# Peak Oil and the health care crisis in America

Contributed by Dan Bednarz
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Introductory comments by Jan Lundberg for Dan Bednarz's article and our new section for this website, Health and Petro-addiction:

For many in the U.S., health care is synonymous with petrochemical drugs and surgery, whereby doctors, hospitals and insurance companies comprise the whole reality. What happens when this system is hamstrung by sudden and permanent shortage of oil and all forms of petroleum? The answer seems obvious: a desperate attempt to survive, whereby there are many casualties for many reasons.

People may not be able to get to hospitals. Once there, can the hospitals operate indefinitely with their energy-intensive electrical, heating and cooling systems? What happens when drugs and organs don't arrive, or when waste piles up? Although there are back-up fuels and co-generation systems at hospitals, alternative fuels and substitutes for petroleum-derived materials are not sufficient to maintain the industrial health system and the larger economy.

Culture Change brings you its first exploration of this future reality with Dan Bednarz's article, below.

In accepting this new piece, I wrote to him: "Looking at the health care sector should be featured at our next Petrocollapse Conference. We should also cover the petrochemical aspect of drugs and how that's part of the capitalistic Western Medicine invasive, non-healing approach. And it's petrochemicals that are causing so many illnesses. After petrocollapse we will use traditional approaches again." He was amenable to this angle, and I promise Culture Change readers that there will be more articles about health care and petrocollapse. So our new section for culturechange.org is Health and Petro-addiction.

The big picture regarding our health and its connection to oil addiction is not to be seen in the mainstream corporate news media. No wonder; their drug ads and car and oil industry ads tend to brush aside any holistic approach. Headlines on June 28, 2006 from USA Today included "Pa., N.J. awash in mud and misery" and "House approves bill to lift ban on offshore drilling". The connections these stories have to climate change and our vulnerability to petroleum dependence are only clear to free-thinking folk who question the alleged reality served up by the news industry. What a concept: Everything is related, and we each must see our place in the center of historic trends that are part of our fast changing world. - Jan Lundberg, Culture Change publisher

Peak Oil and the health care crisis in America

At the May 2006 conference Peak Oil and the Environment in Washington, D.C., I put this question to the panel, "Can you speculate a bit on how Peak Oil will change health care in the United States?" Congressman Roscoe Bartlett's answer was terse: "Americans have a Ferrari health care system," he said. In a post-peak nation, he continued, we "will not be able to afford it."

I am a health care professional, and as far as I know hardly anyone in my field is paying serious attention to Peak Oil. Furthermore, only five of the thirty-seven deans of our schools of public health have shown any interest in my work.

Health care in America is beleaguered with problems of cost, coverage, and quality. Some observers despair and say that necessary reforms are impossible to enact, while others hold out hope that incremental changes will repair the system before it implodes. Both groups assume that health care is an endogenous entity, a virtually closed system. But exogenous, macro-environmental change looms: the end of the fossil fuel era.

We therefore have to make this choice: either cling to the status quo -- and face the likelihood of chaotic nationalization of health care, massive shifts of public funds from clinical to preventive medicine, and even the partial collapse of the medical system -- or confront the challenges imposed by Peak Oil and help lead a socio-economic transformation to alternative -- and necessarily more limited -- energy sources.

For the first time in human history we must be hyper-conscious of where energy comes from and of the consequences of having used it on such massive scales. This will oblige us to ration it, a necessity that will apply with force to medical care. Since the allocation of scarce resources involves tradeoffs, we will be forced to confront Harold Lasswell's brutal question, a classic definition what politics really comes down to, "Who gets what, when, why and at whose expense?"

And America's health care crisis will be resolved -- or descend into systemic chaos -- in the context of the emerging worldwide energy crisis. This will astound those industry professionals who are, first, unaware of the dimensions of the incipient energy predicament and, second, possess only a vague understanding of the indispensable role petroleum (as well as natural gas) plays in medicine. The era of cheap, abundant fossil fuels is in its twilight, and, as things now stand,

the health care community -- like the society at large -- is wholly unprepared for this geologically-mandated transformation.

Here is how the economist Sterling Newberry describes our predicament:

The whole modern world is running out of value. Its capital, based on oil, is of limited duration. As the age of coal fell away, and its capital devalued, so too will the putt-putt age of internal combustion fall away. America survived, and even flourished from the last transition, because we were fortunate and smart. There is no reason that we cannot make the same sharp turn that we did the last time. America is still the land that can do the right thing, but only after we have done all of the wrong things.

Let us hope that the pessimism of Newberry's final sentence involves more dramatic license than bitter truth.

## THE END OF THE STATUS QUO

Health care reforms are currently attempted in the tradition of incrementalism, a view of policy-making that values small improvements over revamping the system wholesale. But incrementalism, also called "the science of muddling through," no longer works.

Ignoring for the moment the energy crisis, let us begin by acknowledging that inflationary costs alone are on course to overwhelm our nation's ability to pay for medical care. Moreover, the current healthcare system reflects the affluence of American society -- ultimately economic growth enables medical cost inflation -- and any prolonged recession or depression would detonate the system. Most health reforms have foundered on this philosophical conflict: whether medical treatment is a human right or a market commodity. Although a large majority of Americans consistently tells opinion pollsters it is a human right, they cringe at the countervailing ideas of rationing and of being told which doctors they may visit.

Accordingly, the administrative, legal, and fiscal structure of American health care represents a "worst of both worlds" pastiche of bureaucratic regulations on the one hand and free-market incentives on the other. It is unable to control cost increases driven by technological innovations, malpractice and liability insurance, and rising energy and petroleum-based equipment prices (not to mention inefficiencies, waste and fraud); it is unable to provide adequate coverage for 45 million uninsured citizens and several millions more who are underinsured; and it is unable to adopt needed improvements in quality either on an absolute basis or relative to the standards of other industrial nations.

Again, even when we do not factor the energy crisis into the equation, we still see that incrementalism has failed, that fundamental reform is required. Thus we read in a report from the National Academy for State Health Policy (Rising Health Care Costs: State Health Cost Containment Approaches, 2002: 49) that "a comprehensive approach to health care cost containment may well require a re-thinking of the entire health care delivery system to assure that clear goals are set and that incentives are properly aligned to reach them."

And in their excellent article on the subject Paul Krugman and Robin Wells ("The Health Care Crisis and What to Do About It" in The New York Review of Books, March 23, 2006) conclude, with the bleakest form of optimism, that fundamental reform might well be undertaken, that the right thing might indeed eventually get done, but only after we continue to do even more wrong things:

So what will really happen to American health care? Many people in this field believe that in the end America will end up with national health insurance, and perhaps with a lot of direct government provision of health care, simply because nothing else works. But things may have to get much worse before reality can break through the combination of powerful interest groups and free-market ideology.

But since we now must also account for the effects of the energy crisis on health care, we are forced to consider how reform is an even more daunting project than we have just considered -- and that Lasswell's question, "Who gets what, when, why and at whose expense?" becomes increasingly painful to answer.

## HEALTHCARE IN A POST-PEAK WORLD

With few exceptions, politicians and the media are not communicating honestly, or intelligently, with the public about energy, and so the threat that Peak Oil poses to the nation's health goes unaddressed.

Furthermore, energy and petroleum products have not been given attention in medical economics since the oil crises of the 1970s (see Glenn, 1976; Loraine, 1973).

Petroleum renders lubricants, jells, plastic gloves, gowns, packaging, various pharmaceuticals and medicines, toothbrushes, dining utensils, a wide variety of tools and equipment to a vast list of the artifacts of modern healthcare (See Johnston, N D). Heating, cooling and other energy costs in medical facilities have increased about four-fold since

the year 2000, while the food served in hospitals, being dependent on natural gas, for fertilizers, and petroleum, for pesticides, processing, and transportation, becomes more and more expensive as oil and natural gas prices continue to climb.

Even more ominously, as Earl Cook (1975) observes, medical and public health improvements have been linked historically to increases in the availability of energy (as are any human advances which are facilitated by technological complexity). Less available energy implies less complexity and therefore the possibility of a general decline in healthcare -- even as costs continue to escalate!

Medical leaders, presently near surfeit dealing with "typical problems," face a choice of either leading fundamental reform of healthcare or succumbing to the deleterious consequences of Peak Oil. Put bluntly, this is a real crisis that cannot benignly be ignored or consigned to the Game Theory tactic of "Let George do it" ("George" here referring to the guy to whom the buck gets passed, not to our current president).

If, as petroleum and natural gas become more expensive, administrators do not awaken to the crisis, they will simply pass costs along and perpetuate the status quo expansion-based business model. Furthermore, as the Baby Boomers, a demographic cohort/bulge twice the size of the preceding generation, begin to retire around 2010, they will demand perhaps twice as many medical resources as they do today. Economists tell us that if the supply of a given resource runs short of demand and substitutes are not available, the market will "stabilize" through demand destruction. In the context of healthcare, demand destruction would be utterly dismal: huge numbers of sick Americans would simply not be able to afford medical treatment.

Obviously this would further burden the state which, as things now stand, already pays for over 50% of all medical treatment. And so we must ask: At what point does the government become simply unable to support the current system? This is the point at which extant political/economic coalitions begin to erode as Lasswell's question is radically rethought.

We can imagine various unhappy scenarios in which Americans demand that the government "do something." And, seeking to preserve its legitimacy, the government might very well "do something" and ineptly nationalize healthcare (where will the tax revenues come from?) or shift funds from clinical treatment to preventive medicine (too bad for those who are already sick).

## YET A THREAT ALWAYS CARRIES WITHIN IT AN OPPORTUNITY

Healthcare is a sleepwalking giant, responsible for 16% or more of the nation's GDP. It has only ephemeral public good will (and this may be too sanguine an observation), but it has the latent power to become a "Good Citizen" by promoting the transition to non-fossil sources of energy. Medicine has an opportunity to educate and guide the nation into the new energy era.

And it cannot stand pat; it is too important, too costly, consumes too many resources, and is too big a target for collective/populist anger.

The quintessential strategic mandate of upper-echelon leaders is to align their organizations with the obdurate social-empirical contingencies of the external environment. To respond properly to peak oil, healthcare decision-makers must overcome what the risk management literature describes as the inherent tendency to avoid poorly understood and novel threats, because acting on them can lead to errors of commission, something leaders of large organizations strive to avoid (Zeckhauser and Vicusi, 1996). But perhaps a few visionaries will emerge in the crisis (Rodgers, 1960); perhaps a small minority of upper-echelon healthcare administrators will begin to "lead" as they recognize the new environment created by Peak Oil.

Finally, you, dear reader, should consider talking to everyone you know in the health professions about peak oil.

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Editor's note by Jan Lundberg, July 1, 2006, from Culture Change Letter #135 via email:

Most people, healthy or not, are distracted by daily consuming and perhaps the spectator sport of watching politicians play musical chairs while enhancing the corporate bottom line. But those of us concerned about larger issues such as petrocollapse and climate change are focusing on such matters as health care in a world about to experience unprecedented upheaval.

There may not be time for reform of the health care system, such as creating a Canadian-like system in the U.S., even if we started now. So you're probably on your own, but "Action is the antidote to despair."

We worrywarts are well grounded in scientific data and industry expertise. For example, authors Matt Simmons and Julian Darley have been warning that North American natural gas supply is too tight for comfort, as reserves dwindle. Extreme temperatures will at some point soon overtax the electric power grid in a devastating fashion. In our previous Culture Change Letter, petroleum expert Simmons warned of blackouts due to natural gas shortage in a very cold winter. This is a dire public health crisis waiting to happen that could make New Orleans/Katrina look like a mere rehearsal.

How will this challenge be addressed? When it comes to leadership, there's nobody home. So-called solutions include maximizing liquified natural gas facilities to import more of this form of gas - an impractical (and unhealthful, unsafe) approach to deal with base load demand. Therefore, as the nation is unable to build its way out of its terminal petroleum crisis, the best thinking appears to have arrived at the consensus that demand-destruction and lifestyle change are the only feasible route. Fundamental changes to the nation's infrastructure needed to begin decades ago.

For what it's worth, the health implications of petrocollapse are not solely negative despite the system's suffering massive disruption; we must improve our health through more natural living that will be forced upon us – for those of us who can make it.

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Read Culture Change's book reviews on two books on health care, by Alice Friedemann, with her peak oil slant:

http://culturechange.org/cms/index.php?option=com_content&task=view&id=62&Itemid=1