



What Role do Advance Registered Nurse Practitioners have in Meeting Florida's Health Needs and Contributing to its Economy?

A Brief Report

The total demand for healthcare in Florida between 2013 and 2025 is projected to increase 24.75% due to population growth (13%), aging of our residents (8.75%), and continued implementation of the Affordable Care Act (4.7%). Florida is currently experiencing a physician shortage which is projected to worsen. The Florida Action Coalition is deeply committed to assuring a qualified health workforce to meet the healthcare needs of all Floridians. To that end, this study analyzes the impacts of more fully utilizing Advanced Registered Nurse Practitioners (ARNP) in the provision of health care in Florida, not only on access to healthcare, but also on the economy through jobs and increased spending. The full technical report provides empirical findings that can be used by policymakers, legislators and thought leaders in healthcare. This brief report summarizes the findings with an emphasis on the study implications.

BACKGROUND

ARNPs are an important part of Florida's healthcare system. These practitioners, which include nurse practitioners (NPs), certified registered nurse anesthetists (CRNAs), certified nurse midwives (CNMs), and clinical nurse specialists (CNSs), provide access to cost-effective, high quality care in a number of specialties such as primary care/family practice, OB-GYN, anesthesia and inpatient specialties. Furthermore, many studies support that outcomes from patients who receive care from ARNPs are equivalent to those receiving care from physicians, and ARNP care is less expensive than the equivalent physician-based care because their training costs are lower, they are compensated at lower levels, and their healthcare utilization is often lower (fewer tests and diagnostic procedures).

Despite these benefits, ARNPs are an underutilized resource in states that restrict their practice. Florida is one of the 29 states in the U.S. that do not allow ARNPs to practice as defined by their professional standards. Therefore, in Florida there are untapped benefits that could be utilized if regulations regarding ARNP practice were less restrictive. Since it has been shown that states with fewer ARNP practice restrictions (such as Arizona, Montana, New Mexico and Utah) have a larger ARNP supply (Kalist, & Spurr, 2004; Reagan, & Salsberry, 2013), removing these restrictions in Florida could expand access to quality healthcare, cost-effectively relieve the physician shortage, and contribute economically.

AUTHORS:

Lynn Unruh, PhD, RN
Professor, Department of Health
Management and Informatics
University of Central Florida

Ashley Rutherford, PhD MPH
Public Affairs Doctoral Program
University of Central Florida

Lori Schirle, PhD, CRNA
Post Doctoral Fellow, Health
Services Research
Vanderbilt University School of
Nursing

This report summarizes the sources of data and methods of analysis of the economic impact of reducing barriers in the practice of Advanced Registered Nurse Practitioners in Florida and reports results of the analysis. The work closely follows the blueprint of a similar analysis in North Carolina entitled Economic Benefits of Less Restrictive Regulation of Advanced Practice Registered Nurses in North Carolina: Technical Appendices, conducted by Christopher Conover and Robert Richards (Conover & Richards, 2015). The same step-by-step data analysis method was used as presented in their technical report. The analysis is also similar to work conducted by The Lewin Group (The State-Level Economic Impact of Office-Based Physicians) and The Perryman Group (The Economic Benefits of More Fully Utilizing Advanced Practice Registered Nurses in the Provision of

Health Care in Texas: An Analysis of Local and Statewide Effects on Business Activity). The project, completed for the Florida Action Coalition, began in January, 2016.

METHODS

An assessment of the impact of workforce changes, such as minimizing restrictions on practice of ARNPs, requires three connected sets of analyses. The first set estimates changes in demand for the workforce over the projected time period. Estimating what will happen to demand is necessary for understanding needed changes in ARNP supply in this time period. The second set of analyses computes the increase in ARNP supply that would result from the change in restriction on practice over this same time period. It also examines the degree to which the increased demand for healthcare would be met by the increased supply. And, it estimates the effect of the increase in ARNP supply, due to the less restrictive regulation, on the physician shortage.

The third set of analyses looks at the economic impact of the changes in employment on total economic output, jobs, wages and benefits in Florida at the state, workforce region, and county levels. This includes the direct impact of the value of output, jobs, wages and benefits that are produced from patient care activities provided by ARNPs. It also includes the indirect effect of the output, jobs, wages and benefits generated in the industries that are supported by the organizations in which ARNPs practice. Finally, consideration is given to the induced effects of ARNP spending on local businesses, which positively affects employment in those businesses, which allows those employees to purchase more goods and services and pay taxes, etc., in a continuing “multiplier effect” across the economy.

The expected changes in demand for ARNPs in Florida was estimated to occur between 2013 and 2025. This estimate took into account the anticipated increase in demand related to changes in population demographic factors and the ongoing implementation of the ACA. Estimates of the increase in ARNP supply were based on what would result from less restrictive ARNP regulations from 2013 – 2025. This was estimated from the additional hours of care ARNPs could provide in activities currently only provided by physicians [measured as Full-Time Equivalents (FTEs)]. The final supply estimate was to indicate the extent of the physician shortage that could be reduced by increasing ARNP hours of care.

The economic impact of less restricted ARNP practice on total output, jobs, wages and benefits was conducted using a software application (IMPLAN). In addition to estimating the economic impact of regulation reform, this section of the analysis also estimated the potential health system savings that might result from expanded ARNP use.

FINDINGS

Increased Demand for Healthcare

Between 2013 and 2025 demand is projected to increase due to increases in the population (13%), changes in the age of Floridians (8.75%), and continuing implementation of the ACA. This results in a total increase in demand of 24.75% without Medicaid expansion and 26.5% with Medicaid expansion.

Size of ARNP Market in 2013

In 2013 there were 18,931 active ARNPs (17,343 FTEs). In terms of compensation, ARNPs were a \$2.5 billion market within the health industry in Florida. This is a conservative figure that does not include practice expense which, in 2013, were estimated to be \$3.3 billion. Including both compensation and practice expenses, the total size of the ARNP market sector in 2013 was close to \$6 billion.

Increased Supply of ARNPs by 2025 due to less restrictive regulation

Between 2013 and 2025, the number of ARNP FTEs could increase by an additional 1,876 (10.89%) if Florida adopted the least restrictive practice regulations such as in Arizona, Montana, New Mexico and Utah. For new ARNPs who otherwise would not have gone into advanced practice nursing or who would have practiced elsewhere in the U.S. or for ARNPs who would increase their FTEs due to the new regulation, this would result in close to \$273 million annually in additional ARNP compensation and \$628 million annually in additional ARNP compensation plus practice expenses.

Increases in demand from aging, population change and the ACA would absorb all of the increase in supply that would occur due to the less restrictive regulation. Put another way, the increase in ARNP supply would be fully employed by the increased demands for healthcare.

Reduction in Physician Shortage

Between 2013 and 2025 less restrictive regulation of ARNPs would result in a net increase of 1,876 full-time-equivalent ARNPs relative to the 2013 supply of 17,343. Taking into account the extent to which ARNPs can reduce the need for physicians either directly (by substituting for doctors to the extent their training allows or diverting physician supervision time into patient care) or indirectly (e.g., by reducing the need for hospitalization and the companion physician care that otherwise would be needed), we estimate the impact on the projected shortage of physicians in FL as follows:

- It could completely eliminate the shortage of primary care (non-OB/GYN) doctors.
- It could reduce the shortage of OB-GYNs by 15.3%.
- It could reduce the shortage of anesthesiologists by 37%.
- It could reduce the shortage of all of these types of physicians by 62%.

Economic Benefits of Less Restrictive Practice

The economic impact of the expansion in ARNP supply due to less restrictive regulation (including direct, indirect and induced effects on the broader economy) was estimated in two ways: based on ARNP compensation alone (lower bound); and based on ARNP compensation plus practice expenses (upper bound). The economic impact is as follows:

- The addition of 4,518 - 10,390 new jobs.
- The addition of \$238 - \$547 million in wages and benefits annually that can be spent on housing, goods and services, and a source of state and local tax revenue.
- An annual increase in economic output of at least \$542 million, possibly up to \$1.25 billion.

It is well established in the literature that using ARNPs to their full potential can reduce health expenditures. As Conover and Richards (2015) report, net health system savings from expanded use

of ARNPs range from 0.63% for the State of Massachusetts to 6.2% for the State of Texas. We estimate health expenditure savings in Florida using this broad range.

Multiplying this range by the total health expenditures in Florida in 2013 of \$153.6 billion indicates that the cost reductions could be from \$968 million to \$9.5 billion. This translates into \$50 to \$493 per Florida resident.

OPPORTUNITIES

This report was written to inform Florida policymakers, legislators and healthcare thought leaders about the economic benefits of fully utilizing ARNPs in the state. Utilizing ARNPs more fully relieves pressure on physician supply, is cost-effective in terms of the reduced cost of ARNP care, improves access to healthcare, and infuses additional value into the economy. It is a win-win situation.

Dealing with an Increasing Demand for Healthcare

It is widely accepted that Florida is facing a critical need for more healthcare providers. Advanced Registered Nurse Practitioners can be educated in a shorter period of time without compromising outcomes and at a reduced cost than that of physicians thus providing a positive solution to aid in addressing demand.

Addressing an Impending Physician Shortage

Utilizing ARNPs as appropriate in the delivery of primary care, obstetrics/gynecology, and anesthesia can effectively reduce the physician shortage while allowing scarce resources to be focused on the education and training of physicians to meet the need for specialty services.

Taking Advantage of Economic Benefits

Economic value is gained by

- reducing the cost of health care,
- creating jobs for a growing population,
- benefitting from state and local tax revenue from high wage incomes, and
- improving access to care thus averting use of expensive emergency settings.

REFERENCES

Conover, C.J., & Richards, R. (2015) *Economic Benefits of Less Restrictive Regulation of Advanced Practice Registered Nurses in North Carolina: Technical Appendices*, (February 2015). Available at: <http://chpir.org/wp-content/uploads/2015/02/Appendix-Final-Version.pdf> (accessed 1-5-16).

Kalist, David E. and Stephen J. Spurr. (2004). The effect of state laws on the supply of advanced practice nurses. *International Journal of Health Care Finance and Economics*, 4(4), 271-281.

Reagan, P.B & Salsberry, P.J. (2013). The effects of state-level scope-of-practice regulations on the number and growth of nurse practitioners. *Nursing outlook* 61(6), 392-399.