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## The Road to a Happier Health Care System: Lessons from Denmark

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The Road to a Happier Health Care System: Lessons from  
Denmark

Deanna Karam  
Dr. Hackey  
Health Care Reform in America  
6 April 2015

## Introduction

Despite countless attempts to establish universal health care coverage in the United States, it has not succeeded. The United State's fragmented health care system is far too expensive compared to other countries and does not provide comprehensive coverage to all Americans. As of 2010, the per capita health expenditure per person in the US was \$8,233; this is more than twice as much per capita than the OECD median (\$3,309) and more than the second highest country, Norway, which spends \$5,388 (Rice 94). Even with the most recent reform, the implementation of the Affordable Care Act (ACA) under Barack Obama, Americans are still paying too much for health insurance, and far too many Americans are living without health insurance. According to the Commonwealth Fund survey, after the first ACA enrollment period, 15% of working-age adults were still uninsured ("New Survey...Low-Income People" 1). For Americans, it is difficult to imagine a health care system that is not only free, but also provides universal coverage.

This is the reality of the Danish health care system, which is a system based on two principles: free and equal access to public health care and universal coverage. For believers in free markets, the Danish health care system stands as the complete opposite as a tax-funded, state-run universal health care system (Vallgård 12-13). Denmark's health care system is so successful largely in part due to its primary care, organized around a gatekeeping system, which maintains efficient and high quality care. In this gatekeeping system, General Practitioners (GPs) act as gatekeepers for referrals to hospitals and specialists, excluding ophthalmologists and ENT specialists, which can be seen without a referral (Armstrong 9-10). In addition, due to its cost control methods, Denmark spends far less on health care than the US, and yet still has comparable, if not better, health outcomes compared to the US. The US's lack of organized care

on the primary care level is a huge contributing factor to high health care costs. While replicating Denmark's health care system in the US would not be possible, Denmark's organization of primary care, specifically through its gatekeeping system, as well as its methods for controlling health care costs, can serve as potential reform models for the US and can help establish a more efficient primary care system and reduce health care spending.

During the second half of the nineteenth century, health insurance was first developed in Denmark, followed by the development of health insurance schemes in 1892, which covered the insured and their children. Members had to pay half of their hospital fees, but were reimbursed by the insurance scheme, making admission to hospitals free. These schemes also paid for care provided by GPs, which is a major reason why there is such a high number of GPs equally distributed throughout Denmark today. In 1973, the schemes were abolished and Denmark changed to a single-payer system. Beginning in 1973, health care in Denmark has been financed through taxation, except for prescription drugs and dental care, which are paid in part or in full by the patients (Vallgård 12-17). Since 1970, the government has been composed of a national government, or the State, 14 counties, and 273 municipalities. In 2004, a reform was implemented which reorganized the counties into five large regions and reduced the municipalities to 98. The five regions are charged with the responsibility of health care and regional development, as well as ensuring optimum utilization of resources. The central government coordinates policy, plans future developments, and advises local health authorities; it is also central to financing the health care system. Municipalities are responsible for administering primary care services not covered by GPs, including nursing care, home nursing visits, dentistry for children and disabled people, school nursing services, long-term care, and rehabilitation services (Armstrong 4-6). The five regions and 98 municipalities are governed by

councils, and are elected every four years. The Ministry of Health holds the responsibility of preparing legislation and providing guidelines for the health sector. Each year, the Ministry of Health, Ministry of Finance, regional, and municipal councils set targets for health care expenditure. The National Board of Health, which was established in 1803 and is currently connected with the Ministry of Health, supervises health personnel and institutions and advises ministries, regions, and municipalities on health issues (Olejaz 27). Beginning in 1973, the National Health Security System (NHSS) has been Denmark's health care insurance system, or the financial provider of Denmark's universal health care. The Ministry of Health and the Ministry of Finance continue to function as advisory and regulatory bodies at a national level (Armstrong 6).

The Danish health care system is organized as a tripartite model consisting of private (self-employed) practitioners, hospitals, and municipal health services (Vallgård 39). The system is further broken down into two main sectors: a Primary Health Care Sector and a Secondary Health Care Sector (hospital sector). The Primary Sector includes GPs, specialists, visiting nurse services, dental care, and preventative services for children. The Secondary Sector includes hospitals and psychiatric treatment in hospitals (Armstrong 7). With a population of 5.6 million ("OECD Data: Denmark" 1), GPs play a central role in Denmark's health care system (Pedersen 535). Compared to the US, which has 24.2 physicians per 10,000 people, Denmark has 34.2 physicians per 10,000 people ("Global Health Facts" 1). GPs serve as gatekeepers and are the patient's primary point of entry to health services. This greatly decreases the number of patients going to Emergency Departments and being seen by specialists (Pedersen 536). Danes are given the option of choosing between two government insurance schemes, called Category 1 and Category 2. Category 1 works by assigning each Danish citizen to a GP within 15 km of his

or her home. In the Category 2 scheme, GPs and specialists can set their own fees. Danes are free to see a GP or specialist anytime, but they have to pay out-of-pocket if the charges are greater than the subsidy to Category 1 patients. In Denmark, 97% of Danes choose the Category 1 scheme, which gives them the option of choosing their own GP and pays for their hospital and specialist services. (Armstrong 9-10).

It is no question that the US spends more on health care in comparison to other countries. According to the 2012 OECD report, in 2012, the US spent 16.9% of its GDP on health care, which is more than any other OECD country. In comparison, Denmark only spent 11% of its GDP on health care (“OECD Health Statistics 2014” 1). Denmark controls the costs of health care by utilizing less diagnostic services, and instead focuses more on preventative care through its well organized primary care services. A major cause of high health care costs in the US is due to advancements in technology and an overutilization of diagnostic testing, such as MRIs and CT scans. When Americans see their doctors, a number of expensive, and sometimes unnecessary, tests are usually ordered because the mentality in US medicine is the more the better. Further, the US has much more diagnostic testing equipment compared to many other countries, which encourages physicians to utilize these services even more, even if it is often unnecessary (Andersen 89-100). According to OECD data, compared to Denmark, which utilized a total of 796,727 CT exams in 2013 (142.7 per 1,000 population), the US used a total of 76,000,000 CT exams (240.2 per 1,000 population). Further, in 2013, Denmark used a total of 338,372 MRI exams (60.6 per 1,000 population), compared to 33,800,000 (106.8 per 1,000 population) in the US. In comparison to the other OECD countries, the US had the highest utilization rates of CTs and MRIs (“OECD.StatExtracts” 1). What is ironic is that compared to other OECD countries, the US spends far more in health expenditures and utilizes more diagnostic tests, yet falls behind

in health outcomes and performance measures, including life expectancy, infant mortality, obesity rates, pharmaceutical expenditure, quality, and access (Fineberg 1021). According to the Commonwealth Fund's 2014 surveys, compared to ten other OECD countries, the US ranked last in efficiency, equity, and healthy lives (Davis 1-2). This combined problem of poor health outcomes and high costs prevents the US from establishing a successful health care system.

Another major cause of high health care costs in the US is due to the high percentage of malpractice lawsuits against doctors. In the US, patients injured by medical negligence are required to seek compensation through lawsuits. This approach to compensation has negative effects, in terms of fairness, cost, and impact on medical care (Mello 1). Malpractice insurance costs physicians, as well as other health care professionals, millions of dollars and is a contributor to the high costs of medical care. As a result, this incentivizes physicians to utilize more testing in order to decrease the chances of being sued for malpractice, ultimately contributing to the overutilization of services. In Denmark, malpractice is much less of an issue; doctors in Denmark do not have malpractice insurance to such an extent as US physicians. In 1992, the government in Denmark implemented the Patient Insurance Scheme, which is a scheme that allows for patients who experience a bad outcome or an error during a procedure or treatment to be compensated with money. These patients receive monetary compensation without the physician having to confess to error or negligence (Armstrong 13-14). According to Danish law, regional hospitals are required to pay for the costs of malpractice claims (Mello 3-4). Denmark's "no fault" system replaces litigation with an administrative compensation system and allows patients to receive compensations without the involvement of an attorney. The Patient Insurance Scheme works in favor of both the patients and physicians, and largely cuts down on medical and liability costs (Mello 1).

The fee-for-service payment system in which the US currently operates on is a third major contributor of high health care costs in the US. This payment system works by paying physicians based on the amount of services that they order and provide, and as a result, has been associated with serious cost efficiency problems (Amara 253). Consumers who are not directly paying for these medical services are not incentivized to measure the costs against value (Amara 254). In contrast to the US, GPs in Denmark are paid by a mix of capitation and fee-for-service. Capitation is a set amount of money per patient to cover all care within a period of time (Armstrong 21). Through this combined payment method, Denmark maintains efficient and cost-effective health care on the primary care level.

According to the United Nations, Denmark, with a population of only 5.6 million, is the happiest country on Earth. Denmark ranked No. 1 in both the 2013 U.N. World Happiness Report and the inaugural 2012 edition. For the past 40 years, it has topped the European Commission's well-being and happiness index (McLendon 1). Many people often wonder what is behind all of this happiness. Denmark's population is about 2% of the United State's, yet its per capita gross domestic product is ranked No. 6 in the world, four spots ahead of the US. Denmark is known for its low crime rates, high gender equality, and clean air (due to half of Denmark commuting by bike), as well as its easy access to health care. What also contributes to this country's happiness is a Danish cultural concept known as "hygge" (pronounced HYU-gah). While this concept has no direct English translation, hygge is often understood in English as coziness, snugness, togetherness, and well-being. Originating from Denmark's dark and cold winters, hygge transformed from simply a word to a cultural remedy, as it protects Danes against cold, solitude, and stress (McLendon 2). Lotte Hansen, a library science student from Aalborg, Denmark, explains that hygge is "a pervasive, year-round spirit. It's like a mood you have. We



can see hygge in many things, in many situations” (McLendon 2). Author Helen Dyrbye describes hygge as “the art of creating intimacy: a sense of comradeship, conviviality, and contentment rolled into one” (McLendon 3). Denmark’s happiness, largely a product of hygge, is manifested throughout all aspects of Danish society, including its universal health care system where no one is ever turned away from receiving health care. Thanks to this free and universal health care system, when Danes get sick or need to utilize some health care service, they do not need to worry about how they are going to pay for these services. In contrast, in the US, the uninsured, and many times even the insured, are unable to receive health care because they cannot afford it. Health care should be a basic right that all Americans are entitled to, but this is unfortunately not the case in the US. What the American health care system lacks is systematic organization of care, especially on the primary care level, and successful methods to control health care costs.

To improve its organization of primary care, the US should model its future reforms on Denmark’s highly successful gatekeeping system, where everyone is enlisted with a GP based on their geographic location. In the United States, since no kind of gatekeeping system currently exists, there is often times an overutilization of specialist’s services and a high number of Americans going to Emergency Departments to seek care. As a result, Emergency Departments are facing problems with being over-utilized and over-crowded. Americans are unsupportive of a kind of gatekeeping system as seen in Denmark because they fear that it is an infringement upon their freedom; Americans do not like being told that they cannot see a particular doctor or specialist. In the US, Health Maintenance Organizations (HMOs), which employ more restrictive gatekeeping tactics on primary care, function much like Denmark’s gatekeeping system. By requiring their members to select a primary care provider, who is not only responsible for

managing their patients' care, but also for referring them to hospitals and specialists, HMOs hoped to control health care spending and improve coordination of care ("What's the Difference...Plans?" 1). However, from the public's perspective, HMOs were viewed rather negatively, especially in the mid-1990s; in the public's eyes, HMOs only focused on cutting health care costs, not on improving health and quality of care (Freudenheim 1). Going forward, policy makers can learn from the failings and critiques of HMOs and remodel them in such a way to make them more patient-centered. Denmark serves as an example that a gatekeeping system works and drastically cuts down on health care spending, while also improving delivery of primary care at the same time. Due to the shortage of Primary Care Physicians (PCPs) in the US, as many physicians opt to specialize in a certain field due to its greater advantages and higher pay (Auerbach 1933-1941), it would be difficult for PCPs in the US to function as gatekeepers to the extent that they do in Denmark. To accommodate for this lack of PCPs, Physician Assistants (PAs) and Nurse Practitioners (NPs), who are increasing more and more and are well liked by the public, can take on greater roles on a primary care level and serve as gatekeepers like GPs do in Denmark. One way in which the US has the potential to have a gatekeeping system is through incorporating a gatekeeping system into the current Patient Centered Medical Homes (PCMH), which by doing so, will greatly improve the delivery of primary care.

As far as looking to Denmark as an example to control health care costs, by establishing a gatekeeping system, the US will cut down on utilization of diagnostic testing. Instead of Americans freely being able to see a specialist or go to a hospital, where the majority of overutilization of services takes place, PCPs, PAs, and NPs will control which patients are referred to specialists and hospitals. With a more efficient delivery of primary care through the

establishment of a gatekeeping system, the US could also greatly decrease costs per person per year on medical care. To decrease liability costs, and at the same time reduce costs of medical care, the US should implement a system in which patients receive administrative compensation for medical injuries, much like Denmark's Patient Insurance Scheme. Lastly, the US must do away with its current fee-for-service payment system, which incentivizes doctors to utilize more services. Denmark's combined payment method of fee-for-service and capitation proves to be successful and can serve as a potential reform for the US to implement in order to decrease costs of health care. While replicating Denmark's health care system would not be possible or recommended, there are certainly features of Denmark's system, including its organization of primary care through a gatekeeping system and its successful cost control methods, that the US could modify and incorporate into its own system as a means of reforming its current fragmented and expensive health care system.

### **Primary Care in Denmark: The Role of General Practitioners as Gatekeepers**

#### *An Introduction to General Practice In Denmark*

General practice is at the heart of Denmark's primary health care system. General Practitioners (GPs) in Denmark can be compared to family physicians in the US. Per year, all Danes have 6.9 contacts with their GP, including in-person, telephone, and e-mail consults. General practice is included in Denmark's universal tax-funded health care system, where GP and hospital services are free. Denmark also offers private hospital care, however, publicly owned and operated hospitals comprise 97% of all hospital services. There are about 3,600 GPs that work in Denmark, making up 20% of the total number of practicing physicians. Of the 2,200 practices that employ GPs, most of these practices have 1-2 GPs (Pedersen 1-2). In all countries except for Denmark, Poland, and the United Kingdom, GPs earn less than the average for

medical specialists. In 2011, both salaried specialists and GPs in Denmark earned 2.6 times the average wage. Self-employed GPs even earned 2.7 times the average wage. In a number of OECD countries, the income gap between GPs and specialists has widened, which has reduced the financial attractiveness for providers to specialize in general practice; this has not been the case in Denmark, as GPs and specialists have relatively equal salaries (“Remuneration of Doctors” 74-75). This greatly incentivizes Danes to work as GPs rather than specialists, which is not usually the norm in other countries, including the United States. There are five key components that characterize general practice and the role of GPs in Denmark: a list system, GPs as gatekeepers and first-line providers, an after hours system staffed by GPs, a mixed capitation and fee-for-service system, and GPs as self-employers (Pedersen 1-2).

### *The Patient List System*

All Danish citizens have the option of being listed with a GP, and about 97% of Danes choose to do so. This government insurance scheme is known as Category 1, in which those Danes who choose to be listed with a GP are either assigned to a GP within 15 km of their home or can choose their own GP, as long as they are located within their geographical area; however, they cannot choose a GP who has closed his or her lists to new patients. All referrals to a specialist or hospital from the GP are covered by the National Health Security System (NHSS); Danes are responsible for paying out-of-pocket for any services that are not referred by their GP (Armstrong 10). On average, a GP’s list consists of 1,561 patients, and the GP has the responsibility of caring for all of the patients on his or her list. Danes who choose not to enlist with a GP must pay a small copayment for GP visits and are free to see office-based specialists without a referral from their GP (Pedersen 3). This type of government insurance scheme is known as Category 2 and allows for GPs and specialists to freely set their own fees (Armstrong

10). Based on the fact that 97% of Danes choose to be listed with a GP, it is clear that Danes are satisfied with GPs and this patient listing system. Once a GP's list reaches 1,600 patients, GPs are allowed to stop receiving new patients. After choosing a GP, a Dane has to wait a minimum of three months before choosing a new GP. Through this list system, GPs develop a better relationship with the individual patient, as well as the patient's family, as families tend to have the same GP (Pedersen 3).

#### *General Practitioners as Gatekeepers*

As gatekeepers, GPs control access to office-based specialists, as well as inpatient and outpatient hospital care. In order for patients to be seen by a specialist or utilize hospital care, they must receive a referral from their GP. In this way, GPs function as an entryway to other medical services. Through this gatekeeping system, the majority of treatment and care that Danes receive takes place at the primary care level with the GP maintaining continuity of care (Pedersen 4). The gatekeeping system is also instrumental to Denmark's cost control methods. One way Denmark controls health care costs is by limiting expensive supplementary testing to newly diagnosed hypertensive patients. Instead of subjecting these patients to extra tests, many of these patients are simply followed-up with their GPs. Patients are not charged any additional costs for follow-up visits with their GP, therefore there is no incentive to limit these visits (Armstrong 18). In the long run, these follow-up visits cost much less money than the extra testing would cost.

#### *An After Hours System*

GPs are responsible for organizing care services on the weekends, as well as during their out of office hours. In a particular geographical area, GPs work on a rotational basis at regional out-of-hours service centers, which are usually located at hospital emergency departments.

Danes can call these out-of-office service centers and are given one of three options: they can talk with the GP on-call, be seen in the out-of-hours service center, or can arrange a home visit. The out-of-office service center in Denmark dates back to 1992, and has inspired other countries to organize similar services (Pedersen 5).

#### *A Mixture of Fee-For-Service and Capitation Payment System*

In order to attract and retain Danes to general practice, a GP's yearly income is higher than the income of senior hospital consultants. GPs are paid by a mixture of capitation and fee-for-service; one third of their income comes from capitation payment from patients on their list and two-thirds comes from fee-for-service payments. This mixed payment system attempts to incentivize Danish GPs in two ways: to treat patients on their list regardless of how many times the patients consult their GPs and to work efficiently when treating their patients. Being paid on a fee-for-service basis incentivizes GPs to treat patients instead of referring them to either a specialist or hospital. While fee-for-service encourages GPs to treat patients, capitation works by preventing GPs from providing unnecessary treatment for the sake of earning more money. In 1987, Copenhagen switched from a capitation-based to a mixed payment system, which resulted in an increase in volume of fee-for-service activities and a decrease in referrals to specialists at the same time (Pedersen 6).

#### *GPs are Self-Employed*

GPs are self-employed; they have a contract with the public funder, which is based on a national agreement. This contract, which is renegotiated every two years, contains specifics pertaining to services, reimbursement, opening hours, and required postgraduate education. Typically, a GP's office receives 95% of its income from public funds (Pedersen 2).

*Why Danes are so Satisfied With Their Lives*

According to international surveys, more than 90% of Danes are satisfied with their health care (“Denmark” 1). According to the annual Gallup Health and Healthcare poll, in 2013, 69% of Americans rated their personal health care coverage as good or excellent, while only 32% rated the health care coverage in the US as a whole as good or excellent (Newport 1). Compared to the US system, the Danish health care system is less expensive and much simpler to manage; there are no medical insurance companies or lawyers working for profit, no financial background checks, and no uninsured. Compared to other OECD countries, Denmark has the highest tax on personal income at 24.2% of its GDP, almost triple the personal income tax in the US; in the US, the tax on personal income is only 8.9% of GDP (“Denmark” 1). Even though Danes pay much higher taxes than the US, since their health care system is much simpler and less profit-oriented, everyone ends up paying less in the end. Areas such as health care, childcare, education, and protecting the unemployed are part of Denmark’s “solidarity system,” which ensures that no Dane falls into economic despair. Becoming rich in Denmark is very difficult, but on the other hand, no one is allowed to be poor (Sanders 1). Danes are not only satisfied with their health care, but also with their lives in general. Denmark is ranked number one for the most satisfied citizens on the OECD ranking report. Danes are so content with their lives largely due to the services that Denmark provides. Their extremely high taxes ironically benefit their society; Danes tend to choose an occupation because they like it not because it will pay the most money. As a result, incomes are generally comparable across Denmark, which creates an overall happy environment (Hempel and Lungberg 1-2). Danes have every reason to be satisfied with their lives, and it is no question that their highly successful health care system plays a huge role in fostering Danish happiness. With the US health care system desperately in

need of new reforms to reorganize its delivery of primary care, Denmark's organization of primary care through its gatekeeping system has the potential to be successful in the US.

### **Primary Care in the United States**

#### *The Failure to Recognize the Importance of Primary Care*

The four pillars of primary care are first contact with the health care system, continuity of care overtime, concern for the whole patient rather than a disease or part of the patient, and coordination of care (Rice 224). In the United States, we spend more on health care than any other country, yet our health outcomes are not up to par, especially in comparison to other developed countries. As David Bates points out, this is largely due to “our failure to emphasize primary care within our health care system” (Bates 998). In other countries where there is a strong focus on primary care, there are better health outcomes at lower costs. Each year, the US spends \$8,745 per person on health care, more than any other OECD country (“What Would Happen...Improved” 1). John Geyman goes as far as to call the “continued deterioration of primary care that threatens to break up the very foundation of US health care” a major crisis (Geyman 1). This steady decline of primary care is responsible for uncontrollable inflation of health care costs, decreased access to care, increased fragmentation and depersonalization of care, and poor quality and outcomes of care. If these trends continue, it will result in the break up and eventual bankruptcy of the American health care system; this is a crisis that looms in our future if successful reforms are not implemented. In most other developed countries, where general practice constitutes the heart of their health care systems, about 50% of physicians are General Practitioners. Since World War II, the number of Primary Care Physicians (PCPs) in the US has declined from 50% to less than 30%, and this number continues to decline. Today, less than one in five medical graduates are choosing to specialize as PCPs; instead, they are choosing



higher paying and more rewarding specialties. As a result, specialists are dominating the health care system and there are nowhere near the number of PCPs needed to meet the countries' needs. Health care systems in other countries have primary care as the foundation of their systems, where PCPs are readily available to patients at all times. In other countries, specialists deal with unusual or less common medical problems, while PCPs provide ongoing continuity of care (Geyman 2). The US health care system functions in the complete opposite manner; this system has specialists at the forefront, while PCPs are significantly less utilized, when in fact, they should be providing the majority of treatment and preventive care. Between 2009 and 2010, the number of PCPs per 1 million population was 472, while the number of specialists was 636 per 1 million population. Further, the annual rate of visits to PCPs per 1,000 population was 1,663, and the annual rate of visits to specialists per 1,000 population was 1,719 (Hing and Schappert 1). Due to the current organization of the American health care system, the four pillars of primary care are not well met in the US. Primary care is one area that needs to be reformed if the US wants to reduce costs and improve health outcomes. Primary care has the potential to improve health outcomes and reduce health care costs in the US; however, this can only be achieved through reforming the organization and delivery of primary care.

#### *The Lack of a Gatekeeping System*

Unlike in Denmark, where primary care is organized by a gatekeeping system in which GPs control what patients are referred to specialists or hospitals, the US health care system lacks such a gatekeeping system. As a result, Americans are free to see specialists as they please. From 1965 to 1992, the specialist-to-population ratio increased by 120% (Rice 232). A typical Medicare patient sees two PCPs compared to five specialists a year (Rice 233). Due to the lack of a gatekeeping system, there is a clear overutilization and overreliance on specialists in the US,

which as a result, leads to a higher proportion of specialists compared to PCPs. At the same time, the number of Emergency Department (ED) visits per person has increased; between 1997 and 2007, ED visits per 1000 people rose from 353 to 390 (Rice 237). In 2011, the total number of ED visits was 136,296, or 45 visits per every 100 people (“Health, United States, 2013” 15). EDs have a tendency of being overused for non-urgent problems and for problems that could have been prevented with better primary care. Patients who do not have a regular PCP often times go to the ED for primary care services; this is not the intended purpose of EDs. This overutilization of EDs for non-emergency visits contributes to the overcrowding and delayed care in many EDs (Rice 237). With improved organization of primary care in the US, modeled after Denmark’s gatekeeping system, the US could drastically decrease visits to specialists and EDs. With better primary care, many health problems that Americans normally go to EDs for can be prevented and treated at the primary care level. With a gatekeeping system, everyone will be enlisted with a PCP, who will either provide treatment or refer them to a specialist or hospital. With a gatekeeping system, primary care in the US can be reestablished as the foundation of the health care system, resulting in more efficient delivery of primary care at reduced costs.

#### *The Shortage of Primary Care Physicians in the US*

For primary care to be organized around a gatekeeping system, PCPs in the US must employ greater roles than they currently do. However, there lies a problem here due to the shortage of PCPs in the US. In 2010, of the 624,434 physicians in the US, less than one-third (209,000) of these physicians specialized in primary care (“The Number of...United States” 1). The implementation of the Affordable Care Act is expected to further worsen the physician shortage. The demand for PCPs is only expected to grow with time, due mostly to a growing and aging population. This problem cannot be quickly overcome by simply producing more

physicians (Dill 1135). If the current primary care system in the US continues to function the way it does today, there will be a projected shortage of 20,400 PCPs in 2020. Between 2010 and 2020, the number of PCPs is expected to increase from 205,000 to 220,800, or an 8% increase. At the same time, between 2010 and 2020, the total demand for PCPs is projected to increase from 212,500 to 241,200, or a 14% increase (“Projecting the Supply...Through 2020” 1). Without reforms changing how primary care is delivered, even with the projected increase of PCPs, it will not be enough to meet the demands for PCPs in 2020. With this shortage of PCPs, they cannot function as gatekeepers to the same extent as GPs do in Denmark. However, midlevel providers, including Physician Assistants (PAs) and Nurse Practitioners (NPs), have the potential to fill in the gaps between the shortage of PCPs and the demand for care, and at the same time, function as gatekeepers in a similar manner as GPs.

*Physician Assistants and Nurse Practitioners: The Answer to the Physician Shortage*

With the shortage of PCPs in the US, there has been an increase in number and utilization of PAs and NPs, especially in primary care, where the physician shortage is greatest. PAs require shorter training and due to their flexibility, can readily adapt to work in new environments. Over the past five years, 32 new PA programs have been established and the maximum capacity of these programs has increased by 17%. The number of people graduating from PA programs has also increased; about 6,545 practicing PAs began working in 2011 (Glicken 1884). The flexibility of PAs, which is a unique characteristic of PA practice, makes PAs ideal for shifting them towards areas of greatest need, particularly primary care (Glicken 1886). With the implementation of the Affordable Care Act, millions of previously uninsured Americans will have the ability to purchase health insurance and access health care services. The increased demand for physicians combined with the physician shortage has led to not only increasing the

supply of NPs, but also to broadening their roles in primary care (Donelan 1899). In a study, in which patient outcomes were compared between patients randomly assigned to either a NP or physician in a primary care setting, no significant differences were found for patient satisfaction or health status (Mundinger 64-65), clearly indicating that NPs provide quality of care similar to that of physicians. Recent surveys also indicate that more and more consumers are open to being treated by PAs and NPs. When given the choice between seeing a PA or NP that day or waiting until the next day to see a physician, 60% of the people surveyed opted to see a PA or NP. These surveys also indicate that increased exposure to PAs and NPs is correlated with an increased affinity for them (Dill 1136-1139). Based upon patient satisfaction rates and PA and NP's ability to deliver care comparable to that of physicians, PAs and NPs show great promise for compensating for the shortage of physicians and acquiring greater roles in primary care settings. Seeing as PCPs alone cannot adequately serve as gatekeepers, PAs and NPs can also take on gatekeeping roles and function as first-line providers and gatekeepers to hospitals and specialists. Similar to how Danes are enlisted with a GP depending on their geographic location, Americans can also be assigned to a PCP, PA, or NP within their geographic area. Together, PCPs, PAs, and NPs have the potential to be instrumental in reforming the US's organization and delivery of primary care into a gatekeeping system modeled after Denmark's highly successful system.

#### *Learning from the Failings of Managed Care in the 1990s*

Many people may make the argument that a gatekeeping system would not work in the US based on the past history of Health Maintenance Organizations (HMOs). HMOs were implemented in order to cut down on health care spending and improve coordination of care. They hoped to achieve this by establishing a kind of gatekeeping system, in which primary care physicians acted as gatekeepers. All members were required to choose one primary care

physician, who was responsible for either treating them or referring them to hospitals and specialists if necessary. Any visits that a patient made outside of the HMO network or without their PCP's referral were not covered by insurance ("What's the Difference...Plans?" 1). This sounds identical to Denmark's gatekeeping system and the role of General Practitioners as gatekeepers. However, unlike in Denmark, this more restrictive form of managed care did not win over the public's approval. In the mid-1990s, doctors, nurses, and consumers criticized HMOs for "forcing health plans to abandon a range of cost-cutting practices that reward doctors and hospitals for limiting care" (Freudenheim 1). Further, Dr. Carl Weber, a surgeon in White Plains, argues that "HMOs are predicated on financial incentives to restrict care and access to care" (Freudenheim 2). In 1998, according to a Kaiser Family Foundation poll, 62% of Americans felt that HMOs made it more difficult to see specialists, 53% said HMOs made it harder to receive general care, 56% believed HMOs decreased the quality of health care, and 50% believed that HMOs cut the quality of care for sick people" (Benesh 1). For most of the 1990s, complaints were mostly about denying care and putting profits above patients. The doctor-patient relationships also suffered due to time constraints and a faster delivery of medical care (Armstrong 391). On the other hand, evidence shows that managed care health plans, specifically HMOs, reduce health care expenditures when compared with fee-for-service systems. More evidence suggests that health care cost inflation moderated as a result of HMOs (Chernew 196). HMOs were viewed so negatively by the public because they were so focused on cutting costs that they failed to take into account the well-being of patients. Americans viewed HMOs in terms of what they took away from the public, not in terms of how they improved quality of care in the best interest of patients. HMOs' failure to be patient-centered largely contributed to their negative ratings and unsuccessful role in reforming the American health care

system, specifically primary care. However, failure can serve as an opportunity to learn from past mistakes, as well as an opportunity to make improvements. The rather recent implementation of Patient Centered Medical Homes (PCMHs), with its added patient-centered component (as stated in its name), has the potential to reduce the costs of health care and improve coordination and quality of care in ways that HMOs could not.

*Reforming Patient Centered Medical Homes (PCMHs) to Function as Gatekeeping Systems*

The Patient Centered Medical Home (PCMH), an advanced primary care and healthcare home, shows great potential for transforming the organization and delivery of primary care. PCMHs encompass five functions and models of care: comprehensive care, patient-centered, coordinated care, accessible services, and quality and safety. To provide comprehensive care, a team of health care providers work together to meet the needs of their patients. PCMHs also provide primary care that is relationship-based with a focus on the whole person. These homes also coordinate care throughout all different tiers of the health care system, including specialty care, hospitals, home health care, and community services. Services are made accessible with shorter waiting times, greater in-person hours, around the clock telephone or electronic access to a staff member, and other methods of communication, such as email or telephone. Lastly, PCMHs are committed to quality and quality improvement (“Patient Centered Medical Home Research Center” 1). PCMHs were implemented in order to reduce the fragmentation of primary care. As of November 2012, 25 states implemented PCMHs for their Medicaid patients (Takach 1), and the initial results of PCMHs prove to be encouraging. The Commonwealth Fund conducted a survey involving patients in various European countries, Canada, and the US. This survey found that adults who were treated at primary care practices that functioned like PCMHs gave higher ratings to the care that they received and were less likely to experience coordination

gaps or report medical errors (Mitka 770-771). As of 2014, more than 10% of primary care practices in the US (about 7,000) were recognized as PCMHs by the National Committee for Quality Assurance (NCQA), which has the nation's largest PCMH program. Further, in 2014, 37 states had public and private PCMH initiatives that used NCQA recognition ("The Future of Patient-Centered Medical Homes" 1-5). In addition to the five functions of PCMHs outlined above, PCMHs should also adopt a kind of gatekeeping system. Primary care providers, including PCPs, PAs, and NPs, who work at practices implementing the PCMH model, should function as gatekeepers. When patients come to see their assigned primary care provider, this provider should be responsible for either treating them or referring them to either a specialist or hospital for further treatment. PCMHs show great promise for improving the organization of primary care by strengthening coordination of care and providing comprehensive and accessible services. In addition, since they are modeled around providing patient-centered care, something that HMOs lack, they have great promise to succeed and be accepted by the public. By adopting a gatekeeping model, combined with their patient-centered model of care, PCMHs have not only the potential to reorganize primary care, but also the potential to transform it to mirror Denmark's systematic and highly efficient primary care system. While implementing an exact replica of Denmark's gatekeeping system in the US would not be possible, with slight modifications and the help of PAs, NPs, and the PCMH model, a gatekeeping system could prove to be a highly successful and effective reform in the US. Aside from its poor delivery of primary care, the US also faces problems with increasing health care costs, and again can look to Denmark for potential reforms to cut down on health care spending.

## How Denmark Controls the Costs of Health Care

### *Denmark's Utilization of Less Diagnostic Tests*

Denmark's total health care spending is 11% of its GDP, slightly above the OECD average, which is 9.4%. In terms of total health spending per person, in 2011, Denmark spent \$4,448, in comparison to the OECD average of \$3,322. Between 2000 and 2010, total health care spending increased by 2.7% per year, which is slower than the average growth rate of 4.0%. In 2010, total health care spending even decreased by 1.9% ("Denmark: Health" 11). Even though Denmark spends less on health care than the US, Denmark's health outcomes are in line with, if not better than the OECD average. In 2012, life expectancy at birth in Denmark was 80.1 years, close to the OECD average. In 2012, infant mortality, the number of deaths per 1,000 live births, was 3.4, also in line with the OECD average ("OECD.StatExtracts" 1). In 2011, mortality from ischemic heart disease for both men and women and the prevalence of diabetes in the adult population (5.7%) fell below the OECD averages ("OECD Reviews of...Denmark" 16). In 2010, 45.7% of the population over the age of 15 was overweight or obese, and in 2012, Denmark spent 6.28% of its health spending on pharmaceuticals ("OECD Data: Denmark" 1), both of which are lower in comparison to other OECD countries. One way in which Denmark controls the costs of health care, while still providing excellent quality of care as proven by its health outcomes, is through the utilization of less diagnostic testing through its gatekeeping system. Because of Denmark's highly organized primary care system, GPs provide the majority of treatment and care, which results in less Danes utilizing hospital and specialist services, and an overall decreased utilization of diagnostic testing. In turn, by utilizing less diagnostic services, Denmark spends less on health care.



*Denmark's Malpractice Scheme Based on Administrative Compensation*

Medical malpractice is an issue that is present across all states and countries. In a number of countries, including the US, patients who are injured due to medical negligence are required to seek compensation through lawsuits. Denmark, on the other hand, replaced litigation with an administrative compensation system; this “no-fault” system allows patients to be compensated without the use of an attorney (Mello 1). In 1992, the government in Denmark established the Patient Insurance Scheme, which enables patients affected by a medical error to receive monetary compensation for the lost money and any pain and suffering that may have resulted due to the provider’s negligence (Armstrong 13-14). The Patient Insurance Scheme was modeled after Sweden’s 1975 voluntary scheme and was motivated by concerns about patient access to compensation. According to Danish law, regional hospital authorities are required to pay for the costs of medical malpractice claims. The Patient Insurance Association (PIA), a joint association consisting of insurance companies and self-insuring authorities, was formed to evaluate the claims according to the Danish law. The PIA is governed by a board of directors, consisting primarily of regional council members (Mello 3-4). Denmark applies a standard of “avoidability,” in which injured patients are offered compensation only if the injuries would not have otherwise occurred under the care of a highly skilled and experienced physician with a similar specialty. This avoidability standard is different from negligence; in negligence, compensations are made to injured patients if the care of a patient falls below the expected standard of care that would be provided by a reasonable and autonomous physician. Danes determine avoidability based on the information that was known at the time when the patient was treated. In addition, claims, which can be filed both by the patient and by the hospitals on behalf of the patient, are filed free of charge and without the aid of a legal council. Denmark’s

avoidability standard proves to be effective, in terms of allowing physicians and patients to maintain a healthy doctor-patient relationship and work together to file for compensation claims. Further, compared to the US, Denmark's system processes claims much faster; in the US, the average time from injury to receiving compensation for a medical practice claim is five years, while in Denmark it is eight months (Mello 4-5). What is most successful and commendable in Denmark's system is its ability to keep malpractice costs low. Denmark's system has an overhead cost of 17% of the total cost of the system, compared to about 55-60% in the US. Denmark also enforces a cap on the total compensation a patient can receive; the maximum total awards are capped at about \$1.7 million. In 2009, the average compensation per paid claim was about \$40,000 in Denmark, compared to \$324,000 in the US (Mello 6-7). Denmark's no-fault system has successfully controlled liability costs, which decreases overall spending on health care, and also improves patients' access to compensation.

#### *Denmark's Method of Paying Doctors: A Mixture of Fee-For-Service and Capitation*

In every country, the cost of living, cultural and social traditions, and lifestyles greatly influence the salary of physicians. Since Denmark and the US greatly differ in each of these areas, it is difficult to even compare the salary of physicians in both of these countries. To add to these differences, in Denmark, physicians are mandated to work a maximum of 37 hours a week. For the majority of physicians in the US, it is unheard of for them to have a maximum 37-hour workweek. Further, physicians' salaries in Denmark are also subject to a 50% tax bite (Armstrong 21). In Denmark, a GP's yearly income is slightly higher than the income of a senior hospital consultant, which serves to attract and maintain GPs. GPs are paid through a combined capitation and fee-for-service system. Having only a fee-for-service system incentivizes GPs to treat patients themselves, and as a result, increases a GP's productivity. However, when

combined with capitation, GPs are prevented from providing unnecessary treatment for the sole reason of monetary gain (Pedersen 537). Denmark's mixed fee-for-service and capitation system prevents the overutilization of health care services and treatments, while also encouraging GPs to provide care; together, these lower the costs of health care expenditure. In the US, if health care costs continue to rise at the current rate, it could result in the demise of the American health care system. With the US greatly in need of reforms to control costs, Denmark's successful cost control methods can serve as examples for the US to follow.

### **What the US Can Learn From Denmark's Cost Control Methods**

#### *Rising Health Care Costs, Yet Mediocre Health Outcomes*

When researching about the American health care system, it is almost impossible not to come across a source that does not mention how expensive our health care system is. This clearly indicates that something needs to be done to reduce the costs of health care. In the past 50 years, a major contributor to the increasing costs has been the development and utilization of new medical technology; about half of the yearly increase in US health care spending is due to new technology. In the past 50 years, there has also been evidence of waste, due to patients receiving too much care, inadequate preventative services leading to excessive use of acute care, and high prices. A number of studies estimate that about 30% of health care spending in the US is wasted (Blumenthal 2552-2553). Today, no other country spends more per capita on health expenditures than the US, and yet our health outcomes are merely mediocre compared to other OECD countries. In 2009, life expectancy was 78.2 years, which left the US in the lowest quartile of the OECD countries; 26 countries had longer life expectancies and only 7 had shorter ones (Fineberg 1021). By 2011, life expectancy only increased to 78.7 years, lower than Denmark's life expectancy. In 2011, infant mortality was 6.1 deaths per 1,000 live births, and in 2012, 63.5% of

the population over the age of 15 was overweight or obese. Further, in 2012, pharmaceutical spending accounted for 11.55% of health spending, almost double that of Denmark's ("OECD Data: United States" 1). Even with the ACA's policies to control costs, as Jonathan Oberlander bluntly puts it, the ACA "lacks systemwide, reliable cost control" (Oberlander 478). Other countries, Denmark being one of them, have proved to be successful in controlling medical spending, but the US simply is unwilling to adopt the policies in these other countries. Instead, Americans are trying all other possible cost-control options, except those that have actually proven to succeed (Oberlander 482). If the US wants to effectively reduce the costs of health care spending, it should stop being so egotistical, and should instead learn from and implement successful policies in other countries, such as Denmark.

#### *Utilization of Less Diagnostic Services Through a Gatekeeping System*

In 2011, an overutilization of health care services accounted for approximately \$226 billion in unnecessary spending (Keyhani 1). Overutilization and misuse of health care services not only affect the cost of care, but also the quality of care. First, it is important to define what is actually meant by the terms overuse and misuse. The Institute of Medicine (IOM)'s Committee on Quality of Health Care in America defines overuse as "the use of health care resources and procedures in the absence of evidence that the service could help the patients subjected to them" and defines misuse as "failure to execute clinical plans and procedures properly" (Burns 1). Estimates show that about one-third of all US health care spending results in no benefit to the patient, and some even causes harm to the patient. The misuse of drugs and treatments costs up to \$52.2 billion each year. Repeated CT scans, a common practice in many hospitals, exposes patients to radiation equivalent to about 350 X-rays (Burns 1). In 2009, over a quarter of all wasteful spending in health care – about \$210 billion – was due to the overuse of health care

services. While the US is one of the most prolific users in high-tech and diagnostic services, it performs average or below average in preventative service use (Berenson 1). This inadequacy in preventative service utilization stems from the US's poorly organized primary care system. With a more efficient delivery of primary care, patients will be treated by their primary care physicians, rather than being referred to Emergency Departments or specialists, where a large proportion of the overutilization of services takes place. A gatekeeping system modeled after Denmark's shows great promise for reforming the current primary care system and decreasing the overall utilization of health care services, ultimately lowering health care costs. Health care costs cannot continue to keep rising at the rate that they are now, and it is clear that the overutilization of services largely contributes to increasing costs. Primary care must be reformed to establish it as the heart of the health care system, in which PCPs provide the majority of treatment and services. This can be achieved through a gatekeeping system, which will also greatly reduce the utilization of diagnostic services.

#### *Reforming the Current Malpractice System to Mirror Denmark*

In the US, patients who are injured due to medical negligence obtain compensation through lawsuits, which leads to a number of negative outcomes relating to fairness, cost, and effect on medical care. The medical liability system in the US is known to perform poorly in a number of areas. Many patients injured due to medical negligence do not file claims both because it is often difficult to obtain an attorney to represent them and because of the stress and difficulties associated with the litigation process. Many deserving cases do not result in compensation to the patient, and some patients receive compensation when they do not deserve it. Even across similar injuries, the amount of money that patients are compensated widely varies. This litigation process also destroys the doctor-patient relationship and causes a fair

amount of stress to both plaintiffs and defendants. At the same time, fear of litigation by physicians leads them to order extra tests, referrals, and other health services solely for the purpose of reducing litigation. This, combined with the high costs of malpractice insurance premiums that result in increases in providers' overhead costs and increased prices, contribute to the increase in health care expenditures. Estimates show that each year, defensive medicine costs over \$45 billion in health care spending (Mello 1-2). It is evident that the litigation system in the US must be reformed, and an administrative compensation system ("no-fault" system) as seen in Denmark, has the potential to greatly improve the current litigation system. Denmark's avoidability standard has proven to maintain a healthy doctor-patient relationship, process claims faster, and keep malpractice costs low; the current American litigation system does poorly in all of these areas (Mello 4-7). Reforming the US's litigation system to be modeled after Denmark's administrative compensation system would allow patients to file claims for compensations without having to worry about hiring a representative attorney. Instead, a governmental or private organization comprised of neutral medical experts, similar to Denmark's Patient Insurance Association, would evaluate the claims, and patients would not be required to prove that their physician or health care provider was negligent in order to receive compensation (Mello 1). Many of the elements comprising Denmark's administrative compensation system, which has successfully reduced liability costs and improved patients' access to compensation, can be transferable to the US in order to effectively reform its litigation system.

#### *Replacing the Fee-For-Service Payment System*

In the US, physicians are currently paid under a fee-for-service payment system, in which they are paid based on the number of services that they provide. This payment model has been associated with cost-efficiency issues and providing insufficient quality of care. Under this

system, health care providers are not incentivized to reduce costs, due to the fact that health care is financed by third parties (Amara 253). The fee-for-service payment system largely contributes to high health care spending, mostly because it rewards quantity over quality. It encourages wasteful use, which leads to patients receiving care that they do not need or want. Further, this payment system does not encourage high-value services, such as preventative care, which could greatly improve patients' health and lower health care costs at the same time (Calsyn and Lee 1). In recent years, there has been a growing agreement that fee-for-service is based on payment for volume, without considering the necessity of the services and treatments being offered by providers. A number of studies show that a number of excess services, including referrals to imaging and other noninvasive office testing, selecting the highest costing intervention for treatment of prostate cancer, and performing major spine surgery on patients with chronic lower back pain, have been associated with the fee-for-service system (Berenson 7). There is a growing consensus that the US must do away with the current fee-for-service payment system. Denmark's mixed fee-for-service and capitation payment system serves as a potential model for the US to adopt. With the added capitation component, physicians will be prevented from providing unnecessary services for monetary gain, which will both lead to less utilization of health care services and reduced health care spending. Denmark has proven that this combined payment method is successful both at reducing health care expenditure and providing high quality care. Growing evidence indicates that the current remuneration of physicians based on the fee-for-service model must be replaced. Rather than implementing a payment system that has no history of being successful elsewhere, the US should adopt Denmark's mixed fee-for-service and capitation payment system.

## Conclusion

It is no question that the American health care system has come a long way since its earliest years. Over the years, countless reforms under various presidents have been implemented in order to improve upon a number of areas, including organization, delivery of care, quality and coordination of care, and cost. It is unfortunate to say that most of these reforms were not successful. As powerful and rich as this country is, it is weakened by its fragmented and grossly expensive health care system. It is no secret that the US spends more on health care than any other country. One would think that given our high expenditure on health care, our health outcomes would exceed those in other developed countries. This, however, is not the case. The US falls behind in a number of health outcomes, including life expectancy, infant mortality, obesity rates, and expenditure on pharmaceuticals. The recent implementation of the Affordable Care Act may have succeeded in reducing the number of uninsured Americans, but it has not succeeded in reducing health care expenditure, a problem that has haunted the American health care system for decades. The weakest areas of our health care system are the unorganized and inefficient delivery of primary care and the lack of effective cost control methods, which together, contribute to rising health care costs.

Primary care should stand as the foundation of all health care systems. Due to the lack of organized primary care in the US, not enough preventative services are being offered, and as result, more patients are utilizing Emergency Department and specialty services for treatment. Many of the diseases and health conditions that are treated by EDs and specialists could have been prevented on the primary care level. The increased utilization of EDs, hospitals, and specialists, due to an inadequate primary care system, contributes to an overutilization of diagnostic services, which increases health care expenditure. The lack of a gatekeeping system



enables Americans to freely utilize these hospital and specialist services without a referral, also contributing to the overutilization of these services. Along with the overutilization of diagnostic services, the litigation system in the US also contributes to increasing health care costs, as well as negative effects on medical care. This is one of the many areas of the American health care system that must be reformed in order to decrease health care costs. Along with the litigation system, the fee-for-service payment system that the US currently operates under must also be reformed. The fee-for-service payment system incentivizes providers to increase the number of services and treatments, which are often times unnecessary and even harmful to patients. In addition to increasing the usage of health care services, including diagnostic testing, this system drastically contributes to increased health care expenditure. The American health care system will not continue to exist if costs continue to rise at such levels. Effective reforms, both to reorganize the delivery of primary care and control health care spending, are essential to the survival of our health care system.

Denmark, a small Scandinavian country with a population of 5.6 million, has been voted the happiest country on Earth and embodies a kind of *hygge* lifestyle, which is manifested in its universal health care system. Denmark may provide the answers to the US's desperate search for successful reforms. General practice in Denmark is organized around a gatekeeping system, in which all Danish citizens have the option of being enlisted with a General Practitioner. As GPs, they function as gatekeepers, and control access to specialists, as well as to hospital services. This means that in order for patients to utilize specialty or hospital services, they must receive a referral from their GP. This gatekeeping system is instrumental to Denmark's well organized and coordinated primary care system, which maintains continuity of care, offers preventative services, and effectively controls the costs of health care. Since the majority of care is provided

by GPs at the primary care level, there is a less utilization of hospital and specialist services, which decreases the overall usage of diagnostic services. GPs are paid by a mixture of capitation and fee-for-service, which encourages them to treat their patients, and at the same time, to not provide unnecessary treatment for monetary gain. This double incentive payment system also contributes to a lower utilization of diagnostic services and a decrease in total health care expenditure. In contrast to the US's litigation system, Denmark operates based on an administrative compensation system, or "no-fault" system. This system, combined with Denmark's avoidability standard, lowers malpractice costs, contributing to an overall lower health care expenditure, and increases patients' access to compensation. To effectively reform the current American health care system, comparative analysis of Denmark's highly successful and cost-efficient system can provide the US with promising reform ideas.

Through the implementation of a gatekeeping system in the US, primary care will greatly be improved and transform the way in which primary care is currently delivered. With a primary care system modeled after Denmark's, health conditions will be treated by primary care physicians, resulting in less visits and utilization of Emergency Departments and specialists. Improved organization of primary care will also contribute to more preventive care, which lowers the risk of poor health later in life. Due to the shortage of PCPs in the US, Physician Assistants and Nurse Practitioners, who are increasing in numbers, provide high quality care, and are well liked by the public, have the potential to fill in the gaps between the shortage of PCPs and the demand for care, as well as take on a gatekeeper role much like GPs do in Denmark. The rather recent implementation of Patient Centered Medical Homes show great promise for transforming the organization of primary care. These models are centered around providing comprehensive, coordinated, and patient-centered care. However, with an added gatekeeping

system model, PCMHs will function more like Denmark's systematic and efficacious primary care system. Despite the negative response to managed care by the public, as seen with the implementation of Health Maintenance Organizations, through their gatekeeping system, HMOs did succeed in reducing health care expenditure. What HMOs failed at was incorporating a kind of patient-centered component. PCMHs, on the other hand, with their patient-centered delivery of care, embody Denmark's unique cultural concept of *hygge*, enabling PCMHs to reform primary care in ways that HMOs could not.

With costs continuing to rise at such high rates, the health care system will eventually cease to exist. A gatekeeping system will reduce health care expenditure in the US by reducing the utilization of hospital and specialist services. To decrease liability costs, and at the same time, reduce health care costs, the US must reform its litigation system and should model it after Denmark's Patient Insurance Scheme, which functions through an administrative compensation system. The US must also replace its fee-for-service payment system, which contributes to the overutilization and unnecessary use of diagnostic services. Combining fee-for-service with capitation will incentivize providers to treat their patients, but not to treat them with excessive and costly services, which are often detrimental to their health. Transferring an exact replica of Denmark's health care system into the US would not be feasible, due to the different cultures, lifestyles, and population size in both countries. Through the modification of Denmark's primary care system, centered around a gatekeeping system, as well as the implementation of Denmark's effective cost control methods, the current fragmented and costly American health care system has great potential to lead the American people towards a healthy future. As Barack Obama has said, "Change will not come if we wait for some other person or some other time. We are the

ones we've been waiting for. We are the change that we seek" ("Barack Obama Quotes" 1); the time to reform our health care system is now.

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