Economic Benefits of Less Restrictive Regulation of Advanced Practice Registered Nurses in North Carolina: An Analysis of Local and Statewide Effects on Business Activity

Key Findings

**Economic Benefits of Modernizing Regulation.** The estimated economic impact of the expansion in APRN supply due to modernizing regulation (including direct, indirect and induced effects on the broader economy) is as follows:

- At least 3,800 new jobs (possibly up to 7,128)
- An annual increase in economic output of at least $477 million (possibly up to $883 million)
- This expansion also would produce annual health system cost savings ranging from $433 million to $4.3 billion.

**Size of APRN Market.** APRNs are a $1 billion market within the health industry in NC (Table 8). This is a conservative figure that includes only APRN compensation. If we included typical practice expenses, the total size of this sector rises to just under $2 billion.

**Increased Demand Due to Demographics.** Between 2012 and 2019, demand for medical care, including APRN services, will increase by 14.4% due to demographic changes; i.e., increased population and population aging. This will “naturally” boost the size of the APRN market by $177 million a year.

**Increased Demand Due to ACA.** In addition, relative to a 2012 spending baseline, the injection of federal dollars under the ACA will increase demand for medical care, including APRN services, by:

- 3.1% if the Medicaid expansion is not adopted.
- 5.7% If Medicaid is expanded (or its equivalent, such as letting people below poverty purchase subsidized coverage through Exchanges).
- The ACA expansion will boost the growing demand for APRN-provided medical care that would have happened anyway due to demographics by an additional one-fifth the two-fifths.

**Increased Supply of APRNs Due to Modernizing Regulation.** Between 2012 and 2019, the number of APRNs would increase an additional 24.4% were NC to adopt the least restrictive scope of practice rules now in operation in states such as Arizona, Montana, New Mexico and Utah.
• This would result in $260 million in additional compensation annually for new APRNs who otherwise would have practiced elsewhere in the U.S.
• The increase in demand for APRNs due to the ACA potentially could absorb 12 to 22% of the increase in supply that would occur due to modernizing regulation.
• If we include the increased demand due to demographic change, the overall increase in demand could absorb 77 to 87% of the potential increase in supply resulting from modernizing regulation.

**Reduction in Physician Shortage.** Less restrictive regulation of APRNs would result in a net increase of 1,744 full-time-equivalent APRNs relative to the 2012 supply. Taking into account the extent to which APRNs 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 NC as follows:

• It could eliminate the shortage of OB/GYNs while reducing the shortage of non-OB/GYN primary care doctors by 83%.
• It could eliminate at least 85% of the projected shortage of anesthesiologists.
• It could decrease the overall shortage of nonfederal physicians by 41%.

**Policy Implications:** There is extensive empirical evidence that APRN practice outcomes are at least equivalent to those of physicians to which they are compared. From a value-for-money perspective, it is difficult to argue that North Carolinians would be better served by a health care system that spends more to achieve the same (or slightly worse) outcomes when a lower cost alternative is readily available. Moreover, especially when there is a shortage of physicians, it makes little sense to further divert doctors from patient care by imposing burdensome physician supervision requirements that other states have eliminated without any empirically demonstrable adverse effects on quality of care. Less restrictive regulation of APRNs offers the prospect of providing North Carolina residents better access to care of equivalent or better quality even as the health system sheds some avoidable costs (e.g., hospitalizations) in the process. It is rare that a health policy change offers gains across all three major dimensions of health system performance.