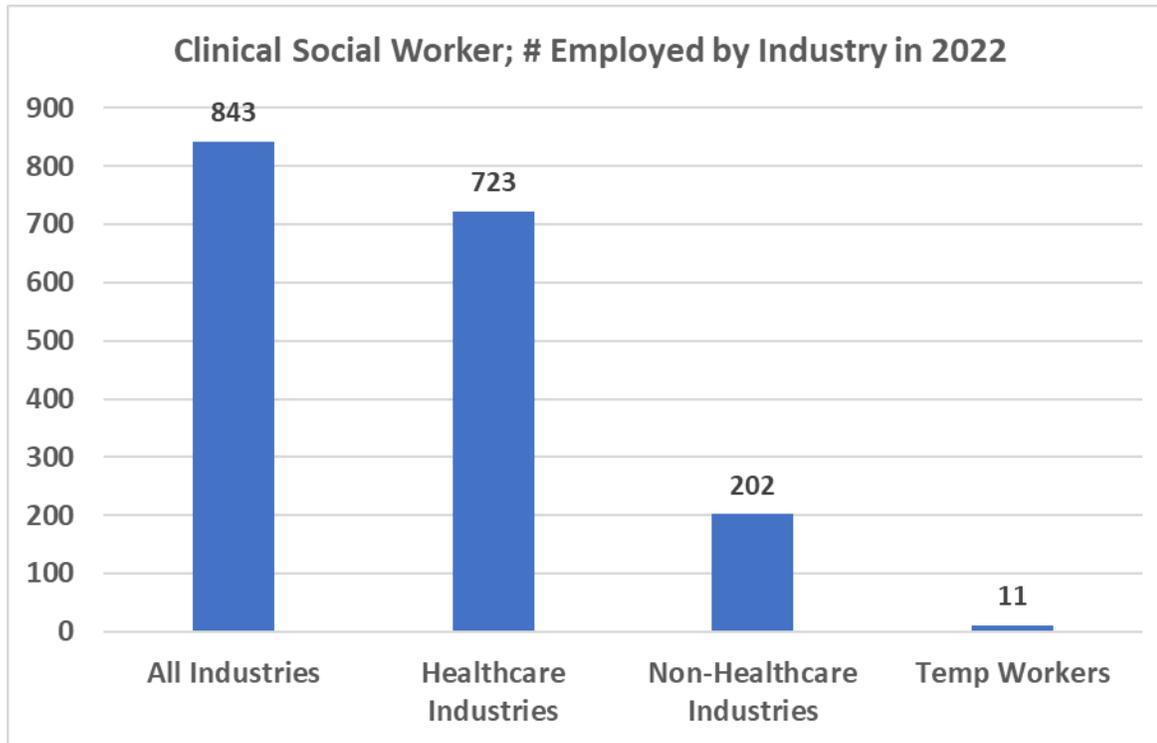
Over 600 RI'ers that were employed had a license for Mental Health Counseling, with one out of five working in non-healthcare industries. The visuals are based on figures in the dashboard.



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Snapshot, # Employed by Industry: Clinical Social Workers

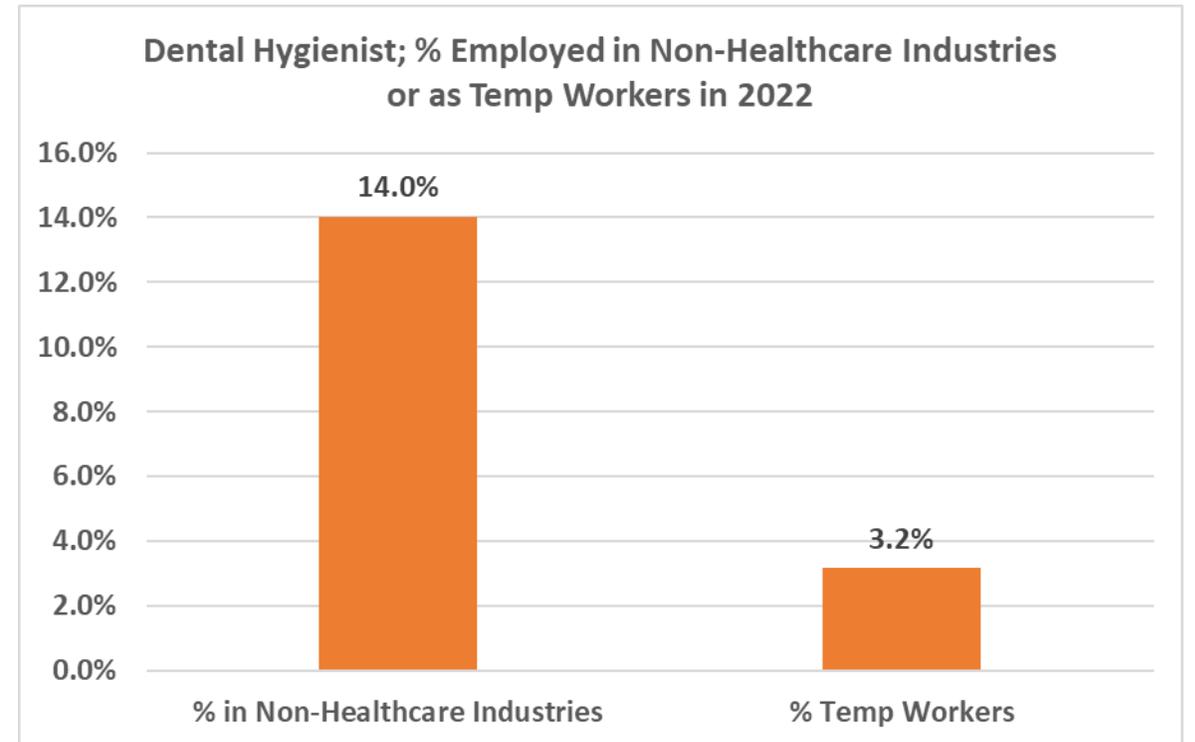
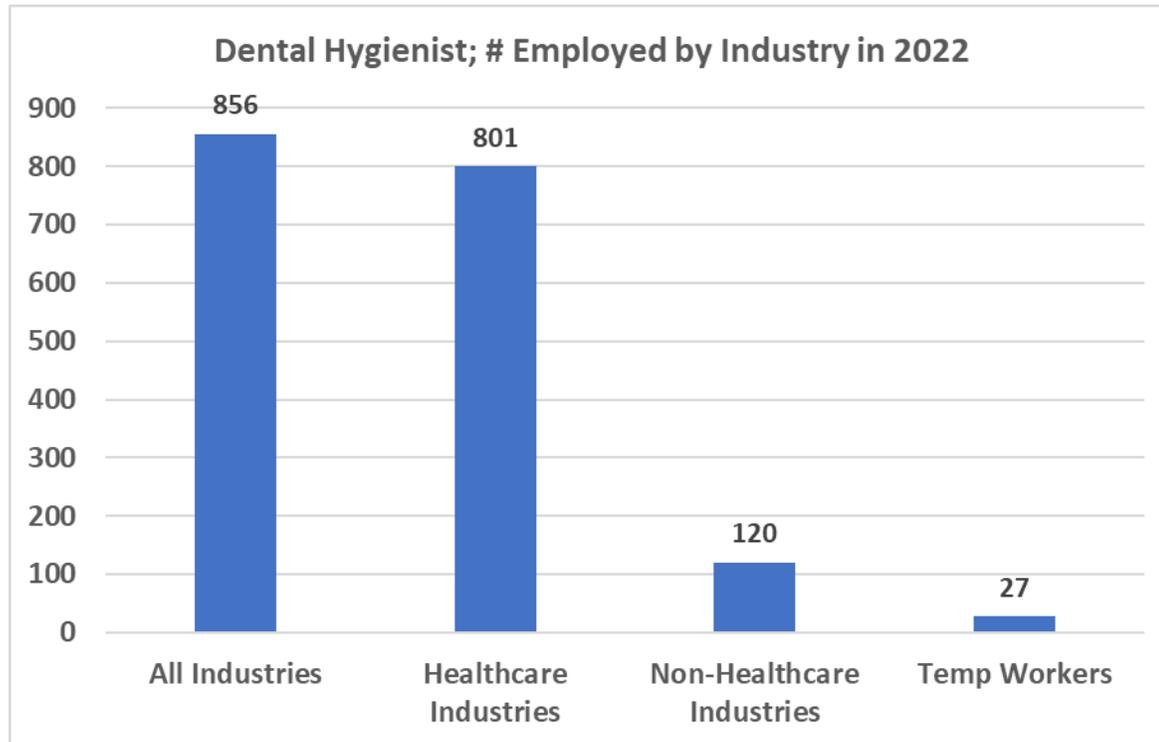
Over 800 RI'ers that were employed had a LCSW license, with nearly one out of four working in non-healthcare industries, and about 1% were temp workers. The visuals are based on figures in the dashboard.



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Snapshot, # Employed by Industry: Dentist Hygienists

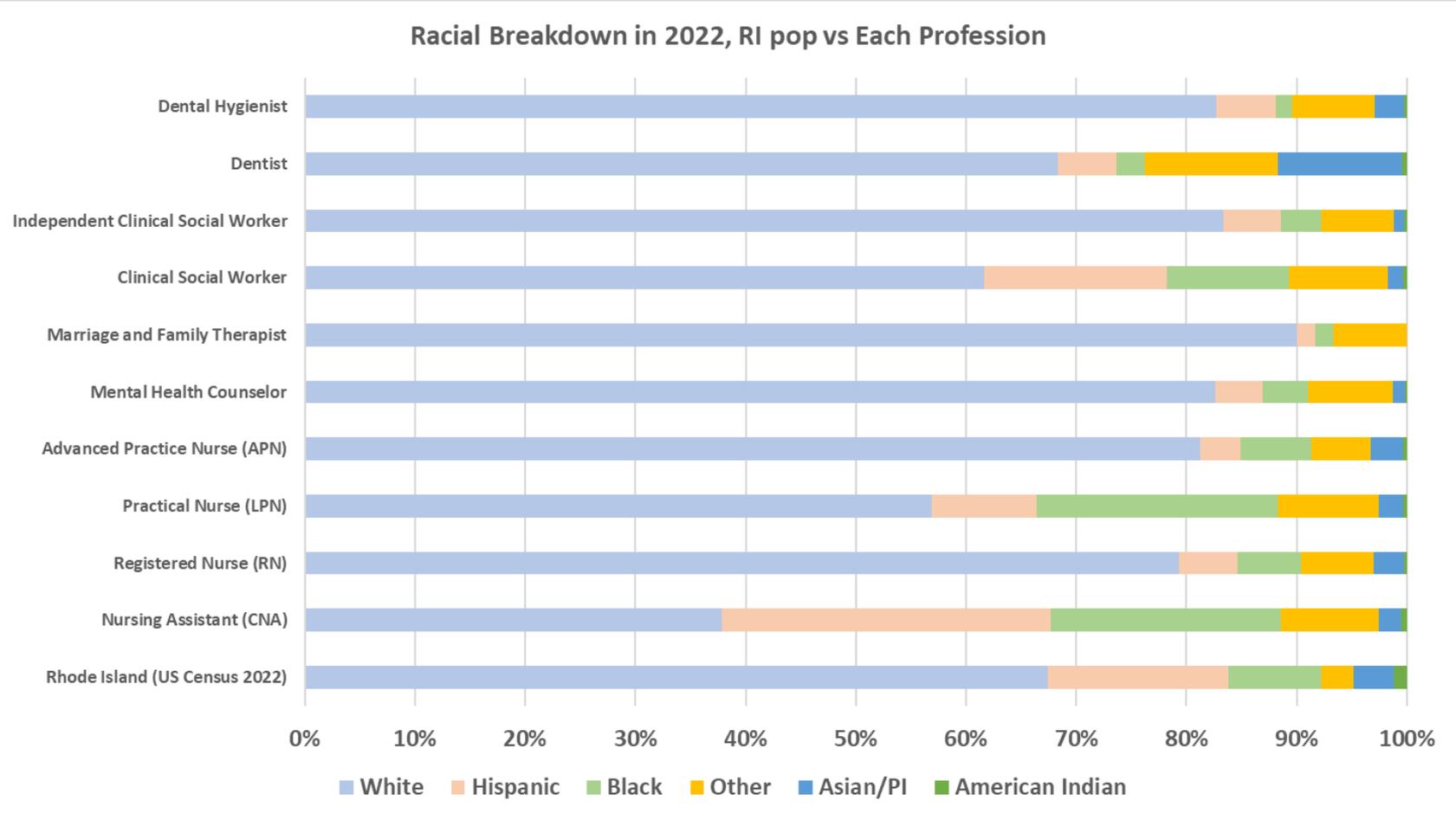
Over 850 RI'ers that were employed had a Dental Hygienist license, with about one out of seven working in non-healthcare industries, and about 3% were temp workers. The visuals are based on figures in the dashboard.



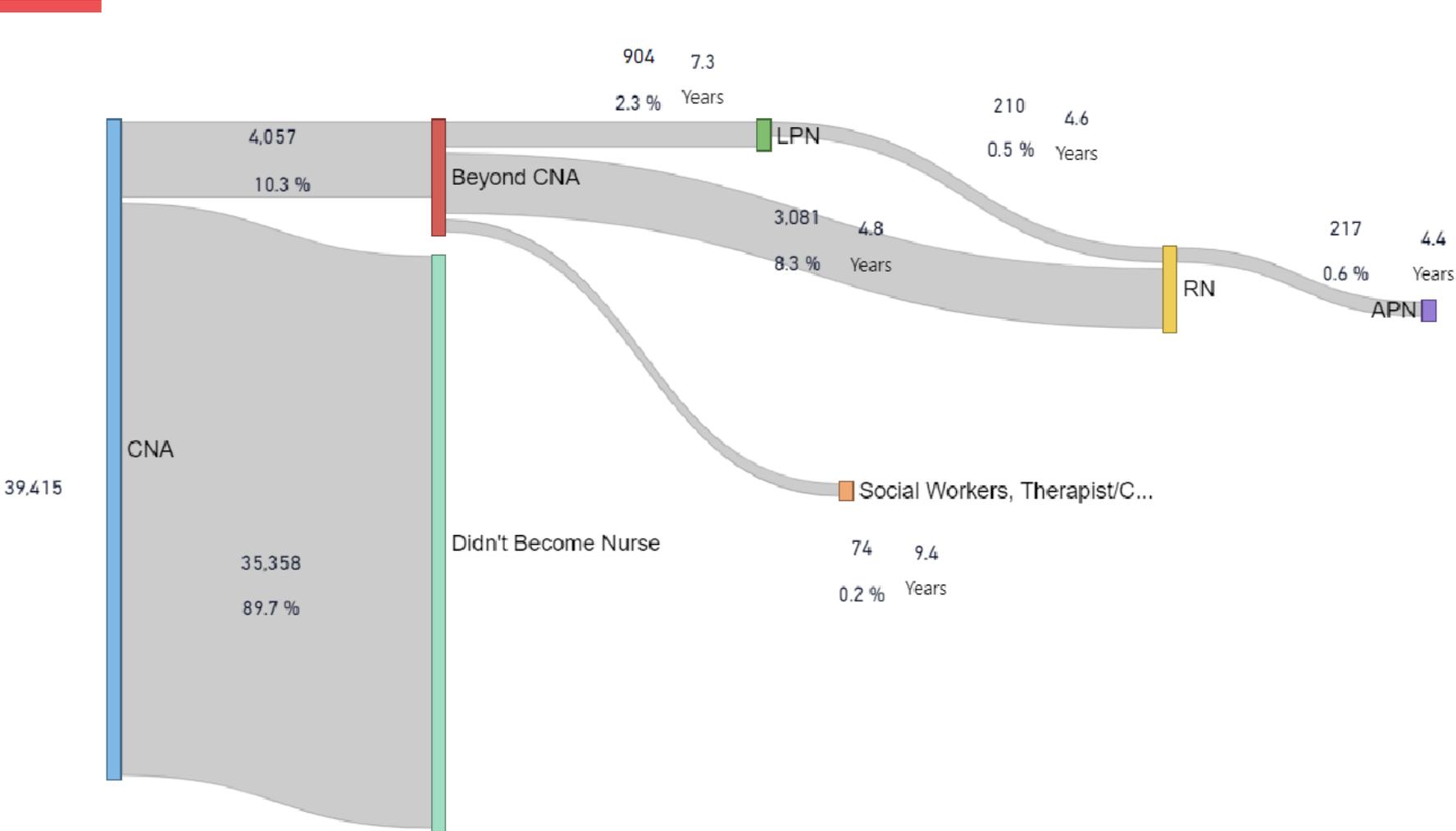
Notes & caveats: Employment data is recorded at the quarterly level. Those working in more than one industry per quarter were counted in each industry designation. The employment data does not indicate whether work was part-time, full-time, or overlapping with other work. Healthcare industry includes NAICS codes 611, 621-624. Temp worker includes NAICS code 5613.

Race and Ethnicity of Licensed Professionals

Nursing assistants, practical nurses, and clinical social workers (LCSW) are composed of a higher % of people who identify as Black, Hispanic, Asian, American Indian, and Other compared to the overall state population.

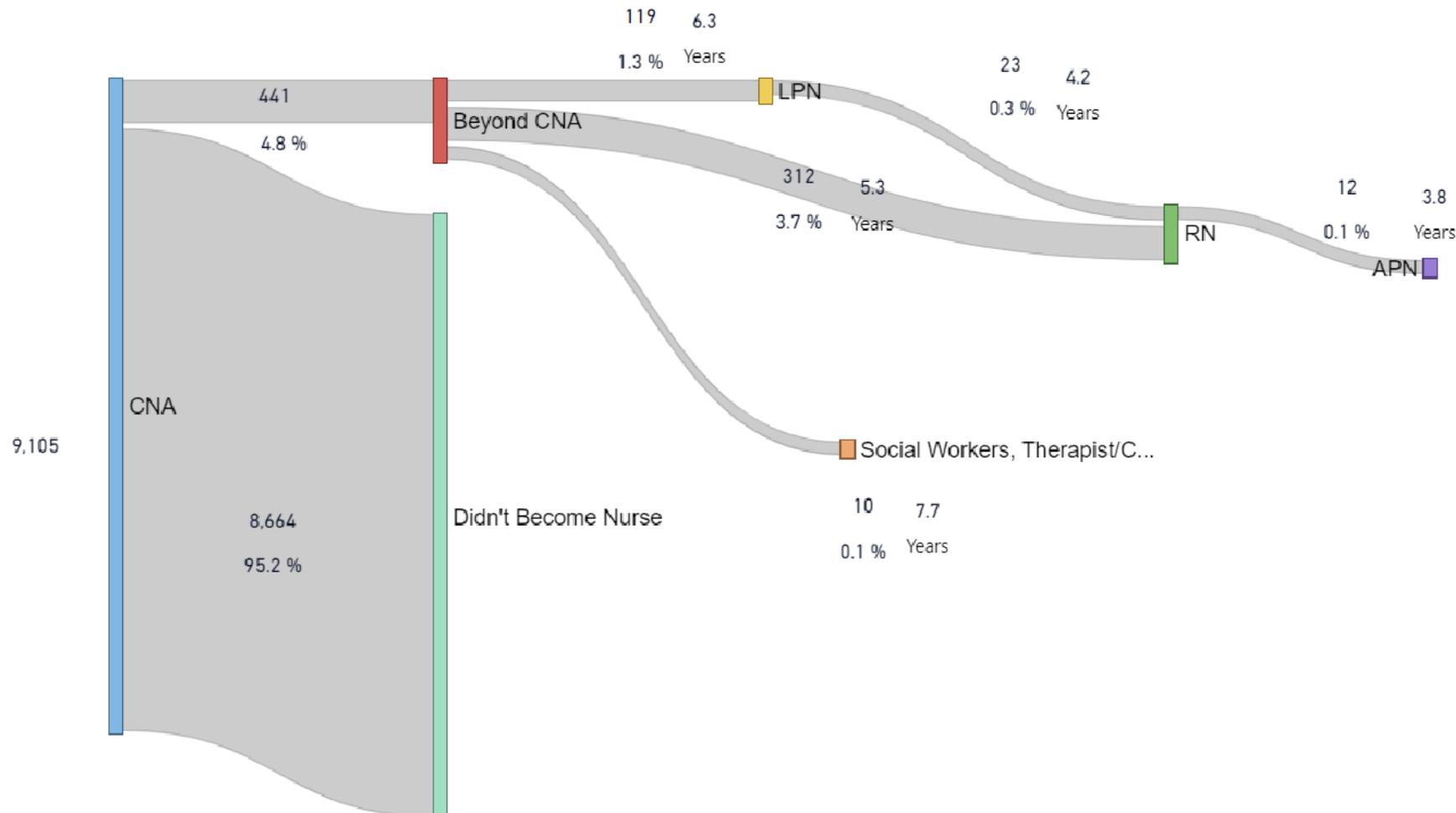


Career Progression Among CNAs with licenses at any point in 2010-2022



This flow chart shows the percent of CNAs that didn't become a nurse or obtain any other advance licensure versus the percent of those who obtained licensure beyond a CNA, along with the average years to reach each license milestone. RI'ers of all races are included.

Hispanic CNAs are less likely to progress to a nursing career, 2010 to 2022



This is the same flow chart as the one from the prior slide but is restricted to only the Hispanic population. Compared to the overall population, a smaller proportion of Hispanic CNA's obtained a licensure beyond a CNA (4.8% vs 10.3% overall pop.) and the path to RN was slightly longer for Hispanics (5.3 years vs 4.8 years overall pop.).

Hispanic RNs are more likely to have started as CNAs, **2010-2022**



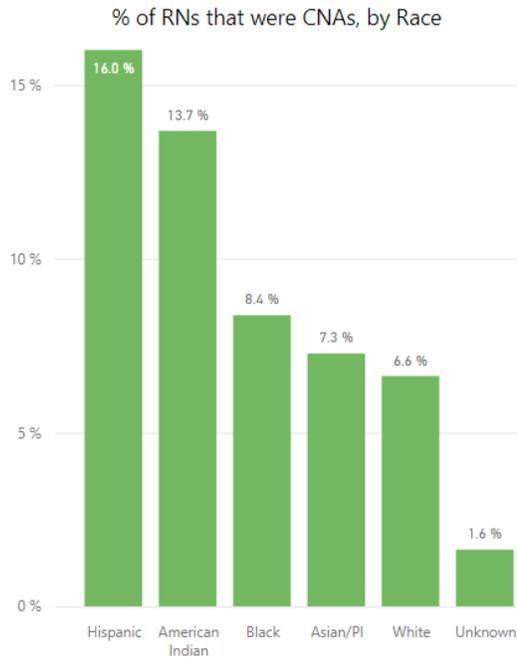
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Pathways to RN Licensure

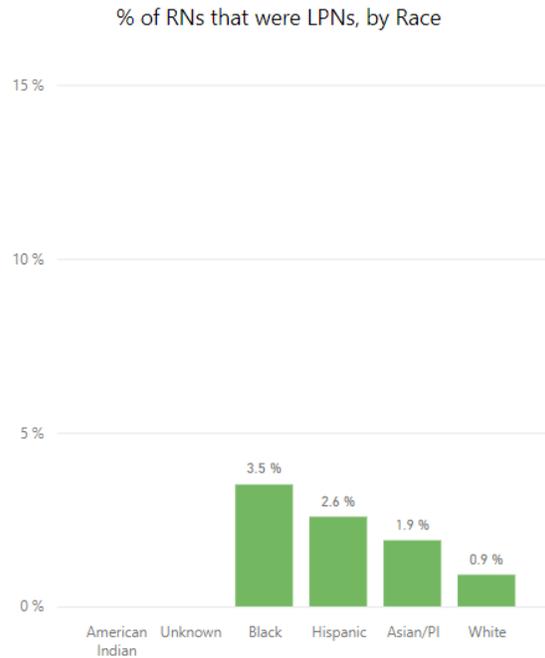
Assessing % of RNs who were previously CNAs or LPNs

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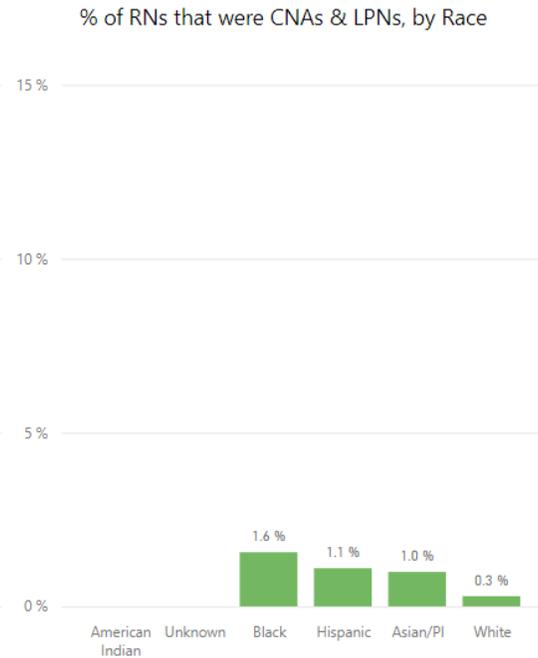
Race/Ethnicity
Multiple selections ▾
6.6 %
Across all Races



1.1 %
Across all Races



0.4 %
Across all Races



Some RNs start their career as a CNA or LPN. The percent of RN's that were previously a CNA (left graph), LPN (middle graph), or both CNA & LPN (right graph) varies by race. Hispanic and Black RNs more often relied on these pathways to their RN career compared to overall ("across all races") population.

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