

Advancing Opportunity, Prosperity, and Growth

POLICY BRIEF 2018-08

Improving Efficiency in the Health-Care System: Removing Anticompetitive Barriers for Advanced Practice Registered Nurses and Physician Assistants JUNE 2018



ADVISORY COUNCIL

The Hamilton Project seeks to advance America's promise of opportunity, prosperity, and growth.

We believe that today's increasingly competitive global economy demands public policy ideas commensurate with the challenges of the 21st Century. The Project's economic strategy reflects a judgment that long-term prosperity is best achieved by fostering economic growth and broad participation in that growth, by enhancing individual economic security, and by embracing a role for effective government in making needed public investments.

Our strategy calls for combining public investment, a secure social safety net, and fiscal discipline. In that framework, the Project puts forward innovative proposals from leading economic thinkers — based on credible evidence and experience, not ideology or doctrine — to introduce new and effective policy options into the national debate.

The Project is named after Alexander Hamilton, the nation's first Treasury Secretary, who laid the foundation for the modern American economy. Hamilton stood for sound fiscal policy, believed that broad-based opportunity for advancement would drive American economic growth, and recognized that "prudent aids and encouragements on the part of government" are necessary to enhance and guide market forces. The guiding principles of the Project remain consistent with these views.

Hamilton Project Updates

www.hamiltonproject.org www.facebook.com/hamiltonproject www.twitter.com/hamiltonproj

The views expressed in this policy brief are not necessarily those of The Hamilton Project Advisory Council or the trustees, officers or staff members of the Brookings Institution.

Copyright © 2018 The Brookings Institution

GEORGE A. AKERLOF University Professor Georgetown University ROGER C. ALTMAN Founder & Senior Chairman Evercore

KAREN ANDERSON Senior Director of Policy and Communications Becker Friedman Institute for Research in Economics The University of Chicago

ALAN S. BLINDER Gordon S. Rentschler Memorial Professor of Economics & Public Affairs Princeton University Nonresident Senior Fellow The Brookings Institution

ROBERT CUMBY Professor of Economics Georgetown University STEVEN A. DENNING Chairman General Atlantic

JOHN M. DEUTCH Institute Professor Massachusetts Institute of Technology

CHRISTOPHER EDLEY, JR. Co-President and Co-Founder The Opportunity Institute

BLAIR W. EFFRON Partner Centerview Partners LLC

DOUGLAS W. ELMENDORF Dean & Don K. Price Professor of Public Policy Harvard Kennedy School

JUDY FEDER Professor & Former Dean McCourt School of Public Policy Georgetown University

ROLAND FRYER Henry Lee Professor of Economics Harvard University

JASON FURMAN Professor of the Practice of Economic Policy Harvard Kennedy School Senior Counselor The Hamilton Project

MARK T. GALLOGLY Cofounder & Managing Principal Centerbridge Partners

TED GAYER Executive Vice President Vice President & Director, Economic Studies The Joseph A. Pechman Senior Fellow, Economic Studies The Brookings Institution

TIMOTHY F. GEITHNER President Warburg Pincus

RICHARD GEPHARDT President & Chief Executive Officer Gephardt Group Government Affairs

ROBERT GREENSTEIN Founder & President Center on Budget and Policy Priorities

MICHAEL GREENSTONE Milton Friedman Professor of Economics Director of the Becker Friedman Institute for Research in Economics Director of the Energy Policy Institute University of Chicago

GLENN H. HUTCHINS Co-founder North Island

JAMES A. JOHNSON Chairman Johnson Capital Partners

LAWRENCE F. KATZ Elisabeth Allison Professor of Economics Harvard University

Professor of Economics University of Maryland Nonresident Senior Fellow The Brookings Institution LILI LYNTON Founding Partner Boulud Restaurant Group

HOWARD S. MARKS Co-Chairman <u>Oaktree Capital Management, L.P.</u>

Former Advisor to George W. Bush Co-Founder, No Labels

Chief Executive Officer & Founder Eton Park Capital Management

ALEX NAVAB Former Head of Americas Private Equity KKR Founder Navab Holdings

SUZANNE NORA JOHNSON Former Vice Chairman Goldman Sachs Group, Inc.

PETER ORSZAG Vice Chairman of Investment Banking Managing Director and Global Co-head of Health Lazard Nonresident Senior Fellow The Brookings Institution

RICHARD PERRY Managing Partner & Chief Executive Officer Perry Capital

PENNY PRITZKER Chairman PSP Partners

MEEGHAN PRUNTY Managing Director Blue Meridian Partners Edna McConnell Clark Foundation

ROBERT D. REISCHAUER Distinguished Institute Fellow & President Emeritus Urban Institute

ALICE M. RIVLIN Senior Fellow, Economic Studies Center for Health Policy The Brookings Institution

DAVID M. RUBENSTEIN Co-Founder & Co-Executive Chairman The Carlyle Group

ROBERT E. RUBIN Former U.S. Treasury Secretary Co-Chair Emeritus Council on Foreign Relations

Council on Foreign Relations LESLIE B. SAMUELS Senior Counsel Cleary Gottlieb Steen & Hamilton LLP

Cleary Gottlieb Steen & Hamilton LL

SHERYL SANDBERG Chief Operating Officer Facebook

DIANE WHITMORE SCHANZENBACH Margaret Walker Alexander Professor Director The Institute for Policy Research Northwestern University Nonresident Senior Fellow The Brookings Institution

RALPH L. SCHLOSSTEIN President & Chief Executive Officer Evercore

ERIC SCHMIDT Technical Advisor Alphabet Inc.

ERIC SCHWARTZ Chairman and CEO 76 West Holdings

HOMAS F. STEYER Business Leader and Philanthrop

LAWRENCE H. SUMMERS Charles W. Eliot University Professor Harvard University

LAURA D'ANDREA TYSON Professor of Business Administration and Economics Director Institute for Business & Social Impact Berkeley-Haas School of Business

JAY SHAMBAUGH Director

Improving Efficiency in the Health-Care System: Removing Anticompetitive Barriers for Advanced Practice Registered Nurses and Physician Assistants

Health-care services in the United States are often criticized as being excessively costly, inefficient, and lacking in competitive pressures. The increase in expense in recent decades is striking: health-care services expenditures accounted for only 8.9 percent of U.S. GDP in 1980, but grew to 17.9 percent of GDP in 2016. At the same time, health outcomes for the United States continue to lag behind those of other countries, whether measured in terms of life expectancy, quality-adjusted life years, or maternal mortality; consequently, U.S. citizens obtain far less value per health-care dollar spent.

One way to lower health-care spending and increase efficiency is to take actions that bolster competitive forces in the sector. Currently there are strong anticompetitive barriers to the most efficient use of labor provided by advanced practice providers (APPs) like nurse practitioners (NPs) and physician assistants (PAs). These legal barriers—referred to as scope of practice (SOP) restrictions—have been put in place by state legislatures with the stated intention of improving patient safety by ensuring that care is provided by properly trained individuals.

However, SOP restrictions can also prevent qualified providers from serving patients and can add layers of administrative costs to the health-care sector. APPs in the sector are prevented from fully competing with physicians, thereby limiting access to primary care and other services while lowering health-care productivity.

In a new Hamilton Project policy proposal, E. Kathleen Adams and Sara Markowitz discuss the effects of SOP laws imposed on PAs and advanced practice registered nurses (APRNs). The authors present evidence showing how these laws restrict competition, misallocate resources, and contribute to increased health-care costs without providing any discernable health benefits. Adams and Markowitz examine the labor market and health benefits of moving to fully authorized SOP for these providers and propose state and federal policies that can help facilitate that shift.

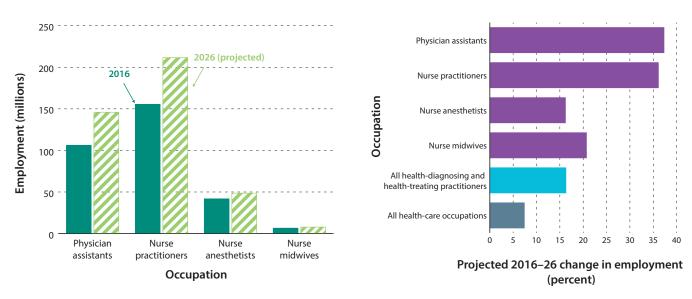
The Challenge

Adams and Markowitz begin by noting that employment of advanced practice providers like nurse practitioners and physician assistants is both high and rising. The Bureau of Labor Statistics projects that APP employment in particular will grow faster than overall health-care practitioner employment over the next decade. Figure 1 shows current employment levels and projected growth through 2026. As APPs become an increasingly important part of the health-care system, the economic benefits of fully integrating them into the health-care system grow as well.

Types of Scope of Practice Restrictions

The authors explain that a primary barrier to full integration of APPs is that many states unnecessarily limit their scope of practice (SOP). SOP laws specify the tasks and procedures that APPs may perform, as well as the degree of independent

FIGURE 1. Employment and Projected Employment of Selected Health-Care Occupations



Source: Bureau of Labor Statistics (BLS). 2017. "Employment Projections Program." Bureau of Labor Statistics, U.S. Department of Labor, Washington, DC.



practice that is permitted, ranging from autonomous practice to collaborative or consultative arrangements with physicians to supervisory relationships with physicians. SOP limitations exist when either a state medical board or state law prevents physician assistants or advanced practice registered nurses from working to the full extent justified by their education, training, and experience. For example, APPs might be limited in their ability to write prescriptions or to work in a practice with more than a specified ratio of APPs to physicians. These SOP limitations take on different forms for PAs and APRNs. Most notably, PAs must practice medicine under the supervision of a physician, but the required nature of that supervision varies by state.

As shown in figure 2, 24 states and the District of Columbia allow fully authorized SOP for NPs. In addition, 28 states and the District allow fully authorized practice for certified nurse midwives (CNMs; not shown).

Impacts of Scope of Practice Restrictions

Adams and Markowitz examine recent empirical studies that explore the impacts of SOP restrictions on provider employment and earnings, health outcomes, access to health care, and health-care costs.

Employment and Earnings

Absent SOP restrictions, employers will seek an efficient mix of different types of labor. However, in health-care labor markets with SOP restrictions, the authors explain that employers are less able to substitute among providers to obtain the most costeffective and productive mix of practitioners. Academic research provides some evidence that SOP limitations negatively impact labor markets. For example, states with fully authorized SOP for NPs have higher rates of NPs working and a diminished number of health professional shortage areas than do other states. In addition, NPs are less likely to leave a state in which they have prescription authority. However, there is no evidence that fully authorized SOP laws affect the employment levels of CNMs or PAs.

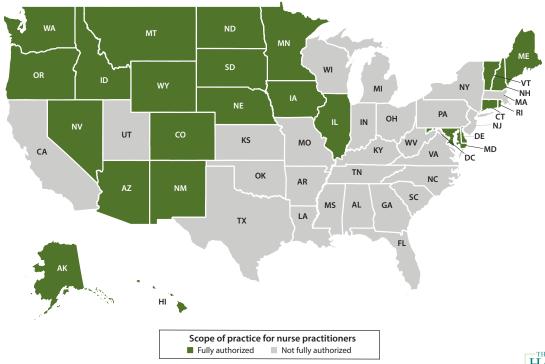
Adams and Markowitz also point out that restrictive SOP requirements may redistribute income from APPs to physicians. One study found that independence in practice authority is associated with increases in NP hourly earnings and decreases in physician hourly earnings.

Access to Care

The authors explain that enhanced employment of APPs—and greater flexibility in their use—should increase patient access to care. This can mean more access in rural areas, for example. It can also mean more scheduled outpatient procedures, rather than urgent care or emergency room visits.

Although it is difficult to quantify access to care (as opposed to employment of APPs), there is evidence that changes in SOP laws in turn have caused changes in utilization of services. NP independence increases the probabilities of patients having routine checkups, having a usual source of care, and being able to get an appointment when wanted. At the same time, NP independence decreases the probability of emergency room visits for ambulatory care–sensitive conditions (i.e., conditions that are preventable or treatable by effective outpatient care).

FIGURE 2.



Fully Authorized Scope of Practice for Nurse Practitioners

Source: Policy Surveillance Program. 2017, August 1. "Nurse Practitioner Scope of Practice." Policy Surveillance Program, Temple University Beasley School of Law, Philadelphia, PA.



Health Outcomes

Adams and Markowitz explain that the research literature is consistent in finding no evidence of harm to patients associated with less-burdensome SOP requirements. For example, SOP restrictiveness for NPs appears to have no effects on a variety of outcomes, including chronic disease management, cancer screening, and ambulatory care–sensitive hospital admissions. Moreover, enhanced prescription authority for NPs has no effects on infant mortality rates. In some cases, there are benefits of less-restrictive SOP, as with infant and maternal health: independent SOP for CNMs is associated with lower probabilities of labor induction, fewer Caesarean deliveries (C-sections), and slight improvements in infant health metrics such as birth weight.

Health-Care Costs

Transaction prices are difficult to observe, in part due to incidentto billing rules. For Medicare, incident-to billing occurs when office- or outpatient-based services provided by APPs are billed to physicians and paid according to the physician fee schedule. Not all services are subject to incident-to billing, but for those that are, Medicare rules require that the services be provided under the direct supervision of the physician, meaning that the physician must be on site and available at the time of the service. In addition to potentially raising costs, this billing practice results in a lack of data on actual utilization and transaction prices for each type of provider.

The authors explain that observed transaction prices tend to be lower when APRNs and PAs have few or no SOP restrictions on their practice. For example, the price of child well-care visits is lower by a range of 3 to 16 percent in states where NPs are permitted to work independently. Other research finds that expanded SOP for PAs is associated with a 12 to 14 percent reduction in the dollar amount of outpatient claims among Medicaid patients. The types of savings this generates—and who captures the savings—may depend on other institutions in the health-care system that affect competition and care.

A New Approach

In light of evidence suggesting that SOP restrictions limit competition and the efficient operation of the health-care system, Adams and Markowitz propose that state policymakers reduce SOP limitations, thus allowing providers to practice in accordance with their education, training, and experience. The authors discuss specific state and federal policies that would help achieve this goal, and explore the ways in which removing SOP restrictions would interact with ongoing health-care reform movements.

State Reforms

Physician Assistants

Adams and Markowitz propose setting the level of interaction between physicians and PAs at the practice level. This would let physicians and PAs decide on the optimal relationship for the organizational and market environments in which they work. Additionally, this would eliminate maximum PA-to-physician

Roadmap

- State legislatures and licensing authorities will:
 - implement fully authorized SOP for APRNs, including elimination of supervisory or delegative practice requirements, elimination of requirements for formal collaborative practice agreements and protocols, provision of prescription authority, and elimination of APRN-to-physician ratio requirements;
 - implement optimal team practice for PAs, such that details of the physician–PA relationship are determined at the practice level; and
 - seek the Federal Trade Commission's recommendations when discussing changes to SOP.
- Federal agencies that provide medical services will institute fully authorized SOP for their medical providers
- Congress will increase funding on research that examines the effects of SOP restrictions.

ratios imposed by states. These reforms would confer flexibility that is particularly valuable given the markedly varying conditions across urban and rural market areas, as well as across the changing organizational structures (e.g., large group practices, ACOs, multihospital systems) within which these professionals work.

Advanced Practice Registered Nurses

Adams and Markowitz propose that state policymakers eliminate requirements for supervisory or delegative practice arrangements, eliminate requirements for formal collaborative practice agreements and protocols, enable APRNs to prescribe medicines, and eliminate maximum APRN-to-physician ratio requirements. Importantly, these proposals are consistent with robust, ongoing collaborative relationships between APRNs and physicians that are already the norm in the health-care field.

The authors note that applying these reforms to CNMs—APRNs who provide prenatal, delivery, and postpartum care—should be of particular interest to state legislators, given that Medicaid pays for almost half of the births in the nation.

Federal Reforms

The authors then describe how the federal government can support changes in provider SOP. One important way that the federal government can assist is by disseminating and encouraging the adoption of best practices at the state level. The federal government can also support these proposals by funding research on the effects of restrictive SOP, particularly in areas where data are lacking, such as professional school enrollment, employment and migration decisions, and wages of APRNs and PAs. Working to eliminate incident-to billing requirements would be helpful both for research on SOP impacts and for establishing fully authorized SOP. In addition,

Learn More about This Proposal

This policy brief is based on the Hamilton Project policy paper, "Improving Efficiency in the Health-Care System: Removing Anticompetitive Barriers for Advanced Practice Registered Nurses and Physician Assistants," which was authored by

E. KATHLEEN ADAMS Emory University

SARA MARKOWITZ Emory University and National Bureau of Economic Research

federal agencies like the Department of Veterans Affairs can take actions to relax SOP requirements and improve outcomes for the populations they serve. Finally, federal policymakers should encourage states to follow the recommendations of the Federal Trade Commission and seek its input when debating changes to SOP laws.

Interactions with Health-Care Reform

The authors believe that it is important to consider these SOP recommendations in the context of ongoing policy efforts to make health-care delivery systems more efficient. These efforts are generally making flexibility in health-care system staffing even more valuable.

Accountable Care Organizations

A relatively new type of health-care delivery model, ACOs are groups of providers who work together to give coordinated care to a defined patient population. Under the Patient Protection and Affordable Care Act, when these groups achieve cost savings without sacrificing quality of care they are permitted to share in the savings generated.

One of the goals of the ACO program is to avoid duplicative or unnecessary services. Some supervisory tasks necessitated by SOP rules may run counter to this goal, and indeed could hinder the formation of ACOs in some states or settings. At the same time, as an increasing percentage of physicians become salaried or participate within this type of delivery model, their economic incentives to enter into formal agreements with other advanced practitioners could diminish. Strict SOP rules likely make it more difficult to efficiently implement and manage ACOs.

Bundled Payments, Retail Clinics, and Other Reforms

Bundled payments are another relatively recent reform that interacts with SOP rules. For a given clinical episode, payments for all health-care services can be combined into one bundled payment. This includes payments to physicians, hospitals, nurses, laboratories, and others. Under this model, a hospital or physician group has strong incentives to substitute lower-cost providers. However, SOP restrictions make it difficult for these substitutions to take place, limiting the possible cost savings. State restrictions on SOP may also inhibit the growth of retail clinics, which are organizations housed within larger retail stores and pharmacies that have the potential to reduce provider shortages, increase system capacity, and provide primary care at lower prices. Finally, innovations related to telemedicine are also potentially hindered by SOP rules that vary across states, given that providers must adhere to the rules and regulations of the state in which the patient is located. These issues related to the changing nature of the health-care system highlight the ways in which SOP limitations can prevent competition and innovation in the health-care sector.

Benefits and Costs

The authors note that national spending on office-based APRN and PA services in 2014 was \$22 billion and \$5 billion, respectively, while equivalent spending on physicians was \$237 billion. To the extent that revising state SOP rules would facilitate more-efficient combinations of labor inputs, the authors' proposal would have large impacts on reducing overall health-care costs.

Adams and Markowitz point to estimates that eliminating restrictions on NPs' SOP would result in an annual national cost savings of \$543 million (an 11.6 percent reduction) in emergency room use for ambulatory care–sensitive conditions. Similarly, the authors' research suggests that fully authorized state SOP among CNMs would produce a savings of \$101 million a year from reductions in C-sections for first births. This represents a 7.5 percent reduction in the \$1.3 billion in excess costs incurred by payers for C-sections. However, these estimates constitute only a limited number of the mechanisms by which fully authorized SOP will affect health-care costs and efficiency, and overall cost savings could be substantially larger.

Conclusion

As policymakers attempt to improve the efficiency and effectiveness of the health-care sector, it is essential to remove policy impediments to full competition. Informed by the evidence on impacts of SOP restrictions, Adams and Markowitz propose that state policymakers remove these barriers, enabling APRNs and PAs to practice in accordance with their education, training, and experience. Specifically, the authors propose that state policymakers eliminate required supervisory or delegative practice arrangements, eliminate requirements for formal collaborative practice agreements and protocols, enable APRNs to prescribe medicines, and eliminate maximum APRN-to-physician ratio requirements. The authors propose similar reforms for PAs, with the nature of interactions between physicians and PAs set at the practice level rather than by the state.

New health-care delivery mechanisms are increasing the potential benefits of these reforms by creating additional opportunities to restructure how care is delivered and who provides it. Adopting the authors' proposals would improve health-care system efficiency without lowering quality or harming public health.

Questions and Concerns

1. Given the benefits (and lack of costs) that you outline, why haven't all states moved to fully authorized SOP for APRNs?

According to the authors, SOP laws are determined by state legislatures, who are very often informed and influenced by practitioner advocacy groups. There exists a misperception that the move to fully authorized SOP is a zero-sum game in which physicians lose when APRNs gain. On the contrary, research indicates that the capacity of the health-care system can expand, benefiting a wide range of stakeholders. A second misperception is that the restrictions are necessary to protect the public health. The academic research shows no difference in a variety of health outcomes when comparing fully authorized SOP to restrictive SOP laws. The authors note that each state's political, economic, and provider capacity influences debates regarding proposed moves to less-restrictive SOP, but the general trend has been to reduce SOP barriers for APRNs.

2. Patients' needs and the capabilities of APRNs are very similar across the country. Would it be preferable to have a national SOP policy?

The authors do not support national SOP. Occupational licensing and related SOP rules are clearly in the purview of the states, in their view. States can, however, follow the model of the Nurse Licensure Compact and pass legislation that adopts a standard set of rules and regulations applicable to all participants in the compact. Given that many insurance carriers and health-care systems (e.g., Kaiser Permanente) have patient clientele in different states, this type of standardization can facilitate the types of efficiency gains discussed in this proposal.

3. You propose to eliminate formal collaborative practice agreements and physician–APRN minimum required ratios. Would this reduce physician– APRN collaboration? Would PAs and APRNs be able to start their own practices?

The authors' proposal would not interfere with or eliminate physician–APRN collaboration. Even where APRNs have fully authorized SOP, standards require that APRNs consult and collaborate with other health-care professionals as necessary to meet their patients' needs.

PAs and APRNs might be allowed to start their own practices even under less than fully authorized SOP, provided they comply with the SOP requirements. However, many states have laws—separate from the SOP practice and prescription authorities discussed in this document—that specifically regulate ownership of practices. In addition, APP-owned practices (like all provider practices) must be financially viable, and it might be difficult for new businesses to achieve the required patient volume. APP-owned practices will also face the usual overhead and administrative costs inherent in such an endeavor.

Highlights

E. Kathleen Adams and Sara Markowitz explain how scope of practice restrictions on physician assistants and advanced practice registered nurses, embedded in occupational licensing rules, limit competition and contribute to increased health-care costs. They propose state and federal efforts to shift to fully authorized scope of practice for these practitioners.

The Proposals

STATE REFORM

Allow the details of the physician assistant–physician relationship to be determined at the practice level. In particular, this would entail elimination of maximum physician assistant–physician ratios imposed by states.

Implement fully authorized scope of practice for advanced practice registered nurses. This would entail elimination of supervisory or delegative practice requirements, elimination of requirements for formal collaborative practice agreements and protocols, provision of prescription authority, and elimination of APRN-to-physician ratio requirements.

FEDERAL REFORM

Institute fully authorized SOP at federal agencies that provide medical services.

Disseminate and encourage the adoption of best practices at the state level, while also funding research on the effects of restrictive scope of practice.

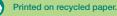
Benefits

Allowing fully authorized scope of practice for physician assistants and advanced practice registered nurses would alleviate health-care shortages while improving efficiency and productivity in the delivery of health care. Loosening scope of practice restrictions would not have adverse effects on patient outcomes, and would strengthen competitive pressures in the health-care sector.



1775 Massachusetts Ave., NW Washington, DC 20036

(202) 797-6484



BROOKINGS