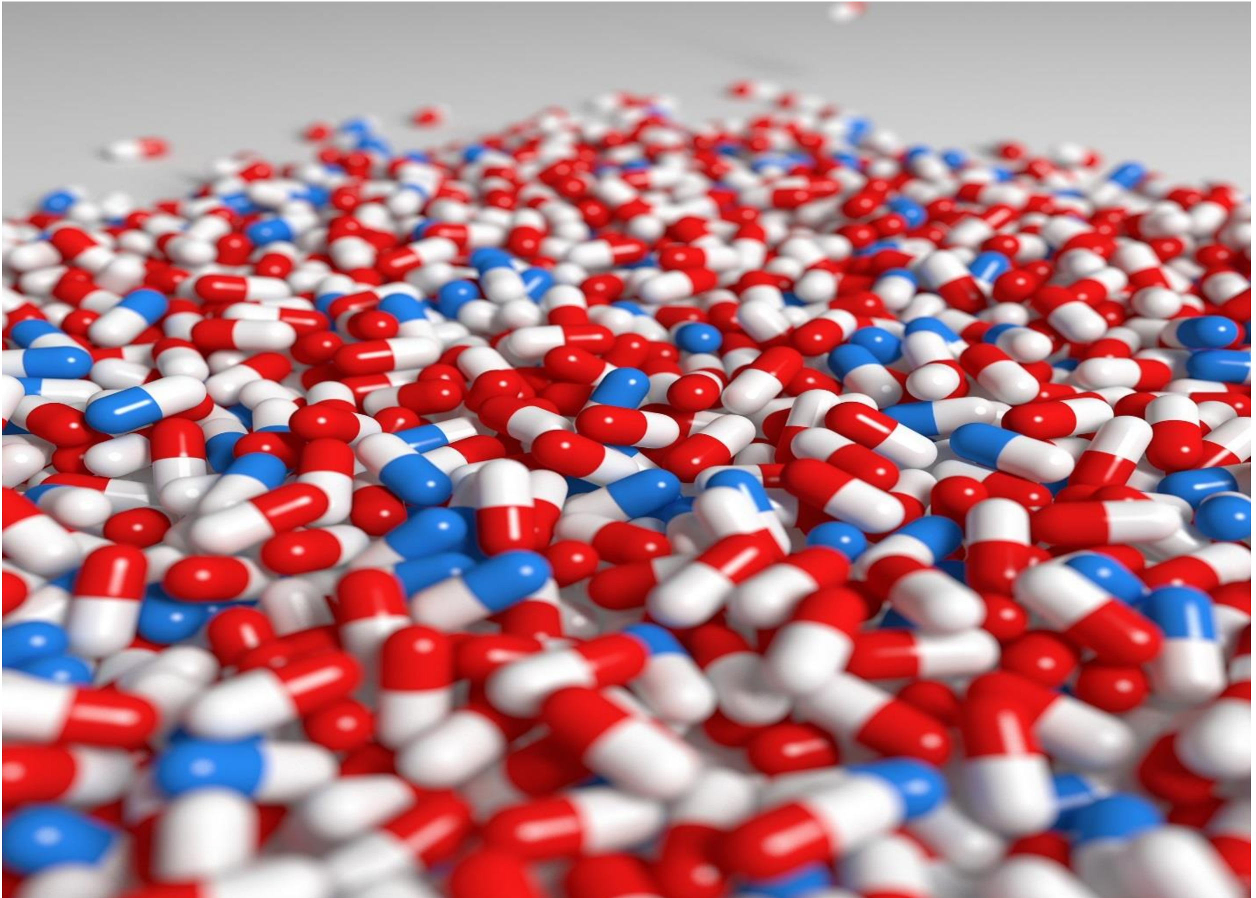
SHORT NOTES ON PROGRESSIVE HEALTH ECONOMICS (PHE)



Kai-Lit Phua, PhD FLMI

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PREFACE

This free e-book has been written as a public service by the author. The aim is to enable readers to learn about "heath economics" written from a pro-people and politically progressive angle.

There is a lot of jargon used in mainstream health economics. I hope that this short book will help to demystify these terms for readers.

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INTRODUCTION

Q. What does the term “Progressive Health Economics” mean?

A. My definition of “Progressive Health Economics” would be health economics that approaches issues dealing with the production, marketing, distribution and consumption of health-related goods and services from a “pro-people” perspective. Pro-people refers to placing the emphasis on benefiting those groups that are disadvantaged or dominated and exploited by more powerful groups in most societies. These disadvantaged or dominated/exploited groups include:

Ethnic or religious minorities
Poor people
Women (especially those who are lowly-educated)
Elderly people (in societies where ageism is significant)
Rural people
Slum dwellers in urban areas
People suffering from stigmatised sickness such as severe mental illness or HIV/AIDS
Illegal immigrants

Accessibility: This refers to the ability to gain access to health resources available within the community. Accessibility is hampered by factors such as lack of money or lack of health insurance coverage; cultural barriers (e.g., reluctance of women in some societies to be seen by male doctors); discrimination (e.g., rude behavior of some health care providers toward social groups such as Roma ("Gypsies"), the poor or charity patients or illegal immigrants); lack of awareness (i.e., not knowing that community NGOs are on hand to provide health-related services).

Adverse selection: Actions by other parties which increase the risk of harm (often financial) for a particular party. Examples include young and healthy people opting out of a health insurance pool. This means that over time, the pool would consist of more and more elderly and sickly people. This may threaten the financial solvency of the health insurance pool.

Ageing population: This refers to an increase in the percentage of elderly people in a population over time. This is primarily due to a decrease in the fertility rate (women marry later, delay child-bearing, and have fewer children) and secondarily, more people reaching old age.

Asymmetric information: Imbalance in knowledge or information between two parties in a transaction, thus giving rise to opportunity for the better informed party to take advantage of the other party. For example, an unethical health care provider may provide more services than medically necessary or a patient may be hospitalised longer than medically necessary, in order for the provider to generate more revenue (in a fee-for-service environment).

Balance billing: Billing a patient beyond the maximum chargeable amount permitted in a health insurance plan. This is legal in some political jurisdictions but not in others.

Barriers to health care: Barriers to care include physical barriers (such as the distance one has to travel to access health care services), financial barriers (lack of money to pay for health care), cultural barriers (e.g., reluctance of women to be treated by male doctors in some cultures) and informational barriers (such as lack of awareness that health-related services are supplied by NGOs at low cost in a particular community on the part of lowly-educated people). Progressive governments can help citizens to overcome barriers by:

- Building more clinics and hospitals in rural areas
- Introducing a Flying Doctor service to increase access of people in remote areas to health care providers
- Promoting "telemedicine"
- Providing free or highly-subsidised health care services to its citizens
- Protecting citizens against having to pay very high health care-related bills through a National Health Insurance scheme
- Increasing awareness of availability of health-related services within a geographical region. The services can be provided by the government, for-profit private sector companies, or by non-profit NGOs
- Taking legal action to prevent discrimination in the provision of services to ethnic minorities, poor people, women, the elderly, immigrants, people suffering from HIV/AIDS and so on

Biopiracy: The patenting of naturally-occurring genetic material or other kinds of biological material (often without the knowledge of the people or community from which it was obtained) for private commercial gain. Thus, in the past, there have been attempts by Western companies to patent biochemical material derived from the blood of indigenous peoples in developing countries. There have also been attempts to learn from indigenous peoples about plants that have medicinal values and patent products from these, without fairly compensating the people who made these knowledge (ethnobotany knowledge) available.

Branded drug (patented drug/proprietary drug): A drug which is protected by a patent. Also, a brand name drug produced by the original company even after its patent has expired. Drug costs can be reduced if a branded drug is replaced by a generic drug in the treatment of disease. However, the generic drug needs to be "bioequivalent" in order to maintain treatment efficacy.

Capitation: A form of paying health care providers whereby they are paid a fixed sum per patient under their care. The providers are paid this fixed sum regardless of whether the patient sees them or not. Supporters of capitation argue that this provides incentives for health care providers to keep their patients healthy (e.g., through health education) so that they would come less often for treatment. Critics argue that providers may undertreat patients or pass on sicker or more complicated cases to other providers (in order to reduce financial risk to themselves).

Case-mix: The mix of cases handled by a particular hospital. The case-mix of teaching or specialised hospitals may differ significantly from those of smaller district hospitals, with the former handling more complex or rarer cases.

Certificate of need (CON): A technique used to control the proliferation or unnecessary duplication of expensive medical technology or capital-intensive health care institutions such as new hospitals. In order to buy and install new medical equipment or to build a new hospital, the party attempting to do so has to satisfy a government regulatory body which has the power to decide whether or not to grant the CON. If the CON is not granted, the new medical equipment cannot be bought and the new hospital cannot be built legally. CON is a method of tackling the challenge of rising health care costs.

Cherry-picking: American term with the same meaning as "cream-skimming", i.e., activities of insurers or health care providers aimed at discouraging the sick from being enrolled in their health plans or being part of their patient loads. This is to reduce financial risk by reducing the chances of economic losses that may be incurred by covering or treating these patients.

Clinical practice guidelines: Guidelines prepared by expert committees to help doctors to provide care to the "typical case" patient for a particular disease. The use of clinical practice guidelines is assumed to improve the quality of care provided by avoiding practice variations on the part of health care providers. Some critics argue that the preparation of clinical practice guidelines can be compromised if any of the "experts" on the committee have financial ties to organisations such as drug companies.

Co-insurance: Co-insurance refers to a fixed percentage of the total health care bill which the patient has to bear.

Community rating: Charging each person the same premium when they enroll in the same health insurance programme regardless of age, sex or history of previous sickness. In schemes that use community rating, this means that in effect, the young subsidise the elderly, the healthy subsidise the sick, and the wealthy subsidise the poor. This is because the elderly, the sick and the poor tend to have more health problems and therefore also make greater use of health care services.

Competition: The term “competition” as used in mainstream economics refers to attempts by different providers of the same (or similar) goods and services to attract as many customers as possible in order to maximise sales and therefore profits. The theory is that competition will increase efficiency in the allocation and use of scarce resources. It would also hold down prices and improve product quality. Competition is eroded or lacking under situations of “monopolistic competition”, oligopoly (only a limited number of sellers) and monopoly (only one seller). Competition is also lacking when sellers collude and engage in price-fixing.

Compulsory licensing: During a public health emergency, even though the patent for a particular drug is held by Company X, the government allows other drug companies to produce copies of the drug for sale and distribution within the country. This is compulsory in the sense that, Company X has no choice but to involuntarily “license” the drug to the other companies. Needless to say, multinational drug companies oppose compulsory licensing strongly.

Consumerism: The consumer movement began in the USA through the effort of lawyer-advocate Ralph Nader. Consumerism in health care has given rise to phenomena such as increasing skepticism of doctors and drug companies in for-profit environments on the part of patients (the so-called “health care consumer”). Patients nowadays are more inclined to question the clinical decisions made by doctors and to file lawsuits against doctors perceived to have engaged in malpractice.

Co-payment: A co-payment is a fixed fee which the patient has to pay each time he or she sees a doctor or other health care provider. The theoretical justification used by those who advocate co-payment is that: People would think twice before seeking health care because it is no longer “free” and so, there would be fewer cases of unnecessary or inappropriate care-seeking (such as going to the hospital for minor health problems). However, there is evidence that introduction of co-payments and other forms of “user fees” may significantly reduce access for patients who are poor. Delays in care-seeking by the poor may also aggravate their health problems unnecessarily.

Cost control: Attempts made (usually by government authorities through public policy) to prevent health care prices from rising too fast. Cost control attempts can be made on the supply side or on the demand side (see Appendix 1).

Coverage: The extent to which a target population is covered by a particular health services programme. Broadening coverage tends to increase costs, even as it improves equity at the same time.

Cream-skimming: A term from the USA to describe activities carried out by insurers or health care providers to discourage sickly people from being enrolled in their health plans or being part of their patient loads. This is to reduce the risk of financial losses that may be incurred by covering or treating these patients under managed care plans. A term with similar meaning is “cherry-picking”.

Deductible: A deductible is a fixed sum of the overall medical bill which a patient has to pay even though he or she is covered by a health insurance plan.

Diagnosis-related group (DRG): First introduced in the United States under its Medicare programme, as a system to pay hospitals for services provided. Patients are categorised into clinically coherent groups with respect to resource use and a fixed amount is reimbursable for each specific DRG category. The aim is to get patients treated more efficiently in hospitals and to cut down on care that is not medically necessary so as to reduce health care cost inflation. The introduction of the DRG has resulted in the phenomenon of “DRG creep”, i.e., hospitals try to “game the system” and generate more revenue by classifying a patient under a higher DRG whenever possible.

Differential pricing: The pricing of goods or services such that customers from different social groups are charged different prices for identical goods or services provided. This is considered discriminatory and, in the eyes of mainstream health economists, a form of market distortion. Those who support differential pricing argue that people who are better off can be charged higher prices and the extra revenue generated can be used to subsidise people who are poor. However, the evidence that this is happening in the for-profit private sector is unconvincing.

Efficiency: Efficiency, as used in mainstream neoclassical economics can mean either “allocative efficiency” or “technical efficiency”. Allocative efficiency is spreading out resources to do things such that total output or results are maximised. Technical efficiency refers to the production of maximum output given a particular set of inputs. This would also result in

the cost of production being minimised. Allocative efficiency is increased if more resources are used to prevent diseases such as diphtheria through vaccination rather than through treatment of cases that arise later.

Equity: Equity in health care refers to “fairness” along various dimensions, i.e., in terms of access to health care services, actual utilisation of health services, reduction in health inequalities across social groups, fairness in spending on health care. There is also “vertical equity”, i.e., the notion that those with worse health (such as indigenous peoples in countries such as New Zealand, Australia, Canada and the USA) should be able to make use of more health care resources and “horizontal equity”, i.e., equal access to health care services for people with equal need.

Evidence-based medicine: A movement in clinical medicine to make the practice of medicine more scientific through the proper testing of drugs and medical procedures via randomised clinical trials (RCT) so as to ensure that they are actually effective against disease.

Experience rating: The charging of different premiums for people from different groups, e.g., charging higher life insurance premiums for smokers and charging higher premiums for people involved in high risk occupations. Critics dislike experience rating as it discriminates against people belonging to certain categories, e.g., men or people in older age groups.

Externalities: The effects of an action taken by a person or organisation on others, e.g., when a factory begins to operate in a particular location, the wastes it generates may pollute the air, water and so on (negative externality). Externalities can be positive sometimes, e.g., when a person gets vaccinated against a particular disease, he or she will be less likely to contract the disease and then pass it on to other people in the community.

Fee-for-service: A method of payment to health care providers such as doctors where the providers are paid for each unit of service supplied. FFS has been criticised for creating financial incentives for providers to supply more services than medically necessary.

Formulary: A list of drugs (usually drugs that have been approved by a selection committee for doctors to prescribe). If doctors wish to prescribe a drug which is not on the formulary, they will need to apply for special approval to do so. Often a health insurance company or another third party

payer will not pay for a non-formulary drug. A drug formulary is one way to keep health care costs under control, e.g., forcing doctors to prescribe cheaper generic drugs in place of more expensive proprietary drugs.

Generic drug: A drug which is identical in its pharmacological effects ("bioequivalent") to a branded drug produced by Company X. Once the patent on a branded drug expires, other companies are legally allowed to produce copies of the drug. Generic drugs are cheaper than their branded counterparts.

Global budget: A budget which has been fixed beforehand. It is intended to cover total costs (usually for one year), e.g., as in the annual budget of a typical Ministry of Health hospital in Malaysia.

Government failure: The failure of a public programme or a public law to achieve the desired results. Right-wing and pro-market mainstream economists usually focus on government failure as an excuse for deregulation, privatisation, and for more competition in the health care sector.

Health care provider-patient relationship: The interactions between a health care provider such as a doctor and the patient make up this relationship. The relationship can be affected by factors such as the socio-demographic characteristics of the provider and the patient, e.g., ethnicity, educational level (of the patient), gender, age, languages spoken and so on. Communication between the provider and the patient can be negatively affected because of these factors, e.g., a lowly-educated patient may misunderstand the medical advice given by the doctor.

Iatrogenic sickness: Sickness or injury that is caused directly by health care providers, e.g., treatment errors made by doctors (such a prescribing too strong a drug dosage for children or the elderly) and surgeons (such as leaving surgical material within the body of a patient after an operation). Iatrogenesis has been identified as a significant cause of morbidity and mortality in a report issued by the Institute of Medicine of the USA.

Illness behaviour: A term from medical sociology to describe what people do when they perceive they are being afflicted by illness. Illness behaviour includes the following – ignoring any signs and symptoms; self-medication; seeking care from "traditional and complementary medicine" health care

providers; going to see a GP; going straight to a specialist; going to the Accident and Emergency department of the nearest hospital; or a combination of these actions. It is claimed that appropriate illness behavior, e.g., going to a GP first for care instead of going straight to a specialist doctor, can help to lower total health care costs.

Incentives: An inducement (not necessarily financial) to encourage higher rates of participation with respect to a particular activity. Incentives can sometimes be perverse in that they unintentionally encourage undesirable kinds of behaviour, e.g., the fee-for-service method of payment can result in the provision of more care than medically necessary by certain providers. On the other hand, the capitation system of provider payment may influence a doctor to undertreat the patient, or attempt to pass on a sicker patient to other providers or health care organisations. Hospitals may also try to discharge patients more quickly under DRG (diagnosis-related group) systems of hospital reimbursement. This may actually endanger the health and well-being of the patient.

Interest groups: Groups that form in order to protect or advance their economic interests or attempt to lobby the government for privileges, e.g., rent-seeking activities. National medical societies such as the American Medical Association and the Malaysian Medical Association are examples of interest groups. The Association of Private Hospitals Malaysia (APHM) is another example of an interest group.

Malpractice: Any form of professional misconduct (including violations of professional codes of conduct) can be broadly classified as “malpractice”, e.g., financial fraud, inappropriate handling of patients (negligence, committing preventable medical errors, engaging in sexual relations with patients). Providers may be forced to purchase expensive malpractice insurance to protect themselves against lawsuits from dissatisfied or upset patients or the family members of patients. Lawsuits alleging malpractice can result in damage to the reputation of health care providers. In some cases, the health care provider may lose his or her license to practice, or even end up in prison.

Managed care: This refers to ways of organising and financing health care that attempt to influence the behaviour of health care providers on the supply side (such as doctors) as well as health care consumers on the demand side (such as patients and their families). Some of the goals of managed care

include the promotion of more appropriate and rational care-seeking by patients (such as seeing a GP for minor health problems) and technical efficiency on the part of providers (such as prescribing generic drugs in place of more expensive proprietary drugs).

Market failure: The failure of the market mechanism to work properly (i.e., fail to efficiently supply goods and services – high price, low quality, insufficient amounts, excessive amounts) because of various reasons, e.g., the existence of monopoly (only one seller), oligopoly (a small number of sellers) or price-fixing.

Medically-underserved group: A medically-underserved group is a group of people who are unable to undergo medical treatment commensurate with the severity of the diseases they experience because of reasons such as lack of money or health insurance coverage, living in remote areas, discrimination, lack of knowledge of availability of health care resources, etc. Medically-underserved groups include

- Ethnic or religious minorities
- Poor people
- Women (especially those who are lowly-educated)
- Rural people
- Slum dwellers in urban areas
- People suffering from stigmatised sickness such as severe mental illness or HIV/AIDS
- Illegal immigrants

Medical savings account: An individualised account which can only be used to pay for one's medical expenses (or for the medical expenses of close relatives). An alternative name is health savings account. Singapore's Medisave scheme to pay for hospital care is an example of a Medical Savings Account.

Moral hazard: This refers to the chance that something will be more likely to occur because the event has been insured against, e.g., higher utilisation of services that are covered by a health insurance policy. Another example of moral hazard is the alleged tendency of young people in the USA who are covered by a health insurance scheme to engage in more risky behavior such as participation in high risk sports.

Neoliberalism: Neoliberalism is an ideology that favours market solutions to social and economic problems and challenges, including the provision of health care of reasonable cost and reasonable quality in a timely manner to patients. Thus, supporters of neoliberalism typically are critical of regulation and are enthusiastic about privatisation of health care services. They claim that the promotion of "consumer choice" and competition between health care providers would help to promote consumer sovereignty as well as efficiency.

New Public Management: NPM is closely associated with the ideology of neoliberalism. NPM proponents typically argue that the adoption of managerial techniques and practices from the private sector would make government operations more efficient. Toward this end, they favour ways to measure job performance and output in public bureaucracies, and to implement systems such as "pay for performance", e.g., achievement of key performance indicators (KPI) should be rewarded with performance bonuses or promotions. Critics of efforts to "reform" health care systems such as the National Health Service (NHS) of England argue that the endless rounds of NPM-influenced "reforms" tends to add more layers of supervisory bureaucracy and demoralise front line staff such as doctors and nurses.

Nosocomial infection: An infection acquired in a health care institution such as a hospital or a nursing home. Systems of infection control are necessary in hospitals to avoid nosocomial infections, e.g., providers must wash their hands after attending to each patient, a patient who suffers from a highly infectious or dangerous disease must be kept in isolation and so on.

Opportunity costs: Roughly, not being able to do Y or Z, because one does X. Technically-speaking, in mainstream economics, opportunity cost refers to the next best thing one could do and has to give up (Y), in order to do X.

Parallel import: Directly importing an identical good from another country in order to reduce the cost of purchasing it (when purchasing the same good from a source within the country would cost more), without the consent of the intellectual property owner. Some multinational drug companies price the same patented drug they produce very differently across countries. By using the strategy of parallel import, the Ministry of Health of a particular developing country (where the patented drug is priced high) can save money by buying the same drug from another country (where the identical drug is priced lower).

Patented drug (branded drug/proprietary drug): A drug which is protected by a patent granted by the public authorities. Also, a brand name drug produced by the original company even after its patent has expired. Drug companies have been accused by critics of the practice of "evergreening", i.e., making minor changes to a branded drug in order to get another patent on the drug, as the original patent approaches its expiry date.

Pharmaceutical industry: All entities involved the development, marketing, distribution, and sale of medical drugs make up the pharmaceutical industry. Questionable or unethical actions that some drug companies have engaged in include:

- Actions that reduce the integrity of the Clinical Practice Guideline preparation process
- Questionable drug marketing techniques (e.g., paying Key Opinion Leaders recruited from the biomedical community to promote particular drugs; DTC or Direct-to-Consumer drug advertising; hiring celebrities to promote drugs; promotion of "off-label" uses, i.e., regulatory authorities have approved a drug to treat medical condition X, but the drug company also attempts to market the drug to treat medical condition Y)
- Questionable responses by drug companies to unfavourable findings from post-marketing surveillance (for adverse events caused by a particular drug they are selling)
- Invention of new diseases (e.g., restless legs syndrome, social anxiety disorder) in order to sell more pharmaceutical drugs
- Using poor people from developing countries for clinical drug trials in unethical ways, e.g., without proper "informed consent"

Premium: Regular payments that have to be made when one is enrolled in an insurance scheme (either private health insurance or a public National Health Insurance scheme). Premiums can be based on community-rating or experience rating. Community rating means every enrollee pays the same amount while experience rating means the premium payable is determined based on the demographic or health situation of the individual, e.g., older people have to pay more, people with chronic illness have to pay more, people holding more risky jobs have to pay more.

Principal-agent relationship: the relationship between the actor (such as the patient) and his or her agent (such as the doctor). Any "information asymmetry" (see the entry under Asymmetric Information) can give rise to situations where an unethical health care provider can exploit (usually financially) the patient, e.g., providing more services than medically necessary and billing for these, or a hospital overcharging for goods and services provided to a patient, or keeping the patient longer in the hospital than medically necessary.

Privatisation: The Malaysian government's definition of privatisation is the "transfer to the private sector of activities and functions which have traditionally rested with the public sector" including management responsibility, assets or the right to use assets, and personnel. The concept of privatisation is part of neoliberal ideology (see entry under "Neoliberalism") and includes the belief that the private sector tends to be more efficient than the public sector because the former is subject to the forces of market competition whereas the latter is not. Hence, to increase efficiency, government services should be privatised as much as possible, e.g., through contracting out or through public-private partnerships. The record of privatisation has been mixed in Malaysia, e.g., privatisation of telephone services has been a boon for consumers. But privatisation in the health care sector has seen phenomena such as high drugs prices for the Ministry of Health because MOH has been forced to buy drugs only from one company. Critics say this is a case of "crony capitalism" whereby contracts are awarded, without going through the process of tender, by the government to companies linked to powerful politicians or their political allies. Signs of privatisation failure include higher prices and/or lower quality medical goods and services.

Professional socialisation: "Socialisation" is a social science term which refers to the process whereby young people learn the norms, values, appropriate behavior patterns, etc. of the society they were born into so that they can become autonomous and fully-functioning adult members of their society. "Professional socialisation", thus refers to how persons (such as first year medical students) not only learn technical skills and knowledge but also the norms, values, behavior patterns expected of medical doctors in the community. Professional socialisation of doctors trained in Western medicine has been criticised for turning out doctors who are not holistic in their thinking and who have a tendency to be overly disease-focused and

treatment-focused (rather than prevention-focused), and who tend to neglect the socio-economic determinants of health and sickness.

Progressive tax: A tax whereby a higher percentage of an individual's income is taxed, the more the individual earns. Some political conservatives advocate a "flat tax" (i.e., everyone pays the same percentage of their income in taxes – whether they are poor, middle income, or very rich) as they oppose the progressive tax.

Prospective payment: Payments arranged or made in advance for goods or services to be supplied later.

Public choice theory: a version of mainstream economics where neoclassical economic theories and concepts (such as "individuals act to maximise their utility") are applied to political and social behavior. Thus, public choice theory advocates argue that government bureaucrats tend to act in their own self-interest rather than in the interest of the public. In the words of the economist William Niskanen, bureaucrats try to maximise their budgets.

Public goods: Goods with special characteristics such as goods which can be enjoyed by those who paid for it as well as by those who did not pay for it. In economic jargon, these goods are "non-excludable" and give rise to the "free rider" challenge. Public goods tend to be undersupplied unless the government steps in to actively increase the supply. Examples include clean air and public health campaigns carried out by the government.

Quality assurance: Steps taken to improve quality in the provision of health care and to reduce cases of adverse outcome (including iatrogenic sickness or nosocomial infection).

Rationality: Actions that are goal-oriented and which attempt to reach these (ranked) goals with as little expenditure of resources as possible. In mainstream economic theory, individuals attempt to "maximise utility" while firms attempt to maximise profits or maximise market share. Issues of social justice are ignored in so-called "positive economics", in contrast to "normative economics" influenced by "value judgments".

Rationing: When the demand for a particular service exceeds its supply, it will be necessary for rationing to be carried out. For example, when the supply of donor kidneys is less than the demand (for kidney transplants),

difficult choices will have to be made about who should be given the kidneys and in what order. One way of rationing is to make people queue for a service, e.g., in the National Health Service (NHS) of England, patients may have to wait months for elective surgery. Left-wing economists often argue that in fee-for-service systems, there is "rationing through ability to pay", i.e., wealthy people get served first because they have superior financial resources as compared to poorer people.

Regressive tax: A tax is regressive if a person whose income is lower is taxed more while a person whose income is higher is taxed less (in terms of percentage of total income), i.e., the percentage of income spent on the tax falls with rising income levels.

Regulation: Laws, directives, regulatory guidelines etc. passed or issued by governmental authorities to shape or influence the behaviour of individuals and organisations. For example, laws that regulate who may practice medicine in the community, laws to control drug prices, laws that declare recreational use of particular substances to be illegal, etc.

Regulatory capture: A government regulatory body is said to be captured (by a special interest group) when it acts to promote the interests of those it is supposed to be regulating rather than the interest of the public. In certain countries, regulatory officials are allowed to work in companies they regulate, i.e., after their retirement from government service. The worry is that this may influence the regulatory officials to be lenient now in return for getting a job in the regulated industry later on.

Rent-seeking behaviour: Actions taken by an individual, organisation or interest group to try to get the government to pass laws or implement policies which directly benefit the former (at the economic expense of the public). Thus, some companies may attempt to reduce market competition by lobbying the government to pass laws that shield them from competition from imported (foreign) products.

Resource-Based Relative Value Scale (RBRVS): A system of paying individual health providers (such as doctors) for services provided based on a list of point scores for each specific service.

Risk: The chance or probability that an adverse event will occur. Participation in a health insurance scheme helps to reduce the risk of heavy financial losses arising from big medical bills.

Risk pooling: The sharing of risk by many individuals or organisations so as to reduce the risk to an individual or a single organisation. The bigger the risk pool, the lower the risk to the individual. Also, the more fiscally sound the risk pool (such as premium money being paid into the risk pool greatly exceeding the payout for medical costs generated by enrollees, or risk pools that have large numbers of young and healthy enrollees, and small numbers of elderly and chronically ill enrollees), the lower the risk of financial insolvency for the entire risk pool.

Risk selection: This refers to attempts by a private health insurance company to reduce financial risks by trying to enroll only those with low health risks and to exclude those with high health risks. If there are too many elderly and sick people in a health insurance scheme, this may result in financial insolvency for the scheme.

Salary: A means of paying health care providers whereby they are paid a fixed amount of money per unit of time served (e.g., payment in the form of a monthly salary). The typical salary can be combined with a "performance bonus" in order to motivate employees to work harder.

Social class gradient in health: This refers to the empirical observation that the health of lower class people (as measured by income or occupation) tends to be lower than that of upper class people. Lower class people tend to have higher rates of morbidity (sickness), higher rates of disability, and lower life expectancy at birth.

Social control: Social mechanisms that influence, guide or even explicitly control the behavior of individuals. These can be internalised (norms, values, religious beliefs etc.) or external (laws, the court system, the police, the army etc.). Some examples of social control that make use of health care providers include the Medical Certificate (MC) in Malaysia whereby doctors play a role in regulating worker behavior, and getting a psychiatrist to determine whether a person who has committed a major crime such as a murder is mentally competent to be put on trial. The most notorious example of social control using doctors is the placing of political dissidents in mental hospitals during the days of the former Soviet Union.

Social insurance: An insurance programme run by the government for the benefit of certain members of the public, or for the entire public. It can be funded by any combination of general tax revenue, earmarked taxes, individual payments, deductions from individual payroll or by fixed employer contributions. Examples of social insurance schemes include the National Health Insurance schemes of Taiwan and South Korea.

Social marketing: Marketing techniques from the private sector are used to promote awareness of ways to improve one's health, or to promote public health services and programmes. An example would be the application of marketing techniques in campaigns to wear bicycle helmets, use car seats for young children, practice safe sex, and so on.

Supplier-induced demand: Demand for goods or services which are actually generated by those who supply the goods or services, e.g., a health care provider who provides more health care services than medically necessary to a patient (for the benefit – usually economic – of the former). Another example of supplier-induced demand is a doctor who asks a patient to come back for a follow up visit although there is no necessity for the patient to do so.

Technology assessment: The evaluation of new medical technology to determine if it is actually effective and also, to determine if the benefits of using such medical technology exceed the costs. Technology assessment is necessary to control health care costs since expensive new technology has been identified as a major driver in the problem of rising health care costs.

Third party payment: Third party payment occurs when an outside party such as a private health insurance company or a government agency pays the doctor for services provided to a patient (and the patient does not pay the doctor for the services provided in full). The doctor and the patient (or the patient and the hospital) are the first and second parties while the health insurance company or the government agency paying the bill is the third party.

Underinsured: The "underinsured" refer to people who are covered by private or public health insurance but the coverage actually provides inadequate protection against heavy financial loss. Some people who are underinsured may not even be aware of their true situation. Interestingly,

even some doctors in the USA may be underinsured – even though they are an important group of health care providers.

Uninsured: People who are not protected at all against heavy financial loss arising from high medical bills (such as from a serious illness, a prolonged stay in a hospital, or an expensive medical procedure) by a private health insurance plan or by the government through a National Health Insurance scheme, or through highly-subsidised health care provided by the public sector.

User Fees: Fixed fees that need to be paid when a person uses a particular health care service. The fee paid may be low if the government provides a subsidy for the service provided. For example, in Malaysia, a patient only needs to pay RM1 when seeking care at a government primary care clinic.

Utilisation: Actual usage of health care services which are available in the larger community. A commonly-used measure of utilisation with respect to a particular hospital would be its bed occupancy rate. One way of increasing equity in health care is the enhancement of "vertical equity", i.e., the idea that those who need more health care services (because of poor health) should actually make use of more services. One form of right-wing argument against vertical equity is that people who have poor health because of "personal irresponsibility" (as shown by an unhealthy lifestyle such as smoking, heavy drinking of alcohol, drug abuse, failure to wear a motorcycle helmet, bad nutrition etc.) should not be subsidised by the rest of the public when it comes to health care costs.

Work, unemployment and health: The work a person does can affect his or her health, e.g., some jobs are physically-demanding and may, over the long term, have a negative effect on the person's physical health. The 3D jobs (jobs that are dirty, dangerous, or degrading) are typical. 3D jobs include construction, agriculture and mining. Jobs that put a lot of psychological pressure on workers can also affect their mental health. Unemployment (especially long term, involuntary unemployment) can also affect a person's health in a negative manner through pressure on finances, loss of self-esteem, decrease in respect from others (including family members). At the level of the individual, unemployment is associated with higher risk of suicide, substance abuse, and domestic violence. At the level of the society, economic downturns and higher rates of unemployment are associated with higher levels of poor mental health. On the other hand, during economic

downturns, occupational injuries and road traffic injuries may actual decrease – simply because fewer people are working in factories and unemployed people may drive less in order to reduce expenses.

Appendix 1: Cost-Containment Measures
(Adapted from: Phua KL, Phua KH. 2009. Health Economics. Penang: USM Press)

Short Term Direct Controls
Budget ceilings
Staff numbers
Levels of remuneration
Price controls
Limits on quantities (supplies, prescriptions, etc)

Short Term Indirect Controls
Relative value scales (payments to individual health care providers)
Positive lists or negative lists (e.g., medical products)
Restrictions on sales promotion/advertising of health care services
Information to providers – costs and prices
Supplier/provider profiles, e.g., identifying high users/claims

Medium Term Direct Controls
Construction and extension of expensive facilities such as hospitals
Installation/purchase of expensive equipment
Substitutes to hospital care, e.g., care in the community rather than in the hospital

Medium Term Indirect Controls
Global budgets
Prospective payment, e.g., Diagnosis-related groups (DRG)
Prepaid capitation, e.g., Health Maintenance Organisation (HMO)

Long Term Direct Controls
Human resources planning – control entry into health professions
Specialist training – restricting the number of specialists

Long Tem Indirect Controls
Disease prevention
Health promotion
Public education

Cost-Sharing
Inpatient charges
Consultation charges
Pharmaceuticals
Others – incidentals (appliances, aids), transport, etc.
Co-insurance, deductibles, no-claim bonuses, etc.