

# Healthcare Reform – A Systemic Approach

*By:*

**Hamid Noorani**

*Based on Systems-Thinking Principles*

*Outlined in the book*

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*hamid@powerfulmethods.com*  
[www.powerfulmethods.com](http://www.powerfulmethods.com)

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## **Healthcare Reform – A Systemic Approach**

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### ***Summary***

1. State governments together can provide universal access to effective, efficient, and affordable healthcare to all Americans. Each State can design a health insurance system that covers all its residents. Each state can devise the right economic incentives for patients and providers that promote the most health for all at the lowest costs.
2. Relieving U.S. employers from the costs burdens of employee health insurance will boost the global competitiveness of the U.S. economy. This saves American jobs from being moved to other countries. More, it lowers the costs of doing business in the U.S. for foreign firms, giving them the incentive to hire more Americans.
3. Employers and insurance companies are not appropriate entities to decide the distribution of healthcare resources, since their objectives do not parallel those of the healthcare system. The healthcare system is not learnable for employers and insurance companies. This is because they cannot identify the reasons behind the results in terms of costs and outcomes, and they are not in the position take the necessary actions for improvements.
4. Harmonization of the regulatory requirements of the U.S., E.U., and Japan will open these markets to a greater choice of drugs for consumers, and help lower the prices of pharmaceuticals. The International Conference on Harmonization must be supported to achieve that goal.

5. Providing patients with choices of qualified healthcare providers will create competitive markets, allowing them to shop for best value and enforce cost efficiencies. It will also spur the providers to compete with better quality and service.
6. Registered Capital Accounts will allow individuals to accumulate monetary capital and use it to pay for medical bills, relieving the financial burden of healthcare. State governments could provide further relief through a mechanism for spreading the financial burden over a longer span of time, and a mechanism for sharing the load across income levels.
7. Systems-Thinking provides all the key concepts for designing large complex organizational systems such as a U.S. healthcare system. It provides a more complete and detailed understanding of the interplay between the market participants, the processes, and system structures. With this understanding, measures can be designed to provide universal access to effective, efficient, and affordable healthcare. Further, the proposed measures empower the patients, enhance social cohesion, and facilitate the creation of wealth.

### ***The Role of State Governments***

State Governments have the incentive to provide health insurance for their citizens because:

- A. Healthy people are more productive, generate more tax revenues, and require less government funded support. More, healthy people require no caregivers, freeing more labor for productive work, creating more tax revenues.
- B. There is a first-mover advantage in doing so. State Governments that provide health insurance for their citizens, free their employers from the costs burdens, attracting firms away from the States that do not provide it. States that provide health insurance will prosper at the expense of those that do not.
- C. They can pass the ownership of public hospitals to the employees and private investors. This is done by giving State health employees bonuses for productivity in the form of shares in the health facilities where they work. Private investors can also be offered the chance to purchase the remaining shares. This raises funds for building more health facilities and passing their ownership to employees and private investors, increasing the supply of healthcare. More, State Governments will reduce their costs of administering the public health facilities.

Each State Government can establish and manage a healthcare insurance system that works as follows:

1. Patients pay 25% of the cost of the care they receive. This gives them the incentive to:

- A. Take every available measure to prevent the need for treatment, and
  - B. Shop for providers that offer the best value: The highest qualities of care for the price.
2. The providers collect the information on their patients, and bill the State Health Department for the remaining 75% of the costs.
  3. The State Health Department contacts the patient for verification of the services received and the price. Upon receiving the confirmation, the Health Department pays the balance to the provider. This process achieves two major improvements over the current system:
    - A. It lowers the administration costs of healthcare to the bare minimum, thereby lowering the costs of healthcare, and
    - B. Allows the Health Departments to gather full data on both the supply and demand for each health condition and region.
  4. State Governments finance the cost through a combination of:
    - A. Consolidation of their current healthcare programs (since these will no longer be needed),
    - B. Health Insurance Income Tax,
    - C. Sales Tax,
    - D. Corporate Tax,
    - E. Federal Government payments for patients who are veterans, on Medicaid, or Medicare.
  5. The State Government has the incentive to:
    - A. Ensure providers publicize the price list for their services,
    - B. Ensure adequate supply of qualified and licensed providers in all populated locations,
    - C. Collect the best practices in healthcare delivery and use these to establish and update Quality Standards.
    - D. Require all healthcare providers in the State to apply for renewing their license every two years, at which time they will be educated and tested on the latest Quality Standards.
    - E. Monitor the highest costs procedures and find ways to reduce the need for these, and also ways to reduce the costs.
    - F. Monitor the highest cost regions and ensure adequate supply of licensed providers.
    - G. Conduct surveys on patient satisfaction with their providers, and publically recognize those with the highest ratings.

## ***The Role of the Federal Government***

This system of health insurance requires support at the national level, which only the Federal Government can provide. These include:

1. Provide a National Health Card for storing health records to each resident of U.S. with a Social Security Number.
2. Require that all residents covered by their State health insurance to have a choice on where to seek treatment within the U.S. Each State to pay for the treatment of its residents, regardless in which State the services was procured and delivered. The patient will pay 25% of the total costs, as when treatment is delivered in their home State. The National Health Card will allow all providers within U.S. instant access to the health records of their patients, thereby lowering the costs of treatment.
3. Transfer the administration of healthcare for veterans and those on Medicare and Medicaid to their State of residence. State Governments will receive payment from the Federal Government for covering those groups in their health insurance programs. This lowers the costs to the Federal Government, allowing it to balance the national budget. This also increases the market demand for healthcare in those States, creating scale economies for providers, further lowering the costs.
4. Insure the State Governments that provide health insurance in times of recession. As part of the Fiscal Stimulus, the Federal Government to make up the shortfall in health costs incurred by the States.
5. Create a national database where State Governments share their best-practices, health data of their residents, and data on the healthcare supply, demand, and prices.
6. Outlaw punitive damages in medical mal-practice law suits.
7. Fund medical universities to develop the new drugs and medical procedures needed, per priorities set by the Center for Disease Control.

The consumers of healthcare have the incentive to minimize demand and shop for the best value. Only the user of a product can make an optimal purchase, because then benefit is weighed against the cost. Only the user can evaluate what benefits are worth the cost.

The providers of healthcare, operating as private enterprises and sharing the rewards of working efficiently, have the incentive to maximize profits by offering the most effective diagnosis and treatment at the lowest possible costs and selling these the best market prices.

Free market economies function on the basis of a set of incentives for the producers and consumers that make the process learnable to both parties. Further, the government is the regulator of healthcare providers and so cannot function also as a provider. There is a conflict of interest when the government tries to be both a regulator and a provider. The function of government is not to create wealth, but to facilitate the private enterprise in wealth creation.

Federal and State Governments further reduce the costs of healthcare by lowering the administrative costs to the providers, lowering the costs of liability insurance, sharing best practices, and creating a large competitive market.

State governments are in the best position for providing public health insurance for their residents for the following reasons.

1. Establishing a universal system at the State level will allow the merging of all government programs, be they Federal or State, into one, lowering the costs of administration. And costs of delivery can be lowered by leveraging Free Market forces.
2. States have the power of taxation, and with it, the ability to spread the costs burden of healthcare across income levels. This lowers the costs to lower income levels, preventing medical bankruptcies. When individuals have to pay large costs for healthcare out of their pockets, their access is restricted to only the treatments they can afford. To improve access, the financial burden must be spread over time and shared across income levels.
3. This pooling of resources allows the poor to be subsidized. If a patient is not able to pay the required 25% of the costs of care, they sign a request for the State Government to make the payment, to be settled at a later date. That signed form entitles the provider to payment by the State. The State will then deduct a higher level of taxes from the patient's income until the amount is paid in full. For the rare cases when the patient has no income and no estate, the government will absorb the costs. Subsidizing the poor, allows them to become more productive and escape poverty

There is also the broader opportunity of redesigning the system as a whole, instead of making small corrections to one fragment at a time. A master design for the whole system is needed in order to ensure its integrity as it evolves. Partial changes would then have a context to define their objectives, their scope, and their limits.

The next section examines how economic principles apply to the healthcare industry, to uncover the reasons why costs are not contained. The report then applies the principles of system design and system management to the design of the healthcare system.

## ***Economic Principles of Healthcare***

The following economic principles apply to the healthcare industry, particularly the U.S. model.

1. As a product, health has no substitute. Health is an intangible asset that has no replacement and cannot be accumulated for future use. Yet it is subject to large and unpredictable risks. Health is a necessity; equally so for the poor and the rich. Yet the poor is denied access to healthcare.
2. Health is radically different from all other assets that people insure against loss or damage. Since the body is impossible to replace, there is no market value for it. Therefore there is no ceiling on health costs, as there is for replacing a car after an accident or a building after damage. And treatment costs can run into thousands of dollars: equivalent to months or even years of income. Individuals are often forced into bankruptcy due to medical costs.
3. When someone is ill, that person's capacity to create wealth is impaired. If patients are not treated, their productivity will diminish, perhaps to the point of making them dependent on others, diminishing the capacity of more people to create wealth. Worse, the patient's life may be threatened. Ill health is costly to all. The collective economic interests of any community are in ensuring the health of all individuals.
4. Health is a constituent of the sovereignty of individuals. In poor health, a person's capacity to acquire, hold, and exercise power is severely diminished. Thus health is a right. As the right to sovereignty is the most fundamental of all rights, so is for health.
5. Consumers have no choice of timing their consumption. Health needs rarely can await treatment. Although consumers can co-produce their health by following good habits of diet, hygiene, and exercise.
6. Most people put a large portion of their income toward healthcare costs. Without some mechanisms for spreading the financial burden over time, or sharing the burden with others, individuals may be left with only very difficult choices. With their savings depleted due to healthcare costs, people are left financially vulnerable. With their monetary capital gone, they cannot invest. So the society is missing the benefits of private investments that cannot be made.
7. Consumers do not choose their treatment, and so they cannot always shop or negotiate for best value. This deprives the healthcare system from this market mechanism, which is essential for enforcing efficient utilization of resources.

In the current system, the patient often does not have any choice of what drug to use, from which supplier to buy it, which tests and procedures to have done, and by whom. None of those who make these decisions have any incentive for promoting efficiency.

Doctors prescribe the drugs, tests, and procedures with the prime concern of effective healthcare for their patients. Drug companies develop, manufacture, and market drugs with the prime purpose of maximizing value for their shareholders. Hospitals and laboratories provide the prescribed procedures and tests with little concern for cost efficiency, since insurance companies or governments pay for these.

8. The FDA (Food and Drug Administration) is responsible for ensuring the efficacy and safety of drugs. Its requirements for approval of a drug can cost a drug company up to a billion dollars. Clearly, this sum is beyond the investing capacity of many companies. Though this requirement is necessary to ensure effectiveness of drugs and procedures, it is a barrier to market entry for potential new suppliers. This leads to a market that is dominated by a few large international companies, keeping potential competitors away.

There are many small companies who specialize in developing drugs, using grants from the government and facilities from academic institutions to do their research. But they can afford to complete only the less costly Phase I and Phase II of the approval process, leaving out Phase III since it is the most expensive to complete. Having established the efficacy and safety of their new products with these trials, they market their company to the larger companies who can finance the Phase III of the regulatory requirements. This means that the small companies, no matter how innovative they may be, have no chance of ever entering the market, competing for market share, and growing as a company.

The FDA's regulatory process enforces effectiveness, but there is no process to ensure efficiency. Given how significant the costs of healthcare are in relation to the patients' incomes, an inefficient health delivery system becomes inaccessible, and therefore ineffective. The FDA regulations, which are intended to protect the consumers' health, also hurt them. If prices are so high that consumers cannot afford to have the care, they will not benefit from the treatment.

9. Fear of punitive damages in law suits also drive up the costs of healthcare. Even though the number of these cases is small, the fear and uncertainty that these bring drive providers to buy liability insurance as protection. This raises the costs of healthcare to all who pay for it.

Holding healthcare providers accountable for consequences of their practices is the only way to enforce learning. This motivates providers to take all necessary measures to ensure that their patients are healed and not harmed. Enforcing the learning process brings providers to make every step of a task learnable so that cause and effect relationships are uncovered routinely and to the maximum level possible. This requires a plan of measuring key variables and following the learning process with discipline. The learning process uncovers all the possible ways that harm may come from each procedure, as well as all the ways to improve effectiveness and efficiency.

Inducing healthcare providers to purchase liability insurance may in fact be counterproductive, in that it may make them believe that they have no need to routinely learn from their experiences. Fear of punitive damages is another factor that promotes effectiveness, but disregards the need for efficiency.

10. The above factors are all structural inefficiencies in the U.S. healthcare system, which raise the costs to a level that make healthcare unaffordable for large sections of the population. Individuals whose employers do not offer health insurance have to pay for their treatments out of pocket and suffer a significant financial burden. Even those whose employers *do* offer health insurance are not in a safe situation. In the competitive global market, companies have to keep their costs down. If the U.S. labor market requires employers to provide health insurance, they have one more incentive to relocate their labor-intensive operations to other countries. Loading the full burden of an inefficient health system on the employers will trigger dislocations that leave the people not only without access to healthcare, but also without jobs.

### **Health: An Economic & Political Issue**

We create commercial wealth and social wealth through our capacity to acquire, hold, and exercise power: our sovereignty as individuals. Health is an integral part of our sovereignty, and therefore a key determinant of our capacity to create both kinds of wealth.

Individual sovereignty lies at the root of our political, economic, and legal doctrines. Though it is not spelled out in the United States Constitution, all three doctrines in this document have at their foundation the principle that sovereignty rests with the individual. As Americans, we believe that free and informed individuals make the best decisions for themselves and the nation. The free market economy recognizes producer sovereignty and consumer sovereignty and justifies the efficiency of its

allocation of resources, on the basis that decisions about production and consumption are made by individuals with choice. Our legal system upholds all private contracts that individuals freely enter.

The right to sovereignty is the most fundamental of all rights. The right to acquire, hold, and exercise power is the basis and justification for all other rights of individuals. The right of individuals to their sovereignty is the basic assumption on which the doctrines of democracy and Free Market economy are built. Without the implicit recognition of the right to individual sovereignty, democracy and Free Market economy are not possible.

The health of individuals, as an integral part of their sovereignty, is a critical economic, social, and political issue. Therefore access to affordable healthcare is a fundamental right of every individual. Ill health diminishes the capacity of individuals to create wealth, and thus impoverishes the community. Health and wealth are inseparable. Investment in health increases the productivity of individuals, creates more wealth, which can then be invested in health. Providing universal access to affordable healthcare starts a virtuous cycle.

People integrate to promote their wealth and their security. A nation is a system formed through the integration of individuals. They form a government to protect and promote the sovereignty of individuals through:

1. Facilitating private transactions to produce commercial and social wealth,
2. Enforcing legitimate private contracts,
3. Providing for the common security, and
4. Managing the common resources.

The government is therefore obligated to ensure affordable access to effective healthcare by all. This is necessary both to facilitate private transactions and to provide for the common security.

### **Systems-Thinking Principles**

We can design a healthcare system that treats the highest possible number of people at the lowest costs, and in the shortest amount of time. More, we can design the healthcare system to be learnable: self-regulating, self-designing, and self-adapting. We have to redesign the healthcare system so it is accessible all who need treatment, and responds equally well to all of them.

In the current system, insurance companies are given a major role in deciding how to allocate resources. This role is inappropriate for two reasons. First, the objective of insurance companies is to maximize

profits and this is not in line with the goal of equal response to all who need treatment. Second, the insurance companies do not have control of the measures needed to improve the healthcare system. For insurance companies, or employers for that matter, the healthcare system is not learnable.

Only State Governments have the natural interest and obligation to ensure that the healthcare system performs as designed. And only the State Governments are in a position to make necessary corrections to the system in a prompt and efficient manner. The healthcare system is learnable only for the patients, the providers, and the government.

Each sub-system within healthcare must have the incentive and obligation to monitor its performance, and be empowered to take the necessary corrective measures. Further, the sub-systems must have the incentive and the obligation to cooperate.

Each healthcare provider, operating as private enterprise with employee ownership, will have such an incentive. Providers who care about their patients will make more profits, and will also gain the respect and loyalty of their patients and the community at large. So they are rewarded in two ways: with commercial reward and social reward.

Small clinics can be started as a company by a group of professionals, under a similar model as seen in small law or accounting firms. The government can build hospitals, since more capital is required to finance such a large project needing expensive equipment. But once the hospital is established, its employees should be represented on its board of directors and its share should be offered to the public. This allows the government to recover its capital and invest in more high-tech and modern facilities. It also brings the participation of the public and the employees in the management of the hospital. With a profit sharing incentive, the employees would work to provide effective healthcare efficiently as well as find motivation to purchase the shares of the hospital and become part owners.

### ***System Design – System Management***

Here in the U.S. we can provide effective healthcare and guard against most diseases. The challenge is providing effective healthcare for all who need it. We have to make effective healthcare accessible, by making it affordable. To reduce the costs of healthcare, we should design a system of incentives to promote cost efficiencies at every step of the healthcare delivery process.

The Free Market mechanisms should be employed to ensure effective and efficient delivery of healthcare to all. With the providers operating as private enterprises in competitive markets, they have

the incentive to reduce costs and attract and keep their customers. The healthcare industry produces both goods and services. Goods, such as drugs and medical equipment, are tradable across state and national boundaries. Therefore markets for these are often very competitive. Harmonization of regulations for drug approvals provides a prime example. European and Japanese drugs should be able to compete with U.S. made drugs so as to lower the prices to consumers. Medical services, in contrast, are locally produced and consumed, and are not tradable across national or even state boundaries. To promote cost efficiencies in the production and delivery of medical services, patients need to have the choice of a number of qualified providers, to create competitive markets.

Yet, healthcare cannot be treated the same way as other products in a Free Market economy. In addition to choice of providers, consumers of healthcare also need support in managing the costs. They need a mechanism to spread the payment for the costs over a longer span of time, so as to make the financial burden manageable. They also need a mechanism to share the costs across the population, so as to ensure the health of the community by maintaining the health of its individuals.

In financing of healthcare, the primary responsibility must remain with the patient, while providing government support when and where it is needed. No other institution has the resources, or the obligation to provide that support.

In all large organizations, such as nations, decision-making authority should remain at the local level, and move to higher levels only when it proves more efficient or when it is the only effective way for achieving the objectives.

State Governments should assume the responsibility to ensure universal access to effective healthcare for all its residents. When problems arise, they can work with the City and the County Governments to determine what corrective measures need to be taken. State Governments can establish large academic institutions for medical research, education, and training of medical professionals, and build large research hospitals. Such institutions require large capital outlays, and a large enough market to fund and utilize it.

There is also the task of regulating new drugs and medical procedures, and monitoring the health of the whole nation. The Federal Government is best suited for these.

## **A Systemic Approach to Healthcare Reform**

Market forces can be used to ensure healthcare delivery that is:

1. Safe and effective,
2. Accessible to all and affordable by all, and
3. Learnable.

The following measures are derived for the principles of Systems-Thinking, and will achieve the above objectives.

1. Abolish punitive damages in lawsuits. A major cost to healthcare providers is the cost of liability insurance, which they presently have to purchase in order to guard against punitive damages. Relieving providers of this burden will lower costs throughout the industry.

Justice means rendering each party to an integration due benefits for due costs. This is achieved through the legal system. The functions of law are:

1. Deterrence,
2. Restoration, and
3. Learning.

Punishment is often justified as a deterrent. Yet, complete restoration would be a burden heavy enough to deter. When the plaintiff of a healthcare case demonstrates that he or she has suffered from the errors of others, this reveals a deficiency in the functioning of that system. This means that the plaintiff is not the only aggrieved party, and that others may have also suffered from the same deficiencies in that system. Further, such deficiencies may be present in similar systems elsewhere in the country that for some reason have not been uncovered. Hence, there is an opportunity for learning.

The legal system should then be mobilized to identify all aggrieved parties, and establish if restoration is warranted, and what corrective measures by the defendant or other healthcare providers are required. This completes the learning function of law enforcement.

Yet, these aggrieved parties are not the only ones injured. By this point in the process, the legal system has incurred some costs in handling this case—costs that it otherwise would have not incurred. Such costs should also be included in the restoration package of the defendant.

The community also has suffered disruptions to its orderly flow of activities as a result of the harm suffered by its members, and the time and effort that are spent to settle the case. The defendant should also restore the community through some contribution to it. Therefore, complete restoration aids in the learning process and it also deters recurrence of harmful practices.

Punishment is irrational and unjust. Systems-Thinking makes us aware of our ever present interdependencies. We interact with each other to create wealth. We need each other. We engage in commercial trade to create commercial wealth. And we engage in social trade to create social wealth. Punishment diminishes a person's capacity to engage in commercial trade and social trade with others. So everyone suffers from the punishment, and not just the intended person. The same reasoning applies when punitive damages are imposed on organizations. This hurts everyone.

The healthcare system clearly demonstrates our interdependence, and how all suffer when someone is punished. Fear of punitive damages forces the healthcare providers to buy expensive liability insurance. Since all providers are subjected to the same threat of punitive damages, they all have to purchase expensive liability insurance in order to survive a lawsuit. This increases the costs of providing healthcare to all, which inevitably is passed on to consumers, punishing everyone.

A system can function consistently as designed only when its processes are regulated through learning loops. And for the learning to take place, each learning loop has to be tied to a sovereign entity who stands to benefit from that process. When the system malfunctions, and people suffer in health and wealth, the question should never be whom to punish, but why the system could not regulate itself. Instead of looking for the guilty, we should fix the system.

A system as large as healthcare requires learning loops around every process whose output directly benefits some sovereign entity. Moreover, that entity should be given access to data about that sub-system as well as the means to make corrective adjustments. In designing a healthcare system, we have to include incentive and learning sub-systems.

2. By promoting competition in the marketplace, the Federal Government can lower prices and increased quality of healthcare and the range of services offered. Drug prices can be lowered by increasing producer access to markets and consumers' choices for treatment. This can be done

through harmonization of the regulatory requirements between major world markets. Efforts to that end have already started.

The FDA (Food and Drug Administration) Modernization Act of 1997 defined the agency's four missions. The third mission is to “participate through appropriate processes with representatives of other countries to reduce the burden of regulation, harmonize regulatory requirements, and achieve appropriate reciprocal arrangements.”

In 1990, the ICH (International Conference on Harmonization of Technical Requirements for Registration of Pharmaceuticals for Human Use) was established by:

FDA – U.S.A.

Pharmaceutical Research and Manufacturers of America – U.S.A.

European Commission – EU

European Federation of Pharmaceutical Industries' Associations – EU

Ministry of Health & Welfare – Japan

Japan Pharmaceutical Manufacturers Association – Japan

In addition, the World Health Organization, the European Free Trade association, and Canada participate in the ICH as observers.

The purpose of the ICH is to produce a single set of technical requirements for the registration of new drug products for all three markets of the U.S., E.U., and Japan. The Common Technical Document, streamlines the development and approval of new drugs, and requires only one approval process for all three regions, eliminating research duplication. A drug that is approved in the E.U. can be directly marketed in the U.S. without a separate approval process. To date, the ICH has developed many harmonization guidelines, covering Efficacy, Quality, and Safety, which are being implemented by the regulatory bodies of the three regions.

This reduces the time needed to bring new drugs to the markets. More importantly, it opens the three markets to competition and lowers prices.

Ideally, and with time, competition among large international pharmaceutical companies will drive them to divest their manufacturing businesses and concentrate on their core competency which is to create new drugs. This will initiate a major restructuring of the industry. Pharmaceutical companies will then focus on product innovation to compete on performance, and sell licenses for manufacturing their products to other companies. Manufacturing

companies will focus on process innovations, to compete on price and sell their products to distributors. Doctors will then be able to prescribe the brands of medicine that are best suited for each patient, and they can purchase the brand that is the best fit and best price for their needs.

3. The Federal Government should increase competition further by financing the approval process for new drugs that can compete with the most expensive drugs on the market.

The NIH (National Health Institute), an agency of the DHHS (Department of Health and Human Services), has a budget to support thousands of research grants in U.S. and abroad. It therefore has the means of financing the approval of certain new drugs that look promising, and that could offer lower cost alternatives to consumers. Such drugs are usually developed by small pharmaceutical companies who cannot afford the costs of Phase III trials. Funding the testing of such drugs can be at the discretion of the Secretary of DHHS, based on recommendations by the NIH and CDC (Center for Disease Control).

When a drug receives approval in this way, the patent rights should remain with those who developed it on the condition that they do not manufacture it by themselves, but rather sell licenses to a number of companies for manufacture. This stimulates process innovations by the competing manufacturers, lowering prices even further.

This program would have two beneficial effects. First, it brings new cheaper drugs into the market that help drive down the prices of all similar drugs. Second, it encourages small pharmaceutical companies to stay in business rather than try to get one of the large companies to buy them. This creates new sources for product innovation, and more new products for evaluation.

4. Federal government should allow individuals to convert their 401K accounts into Registered Capital Accounts (RCA). As with 401K, allow each individual to make pre-tax deposits of up to some amount per year. Allow employers to make pre-tax contributions of unlimited amounts to their employees' RCAs as gain sharing bonuses. Allow the gain sharing contributions to be in the form of the employers' treasury stocks. Allow the individuals to use the funds tax-exempt for investments: renovating their home, buying property, retirement, college education for their kids, job training, and paying medical bills. Allow banks to maintain the RCAs, manage taxation of taxable withdrawals and offer investment options to account holders.

This provides an opportunity for every individual to accumulate monetary capital. This is the best way to empower the individual, giving them the chance to help themselves. It allows individuals to gain a measure of autonomy, invest in themselves, remain productive, and avoid becoming a burden on the state or need welfare assistance.

Although this paper is concerned directly with healthcare reform, measures that would help individuals and families to invest in their health without undue financial burden have a broader range of benefits.

5. State Governments should assume the responsibility of ensuring the availability and convenient access to healthcare for all their residents.

With this measure, employers will be relieved from the burden of providing health insurance for their employees. Employers should not participate in the healthcare system, since it is not learnable for them. They have the incentive to lower their costs but only have limited data on how it performs and where the problems are, and no capacity to take any corrective action that would regulate or redesign the system.

This measure relieves the employers from the financial burden of purchasing health insurance for their employees. The challenge they will face, however, involves raising salaries and wages so that the employees can fund the healthcare they receive through State Government insurance. Still, there will be a net saving for the employers since they are relieved from the burden of administering health benefits.

This measure also eliminates the need for insurance companies to act as agents for healthcare. Insurance companies can be an effective agent for load sharing and load distribution mechanisms, and they perform this function well when they provide auto insurance. But when it comes to healthcare this mechanism breaks down.

As with the employers, the healthcare system is not learnable for the insurance companies. Unlike the case with auto insurance, the insured under healthcare plans have no control of what their needs will be. Preventive measures are available for only a very narrow range of cases. By nature, healthcare needs are randomly spread among the population, and at times individuals face abrupt increases in their health needs, putting a strain for which they can't easily plan.

The incentive for the insurance companies is to maximize profits, and all their actions are directed to that end. They want to “cherry pick” when offering coverage, preferring those

without existing expensive needs. They have to compete on price. Yet they cannot offer an incentive to the providers for cost efficiency, lest it impedes effectiveness. They cannot in any way improve the effectiveness or efficiency of the healthcare system.

In the final analysis, all they end up doing is burdening the system with the full weight of their administrative costs without producing any benefits.

6. Patients will pay the costs of healthcare in two parts:
  - a. A Healthcare Tax as prepayment to be collected by the State Government, and
  - b. A user fee of 25% to be paid to healthcare providers.

The provider collects the remaining 75% of the cost from the State Health Department.

The patient has the incentive to shop for best value. Given that the costs of healthcare represent a sizeable portion of the patient's income, the patient has a great incentive to educate himself about the available treatments and the quality and services available on the market.

Further, the patient has the incentive to educate himself about available preventive care, and diligently maintain his health through exercise, healthy eating, and refraining from self-abusing indulgence in alcohol, tobacco, and substance abuse.

This mechanism also gives the incentive to Providers to compete with choice, quality, service, and price. Each provider can be a company made of healthcare professionals who share the profits, giving them further incentive to provide value to their customers. A satisfied customer brings new customers. An unsatisfied customer drives customers to the competition.

7. Patients to have the option of seeking healthcare from out of State providers. If a patient uses the services of a healthcare provider in another State because he/she happen to be there when the need arose, then the home State pays the 75% of the costs to the provider.

If a patient prefers a provider in another State, the home State would still pay its portion of the costs. This gives the incentive to the home State to find out why the required healthcare, or the quality or the service, was not locally available, and what corrective measures the case suggests.

8. Patients who cannot afford paying the User Fee in one payment will arrange a gradual payment plan with the State.

Patients who cannot afford to pay the User Fee at all will ask the State Government for financial assistance. In such cases, the State pays the User Fee, as well as its 75% portion. However, the State Government must recognize that such patients are in financial difficulty and may have other problems that require the attention of social workers. The City Government then assigns a Case Worker who looks into the financial and social affairs of each such a patient, and coordinates supports from various government agencies to help them get their affairs back in order.

Through wider distribution and load sharing, this mechanism allows delivery of healthcare to all without running into the moral hazard problem.

9. The State Government will collect taxes on personal incomes as Healthcare Tax, proportional to the income levels, in sufficient rates to cover the costs of the disbursements to the providers and administration.

A provider can collect the 75% portion of the costs from the State Health Department, simply by producing the invoice as paid by the patient. That invoice is sufficient proof that the stated services were rendered, since the patient named has already agreed to the price and has paid the User Fee. This mechanism requires no further verification by the State, and so can be completed at minimal cost.

Overall, the total costs of healthcare will be lower than the present level, because the administration costs of the State will be lower than those of the insurance companies and employers. So there is an overall net saving to the economy of the State.

10. Medicare and Medicaid patients to follow the same process as others, shopping among providers for the best value. In their case, the State will perform the administrative functions to ensure access to federally funded benefits.

This mechanism reduces the administrative burden of the Federal Government, since the State governments verify services rendered and the pricing. The mechanism also prevents fraud and abuse by providers, by ensuring transparency and local management. When a provider sends a bill to the State for services rendered to a Medicaid or Medicare patient, the city administrators can verify if the costs of the treatments are the same as those given to other patients. Since other patients shop for providers who offer the best value, the providers are already under market pressures to be competitive.

11. The City will collect recommendations from the residents on the providers who deserve public recognition for their service to the community. The City to establish an office of Community Service Recognition Board, staffed with volunteers. The Board collects nominations from the citizens for receiving public recognition at a ceremony held once a year.

Although this paper is concerned only with healthcare reform, it is evident that such a mechanism is also useful for recognizing other public service providers such as teachers, police, and fire fighters. The value that these professions provide to the public cannot be compensated with commercial rewards alone. The value they impart to the community is more than can be measured with GDP (Gross Domestic Product). They create social wealth as well commercial wealth.

The effectiveness of a healthcare delivery system often depends on the care and attention of the providers. Receiving healthcare is not the same as getting an oil change. Healthcare is personal, both for the patient and the providers. No law can demand the love and care of the providers. No commercial reward can compensate for it. Those who serve others wholeheartedly can be compensated only with the ultimate reward: the wholehearted appreciation of the community.

This mechanism provides two major benefits:

- I. It provides a channel for supplementing commercial reward with social reward, thereby encouraging those who value both, and
- II. It re-affirms the community's culture of doing things out of love and with love.

The above measures in effect re-design the healthcare system such that it becomes manageable. In doing so, they also create structures that facilitate the whole economy to create both commercial and social wealth.

In this design, the following sovereign entities participate:

- Patients, as consumers
- Providers, as suppliers
- State Governments, facilitating access, education, training, and accreditation

- Federal Government, regulating

These entities each have a clear incentive to improve health. They are each sovereign in that each has the capacity to acquire, hold, and exercise power in order to influence action. They are organized with the Federal Government as the largest context, of which the State Governments are sub-systems. A State Government is the context for City Governments, and each City the context of its residents. The providers can range in size with their operations spanning a geographic area as small as a city or as large as the whole world.

Each sovereign entity has the capacity to learn and influence its own actions or actions of others in pursuing its purpose. Each has an incentive, and the freedom, to learn so as to maximize its effectiveness and efficiency.

### ***Conclusion***

Health is one of the four constituents of the sovereignty of individuals, along with capital, skills, and relationships. It is thus both an economic and a political issue. Poor health diminishes the capacity of individuals to create wealth. This impoverishes both the individual and the community. A poorer individual and community will have fewer resources to invest in health. Left unchecked, this leads to a vicious circle. In contrast, investment in the health of the poor raises their productivity. This creates more wealth, which can be invested in health. The vicious cycle is broken, and a virtuous cycle is started.

The U.S. healthcare system is in crisis and in urgent need of reform. Though U.S. has the most advanced medical knowledge in the world, effective healthcare is available only to those with health insurance and those who can afford large sudden expenses. Healthcare in U.S. is too expensive and is inaccessible to large sections of the population. It is inefficient, and unmanageable.

Systems-Thinking is aptly suited for designing complex large organizational systems such as that of the U.S. healthcare. It helps design measures for reforming the healthcare system to enhance its effectiveness, cost efficiency, and accessibility and affordability to all. The proposed measures also make the system more learnable, flexible to regional needs, and adaptable to regional changes. The system is thus more manageable.

With the proposed measures, the U.S. healthcare system can provide universal coverage. Further, the proposed measures require no initial capital expenditure.

These changes highlight the significance of healthcare both as an economic and a political issue, and demonstrate that healthcare is a fundamental right of each individual. With these conclusions, we see how the government has an obligation to provide affordable access to healthcare for all.

Employers and insurance companies should not participate in the healthcare system since their objectives are not in line with that of the system. Further, neither the employers nor the insurance companies have the capacity to make the kind of corrective changes that the system needs in order to improve the health of people.

The proposed measures harness the forces of competition to empower patients with choice of providers and suppliers, and so enforce cost efficiencies. The proposed measures also provide relief to patients from suffering extreme financial burdens.

This is done through three mechanisms. Registered Capital Accounts allow individuals to save pre-tax dollars as capital. This capital can be used, free of income tax, for payment of medical bills.

The State Governments should be responsible for providing affordable and effective healthcare for all. While the primary responsibility for funding the healthcare rests with the patients, the State can provide support in two ways to ease the financial burden. The State collects a Health Tax from the residents, in proportion to their income levels as Prepayment, and pays 75% of the costs of each case to the providers. The patient pays 25% of the costs as User Fee.

This mechanism spreads the financial burden for the patient over a longer span of time, so as to make the burden manageable. The mechanism also shares the financial burden across the population to ease the burden on lower income families. Patients who cannot pay the User Fee in one payment are to be given the option of arranging a payment plan with the State and make a series of smaller payments over time. Patients who cannot pay the User Fee at all will have the Fee paid by the State and will have a Social Worker assigned to them to help them manage their finances.

The State governments and the Federal Government should play smaller roles. This will allow maximum flexibility for all levels of government and it will lower the overall costs of the system.