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Take This Health Care System and if You're Not Better, Call me in the Morning

The Health Care System of Tomorrow

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MBA students design a health care system committed to provide health care for every citizen, while maintaining the free enterprise system, coupled with a modicum of federal oversight and regulation.

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Part One of a Two Part Series

Reshaping today's health care system into a model that provides coverage for all citizens, yet preserves a public-private partnership while sustaining affordability is no easy task. In the first of a two part series the foundation of *The Health Care System of Tomorrow* is laid together with a sprinkling of cost considerations. The basic tenet of Part One is that all citizens will have health insurance with government assistance where needed but with individual choice from among competing insurance plans. Under the auspices of a comprehensive coverage umbrella, prevention and best practices address quality and safeguards. Communications are put in place to educate Americans. Individual responsibility for one's own health is covered under wellness. To assure universal coverage, health insurance is mandatory. Finally in Part One the issue of malpractice reform receives attention with provisions for grievous injuries.

Part Two of this article will be presented in the next article in this Volume. Suggestions to mitigate costs are provided as well as a look at some of the social inequalities in our social security system. Some of these suggestions to cut costs include a range of reforms. For example, volunteerism provides opportunities to obtain funds for health insurance coverage as well as provides a venue for significantly reducing costs. Pharmaceutical price negotiation requires the government to assure it receives the best prices for the coverage it provides or subsidizes. Electronic Health records are utilized to lower cost, reduce unnecessary utilization and improve quality. The vulnerable aged population – those age 85 and above – can access a full year of nursing home coverage or two years of home health care. Gender inequity in terms of Social Security benefits is resolved – recognizing that pay equality must be achieved and recognizing the fact that women often leave the work force to care for elderly family members. To assure an adequate supply of physicians and nurses provisions are included for subsidized education with concurring obligations of providing coverage in underserved areas.

Finally, provisions are made to provide health insurance coverage to those displaced or out of work because of a natural disaster.

ABSTRACT

A new health care system for the United States is described in a series of thirteen recommendations for change and innovation. The basics of the free enterprise system are preserved, but the responsibility of government to preserve and improve health care is recognized and fortified. The new system referred to as *The Health Care system of Tomorrow* includes the following elements:

1. Citizen Responsibility with Assistance – All citizens would be required to purchase health insurance from a list of competing health plans (CHPs). Large employers would be required to provide insurance. Government subsidies would be available for small business, the poor, unemployed and elderly.

2. Prevention and Best Practices – All CHPs would be required to provide prevention services and all plans would be required to adopt evidence-based medicine protocols (best practices) for chronic disease management.

3. Communications – The government would publish annually a booklet that reviews offerings and prices for insurance from CHPs. Hospitals would be required to provide counseling services about various plans, costs and coverages free of charge.

4. Wellness Programs – The government would establish within the Department of Health and Human Services (HHS) a new section to be known as Health in America (HIA). The section would identify biannual wellness programs and recommend incentives for compliance by individual citizens.

5. Mandatory Insurance– All American citizens or persons legally domiciled in the U.S. would be required to have health insurance.

6. Malpractice Reform – Under a federal system, malpractice awards would be capped. All medical malpractice would be governed by a federal statute of limitations that do not exceed four years from the time an injury occurred. This provision attempts to address costs that impact health care delivery. State courts would retain their present jurisdiction over malpractice cases but would be required to apply federal procedures regarding statutes of limitation.

7. Volunteerism – The poor and those receiving health care subsidies from the government to purchase health insurance would be required to work in a community-based program, assuming ability to do so. Volunteers would also be encouraged to provide in-home services to the elderly or disabled who might otherwise be in long-term care facilities. The government would establish a *Health Care Corp* (HCC) similar to the Peace Corp. HCC participants would provide care and assist with chores in the homes of the needy elderly or incapacitated.

8. Pharmaceutical Price Negotiation – The federal government would negotiate prescription drug costs on behalf of those citizens receiving health care insurance subsides as well as the elderly population presently participating in today's Medicare Part D prescription drug program. Concurrently there would be established a federally funded research and development program that provides research dollars to pharmaceutical companies.

9. The Electronic Wizard – Reducing Administrative Costs – All providers would be required to use a single master billing form. Duplication in testing would not be allowed except under unusual circumstances. Providers would utilize an Electronic Health Record (HER). Universal access to information would be allowed with permission. Administrative costs would be reduced by at least 10%. Tax credits would be available to small providers to assist in the purchase of federally approved EHR software.

10. The Vulnerable Aged Population - Citizens age 85 and above would receive, based on need, up to 360 days of free nursing home care or home health care on the basis of two times home health care for every nursing home care day (could receive up to 720 days of home health care). Unlimited rehabilitative care would be provided to those ages 85 and over. These provisions would be subject to a test to determine if a person has insufficient income to meet the costs of lengthy confinement in a nursing home (a means test).

11. Equalizing Social Security for Women – At normal retirement age, Social Security benefits would be equalized for men and women based on the mean income of men in the

same or similar position to that of a woman. Working credit at the minimum wage would be given to those persons serving as full time caregivers for the elderly or disabled.

12. Physician and Nurse and Pharmacist Education – A federally subsidized *Physician Nurse and Pharmacist Education Program* (PNPEP) will assist in financing students pursuing their medical, nursing or pharmacy degrees. A Physician Nurse Pharmacist Corp (PNPC) would be developed. Participants would be assigned to areas of need. There would also be formed a civilian *Critical Care Nurse Corp* (CCNC).

13. Natural Disasters – Health care insurance premiums will be waived and absorbed by the federal government, for those citizens' unemployed or displaced because of a natural disaster (such as Hurricane Katrina). This provision recognizes that every citizen must be covered by health insurance. This provision would only apply if other provisions of reform fail to provide health insurance coverage.

TAKE THIS HEALTH CARE SYSTEM AND IF YOU'RE NOT BETTER, CALL ME IN THE MORNING

Better than most, but at a price. Far worse than the best, regardless of price. Welcome to the U.S. health care system. Our friends to the north in Canada live longer. Their health insurance seems free since it is paid by tax dollars. In the U.S. you can get an MRI in any small town without a wait. In Canada you can get an MRI in any big city with a wait. The average Japanese citizen lives 3.4 years longer than the average American citizen – 81.4 vs. 78.0 years. In the U.S. physicians have the highest average income of any profession.[1] Moreover, physician's income in the U.S exceeds that of any of the industrialized countries of the world.[2] In Japan a physician make less than 33% of what his or her counterpart would earn in the United States.[3]

In a sense, health care in the U.S. is much like the gas guzzling large automobile. – one consumes an ever increasing portion of our national budget which unchecked will lead to societal bankruptcy while the other consumes huge amounts of fossil fuels accelerating their depletion.

There is much to admire as we look at health care in various countries and cultures on the world stage. Universal access (Canada and the United Kingdom) is to be admired. So too are the benefits, such as paid time off and free babysitting services afforded mothers in the Nordic countries (Sweden, Finland and Norway). In most European countries, drugs are inexpensive due to government regulation or negotiation of prices. In Japan children take care of their aging parents, thus avoiding nursing home costs. One study found that 30% of Japanese adult children living apart from their parents provided in-home long term care although the parents were wealthy enough to meet the costs of nursing. In Saudi Arabia the Constitution guarantees free health care to all citizens.[4] We can argue that the Constitution of the United States, in its very preamble, includes language that would seem to compel a united federal and state obligation to meet the health care needs of U.S. citizens. Need we be reminded these words frame the main document of our democracy: "We the people of the United States, in order to form a more perfect union, establish justice, insure domestic tranquility, provide for the common defense, **promote the general welfare** and secure the blessings of liberty to ourselves and our posterity, do ordain and establish this Constitution for the United States of America".[5] (Emphasis added). Certainly the health of a society's citizens would seem to fall under the context of promoting the general welfare. But alas, the preamble is but a purpose clause and so definitive pronouncements on health care were left to future generations who could amend the document – or for courts to interpret the document broadly so as to compel government support of its citizens' health.

With the thought in mind that the U.S. healthcare system might be broken (or at least heading toward an immovable wall with faulty brakes) it was decided to build a better mousetrap. Drawing from a class of MBA students at The University of Findlay, Findlay, Ohio (USA) we sought solutions from the diversity of the class. The class was *Health Care Regulations and Public Policy*. The students were both domestic and international. Several were from India, one was from Nepal, most were health care professionals in their own country – doctors, pharmacists, dentists, physical therapists, administrators, biologists and health care consultants.

Over a two-week period, each class member was asked to complete a two-part assignment based on the assumption that he or she was a candidate for President of the United States. As he or she campaigned for the Presidency, each "candidate" prepared two speeches. The first speech outlined a new health care system for citizens of the United States. The second speech outlined financing methodologies to implement the plan.

As might be expected, our political candidates set forth plat-

forms that ran the gamut from universal access, as embraced in the Canadian health care system, to complete deregulation of every aspect of health, including doing away with federal agencies overseeing health including the Food and Drug Administration (FDA) and Department of Health and Human Services (HHS) (which includes the Center for Medicare and Medicaid Services (CMS)). What emerged as a final consensus was a plan that reflected one or more recommendations from every student.

While the emphasis in this article is focused on a national health care plan and financing, one provision has been added that address's the Social Security system in the U.S. During the course of the semester the plight of women, especially elderly women, was studied. As Carroll Estes notes in her book, *Health Policy – Crisis and Reform in the U.S. Health Care Delivery System*, by the time a woman is age 65, she is almost twice as likely as her male counterpart to be poor or near poor.[6] Moreover, 60% of older women are single compared to 26% of older men.[7] Finally retired women receive less in Social Security benefits than do retired men ($774 compared to $1,006 in 2002 – a 20% disparity).[8] In our quest for an achievable – and deliverable – health care delivery system we suggest parity in our Social Security system. We are cognizant of the fact that women are more often than not called on to care for elderly parents thus taking them out of the working world and diminishing further credits toward Social Security at retirement age.

A HISTORICAL PERSPECTIVE

Health care evolved slowly as the United States as settlers and treaties added land across the country from the Atlantic to the Pacific ocean and thence to Alaska and Hawaii. Scientific breakthroughs in the late nineteenth century provided the tools to control the spread of disease and regulation followed at both state and federal levels.[9] The discovery of the role of germs in causing illness led to an emphasis on contagion and thence to vaccines, sanitation, food and drug laws and finally to licensure of both providers and institutions.[10]

Health insurance traces its roots to a 1929 plan developed by Baylor Hospital in Houston, Texas for schoolteachers.[11] The spread of the Baylor concept led to the eventual formation of non-profit Blue Cross plans for inpatient care and subsequent development of Blue Shield plans that covered physician charges.[12] The most significant impetus for employer provided health insurance came during World War II when wages were frozen by the federal government. Benefits were exempt from the freeze and employers embraced health insurance as a way to attract needed wartime workers.[13] The die was cast for pre-paid employer provided health insurance. Unions were quick to include these benefits in their negotiating packages.

The percentage of employers offering health insurance peaked at 69% in the year 2000 and has fallen to 60% in 2006.[14] More than one out of six Americans under the age of 65 or nearly 18% had no health insurance in 2006. The uninsured nonelderly population has reached 46.5 million people.[15] The following table provides a snapshot of the health insurance coverage of nonelderly Americans in 2006.

Employer provided insurance	60.9%
Individual provided insurance	5.4%
Covered by Medicaid	13.5%
Other	2.3%
Uninsured	17.9%

Source: Kaiser Family Foundation – Health Insurance Coverage of the Nonelderly[16]

More than 62% of uninsured Americans under 65 live in households with income under $40,000.per year.[17] There is a dark side for the insured as well as the uninsured. Out of pocket expenses continue to rise for those with insurance. Those citizens covered by Medicare (which is a health insurance program for those 65 and over and for certain disabled citizens) paid $2,223 out of pocket for medically related expenses in 2002. Actually Medicare paid less than half (45%) of the $11,714 in total expenses per beneficiary – Medicaid paid 12%, private insurance 18%, other sources 6% and direct out of pocket, 19%.[18] If one adds private insurance costs to out of pocket costs, 37% of an average Medicare recipients costs are paid by the beneficiary.

A historical perspective would not be complete without a glimpse of the burden health care has placed on our national budget. With the aging of our society the demand for care will continue to increase – but can we absorb the costs? The table below shows where we were and where we're going.

National Health Expenditures

	1960	1985	2003
	(in billions of dollars)		
Aggregate Spending	27	427	1,679
Per Capita	143	1,765	5,670
	(in billions of constant 2003 dollars)		
Aggregate Spending	166	730	1,679
Per Capita	891	3,019	5,670
Share of GDP	5.1%	10.1%	15.3%

Source: U.S. Department of Health and Human Services[19]

In 2005 the United States spent approximately two trillion dollars on health care or $6,697 per person. In 2005 16% of the GDP was spent on health care.[20]

THE THEORY OF SIMPLICITY

Judgment day – when will it come? We suspect it will have to come before spending reaches 20% of the GDP. An anomaly in health shopping is that patients seldom shop. After all, someone else is probably paying for those items in our shopping cart. No delivery charges apply nor are there specials to be considered. Medicare is largely fee-for-service. Medicaid is free if we qualify – and there is little inducement to go to work and lose this generous benefit. And then there's the paperwork. The only way the paper work jungle can be brought to its knees is if there is another Einstein out there armed and ready with a new "Theory of Simplicity". Such a theory would be based on what the name implies – for every piece of paperwork generated there would be an equal and opposite destruction of a piece of paperwork – it's as simple as that. No quantum physics here. Just a good old paper shredder!

We have not yet identified our Einstein 2008 but do have some brilliant MBA students who have looked at the U.S. health care system and said, rhetorically speaking of course, "we can fix this system". The advantage of a classroom is that students are not Democrats nor Republicans, or even Independents for that matter. No patronage is owed and no lobbyists are in the wings. No "hate ads" are being aired and debate is civil. Add to the mix international and domestic students, most with health care backgrounds and you have a cross section of the world stage on which to paint your health care reform canvas. The portrait painted in the Fall Semester, 2007 follows.

The Health Care System of Tomorrow

Citizen Responsibility – With Assistance

The Basics Summarized

- All American citizens will be responsible for purchasing their own health care from a list of competing plans. Note: Throughout this article the words Competing Health Plans (CHP's) and Insurers will be used interchangeably.
- Large employers would be mandated to provide a set amount of monthly pre-tax reimbursement to each employee to assist in the purchase of insurance for the employee and immediate family members.
- Small employers would receive tax credits and would be mandated to provide a set amount of monthly pre-tax reimbursement to each employee to assist in the purchase of insurance for the employee and immediate family members.
- Those citizens who are enrolled in Medicaid or Medicare would receive tax-free subsidies from the government to purchase health insurance but citizens would still make their own choice among competing health plans.
- Additional tax-free reimbursement will subsidize the unemployed for a period congruent with their unemployment benefits. For those unemployed beyond the period of unemployment benefits, the government would provide tax-free subsidies to purchase health insurance.
- Every adult and emancipated minor citizen would file an income tax return regardless of income level. The return will assist in determining those eligible for government assistance in meeting health care premium costs.

Discussion

It would have been much easier to set forth a plan similar to the Canadian system where taxes support basic health care without additional costs for every citizen. There were two primary reasons why the Canadian system was not the system of choice. First it (the Canadian system) would require dismantling a significant portion of the U.S. health care system. Americans have come to rely on immediate health care, and waiting or traveling far distances for the use of technology together with the closure of many hospitals and a mitigation of the use of specialists would not be acceptable – at the kitchen table or in Washington. Moreover, the additional taxes to create a universal system would be unacceptable to the average American. One overriding premise shaped our recommendations – the American people and their elected representatives in Congress must embrace the new system. And so the free enterprise system – together with a modicum of federal oversight and regulation has been preserved in our model.

Regina Herzlinger, PhD is Chairman of Harvard Universitiy's Business School. In her book, *Who Killed Health Care? America's $2 Trillion Medical Problem and the Consumer Driven Cure*, she holds Switzerland up as a model of consumer-driven health care.[21] Therefore, the Swiss health care system served as a model for the opening recommendations, yet we deviated significantly from the Swiss system in one major respect. Under the Swiss system, each citizen must purchase health insurance from a number of competing plans.[22] But under the Swiss plan, the government sets health care prices each year. Individuals must pay for their own insurance without help from their employers. The poor have their costs subsidized by the government.[23] In these recommendations, employers continue to play an important role in providing pre-tax income to employees who then purchase their own insurance. Unlike the Swiss, these recommendations do not state that government sets prices for health care services. Where this plan and the Swiss plan coincide is that both plans place responsibility on the individual to purchase insurance from competing national plans. Only when patients pay for what they choose will they select economically. If employers provide $400 per month for insurance and patients select a plan that costs $300, then they save $100 – but these recommendations suggest the savings be used to purchase Long Term Care (LTC) insurance, unless a person's income is at or below 400% of the national poverty guidelines, in which case they can spend the extra $100 as part of their disposable income.

In essence the plan proposed is much like the Medicare Part D Prescription Drug program except there will be no "doughnut hole" – a space between two financial thresholds where no coverage is provided.[24] Under the Part D program, Medicare beneficiaries can choose their own provider from competing plans doing business in the state in which they live. Although the selection can be a confusing exercise, that issue is addressed in other recommendations that follow latter in this article

Consumer choice is wise choice and cost effective choice. This is the backbone of *The Health Care System of Tomorrow*. Over time it is proposed that the Medicare program be based on consumer choice, not unlike the Medicare Advantage program in effect today. Medicare Advantage plans are like a Health Maintenance Organization (HMO) plan. They generally combine Medicare Part A (Hospital), Medicare Part B (Medical) and Medicare Part D (Prescription Drug Coverage).Generally Medicare Advantage Plans have a more limited list of providers that participate in their specific plan(s). More importantly, however, Medicare beneficiaries would be given government dollars to purchase the plan of their choice. For all citizens there would be a basic plan with benefits mandated by the government. The basic plan would be the lowest cost plan, but not necessarily the only plan subsidized by the government for those whose circumstances require subsidized benefits. Medicaid beneficiaries would be provided government dollars to purchase a plan of their choice, but at least a Basic Plan Plus would be required for Medicaid families with children.

As other sections of this article point out, there is an expectation that those able to do so will provide volunteer service when receiving subsidized benefits. The key words here are "able to do so". Since all Americans will have health insurance under *The Health Care System of Tomorrow*, the payers will be employers, then those able to pay, then the government for the unemployed, the disabled and the elderly. There will be no "underemployed" as small businesses will provide health benefit premiums to their employees with the help of government subsidies.

PREVENTION AND BEST PRACTICES

The Basics Summarized

- All competitive health plans would be required to provide prevention and screening services, including, but not necessarily limited to, vaccinations, influenza shots, pap smears,

colorectal screening and prostate screening. These services would be required in the Basic Health Plan and each enhancement of the Basic plan.

- All plans would be required to adopt evidence-based medicine for subscribers requiring chronic disease management. This provision requires hospitals, other health care institutions and physicians to adopt best practices.

Discussion

In the 1950's there were 350,000 cases of polio in the United States. Today there are none. Moreover, polio worldwide has been reduced to 300 cases and complete eradication is now on the horizon – thanks in large part to Rotary International, the Bill and Melinda Gates Foundation, the World Health Organization and others.[25] With genomics and genome research it is highly probable that many of the leading causes of death by disease will be isolated and conquered within our children's lifetime. Until a disease free world is upon us, however, it is mandatory that the building blocks of prevention and screening be readily available to every citizen. *The Commonwealth Fund Commission on a High Performance Health System* pointed out in a 2006 report that barely half of adults (49%) received preventive and screening tests according to guidelines for their age and sex.[26] The same report indicated that children fell 15% under a national benchmark rate for recommended immunizations and preventive care.[27] If we can't eradicate a disease, it is imperative that our national resources be marshaled to prevent the disease if possible and identify signs early in the onset where prevention is not possible. Unfortunately making screening and prevention services available provide no assurance of complete citizen buy-in when it comes to utilization. Later in this article there is a discussion of the use of incentives and disincentives geared toward walking softly yet carrying a big (somewhat padded) stick.

The hallmark of the oath taken by every new physician is Do No Harm – primum non nocere. Evidence based medicine and best practices are in large measure built around the concept of quality. The Institute of Medicine (I.O.M.) defines quality thusly: *The degree to which health services for individuals and populations increase the likelihood of desired health outcomes and are consistent with current professional knowledge.*[28] Everyone struggles with adapting to new ways. Physicians will look at lab results on paper in a medical record but shy away from viewing the same results via a smart phone or computer, which could be done in the comfort of their home or office. In health care applying "current professional knowledge" can often mean the difference between life and death.

In a report published in 1999 the Institute of Medicine estimated that 98,000 people die each year in US hospitals due to medical injuries (See: To Err is Human).[29] The Center for Disease Control (CDC) estimates that 2 million patients get hospital-acquired infections each year. The Institute for Healthcare Improvement published a goal in 2005 to save 100,000 lives of hospital patients over 18 months from January 2005 through June 2006 and every year thereafter. The "100,000 Lives Campaign" signed up over 3,000 of the nation's 5,700 hospitals as voluntary participants. At the end of the 18-month period it is estimated that 122,000 lives were saved.[30] The Institute has now launched a new "5,000,000 Lives Campaign" which attempts to protect patients from 5,000,000 incidents of medical harm over a two-year period from December 2006 to December 2008. Four thousand hospitals will be enlisted as participants.[31] Best practices are culled from what has evolved as state of the art and science of medicine. The Health Care System of Tomorrow must be built on a foundation of strength and in medicine and health strength evolves from studying the past to choose the correct building blocks for the future.

The treatment of patients with chronic disease provides a venue for applying the best of the best. Moreover, this is where the majority of our heath care dollars are spent. Accordant Disease Management of Greensboro, NC specializes in chronic disease management. According to Accordant, "Effective chronic disease management is the application of continuous quality improvement to the whole spectrum of care".[32] Actually, Accordant provides its services to other insurers. The following services are provided:[33]

- Risk stratification of diagnosed members;
- Disease-specific education resulting in better self-management;
- 24 hours per day 1-800 number for enrolled members;
- Development of individual care plans;
- Disease management reports;
- Demographic oriented reports
- Outcomes reports – reports relating to clinical/functional

status;

- Distribution of reports – health plan and physician
- For patients, self motivating methods to help them recognize early signs of problems;
- For patients, self-motivating techniques to help them maintain their health;
- For patients, educational resources to help them learn more about their disease;
- For patients, Information on the latest medical breakthroughs.

Accordant is only one firm yet it provides disease management services for 15 complex chronic diseases. Using evidence-based medicine, the tools are available for up to date prevention and treatment. To err may be human, but to continuously err borders on the negligent. With the cost of health care so high, institutions and medical personnel now stand in a fiduciary relation, as well as a healing relationship, with their patients.

COMMUNICATIONS

The Basics Summarized

- The federal government would publish a comprehensive booklet and initiate a user-friendly web- site that clearly outlines the offerings and price of each comprehensive health plan in each defined regional area. The booklet and web site would be updated annually and distributed to every citizen.
- A toll-free 1-800 number and staffed help desk would be available to citizens 24/7.
- Hospitals would be required to provide free consulting services on national health care plans and various options available. The additional costs are more than compensated for by the fact hospitals will no longer be subject to bad debts.
- A federal committee would oversee communications to assure compliance accuracy, pricing and accessibility.

Discussion

The Centers for Medicare and Medicaid Services (CMS) publishes an annual handbook that is distributed free of charge to all Medicare beneficiaries. The 2007 edition entitled Medicare and You contains over 100 pages and addresses important information about:[34]

- What's new
- What's covered
- Health plans
- Prescription drug plans
- Your rights

The handbook is also available on audiotape in various languages. These publications are the prototype we suggest for distribution to every citizen. The language is clear and the layout is user friendly. Also included is a 1-800 number that is available 24 hours per day for beneficiaries with questions.

Each insurer would also publish its own handbook that explains in detail the company's Basic Plan and all optional plans available. Each plan would be fully described together with price and accessibility of the provider network tailored to the recipient's state or geographical area. Portability of benefits would be assured during travel throughout the United States and contiguous countries (Canada and Mexico). Insurance at additional out-of-pocket cost would be available to those traveling abroad. The insurer's booklet would be similar to those insurers mail to participants in Medicare's Part D Prescription Drug Plan. As an example Humana's prescription drug plan starter kit for 2008 includes a Reference Guide containing details of 2008 benefits and services; a Member Handbook containing 2008 highlights and a 2008 Prescription Drug Guide that includes an abbreviated formulary.[35]

When citizens are given a set amount of money, either from their employer or the government, and asked to choose among competing alternatives, the choices will be difficult – and more so early in the process. It is not unlike trying to figure out where to invest your 401(k) contributions – or any investment for that matter. Easy to read and understand handbooks are a part of the communications strategy, but there must be enhanced communication alternatives beyond the written or audio stage. It is expected that many organizations will step forward to assist in

the educational process. Bar associations, senior organizations, physician offices, and a host of non-profit organizations would be expected to help. The plan also calls for hospitals to provide no cost counseling services – this obligation would be imposed as a condition of a hospital's participation in the federal Medicare program. Since bad debts would no longer burden a hospitals financial health, the provision of counseling service is a small price to pay for the lifting of this burden. It is expected that trained hospital staff would provide one–on-one counseling as well as hosting seminars within the community. Employers would be encouraged to contact local hospitals to request hospital representatives provide educational programs at the work site. Employers would not, however, be allowed to choose or recommend a plan for their employees. To assure employees have an unbiased choice of presenters, the government shall provide a toll free number that any employee can call to access a government sponsored, non partisan, meeting of all CHP's providing health care plans to the community. These community meetings shall be available in a format similar to a job fair where all CHP's desiring to participate are represented. No citizen shall be required to travel more than 25 miles to attend a community meeting except under unusual circumstances based on population density.

To assure a hospital's compliance with the counseling provision, the government would annually survey each beneficiary and inquire if they contacted (or heard a presentation) from one or more of their local hospitals. If the answer was affirmative, the beneficiary would be asked to rate the quality of the hospital's assistance. The government would provide incentives to hospitals who achieved very good or better overall evaluations.

The selection process for a health plan must not be based on the caveat emptor philosophy where the buyer chooses at his or her risk. To assure fairness in communications and pricing a federal committee would oversee publications issued by CHP's and apply a truth in advertising oversight to the communications process.

WELLNESS PROGRAMS

The Basics Summarized

- Bi-annually, the government would identify two comprehensive wellness programs that competitive health plans must offer and include in all of their program options.

- Initial offerings shall address dietary counseling and smoking cessation programs.

- The government will establish a new section within the Department of Health and Human Services (HHS) to be known as Health in America (HIA). This section shall identify the bi-annual wellness programs and recommend incentives for compliance by individual citizens. The work of HIA shall be guided by volunteer panels of experts.

Discussion

If one were to take a poll in an attempt to identify the reasons for the high cost of health care in the U.S. the answers would provide a smorgasbord of issues. At the top of the list would be hospital costs, followed closely by the cost of long-term care. Physician and drug costs would appear in the list and the cost of technology would most certainly assume a key position. Then there is home health care, hospice care and let's not forget one of the most significant costs of all – administrative costs because of the paper work jungle and the layers of bureaucracy between citizen and healer. Absent from the list would be people – you and I. If we could look in the mirror of Snow White and say "Mirror, Mirror on the wall, who is responsible for the high cost of health care in America", the answer might well come back "you are". Ouch! That hurts.

It is not the present or future health care system that is at peril in this discussion. It is our lives at peril. And when we place our lives at risk as a nation, we place our country at risk as a society. Looking at health issues, progress has been made in smoking cessation, but that step forward has been blocked by the propensity toward obesity. Let's look at the costs. Curtis S. Florence, PhD at the Rollins School of Public Health at Emory University has indicated that overweight/obesity has now surpassed smoking in terms of employer costs.[36] The costs are reviewed in Dr. Curtis's table below.[37]

What is the Bottom Line?

(Millions of 2000 $)

	Health Plan $	Lost Work $
Smoking	$13,192	$2,609
Overweight/Obesity	$23,716	$2,985
Total	$36,908	$5,594

Since our magic mirror has indicated "we" are the problem, it's time to take stock and face up to reality. *The Health Care System of Tomorrow* will be no better than the health care system of today unless the main driver of health costs, we the people, are chal-

lenged enough to make some hard life choices – eating that Big Mac or opting for a few additional years of life and a national treasury that can afford to pay our health care bills as well as provide for our retirement income.

This plan suggests that bi-annually the government identify two comprehensive wellness programs although it is not unreasonable to assume that one or more programs might be repeated beyond a two-year period. Initially the government would identify smoking and obesity as traits requiring an emphasis on wellness requiring behavior modification. Moving 301,000,000 people toward a common goal that requires bodily sacrifice will not be easy. It may well be that incentives, or even disincentives tied to health insurance premiums may be necessary. The new HIA Department is charged with the responsibility of getting citizen buy-in. It is anticipated that the Department will work with panels of experts who serve on a volunteer basis. Since America was built on its competitive spirit, it is hoped that a competitive spirit will be engendered that helps people to make healthy choices. Industrial America will be called on to make our food healthier and our ability to exercise more convenient – possibly at the workplace. The 2006 Kaiser Family Foundation reports indicate that 27% of employers offering health benefits offer one or more wellness programs; 19% offer an injury prevention program; 10% offer a fitness program; 9% offer smoking cessation programs and 6% offer a weight loss program.[38]

INSURANCE MANDATORY

The Basics Summarized

- All American citizens or persons legally domiciled in the U.S. are required to have health insurance.

- This law will not apply to illegal immigrants, however, emergent care shall be provided where required by federal law. The Emergency Medical Treatment and Active Labor Act (EMTALA) provides for screening and treatment of any person presenting to a hospital's emergency department regardless of citizenship. These costs are already part of a hospital's overhead.

- International students enrolled in Universities shall be required to carry health insurance. CHP's shall set student premiums based on regional age/risk formulas for the student population. Students would be required to show proof of coverage or purchase coverage from a CHP.

Discussion

Today not all college students are young people, although most are. Septuagenarians are attending college both on a full and part time basis. On the average college campus, however, there are many more generation X students (age 18-29) than baby boomers. Being young, of course, shrouds one in a cloak of invincibility – that is until disaster strikes. Consider the comments of the Kaiser Commission when the need for student insurance is discussed.[39]

- 23% of the uninsured must change their way of life significantly in order to pay medical bills.

- Uninsured adults are far more likely than the insured to postpone or forego health care altogether and less able to afford prescription drugs or follow through with recommended treatments.

- Health insurance makes a difference in whether and when people receive necessary medical care, where they get that care, and ultimately, how healthy they are.

What we say in the basic summary above about mandatory insurance is fairly self-explanatory. Every person legally domiciled in the United States will be required to carry health insurance. This requirement will vest with every man, woman and child, although parents would be responsible for providing insurance for their minor children.

Mandatory insurance poses an interesting question that is not addressed in this article – the realization that there will be an elimination of bad debts in the medical world. Admittedly hospitals include more than bad debts when they calculate uncompensated care. For instance, the difference between what a program such as Medicare and Medicaid pays and the cost of providing care is included in uncompensated care – and is used to justify tax-exempt status. There are, however, pure bad debts where patients will not or cannot pay their bills. The same is true in the doctor's office. With mandatory insurance medical and institutional providers, net revenue should increase. The final resting place of that increase is not discussed here, although the net effect of the Health Care System for Tomorrow on the provider community should be neutral at best.

Since illegal immigrants are, by the nature of the term, in the U.S.

on an illegal basis, the mandatory issue of insurance would not apply. This does place on the employer a greater burden, because large employers must pay to their employees a pre-determined amount so the employee can purchase health insurance. This payment should not be a windfall for someone in the country on an illegal basis. Moreover, the government will subsidize payments for small employers and the subsidy should go only for those legally domiciled in the U.S. The burden on employers is increased to assure compliance with immigration laws. Since small employers will receive tax credits for health insurance and will be required to provide each employee with a payment to purchase insurance, small employers will be required to provide an employee's Social Security number to the government. Moreover, hospitals will be required to provide employment data for those treated under the EMTALA program.

EMTALA (Emergency Medical Treatment and Active Labor Act) would continue to require hospitals with emergency departments to stabilize and provide services to women in labor.[40] This law, unless amended, would continue to apply to all patients, including those in the country on an illegal basis.

MALPRACTICE REFORM

The Basics Summarized

- Under a federal system, malpractice awards would be capped and a catastrophic pool would be developed that would be funded participating liability carriers.

- All medical malpractice would be governed by a federal statute of limitations that would not exceed four years from the time an injury occurred.

Discussion

Often, the discussion of medical malpractice reform is a polarizing issue with strong beliefs set forth by proponents and opponents of reform. Federalization of malpractice awards and a federal statute of limitations in the context of providing health care insurance to all Americans is suggested. This article sets forth recommendations to improve the quality of health care, increase access, reduce errors and adopt best practices. The stage has been set for achieving as close to an error-free system as human skills and the present state of technology and science will allow.

Influential organizations, such as Public Citizen, a non-profit consumer advocacy organization, argue against the recommendations made in this section. They reference the Institute of Medicine's study *To Err is Human, Building a Safer Health Care system, 2000*, which indicated that annual costs for medical errors in hospitals are estimated at $17 billion to $29 billion annually, while the total cost spent on medical malpractice insurance in 2000 was only $6.4 billion.[41] Public Citizen, citing data from the National Practitioner Data Bank, additionally observes that malpractice payments by physicians and their insurers were a mere $4.5 billion in 2001 – less than 1% of the country's overall health care costs of $1.4 trillion.[42] Three observations are in order as these findings are considered. First, as pointed out previously, *The Health Care System of Tomorrow* recommendations require steps that will largely mitigate medical errors. Second, no mention is made of the costs to institutions (hospitals and nursing homes) for medical malpractice liability insurance. Last, the cost of medical malpractice insurance escalated dramatically after the year 2000 – in many cases doubling and tripling. As an example medical malpractice underwriters booked total premiums of $6.4 billion in 2000. By 2004 these premiums had increased to $11.4 billion – an increase of 81% in four years.[43] In 2005, Maryland's Governor made the following observation on malpractice rates for OB/GYN physicians in the state: "In a letter to the state's senate president, *Gov. Ehrlich said that the actuarial firm of Milliman Consulting estimates that without any further legal reform, medical malpractice rates will increase 108% by 2009, with rates for obstetricians increasing from about $153,000 to $318,000."*[44]

It should be noted that insurance company profits play a major contributing factor in increased medical malpractice insurance premiums. An interesting comment on increased profits can be found in a white paper issued by Rappaport Glass Green and Levin LLP a legal firm that represents many insurance companies.[45] As a Board member of two medical malpractice insurance companies it is this author's observation that profits decline significantly during turbulent times and then rise considerably when liability claims soften. In a scenario of national malpractice reform such as we suggest, malpractice carriers would be expected to lower rates voluntarily or face increasing government pressure to do so. To achieve overall reform, the root causation of harm or potential harm must be examined, and to the extent humanly possible, eliminated. The matrix for quality health care has been designed. The puzzle for total reform is complex, yet the pieces are in place. Economics plays an important role and malpractice reform must be put in place as part of overall economic considerations. Harm to patients will still be compensated, but at levels commensurate

with the degree of trauma to the individual. With due respect to the common law system that presents a shopping cart of potential torts, at checkout there should be but one tort and one recovery, to one individual, that addresses proven injury.

Malpractice awards should be capped at $400,000, except in cases where permanent disability or loss of life occurs. This amount would increase each year by the percentage change in the Consumer Price Index (CPI). When an injury occurs that leads to permanent disability or death lost wages would be calculated and paid annually to the patient or beneficiary on an annuitized basis. Lost wages would not exceed the average annual earnings of all U.S. workers for the immediately preceding calendar year by a multiple of five. Examples are reflected in the table below.

of cost escalation in medical malpractice. In reality there is no statute of limitations when the discovery rule is expanded to virtual infinity. In expanding the statutory limitations by application of the discovery rule courts have made law rather than interpreted the law. The work of the legislature and executive branch of government has largely been ignored.

It can be argued that a four-year statute of limitations is unfair to minors. Assume a drug is given to a minor that has toxic effects that are discovered after the drug has been marketed and used under the auspices of current FDA regulation. A four-year statute of limitation provides ample time for adverse drug effect discovery. For those drugs that are determined twenty or thirty years later to have long lasting adverse effects, the risks are no greater than consuming food which over time is determined to have an unhealthy effect on the body, and indeed, life longevity.

Earnings When Permanent Disability or Death Accrues as a Result of Medical Negligence

Patient Earnings Before Injury	Average Annual Wage-Prior Year All U.S. Workers	Patient or Beneficiary Earnings After Injury
$25,000	$50,000	$25,000
$60,000	$50,000	$60,000
$150,000	$50,000	$150,000
$350,000	$50,000	$250,000
$500,000	$50,000	$250,000

Payments for lost wages for those meeting the guidelines above would be funded from a catastrophic pool financed by all medical malpractice carriers doing business in the United States.

- Health care costs would not be recoverable under malpractice reform as these costs would be covered by the patient's insurance plan. Certain costs not covered by health insurance would be recoverable. Examples would include, but not necessarily be limited to, prosthesis, handicap accessible vehicles, etc.

Statutes of Limitation for medical malpractice would be guided by federal law. The discovery rule would not be applicable to malpractice claims. Application of a discovery rule allows lawsuits to be filed, not when the injury occurred, but rather when the patient, by the exercise of reasonable judgment, knows or should have known of the injury. This rule allows the filing of suits years and even decades after an alleged injury. The proposed standard suggested in this article is a statue of limitations of four years, which begins to run on the date of actual injury.

It is the judicial expansion of the discovery rule that is the driver

Should a compromise be necessary, Congress can provide funds in the future to establish a pool for extremely egregious injuries.

Part Two

VOLUNTEERISM

The Basics summarized

- The poor and those receiving health care subsidies from the government to purchase insurance would be required to work in a community-based program, assuming ability to do so. The dollar value of the subsidy would be calculated and hours worked would be credited with a hypothetical earning of 150% of the current minimum wage.

- Should the person receiving a subsidy work more hours in a community-based program than is needed to amortize the subsidy in a single month, hours can be carried over for credit into subsequent months.

- The government will establish a Health Care Corp (HCC) for the U.S., similar to the Peace Corp. HCC participants will provide care and assist with domestic chores in homes of the needy elderly or incapacitated. HCC volunteers completing a two-year tour of duty shall be eligible for two years of government paid college tuition.

- It is hoped that consideration will be given to superimposing the first bullet point above with the third bullet point. In such a scenario, a poor person could qualify for two years of college paid tuition, should they choose to become a HCC volunteer. Three advantages accrue. First, the volunteer continues to receive a check for health coverage. Secondly, the volunteer receives the HCC subsidy of approximately $600 per month. Finally up to two years of free college tuition would be available to the volunteer.

Discussion

This section lays the framework for a new tomorrow, based on hope and pride. Within the context of a new health care system one may find a pathway out of poverty. Medicaid becomes a program for historians to write about because it disappears. Many patients in nursing homes can return to their homes, where they'll find a new quasi-foster family member ready to assist them – a member of the Health Care Corps. Patients would have the right to accept or reject the caregiver.

To start, let's focus on the poor and those receiving Medicaid today. From the millions of Medicaid recipients nationwide (more than 47 million and counting), let's concentrate on a hypothetical Mary. Mary is a single mom, and she and her child are enrolled in her state's Medicaid program. Mary lives with her parents and, although she can work, little is available and jobs she has looked at do not provide health insurance. Also, her pay would disqualify her for Medicaid (the working poor). With the implementation of the *The Health Care System of Tomorrow*, Medicaid would go away, but Mary would receive a check each month from the government to purchase health insurance. She could choose a Basic Plus plan (basic coverage for her and her child) and keep the remaining portion of the payment, tax free, to offset her living expenses. Now Mary is faced with an obligation. She must volunteer her time at a community-based agency until her health check subsidy is amortized. But she need only provide this volunteer work **if she is able to do so** (**emphasis added**). If she can't take her child with her or her parents, relatives or friends can't help with the baby-sitting chores, Mary would have no obligation to repay the health insurance subsidy. If she did work at a community-based agency, she would receive a hypothetical credit of 150% of the current federal minimum wage. As an example, let's assume Mary's health insurance subsidy is $500 per month. Let's further assume the current federal minimum wage is $8.00 per hour. Mary would receive a hypothetical credit of $12 per hour (150% of $8). In a month Mary would have to average approximately 42 hours ($500 divided by $12 = 41.7) of volunteer work. Should Mary volunteer more hours than those required in a month, she would receive a proportional credit toward a future month(s). A special form would be issued by the government for reporting activity under this section. The form would be completed and submitted electronically on a monthly basis by the volunteer agency benefiting from a volunteer's activity.

Mary has another choice. She can join the HCC and perhaps she and her child can move in with her new "foster" family, an elderly person or couple for whom she would provide care and chore services. The elderly person or couple for whom Mary would provide care retains the right to accept or reject her (along with her child) as a caregiver. At the end of two years Mary would be eligible for two years of paid college tuition. We further recommend that the government provide citizens in Mary's position with a free computer when they complete their two years as a HCC volunteer. Now Mary can take her college classes online thus saving travel expenses. Mary has taken a big step out of poverty into the world of opportunity.

The Health Care Corps suggested in this article is patterned after the Peace Corp, which was started during the Presidency of John F. Kennedy. Today over 190,000 Peace Corp volunteers have served in 139 host countries.[46] HCC volunteers would receive a modest allowance to provide for food and daily necessities. A volunteer would be matched with an elderly family or person that required care and help with domestic chores. This family would become the volunteer's home for two years, with vacation time provided at the rate of two days per month or 48 days over two years – again similar to the Peace Corp program. The "host" family would be required to provide a room for the HCC volunteer.

How will the cost of the HCC program compare to the amount Medicaid spends to keep a patient in a nursing home? The average cost per day in a nursing home in 2006 was $194.[47] Over a two-year period that adds up to $141,620. The HCC volunteer would receive approximately $600 per month for food and basic necessities or $14,400 over two years. In addition HHC participants would "earn" two years of college tuition. For the 2005-2006 academic year tuition and fees at public universities averaged $5,491, and private colleges and universities averaged $21,235.[48] We recommend that tuition reimbursement be capped at twice the average public university tuition and fees. Over two years, educational costs would average approximately $22,000 ($5,491 rounded to $5,500 x two x two years = $22,000). Using this formula, the total cost to the government for a HCC participant would be approximately $36,500 for two years of service. Add another $10,000 per volunteer for program overhead and $12,000 for health insurance premiums and the savings for taking care of a family or person in their home is approximately $88.000 less than in a nursing home. Moreover, one cannot begin to calculate the benefit of a person being in his or her own home as compared to institutionalization.

The HCC provides opportunities for people of all ages to help those less fortunate. It is possible that a senior citizen, living alone and in good health would find service as an HCC volunteer attractive. Should a senior citizen be interested in such an opportunity, it is possible to consider shorter periods of duty in the Corp.

NEGOTIATING PHARMACEUTICAL COSTS

The Basics Summarized

- The federal government would negotiate prescription drug costs on behalf of those citizens receiving health care insurance subsidies, as well as, the elderly population presently participating in today's Medicare Part D prescription drug program.

- Concurrently, there would be established a federally funded research and development program that provides research dollars to pharmaceutical companies. Funding would favor the most challenging research needs. Secondly, funds should be made available for research into other diseases where the cost of care is high and/or the quality of life is poor.

- Research dollars would be awarded based on a competitive RFP (Request for Proposal) system.

Discussion

Like Malpractice Reform discussed earlier in this article, federal involvement in pharmaceutical pricing is controversial at best and socialistic at worse. In the context of overall health care system reform, however, the United States must emulate, in part, the international community. In 2003 prescription drug costs in the U.S. totaled $179 billion that accounted for 11% of total health care spending.[49] Since 1995 spending for drug purchases has been the fastest growing segment of the health care dollar.[50] The financial impact of drug costs on the federal government increased significantly with the signing of *The Medicare Prescription Drug, Improvement, and Modernization Act of 2003* by President Bush on December 8, 2003. The Act creates a voluntary prescription drug benefit program (Part D) for all individuals eligible for Medicare, under which they will pay a monthly premium for coverage in helping them purchase prescription drugs. Part D was effective January 1, 2006[51] Not only is the government now picking up a greater percentage of overall drug costs, but the escalation in drug prices continues to far outpace general inflation as measured by the Consumer price index (CPI). As Families USA points out the CPI increased 2.4% from February 2006 to February 2007 while drug prices increased almost four times faster than overall consumer prices.[52]

For years Americans have traveled to Canada to purchase lower priced drugs. With the advent of online shopping, Canadian drugs are available to Americans over the Internet. Internet com-

parisons reflect a savings of approximately 33%, comparing Canadian to American drug prices – and this is after factoring in shipping charges that normally fall in the $10 range. The Federal Food and Drug Administration (FDA) says that importing drugs violates the Federal Food, Drug and Cosmetics Act. That said, however, there has never been a prosecution for purchasing drugs from Canada – in person or over the Internet. In fact, the American Association of Retired Persons (AARP) points out that their own endorsed insurer's, such as United Health Care, will reimburse AARP members who purchase drugs from Canada, assuming they have a supplemental health insurance plan with drug coverage.[53]This is not to say that drugs imported from all countries of the world are safe, but certainly those imported from our neighbor to the north should be within tolerable safety margins.

Why are prices for pharmaceuticals lower in Canada and many European Countries compared to the United States? Governments shop for the best prices, and then exert their considerable purchasing power in negotiating prices. Because the government is picking up the health care insurance tab, it should have the right to negotiate prices for pharmaceuticals. The prices negotiated by the government would be available to all who receive subsidized health care benefits including the poor and the elderly. The federally negotiated prices would also be available to employees of small employers who receive subsidies from the government that allow them to provide health insurance payments to their employees.

France's approach to pharmaceutical pricing is the model we suggest be applied to negotiations. The following language from the Minority Staff Report to the Committee on Government Reform of the U.S. House of Representatives in 2001 is the template we suggest for the U.S. government: *"The French pricing system allows pharmaceutical companies to sell their products at any price. However, if these companies want the national health care system to reimburse patients for the cost of the drug, the companies must agree to a lower, negotiated price. These negotiated prices and reimbursement rates paid by the healthcare system are based on the therapeutic value of the drug and the price of the drug in other countries. The French pricing system results in brand name drug prices that are an average of 45% lower than prices in the United States".*[54] We would take this language and change it slightly to read as follows:

The United States pricing system allows pharmaceutical companies to sell their products at any price. However, if these companies want the government to reimburse patients who receive subsidized health insurance premiums from the government for the cost of the drug, the companies must agree to a lower, negotiated price. These negotiated prices and reimbursement rates paid by the government are based on the therapeutic value of the drug and the price of the drug in other countries.

Pharmaceutical companies will argue that the government should keep its tentacles out of the free enterprise system. Moreover, the argument will be made the high cost of research demands that costs be passed on to consumers. As with any debate about pricing, there are two sides to be considered. Should the U.S., for instance, subsidize pharmaceutical research for the rest of the world? In effect, that is what is happening. The U.S. consumer pays higher prices for drugs to provide research dollars that are not matched by countries with negotiated drug prices. It should also be noted that the government is now involved in underwriting a portion or all of the drug costs for nearly 100 million of its citizens – nearly a third of the entire population (includes Medicaid and Medicare).

Research is the engine by which a society progresses and the pharmaceutical industry has done much to keep the people of the world healthy. While price negotiation is required with the government being the biggest single purchaser of health care, the U.S. needs to keep research as a top priority. A federally supported research and development program should be established whereby research dollars are made available to pharmaceutical companies based on an annual competitive call for RFP's. This funding should be in addition to any research funding currently available in the federal budget.

Funding should be prioritized to meet two needs. First the most challenging research needs should be funded. These would address leading causes of death. Removing accidents, the five leading causes of death in 2003 included diseases of the heart; malignant neoplasm's; cerebrovascular diseases; chronic lower respiratory disease and diabetes.[55] Secondly, funds should be made available for research into other diseases where the cost of care is high and/or the quality of life is poor. This category would address mental, as well as, physical disease. Examples might include schizophrenia or severe rheumatoid arthritis.

Each year pharmaceutical companies would be encouraged to submit RFP's for research funds. The total dollars available would be based on the government's projected savings resulting from price negotiation. A reasonable amount would appear to be in the 10% range. What might this amount to? Above, it was pointed

out that drug costs in the U.S. totaled $179 billion in 2003. Let us assume that the government purchased one-third of all drugs or approximately $60 billion. Assume further that under the new negotiating plan, the government saved 33% or $20 billion. Ten percent of these savings or $2 billion would be awarded in federal research grants. In 2008, of course, all of these amounts, including savings would be significantly higher as drug price inflation has continued to outpace inflation by 300 to 400 %.

Admittedly $2 billion is not a hugh amount of money when one looks at what pharmaceutical companies currently spend on research – estimated at $40 billion in 2004.[56] In 2003 the National Institutes of Health (NIH) research budget was $28.7 billion.[57] We would not expect either the pharmaceutical industry or the NIH to reduce their research budgets. It is interesting to note that the pharmaceutical industry spent nearly $22 billion on drug promotion and direct to consumer advertising in 2001.[58] Trend this forward to the present day and there are significant sources of funds that can be diverted to the research pipeline.

THE ELECTRONIC WIZARD – REDUCING ADMINISTRATIVE COSTS

The Basics Summarized

- Large and integrated providers must adopt a single billing form.
- Duplication in testing shall to the maximum degree possible, be eliminated.
- Large and small providers shall adopt an Electronic Health Record (EHR). The government shall provide tax credits to small providers to assist in the purchase of EHR software.
- With a patient's permission, health providers will have universal access to a patient's EHR.
- A national goal for large health care providers, including CHP's, will be to reduce administrative costs by at least ten percent.

Discussion

Many have argued that advancements in information technology will have the most significant impact on health care in the years ahead. The Internet has brought the consumer to the forefront of choosing among various alternatives in both diagnosis and treatment. The quality of care has been enhanced with the use of evidence-based medicine and best practices – which in turn draw their body of knowledge from the world of information technology. Access to care has been improved through the use of telemedicine and various home monitoring devices linked to computers. Implantable chips monitor changes in physiologic body functions and relay changes via alarms and sensors and transmit data to far flung off-site locations.

With all the advancements in access to information the computer has made possible, the U.S. health care system is still driven by paper records. Needless tests are repeated by providers who do not have access to results of tests already performed. Drugs are prescribed by medical practitioners who seldom have data on drugs prescribed by other physicians. Care is rendered in emergency rooms by physicians who could treat their patients much better and more safely if they had access to a patient's prior medical history. Pharmacists fill prescriptions without a customer's entire drug history at their disposal.

Consider this quote from an August 21, 2003 article in the New England Journal of Medicine (NEJM):

"In 1999, health administration costs totaled at least $294.3 billion in the United States, or $1,059 per capita, as compared with $307 per capita in Canada. After exclusions, administration accounted for 31.0 percent of health care expenditures in the United States and 16.7 percent of health care expenditures in Canada. Canada's national health insurance program had overhead of 1.3 percent; the overhead among Canada's private insurers was higher than that in the United States (13.2 percent vs. 11.7 percent). Providers' administrative costs were far lower in Canada."

- Even if the NEJM authors are off a $100 billion or so, the figures are still staggering. Certainly there are nearly enough savings to be realized to underwrite the costs of providing insurance for uninsured Americans. If true health system reform is to be achieved in the United States, information technology must be used to mitigate the paperwork jungle.

Developing a new health care system requires many of the same

skills we apply when setting up a new computer or installing a new software program. An electronic wizard helps us navigate each step along the digital highway. If we applied a wizard to *The Health Care System of Tomorrow* the first step might well be adoption of a single billing form. Mary, our hypothetical patient, enters a hospital. Weeks or months later a separate hospital bill is sent to her, her insurance company and a host of potential third party payers. Moreover, separate bills arrive from pathologists, radiologists, anesthesiologists, surgeons, other specialists and the beat goes on. We propose that health care providers adopt a single master bill and that all organizations or individuals involved in an episode of care submit their charges on the master bill. The master-billing host would be the patient's primary insurance carrier.

The next portal for our electronic wizard would be the duplicate testing phenomenon that is uniquely utilized in health care – often because someone other than the patient is paying the bill. Except under unusual circumstances, duplicate testing would not be reimbursed by a patient's insurance carrier. Seventy-five percent of healthcare spending is spent on people that have chronic diseases. These patients see 4.6 to 9.4 physicians per year (the more chronic diseases a patient has the more physicians he or she sees). These multiple visits lead to medical errors, duplicate testing and therapies and overall cost increases while quality is driven down.

Click on "next" and the wizard takes us to the Electronic Health Record (EHR) .Let's follow our hypothetical patient Mary through the health care maze where the EHR is not utilized. Mary sees her primary care physician who performs a physical examination. The exam reveals the need for possible surgery. Her physician orders tests – lab, x-ray, EKG and stress test. Tests confirm a possible blockage. Mary is referred to a surgeon. The surgeon determines Mary needs specialized care and refers her to another surgeon who specializes in the type of surgery she requires. Surgery is scheduled at a hospital. Pre-Admission testing is required and more tests are ordered. At the hospital Mary is seen by an anesthesiologist prior to surgery, where she answers the same questions for the fifth time. After surgery, Mary is discharged with prescriptions for multiple medications. Physical Therapy is ordered – more questions. Mary becomes depressed. Her physician refers her to a psychiatrist- more questions. More drugs are ordered. Leaving the doctor's office, Mary slips on the ice. Mires are ordered and more questions asked. Mary is referred to an orthopedic surgeon – you guessed it, more questions. More tests are ordered and more questions. More surgery is scheduled and more questions including the hospital and anesthesiologist. More rehabilitation is necessary and, of course, you know what will happen. Some two years latter Mary is still receiving bills from medical providers – including bills from her own insurance company. Welcome to today's health care system!

In the scenario above, consider what a fully integrated EHR would have accomplished. Unnecessary duplicate testing would have been avoided. One bill would arrive that included all testing, doctor and hospital charges. It would be possible for Mary's physician and pharmacist to assure the drugs she was taking were not contraindicated alone or in combination with her entire pharmaceutical regimen. Hundreds of repeated questions would not be asked. Chances are Mary's depression would never have occurred.

What about those health care professionals who say, I'm too old to learn this gadgetry? Then we suspect these same people are too old to learn about evidence-based medicine and best practices. There becomes a point in one's professional career where change must be embraced, no matter the degree of difficulty.

Equipping an office with the latest technology is not at a minimum cost. To embrace a new health care system, the government is best suited to provide financial incentives or grants for small employers (offices) whose gross income falls below a certain level. It is recommended, therefore, that financial assistance be provided to help defray software costs needed to equip an office to keep and maintain a universal and portable health record for each patient. The government will also have to develop and publish national standards for software and hardware to assure data can travel (and be read) seamlessly among providers at all levels.

Our electronic wizard is back, asking for permission to proceed to the next step. The next step is our (yours or mine) permission to allow our universal health record to be reviewed by those health care providers we designate. Additions will be made and the record updated as we travel from institution to physician, to pharmacist and all stops in-between. In granting universal access, we grant up-to-date knowledge to all who try to keep us healthy.

Our last click before the wizard provides us with an "Installation Complete" message is a notice from the government to all large providers, including CHPs to reduce their administrative costs by at least ten-percent. Earlier in this section, our wizard has helped us install the financial and social capital necessary to improve care and reduce costs. Since the government will be providing some or most of all health care payments (except for payments by

large employers) the ability of government to assist in – and not add to – cost reduction is significant.

THE VULNERABLE AGED POPULATION

The Basics Summarized

- Citizens age 85 and above would receive, based on need, up to 360 days of free nursing home care or home health care on the basis of two times home health care for every nursing home care day (could receive up to 720 days of home health care).
- Unlimited rehabilitative care would be provided to those ages 85 and above. These are the frail elderly who fall easily and often require therapy.
- The above provisions would be based on a means test – applicable to those with income no greater than a multiple of the federal poverty guideline. Interest, dividends and income from pensions would be included in determining total income.
- The above provisions would require the age 85 threshold to be adjusted upward by one year for every year increase in average age longevity. For instance if the average lifespan (male and female) was 80 years in 2008 and increased to 81 years in 2010, the age 85 threshold would increase to 86.For those aged 85 and above, in home care can be assigned to a family member or appointed individual where professional nursing care is not required. Reimbursement for such care will be set at the then current hourly federal minimum wage based on a 40-hour week.

Discussion

Medicare and Medicaid would be phased out of existence with the adoption of the *Health Care System of Tomorrow* provisions. Participants in those programs both current and future would receive a government check that would allow them to choose a health care plan – and the subsidy would be much higher for the elderly and others in the current Medicare program. Competitive Health Plans (CHP) would be required to include in their Medicare replacement offerings enhanced benefits for what we will refer to as the frail elderly – those 85 years of age and above. These improved benefits would include provisions for enhanced long-term care coverage – both in nursing home and in-home venues. Advancing in age beyond age 65 triggers two realities. The elderly will require more nursing home care and their income, based on averages, will decline and continue to decline in future years. Moreover, the older someone gets, the more likely it is that the person will be female rather than male, and the female's income will be much less than her male counterparts. In 2007, the Employee Benefit Research Institute (EBRI) published data based on 2005 statistics for the elderly population, age 65 and above which reflected gender disparities. Significant observations included:[59]

- Median income for the elderly: $15,422
- Total Average Income – Male: $33,833
- Total Average Income – Female: $17,383
- Total income – Age 65-69: $30,303
- Total Income – Age 70-74: $24,788
- Total Income Age 75-79: $21,962
- Total Income – Age 80-84: $20,175
- Total Income – Age 85 and above: $18,920
- Social Security accounted for 50% of elderly women's income compared to 33% for men.
- For those ages 85 and over 55.3% of their income came from Social Security.

As we reflect on the data above, note that the median income for all elderly is a mere $15,422. (in calculating the median we rank numbers from the highest to the lowest, and then find the number that is exactly in the middle). Also, note the wide disparity between the average income of males and females – a male's income is nearly twice as high as a female. Finally, note the decline in income as one continues to age. The total income of the elderly age 85 and over drops to $18,920, which is less than 200% of the federal poverty guideline for 2007, which is $10,210 for a family of one.[60]

To address the needs of the most senior of our senior citizens – those 85 years of age and older – this recommendation provides for up to 365 days of care in a nursing home. In 1999 the length

of stay for current residents in nursing homes was 892 days while the average length of stay per discharged resident was 272 days.[61] This is a lifetime provision. Recognizing that in-home care is always preferable, it provides for home health care at a multiple of two home health care days for every unused nursing home day. In addition, it provides for care by relatives or friends, and provides compensation at the then current federal minimum wage. The hours worked by these caregivers would be limited to 12 hours per day for a full two-year benefit. If 24 hour were provided, the benefit would match the nursing home provision – 365 days. This provision helps compensate family members who undertake the burden of elderly care. These caregivers would file a special federal form indicating the services provided and the hours worked. Verification by a state agency would be required.

Why additional nursing home care and in-home care for those age 85 or over? Forty five percent of the 1.5 million nursing home residents in the U.S. are 85 or over. While only two percent of those ages 65-84 live in nursing homes, fourteen percent of Americans 85 and over are nursing home residents.[62] Between the ages of 65 and 84, 34% of the population is male and 66% female. By the time one reaches 85, the gender gap widens with 18% of the population being male and 82% female.[63] Most nursing home residents are female, especially at older ages. Widowhood is a key predictor of nursing home use – at time of admission, over half of nursing home residents were widowed, and only 1 in 5 was married or living with a partner.[64] The 1990 census reflects a male to female ratio of 40.7[65] Moreover, 80% of women over 85 are widowed.[66]

Based on medical necessity this recommendation suggests that rehabilitative care (physical, occupational and speech therapy) be available on an unlimited basis for those age 85 and over. Since many frail elderly are prone to falls that result in broken bones, rehabilitative therapy is often the difference between mobility and confinement to a bed or wheelchair.

- It is suggested that a means test to determine eligibility for the provisions outlined in this section be established. It is proposed that there be eligibility for any citizen whose total income is 500% or less of the then current federal poverty guideline. In 2007 this would mean that a single person (family of one) would qualify at income of $51,050 or less ($10,210 x 5 = $51,050).

Finally it is proposed that the threshold age of 85 be adjusted upward by one year for every one-year increase in age longevity by this group. Thus if dramatic breakthroughs in medical science or genome therapy significantly increases life expectancy, the threshold trigger would move up proportionately.

EQUALIZING SOCIAL SECURITY FOR WOMEN

The Basics Summarized

- At normal retirement age, Social Security benefits would be equalized for men and women based on the mean income of men in the same or similar position to that of a woman.

- Working credit at the minimum wage would be given to those persons serving as full time caregivers to the elderly or disabled.

Discussion

A discussion of Social Security benefits within the framework of a new health care system may seem like pork barrel politics. It is hoped that these recommendations not be viewed as such. The credibility of this article must be viewed through apolitical glasses. If there is any encroachment on the hallowed grounds of politics, it is by error, not design. The students who designed this plan started with a clean slate and sought only what was best and what would hopefully be acceptable to the American public.

Social Security has been included because the majority of health care dollars are spent in the later years of our life. As the problem was studied, it became apparent that there was disparities in those later years not only were women living much longer than men, but they were also exposed to higher health care costs and paying these costs with a smaller income base. In 2002, 90% of women were collecting Social Security benefits with the average benefit for retired women ($774) being 20% less than the average benefit for men ($1,006).[67] Women must often leave the workforce as they provide 70% or more of the care for the non-institutionalized elderly.[68] Ekaterina Shirley and Peter Spiegler, graduate students at the John F. Kennedy School of Government, Harvard University made the following observations:[69]

Although the Social Security system is gender neutral on its face, it produces some financial outcomes that place women at a disadvantage in retirement compared with men.

- *The employment patterns of women, characterized by fewer years in the labor force, lower earnings, and more frequent job changes, translate into lower Social Security benefits.*

- *The dual-entitlement rules of the system often impose a penalty on wives and widows of two-earner couples.*

- *The loss of up to 50 percent of a couple s benefit at the husband s death throws every fifth widow into poverty.*

Those outcomes are exacerbated by women s disproportionate dependence on Social Security benefits. As a result of low private asset accumulation and inadequate or absent supplementary pension coverage, on average, nonmarried women over 65 rely on Social Security for 72 percent of their retirement income. Forty percent of that group relies on Social Security for 90 percent or more of their retirement income.

One may argue that there really is little disparity in Social Security lifetime payments to females when compared to males and the argument has some validity. Since women live on the average 5.2 years longer than men, they receive, on the average, 63 additional monthly payments. The other side of the coin, however, is the increased health costs elderly women will face during their remaining lifetime. As one study points out, per capita lifetime expenditure for health care is $316,600, a third higher for females ($361,200) than males ($268,700). Two-fifths of this difference owes to women's longer life expectancy. Nearly one-third of lifetime expenditures are incurred during middle age, and nearly half during the senior years. For survivors to age 85, more than one-third of their lifetime expenditures will accrue in their remaining years.[70] Admittedly the overall plan we propose will pay for most of an elderly women s health expenses, but not all may be covered for those 85 and over we provide for 365 days of nursing home care while residents in a nursing home of that age have an average length of stay approaching three years.[71] Where there is a differential between men and women doing the same or similar work, we recommend equality in the calculation of final Social Security benefits. This is a necessary first step toward parity in retirement income. Admittedly, more data will need to be collected on an employer-by-employer basis. We also recognize the implications of our recommendations may have consequences beyond the realm of Social Security. This section of our overall plan is more difficult to implement in the short term because of the need for more comprehensive data collection by the Social Security Administration (SSA).

A portion of our plan, which can be implemented in the short term, addresses Social Security credit based on the federal minimum wage for caregivers who provide care to parents, relatives or others. As we pointed out earlier, women provide over 70% of the long-term care for the non-institutionalized elderly. Let s assume our hypothetical Mary cared for her elderly parents 40 hours per week. At a minimum wage of $8 per hour, Mary would receive $320 of credit per week toward her final Social Security benefit calculations at her normal retirement age. Assuming Mary provided care for a year with four weeks off, she would earn $15,360 in Social Security credit for the year (48 weeks x $320/week = $15,360). Of course, as we pointed out in earlier sections of this article, Mary could join the Health Care Corp (HCC), receive a stipend of $600 per month and receive up to two years of free college education.

PHYSICIAN NURSE AND PHARMACIST EDUCATION

The Basics Summarized

- A federally subsidized Physician Nurse and Pharmacist Education Program (PNPEP) will assist in financing students pursuing their medical nursing or pharmaceutical degrees.

- A Physician Nurse Pharmacist Corp (PNPC) world be developed which provide the subsidies and benefits of this section.

- In reciprocation for this benefit, proportional pledges of employment will be required in federally determined locations.

- Incentives will be provided for nurses who receive additional training in critical care.

- There will be formed a Civilian Critical Nurse Corp (CCNC) which will open to critical care nurses that pass a qualifying national exam.

Discussion

Most would agree that the U.S. faces a severe shortage of nurses in the years ahead. Flip to the job opening section of any newspaper and you will find column after columns of openings for nurses in hospitals and virtually every other venue in health care. Less well known is the shortage of physician that looms on the horizon. From 1980 to 2005

the first year MD enrollment has declined from 7.3 per 100,000 population to 5.6 per 100,000 population and further declines to 5.0 per 100,000 population are projected by the year 2020.[72] The shortage in primary care physicians - family practitioners, pediatricians and general internists will be even more acute. These are the physicians that are generally at the low end of the medical earning hierarchy.

For nursing, from 2000 to 2020 demand is expected to grow 40% and supply only 6%.[73] The reasons are many. Older nurses are retiring early often in their early 50 s. There is an insufficient supply of nursing educators to meet the demand of nursing schools thus potential students lack admission opportunities. Clinical sites for training are not sufficient to meet demand. Job satisfaction is low as hospitals reduce positions of nursing assistants thus placing additional burdens on the professional nursing staff. Nursing is becoming more complex with new technologies and ever changing patterns of care. The top five reasons cited by nurses for not working in nursing include better hours, more rewarding work, better salaries, skills out of date and safer working conditions.[74]

Those who would choose medicine as a career are turned away because of paperwork, malpractice premiums and the high cost of medical education including postgraduate medical requirements of residencies and fellowships. In 2005, the Council on Graduate Medical Education released a report predicting a shortage of about 85,000 physicians by 2020, due in part to the aging population.[75]

In 2001 there were 136,000 equivalent full time practicing pharmacists in the United States. By 2020 the demand for pharmacists is expected to increase to 420,000. While the need for dispensing pharmacists will decrease, the evolving role of the pharmacist in counseling, monitoring, selecting and adjusting drug therapy will increase dramatically.[76] Moreover, the number of prescriptions written is expected to increase from 3 billion in 2001 to 7.2 billion by 2020.[77] We suggest that a Physician Nurse Pharmacist Corp (PNPC) be developed. Medical, nursing and pharmacy students would receive free education for nursing, pharmacy, medical school and for postgraduate medical education. The Corp would be patterned after the Peace Corp, except educational subsidies would be provided up front, to be followed by service obligations within the United States. All educational expenses would be provided by the government and packaged as a student loan. Upon completion of the student s education in nursing, pharmacy or medical school or fellowships, the Corp member would be assigned by the government to an urban or rural venue suffering a shortage of nurses, pharmacists or physicians. For each year on assignment the Corps member would receive 90% of the normal salary for the position plus a proportional percentage of the accrued loan debt (interest and principal) would be forgiven. As an example, one year of educational subsidy would be amortized with one year of service. The government would be allowed, but not required to negotiate with a community for repayment of the 90% salary. This program is somewhat similar to the National Health Service Corp (NHSC) which was established in 1972 and addresses physicians only. [78]

There are more than 400,000 critical care nurses in the United States. These nurses work in Intensive Care Units (ICU s), Coronary Care Units (CCU s), step down units, emergency departments and post op recovery rooms. By their very nature they provide care to the sickest or most challenged patients. Burn out is a professional hazard because of the pressure that these nurses experience every day. It is to be expected, therefore, that shortages of critical care nurses will be more acute than in general nursing. This is how The American Association of Critical Care Nurses (AACN) describes the problem:[79]

Nursing Shortage More Pronounced for Critical Care Nurses
The growing nursing shortage is especially acute in the specialty areas of nursing. Although specific figures are not available on the extent of the shortage, we do know that the number of requests for temporary and traveling critical care nurses to fill staffing gaps has skyrocketed in every part of the U.S. These requests were most pronounced for adult critical care units, pediatric and neonatal ICUs and emergency departments. Recruitment advertising for critical care nurses in AACN s publications continues to grow, especially in the annual Career Guide. Hospitals are offering critical care nurses ever more attractive incentives, including sign-on bonuses, relocation bonuses, reimbursement for continuing education and certification, and other attractive benefits. In addition, many hospitals are launching critical care orientation and internship programs, such as the Web-based Essentials of Critical Care (ECCO) program, to attract and prepare experienced and newly licensed nurses to work in critical care.

We recommend that the government develop and fund a training program for critical care nurses. Not only is this important because of the increasing demand for services, but it is an investment in the future security of the United States should a national act of terrorism result in massive hospitalizations of injured or exposed citizens. Moreover, the cost to hospitals presently is significantly high because of the need to hire traveling or agency

critical care nurses. Not only do costs double or triple, but the quality of care can be compromised when one is not familiar with the surroundings or patients. We also suggest that graduates of the government program receive uniforms similar to the dress uniforms worn by members of the various military branches. These uniforms would be available to present critical care nurses that pass a qualifying national exam. There would be formed the Civilian Critical Nurse Corp (CCNC). In case of national emergency CCNC members could be encouraged to volunteer for active duty.

NATURAL DISASTERS

The Basics Summarized

- Health care premiums will be waived and absorbed by the federal government, for those citizens who are unemployed or displaced because of a national disaster (such as Hurricane Katrina).

Discussion

1. This article suggests that every citizen purchase health insurance. Large employers would make tax-free payments to their employees to purchase insurance. The same would be true for small employers although the government would provide subsidies or tax credits to small employers to assist in the purchase. The poor, unemployed and elderly would receive direct tax free payments from the government to purchase insurance. In this section we complete our recommendations by imposing an obligation on the federal government to subsidize health insurance payments for those unemployed or displaced by a natural disaster. The disaster could be one wrought by nature such as Hurricane Katrina or because of domestic terrorism such as 9/11. This provision recognizes that every citizen must be covered by health insurance. This provision would only apply if other provisions of reform fail to provide health insurance coverage.

CONCLUSION

In the preceding pages we have provided for health insurance for all Americans. To assure that our citizens spend their health money wisely, we have placed the burden of choice on the individual to choose among CHP s and multiple options within these plans. We have emphasized wellness as the backbone for a healthy America. We have attempted to improve the quality of health care with best practices and evidence based medicine while significantly reducing costs. We have reformed medical malpractice, yet provided for lifetime income in defined circumstances. We have provided for the frail elderly and equality for women in Social Security. We have suggested programs to assure doctors and nurses and pharmacists are available in numbers sufficient to meet future needs. We have embraced information technology with the Electronic Health Record (EHR) and provided for far reaching communications. We have taken volunteerism to a new level seldom before seen in the United States. We have provided for government negotiation with pharmaceutical firms in those instances where the government provides subsidized insurance payments. We have eliminated Medicaid and Medicare. Finally, we have created several new acronyms HIA (Health In America); HCC (Health Care Corp); PNPC (Physician Nurse Pharmacist Corp); and CCNC (Critical Care Nurse Corp). Twenty-three MBA students and their instructor hope that this is the beginning of *The Health Care System of Tomorrow*.

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