

**Health Care for All:  
Moving to a Primary  
Care-Based Health System  
in the United States**

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## About the Primer

This primer was commissioned by the American Academy of Family Physicians (AAFP) to inform and educate AAFP members about policy principles and considerations that will guide AAFP engagement on current and future health care reform efforts. It was researched and written by CapView Strategies.

# Health Care for All:

## Moving to a Primary Care-Based Health System in the United States

### Executive Summary

The American Academy of Family Physicians' (AAFP's) vision is to **"...transform health care to achieve optimal health for everyone."**<sup>1</sup> With the U.S. health care system facing coverage, quality, and cost challenges, the American public and policymakers at the federal and state levels are beginning to consider options to address these important issues. In response, the AAFP's Congress of Delegates approved a policy in 2018 that supports affordable, primary-care based health care for all. This policy was developed based on the AAFP's historical policy positions, a 2017 discussion paper examining international health system coverage and financing approaches,<sup>2</sup> and feedback from AAFP chapters.

The 2018 policy outlines seven guiding principles for health system reform: (1) coverage; (2) a primary care-based health system; (3) insurance reforms; (4) primary care payment; (5) workforce; (6) reduced barriers for primary care; and (7) patient and physician choice. The policy also describes considerations—such as bipartisan support and economic factors—that will help guide the AAFP's assessment of health reform proposals and discussions at the federal and state levels and with the American public. Finally, the policy will guide the AAFP's engagement on current and future health care reform efforts. This primer, which summarizes the principles and considerations of the 2018 policy as adopted by the Congress of Delegates, is meant to inform and educate AAFP members.

## The AAFP's Framework for a Primary Care-Based System in the United States

### Background

The U.S. health care system is facing a growing number of coverage, quality, and cost challenges. For the first time since the passage of the Patient Protection and Affordable Care Act (ACA) in 2010, the numbers of uninsured in the United States are growing. In the fourth quarter of 2018, the adult uninsured rate was 13.7%, which was its highest level since the first quarter of 2014.<sup>3</sup> The percentage of children without insurance increased from 4.7% in 2016 to 5% in 2017.<sup>4</sup> At the same time, the United States continues to have the highest per capita health care costs among industrialized nations.<sup>5</sup> It also has the highest rate of health care spending as a percentage of gross domestic product (GDP).<sup>6</sup> The health share of GDP in the United States was 17.9% in 2017, which is projected to increase to 19.4% by 2027.<sup>7</sup> Overall, national health spending is projected to increase from \$3.6 trillion in 2018 to almost \$6 trillion by 2027.<sup>7</sup>

At the population level, outcomes and quality are worse than expected. A study comparing health system performance in 11 high-income countries found that the United States ranks last in terms of health outcomes, including population health, mortality amenable to health care, and disease-specific health outcomes.<sup>8</sup> Fee-for-service payment structures and the undervaluation of primary care services have contributed to a U.S. system for which primary care is not foundational, despite evidence of the positive impacts of a primary care-based health system on population outcomes and overall spending. Research has shown that U.S. states that rely more on primary care physicians to manage chronic illness have lower Medicare spending, lower utilization of some services (e.g., physician visits, days in the hospital and intensive care units), and better quality of care.<sup>9</sup> Additionally, a study that analyzed the impact of having a regular source of primary care on quality and patient experience found that while adults with and without primary care had the same average number of outpatient, emergency department, and inpatient encounters, adults with primary care were more likely to have had a routine preventive visit.<sup>10</sup> They had also filled more prescriptions over the past year, received more high-value care, and reported better access to and experience with care.<sup>10</sup>

A recent study examined the relationship between the supply of primary care physicians and mortality from 2005-2015. Researchers found that a greater supply of primary care physicians was associated with higher life expectancy and reduced cardiovascular and respiratory mortality; however, the number of primary care physicians per capita decreased over the same period.<sup>11</sup>

Inequities in health care continue to result in lack of access to high-quality, timely care for all populations. The aforementioned study that examined health system performance across 11 high-income countries found that the United States also ranks last in health equity (i.e., the difference between low- and high-income individuals in terms of quality of care and barriers to obtaining care) and access to care (as measured by affordability and timeliness).<sup>8</sup> Rising numbers of uninsured, ever-increasing spending, worse than expected population outcomes, and inequitable access to care have led to a resurgence in the debate over the future of the U.S. health care system.

## Primer Goals and Methodology

The AAFP developed this primer to inform and educate members on the most recent policy principles and considerations that will guide AAFP engagement on current and future health care reform efforts on behalf of its members. The AAFP continues to support health care coverage rooted in the following principles:

- Health care is a basic human right.
- Individuals should have universal access to timely, acceptable, and affordable health care of appropriate quality.

In developing the 2018 *Health Care for All* policy (see *Appendix A*), the AAFP Board of Directors (the Board) reviewed information from a discussion paper examining international health system approaches<sup>2</sup> and solicited feedback on an initial draft from AAFP chapters. Comments from 30 chapters were received and contributed to draft policy revisions, resulting in the final *Health Care for All* policy.

Previous AAFP policies examined coverage for all in the context of the existing multipayer and pluralistic health care system. The 2018 policy continues to support the goals of coverage for all and a primary care-based health system that supports the delivery of comprehensive and longitudinal care. However, it allows for consideration of a range of options for system redesign and financing that address the unique needs of the U.S. system.

## Reforming the U.S. System: International Models With Foundational Primary Care

As the Board developed the 2018 *Health Care for All* policy, they examined evidence from international approaches and the impact of these approaches on key health system and population health indicators. The 2017 *Discussion Paper on Health Care Coverage and Financing Models* examined three international health system models and how they impacted health care coverage and access; the family and primary care physician workforce; health care spending; and population health (see *Appendix B*).

**The discussion paper is not AAFP policy but was used by the Board for informational purposes as they developed and recommended the *Health Care for All* policy adopted by the 2018 Congress of Delegates.**

The international models identified in the 2017 discussion paper included the following:

1. **Bismarck Model:** The study included an analysis of countries (e.g., Germany, the Netherlands, Switzerland) with statutory health insurance and multiple nonprofit payers that cover a defined set of benefits, resulting in universal coverage. In these models, health care providers can be either public or private.
2. **Public Option:** The researchers also examined publicly administered health insurance plans that compete with private plans for enrollees. There is interest by some policymakers and segments of the American public for such an approach. The goal of this model is to reduce health care expenditures through increased competition. Public option plans can be designed and implemented at multiple levels, including national, regional, or even singular markets or programs.

## Health Reform: AAFP Policy Activities 2016-2018

**2016:** The Congress of Delegates referred a resolution to the AAFP Board of Directors to study the effects of a national publicly financed, privately delivered health care system for all Americans and its potential effects on individual health care access, public health, health care spending, the family physician workforce, and physician burnout. The Board considered this referred resolution and chose to commission a study by RTI to evaluate international health systems, their features, and their impact on the AAFP's priority issues. The study examined how these systems may offer ideas that could inform a unique American solution if the policy and political environment could support large-scale change.

**2017:** RTI submitted *Discussion Paper on Health Care Coverage and Financing Models* to the AAFP. The paper examined international approaches to health care coverage and financing that could enhance, complement, or replace the current U.S. system. Its authors concluded that the best option for reform is likely a combination of financing and coverage models to meet the unique needs of the U.S. system.

**2018:** The policy *Health Care for All: A Framework for Moving to a Primary Care-Based Health Care System in the United States* was recommended by the Board and approved by the Congress of Delegates. The Board intended for this report to support future policy evaluation and engagement on health reform.

3. **Single-Payer Model:** The researchers examined publicly financed, privately administered systems for providing universal coverage, such as the systems in Canada and Australia. In these countries, the government raises money to pay for health care delivered by physicians or other health care providers who work independently or in private systems.

Within each model type, researchers examined variables and presented findings across four categories (see *Tables 1-4*):

- **Health Care Coverage and Access:** Percentage of population covered; percentage experiencing cost barriers; and percentage waiting two or more months for an appointment with a specialist
- **Family Medicine:** Number of general physicians (i.e., family physicians, general practitioners, and primary care physicians) per 1,000 people; percentage of physicians satisfied with practicing medicine
- **Health Care Spending:** 2012 percentage of GDP; 2012 per capita spending
- **Population Health:** Life expectancy at birth

**Table 1. Comparative Analysis of Health Systems on Health Care Coverage and Access Variables**

Model	Percentage of Population Covered	Percentage Experiencing Cost Barriers	Percentage Waiting $\geq 2$ Months for Specialist
Single-Payer Model	Coverage likely to increase	Barriers to accessing care likely to be reduced	Wait times may increase modestly
Bismarck Model	Coverage likely to increase	Unknown	Unknown, but some opt out of statutory system for private coverage
Public Option	Coverage could increase	Unknown	Unknown

Researchers concluded that countries with single-payer or Bismarck models have universal coverage and more limited cost barriers to accessing care but may also have longer wait times for specialty care.

**Table 2. Comparative Analysis of Health Systems on Family Medicine**

Model	Administrative Burden	Payment	Workforce	Caseload	Physician Satisfaction and Burnout	Autonomy
Single-Payer Model	Likely to decline	May be reduced; depends on payment levels and structure	Ratio of primary care physicians to specialists could increase	Unlikely to change	Likely to improve	Unknown
Bismarck Model	Likely to decline	Unknown	May not change	Unknown	May not change	May decline
Public Option	Could increase	Unknown	Unknown	Unknown	No change	No change

The countries with single-payer or Bismarck models generally have stronger health systems that are based on primary care. Compared with the United States, these systems have a higher ratio of primary care physicians to specialists, which is probably a reflection of the narrower pay gap between the two groups and the availability of lower cost or free medical education. Overall, researchers concluded that the physicians in single-payer or Bismarck systems also have higher rates of satisfaction and generally lower levels of administrative burden, a key issue for U.S. physicians. Payment levels and structures vary, but physician incomes are generally lower in these countries relative to the United States.

**Table 3. Comparative Analysis of Health Systems on Health Care Spending**

Model	Total Expenditures	Personal and Government Expenditures	Variability in Spending
Single-Payer Model	Lower	Personal - Unclear Government - Increase	Greater emphasis on primary care; increased spending for practice-based primary care
Bismarck Model	Lower	Variable	Increased out-of-pocket expenditures
Public Option	Unknown	Unknown	Unknown

The impact of these models on total health expenditures is difficult to discern. In single-payer systems, individual costs may be lower, but government spending may be higher and is often funded by higher taxes. However, relative to the United States, both single-payer and Bismarck systems have lower levels of health care spending as a percentage of GDP.

**Table 4. Comparative Analysis of Health Systems on Population Health**

Model	Population Health
Single-Payer Model	Likely to improve
Bismarck Model	Likely to improve
Public Option	Likely to improve

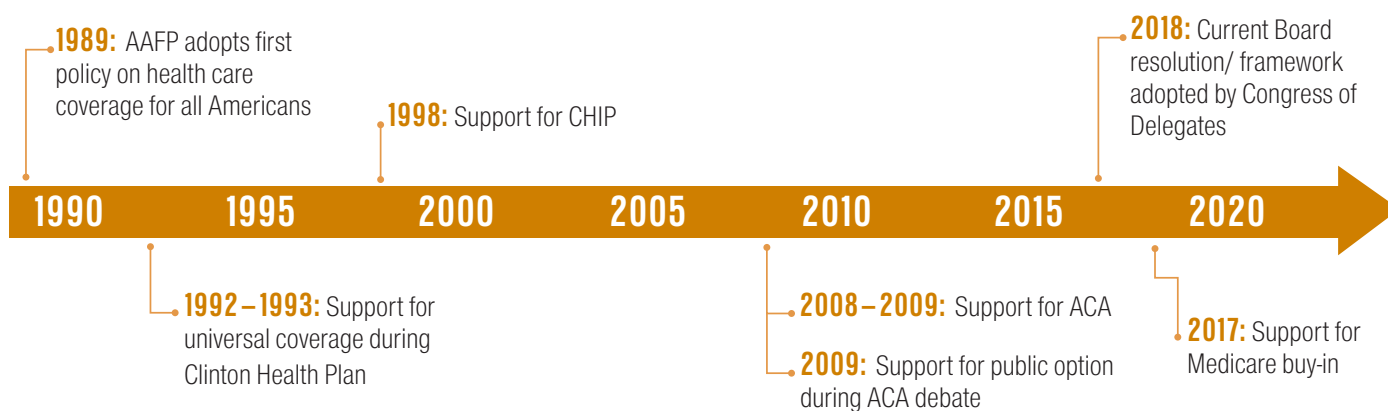
Generally, health outcomes in countries with single-payer or Bismarck models are better than in the United States. Researchers attributed this to the emphasis on prevention through comprehensive, standard benefit packages that provide better access to immunizations and screenings. Single-payer countries also support population health interventions from which savings or benefits can be “captured” or remain within the system. Some of the differences in health outcomes may also be due to the greater investment in social programs in these countries, which may address the social determinants of health that have been shown to affect health outcomes.

The Board examined both the discussion paper and AAFP member feedback and found that each of the three models has strengths and challenges. The optimal system may be a combination of features from the reviewed models that is able to address the unique needs of the U.S. system and is subject to debate by policymakers and the American people.

## AAFP Policy Priorities and Guardrails to Guide Engagement on Health Care Reform Efforts

Since 1989, the AAFP has been committed to ensuring all Americans have health coverage (see *Figure 1*). As the largest primary care physician specialty organization in the United States, the AAFP is a leading voice on health care issues and is in a position to assess how changes could impact the goal of building a health system for which primary care is foundational that covers all Americans and has limited cost and access barriers.

**Figure 1. AAFP Policy Timeline on Coverage for All**



CHIP = Children’s Health Insurance Program

# Principles to Guide Policy Development, Advocacy, and Engagement

To guide policy development, advocacy, and engagement, the AAFP has developed seven principles for health reform that focus on coverage, a primary care-based health system, insurance reforms, primary care payment, workforce, reduced barriers for primary care, and patient and physician choice.

1. **Coverage.** Ensure affordable health care coverage for all that provides equal access to age-appropriate, evidence-based health care services
2. **Primary Care-Based Health System.** Provide comprehensive, longitudinal primary care by ensuring everyone has a primary care physician and a primary care medical home
3. **Insurance Reforms.** Maintain established insurance reforms, including the following consumer protections and nondiscrimination policies:
  - Continuation of guaranteed issue
  - Prohibitions on insurance underwriting that takes health status, age, gender, or socioeconomic criteria into account
  - Prohibitions on annual and/or lifetime caps on benefits and coverage
  - Required coverage of a defined set of 10 essential health benefits (EHBs), at a minimum
  - Required coverage of designated preventive services and vaccines without patient cost-sharing
4. **Primary Care Payment.** Reforms should improve primary care payment levels and include new payment models and mechanisms that support the delivery of comprehensive, longitudinal primary care. This would include at least a doubling of the percentage of health care spending invested in primary care, as well as payment models that support practice transformation and the delivery of advanced primary care, such as the Advanced Primary Care Alternative Payment Model (APC-APM; see *Figure 2*).

## Essential Health Benefits

1. Ambulatory patient services
2. Emergency services
3. Hospitalization
4. Maternity and newborn care
5. Mental health and substance use disorder services, including behavioral health treatment
6. Prescription drugs
7. Rehabilitative and habilitative services and devices
8. Laboratory services
9. Preventive and wellness services and chronic disease management
10. Pediatric services, including oral and vision care

**Figure 2. APC-APM Four-Part Payment Structure**





5. **Workforce.** Reform federal, state, and private funding for graduate medical education (GME) to produce a primary care physician workforce that meets U.S. health care needs. Changes would also hold medical schools to higher standards in educating and training physicians who enter primary care.
6. **Reduced Barriers for Primary Care.** Eliminate cost-sharing for a defined set of visits and services provided by a primary care physician.
7. **Patient and Physician Choice.** Health reform should preserve the ability of patients and physicians to voluntarily enter into direct contracts for a defined or negotiated set of services. Individuals should also be able to purchase additional or supplemental private health insurance.

## Health Reform Considerations

A number of issues will need to be examined when assessing particular health reform proposals at the federal or state level, including the following:

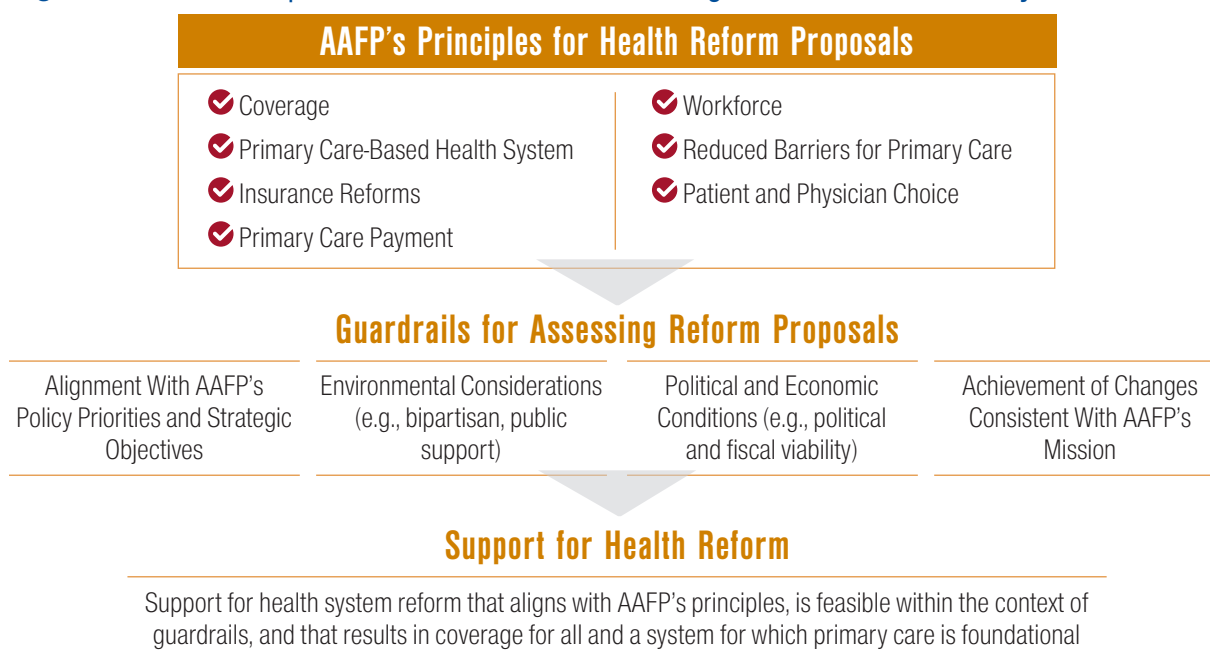
- Administrative burden on physicians and patients
- Fiscal impacts on government, employers, and individuals, including level of tax burden and deficit impacts
- Use of global budgets or price negotiations as part of financing/sustainability of reform
- Patient, physician, and clinician satisfaction in a reformed system, including administrative burden, wait times, and access to elective services
- Sustainable payment levels to physicians and other health care providers, including increased investments in primary care
- Inclusion of family physicians on payment, delivery, or other decision-making boards/entities
- Clear set of core EHBs, with a focus on primary and preventive care, management of chronic disease, and protection from catastrophic out-of-pocket costs
- Impacts on quality, access, and equity of care

## Policy, Political, and Economic Considerations

In addition to the seven principles for health reform, discussions and proposals will also be assessed to ensure alignment on a number of factors that will allow the AAFP to maintain policy and advocacy flexibility in response to a changing environment and public dialogue (see *Figure 3*). Proposals should be assessed using the following additional considerations:

- **Policy Priorities and Strategic Objectives.** Assess reforms for alignment with AAFP policy priorities, key principles, and strategic objectives, including health care coverage for all and a primary care-based health system
- **Environmental Considerations.** Evaluate support for proposals that bring forward bipartisan solutions, are supported by a majority of Americans, and involve one or more of the approaches studied in the *2017 Discussion Paper on Health Care Coverage and Financing Models*
- **Political and Economic Conditions.** Weigh political realities, shifts, and implications for both passage and implementation of reform proposals and, to ensure sustainability, consider their fiscal impact
- **Achievement of Changes Consistent With Mission.** Assess how well health reform proposals would support the AAFP’s mission “...to improve the health of patients, families, and communities by serving the needs of members with professionalism and creativity”<sup>1</sup>

**Figure 3. AAFP Principles and Considerations for Guiding Health Reform Advocacy**





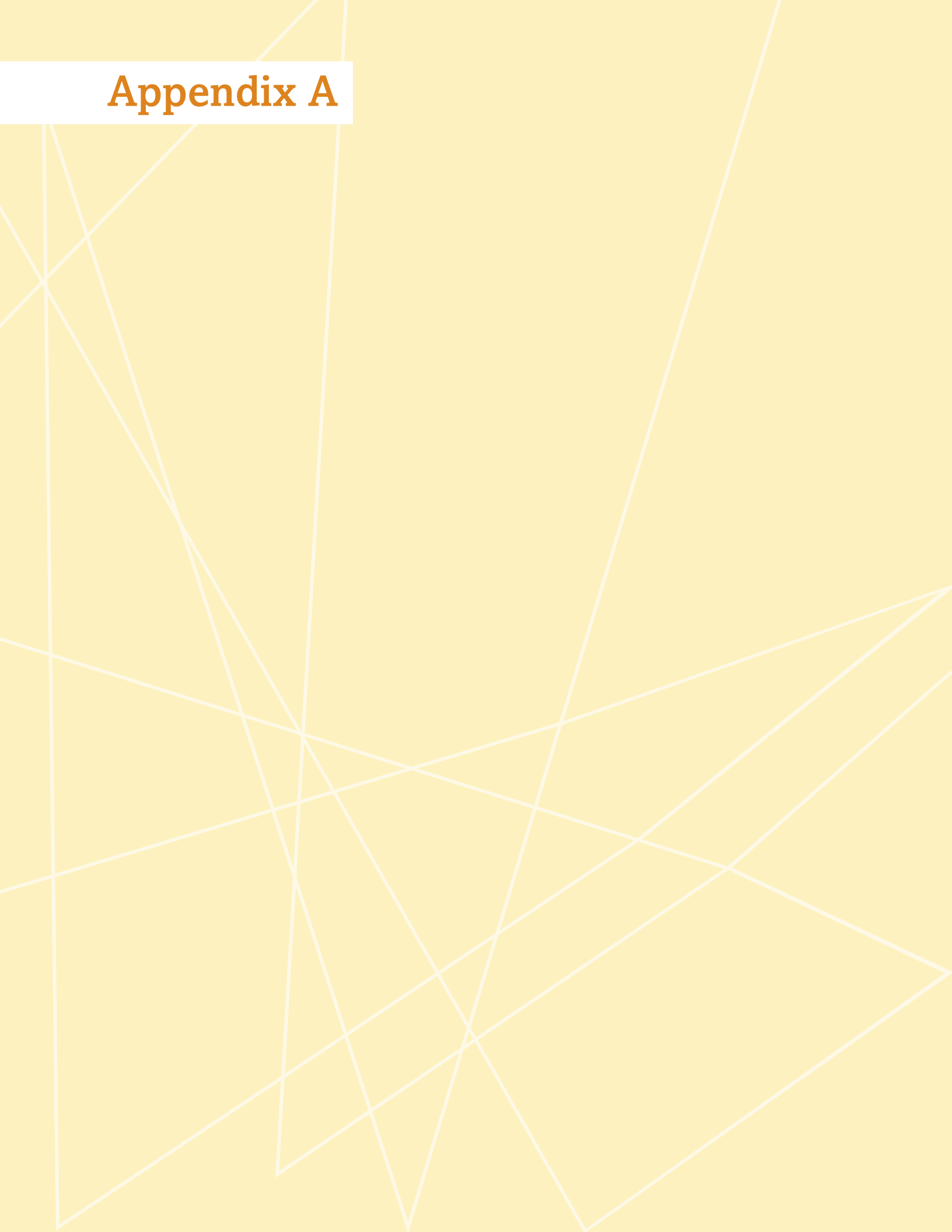
## Conclusion

The AAFP has a decades-long commitment to coverage for all and the creation of a primary care-based health system that can improve health outcomes and reduce overall spending. In response to the growing coverage, cost, quality, and equity challenges facing the U.S. health system and the shifting public dialogue and policy debate on health reform, the AAFP Board of Directors developed the *Health Care for All* policy, which was adopted by the 2018 Congress of Delegates. This policy affirms the AAFP's long-standing commitment to universal coverage and timely access to high-quality care, which could be financed and delivered through a variety of mechanisms and approaches to achieve a unique American solution that aligns with—and ensures support of—the AAFP's mission and policy goals. The policy principles and considerations described in this primer are intended to offer the AAFP flexibility to engage with federal and state policymakers and the American public with the goal of shaping changes to the U.S. health care system that reflect the AAFP's guiding principles and result in coverage for all and a system for which primary care is foundational.

## References

1. American Academy of Family Physicians. Mission, Vision, and Strategic Plan. <https://www.aafp.org/about/the-aafp/vision.html>. Accessed March 19, 2019.
2. Clayton D, Lines L, Alterbaum R; RTI International. Discussion paper on health care coverage and financing models. June 2017.
3. Witters D. U.S. uninsured rate rises to four-year high. January 23, 2019. <https://news.gallup.com/poll/246134/uninsured-rate-rises-four-year-high.aspx>. Accessed March 19, 2019.
4. Alker J, Pham O. Nation's progress on children's health coverage reverses course. Washington, DC: Georgetown University Health Policy Institute, Center for Children & Families; 2018. [https://ccf.georgetown.edu/wp-content/uploads/2018/11/UninsuredKids2018\\_Final\\_ashoff128743pm.pdf](https://ccf.georgetown.edu/wp-content/uploads/2018/11/UninsuredKids2018_Final_ashoff128743pm.pdf). Accessed March 19, 2019.
5. Organisation for Economic Co-operation and Development. Health spending: total, government/compulsory, voluntary; US dollars/capita; 2017 or latest data available. <https://data.oecd.org/healthres/health-spending.htm>. Accessed March 8, 2019.
6. Organisation for Economic Co-operation and Development. Health spending: total, government/compulsory, voluntary; % of GDP; 2017 or latest data available. <https://data.oecd.org/healthres/health-spending.htm>. Accessed March 8, 2019.
7. Centers for Medicare & Medicaid Services Office of the Actuary. National health expenditure projections 2018-2027 – forecast summary. <https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/NationalHealthExpendData/Downloads/ForecastSummary.pdf>. Accessed March 19, 2019.
8. Schneider EC, Sarnak DO, Squires D, Shah A, Doty MM. Mirror, mirror 2017: international comparison reflects flaws and opportunities for better U.S. health care. July 2017. <https://interactives.commonwealthfund.org/2017/july/mirror-mirror/>. Accessed March 19, 2019.
9. Dartmouth Medical School Center for the Evaluative Clinical Sciences. The care of patients with severe chronic illness: an online report on the Medicare program by the Dartmouth Atlas Project. The Dartmouth Atlas of Health Care 2006. [http://archive.dartmouthatlas.org/downloads/atlas/2006\\_Chronic\\_Care\\_Atlas.pdf](http://archive.dartmouthatlas.org/downloads/atlas/2006_Chronic_Care_Atlas.pdf). Accessed March 19, 2019.
10. Levine DM, Landon BE, Linder JA. Quality and experience of outpatient care in the United States for adults with or without primary care. *JAMA Intern Med*. 2019;179(3):363-372.
11. Basu S, Berkowitz SA, Phillips RL, Bitton A, Landon BE, Phillips RS. Association of primary care physician supply with population mortality in the United States, 2005-2015 [published ahead of print February 18, 2019]. *JAMA Intern Med*. <https://jamanetwork.com/journals/jamainternalmedicine/article-abstract/2724393>. Accessed March 19, 2019.

# Appendix A



# Health Care for All:

## A Framework for Moving to a Primary Care-Based Health System

### Goal

To ensure health care coverage for everyone in the United States through a foundation of comprehensive and longitudinal primary care.

The intent of this policy document is to give the American Academy of Family Physicians (AAFP) and its Board of Directors the needed advocacy flexibility to consider all options that might come before federal and state governments and the American people in working to achieve the goal of health care coverage for all—a goal based upon AAFP policy which recognizes that health is a basic human right for every person and that the right to health includes universal access to timely, acceptable and affordable health care of appropriate quality.

### Introduction

The health care system in the United States is uncoordinated and fragmented and emphasizes intervention rather than prevention and comprehensive health management. Health care costs continue to increase at an unsustainable rate and quality is far from ideal.<sup>i,ii</sup>

Over the past two decades, policies implemented through the Children's Health Insurance Program (CHIP) and the Patient Protection and Affordable Care Act (ACA) have extended access to affordable health care coverage to millions of previously uninsured, non-Medicare eligible adults and children. The uninsured population reached a historic low of 8.8% under the implementation of these policies.<sup>iii</sup> The greatest gains in coverage have occurred among our most vulnerable populations and young adults. However, the rollback of some provisions of these policies has increased the percentage of those uninsured to 15.5%,<sup>iv</sup> close to what it was one decade ago when our uninsured rate was nearing 17%, with nearly 50 million people uninsured.<sup>v</sup>

Ensuring that all people in the United States have affordable health care coverage that provides a defined set of essential health benefits (EHB) is necessary in order to move toward a healthier and more productive society. Additionally, our health care system must begin to account for and address social determinants that have a profound impact on individual and population health outcomes and costs, such as socioeconomic status, housing and occupational conditions, food security, and the environment. As noted by the Commonwealth Fund, the design of a system to provide health care coverage to all people “will have a deep impact on its ability to make sustainable and systematic improvements in access to care, equity, quality of care, efficiency, and cost control.”<sup>vi</sup>

Any successful health system reform designed to achieve health care coverage for all must re-emphasize the centrality of primary care, reinvigorate the primary care infrastructure in the United States, and redesign the manner of primary care delivery and payment. Compelling research demonstrates that the ever-increasing focus of resources on specialty care has created fragmentation, decreased quality, and increased cost. Studies confirm that if primary care practices redesign how they operate so that they are more accessible, promote prevention, proactively support patients who have chronic illnesses, and engage patients in self-management and decision-making, health care quality improves along with the cost efficiency of care.<sup>vii</sup>

Family medicine and primary care are the only entities charged with longitudinal continuity of care for the whole patient. The patient and primary care physician relationship and its comprehensiveness have the greatest effect on health care outcomes and costs over the long term. However, the current United States health care system fails to deliver comprehensive primary care because of the way primary care has been, and is currently, financed.

According to the Center for Evaluative Clinical Sciences at Dartmouth (now called the Dartmouth Institute for Health Policy and Clinical Practice), U.S. states that rely more on primary care have lower Medicare spending (inpatient reimbursements and Part B payments); lower resource inputs (hospital beds, intensive care unit [ICU] beds, total physician labor, primary care labor, and medical specialist labor); lower utilization rates (physician visits, days in the ICU, days in the hospital, and patients seeing 10 or more physicians); and better quality of care (fewer ICU deaths and a higher composite quality score).<sup>viii</sup>

The patient-centered medical home (PCMH) is one approach to providing comprehensive advanced primary care (APC) for children, youth, adults, and the elderly. It is a model of health care that facilitates a partnership between an individual patient, the patient's personal physician, and, when appropriate, the patient's family or caregiver. Each patient has an ongoing relationship with a personal primary care physician trained to provide first-contact, coordinated, continuous, and comprehensive care. The personal physician leads a team of individuals at the practice level and beyond who collectively take responsibility for the ongoing care of patients.<sup>ix</sup>

Fundamental change is required to shift the direction of the U.S. health system toward one that covers all people and emphasizes comprehensive and coordinated primary care. Current resources must be allocated differently, and new resources must be deployed to achieve these desired results. Payment policies by all payers must change to reflect a greater investment in primary care to fully support and sustain primary care transformation and delivery. Workforce policies must be addressed to ensure a strong cadre of the family physicians and other primary care physicians who are so integral to a high-functioning health care team. Congress and/or state legislatures must enact comprehensive legislation to achieve this change. If such legislation only addresses the uninsured and fails to fundamentally restructure the system to promote and pay differently and better for family medicine and primary care, any solution will not reach its full potential to achieve the Quadruple Aim of better care, better health, smarter spending, and a more efficient and satisfied physician workforce.

## Key Principles of Any Framework

- Everyone will have affordable health care coverage providing equal access to age-appropriate and evidence-based health care services.
- Everyone will have a primary care physician and a medical home.
- Insurance reforms that have established consumer protections and nondiscriminatory policies will remain and will be required of any proposal or option being considered to achieve health care coverage for all. Those reforms and protections include, but are not limited to, continuation of guaranteed issue; prohibitions on insurance underwriting that uses health status, age, gender, or socioeconomic criteria; prohibitions on annual and/or lifetime caps on benefits and coverage; required coverage of defined EHB; and required coverage of designated preventive services and vaccines without patient cost sharing.
- Any proposal will reflect at least a doubling of the percentage of health care spending invested in primary care.<sup>x</sup> This investment must result in a payment model for primary care that supports and sustains primary care medical home transformation and reduces the current income disparity between primary care and subspecialty care to ensure an adequate primary care physician workforce.
- Federal, state, and private funding for graduate medical education will be reformed to establish and achieve a national physician workforce policy that produces a primary care physician workforce sufficient to meet the nation's health care needs. Additionally, U.S. medical schools will be held to a higher standard in regard to producing the nation's needed primary care physician workforce.
- A defined set of visits and services to a primary care physician will not be subject to cost-sharing.
- In any system of universal coverage, the ability of patients and physicians to voluntarily enter into direct contracts for a defined or negotiated set of services (e.g., direct primary care [DPC]) will be preserved. Additionally, individuals will always be allowed to purchase additional or supplemental private health insurance.

To achieve health care coverage for all, the AAFP supports bipartisan solutions that follow the above referenced principles, are supported by a majority of the American people, and involve one or more of the following approaches, with the understanding that each of these have their strengths and challenges:

- A **pluralistic health care system approach** to the financing, organization, and delivery of health care is designed to achieve affordable health care coverage that involves competition based on quality, cost, and service. Such an approach involves multiple for-profit and not-for-profit private organizations and government entities in providing health insurance coverage. Such an approach to universal health insurance coverage must include a guarantee that all individuals will have access to affordable health care coverage.
- A **Bismarck model approach** is a form of statutory health insurance involving multiple nonprofit payers that are required to cover a government-defined benefits package and to cover all legal residents. Physicians and other **clinicians** operate independently in a mix of public and private arrangements.
- A **single-payer model approach** that is clearly defined in its organization, financing, and model of delivery of health care services would be publicly financed and publicly or privately administered, with the government collecting and providing the funding to pay for health care **provided by** physicians and other **clinicians** who work independently or in private health systems.

- A **public option approach** that is a publicly administered plan directly competing for customers with private insurance plans could be national or regional in scope. Physicians and other **clinicians** would continue to operate independently.
- A **Medicare/Medicaid buy-in approach** would build upon existing public programs by allowing individuals to purchase health care coverage through these programs. In such a scenario, there must be at least Medicaid-to-Medicare payment parity for the services provided to the patients of primary care physicians.

As noted in the AAFP's *Discussion Paper on Health Care Coverage and Financing Models*, which was commissioned by the AAFP Board of Directors in 2017, each of these options for achieving health care coverage for all has its strengths and challenges, which need and deserve to be debated by the American people and their elected officials and representatives. These include, but are not limited to, the following important issues:

- Level of administrative and regulatory burden for physicians, clinicians and other health care providers, and patients/consumers
- Impact on overall health care costs to government, employers, and individuals
- Level of patient, consumer, physician, and clinician satisfaction
- Level of tax burden
- Impact on the timely delivery of health care services (wait times) and delays in scheduling elective health care services
- Clarity of the financing model and levels of payment to physicians, clinicians, and other health care providers
- Inclusion of family physicians on payment, delivery, and other health care decision-making boards
- A description of and clarity on a core set of essential health care benefits available to all, especially primary and preventive care, management of chronic illnesses, and protections from catastrophic health care expenses
- Impact on the equitable availability and delivery of health care services
- Impact on quality and access
- Determination of whether there are global budgets and price/payment negotiations
- Need for a clear and uniform definition of a "single-payer health care system"

## Comprehensive Primary Care

Advanced primary care embodies the principle that patient-centered primary care is comprehensive, continuous, coordinated, connected, and accessible for the patient's first contact with the health system. APC aims to improve clinical quality through the delivery of coordinated, longitudinal care that improves patient outcomes and reduces health care spending. The AAFP believes APC is best achieved through the medical home model of practice. We define a primary care medical home as one that is based on the Joint Principles of the Patient-Centered Medical Home<sup>ix</sup> and has adopted the five key functions of the Comprehensive Primary Care Plus (CPC+) initiative, which establishes a medical practice that provides comprehensive care and a partnership between patients and their primary care physician and other members of the health care team, as well as a payment system that recognizes the comprehensive work of providing primary care. The key functions of a primary care medical home are:

1. Access and Continuity
2. Planned Care and Population Health
3. Care Management
4. Patient and Caregiver Engagement
5. Comprehensiveness and Coordination

## Benefits

All proposals or options to provide health care coverage for all will be required to cover a defined set of essential health benefits. At a minimum, these would include items and services in the following benefit categories:

1. Ambulatory patient services
2. Emergency services
3. Hospitalization
4. Maternity and newborn care
5. Mental health and substance use disorder services, including behavioral health treatment
6. Prescription drugs
7. Rehabilitative and habilitative services and devices

8. Laboratory services
9. Preventive and wellness services and chronic disease management
10. Pediatric services, including oral and vision care

In addition to requiring coverage for EHB, all proposals or options will ensure that primary care is provided through the patient's primary care medical home. To foster a longitudinal relationship with a primary care physician, all proposals or options will provide the following services independent of financial barriers (i.e., deductibles and co-pays) if the services are provided by the patient's designated primary care physician:

- a. Evaluation and management services
- b. Evidence-based preventive services
- c. Population-based management
- d. Well-child care
- e. Immunizations
- f. Basic mental health care

## Affordability

**To achieve the goal proposed in this paper:** "to ensure health care coverage for everyone in the United States through a foundation of comprehensive and longitudinal primary care," it will not be sufficient to focus on health care coverage and primary care alone. There will need to be an effort aimed at identifying and reducing the costs of health care services including the administrative costs of delivering those services. A health care system that is comprehensive and prioritizes primary care must also emphasize the cost and affordability of care. This is important not only for consumers, but also for the decision-making of physicians, clinicians, payers, and government agencies. Affordability is a critical component in efforts to reform the United States health care system.

- **Prevention & Public Health** – there should be increased investment in preventive care, specifically those preventive services that have been proven to reduce the prevalence of preventable diseases (e.g., access to free vaccines and screening programs). A focus on reducing preventable diseases likely would reduce or, at minimum defer, future high-cost spending for preventable diseases. In addition, there should be an increased focus on identifying societal and environmental factors that contribute to increased health care spending.
- **Transparency** – an increased investment in primary care and the medical home allows health plans to not only reduce the costs of treating high-risk patients but improve the quality of health services.<sup>xi</sup> This increased investment should be supported by aggressive efforts to establish price transparency for all health care services. Such transparency likely will contribute to reducing excessively high health care costs by informing the public about their costs of care and creating more competition in the health care industry.
- **Consolidation** – consolidation in the health system is cause for concern when it comes to affordability. Although consolidations between health systems may allow for reductions in internal costs, such as operating expenses, they create a less competitive market which leads to higher health care costs and insurance premiums.<sup>xii</sup>
- **Site-Neutral Payment Policies** – for many health care services, current payment policies often are highly variable depending on the site of service (payment higher for the same service performed in a hospital versus an ambulatory surgery center versus a physician's office for example) despite no significant differences in quality or outcomes of care. Such payment policies contribute to excessive spending in our current system. In addition, such payment policies incentivize consolidation, decrease competition between providers of care, and facilitate over-utilization of high-cost health care services. This issue could be addressed effectively through site-neutral payment policies and the elimination of some facility fees.
- **Administrative Costs** – a share of the overall costs of health care in United States health care is due to high administrative costs. Much of these high administrative costs is due to complexities in billing which is exasperated by multiple payers. Countries with lump-sum budgets and fewer health care payers have seen lower costs in administrative spending.<sup>xiii</sup> Of all hospital spending in the United States, 25% is dedicated to administrative costs—nearly \$200 billion. In comparison, Canada dedicates only 12% of hospital spending to administrative costs, while England spends 16% on administrative costs. Additionally, no link has been found between higher administrative costs and higher quality care.

- **Pharmaceutical & Biologics** – advances in pharmaceuticals and biologics have improved the health of millions of people, decreased the prevalence of preventable diseases, and allowed for chronic diseases to be maintained over a prolonged period of time. These advances have extended life expectancy for millions of people, especially those with chronic diseases and some cancers. These advances should be celebrated for the positive impact they have had on millions of people. However, the escalating costs of pharmaceuticals and biologics places these interventions and treatments out of reach for far too many people. Policies should be established that allow purchasers of health care, including Medicare, to negotiate the costs of prescription drugs. Additionally, there should be greater flexibility in the design of formularies that allow for increased use of generic and bio-similar products.

## Payment

The AAFP believes all primary care physicians should be compensated in a manner that is consistent with the AAFP’s comprehensive payment model for family medicine and primary care, the Advanced Primary Care Alternative Payment Model (APC-APM). The AAFP believes the APC-APM is a foundational element of a greater investment in primary care that is essential to a better system of care in the United States.

The model builds on previous programs and years of research showing the benefits of movement away from fee-for-service (FFS) payment and increased support for population-based care. It better supports small and independent practices and reduces administrative burden in the health care system.

## Key Components of the APC-APM

For any health care system to achieve its goals, there will be a need for greater investment in primary care. The AAFP strongly supports increased investment in primary care as part of any U.S. health care system.

Family physicians, other primary care physicians, and primary care teams provide comprehensive primary care through two distinct functions: direct patient care and non-face-to-face care, which we label as “population-based care.” The AAFP has concluded that traditional FFS payment is largely incongruent with these core functions. The APC-APM, which is outlined in *Figure 1*, is better designed to recognize the value of these complementary, yet distinct, functions.

The APC-APM establishes a payment model built on the realization that high-quality primary care is delivered through both direct patient care and the population-based services that are provided by the primary care team. Additionally, we believe the revenue cycle for primary care must move to a prospective payment model with a retrospective evaluation for performance and quality. Therefore, our model establishes prospective payments for a direct patient care global payment, a population-based global payment, and a performance-based incentive payment.

Building on our belief that primary care should remain comprehensive, the APC-APM maintains an FFS component as a means of driving comprehensive care at the primary care level. The presence of this FFS component recognizes that a comprehensive primary care practice will provide episodes of care that are beyond the scope of the direct patient care global payment.

We believe the APC-APM will support a greater investment in primary care and will allow primary care practices of all sizes and in any location to achieve and sustain success through its simplified payment structure and dramatic reduction in administrative burden. More importantly, we believe patients will achieve better outcomes and have a more favorable experience through this model.

**Figure 1. Key Components of the APC-APM Payment**





## Summary

This framework offers important policy options for the AAFP to move the United States toward a primary care-based health care system in which all people have appropriate and affordable health care coverage, are provided a medical home, and have primary care-oriented benefits. This can be achieved only if Congress and/or state legislatures act to ensure that these policy objectives are implemented. All people in the United States must have appropriate and affordable health care coverage, but this is not sufficient by itself. A fundamental change in the health care system to move toward a primary care-based system is essential to achieve improvements in access, quality, and cost. Extensive worldwide research supports the value of a primary care-based health care system in which all people are covered.<sup>xiv</sup> This framework is grounded upon the documented value of primary care in achieving better health outcomes, higher patient satisfaction, and more efficient use of resources. The United States will only achieve the type of health care system that our people need, and our nation deserves through a framework of health care coverage for all that is foundationally built on primary care.

## References

- i Institute of Medicine Committee on Quality of Health Care in America. *Crossing the quality chasm: a new health system for the 21st century*. Washington, DC: National Academies Press; 2001.
- ii Institute of Medicine Committee on Quality of Health Care in America. *To err is human: building a safer health system*. Washington, DC: National Academies Press; 2000.
- iii Barnett JC, Berchick ER. *Health insurance coverage in the United States: 2016*. Washington, DC: U.S. Government Printing Office. 2017. Current population report no. P60-260. <https://www.census.gov/library/publications/2017/demo/p60-260.html>. Accessed July 1, 2018.
- iv Collins S, Gunja M, Doty M, Bhupal H. *First look at health insurance coverage in 2018 finds ACA gains beginning to reverse*. May 1, 2018. <https://www.commonwealthfund.org/blog/2018/first-look-health-insurance-coverage-2018-finds-aca-gains-beginning-reverse>. Accessed July 1, 2018.
- v DeNavas-Walt C, Proctor BD, Smith JC. *Income, poverty, and health insurance coverage in the United States: 2009*. Washington, DC: U.S. Government Printing Office. 2010. Current population report no. P60-238. <https://www.census.gov/prod/2010pubs/p60-238.pdf>. Accessed July 1, 2018.
- vi Collins S, Schoen C, Davis K, Gauthier A, Schoenbaum S. *A roadmap to health insurance for all: principles for reform*. October 1, 2007. <https://www.commonwealthfund.org/publications/fund-reports/2007/oct/roadmap-health-insurance-all-principles-reform>. Accessed July 1, 2018.
- vii Bailit M, Hughes C. *The patient-centered medical home: a purchaser's guide*. Washington, DC: Patient-Centered Primary Care Collaborative; 2008. <https://www.pcpcc.org/guide/patient-centered-medical-home-purchasers-guide>. Accessed July 1, 2018.
- viii Dartmouth Atlas of Health Care Working Group. *The care of patients with severe chronic illness: an online report on the Medicare program by the Dartmouth Atlas Project*. 2006. [http://www.dartmouthatlas.org/downloads/atlas/2006\\_Chronic\\_Care\\_Atlas.pdf](http://www.dartmouthatlas.org/downloads/atlas/2006_Chronic_Care_Atlas.pdf). Accessed July 1, 2018.
- ix American Academy of Family Physicians, American Academy of Pediatrics, American College of Physicians, American Osteopathic Association. *Joint principles of the patient-centered medical home*. March 2007. [http://www.aafp.org/dam/AAFP/documents/practice\\_management/pcmh/initiatives/PCMHJoint.pdf](http://www.aafp.org/dam/AAFP/documents/practice_management/pcmh/initiatives/PCMHJoint.pdf). Accessed July 1, 2018.
- x Koller C. *Getting More Primary Care-Oriented: Measuring Primary Care Spending*. <https://www.milbank.org/2017/07/getting-primary-care-oriented-measuring-primary-care-spending/> Accessed July 5, 2018.
- xi Collins S, Piper K, Owens G. *The opportunity for health plans to improve quality and reduce costs by embracing primary care medical homes*. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4031704/> Accessed July 3, 2018.
- xii Kacik, A. *Monopolized healthcare market reduces quality, increases costs*. <http://www.modernhealthcare.com/article/20170413/NEWS/170419935>. Accessed July 3, 2018.
- xiii Himmelstein, D. *A comparison of hospital administrative costs in eight nations: U.S. costs exceed others by far*. <https://www.commonwealthfund.org/publications/journal-article/2014/sep/comparison-hospital-administrative-costs-eight-nations-us>. Accessed July 3, 2018.
- xiv Patient-Centered Primary Care Collaborative. *Results and evidence*. <https://www.pcpcc.org/results-evidence>. Accessed July 1, 2018. (1989) (July 2018 BOD)

# Appendix B



June 2017

# Discussion Paper on Health Care Coverage and Financing Models

## About the Discussion Paper

This primer was commissioned by the American Academy of Family Physicians (AAFP) to inform and educate AAFP members about the potential effects of different models of health care coverage and financing. It was researched and written by RTI International.

## Acknowledgements

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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)<sup>1,2</sup> and Senator Bernie Sanders' single payer plan<sup>3</sup> are recent U.S. proposals for a type of single-payer model.

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

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## Overview: 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: 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.<sup>4</sup> 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**

	<b>Model</b>	<b>Coverage and Access:</b> percentage of population covered; percentage experiencing cost barriers (2015); percentage waiting 2+ months for specialist appointment (2015)
<b>Multipayer, nonstatutory, market-oriented system with public subsidies and universal coverage over age 65</b>		
<b>United States</b>	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
<b>Statutory health insurance system with universal coverage (Bismarck)</b>		
<b>Austria</b>	Statutory health insurance system with region- and occupation-based health insurance funds.	99.9% covered (access measures unavailable)
<b>Belgium</b>	Statutory health insurance system with six private nonprofit insurers and one national public insurer.	99.9% covered (access measures unavailable)
<b>France</b>	Statutory health insurance with all insurers incorporated into single national exchange.	99.9% covered 18% with cost barriers 18% waited 2+ months
<b>Germany</b>	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
<b>Netherlands</b>	Statutory health insurance system, universally mandated private insurance (national exchange).	99.8% covered 22% with cost barriers 3% waited 2+ months
<b>Switzerland</b>	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
<b>Single payer**</b>		
<b>Australia</b>	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
<b>Canada</b>	Single publicly financed, privately administered national health program.	100% covered 13% with cost barriers 29% waited 2+ months
<b>Ireland</b>	Tax-financed public health insurance system with optional private insurance available.	100% covered (access measures unavailable)
<b>Spain</b>	Single-payer system offering statutory health insurance, limited out-of-pocket expenses.	100% covered 33% waited 2+ months (2009 data; more-recent data unavailable) <sup>5</sup>
<b>National health care system</b>		
<b>Italy</b>	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
<b>New Zealand</b>	National health system with district health boards responsible for planning, purchasing, and providing care.	100% covered 21% with cost barriers 19% waited 2+ months
<b>United Kingdom</b>	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

Data sources: Organization for Economic Cooperation and Development (OECD)<sup>6</sup> and the Commonwealth Fund<sup>7,8</sup>

\* 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.



## countries

<b>Family Medicine:</b> number of general practitioners (GPs) per 1,000 people; percentage of physicians satisfied with practicing medicine (2012)	<b>Expenditures:</b> 2012 percent of GDP; 2012 per capita (USD 2010)	<b>Population Health:</b> life expectancy at birth (2012)
0.3 GPs per 1,000 68% satisfied	16.4% of GDP \$8,103 per capita	F: 81.2 M: 76.4
0.78 GPs per 1,000 (satisfaction data unavailable)	10.4% of GDP \$4,451 per capita	F: 84 M: 79.2
1.11 GPs per 1,000 (satisfaction data unavailable)	10.4% of GDP \$4,120 per capita	F: 83.9 M: 78.8
1.56 GPs per 1,000 76% satisfied	10.8% of GDP \$3,942 per capita	F: 85.4 M: 78.7
0.67 GPs per 1,000 54% satisfied	10.8% of GDP \$4,517 per capita	F: 83.3 M: 78.6
0.77 GPs per 1,000 88% satisfied	10.9% of GDP \$4,850 per capita	F: 83 M: 79.3
1.08 generalists* per 1,000 84% satisfied	10.6% of GDP \$5,486 per capita	F: 84.9 M: 80.6
1.14 GPs per 1,000 80% satisfied	9.3% of GDP \$4,164 per capita	F: 84.4 M: 80.3
1.18 GPs per 1,000 82% satisfied	10.3% of GDP \$4,218 per capita	F: 83.6 M: 79.4
0.72 GPs per 1000 (satisfaction data unavailable)	9.4% of GDP \$4,743 per capita	F: 83.5 M: 79.3
0.75 GPs per 1,000 (satisfaction data unavailable)	9.1% of GDP \$2,903 per capita	F: 85.5 M: 79.5
0.76 GPs per 1000 (satisfaction data unavailable)	8.8% of GDP \$2,987 per capita	F: 84.8 M: 79.8
0.83 generalists* per 1,000 82% satisfied	9.7% of GDP \$3,151 per capita	F: 83.0 M: 79.3
0.80 GPs per 1,000 84% satisfied	8.4% of GDP \$3,063 per capita	F: 82.8 M: 79.1

### Shown in Table 1 (left) are:

- percentage of population covered;<sup>6</sup>
- access, defined as percentage who experienced access barriers because of cost in 2015<sup>7</sup> 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;<sup>6</sup>
- the percentage of physicians who reported being satisfied with practicing medicine in 2012;<sup>8</sup>
- health spending as a proportion of GDP and per capita health expenditures in 2012 (reported in constant 2010 US dollars [USD]);<sup>6</sup> and,
- life expectancy at birth for females and males in 2012.<sup>6</sup>

# 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.<sup>9</sup> 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,<sup>7</sup> 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.<sup>9</sup> 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%.<sup>7</sup> Another survey also suggests that current wait times in the United States are shorter than in Canada.<sup>10</sup> 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).<sup>7</sup> 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.<sup>11</sup> 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.<sup>12</sup>

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

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—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.<sup>13</sup> 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%).<sup>7</sup>

## 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.<sup>14-19</sup>

## 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.<sup>20,21</sup> While this gap has narrowed somewhat, in 2014, primary care physician pay in the United States averaged about \$186,320 USD,<sup>22</sup> compared with roughly \$155,700 USD in Canada.<sup>23\*</sup> 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.<sup>12</sup>

## 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 specialists<sup>7</sup> and a higher number of general practitioners per 1,000 population members.<sup>6</sup> 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.

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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

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## 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.<sup>9</sup> 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.<sup>12</sup> 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.<sup>9</sup> 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.<sup>24</sup> Other sources of dissatisfaction and burnout come from payers, both public and private, and electronic health records,<sup>24</sup> 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%).<sup>8</sup> 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."

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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

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## 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.<sup>7</sup> 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.<sup>25</sup> 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.<sup>26</sup>

### **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.”<sup>27</sup>

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*).<sup>6</sup> 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.<sup>7</sup>

**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 Fund<sup>7</sup> and Canadian Cancer Society<sup>28</sup>

# Bismarck Model

## Health Care Coverage and Access

The universal health coverage concept originated in Germany in 1883.<sup>29</sup> 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.<sup>30</sup>

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.<sup>31</sup> 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.<sup>31</sup> Researchers have found that privately insured patients in Austria and Germany have faster access to elective surgery.<sup>11</sup>

## 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.<sup>31</sup>

### **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.<sup>31</sup>

### **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.<sup>31</sup>

### **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).<sup>7</sup> 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.<sup>31</sup>

### **Physician Satisfaction and Burnout**

In Austria, 36% of a small sample of physician survey respondents (n = 95) reported being at risk for burnout.<sup>32</sup> 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.<sup>33</sup> However, another larger survey in 2012 suggested that Germany has the lowest proportion of physicians who are satisfied with practicing medicine.<sup>8</sup> 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.<sup>31</sup> 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.<sup>8</sup>

## 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.<sup>7</sup> 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).<sup>7</sup> In the Netherlands, 84% of residents buy private plans for dental, vision, etc. and an annual deductible of ~455 USD covers most cost-sharing.<sup>7</sup> In Belgium, roughly 20% of expenditures are out-of-pocket, compared with 13% in Germany, 7% in France, and 5% in the Netherlands.<sup>34,35</sup>

### **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%.<sup>31</sup>

## 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.<sup>6</sup> There are disparities in the Netherlands of up to 7 years' difference in life expectancy between the highest and lowest socioeconomic groups.<sup>7</sup> 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.<sup>36</sup>

## 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.

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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

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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.<sup>4,37</sup>



## 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.<sup>4,38-40</sup>

### **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.<sup>39,40</sup> 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.<sup>12</sup> 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.<sup>4,38-40</sup>

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.<sup>4,38-40</sup>

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.<sup>39,40</sup> 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.<sup>4,38-40</sup>

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**A public option could spend up to 5% less on administrative costs than equivalent private plans.**

*—Congressional Budget Office*

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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.<sup>37,40</sup>

## 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.<sup>4,37</sup>

## 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.<sup>31</sup> 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.<sup>8</sup>

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.<sup>41</sup> 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.<sup>8</sup> 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.

\* 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>.

## Works Cited

1. Seidman L. Medicare for all: A public finance analysis. 2013; <http://EconPapers.repec.org/RePEc:dlw:wpaper:14-02>. Accessed Apr. 19, 2017.
2. Seidman L. The Affordable Care Act versus Medicare for All. *Journal of Health Politics, Policy and Law*. 2015;40(4):911-921.
3. Holahan J, Clemans-Cope L, Buettgens M, Favreault M, Blumberg LJ, Ndwanwe S. The Sanders single-payer health care plan. 2016; <http://www.urban.org/sites/default/files/publication/80486/200785-The-Sanders-Single-Payer-Health-Care-Plan.pdf>. Accessed Apr. 19, 2017.
4. Halpin HA, Harbage P. The Origins And Demise Of The Public Option. *Health Affairs*. 2010;29(6):1117-1124.
5. Garcia-Armesto S, Begona Abadia-Taira M, Duran A, Hernandez-Quevedo C, Bernal-Delgado E. Spain: Health system review. *Health systems in transition*. 2010;12(4):1-295, xix-xx.
6. Organization for Economic Cooperation and Development. OECD Health Statistics. 2017. <http://stats.oecd.org/>. Accessed May 10, 2017.
7. Mossialos E, Wenzl M, Osborn R, Anderson C. 2015 International Profiles of Health Care Systems. *The Commonwealth Fund*. 2016.
8. Schoen C, Osborn R. Commonwealth Fund International Health Policy Survey of Primary Care Physicians. 2012; [http://www.commonwealthfund.org/~media/Files/Publications/In%20the%20Literature/2012/Nov/PDF\\_2012\\_IHP\\_survey\\_chartpack.pdf](http://www.commonwealthfund.org/~media/Files/Publications/In%20the%20Literature/2012/Nov/PDF_2012_IHP_survey_chartpack.pdf). Accessed May 22, 2017.
9. Enterline PE, Salter V, McDonald AD, McDonald JC. The distribution of medical services before and after free medical care—the Quebec experience. *New England Journal of Medicine*. 1973;289(22):1174-1178.
10. O'Neill J, O'Neill DM. Health status, health care and inequality: Canada vs. the U.S. 2007; <http://EconPapers.repec.org/RePEc:nbr:nberwo:13429>. Accessed April 19, 2017.
11. Viberg N, Forsberg BC, Borowitz M, Molin R. International comparisons of waiting times in health care—Limitations and prospects. *Health policy (Amsterdam, Netherlands)*. 2013;112(1):53-61.
12. Buchmueller TC, Miller S, Vujicic M. How do providers respond to public health insurance expansions? Evidence from adult Medicaid dental benefits. 2014; <http://www.nber.org/papers/w20053w>. Accessed April 19, 2017.
13. Giffin R, Robinson S, Wizemann T. *Breakthrough business models: Drug development for rare and neglected diseases and individualized therapies: Workshop summary*. National Academies Press; 2009.
14. Gaffney A, Himmelstein DU, Woolhandler S, Angell M. Beyond the Affordable Care Act: A physicians' proposal for single-payer health care reform. 2015; [http://www.pnhp.org/beyond\\_aca/Physicians\\_Proposal.pdf](http://www.pnhp.org/beyond_aca/Physicians_Proposal.pdf). Accessed April 19, 2017.
15. Holahan J, Clemans-Cope L, Buettgens M, Favreault M, Blumberg LJ, Ndwanwe S. The Sanders single-payer health care plan. 2016; <http://www.urban.org/sites/default/files/publication/80486/200785-The-Sanders-Single-Payer-Health-Care-Plan.pdf>. Accessed April 19, 2017.
16. Hsiao WC. State-Based Single-Payer Health Care—A Solution for the United States? *New England Journal of Medicine*. 2011;364(13):1188-1190.
17. Kemble SB. Opinion piece: Health reform and professional ethics Hawai'i Medical Association Presidential Inauguration Speech. *Hawaii J. Med. Public Health*. 2013;72(1):31-33.
18. Morra D, Nicholson S, Levinson W, Gans DN, Hammons T, Casalino LP. US Physician Practices Versus Canadians: Spending Nearly Four Times As Much Money Interacting With Payers. *Health Affairs*. 2011;30(8):1443-1450.
19. Woolhandler S, Himmelstein DU. Single-payer reform: The only way to fulfill the president's pledge of more coverage, better benefits, and lower costs. *Ann. Intern. Med*. 2017.
20. Laugesen MJ, Glied SA. Higher fees paid to US physicians drive higher spending for physician services compared to other countries. *Health Affairs*. 2011;30(9):1647-1656.
21. Peterson CL, Burton R. US health care spending: Comparison with other OECD countries. *Federal Publications*. 2007:311.
22. Bureau of Labor Statistics. Occupational Employment and Wages, May 2014: 29-1062 Family and General Practitioners. 2014; <https://www.bls.gov/oes/2014/may/oes291062.htm>. Accessed Jun 29, 2017, 2017.
23. Canadian Medical Association. Family Medicine Profile. 2016; <https://www.cma.ca/Assets/assets-library/document/en/advocacy/Family-e.pdf>. Accessed Jun 29, 2017.
24. Rao SK, Kimball AB, Lehrhoff SR, et al. The Impact of Administrative Burden on Academic Physicians: Results of a Hospital-Wide Physician Survey. *Academic Medicine*. 2017;92(2):237-243.
25. Friedman G. Funding a national single-payer system. 2013; <http://www.dollarsandsense.org/archives/2012/0312friedman.pdf>. Accessed May 10, 2017.
26. Hellander I. How much would single payer cost? 2016; <http://www.pnhp.org/facts/single-payer-system-cost>. Accessed May 10, 2017.
27. AAFP Integration of Primary Care and Public Health Work Group. Integration of Primary Care and Public Health (Position Paper). 2015; <http://www.aafp.org/about/policies/all/integprimarycareandpublichealth.html>. Accessed May 10, 2017.
28. Canadian Cancer Society. Breast Cancer in Canada, 2016. 2016; <http://cbsf.org/ontario/AboutBreastCancerMain/FactsStats/Pages/Breast-Cancer-Canada.aspx>. Accessed Jun 29, 2017.
29. Hussein R. A Review of Realizing the Universal Health Coverage (UHC) Goals by 2030: Part 1-Status quo, Requirements, and Challenges. *J. Med. Syst*. 2015;39(7).
30. Polyakova M. Risk selection and heterogeneous preferences in health insurance markets with a public option. *Journal of Health Economics*. 2016;49:153-168.

31. Busse R, Blumel M. Germany: Health system review. *Health systems in transition*. 2014;16(2):1-296, xxi.
32. Fuchs S, Mesenholl-Strehler E, Endler P. Physician Burnout in General Practitioners: Reflections upon Prevention and Treatment. *Internat J Commun*. 2011;5(2):53-60.
33. Awa WL, Plaumann M, Walter U. Burnout prevention: A review of intervention programs. *Patient Education and Counseling*. 2010;78(2):184-190.
34. Squires D, Anderson C. US health care from a global perspective: spending, use of services, prices, and health in 13 countries. Issue brief. 2015;15:1-15. <http://www.commonwealthfund.org/publications/issue-briefs/2015/oct/us-health-care-from-a-global-perspective>. Accessed Apr. 19, 2017.
35. Gerkens S, Merkur S. Belgium: Health system review. *Health systems in transition*. 2010;12(5):1-266, xxv.
36. Chetty R, Stepner M, Abraham S, et al. The Association Between Income and Life Expectancy in the United States, 2001-2014. *Jama*. 2016;315(14):1750-1766.
37. Berenson RA. Getting to a public option that contains costs: Negotiations, opt-outs and triggers. 2009; <http://www.urban.org/sites/default/files/publication/30756/411984-Getting-to-a-Public-Option-that-Contains-Costs-Negotiations-Opt-Outs-and-Triggers.PDF>. Accessed May 22, 2017.
38. Auerback M, Wray LR. Toward true health care reform: More care, less insurance. 2010; [http://EconPapers.repec.org/RePEc:lev:levppb:ppb\\_110](http://EconPapers.repec.org/RePEc:lev:levppb:ppb_110). Accessed April 19, 2017.
39. Blumberg L, Holahan J. Designing a Medicare buy-in and a public plan marketplace option: Policy options and considerations. 2016; <http://www.urban.org/sites/default/files/alfresco/publication-pdfs/2000946-Designing-a-Medicare-Buy-in-and-a-Public-Plan-Marketplace-Option.pdf>. Accessed April 19, 2017.
40. Kaplan E, Rodgers M. The Costs and Benefits of a Public Option in Health Care Reform; An Economic Analysis. *Advancing National Health Reform*. 2009.
41. Hussey P, Anderson GF. A comparison of single- and multi-payer health insurance systems and options for reform. *Health policy (Amsterdam, Netherlands)*. 2003;66(3):215-228.

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

1. American College of Physicians. Achieving a high-performance health care system with universal access: what the United States can learn from other countries. *Ann Intern Med.* 2008;148(1):55-75.
2. Auerback M, Wray LR. Toward true health care reform: more care, less insurance. Levy Economics Institute; 2010.
3. Berenson RA. Getting to a public option that contains costs: negotiations, opt-outs and triggers. 2009. <http://www.urban.org/sites/default/files/publication/30756/411984-Getting-to-a-Public-Option-that-Contains-Costs-Negotiations-Opt-Outs-and-Triggers.PDF>. Accessed May 22, 2017.
4. Blumberg L, Holahan J. Designing a Medicare buy-in and a public plan marketplace option: Policy options and considerations. 2016. <http://www.urban.org/sites/default/files/alfresco/publication-pdfs/2000946-Designing-a-Medicare-Buy-in-and-a-Public-Plan-Marketplace-Option.pdf>.
5. Buchmueller TC, Miller S, Vujicic M. How do providers respond to public health insurance expansions? Evidence from adult Medicaid dental benefits. 2014. <http://www.nber.org/papers/w20053>. Accessed April 19, 2017.
6. Buckley NJ, Cuff K, Hurley J, McLeod L, Mestelman S, Cameron D. An experimental investigation of mixed systems of public and private health care finance. *Journal of Economic Behavior & Organization.* 2012;84(3):713-729.
7. Busse R, Blumel M. Germany: health system review. *Health systems in transition.* 2014;16(2):1-296, xxi.
8. Chevrel K, Berg Brigham K, Durand-Zaleski I, Hernandez-Quevedo C. France: health system review. *Health systems in transition.* 2015;17(3):1-218, xvii.
9. Congressional Budget Office. Private health insurance premiums and federal policy. Congressional Budget Office; 2016. <http://EconPapers.repec.org/RePEc:cbo:report:511300>. Accessed April 19, 2017.
10. Courtemanche C, Marton J, Ukert B, Yelowitz A, Zapata D. Impacts of the Affordable Care Act on health insurance coverage in Medicaid expansion and non-expansion states. National Bureau of Economic Research; 2016. <http://www.nber.org/papers/w22182>. Accessed April 19, 2017.
11. Cylus J, Richardson E, Findley L, Longley M, O'Neill C, Steel D. United Kingdom: health system review. *Health systems in transition.* 2015;17(5):1-126.
12. Dafny L, Gruber J, Ody C. More insurers lower premiums: evidence from initial pricing in the health insurance marketplaces. National Bureau of Economic Research; 2014. <http://www.nber.org/papers/w20140>. Accessed April 19, 2017.
13. De Pietro C, Camenzind P, Sturmy I, et al. Switzerland: health system review. *Health systems in transition.* 2015;17(4):1-288, xix.
14. DeVoe JEMDD, Tillotson CJMPH, Wallace LSP, Selph SMD, Graham AMD, Angier HMPH. Comparing types of health insurance for children: a public option versus a private option. *Medical Care.* 2011;49(9):818-827.
15. Ferre F, de Belvis AG, Valerio L, et al. Italy: health system review. *Health systems in transition.* 2014;16(4):1-168.
16. Fuchs S, Mesenholl-Strehler E, Endler P. Physician burnout in general practitioners: reflections upon prevention and treatment. *Internat J Communic.* 2011;5(2):53-60.
17. Gaffney A, Himmelstein DU, Woolhandler S, Angell M. Beyond the Affordable Care Act: a physicians' proposal for single-payer health care reform. 2015. [http://www.pnhp.org/beyond\\_aca/Physicians\\_Proposal.pdf](http://www.pnhp.org/beyond_aca/Physicians_Proposal.pdf). Accessed April 6, 2017.
18. Garcia-Armesto S, Begona Abadia-Taira M, Duran A, Hernandez-Quevedo C, Bernal-Delgado E. Spain: health system review. *Health systems in transition.* 2010;12(4):1-295, xix-xx.
19. Garcia-Armesto S, et al. Spain: health systems review. *Health systems in transition.* 2010;12(4):1-293, xix.
20. Gerkens S, Merkur S. Belgium: health system review. *Health systems in transition.* 2010;12(5):1-266, xxv.
21. Glied S. Single payer as a financing mechanism. *Journal of Health Politics, Policy & Law.* 2009;34(4):593-615.
22. Halpin H, Harbage P. The origins and demise of the public option. <http://content.healthaffairs.org/content/29/6/1117.full>. Accessed May 23, 2017.
23. Herzlinger RE, Richman BD, Boxer RJ. Achieving universal coverage without turning to a single payer: Lessons from 3 other countries. *JAMA.* 2017;317(14):1409-1410.
24. Hofmarcher MM, Quentin W. Austria: health system review. *Health systems in transition.* 2013;15(7):1-292.
25. Holahan J, Clemans-Cope L, Buettgens M, Favreault M, Blumberg LJ, Ndwandwe S. The Sanders single-payer health care plan. Washington, DC: Urban Institute; 2016. <http://www.urban.org/sites/default/files/publication/80486/200785-The-Sanders-Single-Payer-Health-Care-Plan.pdf>. Accessed April 19, 2017.
26. Hsiao WC. State-based single-payer health care—a solution for the United States? *New England Journal of Medicine.* 2011;364(13):1188-1190.
27. Hunter JG. Reducing U.S. health care spending: is it realistic or even desirable? *Plastic and reconstructive Surgery.* 2009;123(1):403-408.
28. Hussein R. A review of realizing the Universal Health Coverage (UHC) goals by 2030: Part 1-status quo, requirements, and challenges. *J Med Syst.* 2015;39(7):71.
29. Hussey P, Anderson GF. A comparison of single- and multi-payer health insurance systems and options for reform. *Health Policy (Amsterdam, Netherlands).* 2003;66(3):215-228.



30. Kaplan E, Rodgers M. The costs and benefits of a public option in health care reform. [https://www.law.berkeley.edu/files/chefs/Public\\_Option\\_Economic\\_Analysis.pdf](https://www.law.berkeley.edu/files/chefs/Public_Option_Economic_Analysis.pdf). Accessed May 23, 2017.
31. Kemble SB. Opinion piece: health reform and professional ethics Hawai'i Medical Association presidential inauguration speech. *Hawai'i Journal of Medicine & Public Health*. 2013;72(1):31-33.
32. Kirch DG, Henderson MK, Dill MJ. Physician workforce projections in an era of health care reform. *Annual Review of Medicine*. 2012;63:435-445.
33. Kroneman M, Boerma W, van den Berg M, Groenewegen P, de Jong J, van Ginneken E. Netherlands: health system review. *Health systems in transition*. 2016;18(2):1-240.
34. Levesque J-F, Haggerty JL, Hogg W, et al. Barriers and facilitators for primary care reform in Canada: results from a deliberative synthesis across five provinces. *Healthcare Policy*. 2015;11(2):44-57.
35. Marchildon G. Canada: Health system review. *Health systems in transition*. 2013;15(1):1-179.
36. Moreno-Serra R, Smith PC. Does progress towards universal health coverage improve population health? *Lancet (London, England)*. 2012;380(9845):917-923.
37. Morgan SG, Boothe K. Universal prescription drug coverage in Canada: Long-promised yet undelivered. *Healthcare Management Forum*. 2016;29(6):247-254.
38. Morra D, Nicholson S, Levinson W, Gans DN, Hammons T, Casalino LP. US physician practices versus Canadians: spending nearly four times as much money interacting with payers. *Health Affairs*. 2011;30(8):1443-1450.
39. Nay O, Bejean S, Benamouzig D, Bergeron H, Castel P, Ventelou B. Achieving universal health coverage in France: policy reforms and the challenge of inequalities. *Lancet (London, England)*. 2016;387(10034):2236-2249.
40. O'Neill J, O'Neill DM. Health status, health care and inequality: Canada vs. the U.S. National Bureau of Economic Research, Inc. 2007. <http://EconPapers.repec.org/RePEc:nbr:nberwo:13429>. Accessed April 19, 2017.
41. Paris V, Hewlett E, Auraaen A, Alexa J, Simon L. Health care coverage in OECD countries in 2012. 2016. <http://econpapers.repec.org/paper/oecelsaad/88-en.htm>. Accessed April 19, 2017.
42. Polyakova M. Risk selection and heterogeneous preferences in health insurance markets with a public option. *Journal of Health Economics*. 2016;49:153-168.
43. Sampath P, Wilson D. A case study and state of science review: private versus public healthcare financing. *Global Journal of Health Science*. 2011;4(1):118-126.
44. Sato K, Ohtsu Y, Kurachi S, Shimamura L, Dobashi Y. An international comparative study of financing healthcare: the case of eight developed countries in 1990s-2000s. Institute for Economics Studies, Keio University; 2016. <https://ideas.repec.org/p/keo/dpaper/2016-010.html>. Accessed April 19, 2017.
45. Seidman L. Medicare for all: a public finance analysis. 2013. <https://ideas.repec.org/p/dlw/wpaper/14-02..html>. Accessed April 19, 2017.
46. Squires D, Anderson C. US health care from a global perspective: spending, use of services, prices, and health in 13 countries. Issue brief. 2015;15:1-15. <http://www.commonwealthfund.org/publications/issue-briefs/2015/oct/us-health-care-from-a-global-perspective>. Accessed April 19, 2017.
47. Titeca H. Healthcare spending: the role of healthcare institutions from an international perspective. 2016. <http://econpapers.repec.org/paper/prampapa/73678.htm>. Accessed April 19, 2017.
48. Viberg N, Forsberg BC, Borowitz M, Molin R. International comparisons of waiting times in health care—Limitations and prospects. *Health Policy (Amsterdam, Netherlands)*. 2013;112(1):53-61.
49. White F. Primary health care and public health: foundations of universal health systems. *Medical Principles and Practice: International Journal of the Kuwait University, Health Science Centre*. 2015;24(2):103-116.
50. Woolhandler S, Himmelstein DU. Single-payer reform: the only way to fulfill the President's pledge of more coverage, better benefits, and lower costs. *Ann Intern Med*. 2017;166(8):587-588.





