

North Carolina Advanced Practice Registered Nurses

Executive Summary

Erin Fraher, Connor Sullivan, Catherine Moore, Tony Kane, Andy Knapton, Lorinda Coombs, Evan Galloway, Haley Simons

Introduction

The lack of robust, state-level data on the Advanced Practice Registered Nurse (APRN) workforce makes understanding gaps in supply and demand challenging. To address this gap, an interprofessional team of researchers investigated trends in the demographic, education, practice and geographic characteristics of the four APRN roles in NC—Nurse Practitioners (NPs), Certified Nurse Midwives (CNMs), Certified Registered Nurse Anesthetists (CRNAs) and Clinical Nurse Specialists (CNSs). The [report](#), detailing findings from the study, is the culmination of work undertaken by the [Cecil G. Sheps Center's Program on Health Workforce Research and Policy](#) with funding from the [North Carolina Board of Nursing \(NCBON\)](#).

The study is timely as the state considers ways to address the growing demand for health care services and better understand the roles that APRNs play in meeting this demand. The report will also be useful to provide policy makers with empirical data on APRNs as discussions of APRN-related legislation continue.

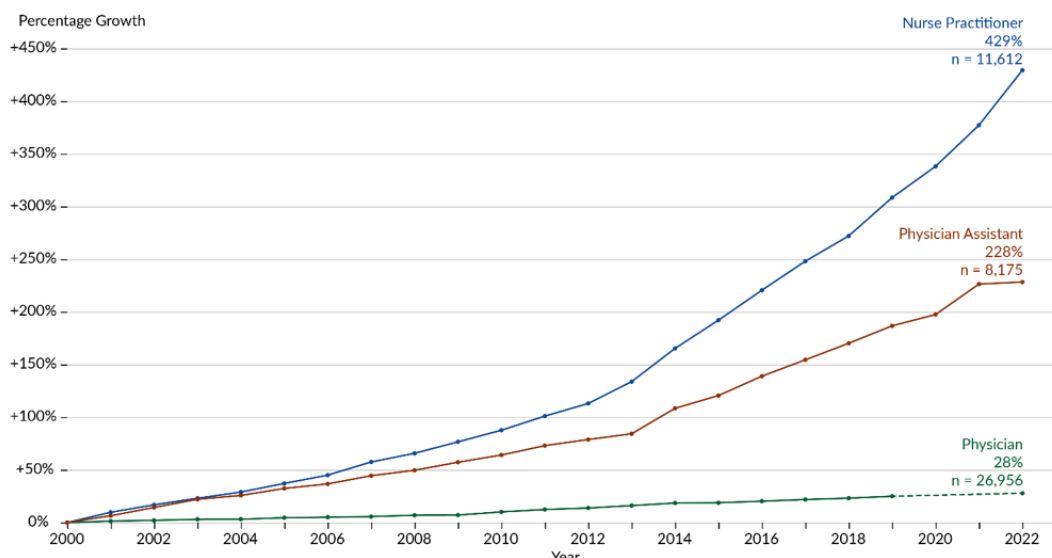
What makes the North Carolina APRN Report Unique?

Most APRN studies are at the national level, and while some state-level APRN studies exist, they often rely on surveys and suffer from low response rates that may produce results that are not representative of the true population of APRNs. This study used licensure data from the NCBON, which represent a full census of the APRN workforce in NC.

Key Findings

- The NP workforce in NC grew by 429% between 2000 and 2022, compared to a 28% growth rate for physicians over the same period. However, there were still more than twice as many physicians as NPs in NC in 2022 (Figure 1).

Figure 1. Cumulative Percentage Growth of North Carolina Nurse Practitioners, Physicians, Physician Assistants, 2000-2022

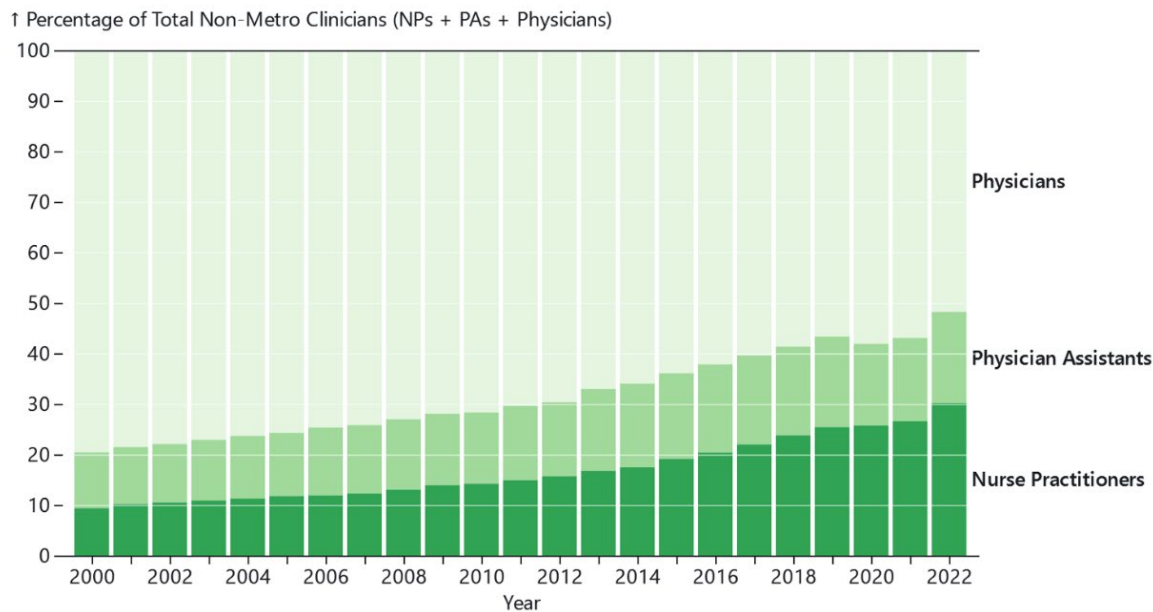


Note. Data from 2020 and 2021 are unavailable because of issues with the data which make longitudinal comparisons misleading.

- In 2022, more than half of new NPs entering the workforce each year were from out-of-state (59.6%), moving to NC after completing their NP education or from practice in other states.
- In 2022, 72.9% of the NP workforce in nonmetropolitan communities were Family Nurse Practitioners (FNPs).

- Physicians outnumber NPs and physician assistants (PAs) in NC nonmetropolitan counties, but NPs and PAs make up a growing percentage of the clinical workforce in nonmetropolitan counties (Figure 2).

Figure 2. North Carolina Nurse Practitioners as a Percentage of Nonmetropolitan Clinicians in the State, 2000-2022



Note. Clinicians are defined as nurse practitioners (NPs), physicians, and physician assistants (PAs). Physician data from 2020 and 2021 were unavailable because of data collection issues during the pandemic. Nonmetropolitan county status was defined using US Office of Management and Budget Core Based Statistical Areas (CBSAs). Nonmetropolitan counties include micropolitan counties and non-CBSAs. The definition of nonmetropolitan corresponds with the delineations in place for each year of data.

- FNPs comprised the largest percentage (28%) of NPs working in hospital settings in 2022.
- The number of psychiatric NPs in the state increased 300% between 2014 and 2022.
- The number of psychiatric NPs who identified as underrepresented minorities (URMs) increased from 23 to 140 between 2014 and 2022, a 508% growth rate.
- In 2022, 50% of FNPs with a dual certification held a second certification as a psychiatric-mental health nurse practitioner.
- The CNM workforce in NC grew by 53% between 2014 and 2022, a number that may increase even more in the future given the new pathway to independent practice for CNMs in NC.
- In 2022, 27% of CNMs who identified as URMs worked in nonmetropolitan counties, compared to 12% of non-URM CNMs.
- The CRNA workforce increased at a slower rate than NPs and CNMs from 2018 to 2022. Also, in contrast to other APRN groups, most CRNAs enter practice in NC from in-state pathways (68.1% in 2022).
- The annual in-state retention of NC CRNA program graduates varied widely per program per year between 2019 and 2022 (from 30% to 92%).
- Most NC counties (n=60) did not have CNSs, and most CNSs practiced in metropolitan counties with major health systems/hospitals in 2022.

Suggested Citation: Fraher E, Sullivan C, Moore C, Kane T, Knapton A, Coombs, L, Galloway E. [A Report on the Advanced Practice Registered Nurse Workforce in North Carolina. Program on Health Workforce Research and Policy.](#) Cecil G. Sheps Center for Health Services Research. The University of North Carolina at Chapel Hill. September 24, 2024.