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International Healthcare Systems: The US Versus the World

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The United States is the only industrialized country in the world that does not have Universal Health Coverage for all citizens. While the Affordable Care Act (ACA) was a step in the direction of universal coverage, as of the end of 2016, 9% of all Americans (and 12.4% of US Adults aged 18 to 64) still did not have health insurance.¹ This paper will give a high-level overview of where we are today, with a comparison to several other countries.

¹<https://www.cdc.gov/nchs/data/nhis/earlyrelease/insur201705.pdf>

Defining the terms: Universal Health Coverage, Single Payer, and Socialized Medicine

When debating the future of health insurance in the US, terms such as Universal Health Coverage, Single Payer, and Socialized Medicine are often used interchangeably, but they are not the same thing. The World Health Organization's definition of Universal Health Coverage is "that all people and communities can use the promotive, preventive, curative, rehabilitative and palliative health services they need, of sufficient quality to be effective, while also ensuring that the use of these services does not expose the user to financial hardship."²

Unpacking that definition, Universal Health Coverage ensures:

1. Universal access to health services
2. Health services that are of high quality
3. Receiving health services does not put people at risk of financial harm

Single payer systems are one method of achieving UHC, but not the only, and there are very few true single payer systems in the world. In a single payer system, the government pays for medical care and restricts alternative payment mechanisms for the services that it covers. Canada and Taiwan are the only 2 countries in the world with true single payer systems covering their entire populations, while within the US, Traditional Medicare is an example of a single payer system.³

Just as a single payer system isn't the only option for achieving UHC, so too Socialized Medicine is not the only way to achieve single payer. In addition to paying for health care, the government owns the facilities and employs the professionals in a socialized medicine system. Neither Canada nor Taiwan meets these criteria (though the UK does), and US Medicare is also not socialized medicine. However, the US itself does have a socialized medicine system in the Veterans Health Administration (VA) – all VA hospitals are owned by the government and the health care providers are all employees of the government.⁴

Universal Health Coverage Around the World

So if most other countries don't have single payer or socialized medicine, what do they have? Other systems fall in one of two broad categories:

1. Insurance Mandates – Government mandates that all citizens purchase health insurance from private or public health insurers. Often includes a requirement for a standard minimum coverage across all insurers, subsidies for low income individuals, and forbids underwriting and for-profit insurance. Some countries with insurance mandates include Germany, Japan, the Netherlands, and Switzerland.
2. Hybrid systems – Combines elements of single payer systems with private insurance mandates. Government provides a standard set of care for all citizens, with options to supplement with private insurance. Some countries with hybrid systems include Australia, France, Singapore, Sweden, and the UK.

²http://www.who.int/health_financing/universal_coverage_definition/en/

³<http://www.npr.org/sections/health-shots/2016/01/22/463976098/debate-sharpens-over-single-payer-health-care-but-what-is-it-exactly>

⁴<http://www.npr.org/sections/health-shots/2016/01/22/463976098/debate-sharpens-over-single-payer-health-care-but-what-is-it-exactly>

The Commonwealth Fund regularly publishes an excellent resource that summarizes the health care systems of many countries. The most recent report in May 2017 examined the systems in 19 countries. The following draws heavily from that report, and I highly recommend reading it if you would like more detail on the systems that I touch on here.⁵

The Single Payer Systems

Canada

The Canadian healthcare system is administered by the provinces with shared funding between the provincial and federal governments. It is a single payer system in that providers offering services covered by the government program generally are not permitted to receive any private payments for those services. Physician, diagnostic, and hospital care must be covered on a first-dollar basis and providers are not permitted to bill patients for amounts over the negotiated fee schedule. Additionally, specialists are not allowed to bill private patients for providing publicly insured services – all covered care must go through the public system. However, private insurance does exist to pay for services not offered through the government plan or for some types of enhanced services.

To receive full federal funding, each province's plan must be publicly administered, comprehensive in coverage (though what is comprehensive is left largely up to the provinces to decide), universal (all citizens and legal residents must be covered), portable across provinces, and accessible (e.g., no user fees). In addition to the public program, the majority of Canadians have supplemental coverage from for-profit insurers, generally provided by an employer or a union, that covers vision, dental, prescription drugs, rehab, home health, and private rooms in hospitals.

There is roughly an even split between general practitioners and specialists, with most general practitioners operating in private practice and being paid fee-for-service while most specialists operate out of hospitals, but are not employees and are also paid fee-for-service. General practitioners operate as gatekeepers and specialists who see patients without a referral receive a reduced reimbursement. Hospitals are a mix of publicly owned and private not-for-profit organizations and operate under annual global budgets negotiated with the government.

As of 2016, total health spend in Canada was 11.1% of GDP. Approximately 70% of spend comes from public funding, 14% from out-of-pocket costs (for items such as prescription drugs, dentals, vision, etc.), and 12% from private insurance. Costs for services are managed through global budgets for hospitals, fee schedules for providers, drug formularies, and regulation of introductory prices for newly patented medicine. Utilization is also suppressed by restricting the supply of physicians and nurses through

⁵http://www.commonwealthfund.org/~media/files/publications/fund-report/2017/may/mossialos_intl_profiles_v5.pdf?la=en

quotas for student admissions and by restricting investments in new capital and technology.

Taiwan

National Health Insurance (NHI) was introduced in Taiwan in 1994 and was modeled in part on US Medicare, though it covers all citizens and not just the aged and disabled. Coverage is compulsory for all citizens and foreign residents, with 99.9% of the population enrolled. Benefits are uniform and comprehensive, covering hospital care, physician care, prescriptions, and other services. Private funds may not be used to purchase services covered through NHI or to receive those services more quickly, but private insurance does exist to pay for non-covered and enhanced services. Balance billing is prohibited except for a handful of medical devices carved out by law.

Funding for NHI is split between government, employers, and the insured, with a typical employee paying 30% of the premium and low-income people paying nothing.⁶ Government funding comes from general revenue plus tobacco and lottery taxes. In addition to premiums, the insured pay copays for physician care and prescriptions drugs and coinsurance for inpatient care, with these costs limited for disadvantaged populations and certain diseases/conditions. Private health insurance is available, but not permitted to cover services provided by NHI, and can also be used to provide private rooms for inpatient care.

Almost all physicians are specialists (only 5% are family medicine) and most practice in private clinics and are paid fee-for-service. Historically there has been no gatekeeper in place and physician utilization is very high relative to other countries. Hospital-based physicians are salaried employees and are eligible for productivity-based bonuses. Most hospitals are privately-run and are non-profit by law. Global budgets are in place for both physicians and hospitals who compete for patients and their slice of the budget. Extra revenue comes from providing non-NHI covered services and from copays and coinsurance.

Taiwan has a very low cost system, with 6.2% of GDP in total health spend in 2014 with 12.1% of health spend in out-of-pocket costs. Administrative costs are just over 1%. Costs are managed through global budgets, with average annual growth under 4%. To combat high utilization, additional copays have been introduced for seeking care without a referral. Capacity is constrained – there are fewer physicians and CT and MRI machines in Taiwan than other countries, though waiting lines are essentially non-existent. Every participant has a mandatory electronic card that tracks personal health information. Aggregate utilization statistics are used for planning and budgeting purposes, while individual high utilizers receive follow-up from government representatives.

The Insurance Mandate Systems

Germany

Health Insurance was first introduced in 1883 and has evolved over time to a compulsory coverage system.⁷ The majority of Germans are required to purchase their insurance from 118 not-for-profit “Sickness Funds” regulated within the Statutory Health Insurance system (SHI). Self-employed and high income employees can choose to opt out of SHI and purchase Private Health Insurance (PHI) from a mix of 42 non-profit and for-profit insurers. Military, police, and other public-sector employees are covered through special programs.

⁶www.nhi.gov.tw/English/Content_List.aspx?n=B9C9C690524F2543&topn=46FA76EB55BC2CB8

⁷<https://www.ncbi.nlm.nih.gov/pubmedhealth/PMH0078019/>

Premium contributions for SHI are 14.6% of wages (capped at \$65K USD in 2016), shared equally between employer and employee. Contributions are pooled together and distributed to the individual Sickness Funds on a risk-adjusted basis. SHI covers physician and preventive care, hospital, mental health, dental, vision, physical therapy and rehab, prescription drugs (except where excluded by law), medical equipment, hospice and palliative care, and sick leave. There is no cost sharing for children and total annual cost sharing is capped at 2% of income.

About 11% of Germans opt for PHI, which is especially attractive to young people with high incomes as they can get more services for less premium. Participants pay a risk-adjusted premium for themselves and dependents, with risk assessed at entry and contracts then good for life. The government regulates rate increases. PHI can also be purchased as a supplement to SHI to pay for uncovered benefits, better amenities, and some cost-sharing.

Physicians who participate in SHI are required to join regional associations that contract fee-for-service reimbursement rates with the Sickness Funds. Physicians are permitted to have a max number of patients and perform a max number of services per patient. They can also supplement their income with services paid out of pocket. There is a 48%/52% split between family physician and specialists, with no gatekeeper requirement, though sickness funds are required to offer a managed care product that acts in some ways as a gatekeeper. Half of all hospitals are publicly owned, with the rest a mix of for-profit and non-profit. Hospitals and physicians are permitted to see both SHI and PHI patients, which is a distinction from most other countries.

Healthcare spend in Germany was 11.2% of GDP in 2014, with 74% of that being from public programs and 13.2% from out-of-pocket spending, mostly on nursing homes, pharmaceuticals, and medical aids. Costs are contained primarily through emphasizing quality and efficiency, with hospital payments tied to quality and reduced payments for “low-value” services. Sickness funds can compete on their ability to negotiate with providers in integrated care networks and for rebates from pharmaceutical companies.

Switzerland

Universal coverage was introduced in Switzerland through the Federal Health Insurance Law in 1996 with three goals: universal coverage with low-income subsidies, comprehensive and high quality coverage, and containment of growing health care costs. The program is administered by 26 individual cantons (similar to US states) with financing coming from general tax revenues, Mandatory Health Insurance (MHI) premiums, and contributions from social insurance related to accident, old-age, disability, and military insurance. Voluntary Health Insurance (VHI) is for-profit medically underwritten insurance available for services not covered by MHI and improved hospital amenities.

MHI is mandatory and purchased by residents from competing nonprofit insurers with the average premium in 2016 ranging by canton from \$3,000 to \$5,000 USD per year for the lowest deductible plan, with subsidies for low income. Premiums are redistributed between insurers on a risk-adjusted basis. MHI covers most physician and some preventive care, hospital care (with significant subsidies from the cantons), physical therapy/rehab, and mental health with a required annual deductible that can range from \$235 to \$1,960 USD. About 1 in 5 choose the minimum deductible plan, 1 in 7 choose a higher

deductible, and the majority of citizens choose a managed care plan that offers lower costs in exchange for accepting a gatekeeper. There is also 10% coinsurance on all services, up to an annual cap of \$549 USD for adults and about half that for kids and a \$12 per day charge for inpatient care.

Providers that accept MHI are not allowed to balance bill patients any amount above the fee schedule. Just under 40% of physicians are general practitioners. Hospital-based specialists are usually salaried employees, but can earn extra income in private practice. Approximately half of hospital reimbursement comes from insurance, with the other half coming from canton subsidies and providing non-covered services.

At 11.1% of GDP, healthcare spending in Switzerland is second only to the US. 67.4% of spend came from public financing, and 5.7% came from out-of-pocket cost sharing. The primary mechanism for controlling costs is “regulated competition” between the insurers and providers. Despite criticism of the system’s relatively high costs, global budgets are not currently being considered for managing spend.

The Hybrid Systems

England

Each of the four countries of the UK (England, Wales, Scotland, and Northern Island) have distinct but similar health systems. We focus on England here.

Healthcare in England is managed by the National Health Service (NHS). Universal coverage is available for all residents generally without cost sharing. NHS pays for preventive care, hospital care (including outpatient drugs), physician services, some dental and vision, mental health, palliative care, some long-term care, rehab, and home care, with specific coverage determined at the local level by one of 209 Clinical Commissioning Groups (CCGs). It is not a single payer system, as private insurance is available to pay for more rapid access to care provided by NHS, in particular for elective hospital procedures.

Funding for NHS comes mostly from general taxes and dedicated payroll taxes, with additional funds from copays and services provided to private patients by NHS providers. Dentistry and outpatient/prescription drugs are subject to copays, but waivers for children, seniors, the sick, and certain conditions result in nearly 90% of prescriptions being dispensed for no charge.

There is a 45%/55% split between general practitioners (GPs) and Specialists, with GPs serving as gatekeepers. Most GPs are private contractors while almost all specialists are salaried employees of NHS hospitals, though employed specialists are permitted to also practice privately. People are required to register with a local general practice, but due to capacity issues, choice is limited. Publicly owned NHS hospitals contract with the CCGs and are paid fee-for-service. Private hospitals provide services not covered by NHS and also care subcontracted by NHS where wait times are unacceptably long. Private hospital reimbursements are unregulated and ineligible for public subsidies. Approximately 10.5% of the population has private insurance to pay for faster access to elective care in private hospitals.

Total healthcare spend in England was 9.9% of GDP in 2014, with 79.5% made up of public funding and 14.8% from out-of-pocket costs. Costs are contained with a nationwide global budget that is

allocated to the CCGs. Growth in annual spend has been running about 1.2% above general inflation. Reimbursements are currently inadequate, with providers running a \$5.3B deficit in FY16 that is expected to grow. These financial pressures are straining quality, with long wait times for care especially prevalent.

Singapore

Singapore's National Health Plan was established by the Ministry of Health in 1983⁸ and is organized around the "3 Ms" – Medisave, MediShield, and Medifund, with a focus pairing individual responsibility with affordable care.

- Medisave is a mandatory savings account with tax exempt employee contributions and employer match.
- MediShield is an insurance plan that citizens are automatically enrolled in with premiums paid from the Medisave account and subsidies based on income and age. Catastrophic coverage only – primary and preventive care, prescription drugs, mental health, dental, and vision not covered.
- Medifund is a supplemental program for the poor that covers medical treatments based on a family's ability to pay.

In addition to the 3 Ms, there is the option to purchase for-profit Integrated Shield Plans with Medisave funds that supplement the MediShield plan and other private insurance that can be purchased with personal funds or provided by employers is available.

“ Costs are controlled primarily by encouraging market competition, with government involvement to help keep costs low.”

Approximately four out of five hospitals are public with subsidies of up to 80% available. Public hospitals have four tiers of amenities, with the highest level offering private rooms and other perks, with bills not being subsidized at this level. Private hospitals offer faster service and more amenities with no public subsidization. The majority of primary care is private with some subsidized public clinics available, paid fee-for-service with no gatekeeper for specialty care.

Total healthcare spend was 4.7% of GDP in 2013, of which 69% was private spending, including out-of-pocket costs and employer health benefits. Costs are controlled primarily by encouraging market competition, with government involvement to help keep costs low. The government regulates supply of public hospitals and prices for services within those hospitals and private providers must keep prices in line if they want to compete. Public hospitals operate with an annual budget of patient subsidies. Utilization is managed with significant copays, deductibles, and restrictions on using Medisave and MediShield for certain services to discourage unnecessary treatment. Additionally, the Ministry of Health publishes prices and utilization numbers for common hospital services and procedures for easy comparison and drugs, medical supplies, equipment, and IT are purchased at a national level to help keep those costs down.

⁸<http://www.hpm.org/Downloads/Singapore.pdf>

The American System

The United States

Rather than one system, United States citizens and residents are insured under a variety of sometimes overlapping systems. The United States is also the only developed country where a significant number of citizens are permitted to be uninsured and where a person's employment can determine whether they have insurance and what insurance they have. As of 2015, 90.9% of Americans had health insurance, with 55.7% receiving coverage through their employer, 16.3% through direct purchase, 16.3% through Medicare, 19.6% through Medicaid, and 4.7% through the military.⁹ The individual sources of coverage add up to more than the total coverage because of overlaps (for example, "dual eligibles" who are enrolled in both Medicare and Medicaid).

The majority of Americans and their dependents are insured through their employer, with the employer generally bearing a significant portion of the cost. Federal law requires insurance to continue to be offered to former employees, but the entire cost is bore by the insured, who often choose to not pay the premium unless they are sick. Employer-based insurance isn't directly subsidized, but receives a "hidden" subsidy, estimated to be worth \$260 billion dollars per year, due to premiums being tax exempt. This tax exemption is not available for insurance purchased in the individual market.

Title XVIII of the Social Security Act was passed in 1965 and introduced Medicare and Medicaid, which have both expanded since.¹⁰

- Medicare, which is funded by payroll taxes, premiums, and general tax revenues, provides coverage for people 65 and older and also those with qualifying conditions and disabilities under the age of 65. Medicare eligible people may also purchase supplemental insurance from insurance companies or heavily subsidized full-replacement insurance called Medicare Advantage.
- Medicaid is an insurance program for the poor administered by the states and funded with federal and state general revenues. Eligibility for Medicaid was significantly expanded under the Affordable Care Act in 2010 for states that chose to participate.

Besides expanding Medicaid, the Affordable Care Act (ACA) in 2010 introduced an insurance mandate and government-run insurance marketplace with subsidies for those without other coverage. It also eliminated most forms of underwriting and prohibited insurers from refusing coverage for preexisting conditions. Prior to the implementation of the ACA, the uninsured rate was 13.3%.¹¹

The Veterans Health Administration (VA) provides care for nearly 9 million veterans annually. The system is an example of socialized medicine, with 1,700 hospitals, outpatient clinics, counseling centers, and long-term care facilities owned directly by the federal government and most providers employed by the government. Due to a severe limitation in resources, Congress has directed that priority in treatment is given to veterans most in need, with those with significant disabilities at the top of the list.

⁹<https://www.census.gov/content/dam/Census/library/publications/2016/demo/p60-257.pdf>

¹⁰<https://www.cms.gov/About-CMS/Agency-Information/History/index.html>

¹¹<https://www.census.gov/content/dam/Census/library/publications/2016/demo/p60-257.pdf>

Approximately 1/3 of doctors in the US are primary care and the rest specialists. 70% of hospitals are non-profit, 15% are for-profit, and 15% are government-owned.

The United States spends far more on health care than any other country. In 2015, total spend was 17.8% of GDP, \$3.2 trillion dollars, for an average of \$9,990 per person.¹² Of this spend, 49% came from public sources, 39% from private insurance, and the remainder from out-of-pocket costs.

Conclusion

There is no perfect health care system. The US has some of the best doctors and hospitals in the world, for those who can afford them. The extent to which medical bills contribute to bankruptcy is hard to tease out from other factors, but even those who are skeptical of the claim that medical costs cause the majority of bankruptcies concede that they are a significant contributor.¹³

In the rest of the developed world, by contrast, medical costs are rarely or never cited as a driver behind personal bankruptcy. There are trade-offs, of course. Patients in The UK and Canada often face far longer wait times for care, particularly “elective” care, than those in the US. Providers are generally much better paid in the US, which is a major driver behind our higher costs, but it also helps prevent the strikes and demonstrations for high pay sometimes seen in Germany and elsewhere. Many Americans cringe at the idea of a government bureaucrat checking up on you if you use too much care as in Taiwan or of the government directly owning and employing most providers as in the UK.

As the debate over the future of healthcare in the US rages on, it is useful to remember that there are many ways to achieve universal coverage. Some countries – Canada and Taiwan – have developed single payer models to care for their citizens. Other countries such as Germany, Switzerland, and Singapore have shown that it is possible to have universal coverage through a combination of public funding, employer participation, and personal responsibility, while maintaining a robust competitive market of insurance payers and medical providers. None of these systems is without trade-offs, though. These various approaches can be useful for Americans to understand, not only to draw ideas from as we look to improve the healthcare system in our country, but also to see that cost-saving mechanisms and broadened coverage have consequences for other parts of the system. America needs to evaluate its own values as a nation to decide what (if any) trade-offs we are willing to tolerate in order to cover a larger percentage of our population.

¹²<https://www.cms.gov/research-statistics-data-and-systems/statistics-trends-and-reports/nationalhealthexpenddata/downloads/highlights.pdf>

¹³<https://www.bloomberg.com/view/articles/2017-01-17/the-myth-of-the-medical-bankruptcy>

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