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Discussion Paper on Health Care Coverage and Financing Models

Prepared for

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Executive Summary

The purpose of this paper is to inform the American Academy of Family Physicians' (AAFP's) Board of Directors and members about the potential effects of different models of health care coverage and financing. Key findings were drawn from a systematic review of more than 100 studies (both peer-reviewed and grey literature) and from interviews with six key informants. We examined the following three health care models:

- 1) **Single payer:** A single publicly financed and privately administered system (e.g., Medicare for All). With universal coverage through single payer, access could improve for previously uninsured and underinsured patients, but wait times could increase as demand for care rises. Adopting single payer in the United States would reduce administrative burden and likely increase physician satisfaction. Caseloads could potentially increase. Effects on physicians' income and autonomy would depend on specific provisions. If payment levels are insufficient, the model could possibly reduce the supply of physicians and other health care professionals. Government spending could increase as payment shifts away from private payers and individual patients; however, lower administrative costs, more regulations, and greater negotiating power on the part of the single payer could lead to decreased total spending. Life expectancies in countries with single payer systems are longer than in the United States, and if such a model were adopted here, we could see improved access to preventive care with greater coverage. Access to new therapies could be hindered by restrictions by the single payer.
- 2) **Bismarck model:** A system of statutory health insurance involving multiple nonprofit payers (e.g., the system in Germany). Compared with the current system in the United States, universal coverage via the Bismarck model would likely improve access to care, but socioeconomic disparities would probably persist. Administrative burden is lower in Bismarckian systems, with a regionally uniform fee schedule negotiated by regional physician associations. The regulatory environment and treatment restrictions reduce autonomy, and some surveys report high rates of burnout and low rates of physician satisfaction. Health care spending by both governments and individuals is lower in Bismarckian systems compared with the United States, with set contribution levels (as a percentage of income) that have risen gradually over time. Population health outcomes are generally better in Bismarckian countries than in the United States.
- 3) **Public option:** A publicly administered health plan that competes for customers against private plans. Coverage and access would depend on payment rates to physicians and other health care professionals. If premiums and payment rates were low enough, a public option could crowd out private plans and lead to single payer. Administrative burden would likely continue to be an issue for physicians, and physician satisfaction would depend on how a public option affects caseload, the supply of labor to meet demand for care, and payment rates. Changes in total health care spending would depend on whether the public option is strong or weak, and changes in population health would depend on how the public option affects coverage levels.

Introduction

Purpose of the Paper

The American Academy of Family Physicians (AAFP) wishes to inform its advocacy related to health care coverage and financing models. In particular, the AAFP wants to inform its Board of Directors and members about the potential effects of (1) a single publicly financed and privately administered system to provide universal coverage, (2) a statutory health insurance (“Bismarckian”) system, and (3) a public option. The outcomes of interest include access to care, family physician issues (such as administrative burden, burnout, and caseload), health care spending, and population health. Although this discussion paper explores these three general options, the best solution for the United States could involve a mix of different components from different systems.

Brief Overview of Methods

Literature Review

We gathered published evidence on the potential effects of various health care coverage and financing models through a rapid, systematic review of electronic literature databases (PubMed, Google Scholar, Embase, Cumulative Index to Nursing and Allied Health Literature [CINAHL], Research Papers in Economics [RePEc]). We sought peer-reviewed journal articles and grey literature published in English from January 2007 to May 2017. We reviewed evidence from the United States and 13 other countries on effects of health coverage and financing models (see **Table 1** below). We retrieved more than 13,510 titles/abstracts, reviewed 103 papers in full, compiled a final bibliography of 50 papers (see Appendix), and extracted key information from each paper in a standardized template.

Key Informant Interviews

To complement the literature review, we recruited three physicians (one family physician and two internists), two economists, and one internist with a PhD in economics. We interviewed these six key informants during separate 60- to 90-minute discussions about single payer, the Bismarck model, and the public option using a semi-structured interview protocol that was tailored to focus on each individual’s area of expertise.

Overview: Single Payer

For this paper, we defined “single payer” as a single publicly financed and privately administered system to provide universal coverage. In this type of system, the government raises money and uses the funds to pay for health

care from physicians and other providers who work independently or in private health systems.

We note that “universal coverage” and “single payer” have different meanings; the former refers to whether everyone in the system is covered, and the latter refers to a single entity that is paying for health care.

In this paper, we are referring to a single-payer system that would in fact cover the entire population of legal residents. In examining the evidence for the effects of these types of systems, we will consider

Canada and Australia as examples, even though these countries have financing and administration through both their state or provincial level governments in addition to their federal government. U.S. bill HR 676 (the Expanded & Improved Medicare For All Act)^{1,2} and Senator Bernie Sanders’ single payer plan³ are recent U.S. proposals for a type of single-payer model.

“Universal coverage” refers to whether everyone in the system is covered. “Single payer” refers to a single entity that is paying for health care.

Overview: The Bismarck Model

The Bismarck model, named for its German originator Otto Bismarck, is a form of statutory health insurance that involves multiple nonprofit payers known as “sickness funds” that are required to cover the government-defined benefits package. These funds must insure all comers and are tightly regulated, resulting in universal coverage for all legal residents. Physicians and other providers (e.g., hospitals) are a mix of public and private. The system is in place in several countries, including Austria, Belgium, Germany, the Netherlands, and Switzerland.

Overview: The Public Option

A public option is a publicly administered health insurance plan that directly competes for customers with private insurance plans. There could be a singular, national public option, or individual regional public plans competing in local markets. The goal of a public option is to expand competition and reduce health expenditures.⁴ In the United States, the public option has been proposed as a qualified health plan offered on the insurance Marketplaces that meets the same requirements as other private plans, offers coverage at actuarially fair prices, and finances all claims costs through premiums.

Comparison Table for Selected Countries

In **Table 1**, we present a high-level summary of coverage and financing models in the United States and the 13 other Organisation for Economic Co-operation and Development (OECD) countries we studied.

Table 1. High-level summary of coverage and financing models in the United States and 13 other OECD countries

	Model	Coverage and Access: percentage of population covered; percentage experiencing cost barriers (2015); percentage waiting 2+ months for specialist appointment (2015)	Family Medicine: number of general practitioners (GPs) per 1,000 people; percentage of physicians satisfied with practicing medicine (2012)	Expenditures: 2012 percent of GDP; 2012 per capita (USD 2010)	Population Health: life expectancy at birth (2012)
Multipayer, nonstatutory, market-oriented system with public subsidies and universal coverage over age 65					
United States	Multipayer, market-oriented, public-private hybrid insurance system. Public subsidies for some poor and nearly universal coverage for the elderly.	85.3% covered 37% with cost barriers 6% waited 2+ months	0.3 GPs per 1,000 68% satisfied	16.4% of GDP \$8,103 per capita	F: 81.2 M: 76.4
Statutory health insurance system with universal coverage (Bismarck)					
Austria	Statutory health insurance system with region- and occupation-based health insurance funds.	99.9% covered (access measures unavailable)	0.78 GPs per 1,000 (satisfaction data unavailable)	10.4% of GDP \$4,451 per capita	F: 84 M: 79.2
Belgium	Statutory health insurance system with six private nonprofit insurers and one national public insurer.	99.9% covered (access measures unavailable)	1.11 GPs per 1,000 (satisfaction data unavailable)	10.4% of GDP \$4,120 per capita	F: 83.9 M: 78.8
France	Statutory health insurance with all insurers incorporated into single national exchange.	99.9% covered 18% with cost barriers 18% waited 2+ months	1.56 GPs per 1,000 76% satisfied	10.8% of GDP \$3,942 per capita	F: 85.4 M: 78.7
Germany	Statutory health insurance with competing sickness funds (insurers) in national exchange and opt-out option for high-income individuals.	99.8% covered 15% with cost barriers 10% waited 2+ months	0.67 GPs per 1,000 54% satisfied	10.8% of GDP \$4,517 per capita	F: 83.3 M: 78.6
Netherlands	Statutory health insurance system, universally mandated private insurance (national exchange).	99.8% covered 22% with cost barriers 3% waited 2+ months	0.77 GPs per 1,000 88% satisfied	10.9% of GDP \$4,850 per capita	F: 83 M: 79.3
Switzerland	Statutory health insurance; universally mandated private insurance on regional exchanges; regional governments responsible for provider regulation.	100% covered 13% with cost barriers 3% waited 2+ months	1.08 generalists* per 1,000 84% satisfied	10.6% of GDP \$5,486 per capita	F: 84.9 M: 80.6

	Model	Coverage and Access: percentage of population covered; percentage experiencing cost barriers (2015); percentage waiting 2+ months for specialist appointment (2015)	Family Medicine: number of general practitioners (GPs) per 1,000 people; percentage of physicians satisfied with practicing medicine (2012)	Expenditures: 2012 percent of GDP; 2012 per capita (USD 2010)	Population Health: life expectancy at birth (2012)
Single payer**					
Australia	Regionally administered, joint (national and state) public hospital funding; universal public medical insurance program (Medicare).	100% covered 16% with cost barriers 18% waited 2+ months	1.14 GPs per 1,000 80% satisfied	9.3% of GDP \$4,164 per capita	F: 84.4 M: 80.3
Canada	Single publicly financed, privately administered national health program.	100% covered 13% with cost barriers 29% waited 2+ months	1.18 GPs per 1,000 82% satisfied	10.3% of GDP \$4,218 per capita	F: 83.6 M: 79.4
Ireland	Tax-financed public health insurance system with optional private insurance available.	100% covered (access measures unavailable)	0.72 GPs per 1000 (satisfaction data unavailable)	9.4% of GDP \$4,743 per capita	F: 83.5 M: 79.3
Spain	Single-payer system offering statutory health insurance, limited out-of-pocket expenses.	100% covered 33% waited 2+ months (2009 data; more-recent data unavailable) ⁵	0.75 GPs per 1,000 (satisfaction data unavailable)	9.1% of GDP \$2,903 per capita	F: 85.5 M: 79.5
National health care system					
Italy	National health system with federal funding and regulation, regional delivery.	100% covered Patients can wait for a free/subsidized appointment or pay for a private, quicker consultation	0.76 GPs per 1000 (satisfaction data unavailable)	8.8% of GDP \$2,987 per capita	F: 84.8 M: 79.8
New Zealand	National health system with district health boards responsible for planning, purchasing, and providing care.	100% covered 21% with cost barriers 19% waited 2+ months	0.83 generalists* per 1,000 82% satisfied	9.7% of GDP \$3,151 per capita	F: 83.0 M: 79.3
United Kingdom	National health service provides care to all permanent residents, free at point of use. Wealthy individuals can opt for private insurance.	100% covered 4% with cost barriers 7% waited 2 months	0.80 GPs per 1,000 84% satisfied	8.4% of GDP \$3,063 per capita	F: 82.8 M: 79.1

Data sources: Organization for Economic Cooperation and Development (OECD)⁶ and the Commonwealth Fund^{7,8}

* GP data unavailable; number reported is for the broader category of generalist medical practitioners.

**Single-payer countries also have private supplemental insurance available to varying degrees.

Shown in **Table 1** above are:

- percentage of population covered;⁶
- access, defined as percentage who experienced access barriers because of cost in 2015⁷ and percentage who waited 2 or more months for a specialist appointment in 2015;
- the number of general physicians (i.e., family physicians, general practitioners, and primary care physicians) per 1,000 people in 2012;⁶
- the percentage of physicians who reported being satisfied with practicing medicine in 2012;⁸
- health spending as a proportion of GDP and per capita health expenditures in 2012 (reported in constant 2010 US dollars [USD]);⁶ and,
- life expectancy at birth for females and males in 2012.⁶

Single Publicly Financed, Privately Administered Healthcare System

Health Care Coverage and Access

The effects of a single-payer model on access to care depend on the features of the system, but experts indicated that access would likely be improved for previously uninsured and underinsured patients, as they would be newly able to afford care. After Canada transitioned to its current single-payer system, known as Medicare, physician visits increased by 18% among the lowest-income quintile of the population and decreased by 9% among the highest-income quintile of the population.⁹ Dr. Woolhandler and Dr. Weisbart both described the reduction in visits from those with higher incomes as a reduction in care that wasn't needed, as there were no effects on health for this group. Regarding health care access across the population, 37% of Americans experienced an access barrier due to cost in the past year, compared with 13% in Canada and 16% in Australia,⁷ the two countries with a system closest to our single-payer definition.

The downside in regards to access for the single-payer system is the potential for increased wait times, as evidence from Canada's implementation of its Medicare system suggests wait times could increase modestly.⁹ Although comprehensive wait time data for the United States is limited, a survey by the Commonwealth Fund reports that 48% of Americans are able to get a same- or next-day appointment when sick; Canada fares worse, at 41%, but Australia performs better, at 58%.⁷ Another survey also suggests that current

wait times in the United States are shorter than in Canada.¹⁰ The Commonwealth Fund also indicates only 6% of Americans reported waiting 2 months or more for a specialist appointment and 7% reported waiting 4 months or more for elective surgery. These figures are higher in both Canada (29% and 18%, respectively) and Australia (18% and 10%, respectively).⁷ Given the higher life expectancy in Canada and Australia, it does not appear these wait times have a significant adverse effect on health.

The effects on wait times will depend on payment levels; hospitals' and practices' ability to adjust to a new, higher level of demand; and the level of care needed by the currently uninsured and underinsured population. Average wait times in Europe, where there is a variety of health care financing and insurance models, vary greatly for elective surgery: from 25 days in Scotland to 86 days in Portugal.¹¹ The same research further indicates that comparing wait times across countries is difficult because of different methodologies, but demonstrates that wait times can vary significantly even across countries with similar systems. Dr. Weisbart attributes higher wait times to lower per capita spending levels and indicated that wait times could be mitigated in a single-payer system in the United States through higher payment levels. Evidence from dental expansions in the Medicaid program in the United States suggests that wait times may not increase in states where advanced practice personnel can be used to accommodate the increased demand for services.¹²

Wait times could be mitigated in a single-payer system in the United States through higher payment levels.

-Dr. Weisbart

Patient access to innovative drugs and treatment options would likely improve for the previously uninsured or underinsured as such treatments become affordable, but there is a possible downside to long-term innovation. If drug prices are negotiated directly with pharmaceutical companies and prices decline, this could lead to an eventual slow-down in innovation from drug companies. This is partially mitigated by the fact that public funding supports drug discovery already through the National Institutes of Health (NIH) and other agencies. In the past, the NIH has been the largest funder of basic drug discovery research, whereas late-stage development is funded primarily by pharmaceutical companies or venture capitalists, possibly with support from government agencies such as the NIH.¹³ Dr. Woolhandler suggested that any reduction in spending on research and development by the pharmaceutical industry could be made up for by expanding current NIH funding.

Evidence on care coordination for single-payer systems is mixed. According to the Commonwealth Fund, 35% of Americans have had a care coordination problem in the last 2 years, compared with 21% of Australians and 32% of

Canadians. However, Americans reported fewer gaps in hospital discharge planning in the last 2 years compared with Australia and Canada (United States: 28%, Australia: 41%, Canada: 44%).⁷

Family and Primary Care Physicians

Administrative Burden

Evidence from both the literature review and key informant interviews indicated that administrative burden would decline in a single-payer system, one of the few findings that was not dependent on the specific details of the system. Dr. Weisbart indicated that American physicians spend 10 to 20 hours per week on administrative work, while in Canada, physicians average 2.4 hours per week. Key informants agreed that there would likely be significant potential improvements in administrative burden in a single-payer system, and several papers reported an expected reduction as well.¹⁴⁻¹⁹

Payment

Effects on payment levels and structure would depend on the details of the system. Under HR 676, for example, physicians would be allowed to continue receiving fee-for-service payments or move into a capitated arrangement. Overall payment rates, and thus physician incomes, depend on the negotiated rates between the single payer and physicians.

Historically, other countries with single-payer systems have had lower primary care physician pay than the United States.^{20,21} While this gap has narrowed somewhat, in 2014, primary care physician pay in the United States averaged about \$186,320 USD,²² compared with roughly \$155,700 USD in Canada.^{23*} Given that compensation for specialists is typically lower too, most countries with single payer have a lower relative return to becoming a specialist. Despite the big difference in compensation in the US and countries with a single payer system, some experts noted that avoiding a radical shift in payment levels in a switch to single payer is necessary to minimize disruption to the system. Also, expansion of lower payment rates in a practice may not necessarily lead to lower incomes if advanced practice personnel can be deployed; when Medicaid expanded coverage for dental care to adults, dentists saw their incomes rise by 7% on average.¹²

* Gross clinical earnings reported for a family physician in Canada by the Canadian Medical Association = \$249,154 (National Physician Database, 2013/14, CIHI); average overhead rate = 28.2% (National Physician Survey, 2010, CFPC, CMA, Royal College); converted to USD by dividing net earnings by the historical currency exchange factor (1.11, the average of the 2013 and 2014 values) published by the IRS at <https://www.irs.gov/individuals/international-taxpayers/yearly-average-currency-exchange-rates>.

Workforce

In the short term, there would likely be an increase in demand that could be addressed by using advanced practice clinicians and reducing time spent on administrative tasks. Any remaining excess demand might result in wait times. In the long term, the number of primary care physicians would likely expand, as most countries with single payer (or universal coverage another way) have a higher ratio of primary care physicians to specialists⁷ and a higher number of general practitioners per 1,000 population members.⁶ Dr. Woolhandler stated that it would be important to reduce the pay gap between primary care physicians and specialists by either increasing payment for primary care physicians or reducing payment for specialists. Such a change in the United States could increase the ratio of primary care physicians to specialists and bring it closer to levels seen in other developed nations.

It would be important to reduce the pay gap between primary care physicians and specialists by either increasing payment for primary care physicians or reducing payment for specialists.

-Dr. Woolhandler

Caseload

As with many other aspects, the effect on caseload would depend on the payment structure and level under the single payer. Evidence from Canada showed that overall patient visits remained flat when their Medicare system was first implemented.⁹ Medicaid expansions for dental coverage suggest more patients would be seen at the practice level, but that some of the increase would be met by advanced practice personnel.¹² Dr. Jena noted that physicians may try to take on more patients if payments are reduced to maintain their income levels, but Dr. Weisbart noted that the reduced administrative burden could allow physicians to see more patients without having to work more hours.

Physician Satisfaction and Burnout

Most evidence suggests that physician satisfaction would improve under a single-payer system, but one expert disagreed. The Commonwealth Fund's primary care physician survey showed that physician satisfaction is higher in Canada and Australia, where 82% and 80% of physicians, respectively, report being very satisfied or satisfied with practicing medicine, compared with only 68% in the United States.⁸ Consistent with this evidence, most experts also indicated that physician satisfaction would likely improve as physicians were able to spend more time on clinical work and less time on administrative tasks. Dr. Jena disagreed and was concerned that if payment rates go down and the number of patients goes up, then physician satisfaction would decline.

Most sources suggested there could be reductions in burnout, but it would depend on payment levels and other specifics of the system. Streamlining the system and reducing administrative burden could improve physician burnout, as there is a demonstrated link between an increased administrative burden and higher burnout.²⁴ Other sources of dissatisfaction and burnout come from payers, both public and private, and electronic health records,²⁴ which may remain a source of burnout with a single payer. Although most experts believed burnout rates would improve with a single-payer system, Dr. Jena indicated that lower payment levels could make it worse.

Autonomy

The effects on physician autonomy depend directly on the kinds of restrictions the single payer would implement on physician care. Such a system could increase autonomy in cases where patients were previously limited by cost, though out-of-pocket costs could still be a feature in a single-payer system. Currently, about 52% of physicians in the United States report that “insurance restrictions on medication or treatment pose a major time concern,” while this figure is lower in other OECD countries with a single payer or universal coverage in a multipayer setting (9%–27%).⁸ Some experts pointed out that physicians would have more treatment options for patients that were previously limited by cost. However, if the single payer introduces specific limitations (for example, pre-authorization or limiting access to drugs), that could negatively affect autonomy. Dr. Jena stated, “Right now, if you want more aggressive care then you can pay for more aggressive care. That may not be possible with single payer.”

“Right now, if you want more aggressive care then you can pay for more aggressive care. That may not be possible with single payer.”
-Dr. Jena

Health Care Spending

Total Expenditures

The change in total expenditures would depend on the specific details of the single-payer system and the health of the currently uninsured population. Some key informants believed they would decrease, but others believed they would increase, and the effects on expenditures may depend on the time frame analyzed. Other countries with single-payer systems and multipayer universal coverage all spend less on health care per capita and as a percentage of GDP relative to the United States.⁷ One economist estimated that the total increase in spending associated with extending insurance to the uninsured, increased utilization (especially for home health care and dental), and a Medicaid rate adjustment would be \$326 billion, while savings from reduced administrative costs and reduced market power to pharmaceutical

companies, hospitals, and equipment makers would be \$569 billion.²⁵ One advocacy group, Physicians for a National Health Program, has compiled 25 different studies suggesting that a single-payer system would save money, either immediately or in the long run.²⁶

Personal and Government Expenditures

The share of government spending would increase and personal spending would decrease (though the decrease in personal spending depends on the cost-sharing structure and the exact financing). Personal taxes would likely increase.

Variability in Spending

All key informants indicated that there would probably be a bigger emphasis on primary care in a single-payer system. Several also indicated that spending would shift away from inpatient hospital care towards practice-based primary care.

Population Health

The AAFP defines population health as “the health outcomes of a group of individuals, including the distribution of such outcomes within the group.”²⁷

Key informants agreed that health for the uninsured with treatable diseases would improve, as would population-level vaccination rates. Dr. Jena pointed out that lifestyle factors such as smoking, obesity, and lack of exercise would probably not change, and that those are significant drivers of poor health today. On the other hand, Dr. Woolhandler indicated that primary care physicians would be able to reinforce public health messaging. Dr. Thorpe noted that primary care access would improve, and that could be associated with improvements for certain diseases. On the other hand, Dr. Jena and Dr. Nichols indicated that the single payer will have to make tradeoffs with limited resources. Because most single-payer systems today emphasize primary care, access to innovative cancer therapies or high-end specialists, for example, might decrease.

Life expectancy in other developed nations with a single-payer system is higher than in the United States (see **Table 1**).⁶ Other selected outcomes indicators from the Commonwealth Fund, shown in **Table 2**, indicate worse health outcomes in the United States in general, but not across the board.⁷

Table 2. Selected population health outcomes in the United States, Australia, and Canada

Outcome	United States	Australia	Canada
Mortality amenable to health care (deaths per 100,000)	115	68	78
Percentage of children with measles immunization	91%	94%	95%
Breast cancer 5-year survival rate	89%	88%	87%

Data source: The Commonwealth Fund⁷ and Canadian Cancer Society²⁸

Bismarck Model

Health Care Coverage and Access

The universal health coverage concept originated in Germany in 1883.²⁹ If the United States adopted this model, health care access would improve, although disparities by socioeconomic status could persist. Guaranteed issue means all are covered, and there is little evidence of risk selection by private insurers in Germany.³⁰

Individuals in Germany are free to choose from 124 different insurers (sickness funds) and may switch once per year, and all have free choice of providers with low waiting times.³¹ All German funds offer the same comprehensive benefit package, including preventive care (such as immunizations), inpatient and outpatient hospital care, physician services, mental health care, dental care, optometry, physical therapy, most prescription drugs, medical equipment, rehabilitation, hospice and palliative care, and paid sick leave. Home care is covered by long-term care insurance.

About 11% of residents opt out of the statutory system in favor of private coverage, leading to inequalities between the private and public systems.³¹ Researchers have found that privately insured patients in Austria and Germany have faster access to elective surgery.¹¹

Family and Primary Care Physicians

Administrative Burden

Generally, administrative burden is lower in Bismarckian systems. In Germany, physicians bill their regional associations under a regionally uniform fee schedule; for the privately insured, patients pay physicians up front and are reimbursed.³¹

Payment

In Germany, regional physicians' associations negotiate payment with funds via collective bargaining. Despite some efforts to reform, the system is still mostly fee-for-service.³¹

Workforce

In Germany, physicians have been undersupplied in rural areas; a recent law has opened up 3,000 new family physician positions in those areas.³¹

Caseload

The Bismarck model combined with constitutionally guaranteed, state-subsidized medical education for qualified students has led to a relative oversupply of doctors in Germany and Switzerland (about 4 physicians per 1,000 people, compared with 2.6 in the United States).⁷ The German government limits licenses to practice to 110% of capacity in each region. The family physician to specialist ratio is 1:1. Since 2004, sickness funds in Germany must offer the option for a “family physician care model,” in which the family physician coordinates care, and patients are eligible for bonuses for complying with gatekeeping.³¹

Physician Satisfaction and Burnout

In Austria, 36% of a small sample of physician survey respondents (n = 95) reported being at risk for burnout.³² One review from 2010 suggested that 20% of German physicians, 22% of US physicians, and 27% of physicians in Great Britain are affected by burnout.³³ However, another larger survey in 2012 suggested that Germany has the lowest proportion of physicians who are satisfied with practicing medicine.⁸ That survey also reported that in 2012, only 22% of German physicians thought the system worked well, with only minor changes needed. Only the United States ranked lower on this measure, with 15% of respondents in 2012 thinking that the system works well.

Autonomy

In Germany, a strong regulatory environment and collective organizations limit individual autonomy.³¹ Insurance restrictions on medication or treatment for patients are reported as a major concern by 37% of German physicians, compared with 52% of US physicians. Only 10% of Austrian and 17% of French physicians reported this as an issue.⁸

Health Care Spending

Total, Government, and Personal Spending

In Germany, the Netherlands, and Switzerland, total expenditures are about 11% of GDP, with most expenditures publicly funded.⁷ Currently in Germany, everyone contributes 15.5% of their income to pay for insurance, and additional cost sharing is capped at 2% of household income (1% for people with chronic illness).⁷ In the Netherlands, 84% of residents buy private plans for dental, vision, etc. and an annual deductible of ~455 USD covers most cost-sharing.⁷ In Belgium, roughly 20% of expenditures are out-of-pocket,

compared with 13% in Germany, 7% in France, and 5% in the Netherlands.^{34,35}

Variability in Spending

In Germany, the contribution rate has grown from 13.2% of income in 1994 to 15.5% in 2012. Between 1996 and 2011, out-of-pocket expenditure as a share of total expenditure increased from 11% to 14%.³¹

Population Health

Countries with Bismarckian models generally have better health outcomes than the United States. In 2012, average life expectancy at birth ranged from 78.4 to 79.3 years for men and 83 to 83.6 years for women in Germany, Austria, and the Netherlands, compared with 76.4 for men and 81.2 for women in the United States.⁶ There are disparities in the Netherlands of up to 7 years' difference in life expectancy between the highest and lowest socioeconomic groups.⁷ In comparison, in the United States, the richest men live 15 years longer than the poorest, and the gap between the richest and poorest women is 10 years.³⁶

Public Option

Health Care Coverage and Access

The impact of the public option on coverage and access depends primarily on the rates it would pay physicians and what the administrative costs would be. If the public option has lower administrative costs or pays lower rates to physicians (and are accepted), then this would allow the public option to offer a plan with lower premiums relative to the rest of the market. This lower-priced plan may induce previously uninsured people to purchase insurance, giving them increased access to health care services.

According to two key informants, in the long term, a public option with lower premiums could drive private insurers out of the market and lead to a single-payer system. On the other hand, if the public option pays at or near private payment rates and has similar administrative costs, then coverage and access is virtually unchanged. As Dr. Nichols pointed out, "Private payment rates for the public option are the only way to make the competition fair, but it doesn't give you what you want [improved coverage]." According to Dr. Thorpe, if certain areas are left without a single private insurer offering coverage in the future, then a public option could provide a significant increase in access for those areas.

"Private payment rates for the public option are the only way to make the competition fair, but it doesn't give you what you want [improved coverage]."

-Dr. Nichols

Without a specific proposal in place, it is difficult to know how rates would be set and what administrative costs would be. If the rates are too low (e.g., Medicaid or Medicare rates), physicians may not accept the plan absent other incentives, diminishing the size of the plan's network and limiting access. Also, physician willingness to accept the plan could depend upon the number of beneficiaries the plan covers. The greater the share of physicians' patients the public option covers, the more likely physicians would want to accept the plan.^{4,37}

Family and Primary Care Physicians

Administrative Burden

Under a public option, physicians would likely still contract, bill, and negotiate payments with a multitude of plans, leaving administrative burden and costs relatively similar to current levels. The public option's effect on administrative burden would depend on whether it is a singular national option like Medicare or consists of multiple regional options operating in local markets. Further, administrative burden is related to which type of entity the public option negotiates with, such as state medical societies, state hospital associations, local provider organizations, or individual physicians and hospitals. As the number of individual negotiations required increases, administrative burden increases as well.^{4,38-40}

Payment

Physician payment depends on the specifications of the public option's proposed payment rate structure.

The payment rate could equal Medicare rates, Medicare plus a fixed amount, or be based on an entirely separate fee schedule. Alternatively, the public option may be required to pay physicians at the same rate as private insurers in the market to ensure that it does not have an unfair competitive advantage over private insurers. Dr. Nichols said that competition between payers would be fairer if the public plan paid similar rates. The public option rates could be national, or there may be geographic and regional differences in rate setting, depending on whether the public option is singular or consists of multiple localized plans. In addition, most public option proposals use fee-for-service as the predominant payment model. However, given the move toward value-based payments, the public option could feature alternative payment models, including capitation or pay-for-performance.

There is also the question of how the public option's payment rate structure would affect private payer payments. If the public option payment rate was lower than the private one, private payers could try to lower their rates to compete. Alternatively, they could set their rates above the public plan to

acquire more-favorable contracting and network arrangements with physicians and other providers.

Workforce

The effects of a public option on the workforce would depend on its financial effect on physicians. If physicians, including family physicians, find the rates the public option provides and the fee schedules it uses profitable, then the option could have an expansionary effect on the workforce. More family physicians may want to enter markets with a public option. Family physicians could, in turn, use the additional funding to expand their practices and hire additional clinical staff, including nurses, physician assistants, and other medical practitioners in addition to support staff.

Conversely, if the public option paid practices at a low rate, drove other payers out of the market that had paid a high rate, or compelled other payers to pay at a lower rate to compete, then family physicians may have to lower costs and generate efficiencies within their own practices to maintain the viability, potentially leading to changes in the workforce.^{39,40} Evidence from Medicaid expansions for dental coverage showed that even with an expansion in the number of patients with below-average payment, net income for dentists increased.¹² The same could be true in the primary care setting for health care if family physicians could use advanced practice personnel to treat the expanded patient population. However, Dr. Nichols expressed concern that certain physicians may not be able to use higher private rates to subsidize lower public option rates, thereby jeopardizing their financial status.

Caseload

To the extent that the public option increases the number of people insured, it could expand physician caseload if physicians are willing to accept those patients. This willingness is, in turn, contingent upon the rates the public option offers to physicians. Most key informants suggested there would not be a big effect, but one noted that it could make physicians busier.

Physician Satisfaction and Burnout

Changes in caseload may affect physician satisfaction, but key informants indicated any change in satisfaction and burnout would likely be minimal. There could be a decrease in satisfaction if caseload increases excessively without a corresponding increase in the supply of labor, putting pressure on physicians to see more patients or increase wait times. In the long term, physician supply could increase, ultimately yielding no major changes to physician satisfaction or burnout.

Autonomy

Key informants indicated a public option would have little effect on physician autonomy given that it would be one plan of many available. As with other payers, there could be restrictions or prior authorization for certain treatments.

Health Care Spending

Total, Government, and Personal Spending

The public option's effect on health care spending depends on whether it is strong or weak. A weak public option has a small market share, operates on a regional or local level, has few customers, and would have a weaker negotiating position with individual physicians. Conversely, a robust singular public option has large or national market share, operates and competes nationally with private plans, has a large customer base, and has significant leverage to bargain down prices with physicians and other providers, all of which could translate into savings for consumers. One way to maximize market share for a public option is to require physicians and other providers who participate in Medicare to participate in the option.

Another potential outcome from a public option is that a substitution effect would occur; in other words, lower payments to physicians by the public option would be subsidized by higher payments for private plans. Therefore, net spending would not decline significantly in such a scenario, and lower spending by the public plan could be made up for by higher spending by private competing plans.

In addition, a public option could affect health care utilization. If the plan leads to coverage gains, it may increase utilization of the services it insures, which in turn may affect spending. Changes in utilization depend on the plan's benefits package, including the services covered, provider network, drug formulary, and beneficiary out-of-pocket costs. A public option that features a narrow network, limited benefits, and significant cost-sharing, including high deductibles and co-payments, would limit utilization and, consequently, spending, as opposed to a more generous policy. The public option's effect on spending is also contingent upon the type of utilization that is impacted; higher use of primary and preventive care, for example, could increase spending in the short term but ultimately lead to lower costs through fewer hospitalizations, emergency department visits, and acute care episodes in the long term.^{4,38-40}

The public option's effect on health spending is also contingent upon how much it pays physicians. Savings from a lower rate would depend on the type and volume of services that are being paid by the plan.^{4,38-40}

Net spending would also be affected by how private payers set payments in reaction to the public option. If the public option payment rate was lower than the private one, private payers could try to lower their rates to compete, reducing net spending. Alternatively, private payers could set their rates above the public plan to acquire more-favorable contracting and network arrangements with physicians and other providers, thereby substituting lower payments from the public option with higher payments from private insurers. In this scenario, net spending would not be as greatly affected.^{39,40} Public payers also generally have lower administrative costs (e.g., billing, claims processing, marketing, overhead, etc.) than private ones. Administrative costs only comprise around 2% of Medicare expenditures but amount to at least 10% of private payers' expenditures. Savings of this nature could be applicable to a public option as well, especially if it is administratively streamlined with Medicare by using the same physician payment and documentation systems. Overall, a public option could spend up to 5% less on administrative costs than equivalent private plans, per Congressional Budget Office estimates.^{4,38-40}

A public option could spend up to 5% less on administrative costs than equivalent private plans.
- Congressional Budget Office

Finally, a public option's effect on health care spending could depend on design elements such as an opt-out/opt-in feature (states can choose whether to have such an option) or a trigger (a certain event relating to insurance premiums, competition, availability of plans, etc.). These features would affect the size, scope, availability to consumers, and market power of the public option, all of which could affect spending.^{37,40}

Population Health

A public option that expands health insurance and health care access could ultimately have a beneficial impact on public health and health outcomes. Generally, people with health insurance pay less out of pocket for doctor's visits, prescription drugs, and other services; get free preventive services, such as check-ups and screenings; and have financial protection against large medical bills, which can be catastrophic. The public option can also lower the total cost of care through added competition and negotiations for lower prices. As a result, consumers can access these benefits at a lower cost, translating into lower premiums, deductibles, co-pays, and other out-of-pocket spending. Dr. Thorpe noted that public health may be particularly bolstered in places where there is a lack of insurance competition on the Marketplace—particularly more rural, sparsely populated counties. Here, consumers may face a lack of options in the private market, and a public option may be especially welcome for these individuals.^{4,37}

Discussion and Implications

Health Care Coverage and Access

In both the single-payer and Bismarck model, access would improve significantly for those currently uninsured or underinsured, although there may be wait times that slightly reduce access for those with higher incomes. This result assumes minimal copays for those with low incomes, consistent with what the United States has in Medicaid today and with systems in other developed nations.

The public option's effect on access depends greatly on the features of the option and the cost compared with current plans on the Marketplace. If prices are similar, reflecting current average payment levels, then rates of uninsurance and underinsurance will likely stay at their current levels with little effect on access. If prices are lower, reflecting lower average payment levels, then some people who are currently uninsured or underinsured may purchase new or better plans and have improved access.

Family and Primary Care Physicians

Effects on family physicians are similar between the single-payer and Bismarck systems, with some differences. Evidence suggests that under both systems, administrative burden would be reduced dramatically, but depending on how insurance claims were handled in the multi-payer Bismarck model, the reduction could be smaller in that type of system. The payment structure and level of physician payment would depend on the specific features of the system, but physician incomes are typically lower in both the single-payer and Bismarck models than in the United States. However, the gap in pay between primary care physicians and specialists is typically smaller, and these systems are also usually accompanied by lower cost or free medical education.³¹ Countries with either of these systems typically have a higher ratio of primary care physicians to specialists and have a bigger emphasis on primary care in general. With the exception of Germany, countries with either a single-payer or Bismarck model report higher physician satisfaction than the United States.⁸

The public option would have little effect on administrative burden for physicians, as they would still have to negotiate and contract with multiple payers. The payment structure could theoretically be set consistent with commercial rates or lower; for example, at Medicare rates. If payment rates are consistent with private levels, then there will be very little effect on the market overall, except in a possible future scenario where all private payers have exited a particular geographic market.

Health Care Spending

Single-payer, Bismarck, and public option models have varying effects on aggregate health care spending. A single-payer plan would shift spending from the private sector to the government, possibly necessitating an increase in taxes. Coverage gains may also lead to increased health care utilization and, consequently, increased expenditures. However, the plan may produce savings on administrative costs relative to private insurers and use its market power to negotiate lower payment rates. Thus, countries that have implemented such a model have lower health expenditures than the United States. Countries that have implemented a Bismarck model generally have lower spending as a percentage of GDP than the United States, but some countries, such as Germany, have seen a higher share of out-of-pocket costs for consumers. Finally, a public option with significant market share could reduce expenditures by enhancing competition with private insurers, using its market power to bargain down prices and payment rates, and reducing administrative costs relative to private insurers. However, some of these savings could be canceled out by higher payments by private insurers and increased utilization by newly covered individuals.

Population Health

Countries with single-payer or Bismarck models vary in how they prioritize and promote population health, but in general, outcomes are better in those countries than in the United States. One reason is the defined, comprehensive, benefit package common in other countries, which often promotes prevention through enhanced access to immunizations and screenings. Another is that, in single-payer countries, the entities that fund population health interventions also stand to benefit from those investments—in stark contrast with the United States, where investment by commercial third-party payers is disincentivized because of the lack of short-term returns on investment. Finally, many of the countries we studied invest considerably more in social services than does the United States.

Disparities in population health continue to be an issue in countries with single-payer and Bismarckian systems, but to a lesser degree than in the United States. Because of the emphasis on solidarity—a sense that “we’re all in this together” that is fostered by everyone contributing and benefiting—many single-payer and Bismarckian systems are more oriented toward equity and fairness.⁴¹ Nonetheless, the existence of private options that offer better access (because physicians are paid higher rates) continue to fuel socioeconomic disparities.

Conclusion

In most cases, the effects of different coverage and financing models depend on the specific details of the health care system and proposals for reform. One consistent finding is that by most measures of health, countries with a single-payer system or universal coverage through a Bismarck model have better overall health outcomes than the United States. Further, these countries spend less per capita and as a percentage of GDP on health care, although they also spend more than does the US on social supports. In most cases, physician satisfaction is higher in single-payer and Bismarckian health care systems (apart from Germany) than in the US.⁸ The optimal system for the United States may be some combination of components from different models, adapted and customized to fit the unique circumstances in the US.

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Appendix: Alphabetical Bibliography of Included Studies from the Rapid Systematic Literature Review

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