

## Health Insurance: Public or Private?

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### **WHO Universal Healthcare**

Universal health coverage encompasses two main components: access to essential healthcare services and protection from financial hardship when using healthcare services.

The UN Sustainable Development Goal (SDG) 3 encompasses achieving universal health coverage (UHC), including financial risk protection, access to quality healthcare services, and access to safe, effective, quality, and affordable essential medicines and vaccines for all. More specifically, SDG Target 3.8 stipulates achieving UHC, including financial risk protection, access to quality essential healthcare services, and access to safe, quality, and affordable essential medicines and vaccines for all.

### **Health Security (World Health Organization)**

Global public health security is defined as the activities required, both proactive and reactive, to minimize the danger and impact of acute public health events that endanger people's health across geographical regions and international boundaries.

Population growth, rapid urbanization, environmental degradation, and the misuse of antimicrobials are disrupting the equilibrium of the microbial world. New diseases, like COVID-19, are emerging at unprecedented rates disrupting people's health and causing social and economic impacts. Billions of passengers travel on airplanes each year, increasing the opportunities for the rapid international spread of infectious agents and their vectors.

Dependence on chemicals has increased, as has awareness of the potential hazards for health and the environment, like climate change and air pollution. As the globalization of food production increases, so does the risk of tainted ingredients and risk of foodborne diseases. As the world's population becomes more mobile and increases its economic interdependence, these global health threats increase and traditional defenses at national borders cannot protect against the invasion of a disease or vector.

Pandemics, health emergencies and weak health systems not only cost lives but pose some of the greatest risks to the global economy and security faced today.

### **Universal Health Coverage (World Health Organization)**

Universal health coverage means that all people have access to the health services they need, when and where they need them, without financial hardship. It includes the full range of essential health services, from health promotion to prevention, treatment, rehabilitation, and palliative care.

Currently, at least half of the people in the world do not receive the health services they need. About 100 million people are pushed into extreme poverty each year because of out-of-pocket spending on health. This must change.

To make health for all a reality, we need: individuals and communities who have access to high quality health services so that they take care of their own health and the health of their families; skilled health workers providing quality, people-centred care; and policy-makers committed to investing in universal health coverage.

Universal health coverage should be based on strong, people-centred primary health care. Good health systems are rooted in the communities they serve. They focus not only on preventing and treating disease and illness, but also on helping to improve well-being and quality of life.

## **Introduction**

There are essentially two perspectives to health insurance: 1) strictly government funded 2) personal payee system; and from the personal payee approach, there yet two more options: 1) employer business plans 2) personal payment plans; and within employer business plans there are also two options: 1) employer funded 2) employee option. Health insurance includes: 1) medical needs and 2) welfare state; medical needs can be classified as: 1) preventive and 2) emergency; and welfare state can be dissected into: 1) unemployment, 2) retirement, and 3) disability. This thesis builds on J.P. Ruger's (2006) commentary, which discusses Aristotle's political theory and Amartya Sen's capability approach, identifies the two defining aspects of universal health insurance coverage to be human flourishing and redistribution of taxation, and adds to the academic literature with perspectives on Martin Luther's use of the national diet, Thomas Matthus's state population mandate, and the American Indian Reservations federal homeland function.

Private health insurance plays a secondary role to statutory health insurance in the European Economic Area, being either substitutive, complementary, or supplementary (Thomson and Mossialos, 2004). In a substitutive scheme such as in Germany, private health coverage is limited to those individuals who are excluded from or opt out of statutory health insurance. In Germany, 11 percent of individuals, most of them high earners, opt out of social insurance in favor of private insurance. In a complementary scheme, private health insurance pays for services not provided by statutory health insurance, such as dental care or drug copayments. In France, over 96% of the population has complementary insurance to cover user charges. In a supplementary scheme, private health insurance enhances consumer choice of health products and services, such as access to quicker care, more health care providers, or better hospital amenities such as a single room (Wouters and McKee, 2017).

The Netherlands and Switzerland have privately administered health insurance schemes, coupled with public oversight. Sekhri and Savedoff (2005) note that private health insurance currently plays only a modest role in low and middle-income countries, generally covering less than 10 per cent of individuals, with exceptions being Brazil, Namibia, South Africa, and Zimbabwe, where private insurers account for more than 20 per cent of total health expenditure. Among developed countries, the United States is the only major democracy which does not have a public health insurance system for all its citizens. European plans are structured so that deductibles and copayments are small, amenities are limited, and provider payments are regulated. One observation about the United States is that they deliver high-quality care to the population that has access to care and the means to pay for it, while delivering poor-quality care to the smaller share of the population that lacks those means (Mirror Mirror 2021 Report). As for cost effectiveness, an example is the National Health Service in Britain, which when implemented in 1948 experienced cutbacks in response to overly optimistic budget projections (Lane, 2012). Equality of access to care rather than guaranteed access to a minimum level of care will become increasingly costly as medical costs rise due to new technologies with high price tags.

One major advantage the U.S. has over all other countries, which should lead to lower healthcare prices, is the ability to produce and deliver their own drugs. With the largest economy in the world, the U.S. has many major drug and pharmaceutical manufacturers located in its domicile, such as Johnson & Johnson, Pfizer, Merck, AbbVie, Bristol Myers Squibb, Abbot, Amgen, Gilead, Eli Lilly, and Biogen. Imagine you were a small nation trying to implement a universal health coverage scheme, and wondering how you were going to procure and purchase your pharmaceuticals, you would have to buy them from a richer nation. A good example of this is the Covid-19 pandemic, where the U.S. led the way in developing and distributing the Covid vaccine, both domestically and internationally. However, due to globalization, the United States actually outsources a lot of their pharmaceutical production to India and China.

### ***Differences Between Public and Private Health Insurance***

- 1) Public health insurance involves redistribution across income and risk levels, though private insurance does not
- 2) Degree of obligation, public health insurance is usually mandatory, while private health insurance is voluntary
- 3) Public coverage is decided by majority vote

One of the most important issues to consider when developing a theory of health insurance is the insurance industry is big business, it is not just health insurance. Even if there is more government control introduced to the health insurance industry, there is still everything else: home, auto, life, etc. We are also talking about the democratic capitalistic spirit when we discuss private health insurance v. a socialist government subsidised health insurance mandate. We must examine the relationship between health insurance and healthcare utilization, and the relationship between health insurance, health outcomes and other forms of health behavior. Oftentimes policies to address adverse selection, such as mandatory insurance, may exacerbate moral hazard. Two ways to get health coverage more universal is through government subsidies and incentivizing more people to enroll.

### **Human flourishing and redistribution through taxation**

Universal health insurance coverage concerns two topics: 1) human flourishing and 2) redistribution through taxation. The human flourishing mandate assumes that the central ethical aims of subsidised insurance includes two primary functions: 1) to keep people healthy 2) to enhance their security by protecting them from both ill health and its economic consequences. Redistribution through taxation is how the health insurance government entitlement is to be funded, through an effective taxation scheme and an efficient administrative complex (Ruger, 2007).

Government mandated health insurance provides more social justice for health care, as government mandated health insurance is universal in nature. Conversely, private mandated health insurance is capitalist in nature, and thus private mandated health insurance is unequally distributed. More must be done than just provide resources to individuals, such as cash payouts or direct medical services. Social justice requires that individuals and households be protected

against the vulnerabilities resulting from ill health, and insurance offers this protection, whether private or government mandated (Ruger, 2007).

The way society finances health care thus has equity implications above and beyond health services delivery and health capability inequalities. In human flourishing, universal health insurance is critical to protect individuals against deprivations resulting from illness or injury, and changes in material circumstances resulting from changes in the economic or other circumstances or from uncorrected mistakes of policy, such as an economic downturn and rising unemployment (Ruger, 2007).

An equitable health system requires protection of all individuals, especially the poor and most disadvantaged, against the monetary burdens associated with health risks. The equity implications of financing and of access are inseparable. If universal health insurance is not to exacerbate other inequities, such as income, the population should share the health insurance tax burden justly, so that the poor or sick are not impoverished by insurance premiums (Ruger, 2007).

### **Universal Health Coverage**

A key question in universal health coverage for a country is whether it will be compulsory universal coverage, or whether participation could be voluntary and still be cost effective at providing healthcare coverage to the general population. Another key question when designing a public health insurance system is whether to have supplementary private health insurance, complementary private health insurance, or both. The purpose of complementary private insurance purchased in addition to public insurance coverage is to cover out-of-pocket costs. The purpose of supplementary private insurance in addition to public insurance coverage is to cover benefits excluded by the public insurance plan, or more convenient access to a wider array of providers and hospitals.

One concern when designing a universal health coverage scheme is whether it will be voluntary and insurance based or mandatory and tax financed. Developing nations commonly find that voluntary and insurance based are better initiatives to use through community-based health insurance schemes due to the fact that general tax revenues cannot sufficiently support the population for mandatory tax financed healthcare. Conversely, for rich nations, the question becomes whether to force their citizens to purchase insurance, either through government taxes as in most European nations, or through compulsory insurance as in the Affordable Care Act in the United States, with the tax for not purchasing health insurance. Thus, even rich nations have a question to confront with how to finance their more universal healthcare than developing nations, as even in the United States health coverage is still not universal, with 8.5% of the population not being insured.

A key question for private health insurance is whether it will be offered through the employer. In Canada, two-thirds of the population holds private insurance, mainly through their employers (Allin and Rudoler, 2017). In France, employer-sponsored health insurance is ubiquitous



(Durand-Zeleski, 2017). In Sweden, about 10 percent of adults have employer-sponsored private insurance to ensure quicker access to specialty and elective services (Glenngård, 2017).

### **Primary Function of Health Insurance**

The primary function of health insurance is to distribute the financial burdens of health care. The uncertainty of how much health care a person will need can be seen as a financial risk, the risk that an individual will require costly health care goods. Employers and private insurance companies bear a portion of this risk for a set fee, and the government also bears risk at the population level through taxation and spending.

It is argued that health insurance lowers the price of utilizing healthcare at the point of access and, therefore, gives rise to increased healthcare consumption. Economic prosperity and social environment are two key indicators which influence the structure of public health insurance systems of different nations and how much benefits they offer in their health insurance schemes.

Public health insurance is a relatively bigger pool and hence has higher potential for risk pooling, thus explaining the positive effects of public health insurance on reducing financial strain (Peng and Zhu, 2021). The existence of adverse selection in the private health insurance market may explain why private insurance was positively associated with financial strain (Peng and Zhu, 2021). Adverse selection is a problem with voluntary schemes. When acquiring private health insurance, older individuals and people with past medical histories often face higher insurance costs and other difficulties (Jin et al., 2016). Health insurance may be public if financed through general taxation and/or payroll taxes, or private, if financed through private non-income related premiums. Adverse selection is an example of market failure that a mandatory public scheme can overcome.

If the level of care the poor can afford is below what society has deemed adequate, then an entirely free market in healthcare would be viewed as inequitable (Shepard, 2020). No service is free, someone has to pay for it, the money has to come from somewhere. Thus, it is fair to ask how more universal health coverage is going to be paid for. From employer premium payments, from general tax revenue, from payroll taxes, from user premium payments? Cost recovery at the point of service is an important topic, as it can be both inhumane to patients and impossible to recover. The question is, how much cost recovery at the point of service is necessary and equitable, both necessary to the health facility and government to cover their costs, and equitable to the patient to allow them to gain access to the healthcare services they need and also be responsible for their fair portion of the fees, which they can also afford.

## **Primary Health Care and Universal Health Coverage**

Sacks et al. (2020) discuss how a strong primary healthcare system is a strong determinant of both community based interventions and universal health coverage. As much of the world's population still lacks access to health facilities for basic services, primary healthcare must be expanded at both the community and household levels. The cornerstone of local, equitable and integrated primary healthcare is community involvement. Community members must be regarded as leaders, not just passive members, with a substantive role in planning, decision-making, implementation and evaluation for primary healthcare to succeed. Not only clinical health outcomes must be evaluated for measuring primary healthcare and universal health coverage, we must also pay attention to indicators of equitable coverage or measures of overall well-being, ownership, control or priority-setting, and the extent to which communities have agency.

Universal health coverage depends on a strong primary healthcare system that can provide essential health services for the entire population, and primary healthcare services are especially important for people who have limited access to high-quality healthcare because they are socially or geographically disadvantaged (Sacks et al., 2020). For much of the world's population, local health facilities are still too far away to ensure convenient access to basic health services, so expanding primary healthcare at the community and household levels is important. Community-based services are effective at improving health outcomes for conditions such as maternal, newborn and child health, especially when they are integrated with facility-based services (Rosato et al., 2008).

A 2017 report from the World Health Organization and World Bank concluded that over half of the world's population lacks access to basic health services and that over 100 million people are forced into poverty annually because of health expenses, including the cost of transportation. The 1978 Declaration of Alma-Ata asserts that primary healthcare can meet most of an individual's health needs through the basic preventive, promotive, curative and rehabilitative care provided by low-level health workers, including community health workers (CHWs). The Declaration advocates "community self-reliance and participation to organize, plan, operationalize and control health services and address the social determinants of health."

### ***What is a Community?***

A community is a "group of families, individuals and other types of networks and social circles that provide support and are often the unit on which health activities are organized and focused (Sacks et al., 2019)." Local organizations trusted by the community can also be essential for guiding interventions aimed at behavioral modification and for facilitating adaptation to changing environmental, demographic and epidemiological conditions (Sacks et al., 2017). Communities are not homogeneous or monolithic and can even be oppressive when conformity is demanded or local elites are in control, and communities can consist of a wide and diverse set of actors, from geographically defined groups and local governance structures to users of health services. In short, a community is an entity with agency that must be engaged with by the formal health system. Each participating community member and organization has its own capabilities, resources, needs and interests.

***Community members and community-based organizations can be effective at:***

- 1) Identifying health priorities
- 2) Addressing health concerns
- 3) Managing financial and personal processes at the local level
- 4) Evaluating health systems and holding them to account.

Communities may be transient, mobile or even virtual, and may change over time, with shifting membership, scope and priorities. Communities change as skills are gained and new challenges are engaged. Communities may have longstanding traditional power structures that do not promote the inclusion of marginalized people, such as women, ethnic and linguistic minorities, oppressed tribes or castes and the most economically disadvantaged.

Individuals and communities are the most important stakeholders in the health system, and thus the healthcare system must be responsive to their needs and concerns and must work collaboratively to improve their health and well-being. Power imbalances must be addressed that limit the ability of communities to participate and restrict which community members can participate, while acknowledging differences in power and civic participation within communities.

***Pillars of Health Care***

- 1) Empowered people and communities
- 2) A focus on equity
- 3) Multisectoral policy and action

Evidence based interventions at the community level (by outreach teams from health facilities as well as trained community members) and deliberate efforts to care for marginalized people is necessary for successful primary healthcare. Community groups must have the authority and resources to effect change, set priorities or tailor interventions.

***Roles of Community Members and Organizations***

- 1) Providing services
- 2) Promoting healthy behavior
- 3) Linking people to care

Action at the global, national, subnational and local levels is needed to address the burdens of maternal and neonatal conditions, infectious and chronic, noncommunicable diseases and the drivers of these disorders, such as pollution, migration, conflict and climate change (Sacks et al., 2019). Ensuring good primary healthcare coverage requires robust documentation on service utilization and population health, especially for marginalized populations and places affected by disease outbreaks, conflicts or other disasters (Declaration of Astana, 2018).

***Metrics, Primary Health Care and Universal Health Coverage***

- 1) The degree to which communities contribute to formulating program priorities

- 2) The degree to which community members are involved in supervising community health workers and the effect this supervision has on their performance
- 3) The presence and effectiveness of committees responsible for overseeing local health facilities
- 4) The level of engagement of volunteers in community health activities

### ***Greater Recognition of Nontraditional Aspects of the Health System***

- 1) Social capital
- 2) Intersectoral partnerships
- 3) Local governance
- 4) Equitable financing
- 5) Community information and data systems
- 6) The role of households in producing and maintaining health

Most primary health care traditionally has taken place and will continue to do so outside of health facilities, such as in homes, where mothers and families usually care for ill children, and at local community health posts. Key to improving systems that ensure access to care is involving community members in decisions about health priorities and strategies for service delivery. The provision of healthcare to everyone through primary health care entails reducing, if not eliminating, health-related inequities. Equitability must be monitored over time as programs evolve, secular trends occur, and the circumstances and preferences of community groups and members change.

### ***Areas for Further Research on Primary Health Care***

- 1) The role community engagement plays in fostering trust in local health services
- 2) Whether local epidemiological data gathered by community health workers and given to communities can improve healthy behaviors and the utilization of health services
- 3) How best to distribute the responsibility and burden of community engagement among community members
- 4) Which policies can increase community participation

### ***Domains to Evaluate Access to Health Care***

- 1) Geographical accessibility
- 2) Financial affordability
- 3) Patient and provider acceptability

The social, physical and structural determinants of primary healthcare that the health system cannot address must be evaluated, such as: poverty, educational inequalities, gender inequities, access to water, sanitation and a hygienic environment, safe and reliable transport, and government policies that promote health. We must look beyond formal health facilities beyond the health sector itself when seeking improvements in primary healthcare, and community meetings and local organizations are critical for reaching service delivery targets.

## **Primary Health Care, 30 by 2030 Campaign**

Maeseneer et al. (2020) discusses the two components of the 30 by 2030 campaign for primary health care as a part of universal health coverage. The World Health Organization defines primary health care as a cornerstone of universal health coverage and describes it as an approach to health and well-being centered on the needs and circumstances of individuals, families and communities. The WHO states that primary healthcare should address physical, mental and social health and well-being, and is about providing whole-person care for health needs throughout life, not just treating a specific set of diseases (World Health Organization, 2018). Implementing primary health care should focus on broad-based participatory action, including integrated and comprehensive person-centered care, community development and social determinants of health.

The 30 by 2030 campaign launched November 2020 calls for international donors to assign 30% of their vertical top-down, disease-oriented budgets to strengthening integrated horizontal community-based primary health care systems by 2030. Resolution WHA62.12 urges member states “to encourage the development, integration and implementation of vertical programs, including disease-specific programs, in the context of integrated primary health care,” with this integration allowing primary health care services to become more responsive to the health needs of populations.

### ***30 by 2030 Campaign Components***

- 1) Information, analysis and awareness on the impact of vertical programs on health systems
- 2) Encouraging the use of 30% of vertical donor investment to strengthen primary health care services through coordination, increased human resources and improved infrastructure

In the WHO Africa Region, the average public expenditure on non-primary health care (hospitals and specialist care, mostly used by population groups with high income), is up to three times higher than the spending on primary health care and prevention (World Health Organization, 2016). In the same WHO Africa Region, only one third of total spending on primary health care comes from governments, and the lower the country’s income, the lower the share. Most of the funds for primary health care services, private and external funds, including out-of-pocket expenses, are channeled through categorical programs that focus on the health problems of specific population subgroups or conditions, with little funding going through integrated primary health care services, which addresses health conditions in a holistic way.

To achieve universal health coverage, the WHO has a strategy to add 1% of gross domestic product (GDP) to the budget of primary health care. In low-income countries, this target of adding 1% of GDP to current primary health care expenditures would increase annual spending in this sector, per capita, from \$26 US dollars to \$33. There is a problem of unbalanced distribution of health care funding across sub-Saharan Africa, such as getting more in AIDS relief (\$150 million) than the entire nation’s health ministry budget (\$136 million), in 2006 Zambia (De Maeseneer et al., 2008). In fact, many people living with HIV receive free care, food

and educational grants for their children, whereas those with other diseases receive poor care and still have to pay out-of-pocket, leading to inequity by disease. Maeseneer et al. (2020) notes that worldwide the primary care facilities that address all diseases across the life-cycle, including common illnesses such as diarrhea, malnutrition and respiratory tract infections, are largely underfunded.

Detrimental effects of global health initiatives include distortion of recipient countries' national health policies, notably through distracting governments from coordinated efforts to strengthen health systems, and forcing health systems to adopt vertical, disease-specific projects.

### ***Achieving Integration of Projects in the Local Primary Health Care System***

- 1) Contributing to capacity building for primary health care
- 2) Supporting infrastructure upgrading
- 3) Strengthening leadership and organization
- 4) Improving the community's involvement

### ***Characteristics of High-Quality Care***

- A) Accessibility
- B) Continuity
- C) Coordination
- D) Person-centeredness

### ***30 by 2030 Plan will Improve***

- 1) Government's spending and governance efficiency
- 2) Participatory processes at the community level
- 3) Monitoring and evaluation processes

### ***Primary Health Care Services***

- 1) Community screening and testing
- 2) Case investigation with support for home-based isolation or quarantine
- 3) Triage at primary care facilities

## Developing Nations and the Journey to Universal Health Coverage

Achieving universal health coverage is a global health priority. Universal health coverage is about giving all people access to quality health services according to need, while also ensuring that the use of these services does not expose them to financial hardship (Assefa et al., 2020). Universal health coverage depends on a strong primary healthcare system that can provide essential health services for the entire population, and primary healthcare services are especially important for people who have limited access to high-quality healthcare because they are socially or geographically disadvantaged (Sacks et al., 2020).

There is a problem of unbalanced distribution of health care funding across sub-Saharan Africa, such as getting more in AIDS relief (\$150 million) than the entire nation's health ministry budget (\$136 million), in 2006 Zambia (De Maeseneer et al., 2008). In fact, many people living with HIV receive free care, food and educational grants for their children, whereas those with other diseases receive poor care and still have to pay out-of-pocket, leading to inequity by disease. In the 2021 UHC global monitoring report, the greatest progress in achieving universal health coverage has come from lower income countries due to lower baseline coverage and success in communicable disease intervention and maternal and child health (Taniguchi et al., 2021).

A health system is all institutions and activities whose primary purpose is to promote, maintain or restore health, and resilient health systems are able to resist, absorb, accommodate, and recover from external shocks in a timely and efficient manner (WHO, 2000; Kutzin and Sparkes, 2020). Achieving health security can be recognized as the complementary goal to achieving universal health coverage. Health security is about reducing vulnerability to health threats at individual and collective levels (Kutzin and Sparkes, 2016). Countries are often faced with difficult choices regarding the most effective use of available health resources, particularly in contexts of resource limitation, competing healthcare needs and political priorities (Nnaji et al., 2021).

Developing nations commonly face challenges with developing mature primary healthcare systems. The World Health Organization in the Declaration of Astana states that primary healthcare has been recognized as the most inclusive, effective and efficient approach to promote health and achieve universal health coverage. Primary health care is critical for improving all dimensions of universal health coverage, which include population coverage, service coverage, and financial protection, through reaching all people, including marginalized and disadvantaged populations, increasing access to quality services, medicines and vaccines, and reducing household expenditure on health (Myloneros and Sakellarios, 2021). Primary health care focuses on tackling health and socioeconomic determinants through community-based services, which in most cases is the only way to reach marginalized populations and identify vulnerable groups (World Health Organization, 2019b).

Carrin et al. (2005) writes about community-based health insurance, in that low and middle-income countries commonly use private health insurance to fund community-based health insurance, which are small, autonomous private health insurance schemes run by

individual communities that can potentially be scaled. Reviews noted that these types of community financing arrangements are, at best, complementary to other more effective systems of health financing.

Some of the characteristics of health systems that differentiate countries working within their resource constraints are: mix of policies, service delivery systems, and financing models. The mix of policies could be defined as the government laws and regulations that affect the health industry. The service delivery systems could be defined as the Health Ministry that enforces the national health policy, and hospitals, public and private. Financing models could be defined as general taxation revenues for a mandatory public health coverage scheme or insurance premiums collected as part of a voluntary private health insurance program.

Rapid economic growth and state infrastructural power are two ways that countries transition from voluntary to compulsory health insurance schemes and universal health coverage. By virtue, if the health insurance scheme is a voluntary system, then it is not going to cover everyone, because some people will make the decision to opt out. Similarly, rapid economic growth is one way to achieve the government financial ability to efficiently insure their population. Another way is through state infrastructural power, and forced compliance, such as in Rwanda or China; and Rwanda shows that even a developing nation can achieve universal health coverage through programs of mandatory enrollment, which is normally the domain of richer nations who can afford the government tax base to support their insured population.

In socialized health insurance, the tax burden of other general citizens must be raised to lower the burden of medical expenses on patients, and efficiency is key in this scheme, as rather than expanding health insurance coverage by recklessly raising premiums and taxes, health insurance's policy direction should be directed towards more efficiency in services offered (Jung and Lee, 2021). Efficiency can be gained through reducing administrative costs via mass enrollment, which means that larger populations have an inherent advantage in healthcare systems, as they can reduce the instances of adverse selection to a greater extent.

Reasons that countries use different health care schemes is that they have different size populations from which to draw resources and premiums from, and they have different proportions of rural v. urban populations, suggesting that richer more developed nations have a smaller informal sector of lower paid citizens to draw insurance premiums from.



## **The Change in the United States from a Uniform Public Plan to a European Design Top-Up Supplementary Scheme**

The United States for its public health insurance option uses a uniform public plan, Medicare and Medicaid. Conversely, common in Europe and other rich nations is the supplementary top-up scheme. According to Shepard et al. (2020), traditional Medicare covers a uniform set of benefits for all income groups and provides more generous access to providers and new treatments than public programs in other developed countries. Although Medigap is called supplementary insurance, it actually is more correctly referred to as complementary insurance, in that it pays cost-sharing user fees. Supplementary insurance, instead, covers extra services such as private hospital rooms and access to specialists. With a uniform public plan, there is a single-payer aspect, which means that one entity, the federal government, pays all costs. With a supplemental top-up scheme, there is no single-payer, and instead there is the option to purchase additional private insurance to supplement the basic benefit package offered by the federal government.

When people think of universal health coverage, they commonly think that means single-payer, as in the federal government provides a centralized payment system to finance healthcare for the citizens. In reality, there is no single-payer health system in the world, or to put it another way, nearly every country uses some mix of public and private insurance, no one just has the federal government foot all the bills. The World Health Organization defines universal health coverage as universal access to key promotive, preventive, curative, and rehabilitative health interventions at an affordable cost. In the World Health Organization, target 3.8 of the sustainable development goal 3 is to achieve universal health coverage (UHC), including financial risk protection, access to quality essential health-care services and access to safe, effective, quality and affordable essential medicines and vaccines for all.

Universal health coverage was adopted as a target of the Sustainable Development Goals (SDGs), with the goal that countries reach this target by 2030. The World Health Organization defines coverage as being universal, when “all people have access to needed health services (including prevention, promotion, treatment, rehabilitation, and palliation) of sufficient quality to be effective while also ensuring that the use of these services does not expose the user to financial hardship.” One of the Sustainable Development Goals of the World Health Organization is a reduction in out-of-pocket expenditures on health and provision of financial protection, and in low-middle income countries, micro health insurance has emerged as a viable option for achieving Universal Health Coverage. According to the WHO definition of UHC, public health insurance subscribers under UHC are required to bear a portion of the costs, and some private medical costs can fall outside the scope of public health insurance.

When discussing the Universal Health Coverage mandate of the World Health Organization, it is fascinating to note that no two countries have the same mix of public (social) and private insurance. There is no one prescribed method on how to offer insurance services to your people; rather, there are varying mixes of services to be offered in basic and complementary

benefits packages, as well as different percentages of costs to cover. Not only is there no one prescribed insurance scheme for a populace, there is also no one prescribed political implementation strategy, such as voting process and regional perspectives.

So when talking of reforming the U.S. healthcare system, to more effectively cover all the citizens with healthcare, or to have no uninsured people, and achieve universal health coverage, that does not have to mean that the federal government supports them all with a single-payer system, financed through general tax revenues. It is okay to still have some of the insurance payment provided by the individual household, and is quite common still in the world for some of the cost of healthcare to be borne by the individual households. The question really is what proportion to be compulsory participation through government financed general tax revenues, and what proportion to be voluntary insurance premiums payments from the individual household.

Still, some of the proposals in the United States for Medicare for All include a single-payer option for the United States federal government, which would be the first single-payer healthcare system in the world. The fact that it is being discussed, or has been discussed, means it is okay to talk about it. Why not use a single-payer system? That would at least mean that everyone is covered, though it would also reduce choice and free market competition by removing the option to purchase supplemental top-up coverage. There would be longer wait times, as everyone would have to wait in line in the same system. Some say that this is not a bad thing, equal treatment for all, though it also fair to say that people deserve the right to choose better services if they have the financial means which they have earned over their lifetime to use, such as paying for private insurance to get shorter wait times and see specialists quicker, like the European nations currently do.

An important distinction to make is between a private health insurance based system, like the United States, and supplemental private health insurance based system, like the European economies. Both still use private health insurance, just in vastly different ways. There is also a distinction in using private health insurance as supplementary, or as a tool in achieving universal health coverage. Wu et al. (2020) notes that in China, the role of private health insurance in extending universal health coverage was limited and should not be overstated. The government can use private health insurance to address existing coverage gaps, as by introducing a different source of funding into the health system, the government can then better allocate resources to the population, improve weak administrative capability in the public sector, and solve limited public fiscal space for the government public insurance program (Wu et al., 2020).

The difference between public health insurance and social health insurance is that public health insurance, or a national health service, is public health insurance is financed through general tax revenues and covers the general populace, whereas social health insurance is financed through compulsory contributions to a social health insurance fund, through workers and the government. So they are similar in that they provide risk pooling and financial pooling to a wide swath of people, though public health insurance covers everyone, whereas social health

insurance only covers people that make contributions, either through their employer or subsidized through the government.

## **Reforming U.S. Healthcare Spending as a Share of GDP: A Model for Reducing U.S. Healthcare Spending**

### **A Model for Reducing U.S. Healthcare Spending**

- 1) Cost-sharing
  - 2) Outpatient pharmaceuticals
- 
- A) Federal government subsidy
  - B) Private insurance payments
  - C) Out-of-pocket expenses

$$HS = FG + PI + CS + OP$$

### **Introduction**

In data taken from the International Commonwealth Fund, the United States has a system of a mix of private and social insurance, with 91.5% of the people having either form of insurance, leaving 8.5% uninsured and 15% with multiple sources of coverage. Brazil has 100% public coverage, and 23% private supplementary coverage. Australia has 100% public coverage, and 46%-55% private supplementary coverage. Canada has 100% public coverage, and 67% private supplementary coverage. England has 100% public coverage, and 10.5% private supplementary coverage.

What stands out about these stats is that the United States is the only nation that has uninsured people, and in fact, the United States is the only high-income country that does not have a universal health coverage system. Additionally, the United States also has the highest healthcare spending as a % of GDP, 16.89% in 2018, and highest per capita healthcare spending in the world, \$10,586 in 2018. This raises the question of is there a correlation between the United States having uninsured citizens, and its high level of healthcare spending?

To understand this dilemma, it is important to familiarize ourselves both with the statistical data and the nature of the U.S. market and population. The share of GDP devoted to healthcare in the United States has grown faster than in other countries. Chandra and Skinner (2012) note that in Europe many countries had already elected to provide universal health coverage, and combined with comparatively high marginal tax rates, had limited scope for expanding benefits. In the United States, Medicare covered only a fraction of the population and marginal tax rates were relatively low, so the increase in spending on covered healthcare could, for a time, be absorbed without generating extremely high marginal tax rates. Expanding Medicare to a greater share of the population would only hasten the anticipated growth in tax rates necessary to fund it (Shepard et al., 2020).

Can the U.S. healthcare industry be called an industry in crisis? Do increasing demand, rising costs, and uneven quality lead to a crisis of healthcare costs in the United States? This is a

complicated question, though certainly by the fact that the U.S. spends almost double per capita what other rich nations spend on healthcare leads us into crisis territory. If we are not in a crisis, then we are certainly in danger of being there soon, if something doesn't change, if we cannot both reduce costs and insure the 8.5% of U.S. citizens which are still uninsured in the pursuit of universal health coverage for all citizens.

Ramakrishnan's (2011) paper aptly titled *Social Security- The way Forward*, sic, provides a great and concise description of the critical elements of the welfare state in various leading nations, including: India, Australia, France, Germany, Canada, and the USA. A higher GDP share spent on health care does not automatically lead to a better functioning health system. In the case of the U.S., high spending is mainly because of higher costs and prices, not due to higher utilization. For example, physicians' salaries are much higher in the U.S. than in other comparable countries. A doctor in the U.S. earns almost twice as much as the average physician in Germany. Pharmaceutical spending per capita is also distinctly higher in the United States. Furthermore, the U.S. also spends more on health administrative costs compared to other wealthy countries.

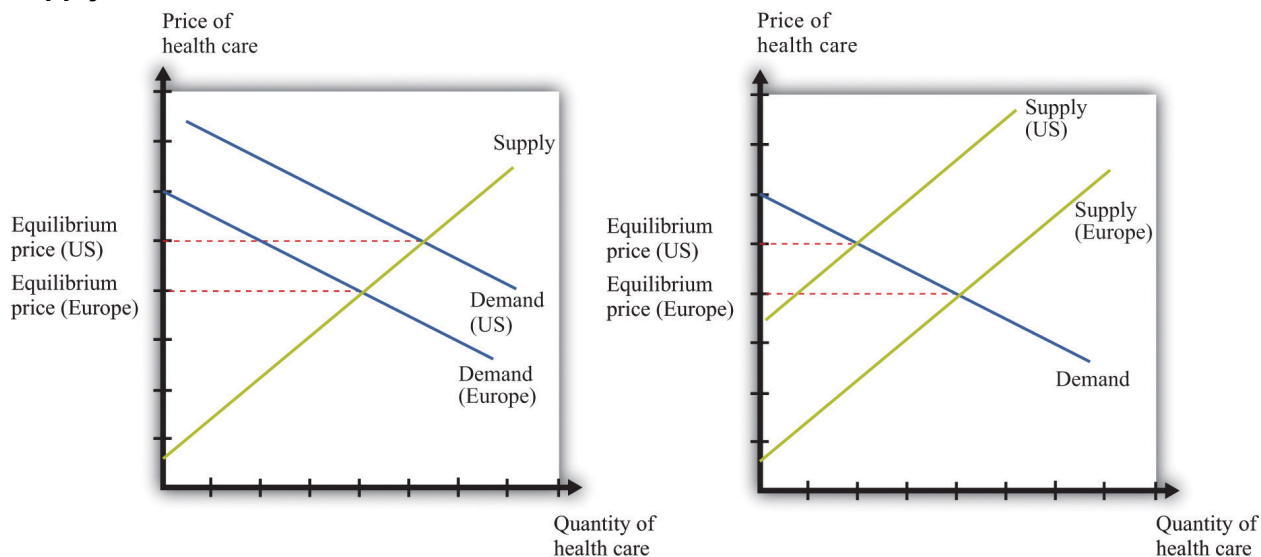
### **Supply and Demand for Health Care**

One area of discussion when analyzing healthcare costs is the extent to which healthcare should be considered a market good, and hence the extent to which economic principles apply.

Healthcare is like electricity, it is a consumer good which does not follow traditional laws of economics, like supply and demand. Electricity demand is only at specified intervals, while healthcare supply and demand also does not follow traditional laws, in that healthcare is more expensive in the United States despite supply and demand curves similar to that in Europe. Traditionally, if a good is more expensive, that means there is either more demand or less supply, which is not the case for healthcare as a consumer good, or healthcare in the United States. The demand curve for healthcare is that since insurance pays a portion of the costs, individuals will keep consuming more healthcare beyond the marginal cost, with the marginal cost being where one more unit equals the price of that additional unit. The supply curve for health insurance is that some nonprofit hospitals do not have profit maximization as their goal, so there should be excess supply and lower prices. Another problem with the supply demand curve in healthcare is that the price is not wholly determined by the free market, rather, in healthcare, the government plays a leading role in setting prices through regulation and oversight.

In fact, healthcare could be considered as a luxury good in some instances. Healthcare can be described as an extreme luxury good, with higher-income people always spending a larger share of their income on healthcare. This can be described graphically, as with an unbounded function, or constant elasticity function, any extension to longevity can be purchased with sufficient spending (Shepard et al., 2020).

## Supply and Demand of Healthcare



Source:

[https://saylordotorg.github.io/text\\_microeconomics-theory-through-applications/s19-01-supply-and-demand-in-health-ca.html](https://saylordotorg.github.io/text_microeconomics-theory-through-applications/s19-01-supply-and-demand-in-health-ca.html)

Healthcare has a vertical demand curve, in that there is always the propensity to consume more. There is no diminishing returns for healthcare, or at least, not usually, rather, there is always added value to the individual to consuming one more unit of healthcare services, especially, for example, if someone has a life threatening condition, then they will continue to consume healthcare services as long as the insurance company lets them, with experimental therapies and drugs. Inelastic demand is when the quantity demanded does not change as the price changes, and is characteristic of the healthcare industry, such as life saving drug that people will pay any price to obtain. Even if the price of the drug would increase dramatically, the quantity demanded would remain unchanged.

In nearly all developed countries, the public sector plays an outsized role in the financing and provision of healthcare services. Although healthcare is considered a merit good that ought to be available to all, usually by constitutional amendment in developed nations, there generally lacks a consensus on the quantity or quality of care to which all should be entitled. Healthcare is often privately produced with economic forces driving supply and heterogenous patient preferences and needs driving demand (Shepard, 2020).

### U.S. Healthcare Industry

#### ***Why the U.S. Share of GDP of Healthcare Spending has Grown Fast***

- 1) An in-kind benefit reflecting the preferences of higher-income taxpayers
- 2) Lower tax rates, and commensurately lower excess burden of taxation

Even though the United States spends almost twice what other developed nations spend annually on healthcare, Americans do not receive more care, and in fact, they may even receive less, as in making fewer visits to physicians, for example. The greater dependence on private

payers, rather than on government as single payer, may account for higher costs. The primary reason Americans have problems accessing healthcare is due to prohibitively high cost. In terms of administrative costs in the U.S. healthcare system, governance and administrative costs accounted for 8 percent of total national health expenditures in the United States as compared to an average of 3 percent in other OECD countries (Papanicolas et al., 2018). Provider administrative costs are also high; over 24 percent of U.S. hospital spending is on administration, compared to around 13 percent in Canada.

The issue in the United States is not the absence of a single payer system or a highly centralized federal healthcare system, such as Medicare for All, it is instead the high cost per capita for healthcare spending. The United States has the highest percentage of healthcare spending per GDP, and the highest per capita spending. The United States also has a public option, Medicare and Medicaid, in which the federal government and state governments pay the healthcare bills. Anderson et al. (2003) argues that prices mainly account for higher healthcare spending in the United States, which is particularly disturbing considering that real wages have remained almost stagnant over the last 20 years, while healthcare prices have gone up excessively and disproportionately.

Studies show that a single payer federal system is not characteristic of all universal healthcare schemes (Gilead et al., 2019) As such, the goal in the United States should not be to achieve single payer federal healthcare, it should be to reduce healthcare spending per capita and as a share of GDP. Reducing healthcare spending can be achieved without transitioning to a single payer federal system, such as by reducing physician salaries, reducing prescription drug prices, or achieving more preventive care use.

In discussing the characteristics of single-payer plans, what would most benefit the United States is not the federal government raising and allocating most of the funding for healthcare or limited and highly regulating the role of private insurance, rather it would most benefit the United States to enlarge the scope of benefits offered and reduce cost-sharing. However, in this system the role of private insurance would have to be limited and regulated in any universal health coverage system. Limiting and regulating private insurance is not the priority that enlarging the scope of benefits and reducing cost-sharing is, though, legislation would have to be enacted to control the private insurance companies.

So, how do these program improvements for a single payer system actually reduce the overall healthcare costs? Even though enlarging the scope of benefits would add costs to an already overly costly healthcare system in the United States, reducing overall costs could be achieved with greater use of preventive medicine and physician visit planning. The argument also follows that eliminating or reducing cost-sharing would add costs to the federal budget, although this would simply be a transfer of payment from individual households to the government (whether federal, state, or local). The theoretical argument behind excessive cost-sharing is that it forces individual households to consider their healthcare purchases before making them, and reduces frivolous visits. The counter is actually true about excessive cost-sharing, in that by reducing the use of healthcare purchases that are medically necessary due to being prohibitively costly, it

drives up overall costs by leading to more expensive treatments when diseases are not treated in a preventive setting at their onset (Gilead et al., 2019).

By more effectively using preventive care, universal healthcare systems can offer lower costs and broader coverage, as evidenced by the lower healthcare spending per capita and as a share of GDP of other high-income countries besides the United States. An argument against a centralized federal single-payer system in the United States is its sheer size, as studies (Glied et al., 2019) show that smaller nations the size of U.S. states make better use of a federal system for healthcare, such as the Netherlands (which uses private insurers as intermediaries between the national government and providers), Singapore, and Taiwan. France is the only larger nation which uses a federal healthcare system.

Deber and Lam (2009) note that the reason the U.S. spends more on healthcare than other countries is due to its continued reliance on an underlying model which ignores the distribution of health expenditures and foregoes many opportunities for cost containment associated with single payers.

### **Out-of-Pocket Payments**

Out-of-pocket payment is one of the indicators measuring the achievement of Universal Health Coverage with the World Health Organization. Out-of-pocket payments play an important role in achieving the Universal Health Coverage enabling people to receive the health services they need without facing any financial difficulty, including issues of households' out-of-pocket spending (Thanh et al., 2021). One of the main impediments to access healthcare for the poor and vulnerable population is inability to pay the out-of-pocket costs. Direct payment for seeking healthcare is considered regressive as it inhibits access to health services for the poor, and is also considered to contribute to the impoverishment of families due to having to pay for unexpected healthcare services at the time of illness (Hailie et al., 2021). Globally every year around 150 million people suffer from financial devastation and about 100 million are pushed into poverty because of high out-of-pocket payments for healthcare services, with the majority of these people being from developing countries (Rannan-Eliya et al., 2016).

### **Medical Tourism**

Americans can find less expensive medical care abroad. Inpatient knee surgery costs over \$10,000 on average in the United States, though only costs \$1,500 at the top hospitals in Hungary and India. Similarly, a coronary artery bypass graft costs over \$35,000 in the United States, but less than \$9,000 (including travel expenses) at the top hospitals in India and Thailand (Mattoo and Rathindran, 2005). The World Health Organization found that the cost of medical treatment in developing countries such as India can be 3-10% of the cost in the United States (Chanda, 2001).

### **Medical Malpractice**

Medical malpractice accounts for only around 2% of total health industry costs in the United States (\$265,103), with costs higher in Canada (\$309,417) and the United Kingdom (\$411,171) (Anderson et al., 2005). Labor costs may be an explanation for why medical costs are higher in



the United States, as the U.S. pays its doctors more than any other Organization for Economic Cooperation and Development nation (Reinhardt et al., 2002). According to the U.S. Centers for Medicare and Medicaid Services (CMS), the primary U.S. agency responsible for healthcare financing, nearly 70% of inpatient hospital costs are labor related. So the United States has larger service costs and labor costs than other countries, likely pointing to the reasons for their more expensive medical system.

### **Technological Change and Competition**

A caveat to the argument that technological change has driven the higher costs in the U.S. health insurance industry is that other nations have also experienced the same levels of technological change, though have lower per capita healthcare expenditures and lower percentage of healthcare spending as share of GDP. So once again, the answer falls flat that this factor, technological change, has been the major driver of higher healthcare costs in the United States. What could be true, however, is that technology has higher costs in general in the United States healthcare industry, not that technological innovation itself has driven up costs. In most industries, technology drives down costs, though the argument can be made in the healthcare industry that more expensive technology costs are in response to treating previously untreatable conditions. In this scenario, more expensive technology costs in the healthcare industry stands out as an outlier industry, as technology not only decreases production costs, it also significantly increases consumer welfare by providing a solution for a previously untreatable condition. This is different from say the automotive industry, in which more technology does not solve a previously untreatable condition, it just increases efficiency of production. What sets the United States apart from all other nations is that no other country is so major an actor in both the R&D (producing) sector and the healthcare (consuming) sector (Weisbrod, 1991). The amount of innovation in the United States sets it apart from all other nations, although all countries have significant healthcare consumption sectors.

Health care expenditures would be lower if healthcare were defined, for insurance purposes, as limited to the use of medical technologies available at the time the policy took effect, or at some other fixed date (Wiesbrod, 1991). The operational definition of health care depends on the boundaries of the insurance contract, such as which technologies and experimental drugs are covered.

Abbot (2011) lists one cause for the crisis as being an absence of meaningful competition between providers, as providers generally do not make information available on the costs of services and their outcomes, and this limits competition based on meaningful value. Comparative information is not readily available in the healthcare industry, like it is in the automotive industry or aviation industry. This reduces the capitalistic innovation potential of the healthcare industry in the United States, where competition improves consumer value. Chronic disease care accounts for approximately three-fourths of U.S. healthcare expenditures, with at least 133 million people having at least one chronic disease, according to Pelletier (2009). For seniors, about 80 percent have at least one chronic health condition, and 50 percent have at least two chronic conditions (He et al., 2005). Abbott (2011) notes that, as for technological advances in medicine such as magnetic resonance imaging (MRI) and

robot-assisted surgery, innovation has led to increased rather than reduced prices, as well as increased rates of utilization. Too often technology patent holders in the healthcare industry charge monopoly prices for access to their developments.

The United States also lacks effective regulatory price controls in the private market, and is forbidden by law from negotiating drug prices in the public market (Abbott, 2011). Other differences between the United States and other industrialized nations is that the United States has a surplus of specialists as opposed to primary care physicians, with more primary care physicians leading to more and better preventive care, and that the United States generally has lifestyle choices which leads to poor health outcomes and high medical costs. This cannot be considered the major reason the United States has higher medical costs per capita, just because Americans make worse lifestyle choices. It is an interesting correlation however, in that having more chronic diseases from worse lifestyle choices can certainly lead to higher medical costs. The main reason for higher medical costs in the United States has to be considered the nature of the healthcare industry, in having higher costs due to lacking effective price controls in the private market, and not being allowed to negotiate drug prices in the public market.

### **U.S. History**

What has changed globally in the healthcare industry since 1950 is a dramatic increase in knowledge of means for diagnosing and treating illness. Today there are a variety of techniques and vaccines to offer to patients that simply were not available in 1950. Another change in the United States medical industry has been from retrospective payments to prospective payments. In prospective payment plans, providers receive the same payment regardless of quality of care, some might be moved to offer less thorough and less personalized service. Retrospective payment plans pay healthcare providers based on their actual charges (Weisbrod, 1991).

In the 1980s in the United States HMOs (Health Maintenance Organizations) and Medicare DRG (Diagnosis-Related Groups) were introduced as prospective payer systems. In a retrospective-pricing system, a hospital's revenue is a function of its admission of patients, which produces an incentive to hospitalize rather than to utilize approaches that nonhospital inputs such as drugs, broad medical management approaches, and instruction of patients in ways to prevent and alleviate problems through life-style and dietary measures (Weisbrod, 1991).

### **Preventative Medicine**

The United States health insurance industry could benefit from more focus on preventive medicine and wellness-based treatment, in addition to the use of complementary and alternative medicine (Abbott, 2011). Complementary and alternative medicine refers to a group of health care systems, practices, and products not presently considered part of allopathic medicine, such as natural products, mind-body medicine, and manipulative and body-based practices.

One of the issues with the American healthcare system is its reliance on treating acute conditions and late-stage disease, and not focusing more on treating chronic, stress-related conditions, improving quality of life, and health maintenance. The American healthcare system

has increasingly relied on expensive, invasive treatments that may carry a high risk of adverse effects (Abbott, 2011). Medication errors are one area that could be improved in the U.S. healthcare system, with a 2006 Institute of Medicine (IOM) report stating that there are at least 1.5 million preventable adverse drug effects in the United States each year. Another area for improvement in the United States healthcare industry is the level of inappropriate care, with a 2003 study finding that patients in some areas of the country receive 60 percent more services, such as hospital days, specialty consultations, and medical procedures, than similar patients in other areas (Schuster, 1998). In fact, one-fourth of hospital days, one-fourth of procedures, and two-fifths of medications could be done without (Brook, 1989).

The link between obtaining health insurance and receiving more long-term cost reducing preventative care is debatable. Alstov et al. (2020) notes that even though the link between health insurance and ex-post moral hazard is well established, the link between health insurance and preventative care, risky health behaviors and health outcomes is more ambiguous. However, if individuals consume more health care, ex-post moral hazard, then they surely are also consuming more long-term cost reducing preventative care as part of their plan. Effects of extending health coverage to more people depend both on the institutional features of the healthcare system, as well as the social, economic, and demographic features of the populace that drive behavior.

Ex-ante moral hazard suggests that health insurance reduces the incentives for individuals to invest in their health, and thus health insurance does not necessarily lead to improved health outcomes (Alstov et al., 2020). In certain subgroups, however, such as the poor, the condition may still hold, as health insurance may improve health outcomes for the financially constrained who benefit from receiving the basic services they otherwise could not afford. The logic of this rationale then means that the well-off financially do not benefit from health insurance as much as the poor do, because they already have access to quality healthcare services, unlike the poor, who have been shut-out of the healthcare industry before their attainment of health insurance.

## **J.P. Ruger, Human Flourishing as a Mandate for Universal Health Insurance**

Preventative medicine and risk pooling argue for the need and rational choice of a legally guaranteed health insurance system in a country and just society. If universal health insurance is not to exacerbate other inequities, such as income, the population should share the health insurance tax burden justly, so that the poor or sick are not impoverished by insurance premiums. Modern health interventions should be socially sensitive and egalitarian. Care for the sick should be on an equitable basis that favors need for service over ability to pay. Instead of the concerns of insurance companies, humanitarian concerns should guide decisions about covered services and the allocation of funds for capital spending and drug formularies.

### **Strategies to Improve Access to Healthcare Services**

- 1) Preventative medicine
- 2) Risk pooling
- 3) Wealth redistribution

Health insurance can reduce risk by providing preventative medicine, such as: immunizations, prenatal and maternity care, infant care, cancer screening, nutritional services, regular wellness exams and physical exams, as well as covering health-care costs in times of illness or injury. Insurance effectively pools risk across time and across individuals such that the financial risks of illness can be predicted and premiums, including actuarially fair premiums plus administrative costs, can be estimated with good reliability, given a sufficiently large pool. Ruger's thesis assumes that subsidised insurance is the free option, and defines this concept as *universal health insurance coverage*, government entitlement, subsidised insurance, or free market health insurance. She considers other concepts in this discipline such as: neo-classical economic perspective, medical ethics, human flourishing, risk-averse, risk management, risk-pooling, entitlement, and redistribution through taxation.

### **Neo-classical Approach to Health Insurance**

The neo-classical economic perspective assesses risk management through health insurance, and assumes two key premises: 1) that individuals make rational decisions to maximise their preferred outcomes 2) that businesses, such as insurance companies, make rational decisions to maximise profits. This perspective assumes the capitalistic egalitarian notion that individuals are risk-averse, that they will purchase health insurance to reduce variation in the costs of health care between healthy and sick periods, when in reality, people are not risk-averse to health insurance. People only go to the hospital when they are sick, after the fact, at the last minute. People are risk-averse when they invest money, not when they buy health insurance. The neo-classical approach redeems itself with its other redeeming qualities, such as: 1) individuals do not always make rational choices 2) people are not prescient, and do not know how do accurately assess their health risks 3) people are smart, though do not know how much health insurance they should buy.

The major premise of neo-classical economics is that welfare rests on an individual's willingness to pay for a commodity, such as health insurance. Welfare economics depends on the standard

rational actor model, which considers that in the real world, individuals invariably make rational choices, according to the neoclassical model. A theory of supply and demand for health insurance can be considered using the neoclassical welfare model of economic theory, which makes several baseline assumptions: 1) Individuals make choices to maximise their preferences over time 2) the goal of society is to maximise social welfare, or aggregate preferences 3) assumes that individuals make rational choices based on cost-benefit calculations under varying conditions 4) The free market is the best way to allocate resources, as it values efficiency over equity.

Investopedia defines behavioral economics as the study of psychology as it relates to the economic decision-making processes of individuals and institutions. The two most important questions in this field are: 1) Are economists' assumptions of utility or profit maximization good approximations of real people's behavior? 2) Do individuals maximize subjective expected utility? Wikipedia defines prospect theory as a behavioral model that shows how people decide between alternatives that involve risk and uncertainty (% likelihood of gains or losses). It demonstrates that people think in terms of expected utility relative to a reference point, current wealth, rather than absolute outcomes.

The neoclassical theory of behavioral economics predicts that consumers will insure against catastrophic medical events and cover lower-cost services themselves, though in reality consumers typically choose policies with low deductibles and copayments. The issues facing consumers in the health insurance market include: imperfect forecasting, imperfect estimating the consequences of changes in circumstances, and little knowledge of individual health insurance plans when choosing between them.

In health insurance markets, as in other areas of economics, people do not perfectly forecast their preferences or desires under different conditions, nor can they always estimate the consequences of changes in their circumstances; they also have relatively little knowledge of individual health insurance plans when choosing between them. In economics this divergence is a matter of regret, individuals choose plans with no deductibles to avoid making trade-offs between medical care and money they might regret after the fact.

Prospect theory, which offers efforts to minimise regret loss and anxiety to reflect a concern for overall well-being, offers a different explanation for this preference maximising behaviour in the neoclassical model. In empirical research concerning prospect theory, given equal cash amounts of loss and gain, consumers place a higher value on the amount lost than on the same amount gained. Consequently, a strong aversion to loss may lead consumers to buy low-deductible policies to eliminate barriers to medical care.

### **Amartya Sen, Welfare Economics and the Capability Approach**

Amartya Sen's capability approach is an alternative to the neo-classical welfare model. The capability approach evaluates an individual's well-being and social welfare in terms of functionings and capabilities. Functionings are a person's achievements, what they are able to do or be, their activities and states of being. Capability is a person's freedom to achieve

functionings that they value. Capabilities address both actual and potential functionings, taking into account individuals abilities to function even if they are not actually functioning at that level at a given time; for example, someone who is convalescing typically retains the capability for work right now, whereas someone who is seriously injured may lose that capability, if the injury is serious enough.

From the perspective of the capability approach, the major premise of neo-classical economics, that welfare rests on an individuals willingness to pay for a commodity, such as health insurance, is flawed. Furthermore, the capability approach does not make the same assumptions as the neoclassical model, such as: welfare economics depends on the standard rational actor model, where in the neoclassical model, individuals make rational choices, though in the real world of the capability model, people do not make rational decisions.

Rather than resting on the individuals pursuit of maximum satisfaction, with priority given to satisfying individual and aggregate preferences, the capability approach gives moral significance to human capability and human flourishing. The capability approach focuses on individuals' exposure to risk and their ability to adequately manage it, rather than their preferences regarding it. Vulnerability and insecurity in health care are inevitable, and they diminish well-being and inhibit human flourishing. When individuals lack access to means of reducing or mitigating risks, they become insecure, and this vulnerability and insecurity diminish well-being and inhibit human flourishing.

Coupling disadvantages, such as when a sick person cannot earn a decent income or pay for needed health care, compounds the problem. Amartya Sen notes that, 'Hardships such as age or disability, or illness, reduce one's ability to earn income. But they also make it harder to convert income into capability, since an older or more disabled, or more seriously ill person may need more income (for assistance, for prosthesis, for treatment) to achieve the same functionings'.

### **Aristotle, Moral Foundations of Health Insurance**

Human flourishing is an Aristotlian concept which means the goal of all political activity, and serves as the moral foundation of health insurance under the universal health insurance coverage dogma. Human flourishing is Aristotle's theory of the supreme good, the aim of every action and decision. For these reasons, including preventative medicine and risk pooling, a formal, institutional and legally guaranteed health insurance is not only critical though also the rational choice in a just society. If health policy is to promote human flourishing, its goal should be to enable individuals to function best, given their circumstances, and thus reduce the vulnerability and insecurity associated with ill health. Universal health insurance is thus morally justified because it ensures some of the conditions for human flourishing, by reducing, mitigating, and coping with the risks of ill health and the resulting financial insecurity.

### **Human Flourishing and Redistribution through Taxation**

The two defining and equally important topics in universal health insurance coverage are: 1) human flourishing and 2) redistribution through taxation. The human flourishing mandate

assumes that the central ethical aims of subsidised insurance includes two primary functions: 1) to keep people healthy 2) to enhance their security by protecting them from both ill health and its economic consequences. And redistribution through taxation is how this government entitlement is to be funded, through an effective taxation scheme and an efficient administrative complex.

### **Health Insurance Financing Options**

- 1) Taxes Distribution
- 2) Insurance Premiums
- 3) Indian Caste System
- 4) Senior Care, More Expensive, Retirement Benefits

### **2 Options for Paying for Health Insurance**

- 1) taxation redistribution, government financed option
- 2) insurance premiums, paying for private corporate insurance

### **Indian Caste System and Senior Care**

In the Indian Caste System, India has a unique financing perspective, whereby the Indians say that doctor and patient are castes, and the job of the doctor is to fix the patient, and the job of the patient is to pay what he can. For financing health insurance from the caste system perspective, the issue is not government v. private, the issue is doctor v. patient. As for senior care, its relation to financing health insurance could be construed as, seniors pay less, since they earn less. For example, seniors pay less taxes, often no taxes, since they earn no money, so to finance senior care under a subsidised insurance system would essentially mean that as seniors pay fewer taxes, and taxes fund the health insurance, then the workers fund both their health insurance and the senior care.

### **Obamacare and the Evolution of Health Care in the United States**

The ACC, Affordable Care Act

- 1) Pre-existing conditions
- 2) Private tax penalty mandate
- 3) Expanding Medicare

### **Government Funded v. Business Competition**

The system currently used in the United States is one of partial government funded. Its always going to be partial government funded, since the hospital is inherently free, morally and economically, so there is no capitalistic system possible where health insurance would be a completely pure business competition model. Fully government funded would create economies of scale, the definition of economies of scale being that when something is automatically partial, if you make it fully comprehensive, then you get more efficient, thereby saving the federal government costs, and spreading the savings to an increased standard of living for the comrades in arms.

### **Job Benefits v. Individual Schemes**

- 1) What happens when you change jobs
- 2) What happens for the people who do not work

Subsidised insurance for everyone fills these gaps. There are individual schemes options that people can purchase for job loss situations, though that could be described as antithesis, as if you lose your job, then you have less money to spend on anything else, not extra, naturally. Some people also choose not to buy the health insurance when there is the employee option v. employer funded, as many people do not currently do in America.

### **Employee Option v. Employer Funded**

It is not responsible or ethical for the federal government of any human society, to reasonably expect that their citizens are going to buy the employee option of purchasing private healthcare. That just convolutes the system, as the hospital is free anyways, hippopotamus oath, which could be construed as mislabeling the funds, and essentially creating a more inefficient use of the time and money for the government mandated bureaucracy of the health insurance system. There is a difference between maximising profits in capitalism, people making more money, skimming off the top, making money off others misery, and the efficiency loss of just in time. Ruger sees this as an efficiency loss, not maximising profits.

### **Insurance Industry, Government Mandated or Government Controlled?**

We have to have an insurance industry, which assumes that industry encompasses both private companies and government agencies. The issue naturally is whether the insurance industry is government mandated private companies, or government controlled government agencies. State-owned enterprises in communism defeats the purpose of the separation of government and private, the separation of church and state, the separation of state and federal.

### **Medical Ethics, Equal Access to Healthcare**

Medical ethics could be described primarily as equal access to health care and a right to health care, and in both capitalist free market systems and communist subsidised plans, any sustainable enterprise would need both: 1) risk management and 2) risk pooling. Risk management is a common economics concept involved in any long-term sustainable enterprise, while risk pooling is a decidedly health insurance term. Ethically desirable could also be described as an inherently capitalistic concept, as capitalism teaches maximise profits, while communism teaches maximise welfare. Is not ethics human rights? Is not ethics legal or criminal?

Can free market health insurance provide effective risk management, that creates both a sustainable enterprise and a valuable community service? Risk management is an essential element of any sustainable business or government enterprise, and certainly is fundamental to a high cost system such as health insurance. The more advanced and thus expensive an operation, the more risk management is needed, included for managing payments, costs, and investments. For example, risk management is an integral part of any investing scheme, and in



a high cost and long-term enterprise such as health insurance, there are annuities, long-term payments, that require extensive hedging, or risk management.

As for risk pooling, an essential element of health insurance, which naturally is the practise by which many premiums pay for one, although, risk pooling also has a more common economics relationship, in economies of scale, the more business we do, the more income, we receive, the better we can pay costs.

Though does not capitalistic medical ethics and risk management and risk-pooling assume equal access to health care, and assure equal income to purchase it for all contributors? No, the health insurance system in American is a royal mess, and it does not assume equal access to health care, as not everyone voluntarily buys the product, and it is not equal income to purchase, because when you wait too late, it is more expensive.

### **Risks**

- 1) Consequences and management, english terms
- 2) Pooling and management, financial departments

### **Economic Theory of Health Insurance**

Health insurance is an economic theory which explain people's actions and desires, and must be better understood by its interaction with the dueling premises of practise and human characteristics. In terms of the health insurance economic concept, practise and actions might refer to the natural aversion that humans have to health insurance, while human characteristics may refer to the fact that we all need health insurance, that is human nature, health insurance is human flourishing. This natural aversion to health insurance is twofold: 1) I will not get sick, which could also be considered in terms of risk consequences 2) I do not want to pay any money I dont need to, which could also be considered in terms of risk management.

- 1) The moral foundations of health insurance
  - 2) The economic realities of health insurance
- 
- A) This is efficiency loss, not maximising profits.
  - B) The hospital is inherently free, morally and economically

### **Risk-Averse, Information Advantage, Comprehensive Coverage**

In terms of the theory of health insurance and risk-averse decision making, risk-averse individuals are predicted to choose insurance against large risks, leaving smaller risks uncovered, thereby improving their overall welfare, although In empirical studies, individuals find it difficult to make such choices. Health insurance markets are not entirely free, as insurance companies have an information advantage, which they use to cherry pick both the kinds of consumers they insure, and the kinds of coverage they offer them, in order to increase their profits. More comprehensive coverage tends to be confined to wealthier individuals, reducing the pooling of risk across the population, and conversely poorer individuals often fail to choose coverage that meets their health needs.

### **Risk Pooling and Health Insurance**

Though because the risk of ill health is uncertain in frequency, timing and magnitude, it is difficult to insure against at the individual level. Most measures of risk give equal weight to both upward and downward variation in factors such as income, though downward changes both affect and concern most people far more than upward changes do. Illness itself brings vulnerabilities, as a potential further decline in health, lost income due to medical expenses, and lost opportunities at work or school. The irreversibility of worst-case scenarios, such as severe disability or death, heightens individuals insecurity and vulnerability.

### **Self-Insure**

Without health insurance, individuals and households must self-insure, use informal risk-sharing arrangements, diversify assets, draw down savings, sell assets, borrow, or go into debt to cover needed services, all of which offer moderate to little effective income smoothing over time. A lack of health insurance does not necessarily mean that the individual must go without necessary medical care. The hospital is free, Hippocratic Oath, though what is not free in a private health insurance system is the preventative care. Even drug prices have been seen to stabilise in the United States recently, in particular in the Trump Administration, such as with drug coupons such as Good Rx and Single Care. However, lack of health-care access increases risk exposure, as failing to meet health needs when they occur can expose individuals to even greater risk of illness or injury later on. This refers to preventative care, as catching the cancer before it spreads leads to a better chance of survival.

### **Major Goals of Public Policy:**

- 1) Protecting health
- 2) Preventing sudden severe destitution

### **Protective Security through Health Insurance**

Protective security through health insurance is a necessary safety net that shields individuals from physical and mental harm and preventable death. Protective security is valuable both in itself and in the other opportunities that result from good health, thus, since protective security supports a person's overall health and general capability, public policies relating to health and health care should promote it. Major illness and/or disability cause significant economic costs both in income losses and medical expenses. Health care costs can affect personal health directly by suppressing demand for necessary medical services

### **Insufficient Protection with Health Insurance**

Barriers to receiving high-quality, medically necessary, and appropriate health care.

- 1) Lack of insurance
- 2) Underinsurance
- 3) Self-insurance
- 4) Informal insurance
- 5) Discontinuous insurance

### **Direct Out-of-Pocket Payments and Moral Concerns**

Direct out-of-pocket payments can discriminate against the sick and impede use of necessary health care. Copayments, deductibles, user fees, and other costs of health care thus create inequities and raise important moral concerns. Attempts to exempt poorer individuals from user fees in public facilities and to use ability-to-pay sliding scales for user fees have had limited success.

- 1) Copayments
- 2) User fees
- 3) User charges
- 4) Waiting periods
- 5) Deductibles

Financial disincentives that discourage patients from using necessary health services leave people behind economic barriers and therefore fail to promote health capabilities. Small copayments are necessary to temper the demand for needed health care and have the ability to avoid unlimited demand for health care.

### **Progressive Financing and Community Rating**

The justification for progressive financing and community rating is based on the close relationship between income and reduced capability. Experience-rated insurance premiums, which penalise those who have used more health care, violate this principle of provision. They can cause sicker individuals to avoid seeking care, by making them pay more than healthier individuals. In contrast, community-rated premiums require everyone to pay the same rate, regardless of health status. Health insurance financing needs to be progressive to improve health and overall capabilities. Financing systems can be classed as regressive, neutral, or progressive; with regressive meaning contributions consume a progressively smaller proportion of income as income rise, neutral means that all income groups pay the same percentage of their income, and progressive means that premiums represent a rising percentage of income as income rises.

### **Health Multiplier Effect**

Good health can expand people's productivity and incomes, allowing them to support a more prosperous overall economy, which can then afford more and better health care and other social services. By contrast, uninsured health care costs can force a person into poverty through medical expenditures or the inability to access necessary health care. Health security and economic security are interrelated, and promotion of human flourishing requires attention to both. Health policy must ensure universal health insurance to enhance human capabilities and promote individuals' ability to flourish, and it must do so efficiently. Health insurance helps create opportunities for both good health and protective security; these interrelated freedoms advance the general capability of a person.

## **United States, Health Insurance Market**

One of the main complaints of progressive health care reformers is that privatized public health insurance fails to eliminate private profit from the health care system (Wiley, 2021). Minimum medical loss ratios (MLR) and maximum administrative costs and profits, can be used to cap overhead and profits. The MLR is the proportion of premium revenues that are ultimately spent on payment of claims and quality improvement activities.

Wiley (2021) writes that what makes public health insurance programs public is the sense of solidarity built through collective determinations regarding the basic questions of how benefits and burdens will be fairly distributed in a mutual aid program.

Opponents of a single-payer system argue that using its negotiating power to lower prices for health care goods and services could also diminish access to high-quality care. This is already the case for Medicare, lower prices, in which Medicare pays hospitals about half as much as rates paid by private insurers. Proponents of the single-payer system argue that the elimination of private profits can lower overall costs. Standing in the way of health justice is the dramatically higher reimbursement rates paid by (publicly subsidized, but privately purchased) private insurers relative to traditional (and privatized) public coverage.

One of the central tenets of favoring private health care over public health care is the preference for private market power over government intervention (Wiley, 2021). In the United States, public health care is eligibility limited and means-tested, such as the Veterans Administration and Indian Health Service. Most private health insurance is purchased by individual households on the individual market, usually with the help of an employer and indirect public subsidies largely hidden from view. Private contractors assist publicly financed health care programs to perform the basic functions of health coverage. In the United States, it is not uncommon to see lower-income families, due to narrow eligibility criteria for public plans, to be churning through subsidized private coverage, various forms of state and federal public coverage, and periods without coverage on a month-to-month basis.

Universal coverage is the main goal espoused by progressive health reforms for being under a single health plan (Wiley, 2021). Other goals include lowering out-of-pocket costs for the underinsured, cutting through red tape, and securing a sense of solidarity among health care plan beneficiaries.

CMS, Medicare; reasonable and necessary for the diagnosis and treatment of illness or injury or to improve the functioning of a malformed body member.

Utilization management is handled for traditional Medicare by private Medicare Administrative Contractors (MACs). Utilization management for privatized health insurance is handled by the private plan.

### **Wiley's Key Functions of Health Coverage**

- 1) Distribution of financial risk

- 2) Determinations regarding enrollee eligibility and choice
  - 3) Benefit design
  - 4) Contracted provider networks
  - 5) Utilization management
  - 6) Reimbursement of providers
- A) How universal health coverage will be
  - B) How the health benefits and financial burdens of public investments in health care coverage will be distributed
  - C) Whether health care costs will be sustainable and equitable

Health insurance makes up approximately one-fifth of the U.S. economy (Wiley, 2021). Sixty years ago health care was 5 percent of the U.S. economy, and at 17.7 percent of GDP in 2018, it was more than three times that. At 6% of GDP, federal health spending represents a quarter of the federal budget. The Congressional Budget Office (CBO) projects a more than doubling of Medicare spending in the next decade, from \$711 billion in 2018 to \$1.5 trillion in 2029 (Shepard, 2020). Data from the International Federation of Health Plans (2015) suggests that Medicare reimbursements for hospital-based and diagnostic services are generally higher than insurance payments in other countries, although Medicare hospital-based reimbursement rates are estimated to average just 53% of commercial rates in the United States (Maeda and Nelson, 2017). The poor cannot afford to pay the full cost of the Medicare premium without a substantial subsidy, as Medicare's annual cost of \$10,739 per elderly enrollee is 63% of the average Social Security benefit (\$16,956 in 2017).

In 1968, the 95th income percentile spent 4.1% of mean income on healthcare (about \$2,500) versus 1.4% of mean income (about \$880) for the 25th percentile—a gap of 2.7% of mean income. In Shepard 2020's model, by 2045 these numbers grow to 23.9% of mean income (\$31,000) for the 95th percentile versus 9.6% of income (\$12,500) for the 25th percentile— a gap that has widened fivefold to 14.2% of mean income, with most of this widening gap reflects the fact that medical spending has grown as a share of income.

Regarding price controls in the health insurance industry, Wiley (2021) notes that health care price controls aimed at equalizing rates between public and private coverage could make expanded access to health care not only more feasible, but also more equitable. She further notes that a stronger government role in rate setting could also free up resources to address other social determinants of health, such as educational and employment opportunities, food and housing security, and environmental protection.

Wiley (2021) notes that there has been an effort to implement a public option in addition to the private plans utilized by the Affordable Care Act. In fact, since the ACA's passage, commitment to health care access as a public responsibility and to health care programs as public things has grown. The ACA instituted a tax penalty for not buying health insurance.

An important question which arises is whether it is necessary to eliminate private insurance companies to achieve the goals of progressive health reform? The answer to this question could be in the privatized public health insurance option, which uses private carriers to serve the administrative needs of the government funded public health insurance system.

Single-payer system, government run, single-payer health plan, federal level  
Public option, state level, the benefits that public option plans offer in their own right

There are many interconnected goals of single-payer and public-option plans, including universal coverage, lower costs, and lower out-of-pocket payments for households (deductibles, copayments, and coinsurance). Universal does not mean uniform, as universal means that everyone is covered, though not necessarily uniform plans (Wiley, 2021).

What is the appropriate balance of responsibility between the state, the market and other societal institutions, and the individual (Wiley, 2021)?

If privatized public coverage is maintained as part of an expanded public program, government officials may require private contractors to take all comers on an equal basis, while paying them a variable fee (Wiley, 2021).

Wiley (2021) notes three ethos that animate progressive reform proposals: 1) solidarity, or interdependence among individuals and groups 2) mutual aid, or reciprocity of support, and 3) communitarianism, or connectedness between individuals and their communities. Privatization is not inherently incompatible to these ethos. A few things that will provide clarity in the debates regarding clear articulation of communitarian criteria for assessing public-private partnerships includes: 1) mechanisms that foster collective deliberation and problem solving to ensure 2) just distribution of the health benefits, and 3) the financial burdens of public investments in health care.

Tactics the federal and state governments could use to implement progressive health insurance reforms include statutory provisions, regulations, and contract terms, and things they could be used to do to secure progressive health insurance reform include securing the public's interest in universal coverage, fair distribution of the health benefits and financial burdens of public investments in health care, and public deliberation on plan design (Wiley, 2021).

### **Wiley's Key Questions in Health Care Plans Design**

- 1) Who will be covered?
- 2) Will they have a choice of plans?
- 3) What will be covered?
- 4) Who will decide?
- 5) How will public investments be defined and financed?
- 6) Who will bear the financial risk that enrollees will require more care than anticipated?
- 7) Will there be out-of-pocket costs for enrollees?

- 8) Will access to providers be limited by networks?
- 9) Will reimbursement rates for health care providers be sustainable and equitable?

### ***What Will be Covered?***

- 1) Inpatient hospital care
  - 2) Ambulatory medical care
- 
- A) Preventive services
  - B) Prescription drugs
  - C) Treatment for mental health and substance abuse disorders
  - D) Vision and dental care

The health justice model dictates that health reforms should be assessed based on the extent to which they foster collective deliberation and problem-solving and ensure just distribution of the health benefits and the financial burdens of public investments in health care (Wiley, 2021). The health justice model should root ongoing efforts to ensure access to health care and healthy living conditions more firmly in community engagement and participatory parity. In Wiley's view the most underappreciated criteria for realizing health justice is the extent to which plan-design processes and public-accountability mechanisms further collective problem-solving in response to collective problems.

### **Health Justice Model Parameters**

- 1) Patient rights
  - 2) Market power
  - 3) Professional autonomy
- 
- A) Decisions about medical treatment
  - B) Health care coverage
  - C) Allocation of scarce resources

### **Government's Role in Securing Health Care Coverage**

- 1) England, National Health Service; taxing and spending to support a publicly administered national health care delivery system.
- 2) Canada, Canadian Medicare; publicly financed and administered single-payer coverage for goods and services delivered by private health care providers.
- 3) Germany; mandatory participation in a multi-payer system of public and private nonprofit insurers centrally coordinated via a government administered system of cross-subsidization (to spread risk across multiple funds) and "single pipe" claims processing (to ensure uniform reimbursements for private health care providers).
- 4) United States; private market, supplemented by direct and indirect public subsidies and heavily regulated to secure the public's interest. Patchwork of privately financed, highly regulated health insurance (with or without an employer's contribution and with varying

degrees of direct and indirect public subsidies), traditional public insurance, and privatized public health insurance.

### **Side Effects of U.S. Health Care System**

- 1) Disruption
  - 2) Uncertainty
  - 3) Financial insecurity
- 
- A) Market-based rationing
  - B) Hidden subsidies

### **Private Health Insurance in the United States**

Privately Financed, Publicly Subsidized, and Highly Regulated

In the early to mid twentieth century in the United States, we saw the development of privately financed and administered prepaid plans such as Blue Cross (hospitals) and Blue Shield (physicians). Employers then also began to offer health coverage to workers via prepaid provider plans as well as newly formed insurance companies. Tax laws exempted health care benefits from payroll and income taxes, resulting in an indirect subsidy on private health benefits. ERISA then had the added benefit of encouraging large employers to offer health benefits by shielding them from some forms of state regulation via “self-funding.” Self-funding is when the large company maintains its own health care plans, which are administered by private companies. Conversely, “fully insure” means that an outside insurance company bears the financial risk in exchange for a monthly premium paid jointly by employer and employee. Fully insured plans are expressly exempted from the protection of ERISA preemption and thus are actively regulated by the states.

The individual or non-group market exists to assist individuals and families to purchase health coverage when they do not have access to employer-based plans. These plans are historically more difficult to procure at a desirable rate because individuals lack the negotiating power and shared risk-pools available to larger groups of employees, and had higher costs and lower quality of plans.

### ***Issues with Individual Market***

- 1) Market failures
  - 2) Inadequate consumer information
  - 3) Overrepresentation of less-healthy prospective insureds
- 
- A) Premiums prohibitively expensive
  - B) Offered terms of coverage that left them with significant financial exposure
  - C) Denied coverage altogether



“Managed care” blends the traditional functions of an insurance company with functions that were traditionally limited to health care providers. “Managed care organization” could now be synonymous with private health insurance company. “Utilization management” uses “pre-utilization authorization” to rely on in-house staff with medical and nursing knowledge to determine whether the goods and services a patient and her doctor were requesting were medically necessary and non-experimental. A “shared-risk arrangement” is when the private health insurance carrier shifts some of the financial risk associated with patients needing more care than anticipated to the hospitals, doctors, and other providers who make decisions about utilization of covered benefits. “Cost-sharing” is when the patient has to pay some of the costs of treatment, including: 1) deductible, a specific threshold at which coverage kicks in 2) copayment, a set fee for a good or service, and 3) coinsurance, a defined percentage of the cost. “Under-insurance” is insufficient coverage and burdensome cost sharing. “Regulatory arbitrage” occurs when private contractors seek to enroll healthier people while driving less healthy enrollees to alternative plans.

By the mid-1990s in the United States suspicions arose about HMOs and managed care organizations from federal and state lawmakers, and they insisted on regulations mandating coverage of specific benefits, adopting procedural protections for insureds whose claims are denied via utilization management, policing the adequacy of provider networks, and shielding health care providers from financial risks so excessive that they threatened the quality of care. These state regulations did not apply to self-insured employer coverage due to ERISA preemption, just to fully-insured employer coverage and private insurance purchased directly by consumers.

The ACA did several things, including established new premium assistance tax credits to subsidize the purchase of private coverage on state-level health insurance exchanges for people earning up to 400% of the federal poverty level who lack access to public coverage or affordable employer-based private coverage. The ACA also has an employer mandate. The ACA extended HIPAA protections for equitable access to coverage and choice of plans, by prohibiting many forms of risk-based underwriting in the employer-based group insurance market (HIPAA) and the individual direct-purchase market (ACA), which are known as guaranteed availability and renewability requirements. There are also community rating requirements which prohibit insurers from charging higher rates based on perceived risk, although they may charge higher premiums for household size, geographic area, age (up to three times higher), and tobacco use (up to 50% higher).

The ACA also applied a range of patient protection provisions to employer-based plans, such as mandating that most types of private health plans cover a comprehensive package of essential health benefits and imposed internal and external grievance requirements for coverage denials. To limit out-of-pocket costs, the ACA banned annual and lifetime caps on benefits and imposed an annual limit on cost-sharing expenditures that goes down with household income. One thing the ACA did not do was lower the reimbursement rates paid by private insurance plans to hospitals and other service providers, rates about twice as high as the prices Medicare pays. HIPAA and the ACA have changed the health care model in the United States, preempting

contractual freedom by imposing universal eligibility criteria and mandating that insurers take all comers all largely equal terms.

ACA tax credits financed with general federal revenues subsidize premiums for people living in households with income between 100% and 400% of the federal poverty level to a defined percentage of income; otherwise, the purchase is wholly privately financed. Medicare funding comes from federal general revenues (43%), federal payroll taxes (36%), and means-tested monthly premiums paid by the enrollees (15%). Medicaid funding is a mix of federal and state funding. Regulators place an annual cap on out-of-pocket costs for covered benefits, at \$7000 per year for individuals and \$14000 per year for families, though the limit does not apply to out-of-network services.

The ACA requires a core package of essential health benefits (EHB) to be included on all private insurance plans though not for employer-based coverage.

### **ACA EHB**

- 1) Emergency services
- 2) Hospitalization
- 3) Ambulatory patient services
- 4) Preventive and wellness services and chronic disease management
- 5) Rehabilitative and habilitative services and devices
- 6) Treatment for mental health, behavioral health, and substance abuse disorders
- 7) Maternity and newborn care
- 8) Pediatric services, including oral and vision care for children
- 9) Prescription drugs
- 10) Laboratory services

### **Government Laws**

- 1) 1965, Medicare and Medicaid
- 2) McCarran-Ferguson Act, the business of insurance is primarily regulated by the states
- 3) ERISA, Employee Retirement Income Security Act of 1974
- 4) Health Maintenance Organization Act of 1973
- 5) Health Insurance Portability and Accountability Act of 1996 (HIPAA)
- 6) Balanced Budget Act of 1997
- 7) Medicare Modernization Act of 2003
- 8) Deficit Reduction Act of 2005
- 9) Affordable Care Act of 2010

### **Traditional Public Health Insurance in the United States**

Publicly Financed and Mostly Publicly Administered

Medicare and Medicaid in 1965 addressed three main groups of people traditionally left out of the health insurance markets in the United States, retirees, people with disabilities, and people living in low-income households. A Medicare Administrative Contractor (MAC) is a private

company which handles benefit rules in addition to the Center for Medicare and Medicaid Services (CMS). MACs bid on contracts to issue coverage determinations governing which goods and services are covered for which patients and to process claims reimbursement, a process known as conducting post-utilization review, for all traditional Medicare beneficiaries within a specified geographic jurisdiction.

Traditional public coverage usually eliminates choice of plans in favor of program contours determined by statutes and regulations. Sometimes particular populations have special needs, so traditional public coverage will not be suitable to all populations within a country. The value of carving out groups who are expected to need a lot of health care goods and services protects them from profit-motivated denials and narrow contract-based provider networks while also indirectly subsidizing private companies by removing them from the risk pool (Wiley, 2021).

### **Medicare**

Eligibility criteria for Medicare is limited based on the identity of the enrollee. Medicare covers most elderly people and some people with disabilities. Two-thirds of beneficiaries are enrolled in traditional coverage (Wiley, 2021). Private contractors handle utilization management and claims processing for these enrollees. One-third of Medicare beneficiaries are enrolled in fully privatized Medicare Advantage (MA) plans in which the government pays a capitated fee to a private insurer.

### **Medicaid**

Eligibility criteria for Medicaid is limited based on the identity of the enrollee. Private insurers play a greater role in Medicaid than Medicare. Medicaid is the jointly administered federal-state program that covers people living in low-income households, and people deserving of government aid, including children, pregnant women, people with qualifying disabilities, and some parents of dependent children. Around 70% of Medicaid participants, including nearly all families and children enrolled in Medicare, are covered by Medicaid Managed Care (MMC) plans, the majority which are private plans operating pursuant to contracts with the state. The 30% of beneficiaries who remain in traditional Medicaid are generally complex patients, which includes “dual eligibles” covered by both Medicare and Medicaid and people with disabilities. State lawmakers make important decisions about who is eligible, which goods and services are covered, and how providers are paid, and states may pursue their health reform goals by taking advantage of statutory flexibility and administrative waivers, through mandatory categories and optional categories.

### **Privatized Public Health Insurance**

Publicly Financed, Privately Administered, and Highly Regulated

Privatized public health coverage is governed by different statutes and regulations and government contracts than private insurance. There are three types of government-subsidized, privately administered health plans currently in the United States, MA plans, MMC plans, and private plans consumers purchase directly on the state-level health insurance exchanges.

Privatized public health insurance could be offered alongside a publicly-administered option, such as with Medicare, or it could be offered without a traditional public alternative, such as with Medicaid.

The Balanced Budget Act of 1997 solidified the option for Medicare beneficiaries to enroll in one of many government-contracted, fully privatized health plans, originally called Medicare+Choice plans. The Medicare Modernization Act of 2003 allowed for prescription drug coverage. The Deficit Reduction Act of 2005 gave states the option of offering alternative benefit plans for specific groups of Medicaid beneficiaries. For Medicare Advantage (MA) and Medicaid Managed Care (MMC) plans, the government does not insure privatized enrollees, nor does it pay health care providers who care for privatized enrollees on a fee-for-service basis, rather the government pays a premium to private companies to insure enrollees, determined by a bidding process. The privatized plan sponsors submit estimated costs per enrollee to the government, and the capitated payments are risk-rated, which means that the per-person per-month payments are adjusted to reflect various characteristics of the enrollee that are likely to determine how much care she needs over the course of the coverage period. Capitation makes the government's costs far more predictable by shifting the risk to the private contractor.

Traditional Medicare or Medicaid is known as fee-for-service, whereas government-contracted privatized coverage involves a risk-sharing arrangement. One reason why privatized plans are believed to be more cost-effective than traditional public coverage is that MA and MMC plans all engage in managed care, such as use of restrictive provider networks, which allows them incentivize hospitals, physicians, and other providers to control costs via reimbursement formulas, and they use more utilization management than traditional Medicare and Medicaid, such as by requiring pre-utilization authorization.

### **Factors Influencing Health Care Plans**

- 1) Quality of coverage
- 2) Scope of provider networks
- 3) Utilization management
- 4) Reimbursement
- 5) Cost-sharing

### **PPACA-Exempt Health Arrangements**

- 1) ***STLDI, Short-Term Limited-Duration Insurance***; health insurance that is primarily designed to fill temporary gaps that may occur when an individual is transitioning from one plan or coverage to another plan or coverage; has an expiration date of less than 12 months, and is renewable for no more than 36 months
- 2) ***Limited Benefit Plans***; different types of health insurance options that offer limited benefits, also known as "excepted benefits"; include indemnity plans that cover a set dollar amount for limited prescription benefits, hospital stays or physician benefits, or plans that offer accident-only coverage, limited scope dental or vision coverage, or coverage for a specified disease; these plans may be combined to mirror more comprehensive coverage

- 3) **Health Care Sharing Ministries**; entities whose members share a common set of religious or ethical beliefs and contribute funds to pay for medical expenses of other members; however, payment for member claims is not guaranteed
- 4) **Association Health Plans (AHP)**; health insurance coverage sponsored by a group or association of employers, which may include trade associations who make plans available to their members

Wouters and McKee (2017) write an analysis of private health insurance (PHI) markets, and find that private health insurance often precedes the development of public sector plans in low and middle income developing economies. Private health insurance can be a stepping stone on the path to universal health care in developing economies. Mossialos and Thomson (2002) find that data from Europe indicates that private health insurance generally leads to inequitable access to health care, does not contain costs or increase efficiency, and undermines the financial stability of statutory health insurance. The impact of private health insurance varies depending on the type of private health insurance, the regulatory environment, and the relationship between the private and statutory systems (Wouters and McKee, 2017). Private health insurance is the best starting point for risk pooling in developing countries, given large informal economies, inefficient taxation mechanisms, high out-of-pocket spending, and corruption. Reeves et al. (2015) collected data from 89 low and middle-income countries and found that greater progress towards universal health coverage is preceded by higher government revenue from progressive taxes, such as capital gains, profits, and income.

One important concern in private health insurance markets is information asymmetry between patients and insurers, as individuals know more than insurance companies about their health and the aspects of their lifestyles that increase the risk of disease or injury (Wouters and McKee, 2017). This information asymmetry may lead to adverse selection or moral hazard. Adverse selection is when patients buy insurance plans that are underpriced. Moral hazard is when individuals engage in riskier behavior or seek more treatment than they would if they were uninsured (Pauly, 1974). A necessity for setting actuarially fair premiums, accurately estimating whether enrollees are at high or low risk of needing health care, is prevented by adverse selection and moral hazard.

To combat adverse selection and moral hazard insurance companies have two options: they can pool risks by charging average premiums to groups consisting of both high and low-risk clients, and insurers can try to separate low and high-risk individuals into different plans. The first option, risk pooling with average premiums in the same group, can lead to a premium spiral, which is when low-risk patients face disproportionately high premiums and leave the scheme, leaving the remaining high-risk patients to face increasing prices and they too may eventually leave the scheme and forgo insurance altogether (Wouters and McKee, 2017).

Reducing benefit packages or imposing spending caps is another way for insurers to limit their exposure to risk, though this exposes the patients to financial risk and also has adverse macroeconomic effects, such as increasing demand for poverty alleviation programs and distorting the balance between saving and consumption (Wouters and McKee, 2017).

One aspect of an efficiently operating insurance market is the ability for patients to switch insurers easily, which should incentivize companies to compete based on premiums, benefits packages, and other plan features (Thomson et al., 2013a). Entry barriers for insurance firms include substantial equity capital and technical expertise. Other costs not incurred by statutory universal systems include transaction costs for continuously monitoring and assessing the risk of their enrollees and marketing costs (Wouters and McKee, 2017).

Market failures in the health sector may undermine private health insurance, such as the denial of coverage for pre-existing conditions. In theory, insurers will want to maximize their client base and minimize unquantifiable risk. If they can match premiums to risk, then they will compete for individuals at all levels of risk. The existence of pre-existing conditions for patients necessitates the need for an insurer of last resort, i.e. the state of some well-funded entity, such as Medicare or Medicaid in the United States (Wouters and McKee, 2017).

In the United States, private health insurance is the main source of health care funding for individuals of working age. Prior to the ACA, about one in six Americans were uninsured (Denavas-Walt, et al., 2012). Himmelstein et al. (2009) estimates that 62.1 per cent of personal bankruptcies in 2007 were due to medical costs. The World Bank (2014) estimates that the US spend more per capita than any other country in the world, at 17.9 per cent of GDP in 2012.

### **ACA 1332 Waiver, State Public Option Plans**

The Affordable Care Act has the 1332 Waiver, which lets the states provide alternative insurance coverage in public option plans, as long as coverage is comparable or better than the ACA's. Three states petitioning for this waiver as of 2021 are Washington, Nevada, and Colorado. With over half of uninsured people in the U.S. qualifying for Medicaid or Affordable Care Act subsidies for private insurance coverage, public options can benefit the people who are left out. Public options have long been considered by the federal government, and when the Affordable Care Act was being passed, a public option was removed.

Public options resemble public-private partnerships, as states are not acting as insurance companies or bearing the risk of paying health care costs of enrollees. Instead, they are partnering with insurance companies and setting terms with providers to manage costs. As with Medicare and Medicaid, potential enrollees must qualify based on their income, with the target customer being someone whose income is too high for Medicaid but too low to afford private insurance. Premium assistance and cost-sharing subsidies are available.

Washington signed Cascade Select into law in 2019, though enrollment was poor in the first year in part because many hospitals refused to contract with insurers to see patients covered by the plan. In Nevada, according to the Kaiser Family Foundation, five years after expanding Medicaid in 2014 the state still had nearly 350,000 uninsured people, or 11.5% of its population. To boost insurer participation, the state will require Medicaid insurers to also offer the public option. In Colorado, criteria for a public option plan includes cost containment and premium reduction targets. The Colorado law states that insurers must achieve a 5% reduction in

premiums as compared to the average rate the previous year, a 10% reduction in 2024, and a 15% reduction in 2025. State hearings will be held for insurance companies failing to hit targets.

The ACA 1332 waiver allows states to eliminate a lot of upfront program costs that states might have to finance on their own. Nevertheless, a key question is whether a public option can reduce costs enough to entice uninsured people to enroll.

## **US Census Bureau**

- 1) In 2020, 8.6 percent of people, or 28.0 million, did not have health insurance at any point during the year.
- 2) The percentage of people with health insurance coverage for all or part of 2020 was 91.4.
- 3) In 2020, private health insurance coverage continued to be more prevalent than public coverage at 66.5 percent and 34.8 percent, respectively. Of the subtypes of health insurance coverage, employment-based insurance was the most common, covering 54.4 percent of the population for some or all of the calendar year, followed by Medicare (18.4 percent), Medicaid (17.8 percent), direct-purchase coverage (10.5 percent), TRICARE (2.8 percent), and Department of Veterans Affairs (VA) or Civilian Health and Medical Program of the Department of Veterans Affairs (CHAMPVA) coverage (0.9 percent).
- 4) Between 2018 and 2020, the rate of private health insurance coverage decreased by 0.8 percentage points to 66.5 percent, driven by a 0.7 percentage-point decline in employment-based coverage to 54.4 percent.
- 5) Between 2018 and 2020, the rate of public health insurance coverage increased by 0.4 percentage points to 34.8 percent.
- 6) In 2020, 87.0 percent of full-time, year-round workers had private insurance coverage, up from 85.1 percent in 2018. In contrast, those who worked less than full-time, year-round were less likely to be covered by private insurance in 2020 than in 2018 (68.5 percent in 2018 and 66.7 percent in 2020).
- 7) More children under the age of 19 in poverty were uninsured in 2020 than in 2018. Uninsured rates for children under the age of 19 in poverty rose 1.6 percentage points to 9.3 percent.

## **United States**

### ***Private Health Insurance Options***

- 1) Employer obtained
  - 2) Local or community programs
  - 3) Health Insurance Marketplace or state-based exchanges
- 
- A) Employment-based
  - B) Directly purchased
  - C) Other sources

### ***Public Health Insurance Options***

- 1) Medicaid
- 2) Medicare
- 3) CHIP, Children's Health Insurance Program
- 4) Other government sponsored health plans
- 5) Indian Health Service, IHS
- 6) Military Plans

### ***Hierarchy for Older Adults***

- 1) Private coverage
- 2) Medicare and Medicaid, dual-eligible
- 3) Medicare Advantage
- 4) Traditional Medicare only, excluding Medicare Advantage
- 5) Other Coverage, includes military coverage
- 6) Uninsured

The National Health Statistics Report from 2021 reports that in the United States, in 2019, 33.0 million (10.2%) persons of all ages were uninsured. 12% of persons under the age of 65 had no insurance. Children were less likely to be uninsured than working-age adults. Children were less likely to have private coverage and twice as likely to have public coverage than working-age adults.

### **Private Insurance: 66.5%**

- 1) Employment-based; 54.4%
- 2) Direct-purchase; 10.5%
- 3) Tricare; 2.8%

### **Public Insurance: 34.8%**

- 1) Medicare; 18.4%
- 2) Medicaid; 17.8%
- 3) CHAMP VA or VA; 0.9%

### ***Why is there no Public Health Insurance in the United States?***

There are several reasons why there is no public health insurance in the United States. One, income inequality is relatively high in the United States compared to other industrialized democratic countries, which means that the support for a comprehensive public health insurance program with income-proportional contributions is likely to be low. Two, in the United States, partial premium insurance is available since health insurance is tied to the employer. Medicare sets in once employer-sponsored health insurance ceases to work and covers a period in which premium risk is particularly severe (Kifmann, 2005).

Pauly (1994) discusses that a public health insurance system in the United States with income-dependent benefits might find more support than a public health insurance program with uniform benefits, and such a system would yield a first-best risk allocation. Nevertheless, it would be difficult to draft a constitution which specifies sufficiently well how benefits are to differ



according to income. A possible alternative in the United States would be to limit income redistribution to make public health insurance with uniform benefits more attractive to higher income individuals, as is done in Germany with income liable to contributions only up to a certain limit. A system with flat fees and transfers to low-income households could also be introduced. These measures are compatible with the coverage of premium risk as long as the median voter is still in favor of a positive amount of public health insurance. The analysis shows however that due to the existence of employer-based health insurance in the United States, even less redistributive proposals might not find political support.

Shifting income redistribution to the tax system can create two types of efficiency gains. One, it would be easier to adopt incentive-compatible insurance contracts, such as through the introduction of copayment schemes. Two, income redistribution through the general tax system is likely to be more efficient than redistribution through insurance contributions which are levied only on earnings (Kifmann, 2005).

### **United States, Medical Problems and Bankruptcy Filings**

Warren et al. discuss the financial impact of medical problems and who is affected most by bankruptcy filings, men or women. One third of the debtors said that they had incurred substantial medical bills of \$1,000 or more not covered by insurance. In 1999, 326,441 families filed bankruptcy papers related to the illness or an injury to themselves or a family member, and 267,757 families reported substantial medical bills though they would list another reason for bankruptcy filing, for a total of 596,198 families in bankruptcy filings related to medical bills 1999.

Health insurance was sparse for the group, with one in five debtors reporting that they had no health insurance for any family member. The absence of health insurance, however, did not correlate with a debtor's identifying a medical problem. Those who had insurance and those who did not were about equally distributed among those who identified a medical problem and those who did not. Households without a male present were nearly twice as likely to file for bankruptcy giving a medical reason or identifying a substantial medical debt as households with a male present. Of debtors 65 or older, 47.6 percent listed a medical reason, as compared with 7.5 percent of debtors under 25 (Warren et al., 2020).

### **Kaplan's Top Ten Myths of Medicare**

-Medicare is a classic entitlement program in that beneficiaries have no monetary cap on the value of the benefits they receive from the program, as long as they meet the program's criteria for eligibility. Medicare has unlimited benefits and full exposure to U.S. healthcare costs.

- 1) There is one Medicare program; Parts A, B, C, D
- 2) Medicare is going bankrupt; Different parts are paid for in different ways.
- 3) Medicare is government healthcare; Not like the Department of Veteran Affairs, which owns the hospitals. Medicare does not even handle the claim and approval process, rather, Medicare Administrative Contractors handle that.

- 4) Medicare covers all medical cost for its beneficiaries; Including cost-sharing and exclusions, such as covering healthcare outside the United States, Medicare pays for only 48% of the healthcare expenses of older Americans.
- 5) Medicare pays for long term care; Medicare pays for some home health care, not assisted living facilities.
- 6) Medicare is politically immune to budgetary reduction
- 7) Medicare wastes much of its money on futile care
- 8) Medicare is less efficient than private health insurance; Medicare spends only 1.4% of medical benefits paid on administrative expenditures, while private insurers spend 25% or more for such costs. Medicare has an effective monopoly Part A insurance benefits, so it does not need to advertise.
- 9) Medicare is not means-tested; Upper-income people pay more in Medicare taxes.
- 10) Increased longevity will sink Medicare

#### ***OECD, 4 Sources of Funding for Health Services***

- 1) Public payment through taxation/general revenues
- 2) public/quasi-public payment model through social insurance
- 3) Private insurance
- 4) Out-of-pocket payments

### **Shepard Economic Model for Medicare for All**

Shepard et al. (2020) develops a model for assessing whether uniform public coverage is preferable to a “top up” scheme, or what type of Medicare for All public scheme is most effective. According to Shepard et al. (2020), traditional Medicare covers a uniform set of benefits for all income groups and provides more generous access to providers and new treatments than public programs in other developed countries.

When discussing uniform health insurance plans, Baicker (2011) finds that although high-income households likely prefer a very generous plan, low-income households likely prefer lower healthcare spending and higher take-home pay or more generous nonmedical benefits such as food stamps or housing assistance.

The paradox of the egalitarian motive to provide equitable access to healthcare is that although the uniform scheme levels the healthcare playing field, it comes at the opportunity cost of forgoing other public assistance that the poor and middle class might prefer. This opportunity cost becomes sharper over time as medical costs rise and inequality grows, making a basic top-up program increasingly attractive even to the nonrich (Shepard, 2020).

### ***3 Major Shifts that Makes a Uniform Design Less Efficient Today than when Medicare Began in 1965***

- 1) Rising income inequality makes it more difficult to design a single plan that serves the needs of both higher- and lower-income people.

- 2) The dramatic expansion of expensive medical technology means that a generous program increasingly crowds out other public programs valued by the poor and middle class.
- 3) As medical spending rises, the tax financing of the system creates mounting economic costs and increasingly untenable policy constraints.

These three forces motivate reforms that shift toward a more basic public benefit that individuals can “top up” with private spending, which if combined with an increase in other progressive transfers, such a reform could improve efficiency and reduce public spending while benefiting low-income populations (Shepard et al., 2020).

### ***Pressures on Healthcare Spending***

- 1) Aging population
- 2) Medical technology growth

Whereas in the United States the public healthcare plan Medicare provides a uniform benefit to all enrollees that places few limits on the scope of coverage, even for unproven technologies, in England access is limited to new treatments and technologies based explicitly or implicitly on estimates of cost-effectiveness (Thorlby and Arora, 2019).

The traditional fee-for-service Medicare has neither network restrictions on providers (with the wrap-around plans held by most enrollees) nor significant deductibles or copayments, unlike most employer-sponsored commercial plans (Shepard et al., 2020).

### ***U.S. Medicare as a Foundation for Expanding Coverage***

- 1) The efficiency and equity trade-offs involved in its current generous uniform design.
  - 2) How rising income inequality, ongoing medical technology innovation, and the budget pressures imposed by an aging population affect the efficiency of the current benefit structure.
  - 3) The effects of an alternative, nonuniform benefit structure on economic efficiency and equity.
- A) Income inequality
  - B) Medical technology growth
  - C) Distortionary taxes

The goal of the Shepard model is to assess how the welfare consequences of Medicare's uniform benefit structure have evolved, as well as the welfare effects of potential alternative public insurance designs. They find that Medicare's uniform benefit has the advantages of simplicity and lower administrative costs, though also comes with the cost of uniformity. Inefficiency due to mismatch between the public benefit and privately optimal generosity is a characteristic of a uniform health insurance program that pools everyone into the same plan. Currie and Gahvari (2008) find that this cost of uniformity, inefficiency from pooling in the same plan, is closely related to the standard efficiency loss from in-kind transfers relative to cash

transfers, though it is included in the Shepard model that includes an explicit role for in-kind transfers to provide more equitable access to healthcare.

### ***3 Macro Trends have Increased the Cost of Uniformity Appreciably Since Medicare's Creation in 1965***

- 1) Rising inequality; Income inequality has risen substantially, and rising inequality leads to growing divergence between rich and poor in willingness and ability to pay for generous medical care (Piketty and Saez, 2014).
- 2) Expensive new healthcare technology; Dramatic innovations in medical technology have occurred, as not only was there much less healthcare available to buy in the 1960s, even advanced technologies of the day were relatively inexpensive.
- 3) Rising tax rates; Average marginal tax rates (MTR) have increased from less than 25% in 1965 to 30% in 2012 (Mertens and Olea, 2018), commensurately increasing the deadweight loss, or economic cost, associated with publicly financed benefits, a trend that will likely continue with the budget pressures from population aging (Baicker et al., 2013).

These changes imply that demand among the rich for generous medical care increasingly diverges from what a uniform public system can afford to fund, and thus Medicare as we know it may not be a sustainable foundation on which to expand public health insurance. The efficiency cost of maintaining uniform coverage has grown over time, compared to when Medicare was introduced in 1965 when options for treatment were both limited and relatively expensive, tax rates were lower, and income more evenly distributed.

A “top up” model for higher-incomes is different than Medigap policies, which cover only deductibles and copayments, not additional coverage for additional services. In the supplemental top-up plan, the government underwrites a basic insurance plan, or mandates the purchase of regulated and subsidized private plans, but then allows households to add on private supplemental insurance. In Switzerland, Swiss citizens are required by law to have basic health insurance, though discretionary private insurance accounts for about one-third of total healthcare spending (Sturny, 2019). In England, 10.5% of the population opts for private health insurance coverage (Thorlby and Arora, 2019). Shepard (2020) writes that switching from a uniform Medicare scheme to a top-up structure with increased transfers to the poor, could generate substantial cost reductions and efficiency gains in the long term.

#### ***Services Included in Basic Plan with Supplemental Top-Up Plan***

- 1) Low patient copayments and deductibles
- 2) More modest provider payment rates
- 3) Coverage of treatments restricted to those with proven effectiveness relative to lower-cost alternatives

#### ***Factors of Medicare for All Scheme***

- 1) Eligibility
- 2) Coverage

- 3) Provider payment rates
- 4) Additional tax revenues that will raise marginal tax rates

### ***Optimal Design of Public Insurance Programs***

- A) How generous should the public benefit be?
- B) Should it be a fixed uniform benefit for all recipients or a basic benefit that recipients can top up using their own money?

When designing the basic benefit for the public insurance program, it is important to remember that cost sharing such as deductibles and copayments does not belong in the basic plan, as this places considerable financial stress on low-income households.

## **Comprehensive National Health and Insurance Scheme in the United States**

Stewart et al. (2020) writes about two main theoretical perspectives related to nationalizing the U.S. health system: the market-based view and the socially sensitive argument.

Government at either the federal, state, or local level pays for around 45 percent of health spending in the United States, and 18 percent of acute care facilities are government owned. In 2019, according to the Centers for Medicare and Medicaid Services (CMS, 2019), US health spending reached \$3.8 trillion, or approximately \$11,582 per capita, and accounted for 17.7 percent of the nation's gross domestic product. In the United States, many hospitals are privately owned, with 3.3 percent federal, 15.7 percent state of community hospitals, 47.8 percent are nongovernment, not-for-profit; 21.3 percent are for-profit; and 11.9 percent are nonfederal psychiatric and other hospitals that treat specific conditions. According to data from the Organisation for Economic Co-operation and Development in 2018, in a study of 17 high-income countries, the United States had the highest or near-highest prevalence of obesity, car accidents, infant mortality, heart and lung disease, sexually transmitted infections, adolescent pregnancies, homicides, and injuries. According to data from the U.S. Census Bureau, in 2017 over 28.5 million Americans did not have health insurance.

In terms of the market-based view, Richardson (2011) notes that market incentives are crucial to solve the pressing problems of efficiency and cost containment. Market forces can push costs down whereas mandatory health coverage increases the role of government, drives costs up, makes healthcare less affordable, and keeps more people uninsured.

Bond and Smith (2016) notes several characteristics of the United States that contribute to it not having a comprehensive national health and insurance scheme: the culture is exceptionally individualistic, favoring personal over government responsibility; lobbyists are exceptionally active, spending billions to ensure that private insurers maintain their status in the health system; and institutions are designed to limit major welfare programs and social policy changes.

Auter (2017) writes about rates of uninsured people in America, noting that based on surveys by the Gallup organization beginning in 2008, the rate of uninsured adults peaked at 18 percent in 2013 prior to passage of the ACA, fell to 10.9 percent in the third quarter of 2016, and stood at 13.7 percent in the fourth quarter of 2018. LeWine (2020) notes that lack of health insurance is associated with increased mortality, from 45,000 to 60,000 preventable deaths per year, and uninsured, working Americans have an approximately 40 percent higher mortality risk compared to privately insured working Americans.

According to the Current Population Survey—Annual Social and Economic Supplement uninsured rates for Americans in 2017 were 8.8 percent and 28.5 million people, and in 2016 were 8.8 percent and 28.1 million people. In the United States, private health insurance covers 67.2 percent of the population while government coverage was 37.7 percent. Of the subtypes of health insurance, employer-based was highest at 56 percent of the population, followed by Medicaid at 19.3 percent, Medicare at 17.2 percent, direct-purchase at 16 percent, and military coverage at 4.8 percent.

### ***Projected National Healthcare Expenditures, 2018-2027***

In the United States, under current law, national health spending is projected to grow at an average rate of 5.5 percent per year from 2018 to 2027, when it will reach nearly \$6 trillion. Health spending is projected to grow 0.8 percent faster than gross domestic product (GDP) per year from 2018 to 2027; as a result, the health share of GDP is expected to rise from 17.9 percent to 19.4 percent. The percentage of uninsured Americans is expected to remain stable at around 90 percent by 2027, and Medicare enrollment is the primary reason the federal, state, and local government share of healthcare spending is expected to increase by 2 percent, reaching 47 percent by 2027 (Stewart et al., 2020).

### ***International Comparisons, 1970-2018***

Wealthy countries tend to spend more per person on healthcare and related expenses than lower income countries, but the U.S. spends about twice as much as other wealthy countries. Since 1970, the difference between health spending as a share of the economy in the United States and comparable OECD countries has widened. While public spending on health is similar, 8.5 percent for the United States, private sector spending is triple that of comparable countries, at 8.8 percent of U.S. GDP compared to 2.7 percent for other nations. Both public and private sector spending increases at faster rates in the United States than in similar countries, as since 1970, private sector spending increased from 1.4 percent to 2.7 percent of GDP in comparable countries, and 3.9 percent to 8.8 percent in the United States.

In the United States, many distinct organizations provide healthcare services, with facilities being largely owned and operated by private sector businesses; 58 percent of community hospitals are nonprofit, 21 percent are government owned, and 21 percent are for-profit (Stewart et al., 2020).

Nersisyan and Wray (2019, p. 26) argue that “Adoption of single payer national health system (replacing for-profit private insurers) would significantly reduce the resources devoted to unusual ways of paying for healthcare.”

- 1) Eliminate the private insurance sector’s participation
- 2) Reduce employers’ costs of administering healthcare plans
- 3) Reduce the costs incurred by doctors and hospitals due to billing insurers as well as pursuing patients for uncovered cost
- 4) Lower the costs of appealing denials
- 5) Cut costs associated with patients avoiding early treatment of diseases (because of the actual or expected out-of-pocket costs) that become chronic and expensive maladies

The health of the population can be viewed as a measure of the overall effectiveness of the healthcare system, and the extent to which the population lives longer, healthier lives signals an effective system and significantly contributes to human capital (Stewart et al., 2020). Health gains do not accrue uniformly, as the uninsured often must forgo medical care, which leads to downstream consequences, such as even more expensive measures when preventable or treatable conditions exacerbate, or covering the costs for treating the uninsured through taxes and other fees, thereby shifting the burden.

Nersisyan and Wray (2019) note that if a national health system were implemented, while the distribution of spending between private and public sectors would change, possibly leading to ballooning government deficits, government spending is not more inflationary than private spending.

The demographic shift in the United States to an older population is projected to increase U.S. medical spending by at least 5 percent, creating a funding challenge for government services like Medicare, insurance companies, and individual savings accounts (Stewart et al., 2020).

#### ***Medically Necessary Services Needed in Insurance Scheme***

- 1) Acute, rehabilitative, long-term, and home care
- 2) Mental health services
- 3) Dental services
- 4) Physical and occupational therapy
- 5) Prescription drugs and medical supplies
- 6) Preventive and public health measures

Universal coverage would eliminate financial barriers to care, as alternative insurance coverage for services included under the national health program would be eliminated, as would patient copayments and deductibles. Ensuring equal access and minimizing the complexity and expense of billing and administration would be the result of a single, comprehensive program (Stewart et al., 2020).

The OECD (2018) reports that U.S. hospitals spend more than twice as much as Canadian hospitals on billing and administration and requires U.S. physicians to spend about 10 percent of their gross incomes on excess billing costs, due to the complexity of the current U.S. insurance system and its multiplicity of payers.

Copayments and deductibles serve to endanger the health of poor people, and decrease the use of preventive care and vital inpatient medical services as much as they discourage unnecessary measures. This is the underlying argument for cost sharing, does it prevent the use of preventive care or does it prevent unnecessary measures. Does cost sharing hurt poor people or save money for the government and insurance companies?

A national health program would distribute capital and facilitate allocation on the basis of need and quality, which would allow for more impoverished hospitals to compete for funds on a more equal footing with the richer hospitals. To make these decisions, you need to have rigorous evaluation of the technology and assessment of needs as well as the active involvement of providers and patients (Nersisyan and Wray, 2019).

In a national health scheme, funds for the construction or renovation of health facilities and purchases of major equipment would be appropriated from the national health program budget and distributed by state and regional health-planning boards composed of experts and community representatives. Capital projects funded by private donations would require approval by the health-planning board if they entailed an increase in future operating expenses (Stewart et al., 2020). For-profit hospitals, clinics and nursing homes would receive a reasonable fixed rate of return on existing equity from the national health program, and since virtually all new capital investment would be funded by the national health program, it would not be included in calculating the return on equity (Nersisyan and Wray, 2019).

#### **National Health Program, Stewart (2020)**

- 1) Fully cover everyone under a single, comprehensive public program
- 2) Pay hospitals and nursing homes and annual amount to cover all operating expenses
- 3) Fund capital costs through separate appropriations
- 4) Pay for physicians services and ambulatory services in any of three ways: (a) fee-for-service payments with a simplified fee schedule and mandatory acceptance of the national health program payment as the total payment for a service or procedure (b) budgets for hospitals and clinics employing salaried physicians, or (c) on a per capita basis
- 5) Be funded, at least initially, from the same sources as at present, but with payments disbursed from a single pool
- 6) Contain costs through savings on bureaucracy and billing; improved health planning; and the ability of the national health program as the single payer for services to establish overall spending limits



## **Single Payer Proposals in the United States**

- 1) Distribution of responsibilities and resources between levels of government, decision-making power and financing
- 2) Breadth of benefits covered and extent of cost-sharing in public insurance
- 3) Role of private insurance

## **Key Differences in Health Systems**

- 1) One difference you will find between countries is the extent to which financial and regulatory control over the system rests with the national government or is devolved to regional or local government.
- 2) Scope of benefits and degree of cost-sharing required at the point of service
- 3) Role of private insurance
  - A) Hospital ownership
  - B) New technology adoption
  - C) System financing
  - D) Global budgeting

Most universal health systems are not highly centralized, and most incorporate private insurance heavily into their models. In addition, most universal health systems offer either narrow benefits or incorporate cost-sharing (Gilead et al., 2019).

A true single-payer model is highly centralized, has an expansive public benefits package, and uses no private insurance.

The Affordable Care Act made great strides in progressing the United States healthcare system, though the U.S. remains the only high-income country without universal health coverage. The World Health Organization defines coverage as being universal, when “all people have access to needed health services (including prevention, promotion, treatment, rehabilitation, and palliation) of sufficient quality to be effective while also ensuring that the use of these services does not expose the user to financial hardship.”

In 2017, two different healthcare proposals were submitted to the U.S. Congress. Senator Bernie Sanders proposed Medicare for All, to establish a federal single payer health insurance program, and Senators Michael Bennet and Tim Kaine proposed the Medicare-X Choice Act, to expand existing public programs as a step towards a universal, public insurance program. Several states including Michigan, Minnesota, and New York have also advanced legislation towards a single-payer healthcare scheme.

## ***Characteristics of Single-Payer Plans***

- 1) The federal government would raise and allocate most of the funding for healthcare
- 2) The scope of benefits would be quite broad
- 3) The role of private insurance would be limited and highly regulated
- 4) Cost-sharing would be minimal

### **Goals of Universal Health Coverage**

- 1) Improving the quality of care
- 2) Improving health equity
- 3) Lowering overall health system costs

### **Universal Healthcare, System Organization**

- 1) As a largely federal system managed at the national level
- 2) As a system with centralized control but also regional flexibility
- 3) As a system that devolves most control to the regional and local governments

Smaller nations the size of U.S. states make better use of a federal system for healthcare, such as the Netherlands (which uses private insurers as intermediaries between the national government and providers), Singapore, and Taiwan. France is the only larger nation which uses a federal healthcare system.

Australia, Denmark, England, and Norway all maintain centralized control over how most resource allocation and policymaking but all for some freedom at the regional and local level in how funds are used. Canada, Germany, Sweden, and Switzerland give regional or local governments most of the authority to allocate resources and make policy decisions as long as they work within constraints established by broad national regulations.

### ***Canada***

Canada does not have a national health insurance system all, it devolves responsibility and resources to the provincial governments who administer the system, using federal funding in the form of per-capita block grants. Some of the regulations on these block-grants which place restrictive bounds on the behavior of the provinces which guarantee a nearly uniform level of coverage across the country and limit the potential for provinces to shrink benefits in a race to the bottom include: provinces are prohibited from incorporating any cost-sharing in their plans and must cover a broad range of healthcare services for all legal residents, including those who move between provinces.

### ***Benefits Covered by Public Insurance***

- 1) Comprehensive, free or low-cost at the point of service
- 2) Broad public insurance with moderate cost-sharing
- 3) Narrow national benefits package, no cost-sharing for publicly insured services

The basic benefits package that is publicly funded and provided by universal health coverage includes physician, diagnostic, and hospital services, as well as inpatient pharmaceuticals. What varies from country to country is coverage for mental health care, outpatient pharmaceuticals, and extent of cost-sharing.

Countries with broad benefits packages that most closely resemble single-payer schemes include Denmark, England, and Germany. These countries offer highly comprehensive benefits

and cover most services, which are mostly free at the point of delivery. As for out-of-pocket requirements, all three countries require modest copayments for outpatient prescription drugs, averaging approximately \$12.50 per item, with maximum caps in Denmark and Germany, and cost-sharing for dental services. Germany also requires modest copayments for inpatient care, capped at 2% of income for most, and 1% of income for those with chronic illnesses.

The most common benefits structure is used by Australia, France, the Netherlands, Norway, Singapore, Sweden, Switzerland, and Taiwan, which offers comprehensive public benefits packages with pervasive cost-sharing. Canada's public system covers a narrower set of basic benefits, with additional services, such as outpatient drugs, being covered either publicly through provincial governments or through private insurance.

### ***Role of Private Insurance, Depends on Three Aspects of Public Insurance Coverage***

- 1) Comprehensiveness of covered benefits
- 2) Cost-sharing
- 3) Access to providers and hospitals

The purpose of complementary private insurance (such as Medigap in the United States) purchased in addition to public insurance coverage is to cover out-of-pocket costs. The purpose of supplementary private insurance in addition to public insurance coverage is to cover benefits excluded by the public insurance plan, or more convenient access to a wider array of providers and hospitals. Canada, England, Germany, the Netherlands, Norway, Singapore, Sweden, and Taiwan have supplementary private health insurance. France has complementary private health insurance. Australia and Denmark have both. In the United States, Medigap is defined as being supplementary insurance, thus showing how differences in definitions can exist.

In Switzerland, mandatory, government-subsidized private insurance compromises the entire universal coverage scheme— it is the primary form of health insurance. In Australia, England, and Germany, some people purchase private health insurance that fully substitutes for the public insurance program. In Australia, the purchase of such substitute coverage is deliberately encouraged through tax incentives and penalties.

## **U.S. v. Other Nations, Mirror Mirror 2021 Report**

### ***Four Features Distinguish the United States from Other Top-Performing Nations***

- 1) They provide for universal coverage and remove cost barriers
- 2) They invest in primary care systems to ensure that high-value services are equitably available in all communities to all people
- 3) They reduce administrative burdens that divert time, efforts, and spending from health improvement efforts
- 4) They invest in social services, especially for children and working-age adults

- A) They provide for universal coverage and remove cost barriers so people can get care when they need it and in a manner that works for them

- B) They invest in primary care systems to ensure that high-value services are equitably available locally in all communities to all people, reducing the risk of discrimination and unequal treatment
- C) They reduce the administrative burden on patients and clinicians that cost them time and effort and can discourage access to care, especially for marginalized groups
- D) They invest in social services that increase equitable access to nutrition, education, child care, community safety, housing, transportation, and worker benefits that lead to a healthier population and fewer avoidable demands on health care

U.S. health outcomes could be improved by focusing on factors beyond healthcare. Health outcomes can be influenced by a wide array of social and economic factors, many of them outside the control of the healthcare system, such as education, employment, nutrition, housing, transportation, and environmental safety. Compared to other OECD countries, the U.S. spends comparatively less on social programs such as early childhood education, parental leave, and income supports for single parents. The U.S. also spends less on supports for workers, such as unemployment protections and labor market incentives, with labor market policies having been linked to so-called deaths of despair, such as suicides and overdose deaths.

Mental health and maternal care are two areas the United States could improve in. Maternal health is critical for reducing maternal mortality, and removing cost sharing for maternal care could achieve this. Investing in primary care models that ensure continuity of care from conception through the postpartum period, including mid-wife led models, and offering support benefits such as parental leave, could improve maternal health.

As for mental health, suicide rates have increased in the United States every year since 2000. Providing mental health care on primary care teams to diagnose comorbid mental health conditions, such as in the Netherlands, Sweden, and Australia, could help to provide early intervention and treatment as well as promote social connectedness and suicide prevention. The U.S. has comparatively fewer mental health professionals than other countries.

Out-of-pocket costs continue to be a major impediment to universal health coverage in the United States, with nearly 30 million uninsured and 40 million underinsured. The U.S. could benefit from annual out-of-pocket caps on covered benefits and full coverage for highly beneficial preventive services, primary care, and effective treatment for chronic conditions. In 2019, 86% of Australians faced no out-of-pocket costs for primary care visits.

Access to care requires more than just insurance coverage, such as convenient and timely primary care. In countries like the Netherlands and Norway timely availability is ensured by allowing for care by phone on nights and weekends, with in-person follow-up at home as needed. In Norway, the Patients' Rights Act specifies a right to receive care within specific timeframes and with maximum wait times applying to covered services, including general practitioner visits, hospital care, mental health care, and substance use treatment. In the Netherlands, where private insurers compete for business, standards require a mandatory minimum basic benefit package with a community rating to keep premiums lower for sicker

individuals. Germany and Canada negotiate provider payments administratively, such as U.S. Medicare and Medicaid. Collective negotiation and standardized payment for services, at either the national or regional level, can greatly simplify transactions, reducing errors and appeals, and making time and attention available to improve care.

### **Health Insurance Fraud**

Villegas-Ortega et al. (2021) writes about health insurance fraud, of which corruption and fraud are embedded in health systems, and they are motivated by abuse of power and dishonesty that harm the user population, generating economic and human losses. Aspects of the health system which are weakened by corruption include equity, quality, response capacity, efficiency, and resilience. Contributing factors to health insurance fraud include a constant increase in healthcare spending, healthcare professionals seeking to maximize profits, and health insurance seeking to contain costs (Dumitru et al., 2011).

Health insurance fraud generally affects developing countries with fewer resources, weakened health systems, and a lack of quality (Perez and Wing, 2019). Losses caused by health insurance fraud in some high-income countries range between 3 and 10% (Rashidian et al., 2012). In the United States, health insurance fraud is a problem that ranks second after violent crimes (Sparrow, 2008). Health insurance fraud can be committed by medical providers, policyholders, and health insurers (Busch, 2008).

It is important to define healthcare fraud to distinguish it from abuse, corruption, or error. Villegas-Ortega (2021) defines health insurance fraud as “an act based on deception or intentional misrepresentation to obtain illegal benefits concerning the coverage provided by health insurance.” Health insurance fraud may differ from country to country based on its regulatory framework and the scope of healthcare coverage provided. Factors shown to reduce the instances of fraud include: auditing, monitoring, sanction and control, nurses’ role, the economy, politics and social conditions, the medical record, and the commercial implication. Factors shown to increase the instances of fraud include: sex, age, predominant race, health insurance, place of residence, medical and surgical treatments, chronic health conditions, risk of illness, deductibles and coinsurance, the complicity between the provider and the insurer, the relationship between the provider and the consumer, the relationship between the consumer and the insurer, the influence of the bosses and the Guanxi, the geography, reimbursement processes and billing characteristics, information asymmetry, and poor economic condition of the patient.

### **Residual Spenders in Private Health Insurance Markets**

McGuire et al. (2021) discuss how residual spending on healthcare affects the top and bottom 1% and 0.1% of all spenders. A high residual spender is someone for whom the residual, spending less payment, is high, indicating that the person is highly underpaid. A low residual spender is someone for whom the residual, from premiums and risk adjustment, is low, indicating the person is highly overpaid. The one-in-a-thousand people, on both sides of the

residual distribution, play an outsized role in creating adverse incentives associated with health plan payment systems.

In healthcare spending, the top 10% and even more so the top 1% of spenders account for a disproportionate share of all spending, and in the United States, the National Institute for Health Care Management (NICHM) found using data from the Medical Expenditure Panel Survey for 2014 that the top 5% of spenders accounted for half of all spending, and the top 1% accounted for more than 20% of all spending. In the Netherlands, the top 1% of all spenders accounted for 25% of all spending. In Germany, 53% of all spending is due to the top 10% of all spenders.

The concern over high spenders in healthcare is motivated not only by cost, though also by a concern for the efficient functioning of individual health insurance markets organized around principles of choice and competition.

### ***Findings About Residual Spenders***

- 1) The diseases found among those with the highest residual spending are also disproportionately found among those with the lowest residual spending
- 2) Those at the top of the residual spending distribution (where spending exceeds payments the most) account for a massively high share of the unexplained variance in the predictions from the risk adjustment model
- 3) In terms of persistence, membership in the extremes of the residual spending distribution is highly persistent, raising questions about selection-related incentives targeting these individuals

Residual spending is the shortfall, spending less payment. Persistence is whether membership in the extremes persists year-to-year. McGuire et al. (2021) discusses how very high profits at the individual level as well as very high losses can disturb the efficient functioning of health insurance markets, especially when these profits and losses are persistent.

In private insurance markets, regulated competition puts health plans in competition for enrollees with the goal of generating incentives for cost containment and efficient plan design.

## **Technological Change and Health Insurance**

Weisbrod (1991) discusses how technological change drives the health insurance industry, and how the expansion of health insurance has paid for the development of cost-increasing technologies, and how the new technologies have expanded demand for insurance.

### ***Changes in the U.S. Healthcare System Since WWII***

- 1) New technologies have revolutionized the ways in which healthcare is capable of being practiced.
- 2) The role of healthcare insurance, private and public, has expanded dramatically, from 10% insured in 1940 to 82.5% insured in 1980 to 91.5% insured in 2020.

- 3) Personal health expenditures have soared, from \$300 (1982 dollars) per capita in 1950, to \$4,564 in 1987, to \$10,623 in 2018.

### ***Weisbold's Propositions About R&D***

- 1) The amount of resources going into the R&D process, and its direction, during some time interval, depend in part on the mechanisms expected to be used to finance the provision of healthcare in future periods, when the fruits of the research process become marketable.
- 2) Reciprocally, the demand for healthcare insurance depends, in part, on the state of technology, which reflects R&D in prior periods.
- 3) Long-run growth of healthcare expenditures is a by-product of the interaction of the R&D process with the healthcare insurance system.

### ***Ways Healthcare Differs from Other Commodities***

- 1) It sometimes involves the preservation of life, or, at least, major effects on the quality of life
- 2) It is a technically complex commodity that abounds with informational asymmetries, adverse to consumers
- 3) As a result of these two characteristics, "nonmarket" (governmental and private nonprofit) suppliers in the healthcare sector, especially among hospitals, nursing homes, and blood banks, play a large role in influencing the interaction between insurance and R&D

Healthcare can be considered as a property right, in that because it affects length and quality of life, it should be made widely available, regardless of one's ability to pay, which results in governments having to finance access to some healthcare redistributively. A reason to intervene in private health markets is substantial information asymmetries, which give rise to economic and political demands for consumer protection (Weisbrod, 1991).

### ***Physician Complaints, Imperfect Agency Relationships with Physicians***

-if physicians are better informed than their patients and do not act as perfect agents

- 1) Induce demand
- 2) Defensive medicine; diagnostic testing and other practices that have no expected benefits for patient health but are defenses in malpractice suits
- 3) Unnecessary surgery

### ***Shifts in U.S. Health Insurance***

- 1) Expansion of HMOs
- 2) Adoption of the DRG system of hospital pricing; prospective-payment system, where the hospital receives payment for treatment based on industry-wide costs for each of the 468 DRG categories

### ***Definition of "Health Care"***

- 1) The operational definition of health care, under insurance contracts, is a function of the state of medical technology
- 2) The state of medical technology today is a function of economic and political responses to prior definitions of health care coverage under insurance

The way the health care is defined also affects the level of insured expenditures, the incentives to utilize resources that are covered relative to those that are not, and the incentives for the R&D sector to explore various potential health-promoting technologies. The more responsive the insurance contract is to changes in technology, the broader the range of activities over which insurance will encourage R&D.

### **Health Insurance: Market Failure or Government Failure?**

Hyman (2007) discusses whether problems with health insurance are due to market failure or government failure. Market failure refers to new regulations and more taxes to fix the problem, and government failure refers to inefficient government regulation of health insurance.

#### ***Factors in the Rise of Employment-Based Coverage***

Only 3% of the American population had employment-based insurance coverage in 1930 (Helms, 1999). Large and mid-size employers are more likely to offer coverage, and more likely to offer a choice of coverage than small employers. Employment-based coverage is less likely in certain industries, such as agriculture, retail, and food service, and those working part-time.

- 1) During World War II, wage and price controls were instituted by the Office of Price Administration in an attempt to deal with inflation. Employer contributions to insurance and pension funds were not counted as wages, and were accordingly excluded from the wage controls, so employers sweetened employer benefit packages by offering health insurance.
- 2) From 1943 to 1954, federal tax code changes led to the Internal Revenue Service issuing rulings to exclude employment-based coverage from taxable income. In the aggregate, this subsidy for employer-based health insurance is worth more than \$100 billion in foregone tax revenue per year, and is the second largest tax expenditure, after home mortgage interest.
- 3) Labor Unions were another factor in the rise of employment-based health insurance, as during the 1940s and 1950s they aggressively bargained for richer benefits packages which included health insurance.

People that obtain health insurance coverage from their employer use health insurance contracts 45% of the time and self-insured by the employer 55% of the time (Kaiser Family Foundation, 2007). American that obtain health insurance coverage through an employer's insured plan are subject to both state and federal regulation, while Americans who obtain health insurance coverage through an employer's self-funded plan are subject only to federal regulation. Individuals that receive health insurance through their place of employment receive a sizeable tax subsidy.



## **ERISA**

When ERISA was enacted in 1974, it focused on pension plans, and placed no substantive regulations on employment-based health insurance. Since 1974, the only new substantive regulations include prohibitions on drive through deliveries, requiring parity in mental health treatment coverage, and imposing limits on the use of preexisting conditions exclusions. Self-funded employers have operated in a virtual regulatory vacuum due to ERISA preempting state law though not imposing much in the way of substantive regulation. Operating in multiple states, self-funded employers operating in this regulatory vacuum can implement uniform coverage arrangements without worrying about state-by-state regulatory variation. This means that self-funded employers have the freedom to design and implement whatever health coverage they desire, including spending as much or as little as they want.

### ***Categories of Relationships***

There are three categories of relationships between insurers, providers, and patients: Type I regulation, the relationship between the insurer and the physician/provider; Type II regulation, the relationship between the physician/provider and the patient, and; Type III regulation, the relationship between the patient and the insurer.

### ***Judging the Regulatory Framework***

The first three frameworks work under the assumption that regulation is driven by the public interest.

- 1) Neo-classical argument; Likely to focus on the problems of adverse selection, moral hazard, and the fact that health insurance contracts are complex and incomplete, which leads to regulations addressing opportunistic behavior by both the insurer and the insured.
- 2) Behavioral economic framework; Focus on the fact that humans have better things to do than read an insurance contract, and even if they do read them, they are likely to discount or ignore inefficient coverage terms.
- 3) Redistributionist framework; Focus on their desire to transfer resources from the more fortunate (healthy and wealthy) to the less fortunate (sick and poor), which leads to coverage mandates that individuals would not be willing to pay for if they were perfectly rational, the definition of redistribution.
- 4) Public choice framework; Emphasizes that regulation often reflects rent-seeking behavior by special interests, and accordingly counsels for great skepticism regarding the merits of most such initiatives.

### ***Adverse Consequences of Minimum Standards for Health Insurance***

- 1) Forcing individuals who can't afford more expensive coverage to do without insurance entirely, thus increasing the number of people who are uninsured
- 2) Forcing those who can afford more expensive coverage to purchase it, even though they have better uses for the money
- 3) Constraining competition on the financing and delivery of health care services

- 4) Taking money from the poor and working class, and giving it to the upper middle class, who provide and disproportionately receive the mandated services

Hyman (1999) describes the problem of health insurance as a bundled product sold into a diverse market, to people with varying intensity of preferences for coverage with different cost-quality-access tradeoffs, and mandates are based on the assumption that there is one right answer to these trade-offs. Hyman (1999) writes that setting an inefficiently high level of health care quality as the mandatory minimum ignores both the short-term consequences for price and access and the long-term consequences of increased price and decreased access on quality.

### ***Ways to Address Regulatory Federalism***

- 1) Direct federal regulation/chartering
- 2) Deregulation
- 3) Association health plans
- 4) Exclusive state regulation
- 5) Cross-border sales of health insurance

## **Social Participation, Universal Health Coverage, and Health Security**

Clark et al. (2021) discusses social participation measures in the context of universal health coverage and health security. Many governments fail to proactively listen to people's needs, perspectives and expectations as part of their decision-making processes, let alone to do so in systematic and institutionalized ways.

### ***Leaders' Reluctance to Embrace a Truly Inclusive Health Governance is Due to:***

- 1) Existing sociocultural power imbalances that prevent meaningful interaction between stakeholders and policy-makers' persistent adoption of a predominantly biomedical health model.
- 2) Systematic lack of policy-maker capacities to create, manage, sustain and leverage long-term, institutionalized participatory processes.

Countries should work to create capacities and skills within their health systems to ensure that long-term and functional, social participation mechanisms are embedded in decision making processes. These mechanisms should be anchored in a legal framework and be provided with an adequate and predictable budget. Stable and available funding is critical for ensuring debate, discussion and exchange as a regular part of the way the health sector works. Social participation is at the center of good governance, and governance is one of the key enabling or hindering factors to both universal health coverage and health security.

## **Voluntary Public Health Insurance**

Goulão (2014) discusses how voluntary public health insurance can be implemented when its coverage can be supplemented in the market. She argues that public health insurance redistributes with respect to risk and income, and the market is affected with adverse selection,

though making public health insurance voluntary does not lead to its collapse since individuals always participate in it. In some cases a voluntary public health insurance scheme increases market efficiency because participation in it sends a signal to private insurers of an individual's health-risk type.

Voluntary schemes become more viable when mandatory schemes find political resistance Goulão (2014). Voluntary schemes can also be ideal for developing countries where tax systems are often more deficient, and where a major part of the poor population is often excluded from the market (Pauly et al., 2006). Topics for future research include other aspects of the health system, such as labor market effects, moral hazard, and propitious selection. In the presence of moral hazard, incomplete coverage is a way of increasing efficiency. Propitious selection means when low-risk individuals buy more insurance than high-risk ones (Hemenway, 1990).

### **Willingness to Pay**

Hall and Jones (2007) notes that willingness to pay (WTP) to extend life rises with income, or that for the wealthiest in society the marginal value of more goods is low, though an additional year in which to enjoy it is priceless, so privately chosen medical spending also increases rapidly with income. The rich proceed further up the marginal cost curve relative to the poor, spending more on less valuable services until (marginal cost of one life-year times medical spending) equals their much higher value of a life-year. For a given level of medical technology, marginal cost first rises gradually but then steeply as the limits of medical technology are reached or as more spending takes the form of amenities. The marginal cost curve becomes vertical when all possible medical treatments are exhausted, as unlike a physical production technology, at some point one can longer "produce" additional units of health simply by spending more money. The level of medical spending is greater for the rich than for the poor, as willingness to pay is much higher for the rich (Shepard et al., 2020).

### ***Differences in Factors Influencing Healthcare Among Groups***

- 1) Types of treatment
- 2) Convenience
- 3) Amenities not immediately reflected in survival

### ***Factors Improving Quality of Healthcare (Not Quantity)***

- 1) Short wait lists
- 2) More comfortable hospital beds (single rooms)
- 3) Greater provider choice

The government has considerable latitude both in designing how transfer programs are funded, such as levying taxes, and in choosing the composition of benefits between in-kind medical care and cash benefits. In discussing egalitarian social preferences for an equitable distribution of healthcare, Currie and Gahvari (2008) cash benefits v. in-kind transfers, and that the individual prefers cash benefits, though the taxpayer prefers in-kind transfers. In-kind transfers offer better

differentiation between targeted and non-targeted beneficiaries, and taxpayer preferences about recipients' use of resources.

### ***Benefit Design: Uniform v. Top-Up Design***

There are essentially two options for a public healthcare scheme, either provide medical benefits with a uniform or top-up design. A uniform benefit scheme imposes an additional constraint on recipients in the form of a medical spending ceiling for medical benefit amount, not present with top-up benefits. However, a top-up scheme creates additional complexity in the form of greater administrative costs and adverse selection problems associated with letting consumers choose among generosity levels. The generous plan, the generous uniform benefit, like U.S. Medicare, makes the uniform level of coverage an amount that few high-income households would want to opt out into a more generous private plan, though it also creates an opportunity cost of less ability to fund cash transfers or other social programs that might provide greater value to lower-income households. For uniform benefit schemes, the government must choose a value that balances the different needs of low-income households with high-income households, or find a middle ground between the ideal points for rich and poor alike.

The Samuelson condition for an optimal public good is where the average willingness to pay of beneficiaries is equal to the average marginal cost of providing the service. The cost of uniformity involved with a uniform benefit system is the loss provided where high-income households prefer more than what was provided and low-income households demand less, instead preferring the cash to high-amenity healthcare or access to unproven treatments.

The top-up scheme provides public benefit by not imposing a ceiling on the rich though still ensures a floor on medical spending for the poor. This allows the government to set the optimal top-up benefit based on the social optimal level for the poor, or where the marginal cost curve intersects the social willingness to pay for a life-year.

### ***Trade-offs Between Uniform v. Top-Up Medical Systems***

- 1) Public health insurance benefits are lower under top-up benefits
- 2) Total medical spending (public and private) may be higher or lower in the top-up design
- 3) Optimal cash transfers can be higher under a top-up medical system
- 4) The top-up system allows for greater medical inequity

Medicare appears to be a uniform scheme targeted to the needs of higher-income households, as the public goods problem shows. Rather than having to balance the desires of the rich and poor into a single system, eliminating uniformity frees up the government to set up a low-cost basic public benefit based on demand by poorer households. The uniform benefit determines medical spending for everyone, though the top-up scheme determines medical spending only for the poorer constrained group that chooses not to top up.

Total medical spending will be lower for poor households that receive a smaller benefit but larger for the rich households which want to top up, so the overall change depends on the shape of the marginal cost curve and the size of each group in the population.

Optimal cash transfers can be higher under a top-up medical system, as when the government spends less on healthcare, they have more to distribute as cash benefits. Cash and insurance benefits are substitutable forms of redistribution, so although the poor get less generous healthcare under top-up benefits, they may also get more cash income.

The optimum healthcare scheme, whether uniform or top-up, depends on relative losses from uniformity v. losses from administrative complexity.

### **Rising Cost of Uniformity: Medical Technology, Inequality, and Taxes**

The cost of uniformity has changed over time, as evidenced by U.S. Medicare. Uniform benefits provide equal access to healthcare, but this uniformity comes at a cost when income groups differ in their demand for healthcare.

- 1) Improved medical technology
- 2) Rising income inequality
- 3) Changing tax rates

#### ***Since Medicare in 1965***

Optimal medical spending in the 1965 environment was not too divergent for rich and poor. There was less income inequality than there is today, reflected in the narrower gap of willingness to pay for medical care between the rich and poor. Medical technology was also less advanced and expensive than it is today. Today we have a production function with gradually diminishing returns for medical care, as reflected by the fact that there are expensive medical procedures available for those willing to pay for them. Conversely, then there was little to do beyond relatively few low-cost interventions for common diseases such as cancer and cardiovascular disease.

These findings indicate that Medicare was established, a single uniform program for rich and poor seniors made better sense, as the cost of uniformity was low, so even a small complexity cost from a more flexible top-up system would be enough to tip the scales towards a uniform program. Medicare in 1965 would also be quite generous, because healthcare was relatively cheap and the government budget and associated taxes relatively small.

#### ***Improved Medical Technology***

Treatments for nearly all medical conditions, though especially for heart disease and cancer, have vastly improved since 1965, though these treatments are also very expensive. Heart attacks that would have resulted in death in 1965 can now be treated and life extended at a cost per hospital admission of \$20,000 or more. The result of improving medical technology is generally a large outward shift and a flattening of the thin marginal cost curve, which leads to privately demanded medical spending for rich and poor now being further apart, as higher-income households are now more willing and able to pay the huge bills associated with modern medicine. At a given level of medical spending, the marginal returns to medical spending are much higher than in 1965. The marginal cost curve, or dollars per life-year, is the

reciprocal of the marginal returns, life-years per dollar, so the marginal cost curve is lower and flatter. The marginal cost curve eventually steepens at a much higher level of medical spending, which are the marginal technologies that are both high cost and low value.

### ***Rising Income Inequality***

Rising income inequality is one of the major trends of the last 50 years (Piketty and Saez, 2014), and the rich therefore proceed much further up the marginal cost curve up to the point that it starts becoming quite steep, reflecting the marginal low-value care. Nevertheless, rising income inequality would have little impact on medical spending gaps without the existence of expensive treatments with limited health benefits.

### ***Rising Deadweight Loss of Taxes***

Mertens and Olea (2018) discuss how although top income tax rates have fallen since the 1960s, average overall marginal tax rates are higher today than in 1965. Tax rates will likely rise further resulting in rising deadweight loss of taxation due to the large federal debt and impending cost of Social Security and Medicare for an aging population. When the marginal tax rate is 50%, the efficiency cost of raising an extra dollar of revenue is higher, whether through reduced labor supply, capital accumulation, or tax avoidance. Although a higher deadweight loss of taxation would also reduce optimal benefits under a top-up system, the welfare impact is larger under a uniform system. Higher deadweight losses from taxation require cutting the public benefit, which in turn makes the restriction against topping up in the uniform system more costly.

### ***Plan Types, Shepard 2020***

- 1) Generous Uniform; like Medicare, topping up prohibited
- 2) Optimal Uniform; more restrictive benefits, topping up prohibited
- 3) Optimal Top-Up; the level of in-kind medical benefit is set to maximize egalitarian social welfare, recognizing that some individuals will choose to top up

### ***Reasons the Efficiency Cost Rises***

- 1) The rising inequality in privately desired health spending, as a single uniform policy is increasingly divergent from what individuals on their own would have chosen.
- 2) The rising cost of public health insurance pushes up tax rates, and therefore, the marginal deadweight loss of taxes, as generous medical care becomes increasingly unaffordable even for the government.

Less generous uniform health insurance benefits imply lower taxes, which disproportionately benefit the rich. Shifting to a top-up system further benefits the rich because it removes a constraint on their desire to buy healthcare beyond the public benefit. Therefore, shifting from generous uniform to either optimal uniform or top-up benefits as at baseline a regressive change. Shepard et al. (2020) makes the simplifying assumption that the savings from lower public spending, or the Medicare dividend, is entirely devoted to lowering taxes, though in practice governments have a choice on how to spend this Medicare dividend, as they could instead use the savings to increase cash transfers, which may allow for a more progressive incidence.

The generous uniform policy, which provides medical care designed for the rich to all income groups, is increasingly inefficient over time. Switching to a more basic medical benefit that allows for topping up generates a welfare gain that is shared equitably can improve average welfare across the board (Shepard et al., 2020).

Currie and Gahvari (2008) note that the primary forms of income redistribution to low-income households are means-tested in-kind transfers of housing, food, and healthcare. Medicare is a uniform in-kind benefit provided to both high- and low-income populations, though by 2020 it has become much less efficient to a “top-up” health insurance program where more basic public coverage can be supplemented by private health insurance (Shepard et al., 2020).

- 1) Tax distortions
- 2) Income inequality
- 3) Egalitarian preferences
- 4) Technology growth

A uniform benefit structure supports the “right to healthcare” as a foundational rationale, as low-income households receive the same level of healthcare as high-income households. Baicker (2001) notes a uniform benefit scheme will in addition to resulting in a higher proportion of spending on healthcare rather than food, education, or housing, it will also result in fiscal pressures that not only raise taxes though also crowd out spending on other public goods and transfer programs. The Medicare dividend, taxpayer savings, can be used to offset some of the equity effects of the top-up scheme redesign by scaling back the public benefit, and can be used to either reduce marginal tax rates on high-income households or increase social support for low-income households (Shepard et al., 2020).

Universal higher education is a related topic that is already in effect in many European countries and was recently espoused by several 2020 presidential candidates. Value-based insurance design and premium support plans are two other schemes proposed in the United States similar to the top-up design.

### ***Medicare for All Proposals***

- 1) What payment rates the public plan would offer to providers
- 2) What network restrictions would be included
- 3) How those features would affect competition between the private and public options

### **Medical Tourism**

Cortez (2008) discusses medical tourism as people are exploring opportunities to reduce spending by using foreign healthcare providers. Some of the common surgeries that people use medical tourism for include: heart surgeries, joint replacements, and fertility treatments. On the supply side, several developing countries have dramatically improved the quality of care they can offer, and the Internet also allows for easy research and bookings.

The chief concern from the United States' perspective should be whether outsourcing expensive surgeries will deprive U.S. hospitals of revenue they might use to cross-subsidize care for the poor. Similarly, in developing nations the campaign to attract foreign patients might divert resources from public hospitals that treat local citizens to private hospitals that cater to foreign clientele, though they could use revenues from foreign patients to cross-subsidize public health care for local citizens.

Healthcare has been traditionally local due to geographic, economic, and cultural barriers. Today, there are thriving international markets for healthcare professionals, telemedicine, medical technology, and drugs. In 2005, over 55,000 Americans visited Bumrungrad Hospital in Bangkok for medical care, per Time Magazine.

### ***Demand Side, Why Patients Travel for Medical Services***

- 1) Because they do not have access to a particular treatment, whether because their government has judged that it is immoral or too experimental
- 2) Because of domestic limitations in technology, training, or infrastructure
- 3) Because of long waiting lists
- 4) Cannot afford a particular procedure in their own country

### ***Risks of Traveling***

- 1) Domestic regulators cannot control the quality of foreign medical care
- 2) Poor countries may be tempted to provide treatments that are illegal or highly experimental in most countries
- 3) Developing countries may not adequately protect foreign patients from medical malpractice

### ***Two Significant U.S. Populations***

- 1) Employed persons that are uninsured
- 2) The underinsured

### ***Policy Responses to Medical Tourism***

- 1) Regulating travel, referral networks, and insurers
  - 2) Providing agency oversight
- 
- A) Build on existing consumer protection laws
  - B) Expand licensing systems
  - C) Recalibrate existing schemes that may unfairly allocate the risks and benefits
- 
- 1) Harmonize insurance standards
  - 2) Harmonize quality standards
  - 3) Harmonize physician licensing
  - 4) Harmonize hospital accreditation



### ***U.S. Healthcare Industry Outsourcing***

- 1) Insurance claims processing
- 2) Medical reporting
- 3) Clinical trials
- 4) Diagnostic test interpretations

### ***Why Do Patients Travel Abroad for Medical Care?***

- 1) Access to medical procedures
- 2) Cost discrepancies, they cannot afford it in their home country

### **Access to Medical Procedures**

- 1) Local laws may prohibit a medical procedure as immoral or unethical, which occurs most often with reproductive medicine
- 2) Certain treatments may not be available when they have not been approved by regulators
- 3) Even in the absence of restrictive laws or regulations, non-governmental actors may ban certain medical procedures not as a matter of law, but as a matter of fact. Physicians, hospitals, and particularly insurers can decide to make a procedure unavailable. In countries, that do not legislate reproductive treatments, “each doctor and clinic decides autonomously whether to provide a certain type of treatment and whether to offer a service to a certain type of patient.”
- 4) Certain procedures may be unavailable in certain countries that lack the requisite medical technology, expertise, or infrastructure
- 5) Foreign doctors provide an outlet to patients in countries with socialized medicine that may have to wait several months for certain medical treatments

### **Cost Discrepancies**

Americans can find less expensive medical care abroad. Inpatient knee surgery costs over \$10,000 on average in the United States, though only costs \$1,500 at the top hospitals in Hungary and India. Similarly, a coronary artery bypass graft costs over \$35,000 in the United States, but less than \$9,000 (including travel expenses) at the top hospitals in India and Thailand (Mattoo and Rathindran, 2005). The World Health Organization found that the cost of medical treatment in developing countries such as India can be 3-10% of the cost in the United States (Chanda, 2001).

Medical malpractice accounts for only around 2% of total health industry costs in the United States (\$265,103), with costs higher in Canada (\$309,417) and the United Kingdom (\$411,171) (Anderson et al., 2005). Labor costs may be an explanation for why medical costs are higher in the United States, as the U.S. pays its doctors more than any other Organization for Economic Cooperation and Development nation (Reinhardt et al., 2002). According to the U.S. Centers for Medicare and Medicaid Services (CMS), the primary U.S. agency responsible for healthcare financing, nearly 70% of inpatient hospital costs are labor related. So the United States has larger service costs and labor costs than other countries, likely pointing to the reasons for their more expensive medical system.

### ***Recent Trends that Facilitate Medical Tourism***

- 1) Improved quality of care in developing countries
- 2) Internet communication and signaling
- 3) Privatization of health care sectors abroad
- 4) Globalization of related industries in health care

### **Improved Quality of Care in Developing Countries**

- 1) Medical professionals; Medical professionals in developing countries increasingly meet Western standards, and many medical schools abroad are taught in English. Over one-quarter of all interns, residents, and fellows in the United States graduated from foreign medical schools, and many of these graduates become board certified in the United States before returning home. Bumrungrad Hospital in Thailand boasts over 200 physicians that were once board certified in the United States
- 2) Facilities; Hospitals in developing countries increasingly meet U.S. standards. As international standards emerge for healthcare quality, accreditation, and education, medical tourism will increase. The International Society for Quality in Health Care created a program to align health care standards and accreditation processes internationally. Medical education is being standardized by the World Federation for Medical Education and the Institute for International Medical Education.
- 3) Technology; Many developing countries have improved the medical technology they offer, including procedures and technologies that have yet to be approved by the FDA. Select hospitals overseas can offer comparably advanced medical technologies.

### **Internet Communication and Signaling**

Searching for health information is the most popular use of the Internet aside from using e-mail and searching for consumer products and services.

### ***Advertisements by Overseas Sites***

- 1) Treatments they use
- 2) Success rates
- 3) Technologies they use
- 4) Number of physicians they employ that were trained or board certified in Western countries
- 5) Ratio of registered nurses to each foreign patient

### **Privatization of Health Care Sectors Abroad**

#### ***Ways Developing Countries Limit FDI in the Health Sector***

- 1) Capping foreign equity investments
- 2) Imposing discriminatory taxes
- 3) Enforcing restrictive competition policies
- 4) Requiring burdensome economic need tests and other clearances

## **Premium Risk**

Kifmann (2005) discusses how public health insurance systems which combine redistribution from the rich to the poor and from the healthy to the sick can be in the interest of the poor and the rich from a constitutional perspective, with necessary conditions being that insurance markets are incomplete and that income inequality is neither too low nor too high. Separating these two dimensions of redistribution would mean that income redistribution could be delegated to the tax system while health insurance could be financed by a flat fee.

Kifmann (2005) shows that in the absence of markets to insure premium risk, a public health insurance system with contributions linked to income may be preferred by everyone to a pure market system and a public health insurance system financed by flat fees. At the constitutional stage, even the rich may be in favor of such a system, as it insures premium risk due to yielding a positive level of public health insurance in a majority voting equilibrium. A system with limited income redistribution may receive public support and be more likely to be backed by the rich, and can cope better with moral hazard.

Breyer and Haufler (2000) find that shifting income redistribution to the tax system can create efficiency gains, though public health insurance systems should not be financed by contributions linked to income, rather they should be financed by the flat fee for health insurance.

Premium risk for individuals exists because premiums are uncertain and since the price of health insurance depends on the risk type (Kifmann, 2005). Two contracts exist in which the individual obtains a first-best risk allocation to insure for the premium risk. The first-best effort level maximizes the agent's payoff, and the fixed payment can be chosen such that in equilibrium the agent's expected payoff equals his or her reservation utility (which is what the agent would get if no contract was written). First, Cochrane (1995) discusses the premium insurance, in which the contract pays out an indemnity if the individual becomes a high risk, which covers the higher health insurance premium. An indemnity is security or protection against a loss or other financial burden. Second, Pauly et al. (1995) discuss the topic of guaranteed renewable contracts to insure premium risk, which are long-run health insurance contracts which include a premium guarantee.

In a guaranteed renewable contract, to avoid that low risk types opt out of the health insurance contract, the guaranteed premiums correspond to the premiums of a new health insurance contract for low risks. This leads to ex post losses, which are covered by a prepayment. Since no individual has an incentive to switch to another insurer after his risk type has been revealed, all individuals pay the same premium regardless of their risk type and premium risk is perfectly insured (Kifmann, 2005).

Premium insurance requires that the risk type can be specified in a contract whereas guaranteed renewable contracts must specify the optimal amount of health insurance. Drafting such guaranteed renewable contracts may be difficult, which opens the possibility of ex post opportunism on the part of the insurer. Under premium insurance, the insurer may claim that the person is a low risk type even though he is in fact a high risk type. Under guaranteed renewable

contracts, the insurer may provide a lower amount of health insurance than optimal. For this reason, individuals may therefore prefer not to buy such contracts if contracts are incomplete (Kifmann, 2005).

Kifmann (2005) makes two assumptions about the obtainment of a constitution for health insurance. One, incomplete contracts, premium risk cannot be insured in the market. Two, majority rule, if a public health insurance system is agreed upon in the constitution, then the amount of public health insurance will be determined by majority rule.

An alternative way to insure premium risk besides premium insurance or guaranteed renewable contracts, is a public health insurance system which does not discriminate according to risk-type. Individuals would draft a constitution that specifies a public health insurance system, and this constitution would ideally establish an income-contingent health insurance level, and the system would be financed by contributions linked to income, also known as income-dependent social insurance (Pauly, 1994). An issue arises if contracts are incomplete, in which a constitution faces the same problem as private insurance contracts. Only words such as “adequate” or “cost-effective” can be used to describe health insurance in a constitution, which leaves ample room for interpretation. It will also be difficult to specify how benefits are to differ according to income in a constitution for health insurance. To this end, a constitution will need to guarantee uniform benefits for everyone and can only specify the rules that determine the amount of health insurance provided by the public system. Furthermore, in the regimes with a public system, all individuals obtain the same amount of public health insurance and can top up their public health insurance by supplementary health insurance (Kifmann, 2005).

Kiffman (2005) notes that a public health system could be attractive to the rich because the rich may want the poor to have sufficient health insurance for altruistic reasons, to avoid the spread of diseases, or to keep the poor sufficiently healthy to be productive.

A key assumption of Kifmann’s analysis is that premium risk cannot be insured in the market, though in the German system it can, through the use of long-term guaranteed renewable contracts which guarantee future premiums independent of changes in the risk types. Similarly, in the United States individuals can obtain health insurance independent of their risk type through their employer, though both these systems face challenges. In Germany, the system is heavily regulated to insure its stability, and individuals lose the prepayments accumulated by their insurer if they switch to another insurer. In the United States, individuals suffer from job lock-in once they have become a high risk or lose their health insurance if they change their job. Therefore, the assumption that premium risk cannot be insured is verified by the analysis (Kiffman, 2005).

The insurance system in Switzerland which is financed by a flat fee would seem to be at odds with Kifmann’s analysis, though Switzerland is not a pure flat fee system. In Switzerland, it is similar to limited income redistribution regime in which the effective contribution rate for the public health insurance system is between 7 and 10% unless income is so high that the corresponding transfer would exceed the flat fee. In Switzerland, if the flat fee exceeds a certain

percentage of household income, between 7 and 10% depending on the canton, then the household receives a transfer financed out of tax revenue which covers the extra premium expenditure (Kifmann, 2005).

In the case of moral hazard, too much income redistribution may not receive sufficient public support, as when a majority opposes more income redistribution, which leads to more public health insurance and therefore more moral hazard (Kifmann, 2005).

### **Consumer-Directed Healthcare and Cost Sharing**

Wouters and McKee (2017) write that two options moving forward as alternatives to private health insurance are consumer-directed health care and cost sharing. Consumer-directed health care instills responsibility in patients for their own health spending and incentivizes them to use health care efficiently (Antos et al., 2012). Medical savings accounts, or health savings accounts, which are earmarked funds that patients can withdraw from to pay for health care, are the primary form of consumer-directed health care. Medical savings accounts are only used in China, Singapore, South Africa, and the US, and evidence suggests that medical savings accounts are inequitable, do not provide adequate financial protection, fail to contain costs, and do not promote efficiency (Wouters et al., 2016).

Cost sharing, or user charges, try to limit moral hazard and generate revenue for the health system (Thomson et al., 2010). Treatments oftentimes not subject to cost sharing include those that are for diseases which are life threatening and for chronic illnesses. Value-based cost sharing only discourages the use of low-value care (Chernew et al., 2007). Examples of value-based cost sharing include an insurer exempting preventative services such as immunizations from cost sharing, charging higher co-pays for patients who buy branded medicines when cheaper generics are available, or rewarding patients who participate in health-promoting activities (Thomson et al., 2013b).

Challenges that developing countries face when considering cost sharing include: extreme poverty, chronically underfunded health systems, and weak taxation mechanisms. Introducing or increasing user fees leads to lower use of preventive and curative services, and removing or decreasing user fees leads to greater use (Lagarde and Palmer, 2011).

#### **Wouters' Conditions for Consumer-Directed Health Care and Cost Sharing**

- 1) Patients must have access to information about the price and quality of health care to make informed decisions, which is often difficult or impossible.
- 2) Patients must be able to distinguish between low and high-value health care.
- 3) Complementary supply-side policies are needed to contain costs.
- 4) A national culture of individualism, personal responsibility, and saving must exist.
- 5) A high-income per capita is required to sustain medical savings accounts.

## **Africa, Health Worker Resources**

Cerf (2021) discusses health workers in Africa and what can be done to improve their lot. Africa has a major health worker shortage, limited infrastructure, is under-resourced financially and has the highest burden of disease. To provide decent healthcare to patients, optimal resourcing of motivated health workers is a top priority. Africa has the most health emergencies with >100 outbreaks and other health emergencies annually, which translates into high morbidity, mortality, disability, and socioeconomic disruptions including the weakening of already fragile health systems (Ota et al., 2018). SDG 3 recommends a threshold of 4.45 doctors, nurses, and midwives per 1000 population. The WHO estimated in 2006 that the sub-Saharan Africa region had 11% of the population, 24% of the overall disease burden with a staggering 67% of the global HIV burden, and only 3% of the global health workforce.

Health worker shortages are worsened by their global imbalance and distribution, with most health workers employed in more affluent countries, in urban areas, with a reduced clinical load and more homogenous disease mix. The health worker shortages exacerbate the inequities in health services access, which contributes to an increase in preventable illness, disability, and death, and further pressures public health, economic growth and development.

### ***Key Elements for Optimal Resourcing of the Limited Health Workforce***

- 1) Motivating health workers
  - 2) Identifying the right skills and training
  - 3) Configuring teams
  - 4) Effectively leveraging nurses and midwives for health service delivery
- A) Sufficient health worker resourcing
  - B) Adequate financial resources
  - C) Adequate healthcare infrastructure

### ***Key Health Resource Capacity Levers***

- 1) Adequate numbers of suitable skilled health workers
- 2) Sufficient financial resources for health service delivery
- 3) The constant flow of reliable and timely health information to inform decisions
- 4) Robust infrastructure such as well equipped health facilities

### ***Issues in Africa***

- 1) High HIV burden
- 2) Increasing prevalence of non-communicable diseases
- 3) Health worker shortages

## **Senegal's Universal Health Coverage Scheme**

Daff et al. (2020) discusses Senegal's transition to a universal health coverage scheme. In the World Health Organization, target 3.8 of the sustainable development goal 3 is to achieve universal health coverage (UHC), including financial risk protection, access to quality essential

health-care services and access to safe, effective, quality and affordable essential medicines and vaccines for all.

### **Goals of the Senegal Universal Health Coverage Scheme**

- 1) Develop basic health financial protection through a community-based health insurance scheme.
- 2) Reform the compulsory health insurance for formal sector employees.
- 3) Strengthen and rationalize the free health-care initiatives.

### **2018 3 Types of Financial Protection Schemes in Senegal**

- 1) Schemes for formal sector employees
- 2) Free health-care initiatives
- 3) Health insurance scheme in which community-based health insurance was chosen as the major approach to reach informal sector and rural areas

The community-based organizations are nonprofit and operated by part-time community volunteers. Volunteers' tasks include registration of beneficiaries, awareness raising activities about the scheme, reviewing invoices and reimburse health posts, health centers and private pharmacies for services used by members. The organizations are grouped into departmental unions and these unions oversee the financial coverage for services offered in referral-based hospitals at departmental, regional and national levels. It is community-based health insurance because it is managed by nonprofit community organizations and its enrollment is voluntary.

### **Strategic Reforms in Senegal**

- 1) Several institutional reorganizations of the existing financial protection systems, such as raising risk pooling from community to departmental level and integrating the free health-care initiatives into the community-based scheme
- 2) Development and implementation of an integrated management information system for more efficient and effective operations of the community-based organizations, as well as monitoring and evaluation of progress towards universal health coverage

### **Institutional Changes, Raising the Risk Pool**

The community-based scheme is limited due to the limited ability for risk pooling, because a large part of the insurance premiums remains to be pooled at the community level. Due to limited budgets to manage insurance, each organization moves some of their tasks to the departmental level, such as review of invoices. To ensure sustained community engagement, other functions, such as registration of beneficiaries and awareness campaigns, remain at the community level. Transferring the risk pooling and part of the management tasks from the community to department level is necessary for the sustainability of the community-based health insurance scheme.

*Due to the larger risk pooling, the departmental health insurance units are more financially viable to facilitate major interventions in the management and operation of the insurance scheme, for several reasons.*

- 1) The units have paid employees, such as director, accounting manager, clinical advisor, administrative assistant, and 4 staff members to collect premium contributions from the beneficiaries
- 2) To increase engagement by local governments, the board of directors includes representatives from the local authority
- 3) The units use a special village membership enrollment approach, in which a volunteer is designated by each community to calculate the amount to be collected
- 4) The units apply a discount on the insurance premium for group enrollment

Further, a directorate will be set up within each departmental union across the country which will control and manage the operation of the insurance scheme, including invoice review, reimbursement to health facilities, and monitoring of community-based organizations.

### ***Institutional Changes, Integration of the Initiatives***

- 1) Free health-care initiatives
- 2) Community-based organizations
- 3) Departmental unions

Integration of the initiatives is necessary because the free health-care initiatives are having issues with financial sustainability and efficient use of resources. In the new scheme, most of the services under the free health-care initiatives will only be offered free of charge to eligible people if they are also enrolled in the community-based insurance scheme.

### ***Aims of Integration of the National Agency***

- 1) Defragmentation of health service purchasing mechanisms
- 2) Unification of financial flows and pooling resources
- 3) Increased coverage of the community-based health insurance scheme
- 4) Improved relations between health service providers and community-based organizations as well as departmental unions
- 5) Improved identification of the targeted beneficiaries for awareness campaigns and collection of fees and premium contributions

Additionally, since the benefit package of the community-based health insurance scheme is generally larger than that of the free health-care initiatives, the new scheme will entail a package that is more complete and attractive than the previous package.

### ***Integrated Information System***

- 1) Biometric identification and management of beneficiaries
- 2) A money processing center for collection of premiums and other funding
- 3) A data warehouse
- 4) Registration and monitoring of the beneficiaries
- 5) Information management for payments and bills
- 6) Information management for insurance operation
- 7) A mobile phone application for beneficiaries



The money processing center offers a savings account where the users can save money for their insurance premium. Registration and monitoring of the beneficiaries is fully synchronized with a module which allows for managing information relating to the insurance operation, including beneficiaries list, health services used, subsidy from the government and accounting of community-based organizations.

### ***Improvements Still Needed***

- 1) Increasing the risk pool using a mandatory scheme
- 2) Reducing fragmentation of schemes
- 3) Strengthening governance and securing funds to achieve and sustain universal health coverage

Increasing the risk pool using a mandatory scheme will reduce adverse selection by eliminating households from purposefully selecting their household members to be insured and paying the insurance premiums for them only. Reducing fragmentation of schemes in the health financing system will be accomplished by transferring risk pooling from community level to departmental level. Furthermore, risk could be pooled at a higher, national level at a future date, achieving a more efficient and equitable system. The urban-rural disparity is also a concern in the sustainability of the system, as is inadequate access to smartphones and/or internet in rural areas. There is also importance in community engagement and ownership in running an insurance scheme, including more community representatives on the board of the departmental unions. To sustain full premium subsidy, the government needs to raise more general revenue and increase the budget for universal health coverage.

## **Kenya's Universal Health Coverage**

Mbindyo et al. (2020) legal and institutional foundations for universal health coverage in Kenya. They define the function of a constitution as acting as a platform to advance health rights and to restructure policy, legal, institutional and regulatory frameworks towards reversing chronic gaps and improving health outcomes. Furthermore, the constitution of a country is its supreme law, which underpins all other laws as well as citizens' pursuit of peace, justice and human development. The United Nations high-level declaration on universal health coverage (UHC) includes a commitment to strengthen legislative and regulatory frameworks for UHC.

The constitutional right to health is associated with better health outcomes, and a significant association has been found between a right to health in a national constitution and reductions in infant and under-five mortality rates (Matsuura, 2013). WHO has observed that most public health challenges have a legal component and that the concept of public health law "includes the legal powers that are necessary for the state to discharge its obligations to realize the right to health for all members of the population. Further, the law can translate vision into action on sustainable development, strengthen the governance of national and global health institutions and implement fair evidence-based health interventions. The law can also be an effective tool to harmonize the mandates of public agencies, clarify functions and promote multiagency

cooperation; to designate the responsible agency to resolve a particular issue; and to create new entities to coordinate activities across multiple agencies.

WHO highlights three critical elements to assess country contexts on whether UHC law reform is feasible: (i) whether there is acceptance of (or opposition to) the proposed reform; (ii) whether there is authority to proceed (especially authority from political decision-makers); and (iii) whether the country has the ability to complete the work (the capacity to make, implement and administer laws). WHO's six key components of a well-functioning health system are: (i) leadership and governance; (ii) service delivery; (iii) health system financing; (iv) health workforce; (v) medical products, vaccines and technologies; and (vi) health information systems.

WHO describes a health system as a set of interconnected parts that have to function together to be effective, consisting of all the organizations, institutions, resources and people whose primary purpose is to improve health. The WHO framework for health-systems performance assessment identifies four basic health-system functions through which health investments flow: (i) stewardship; (ii) resource generation; (iii) service provision; and (iv) financing. A well performing health system strives to attain three intrinsic goals or outcomes: health, responsiveness and fair financial contribution. Travis et al. (2003) defines stewardship as usually the most neglected function within health systems, yet it “anchors health to the wider society, comprising three broad tasks: providing vision and direction, collecting and using intelligence, and exerting influence through regulation and other means.”

Kenya devolved health functions, including: the national government is assigned health policy, national referral services and capacity-building for counties; county governments are assigned person-based and public health services within their jurisdictions. Mbindyo et al. (2020) develops the adapted health-system framework, which enables a structured, all-inclusive framing of health functions, and promotes uniform and coherent analysis to identify structural gaps across the health system. Kenya has established seven distinct regulatory components at varying stages of transformation. Two new regulators have been formed (concerning health professionals and health research); two new regulators are mandated to be formed (for drugs and devices, and health-care institutions); three initiatives are in progress (concerning public health, financing arrangements and business relationships). Two regulatory areas remain fragmented, however, public health and health-care professionals.

### **Ethiopia Client Satisfaction Surveys**

Hailie et al. (2021) developed client satisfaction surveys to gauge patient satisfaction of the community-based health insurance system in Ethiopia. Usually voluntary, community-based health insurance systems are characterized by community members pooling funds and protecting themselves against the high costs of seeking medical care and treatment for illness (Hailie et al., 2021). Over the last 20 years, community-based health insurance has rapidly grown as a health financing tool in low and middle-income countries, as it has become one of the key risk-protection schemes available and is expected to play a great role in helping the country move towards universal health coverage (Ahmad, 2019).

In Ethiopia the benefits package for community-based health insurance includes all family health services and curative care that are part of the essential health package which excludes dental implantation and optics services. The client's satisfaction is determined by service quality, clients' expectations, subjective disconfirmation, and emotions experienced during service delivery (Hailie et al., 2021). Client satisfaction studies also allow service users' voices to be heard and confirm their experience for improved healthcare planning. Reasons for dissatisfaction include drug stock out, lengthy waiting time, lack of courtesy on the part of the staff assigned in the facilities, and inadequate availability of diagnostic services. A major challenge to community-based health insurance members is when they have to pay out-of-pocket services such as drugs and diagnostics in non-contracted health facilities.

### **Ethiopia, Voluntary Community-Based Health Insurance**

Lavers (2021) discusses how states use different tactics to achieve health insurance enrollment, either through voluntary schemes or mandatory state-sponsored schemes, and whether state infrastructural power can explain variations in health insurance enrollment. In using insurance as a means to achieve universal health coverage, high enrollment is a key factor to consider. For voluntary schemes this entails mass awareness and promotional activity, though as schemes move to compulsory enrollment, monitoring and enforcement are required. With low enrollment and poor management, community-based health insurance makes little contribution to universal health coverage.

Lavers defines Universal Health Coverage as being a situation in which 'all individuals and communities receive the health services they need without suffering financial hardship when paying for them.' Funding informal sector coverage through general taxation is more feasible, as insurance schemes often exclude large numbers in the informal sector because people struggle to pay premiums due to the huge task of enrolling and collecting premiums from nonindigent farmers and informal sector workers (Lavers, 2021).

The Ethiopian government's goal is to achieve 90% enrollment in the informal sector through state-administered schemes, including community-based health insurance. The community-based health insurance scheme in Ethiopia includes outpatient treatment, surgery and prescriptions, as long as patients follow the referral system. The 2015 Health Sector Transformation Plan (HSTP) aimed to establish CBHI in 80 percent of wereda and achieve 80 percent coverage by 2020 (MoH, 2015). In 2017, CBHI was operational in 384 of Ethiopia's 800 wereda, with 11 million people enrolled out of a population of more than 100 million and expanding rapidly.

Large numbers of people are needed to enroll to make a voluntary health insurance scheme viable, and two measures stand out:

- 1) Enrollment as a percentage of the eligible population
- 2) Indigent members as a percentage of those enrolled

State infrastructural power, or the state's capacity and reach, determines mass enrollment and the enforcement of health insurance mandates. The state's ability to mobilize its population

varies internally on historical factors, recent political dynamics, and gender norms. Consequently, the pursuit of Universal Health Coverage through insurance depends on state infrastructural power, and today's welfare states oftentimes do not have this capacity to raise enrollment based on the power of the state to mobilize its population.

The first countries to cover broad sections of their population through health insurance gradually moved from voluntary to compulsory enrollment, with coverage extension taking place over decades, alongside economic transformation, which eased the challenge of enrolling the informal sector. Thus, without economic advancement, the experience of the world states shows that it is difficult for a state to enroll enough people in the informal sector to sustain a voluntary health insurance program. Phased expansion depended on structural transformation of the economy and formalization of employment, which has not happened with developing countries at the same speed as richer nations. Instead, formal sector schemes created vested interests, resisting subsequent expansion and pooling with less well-off groups (Kutzin, 2012).

In many African countries, such as Ethiopia, health insurance often entails compulsory insurance for a small formal sector, with informal sector coverage limited to voluntary community-based health insurance. China's New Rural Cooperative Medical System stands out with 97% coverage of the rural population by 2011, achieved through massive outreach campaigns, making China the exception to the rule that no country has attained universal population coverage by relying mainly on voluntary contributions (Yu, 2015).

Rwanda has the Mutuelle de Santé, which is a state-managed and compulsory scheme, with a 2006 law requiring all Rwandans to enroll in health insurance resulted in 90 percent coverage by the late 2000s (Chemouni, 2018). The Rwandan health insurance law also prescribes fines for failure to enroll, with reports of arrests and denial of service for those that refuse. What China and Rwanda share is the enormous capacity of the state to mobilize the population, and are examples for why compulsory health insurance can be applied to the informal sector. In Ghana, enrollment has stagnated at around 30-40%.

Factors that influence enrollment in voluntary health insurance include political influences, willingness to pay, income levels and access to health facilities. Universal enrollment will ultimately rely on the state's ability to enforce compliance, not just acceptance of state policies and rules regarding health insurance enrollment as legitimate. This enforcement capacity will depend on the existence of a dispersed network of officials reaching across national territory who can mobilize people, raise awareness and enforce laws. A factor shaping enrollment is the availability and quality of health services, with access to high quality services likely to provide an incentive to enroll.

Mann (1986) defines despotic power as the ability of the state to make decisions independent of civil society, and infrastructural power as the ability to actually implement those decisions across national territory.

### ***Three Aspects of Infrastructural Power***

- 1) Staff availability and competence; The availability and training of state officials on which implementation must rest. With respect to health insurance, greater availability of better-trained staff is likely to lead to increased enrollment due to improved scheme administration and time allocation to promotional activities.
- 2) State-society relations; Infrastructural power highlights the importance of state-society relations. Where legitimacy is limited, the state may still be able to implement its plans through threats of punishment or outright coercion, if it possesses the necessary power over society. When a state lacks enforcement capacity, enrollment will be voluntary and relatively low. Societies and state mobilization capacity are differentiated by gender, class, ethnicity, and religion.
- 3) Intra-state relations; Infrastructural power concerns relations between state agencies. To achieve its objectives, the central state must influence lower level officials, through performance evaluations, discursive narratives or coercion.

### ***Problems Developing Countries Face with Voluntary Insurance Schemes***

- 1) Health services are frequently inconsistent, reducing the incentive to enroll
- 2) A large proportion of the population work in the informal sector, without clear mechanisms for collecting premiums and enforcing enrollment

## **Ethiopia, Primary Health Care Contributions to Universal Health Coverage**

Assefa et al. (2020) discusses primary health care in Ethiopia and its correlation to achieving universal health coverage. Ethiopia has been implementing the primary health care approach since the mid-1970s, with primary health care at the core of the health system since 1993. In Ethiopia, there has been a diagonal approach to disease control programs along with health systems strengthening, community empowerment and multisectoral action. Key challenges remaining to be addressed include inadequate coverage of services, inequity of access, slow health-systems transition to provide services for noncommunicable diseases, inadequate quality of care, and high out-of-pocket expenditures. The country needs to improve its domestic financing for health and target disadvantaged locations and populations through a precision public health approach.

Over the course of the past 40 years, primary health care has been shown to increase access to services, improve service coverage and quality in the most efficient and equitable way, and contribute to financial protection for individuals and households (Hone et al., 2018).

### ***3 Pillars of Primary Health Care***

- 1) Universal access to quality health services (supported by essential public health functions) and equity of access to health care
- 2) Empowered people and communities
- 3) Multisectoral policy and action for health

### ***Ethiopian Health System***

- 1) Primary hospitals; Primary hospitals provide promotive, preventive, curative and rehabilitative outpatient care, basic emergency surgical procedures, and comprehensive emergency obstetric care, with a minimum capacity of 35 beds.
- 2) Health centers; Health centers provide promotive, preventive, curative and rehabilitative outpatient care, and inpatient care with the capacity of 10 beds for emergency and delivery services.
- 3) Health posts; Health posts provide essential promotive and preventive services and limited curative services.

#### ***5 Pillars of Ethiopia's Health Policy***

- 1) Democratization and decentralization of the health system
- 2) Preventive and promotive health services
- 3) Access to health care for all the population
- 4) Intersectoral collaboration
- 5) Enhancing national self-reliance by mobilizing and efficiently utilizing resources for health
- 6) Broader issues such as population, food, living conditions and other essentials of life for better health

#### ***Ethiopian Transformation Plan***

- 1) Quality and equity of health care
- 2) District transformation
- 3) Compassionate, respectful and caring health professionals
- 4) Information revolution

#### ***Improvements in Ethiopia Health Care System***

- 1) Improvements in maternal and child health
- 2) Prevention and control of communicable diseases
- 3) Hygiene and sanitation
- 4) Knowledge and health care seeking
- 5) Community engagement

#### ***Challenges Faced by Ethiopia's Health Care System***

- 1) Resource gaps (medical equipment and drugs)
- 2) Limited supportive supervision
- 3) Absence of a well-established referral system
- 4) High turnover of health extension workers
- 5) Absence of a clear career structure for health extension workers
- 6) Unattractive salary scale

### **Tanzania, Community-Based Health Insurance**

Kagaigai et al. (2021) discuss voluntary non-profit insurance schemes, also known as community-based health insurance schemes, in rural populations and the informal sector in Tanzania. The most important factors determined by their methods for insurance enrollment

status were: quality of healthcare services, preferences (social beliefs), and accessibility to insurance scheme administration (convenience). Age and income as socio-demographic characteristics were also statistically significant. Other names for community-based health insurance are: community health insurance, micro health insurance, community health funds (CHF), and mutual health organizations (Kagaigai et al., 2021).

The World Health Organization states that at least half the world's population living in low- and middle-income countries lack access to essential health services, with out-of-pocket health expenditures in these countries contributing to more than 40% of the total health budget, and more than 800 million people spend more than 10% of their household budget on healthcare (World Health Organization, 2019a). In the World Health Organization, target 3.8 of the sustainable development goal 3 is to achieve universal health coverage (UHC), including financial risk protection, access to quality essential health-care services and access to safe, effective, quality and affordable essential medicines and vaccines for all.

In Tanzania, the program is known as the Community Health Fund (CHF), and is one of two main public insurance schemes, along with the National Health Insurance Fund (NHIF). CHF is a voluntary prepayment scheme that primarily provides access to primary care services. A total of 6-8 family members were covered under CHF and could receive the primary health services up to the district level from public health facilities only. The percentage of rural residents and people working in the informal sector in Tanzania is around 70%, which are people eligible for the CHF scheme.

#### ***Reasons for Low Enrollment in Tanzania CHF***

- 1) Unaffordable premiums
- 2) Poor quality of services
- 3) Poor scheme management
- 4) Lack of trust

The improved Community Health Fund, iCHF, offers a flat annual premium of about 15 USD, and offers additional services such as x-rays, ultrasounds, and in-patient services (including major surgery) from both hospital levels (District and Regional). iCHF also simplified the enrollment process by using a mobile application, an insurance management information system, though excluded the following services: CT-scan, HIV services, screening for cancer, and other non-communicable diseases. In other studies analyzing the impact of household perceptions in association with insurance schemes in low- and middle-income countries, in Ghana scheme factors such as price, benefits, and convenience were the most important, and in India “lack of awareness about the need for insurance” and “low and irregular income” were the most important barriers to enrollment.

#### **Ghana, Lessons from Self-Undermining Feedbacks on User Fees**

Wireko et al. (2020) discusses the evolution of healthcare financing in Ghana, and the shift in healthcare financing from full cost recovery, known as cash-and-carry, to a nation-wide public health insurance policy called the National Health Insurance Scheme (NHIS). The article shows

how self-undermining policy feedback effects from the existing health policy constrained the menu of options available to reformers, while simultaneously opening a window of opportunity for transformative policy change, and shows how the interaction between policy feedbacks and other factors such as ideas and electoral pressures can bring about path-departing policy change.

### ***Self-Undermining Feedbacks Caused by Cash-and-Carry***

- 1) Costly and unaffordable healthcare services
- 2) Reduced healthcare access
- 3) Institutional corruption
- 4) Negligible user fee exemptions for the poor and marginalized
- 5) Overt abuse of these vulnerable populations in healthcare facilities

In addition to these self-undermining feedbacks creating a window for policy change, they also generated an alternative feedback effect from below, such as in Community-Based Health Insurance Schemes (CBHIS), which were health-financing arrangements organized by the local communities. The National Health Insurance Scheme (NHIS) was created in 2003.

### ***Ghana Health Insurance History***

After independence in 1957, the National Health Service (NHS) system was introduced in Ghana, which was a single-payer model financed through tax revenue, in which healthcare was provided free of charge at the point of use to everybody, including foreigners residing in the country. As the country's economic resources plummeted in the 1970s and 1980s, they introduced individual cost bearing responsibility and healthcare user fees payable at the point of service use, referred to as the cash-and-carry healthcare financing policy. User fee exemptions were introduced to cater to the poor and marginalized, who would be unable to afford the standard user fees.

### ***Services Provided by Cash-and-Carry***

- 1) Outpatient consultations
- 2) Drugs and pharmaceuticals
- 3) Laboratory, X-ray, and other examinations
- 4) Medical, dental and surgical services
- 5) Hospital catering and accommodations

User fees could either be deposited to the national treasury or retained by the health facilities to pay to ensure they had readily accessible income for service delivery improvements. User fees were necessary because government subventions to the health sector had declined significantly. If the government could not pay for those services, then the health facilities should be able to charge user fees to ensure high quality healthcare delivery. The cash-and-carry system was able to help hold the drug revolving fund, and they had enough money in the bank that the health facilities were not dependent on the government to give them money to order drugs from abroad.



An issue arose in Ghana, however, as it is a country with high levels of poverty, and that was unsustainable with the cash-and-carry policy, as the policy actually reduced the citizenry's access to healthcare, and the user fee exemptions never worked out. Between 1985 and 1989, a trend that developed is that Ghanaian citizens went from going to the hospital once per year to once every three years.

### ***Problems with Implementation of User Fee Exemptions in Ghana***

- 1) The implementation guidelines neither specified exactly what should be exempted for each category nor identified who would pay for those exemptions if they were given; no service is free, someone has to pay for it, the money has to come from somewhere
- 2) The problem of identification; because professionals who could properly identify the potential exempts were not incorporated in the implementation process, providers were generally helpless at implementing the exemption scheme

After 1992, the situation deteriorated, as health facilities were instructed to retain all their user fees, which meant that providers became so concerned about recovering their capital that even if you were on the exemption list they did not exempt you. 'Fees of varying shades of legality' were also introduced across the healthcare system, as facilities were granted permission to determine their own fees, such as >70% of all institutions at all levels charged for gauze, gloves, needles, and syringes, although fees for such services were supposed to be waived for patients. Indigents were also not supposed to pay for services, though fee collection efforts were insistent upon them.

### ***Multiple Fee Types, Three Main Types of Extra User Fees***

- 1) The cash-and-carry program for drugs
- 2) Locally authorized charges instituted by the various health facilities on their own
- 3) Illegal or unauthorized charges made by staff of the facilities for various services; included commissions for selling drugs and other consumables, and commissions for the disposal of placentas, among other things

After the introduction of the multiple fee types, most service providers charged *de facto* fees that went beyond those stipulated by the *de jure* user fees policy, which were already unaffordable. 11.0% of households in Ghana spent over 5% of their total household expenditure on health care out-of-pocket (user fees). 10.7% of Ghana households spent more than 10% of their non-food consumption expenditure on out-of-pocket healthcare payments. 2.6% of Ghana households are observed to have spent in excess of 20% of their total household income on health care out-of-pocket expenses.

Even though high user fees were charged by the various health facilities, they were still unable to meet targets of generating 15-20% of their recurrent expenditure through user fees, with reasons including reduction in hospital attendance and malpractice by some staff members and customers. Most facilities could barely raise 10% of their recurrent expenditure through user fees. Some of the problems with staff include staff members pocketing fees from patients' consultation cards before they were able to see their doctors, and health administrators

under-invoicing and under-issuing receipts; for example, if you pay \$14,000, you were given a receipt for \$8,000. Also, patients who needed to bypass the usually long queues in the facilities were asked to make side-payments, monies which were not accounted for by staff. Bribery within the system was increased by having multiple payment points within the facility instead of a one-stop-shop for service payment.

In order to try to force patients to pay their bills, some facilities introduced mitigation strategies, such as detaining patients after recovery and discharge until payments were made. Even in emergencies, when healthcare providers were required to request payment only after service delivery, patients would attempt to abscond without paying their bills. In fact, by the time that those patients had gathered enough money to pay their healthcare bills, the amount requested would have increased by their longer stay at the facility.

In 1995 Ghana established the Social Security and National Insurance Trust (SSNIT), however, only 5% of the population registered with SSNIT and that was mainly the formal sector, which meant that they would be excluding 95% of the population and thus would be a discriminatory health insurance scheme. Around the same time various religious organizations and community associations began exploring alternatives, and instituted CBHIS, community-based health insurance schemes. The Nkoranza CBHIS allowed community members to pool resources together, similar to what was being done in many localities to cater for emergency situations such as a funeral, so that community members would not be financially overburdened when members were admitted in the hospital. One of the political parties noted that the policy of cost recovery at the point of service has proven notoriously callous and inhumane.

#### ***What Feedback from Cash-and-Carry Accomplished***

- 1) Provided windows of opportunity to move health-financing reform to the policy agenda
- 2) Structured the menus of options available to policymakers
- 3) Shaped the electoral politics of the reforms

#### ***Categories of Feedback Effects from Cash-and-Carry***

- 1) Self-reinforcing effects; included the initial improvement in the fiscal position of the health system and the related improvement in the ability of service providers to buy needed tools, equipment and other resources for quality service delivery
- 2) Self-undermining effects; included the costly and unaffordable healthcare services, reduced access to healthcare by the citizenry, corrupt institutions, weak design of exemptions granted to the poor, high prices leading to self-medication and clearly inadequate treatment of patients by public healthcare facilities

Self-reinforcing mechanisms include: the development of supportive coalitions and institutions, the role of adaptive expectations created as societal actors adjust their behavior to current policies, learning, sunk costs and uncertainty effects that are expected to make policy change increasingly costly and unattractive over time.

## **Ghana, Universal Health Coverage**

Aikens et al. (2021) discusses how the Ghana National Health Insurance Scheme (NHIS) needs changes to achieve universal health coverage. In 2003 Ghana introduced the National Health Insurance Scheme to reduce out-of-pocket payments for healthcare, though as of 2021 the NHIS is currently unable to meet its financial obligations. Capitation has been suggested to be adopted by key stakeholders as a provider payment mechanism to minimize the risk of providers' fraud and protection from political interference. Also, rapid releases of specific statutory deductions and taxes for NHIS providers could reduce delays in claims' reimbursement which is one of the main challenges faced by healthcare providers.

It is important to remember the connection between poverty and access to health services that characterizes integrated programs for healthcare across the world. In order to reduce financial barriers to health care to achieve universal health coverage, many countries have developed insurance schemes to reduce the catastrophic effects of out-of-pocket payments.

In the Ghana scheme, membership of the insurance scheme by the informal sector is through premium contributions and periodic renewal, with those exempt from premium payments including persons below 18 or above 70 years age, SSNIT pensioners, pregnant women, or persons deemed indigent. The scheme covers about 95% of common diseases in the country.

### ***Services Covered by Ghana Scheme***

- 1) Outpatient and inpatient services
- 2) Essential drugs
- 3) Inpatient accommodation
- 4) Maternity care including cesarean delivery
- 5) Dental Care, Vision Care
- 6) Emergency care with provision for inclusion of other services in the future

## **South Korea National Health Insurance (NHI)**

Choi and Jung (2019) discusses the role of private health insurance on medical expenditure and unmet medical needs in the South Korean National Health Insurance scheme. The results indicate that indemnity type insurance plans had a large effect on out-of-pocket expenditure, and private health insurance increased out-of-pocket expenditure but failed to decrease unmet medical needs. In South Korea, when NHI coverage is calculated as the ratio of public resources to individual medical expenditure, the resulting rate of 55.1% is far lower than the Organisation for Economic Cooperation and Development's (OECD) average of 73% (Choi and Jung, 2019).

In South Korea, the expansion of the private health insurance market creates the possibility of the over-consumption of medical services, or the possibility of moral hazard for medical consumers who have joined both public health insurance and private health insurance (Lee and Nam, 2013). Studies have reported that private health insurance has a positive impact on outpatient expenditure, but the effect on inpatient expenditure was not consistent (Jeon and Kwon, 2013). Private health insurance is expected to reduce unmet medical needs, as a

supplementary role in coverage and depth, but the Korean National Health Insurance has a high incidence of unmet medical needs (Huh and Lee, 2007). Unmet medical needs is an important issue to identify and improve in terms of policy, because diseases can worsen and complications can arise if a problem is not treated in a timely manner; thus, it is also important to understand the relationship between private health insurance and unmet medical needs (Lee and Kim, 2014).

### **South Korea, Catastrophic Health Expenditures**

Jung and Lee (2021) discuss two measures of calculating the medical cost burden of households, catastrophic health expenditure (CHE) and out-of-pocket expenditures.

#### ***Two Approaches for Estimating Health Insurance Coverage***

- 1) Share of the payment from public sources to the total health expenditure
- 2) Catastrophic health expenditure indicator

The public sources indicator calculates the ratio of public spending to the total health expenditure of the entire population, which has the advantage of providing a macroscopic view of how much of the total healthcare costs are covered by the government (including national health insurance). This measurement is difficult to estimate the medical costs' contribution to the economic burden on people at the individual or household level, as it only considers medical expenses and not individuals' financial burdens. The CHE indicator is calculated as the proportion of out-of-pocket costs to household income.

In selecting 'fairness in financial contribution' as a goal to be achieved in healthcare systems by the World Health Organization, they present the CHE index as a measure to estimate it. This indicator is not only used in macro-level studies on health coverage across many countries but also at the individual and household levels to analyze the causes of high medical expenditures and their impacts in household economies and poverty (Jung and Lee, 2021).

In South Korea, the national health insurance system (NHI) was established in 1999, though 20 years later people in South Korea still pay enormous medical costs because the level of insurance benefits has remained low. From 2005 to 2018, the percentage of public health resources out of the current health expenditure remained between 56.5% and 59.1%, comparatively low to the average of the nations in OECD, 71-73%.

#### ***FMD, Four Major Diseases Program***

- 1) All types of cancer
- 2) Cardiovascular diseases
- 3) Cerebrovascular diseases
- 4) rare/intractable diseases

## **South Korea, Private Health Insurance**

Baek et al. (2021) discusses how private health insurance leads to inequities in universal health coverage due to people from higher socio-economic classes being able to afford it more easily. Even though South Korea has a national health insurance system, many citizens still register for additional private health insurance. Registration rates are higher for individuals with a higher socioeconomic status, and there is a difference in mortality rates between people with private health insurance and those without it.

Public health insurance typically covers approximately 70% of their citizens' total medical costs in OECD countries, with the South Korean situation being similar, in that 20% of all medical costs are borne by the patient in the case of hospitalization, although the costs of medical services that are not covered by the national health insurance (NHI) program, such as new medical technology and new drugs, are borne entirely by the patient (Baek et al., 2021). In South Korea, more than 75% of households have additional private health insurance, which amounts to a collective amount spent of more than KRW 24 trillion per year.

Baek et al. (2021) find that mortality rates for people with private health insurance were lower than for those without private health insurance in South Korea. In South Korea, there is a single public health insurance system, the NHI, and registration is compulsory. In 2017, 97.2% of South Koreans were registered with the NHI, and 2.8% were classified as Medical Aid beneficiaries and had all of their medical benefits covered by the state. Private health insurance in South Korea has both complementary and supplementary characteristics, with the NHI requiring individuals to pay certain premiums, though there are tests and treatments not covered by NHI. In terms of socioeconomic status, in South Korea, 37.4% of households have private health insurance in the bottom 20th percentile for household income, while the rate is 95.2% among households in the top 20th percentile (Baek et al., 2021).

As private health insurance reduces the financial burden of additional tests, treatments, and rehabilitation outside the scope of public health insurance coverage, when patients have additional private health insurance they are likely to become more active in seeking tests and treatments (Baek et al., 2021).

## **Vietnam Out-of-Pocket Health Expenditures**

Thanh et al. (2021) reports on out-of-pocket health payments for outpatient healthcare services and explores the impact of public health insurance on out-of-pocket health expenditures for the near-poor. According to the World Health Organization, out-of-pocket payments should not exceed 30%-40% of total health expenditure for countries in the Asia Pacific region.

Household spending for health is defined as the total household's payment on health-related needs such as preventive, promotional and curative care. Household health payments can include prepayment before illness, such as the cost of health insurance, and direct out-of-pocket health spending such as payment for hospital fees.

In Vietnam, the household out-of-pocket payment for healthcare services is quite high, accounting for 60%-70% of total payment (Lieberman and Wagstaff, 2008). Without health insurance, out-of-pocket costs for an individual can rapidly increase up to 75% of the monthly nonfood per capita payment of a household. In 2012, the master plan of Universal Health Coverage was released by the World Health Organization, which identified the objectives of reaching 70% of social health insurance by 2015 and 80% of social health insurance coverage by 2020, which means that as a result the out-of-pocket expenditures would be less than 40% by 2015 (Somanathan et al., 2014).

### ***Advantages of Health Insurance, Vietnam Law on Health Insurance***

- 1) To expand the beneficiaries of health insurance
  - 2) To expand the scope of health insurance benefits and the level of health insurance benefits
  - 3) To open the route of medical examination and treatment with health insurance
  - 4) To specify the management and use of the Health Insurance Fund
  - 5) To regulate the responsibilities of relevant agencies and organizations
- 
- A) Stipulates compulsory participation in health insurance for all people
  - B) Demonstrates political determination to promote the implementation of universal health insurance goals
  - C) Enhances the legitimacy to align the responsibilities of all people participating in health insurance, ensuring the principle of sharing of people participating in health insurance

Health insurance can help to reduce up to 200% of the household's out-of-pocket spending (Jowett et al., 2003). Total health payments for the poor is significantly reduced by the coverage of health insurance that supports this population (Thanh et al., 2010).

### **Vietnam, Family-Based Social Health Insurance**

Nga et al. (2021) discuss family-based health insurance introduced in Vietnam for the informal sector workers and their families in the name of achieving universal health coverage for its citizens.

### ***Principles of Universal Health Coverage via Public Health Finance***

- 1) Pre-payment
- 2) Equitable pooling of financial resources
- 3) Limited direct payment at the time of health services

### ***Informal Sector Workers***

- 1) International Labor Organization; informal sector workers, or self-employed, are individuals employed in small, often family-based enterprises
- 2) General Statistic Organization of Vietnam; defines informal employment as 'all employed workers not covered by the social security system (social insurance), irrespective of the institutional sector in which they are employed'

In developing countries the informal sector plays an important role in employment, income generation, and economic and social development, and the informal sector accounts for approximately 40% of global non-agricultural employment, and 50-80% of GDP in developing countries in Asia and Africa (Steel and Snodgrass, 2008). The Vietnam General Statistical Office reports that the proportion of self-employed and household workers accounted for 62.6% (32.7 million people) of all workers, that was nearly double that of salaried personnel.

Developing countries face difficulties with public insurance schemes in collecting contributions and relatively high administrative costs, as well as many informal sector workers are not able or willing to purchase health insurance. No country has successfully implemented coverage to the informal sector based solely on a voluntary contribution (Hsaio, 2007); instead, most countries that have successfully expanded coverage to the informal sector have done so through compulsory enrollment and financing it through general taxation revenue.

In Vietnam, there was 79.6% enrollment in health insurance coverage in 2016. In terms of the 'missing middle', the informal sector workers, approximately 40% of the 31.9 million uninsured people in Vietnam were non-poor informal workers in 2011. Vietnam had a voluntary individual health insurance scheme for informal sector workers from 1992 to 2014, and in 2015, changed it to a compulsory family-based health insurance program. It has a contributory premium with a discounted rate based on the number of uninsured members in the family, and there is no stipulation regarding penalties if they refuse to enroll (Nga et al., 2021). Families living in urbanizing and urban areas were more likely to be insured than those in rural areas, and thus living in an urban area may increase knowledge of family-based health insurance and accessibility to good quality health services.

### ***Factors Influencing Enrollment in Family-Based Health Insurance in Vietnam***

- 1) Knowledge of family-based health insurance
  - 2) Historical use of health services
  - 3) Place of residence
- A) Strengthening communication and education about health insurance scheme at the local level
  - B) Improvement of the quality of primary health care

### **China, Chronic Diseases**

Peng and Zhu (2021) discuss whether public or private health insurance helps to alleviate costs with chronic diseases in China. People with chronic diseases struggle with financial hardship due to both short-term and long-term needs for health services, and health insurance, both public and private, is commonly employed as a tool to solve such financial strain. Their research strives to do two things: first, to explore whether health insurance could reduce the financial barriers for people with chronic diseases in China; and second, to compare the impacts of different health insurance types on financial barriers. Public health insurance has the potential to reduce the financial strain for people with chronic diseases, and private health insurance was identified as a positive predictor of inpatient financial strain for people with chronic diseases.

### ***Key Findings, Chronic Diseases in China***

- 1) People with chronic diseases were more likely to experience both the outpatient and inpatient financial strain
- 2) Public health insurance was found to reduce the outpatient financial strain
- 3) Private health insurance was found to positively associate with inpatient financial barriers
- 4) Urban employment insurance (UEI) was expected to reduce both the outpatient and inpatient financial barriers, while self-paid private insurance (SPI) was positively associated with inpatient financial barriers
- 5) Income was identified as a positive predictor of having outpatient and inpatient financial strain

Non-communicable diseases (NCDs), also known as chronic diseases, tend to be of long duration and are the result of a combination of genetic, physiological, environmental and behavioral factors. NCDs are the leading cause of death globally, and nearly 80% of NCDs are in low-middle income countries. In China, the prevalence of NCDs doubled from 2003 at 12.33% to 2013 at 24.52% (Peng and Zhu, 2021).

Health insurance can be employed as a tool to protect individuals against the risks of large unexpected medical expenditures. Public health insurance, however, is always partial, and concerns either a limited basket of care (as in Canada where drugs are out of the public system or in Spain and the UK where services provided by private physicians are uncovered), a limited population (as in the U.S. where public coverage only covers old, vulnerable and poor populations) or since it lets copayments on a quite large basket of care through coinsurance rates and deductibles (as in Belgium, France, and Switzerland) (Pauly et al., 2006).

Dong et al. (2021) discusses China's three main social health insurance schemes and the differences in benefits in each, and how they are being integrated together in order to achieve universal health coverage. The three Chinese social health insurance schemes are: Urban Employee Basic Medical Insurance (UEBMI), Urban Resident Basic Medical Insurance (URBMI), and the New Rural Cooperative Medical Scheme (NRCMS), with each targeting a different population segment. In April 2009 the Chinese government announced a new initiative of health system reforms which would include public health services, medical care services, health insurance for financial protection, and an essential medicines policy to establish a universal healthcare system which would provide safe, efficient, and affordable basic healthcare services for all Chinese citizens by 2030.

The Chinese government invested over USD 800 billion from 2009 to 2015, particularly in subsidizing premiums for rural and urban residents who were not covered by UEBMI to enable them to enroll in insurance schemes. At the end of 2015, more than 95% of the Chinese population, about 1.336 billion people, were enrolled in health insurance. In China, the expansion of social health insurance coverage had reduced out-of-pocket medical expenses from 56% in 2003 to 29% in 2017. The benefits of health insurance enjoyed by each subgroup of insurance enrollees are different, with those insured under different health insurance



schemes being unequal in healthcare utilization, the choice of hospitals and healthcare cost (Dong et al., 2021).

In China, expanding health insurance coverage is the first step towards universal health coverage, with policymakers aiming to merge these three programs into one scheme by 2030. Inequities in financing and access to healthcare can be reduced or eliminated by consolidating different health insurance plans into one centralized system. In terms of consolidating national health insurance schemes, South Korea replaced three schemes with a national system in 2000. In Japan, there are 3500 health insurance plans, though the core elements under those plans, such as co-payments and benefits, are standardized. Dong et al. (2021) found that implementing health reforms effectively narrowed the difference in benefits among social health insurance schemes, including the reimbursement rate and reimbursement amount. Factors associated with significant reimbursement amounts were: inpatient service, higher severity and higher institutional level.

### **China, Supplemental Private Health Insurance**

Wu et al. (2020) discusses how supplemental private health insurance may help to achieve universal health coverage in China by supplementing the social health insurance system (SHI). They analyzed the impacts of private health insurance on expanding coverage, increasing access to healthcare, and financial protection. Their results is that coverage prevalence of private health insurance gradually increased but it was unequally distributed across regions and populations. The expansion of social health insurance was proven to have enhanced the total aggregate premium of private health insurance but has had a mixed impact on the take-up of private health insurance. Private insurance beneficiaries were found to limit their utilization of healthcare services and there was no evidence that it ensured financial protection. They conclude that the role of private health insurance in extending universal health coverage in China was limited and therefore should not be overstated.

In China, the public spending as the share of total healthcare expenditure increased from 36.2% in 2003 to 56% in 2012, which mostly came in the form of subsidization for SHI contributions, with the increase in subsidies enabling people to gain coverage primarily from SHI schemes. Overall insurance coverage in China increased from 29.7% in 2003 to 95.7% in 2011, with the three main SHI schemes in China covering around 87% of the population; (UEBMI) Urban Employees' Basic Medical Insurance, (URBMI) Urban Residents' Basic Medical Insurance for uncovered urban registrants, and (NCMS) New Cooperative Medical Scheme for rural registrants. Even though there are high rates of insurance coverage in China, many households are still exposed to healthcare-related financial risks due to limited coverage from SHI for treatment and prescriptions, co-payments, deductibles, and limited reimbursement. In 2013 in China, almost one-third of total health expenditures came from out-of-pocket payments.

Private health insurance was introduced in China during the economic reforms of the 1980s, and the government has increasingly relied on private health insurance as a financial source to its health system and as a supplement to the coverage gap within the current SHI system. In 2003, there were only around three hundred PHI products in the market and no specialized PHI

companies, while in 2013, more than one hundred commercial insurers and five specialized PHI companies operated PHI business, providing thousands of products. One thing the Chinese government has done to encourage more private health insurance is allowing employers to purchase PHI for their employees in addition to being under the UEBMI scheme of SHI and implemented regulations to simplify the compensation process between PHI insurers and local SHI agencies. The government has also offered tax incentives for employers and individuals purchasing PHI through a series of pilot programs in major urban centers.

### ***Role of Private Health Insurance in China***

- 1) Being a substitute form of health coverage for individuals that are unable to get coverage from an SHI scheme
- 2) Being a complementary and supplementary coverage for individuals covered by a plan in the SHI scheme

### ***Dimensions of Universal Health Coverage***

- 1) Breadth, covered population
  - 2) Depth, covered benefits
  - 3) Height of coverage, covered costs
- 
- A) Coverage prevalence
  - B) Access to care
  - C) Financial protection

## **Japan, Dental Care and Universal Health Coverage**

Okamoto (2021) discusses the marked improvement in dental care as a part of the elderly population in achieving universal health coverage in Japan. He found a marked improvement in dental health status in the elderly population as measured by tooth-specific survival, which may be attributable to the universal coverage of dental care, as evidenced by the steady increase in home visits by dentists.

In most countries dental care is not covered by public insurance, and if it is, it may not be universal. With some exceptions, such as orthodontics, dental care is covered by Japan's universal health insurance scheme. Under Japan's universal health insurance, the prices of each procedure as well as of medicines are regulated by the government as a form of national uniform fee schedule. In Japan, the share of the elderly who maintain 20 or more teeth has increased from 15% in 1999 to 51.2% in 2016. Japan not only covers dental care in their universal health insurance package, though also expanded the coverage to include home dental care to accommodate elderly patients at home.

## **Portugal, Multi-Layer Health Insurance Coverage**

Tavares and Marques (2021) discuss multi-layer coverage and asymmetric information in the Portuguese health insurance system. In Portugal, there is the baseline national health system coverage, then a second layer of coverage for some professionals, followed by the third coverage layer, for voluntary private health insurance. The goal of their paper is to determine

whether people with supplemental multi-layer health coverage have more consultations, either with a general practitioner or specialist, and enjoy better health status overall. They find that people with supplemental multi-layer coverage have more specialist consultations, though not more general practitioner consultations.

The Portuguese health system system was created in 1979 as a universal coverage system, and is structured as a tax-based (or Beveridge) system, and defined as a national health system. It is also a Bismarck model, where some professionals pay a contribution to a social health insurance scheme, which includes the second layer for select employees and is comprised of civil servants (public), the armed forces (public), and bank employees (private). This second layer of coverage is also known as double coverage health insurance. This second layer allows for easier access to specialists, faster access to treatment, avoids waiting lists, allows choice of physician or hospital, and reimburses out-of-pocket expenses. Social contributions under these professional insurance schemes are income-based and not risk-based. The third layer, voluntary private health insurance, covers dental care.

### ***Problems with the Portugues Health System***

- 1) Difficulty gaining access to specialists due to gatekeeping
- 2) Long waiting lists
- 3) No freedom of choice for patients

In 2011, as a result of the global debt crisis, Portugal enacted some reforms to their national health insurance scheme, including: increased user charges for cost-sharing and the social health insurance contribution; it also ended the transfers of public money to public social health insurance; and it introduced the public social health insurance opt-out option for civil servants that year.

In Portugal, approximately 16% of the population was covered by some form of double coverage in 2015, and public employment accounted for 15.2% of total employment (Tavares and Marques, 2021). Voluntary private insurance provides faster access to appointments and treatments which are also provided by the national health system, or it provides access to services not covered by the national health system. In 2015, there were almost 2.7 million people insured under voluntary private health insurance (Tavares and Marques, 2021).

### **Greece, Primary Health Care**

Myloneros and Sakellariou (2021) discuss Greece's transition from the monetary bailout in 2010 and how primary healthcare has evolved since then. In the 1980s, Greece created rural health centers as part of the National Health System (known as ESY) but failed to develop strategies for comprehensive country-wide primary health care services. This led to issues such as fragmentation of services and funding, excessive reliance on specialist care, lack of care pathways, supply-induced demand with consequent high out-of-pocket payments as percentage of total health spending. Low household expenditure on health is strongly associated with the use of preventive approaches and health promotion, in contrast to the more expensive retroactive disease-management approach (Merkur et al., 2013).

## **2 Levels of Community-Based Care in Greece**

- 1) The first level includes the existing rural solo practices, the contracted family doctors and the new Local Health Units (TOMYs). These units are staffed with multidisciplinary health teams consisting of family doctors, nurses, health visitors, social workers, and administrative staff and their aim is to address major health-related issues at the community level, reduce avoidable hospitalizations, provide patients with care as close to their homes as possible, and address public health issues at their roots by targeting behavior and risk factors.
- 2) The second level of care includes the referral Health Centers providing primary, ambulatory, diagnostic, acute, and emergency out-of-hour care, and the contracted specialist and diagnostic private services.

## **Russia, Moral Hazard and Adverse Selection**

Health insurance suffers from the problem of asymmetric information, and the first two common forms of asymmetric information are adverse selection and moral hazard (Arrow, 1963). Moral hazard is the tendency to change behavior when the cost of that behavior will be borne by others, such as smoking and drinking, and addresses the challenge of covering health care expenses while minimizing economic risks. Adverse selection refers to a situation in which the buyers and sellers of an insurance product do not have the same information available. A common example with health insurance occurs when a person waits until he knows he is sick and in need of health care before applying for a health insurance policy. Adverse selection is when high-risk people, the unhealthy, tend to sign up for health insurance, while low-risk people, the healthy, tend to opt out of it.

The extra use of healthcare may reflect both a faster 'access effect' obtained under double coverage and a smaller 'moral hazard effect,' as noted by Tavares and Marques (2021). The access effect is due to longer waiting times and difficult access to specialists due to compulsory referral. Tavares and Marques (2021) also note that the higher use of healthcare by people who have insurance may be due to either moral hazard or supply-induced demand. They claim that asymmetric information within a health system has one major consequence which cannot be ignored, in that moral hazard is the major issue, not adverse selection. The overuse of health services leads to excessive health expenditure and inefficient use of resources, something that cost-sharing and user fees can help to contain.

The private health insurance market is susceptible to market failures such as moral hazard and adverse selection. Moral hazard may contribute to patients using suboptimal high levels of care, and physicians to prescribe unnecessarily expensive medications and more intensive treatments (Arrow, 1963). Insurers respond to moral hazard through copayments and/or deductibles, therefore putting beneficiaries at risk for limited financial protection (Sekhri, 2006).

Risk adjustment in health insurance markets attempts to offset adverse selection, though it may be misguided, and can lead to higher prices and lower social surplus. The reason is that firms

facing adverse selection have an incentive to lower their prices to encourage lower cost “young invincibles” to buy their product (Mahoney and Weyl, 2016).

Alstov et al. (2021) discusses moral hazard and adverse selection in the Russian mandatory health insurance system and supplemental private health insurance. Ex-post moral hazard is increased utilization of healthcare (relating to the price sensitivity of demand for healthcare), and ex-ante moral hazard is changes in health behaviors (relating to the individual propensity to invest in health). Their data revealed evidence of ex-ante moral hazard demonstrated by clear behavioral differences between those with self-funded supplemental health insurance and those for whom the workplace finances the additional insurance.

The Russian healthcare system is financed through a mandatory health insurance (MHI) system, which is financed by a premium paid by the employer and which offers comprehensive healthcare to Russian citizens, free at the point of delivery. A key question in Russia is to what extent supplemental health insurance can be an active tool for addressing the shortcomings and financial constraints inherent to the current system.

#### ***Shortcomings with the Russian MHI***

- 1) Under financed
- 2) The care, which is of variable quality, is far from comprehensive
- 3) Access to it is characterized by regional, demographic and socioeconomic inequalities related to the individuals' capacity to make out-of-pocket payments

#### ***Three Routes to Access Medical Care in Russia***

- 1) Employer-financed MHI
- 2) Out-of-pocket payments
- 3) Voluntary health insurance (VHI)

In Russia, the health insurance market is growing, and the number of VHI contracts has increased from around 6.6 million in 2000 to almost 11.4 million in 2016, corresponding to about 4.5-8% of the Russian population. Consensus thinks that the prevailing system of compulsory medical insurance is ineffective and the share of private spending on healthcare, between 40 and 50%, is too high.

#### ***Three Sub-groups of the Russian Population***

- 1) Largest group, reliant on MHI only
- 2) Group that receives supplemental VHI through association with their enterprise
- 3) Group that chooses to finance supplemental VHI themselves while still having access through MHI

#### ***Policy Proposals in Russia***

- 1) Replacement of the mandatory system with a purely voluntary system
- 2) Introduction of a co-payment system
- 3) Development of a comprehensive drug insurance system

- 4) Further reduction of the mandatory offer alongside a more clearly differentiated expansion of the voluntary system

Adverse selection can be attenuated in the study by distinguishing between individuals who self-select supplemental health insurance and those that have it provided for them through their place of employment. Moral hazard and adverse selection can vary based on gender, age, education and region, and can depend on risky health activities such as smoking, drinking and the absence of exercise.

Health insurance will result in increased consumption of healthcare due to the moral hazard (Arrow, 1963). Moral hazard can be either ex-ante, relating to the individual propensity to invest in health, or ex-post, relating to the price sensitivity of demand for healthcare. Ex-ante moral hazard suggests that health insurance reduces the incentives for individuals to invest in their health and, therefore, will be associated with unhealthy behaviors, such as smoking, drinking, less exercise and less appropriate diets. Ex-post moral hazard takes the individual's health as given, and suggests that, at any given level of health, individuals with health insurance will consume more healthcare, because the price of healthcare is lower (Pauly, 1968).

A limitation of the economic theory of moral hazard is that it does not provide us with predictions of the impact of health insurance on either health outcomes or on social welfare. The impact on health outcomes is unclear because any benefits of increased healthcare utilization may be offset by ex-ante reductions in health investments. The impact on social welfare depends on a variety of factors, or diminishing marginal returns to healthcare imply that the impact of additional consumption depends on the initial individual stock of health capital.

### ***Factors Impacting Social Welfare***

- 1) The balance of increased (decreased) use of efficacious (inefficacious) medical services
- 2) The relationship between health insurance and health behaviors
- 3) The extent to which increased use of medical services is linked with positive changes in health behavior

Identifying the existence of moral hazard presents a methodological challenge, since in most empirical settings there are fundamental selection differences between those with and without insurance (Akerlof, 1970). In this setting, the high risks, the least healthy, self-select into insurance, so that both adverse selection and moral hazard are consistent with greater ex-post utilization of healthcare, with ex-post meaning that at any given level of health, individuals with health insurance will consume more healthcare, because the price of healthcare is lower (Chiappori and Salanie, 2000). For this reason, it is challenging to disentangle moral hazard from adverse selection effects, but it is important from a policy perspective, because oftentimes policies to address adverse selection, such as mandatory insurance, may exacerbate moral hazard (Cutler and Zeckhauser, 2000).

Evidence of ex-post moral hazard exists due to the fact that spending on healthcare is lower when consumer cost-sharing and out-of-pocket spending requirements are higher, with ex-post

meaning that at any given level of health, individuals with health insurance will consume more healthcare, because the price of healthcare is lower (Einav and Finkelstein, 2017).

### **Mongolia, Out-of-Pocket Expenditures**

In developing countries, high out-of-pocket expenditures is a common problem, with the employed population rather than the general population to be considered the main contributor to healthcare financing in developing countries (Batbold and Pu, 2021).

One of the United Nations' Sustainable Development Goals (SDG) in the achievement of universal healthcare coverage is: "to reverse the impoverishing effects of out-of-pocket health expenditures."

The Mongolian population relies heavily on private healthcare providers because of service delivery failures in the public sector, including complicated hospital admission practices, poor referral and appointment system, and long waiting times (Tsevelvaanchig et al., 2018). Private health insurance could play a positive role in improving health financing when it complements the existing social health insurance (SHI), the healthcare scheme in Mongolia, especially when the SHI provides only limited coverage (Sekhri and Savedoff, 2005). High mobility and low tenure in the labor market can be addressed by the parallel private health insurance system, as it can be provided as a job incentive and can effectively attract talent from the labor market (Batbold and Pu, 2021).

### **Nepal, Insurance Awareness**

In Nepal, the main source of awareness for health insurance programs was the insurance agent (47.3%), followed by friends, family and relatives, television and newspaper, while another study showed 74% awareness by radio. Only 5% of the Nepalese are enrolled in the social health insurance scheme. Approximately 150 million people suffer from financial burden each year due to healthcare payments, and about 100 million are pushed into poverty (Shrestha et al., 2020).

### **Pakistan, Women's Micro-financing**

Habib and Zaidi (2021) report on the use of micro health insurance (MHI) in Pakistan to achieve Universal Health Coverage. One of the Sustainable Development Goals of the World Health Organization is a reduction in out-of-pocket expenditures on health and provision of financial protection, and in low-middle income countries, micro health insurance has emerged as a viable option for achieving Universal Health Coverage. Micro health insurance is a voluntary health insurance system that pools funds from members of a community, or a socio-economic organization, to ensure access to healthcare without facing adverse financial consequences. MHI schemes are often implemented at the local level, targeting low-income households, including those in the informal sector.

#### ***Reductions Associated with Micro Health Insurance***

- 1) Catastrophic health expenditures

- 2) Out-of-pocket expenditure
- 3) Household borrowings
- 4) Protection of household assets in the beneficiary households

In Pakistan, OOP expenditure accounts for 58% of all healthcare costs, and since 2005, at least five micro-insurance schemes have been introduced in Pakistan, primarily aimed at covering the costs of hospitalization (Habib and Zaidi, 2021). The Sehat Sahulat Programme in Pakistan covers hospitalization for 6.7 million households across 86 districts in Pakistan.

#### ***Issues with Pakistan Insurance Schemes***

- 1) Poor utilization
- 2) Secondary to low insurance literacy among the beneficiaries
- 3) Lack of empaneled private providers

One of the main challenges for low-middle income countries (LMIC) is designing a benefits package which is affordable and acceptable for the target beneficiaries. A critical determinant of the community response to its introduction, acceptability, enrollment and overall sustainability is the scope of the benefits package offered by an insurance scheme. Disagreement of the target groups of the benefits package, including example coverage of emergencies, outpatient care, medicines, and transport cost, can result in low insurance scheme uptake and utilization (Habib and Zaidi, 2021).

The approach that Habib and Zaidi (2021) use is to question potential beneficiaries using hypothetical scenarios, which can provide relevant information on beneficiary preferences on benefit packages, premiums and willingness to pay for insurance schemes, that can serve to strengthen the program design and implementation strategies. They use the preferences of females from low-income households for an insurance benefits package and premiums for fund pooling, as opposed to out-of-pocket spending. They attempt to provide a model for policy makers for designing an affordable healthcare financing system targeted at the low-income population for progression towards Universal Health Coverage.

In Pakistan, over 90% of the households had incurred OOP expenditure at the outpatient level in the last 2 weeks, with 50% of all outpatient department treatment (ODP) expenditure taking place at private facilities. The fact that this study used women could explain the higher utilization of outpatient department treatment for services such as maternal, newborn and child health care (MNCH). Data from the Demographic Health Surveys (DHS) shows that women are not involved in decisions concerning their own health in 50% or more of the households in low-middle income countries. The Pakistan Sehat Sahulat Programme (SSP), the national health insurance initiative, uses a poverty-based scorecard to offer insurance to cover its poorest citizens.

#### ***Factors Shifting Consumer Favor Towards Private Facilities***

- 1) Overcrowding
- 2) Poor perception of quality
- 3) Low responsiveness



- 4) Difficult geographical access to government facilities

### ***Reasons why Pakistan Health Scheme Only has 3% Utilization Rate***

- 1) Low insurance literacy among the insured population
- 2) Lack of coverage for outpatient and primary care services
- 3) Low numbers of empaneled private providers

They find the need for an urban primary health care (PHC) network as part of the health insurance scheme to cover outpatient services, and there is also a critical need to purchase health services from private hospitals, clinics and diagnostic centers to supplement government services for meeting the mandate of UHC.

38.9% of study participants chose medicines as the entity of choice to be covered fully in the insurance benefits package so that no co-payment is required to be made at the time of obtaining medicines, which relates with the finding of high OOP expenditure for medicines (median PKR 800/ US\$ 8), which could be a financial burden on low-income households. In 2016, medicines accounted for the majority (47.3%) of all OOP health expenditures in Pakistan. A common problem in low-middle income countries with medicines is irrational use, including self-medication and prescription medicines, frequently resulting in high expenses incurred on medicines. Due to being an urban sample, 65.7% of the study participants agreed to completely bear the transport expenses themselves without it being covered by insurance.

### **Indonesia, Willingness to Pay**

Muttaqien et al. (2021) discusses informal sector workers in Indonesia who have stopped paying their health insurance premiums and whether it is due to ability to pay or willingness to pay. There are two concerns when sustainably financing coverage for informal sector workers: 1) incentivizing enrollment for those never insured, and 2) recovering enrollment among those who once paid but no longer do so. Their study assesses the ability- and willingness-to-pay of informal sector workers who have stopped paying the Jaminan Kesehatan Nasional (JKN) premium for at least six months, across districts of different fiscal capacity, and explores which factors shaped their willingness and ability to pay using qualitative interviews. The main reasons for lapsing on premiums in the study were based on uncertainty of income and changing needs.

### ***Strategies Recommended to Reinstate Premium Payment***

- 1) Targeting of subsidies
- 2) Progressive premium setting
- 3) Facilitating payment collection
- 4) Incentivizing insurance package upgrades
- 5) Socializing the benefits of health insurance in informal worker communities

The informal sector is commonly known as the missing middle, and covering and incentivizing enrollment is a major challenge for implementing social health insurance. Although health insurance programs are historically tied to the formal sector, the informal sector must also be integrated into the scheme to achieve universal health coverage.

In Indonesia, in 2017, 69 million (57%) of the employed workforce were informal sector workers, and only 30 million of these have been enrolled in JKN previously. The majority of these 30 million, 63.7%, whose premiums are not subsidized by the government, pay the cheapest entry-level premium (IDR25,500; USD1.96), and receive the basic benefits package, Class III services. 14 million (47%) of the 30 million informal sector workers enrolled are currently non-active, which makes up 75% of the total non-active members in JKN, thus representing a substantial revenue base to lose. There are also informal sector workers that are part of the 120 million *Penerima Bantuan Iuran (PBI)*, which is members whose premiums are subsidized by the government.

Ability to pay and willingness to pay are economic concepts with wide use in the valuation of healthcare, and can be used to determine whether informal sector workers stop paying premiums due to their personal financial capacity, or whether they lapse due to other factors related to payment, such as low perceived benefit or payment obstacles.

In Indonesia in 2015, the informal sector contributed just 9% (IDR4.68 trillion or USD359.8 million) to total JKN revenue, yet accounted for 29% of the total JKN claims, or IDR16.7 trillion (USD1.28 billion). Assuming the 39 million informal sector workers who have never enrolled on JKN choose the Class III benefits package, those premiums add up to IDR994.5 billion (USD76.45 million) revenue stream missed.

### ***Nonfinancial Arguments for Bridging the Enrollment Gap***

- 1) Differences in the access to healthcare services between formal and informal workers
- 2) The financial protection it offers from excess health expenditure
- 3) The governments' own national targets for complete JKN enrollment in 2019

Across districts of varying fiscal capacity, the mean ATP and WTP of informal sector workers was considerably lower than the premium amount (IDR8,929 and 13,015, respectively), and that these same individuals had at one point registered and paid for JKN suggests that assessments of ATP and WTP are fluid, and subject to change.

Engel's law for health spending holds that the proportion of income spent on health would decrease as income increases, even as the absolute amount of health spending continues to rise (Binnendijk et al., 2013). One of their main findings was that the informal sector is not a homogenous group in relation to its demand for health. The responses of informal sector workers suggests that the main problem they face in reconciling their ability and willingness to pay is their fluctuating income and needs. Research on informal sector workers in Bangladesh indicates that occupations with daily wages, such as rickshaw pullers, had a higher WTP than those paid weekly or monthly given the former have more ready access to liquidity (Ahmed et al., 2016). The second and third ranked reasons for lapsed payment were forgetting to pay and difficulties associated with payment.

When a premium payment was missed, it was prohibitive for individuals seeking to recover their insurance status to have to pay the entire debt in one payment. A major reason why respondents had signed up for JKN was that they expected significant health spending in the near future. This confirms the theory that insurance is not used by the informal sector to recover the costs of frequent, common illnesses, rather for the protection it offers against rare but large financial losses from acute episodes.

### **Indonesia, Universal Health Coverage**

Pratiwi et al. (2021) discuss how the Indonesia single payer system is progressing towards universal health coverage. In 2020, the Indonesian health scheme reported over 220 million participants, 82% of the population of 268 million. One of the goals of the Indonesian health scheme, JKN, Jaminan Kesehatan Nasional, was to increase equitable access to health services without risk of impoverishment, across the nation. Indonesia has a limited availability of health services, which means that registration of participants does not necessarily translate into effective coverage.

In the Indonesian single payer health scheme, participation is compulsory, with premiums paid by employers. The state covers premiums for its employees, the poor and the near-poor, which is 69% of all premiums. Non-poor Indonesians in unsalaried jobs, some 30 million people, are supposed to pay their own premiums, though in reality many do not.

### **Philippines, Social Health Insurance**

EL Omari and Karasneh (2021) discuss how providing free access to health services might be enough to enhance the utilization of health care by indigents. Social health insurance aims to reduce health inequalities by offering low-income households free access to medical services. The Philippine Health Insurance Corporation was created in 1995 to implement universal health coverage in the Philippines.

#### ***Four Membership Categories of PhilHealth***

- 1) Members of the formal economy, including employees in the government and private sectors, whose premium contribution payments are evenly shared by the employee and employer (1.25% each of payroll).
- 2) Indigents or persons who have no visible source of income, or whose income is insufficient for the subsistence of the household, as identified by the Department of Social Welfare and Development, based on specific criteria set for this purpose. The annual premiums of selected beneficiaries are subsidized through a cost-sharing agreement between the national and local government units. In 2014, this category represented 49% of the total members covered by PhilHealth.
- 3) Self-employed members whose income is derived purely from business or professional practice. Their contributions are based on household earnings and assets, which should not exceed 3% of their estimated monthly salaries.
- 4) Lifetime members or those former members who have reached the age of 60 and have paid at least 120 monthly contributions with PhilHealth prior to the semester of their retirement. Membership becomes free if one qualifies for both.

Under each member category, the legal dependents of the principal member (spouse and all children below 21 years of age) have free access to healthcare services offered by PhilHealth. In 1997 PhilHealth introduced a special Indigent Program for needy families, in which premiums are supported by government subsidies, which is co-financed by the national and local governments. The number of indigent families covered by this program increased from 2904 in 1997 to 14.7 million in 2014 (El Omari and Karasneh, 2021).

#### ***Benefits Included Under PhilHealth***

- 1) Room and board
- 2) Professional healthcare services
- 3) Diagnostics and other medical examination services
- 4) Maternity care
- 5) Use of surgical or medical equipment
- 6) Prescription drugs and biologicals
- 7) Personal preventive services

#### ***Major Obstacles Preventing Families from Visiting Healthcare Facilities***

- 1) A lack of financial resources
- 2) The geographic remoteness of facilities, especially in poor regions

In the Philippines, the average travel time is longer for persons in rural areas (38 minutes) as compared to those in urban areas (28 minutes). 27% of women stated that distance from a health facility is a serious obstacle, and rural women (65%) are more likely than urban women (51%) to report problems in accessing healthcare services. Women from the lowest wealth quintile (52%) were more likely than those from the highest wealth quintile (13%) to say that remoteness of healthcare facilities prevents them from seeking health services. The National Statistics Office in 2013 reported that 74% of indigent households reported that getting money for treatment was a struggle. The Family and Expenditure Surveys from 2012 reports that in the Philippines out-of-pocket health expenditures increased by 150% (real) from 2000 to 2012, with the main driver of this increase being cost of medicines, with the larger share of medicines in total health expenditures among the poor (76%) as compared to the rich (58%) (El Omari and Karasneh, 2021).

#### ***Obstacles for Women Obtaining Medical Services when they are Sick***

- 1) Getting permission to go for treatment
- 2) Getting money for treatment
- 3) Distance to healthcare facilities
- 4) Not wanting to go alone

#### ***Recommendations for PhilHealth***

- 1) Promotion of community-based care services by investing in the construction of health centers at the village level or by organizing regular and frequent visits or caravans to

help indigent people overcome the cost and transportation barriers that prevent them from participating in this health insurance program and benefiting from its benefits

- 2) Efforts must be made to provide all indigent members with clear, easy-to-understand, and detailed information out the full range of benefits offered by the Philippine Health Insurance Corporation
- 3) Action is needed at national, regional, and local levels to plan and implement health campaigns to raise awareness among indigentds of common diseases and the importance of seeking timely healthcare services from appropriate providers
- 4) Logistic and legislative measures must be in place to implement free medicine programs for indigent patients in poor and remote areas to enable these patients to access badly-needed medicines

## **Micro Health Insurance in India**

### ***IRDA Micro-Insurance Regulations 2005***

- 1) Health insurance sold under the “general micro-insurance product” or the “life micro-insurance product” definition must cover (“cap”) no less than Rs. 5,000 (per individual) or Rs. 10,000 (per household). Although not specifically stated in the Regulations, it is assumed that this cap applies for the entire period of the contract (rather than to a single episode of illness).
- 2) The minimal period of coverage is one year. The Regulations do not specify the terms for renewal, and this implies that insurers could decide to renew or not to renew any policy at the end of the affiliation period. Incidentally, insurers could also change the terms of the policy and the premium it commands, which de facto means that insurers could cherry pick. And insurers can decide whether to accept an offer of insurance in the first place or refuse it.
- 3) Minimum and maximum age of the insured is left to insurers’ discretion. The Regulations do not require the insurer to justify such exclusions, or to maintain the same age limitations for all insured.
- 4) The Regulations do not define the scope of coverage; therefore, insurers can (and do) exclude certain conditions or pathologies from coverage (both pre-existing and newly diagnosed ones).

## **Myanmar, Universal Health Coverage**

Nikoloski et al. (2021) discuss several challenges which have befallen the Mynamar health system.

### **Challenges Facing the Myanmar Healthcare System**

- 1) Chronic underfunding of the healthcare sector, with public spending over the last 20 years being around 1% of GDP.
- 2) The lack of funding has resulted in notable shortages in human resources for health. Rates of general practioners (GPs) and nurses/midwives number 0.68 and 0.99 per 1,000 people, respectively, falling well below the regional averages of East Asia (1.5 and 2.6 per 1,000 people, respectively).

- 3) The distribution of healthcare infrastructure, such as buildings and equipment, is unequal. There are 0.9 hospital beds per 1,000 people in the country, falling below the regional average of 3.5. There are also issues in estimating catchment population, due to a historical mismatch between health maps of the administrative units and the catchment areas of health facilities.
- 4) In terms of service provision, there is an emphasis on secondary and tertiary care, with facilities at lower levels receiving much less attention.
- 5) Health insurance is available to government employees, but not to the majority of the population, which coupled with the low overall spending on healthcare, this implies that a majority of healthcare spending is out-of-pocket. 76,2% of health financing is out-of-pocket, which is much higher than the regional average of 36.1%.

### **Iraq, Equity and Determinants in Universal Health Coverage**

Taniguchi et al. (2021) discuss equity and determinants in universal health coverage in Iraq. To reduce inequality in Iraq, more consideration is needed for vulnerable households having female heads, less educated mothers, and more children and/or elderly people. In Iraq, the healthcare systems have not been fully restored and free public health services are not equitably distributed across governorates. Iraq has not developed a pre-pooled financing mechanism and the share of out-of-pocket health spending in total health expenditure increased from 29% in 2004 to 78% in 2016.

#### ***Targets for Universal Health Coverage by 2030 for UN Members States***

-World Health Organization and World Bank

- 1) At least 80% essential health service coverage for the entire population of the country irrespective of economic status, gender, and place of residence (equity)
- 2) 100% protection from catastrophic and impoverishing health payments by 2030

### **Iran, Universal Health Coverage**

Doshmangir et al. (2021) discuss the Iranian healthcare system and its push to universal health coverage through social health insurance. The health transformation plan (HTP) in 2014 helped to progress towards universal health coverage and health equity by expanding population coverage, a benefits package, and enhancing financial protection. Challenges include that there is a lack of suitable mechanisms to collect contributions from those without a regular income, the compulsory health insurance coverage law is not implemented in full, and a substantial gap exists between private and public medical tariffs, leading to high out-of-pocket health expenditure for Iranians. The study also noted that the Iranian Ministry of Health and Medical Education should devise and follow the policies to control health care expenditures. In Iran, inequalities in health financing indicators and access to health care services continue to exist, particularly for low-income groups and rural residents.

#### ***Cornerstones of Universal Health Coverage***

- 1) Equity
- 2) Efficiency
- 3) Sustainability

- 4) Acceptability to clients and providers
- 5) Quality

One suggestion for achieving universal health coverage is that social health insurance should be given priority in all and not just low-middle income countries. Social health insurance can provide a stable source of revenues by combining risk pooling and mutual support with the visible flow of funds into the healthcare sector. Social health insurance in theory involves compulsory membership among the population.

### **Iran, Universal Health Coverage**

Derakhshani et al. (2021) the factors needed to achieve universal health coverage in Iran. The initial purpose of healthcare systems around the world is to promote and maintain the health of the population. Universal health coverage is a way of promoting the population's quality of life while ensuring financial risk protection, equity, and access to essential and quality health services. In Iran, there is both private sector and public sector health services. The public health sector provides primary, secondary, and tertiary health services, though the private health sector focuses mainly on secondary and tertiary healthcare in urban areas.

#### ***3 Dimensions of Universal Health Coverage***

- 1) Maximum population coverage
  - 2) Health service coverage
  - 3) Financial protection
- 
- A) Political sustainability
  - B) Economic growth
  - C) Fragmentation in the health system

#### ***Leading Factors on the Way to Universal Health Coverage***

- 1) Political commitment during political turmoil
- 2) Excessive attention to the treatment
- 3) Referral system
- 4) Paying out-of-pocket and protection against high costs
- 5) Economic growth
- 6) Sanctions
- 7) Conflict of interests
- 8) Weakness of the information system
- 9) Prioritization of services
- 10) Health system fragmented
- 11) Lack of managerial support
- 12) Lack of standard benefits

#### ***3 Steps to Achieving Universal Health Coverage in Iran***

- 1) To decrease out-of-pocket payments, extend insurance coverage, and improve the quality of health services in target populations.

- 2) Providing all services, drugs, and equipment needed by the inpatient wards.
  - 3) Updating the tariffs on medical services.
- A) To improve the health indicators
  - B) To ensure equity in the delivery of health services
  - C) To reduce health costs

### ***Challenges Threatening the Health System in Iran***

- 1) High degrees of out-of-pocket payments
- 2) Limited financial resources
- 3) Increase in unofficial payments to physicians
- 4) Lack of community participation in solving health problems
- 5) Financial constraints
- 6) Lack of clarity in tariffs setting mechanisms
- 7) Difficulties affecting the system due to international sanctions against Iran

### **Iran, Universal Health Coverage**

Mahdavi and Sajadi (2021) discuss determinants of universal health coverage in Iran. Access to services refers to services that are already covered and extending coverage to other services. Quality refers to the effectiveness of services for improving health related to a need, and consists of three concepts: awareness of health status and need for health services, utilization as being enabled through financial means, and the effectiveness of services used to improve health status. In this regard, quality indicates if the health problem is “under control.” Financial protection is measured through the share of costs in the form of out-of-pocket expenditure or immediate cash payment. Equity can be linked to service utilization, effective coverage, and financial protection.

### ***3 Key Objectives of Universal Health Coverage***

- 1) Access to services when needed
- 2) Quality of service
- 3) Financial protection against the risk of disease

### ***Financing Health Services via Universal Health Coverage***

- 1) Cover entire populations rather than only extremely poor
- 2) Fund healthcare by a mandatory enrollment in basic insurance schemes
- 3) Provide all populations with a benefits package
- 4) Design the mechanisms of risk sharing
- 5) Establish effective mechanisms of payment to providers

### **Eastern Mediterranean Region, Universal Health Coverage**

Mataria et al. (2020) discuss how Covid affected universal health coverage in the Eastern Mediterranean Region (EMR). The EMR is prone to emergencies from hazards including disease outbreaks, natural disasters, conflicts, displacements, and technological disasters. In the EMR, there are over 69.6 million people that require humanitarian assistance, representing



42% of the global total. The region is also source of 64% of the world's refugees, many of whom remain in the EMR.

## **Central and Eastern European Countries, Transition from Communism**

Tambor et al. (2021) write about the transition from communism to capitalism in eight Central and Eastern European (CEE) countries, and the problems that have encountered from their departure from publicly financed healthcare. Their results indicate that a high reliance on out-of-pocket payments persists in these countries, and only a few countries have shown a significant downward trend over time. The gaps in universal coverage in these nations was due to explicit rationing (a limited benefit package, patient cost sharing) and implicit mechanisms (wait times).

### ***Ways to Increase the Role of Public Financing in CEE Countries***

- 1) Budget prioritization
- 2) Reducing patient copayments for medical products and medicines
- 3) Extending the benefit package for these goods
- 4) Improving the quality of care

An important component of transformation in postsocialist countries was the change of the healthcare system, as reforms from the collapse in communism resulted in departure from the centralized and nationalized healthcare systems of the Semashko model (Tambor et al., 2021). Reforms suffered from institutional shortcomings such as insufficient contribution rates or poor effectiveness in collection of contributions.

### ***Transformations from Shift in Communism***

- 1) Shift in ownership, transforming public entities into private ones and/or establishing private healthcare entities
- 2) Changes in organization, disintegration of care and strengthening primary healthcare
- 3) Changes in healthcare financing (introduction of social health insurance in most CEE countries)

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