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Healthful care: Public and private return on investment

EFFECTIVE SOLUTIONS APPLICABLE TO US HEALTHCARE

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Family USA's report on the state of America's healthcare system "makes crystal clear what many of us in cities across America—who are faced with the spiraling costs of health care both for our employees and our citizens—understand all too well," said Philadelphia's Mayor Michael A. Nutter. "It's threatening our economies, our families and our futures. It is time for Washington to stop the excuses and fix our broken health care system." (22 June 2008)

This report focuses on how well, efficiently and effectively America's public and private healthcare system functions. A 'report card' for each of the major segments of American healthcare is presented. How well each does and its potential are presented.[1]

The five healthcare segments whose 'report cards' are presented are:

1. Federal government:
   Medicare beneficiaries and **military**,
2. State government:
   Medicaid and state programs,
3. Private reimbursement:
   Managed and administered care,
4. Self-paid symptom-based care:
   Private allopathic care, and,
5. Self paid care based on causes:
   Consumer-driven and proactive prevention care.

Impact of America's Healthcare System at home and as an example to the world

The World Health Organization (WHO) provides a useful starting point: **Health is defined as the highest attainable mental, physical, and spiritual well being of each individual** [2]. This is adequate and objective as a basis for developing these Health Report Cards [3].

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[1] By measures developed at the Institute for Health Innovation, the Dartmouth Atlas, the ASIMP working group on healthcare transparency, Anhang and the Californians Health Alliance.

[2] The background and supportive work of Halbert Dunn is noteworthy. His classic book *High Level Wellness*, Avery Press, 1953 remains a guide. René Dubose and Don Ardell have built upon this foundation.

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The measures of health outcome needed to determine how well different segments of America's healthcare system deliver are available based on the health indices used by the OECD in measuring aspects of individual and national health in 153 countries. In that context, America is 15th-37th out of 153 countries on health measures despite spending substantially the most by all measures and metrics.

This means that **America has substantially less return on investment (ROI) given the state of its health and the costs to achieve that health status.**

Figure 1A&B: Relationship between health status and resources devoted to healthcare as % GDP in 2000 (1A) and in 2020 (projected, 2B). Given that America is often a role model for developing and advanced countries, health results delivered and poor ROI has global implications for those who assume America to be the pathfinder or model to follow.

More challenging and somewhat surprising, quality measures in healthcare are just now being defined and validated [4]. This means we do most of our conventional care by precedent rather than evidence [5]. Note that the increase in resources devoted to healthcare shown in Figure 1B projected in 2000 are substantially below the actual increase in GDP share devoted to healthcare.

This analysis reaches the conclusion that the 'sweet spot' for healthcare expenditures is 6-9% of GDP [6].

A recent report on America's healthcare and its impact on society[7] reached the following conclusions:

1. Urban budgets are increasingly strained trying to meet increased demands for safety net health services.
2. Cities are experiencing escalating demands for health clinics, hospital emergency departments, mental health, and special education services are increasing well beyond available resources to meet them [8].
3. American mayors assert the need for health care reform as a top priority of the new administration and Congress next year.
4. Cities are seeking significant increases in eligibility levels for Medicaid and the State Children's Health Insurance Program (sCHIP).

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[3] In regulatory context the definition of health may be functionally and operationally quite different. This is an impediment to achieving best outcomes and to best use of scarce resources.

[4] Jack Lewin of the American College of Cardiology estimates that after investing $60MM over three years that quality measures in heart disease practice will be available by 2010-2012. Similar activities throughout healthcare are underway. The lack of quality measures demonstrates how primitive and meager are our quality measures and metrics.
More attention is needed to defining outcome goals and the measures or metrics to achieve them.

[5] 87% according to the Office of Technology Assessment, U S Congress, report by Gretchen Kohlsrud, 1987.

[6] The work of John Wennberg, Elliot Fisher and the Dartmouth Atlas is particularly relevant. They have documented the disconnection between resources devoted and outcomes achieved, as has the Institute for Health Innovation (IHI).

[7] Families USA, 28 June 2008,
http://www.familiesusa.org/resources/publications/reports/cities-on-the-front-lines.html

[8] In 11 of 13 urban areas surveyed.

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"Our cities face the dual challenges of assisting a rising number of uninsured Americans and providing increasingly expensive health coverage for their own employees," Ron Pollack, Executive Director of Families USA, said on release of their report, June 22, 2008.

"As mayor of San Francisco, which offered the first universal access program for the uninsured, I know that America's cities can provide compassionate and innovative health care to their residents," Mayor Gavin Newsom said on release of the report. "But we can't do this job alone. An overhaul of our nation's health care delivery must be one of the top priorities of a new administration and Congress in Washington in 2009."

"There's no question, the lack of comprehensive health care reform on the national level has a severe impact on America's cities and America's working families," Mayor David Cicilline of Providence, Rhode Island said. "Cities, and even states, can't solve this problem alone — this requires real leadership and immediate action on the federal level."

In aggregate, the opportunity includes:

1. 40% of all healthcare expenditures or ~$1 Tn in 2008 that can be unlocked for productive use in either promoting healthful caring or the overall health and productivity of our social infrastructure,
2. 100-300,000 lives lengthened with enhanced quality of life,
3. Prolongation in national lifespan by more than three years at lower net cost,
4. Millions with better life quality at home and productivity at work,
5. Suffering avoided for untold family members,
6. Transparency about better choices based on clear measures & metrics,
7. Advanced use of information and computer technologies,
8. Coherent use of new media and communication technologies as part of proactive health,
9. Incentives to practice habits of good health rather than ill health,
10. Confused and counterproductive policy, practices, and regulation resolved so that administrators have clarity and markets have stability.

Healthcare is distinctive in that it is selectively highly regulated marketplace with much inertia toward the familiar rather than the 'better'. This leads to interim and shortsighted decisions. When detailed, the toll exacted from society is staggering. The opportunities are equally impressive. We are at a critical time in the debate about healthcare. We are better served when the debate focuses on true rather than interim variables.

We can achieve a substantially better ROI in short time to the benefit of health professionals, consumers, business, public servants, and educators. While substantial, the transition and translation journey begs to be engaged at the earliest opportunity.

To the extent American healthcare is biased toward high tech, high cost, high morbidity solutions, a human and financial burden is placed on too many Americans. This conclusion suggests fundamental rethinking of needs and opportunities by healthcare leaders [9]. Constrained thinking about options and lack of outcome measures are responsible for part of the current situation.

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[9] This includes the social security administration, the Centers for Medicare and Medicaid Studies (CMS), Project Hope, IHI, the Dartmouth Atlas, the Brookings Institution, the Hoover Institution, and the Hastings Center.

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Preoccupation with disease treatment rather than proactive prevention contributes as well. Conventional healthcare assumes that reductionist science and mechanistic understandings of problems of living and chronic illness are preferred.

Functional information systems and cross-disciplinary, pragmatic, evidence based, best outcomes approach is recommended. A convergence of consumer and business interests and astute public sector leadership can speed the transition from the current sickness care preoccupation to a proactive healthful caring system that is affordable and sustainable.

This includes a convergence and conscilience of wisdom and experience based on recognition of the opportunities to reward outcomes in payment and reimbursement mechanisms; to focus on causes more than consequences; and to provide incentives for the outcomes desired.

Table 1.
Current and Healthful Caring Systems compared, 2010P based on 2008

Component	Public Healthcare (90% pop.)	Private Healthcare (10% pop.)	Healthful Caring System: Public Health Promotion(<10%)	Private health
Cost	High	High	Modest	
% GDP (17.5% total)	6.6%	10.9%	8-9% (Goal)	
Healthcare inflation Change in GDP	2.5 x CPI (Increase ~0.3%/year)	4 x CPI	1-1.5 x CPI fixed as above	
Safety	Mixed	Better Hi tech 'tax' more likely	High	
Efficacy	Mixed	Good	Consistent	
Morbidity	High	Lower	Low	
Mortality	High	High	Low	
Paradigm	Reductionist	Pragmatic	Dynamic; multi-faceted	
Measures & metrics	Interim;	easy Interim	Full outcome/life-cycle; hard	
Transparency	Low	More	High	
ROI	Unsustainable	Unsustainable	Sustainable	
Prevention	Advise> practice	Health coach	Priority; outcome measure	
Proactive prevention	Overlooked	Considered	Essential	
Public health	After thought	Specialist	Priority	
Relationship	None	Negotiated (5 min visit)	Lifetime health ombudsman	
Treatment	By protocol	By best practices	By best outcomes	
Philosophy of practice	Allopathic	Allopathic	Eclectic practice philosophies	

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Figure 1A

Comparison of United States, Japan, and certain European countries relating life span to resources expended (% GDP) devoted to conventional healthcare in 2000.

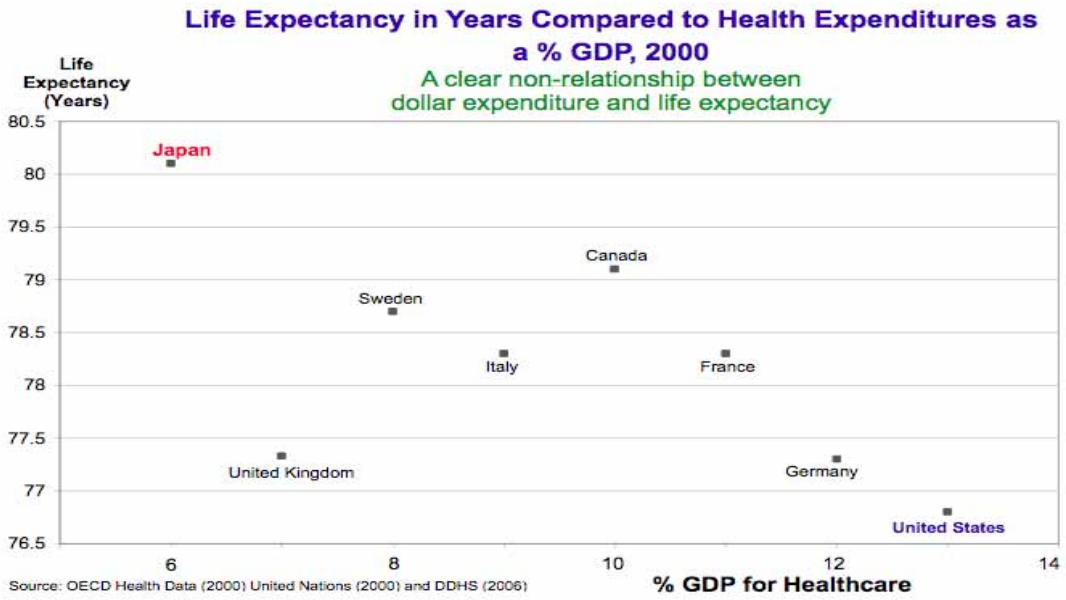

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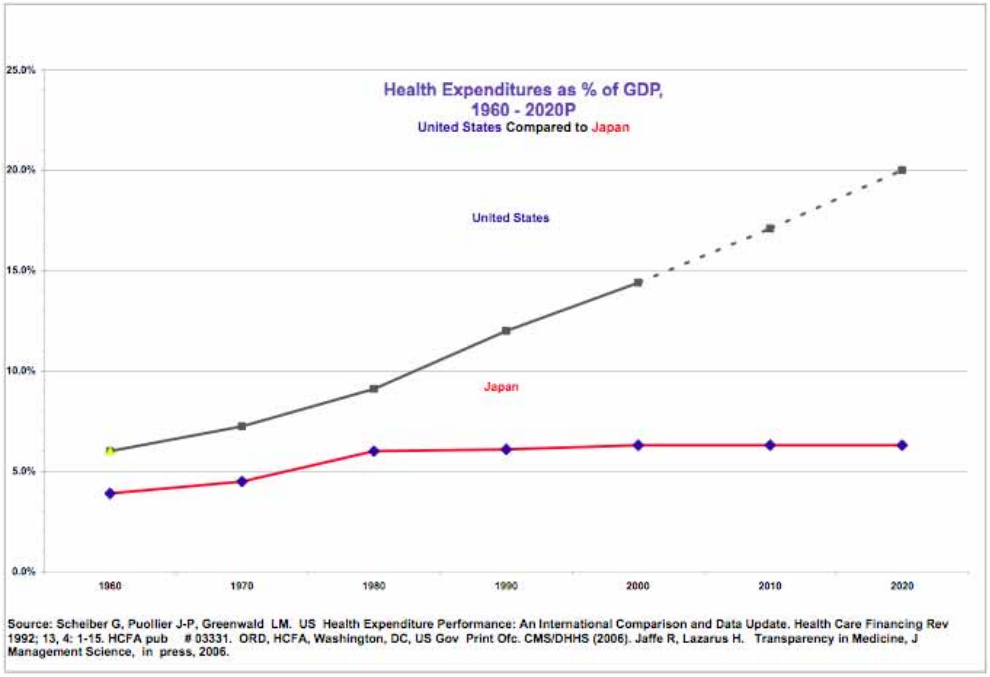
Figure 1B

United States %GDP for conventional healthcare compared to Japan, 1960-2020.



The five US healthcare segments and their performance and potential

Lifetime and life-cycle measures of quality outcome are needed to make better decisions. They are just beginning to emerge[10]. Their value has been elsewhere reviewed[11].

It is a comment on healthcare policy and priorities that measure quality delivered remain sorely needed yet too few incentives exist for their development or implementation[12]. Incentives include the financial, emotional, and psychological rewards for actions taken. If these promote health, they support healthful caring. If these promote ends such as symptom suppression or other interim reinforcements, they may contribute to the problem rather than to its solution. Systems follow the incentives they are given. Sometimes we can induce what are the driving incentives based on how the system performs. For example, pay for performance is intended to reward and incentivize better professional outcomes. The operational incentives reward short term profit that, in turn, are enhanced by limiting to the acceptable minimum the actions taken.

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[10] Jack Lewin's leadership at the American College of Cardiology is noteworthy.

[11] Articles on Transparency in Healthcare published in the International Journal of Management by Jaffe (and the ASIMP working group on healthcare transparency).

[12] This helps explain why worthy 'Healthy American' goals remain a receding horizon. See reports from the US Surgeon Generals office: Healthy Americans 2000, then Healthy Americans 2010, and now Healthy Americans 2020.

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Similarly, the information and digital technologies create huge opportunities for better outcomes, risk reduction, improved decision quality, more transaction transparency and lower net cost.

Lack of quality measures contributes to the current human 'tax' of high tech living. This means the burden exacted because of making familiar rather than 'best outcome' decisions. 87% of what is done in common medical practice is by convention rather than evidence based, according to Gretchen Kohlsrud's report for the US Congress's Office of Technology Assessment. More recent assessments suggest little has changed in the twenty years since that report. This means the human, social, and financial burden exacted by the sickness care systems. In aggregate, this human and financial 'tax' is responsible for:

1. 40% of all healthcare expenditures or ~$1 Tn in 2008,
2. 100-300,000 lives shortened annually,
3. Reduction in national lifespan by more than three years,
4. Millions with reduced life quality at home and productivity at work,
5. Avoidable suffering for untold family members,
6. Confusion about better choices for lack of transparent measures & metrics,
7. Primitive use of information and computer technologies,
8. Incoherent use of new media and communication technologies,
9. Incentives to practice habits of ill health rather than good health,
10. Confused and counter productive policy, practices, and regulation.

Healthcare is a distinctive marketplace.

Current regulations are largely disincentives to innovation. Current institutional priorities favor the familiar rather than the 'better'. Institutional priorities also favor deferral of decisions when possible. This leads to interim and short-sighted decisions. In aggregate, the toll exacted from society is surprisingly large in both human and financial terms, as noted above.

Institutions and healthcare workers report being overwhelmed by the pace and consequences of change. It is the institutions and systems that need to adapt to become more responsive and flexible. Distributed decision systems and ability to use modeling and management techniques that have proven highly effective where applied in other industries is sorely needed. Excellent examples exist. Leadership that calls attention to the causes and offers solutions is also much needed. In too many cases, we do not provide incentives to apply effectively or efficiently available solutions that are evidence based or proven in practice in other places or contexts.

A disconnection is growing between need and action in conventional healthcare institutions. Information in biotechnology is doubling in less than four years. Institutional decisions often take years to decades to make. This means a disconnection between needed innovation and pace of change.

We also benefit from translational and cross-disciplinary collaboration with incentives for collaborative solutions that demonstrate true effectiveness. This implies a confidence in the health professionals and the people they serve. In contrast, too much care today is by diagnosis or symptom-driven protocols through which people are reduced to treatable, trackable diagnoses.

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According to Elliot Fisher[13], America consistently chooses the high-tech, high-cost, high-morbidity solution. This surprising conclusion is causing fundamental rethinking of needs and options by leaders in America's healthcare system[14]. Constrained thinking about options and lack of outcome measures are responsible for the current situation. Preoccupation on disease treatment rather than proactive prevention contributes as well.

Avoidable, expensive complications occupy about half of the one per cent of people that consume 30% of America's healthcare dollars and resources[15]. This means we could reclaim 15% of all healthcare dollars if avoidable complications were systematically avoided.

More effective technologies are desirable

More effective technologies are those that facilitate interaction between healthcare provider or system and the client. More effective technologies also improve quality and accuracy of communication. The late adoption of technology by healthcare systems and professionals provides an opportunity for the private sector to work with professional societies and organizations to demonstrate the opportunities to improve outcomes at lower net cost. Regulation to enable innovative solutions is needed. Innovative public-private partnerships show promise where they have been employed.

The case for proactive prevention can be summarized as:

> **"An ounce of prevention is worth a pound of cure."**
>
> **"A stitch in time saves nine."**
>
> **"Use it or lose it."**

Translating the above timeless wisdom into practice, policy, and regulation often meet operational, institutional and regulatory resistances. Incentives for personal action, as well as for technology and organizational development, that include measures of outcome quality and incentives to bring 'tax relief' from the human and financial 'tax burden' exacted by the current disease care system.

Guidance and leadership in both public and private sectors are needed to reduce the unnecessary and social debilitating loss of lives and treasure. Public-private partnerships are mechanisms proving well suited to facilitating resolution of some of these strategic issues.

Comparison of the report cards for the five components of America's public and private healthcare systems

The ASIMP working group on transparency in healthcare developed this synthesis based on the available data, both public and private.

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[13] Director, Dartmouth Institute for Health Policy and Clinical Practice and the source of the database used by Office of Management and Budget, Social Security and Medicare actuaries, *etc*.

[14] This includes the social security administration, the Centers for Medicare and Medicaid Studies (CMS), Project Hope, IHI, the Dartmouth Atlas, the Brookings Institution, the Hoover Institution, and the Hastings Center.

[15] Healthcare resource consumption in relation to population finds:

% Population	% Healthcare resources consumed	$ (2008, Bn)
1	30 (includes ~ half of avoidable complications)	720 (360 avoidable)
3	50	720+480=1,200
10	70	1,200+480=1,680
90	30	720

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CRITERIA FOR SCORE & POTENTIAL

Category of Care	Score meaning	Potential meaning
Overall	Health delivered compared to OECD health criteria	How much of health potential is realized in each OECD or WHO category
Quality	Mean net health benefit per transaction	Addressing the cause of an issue & demonstrating behavior change are measures of health benefit from transaction
Communication	Vital information included & accessed	How well is important information transmitted; do consumers understand & take action on the message offered
Compassion	Empathy & human concern demonstrated	How well does the tone and demeanor of the health professional reflect concern
Competence	Is care evidence based; are all relevant therapies provided to client?	How well does the system stay current with new discoveries; quality measures and metrics document abilities
Ethics	Integrity status conflicts of interest	The integrity with which care is delivered both individual and institutional
Information	Quality of data or clarity of presentation	Accuracy and communication value of interaction with the healthcare system
Quality of life	Impact on experience of life quality	Comprehensive impact of therapy on function and satisfaction in living
Trust	Reliability	Worthy of confidence; demonstration of clients confidence earned
Value / ROI	Human & financial return on investment	How much health is produced for given resources expended.

"We all live under the same sky, but we don't all have the same horizon."

Konrad Adenauer

Scale:

A = 90 – 100 (Excellent)

B = 80 - 89 (Above average)

C = 70 - 79 (Average)

D = 60 - 69 (Below average)

F = < 60 (Failing)

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MEDICARE / FEDERAL PLANS

Category of Care	Score (Mean ± SD)	Potential (Mean ± SD)
Overall	D	B+ to A-
Quality	D	B- to B+
Communication	F	B+ to A
Compassion	F	B+ to A-
Competence	C	A- to A
Ethics	D	B+ to A-
Information	C	A- to A
Quality of life	C	B+ to A
Trust	D	B- to A-
Value / ROI	F	B- to B+

- Characterized by increasing institutional disconnection between needs, opportunities, and actions. Highly structured. Subject to selective opacities and institutional inertia to innovation.
- From quality of life to health promotion, the focus of nationally administered healthcare remains focused on treating symptoms and signs of disease with improving proficiency.
- The gap or chasm between healthcare delivered and healthful caring needed grows. With resources increasingly strained, rationing of care, however it is named, is increasingly common.
- A major issue is that caring and competent people are often constrained by institutional systems or processes with little incentive for delivering better, more personalized care.

"The Secret to caring is caring."

Harvey Cushing, Nobelist in Medicine and physiology

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MEDICAID / STATE UPDATE

Category of Care	Score (Mean ± SD)	Potential (Mean ± SD)
Overall	D	B+ to A-
Quality	D-	B- to B+
Communication	F	B+ to A
Compassion	F	B+ to A-
Competence	C+	A- to A
Ethics	D	B+ to A-
Information	C-	A- to A
Quality of life	C+	B+ to A
Trust	C-	B- to A-
Value / ROI	D	B- to B+

- Characterized by increasing institutional dysfunction and reduced autonomy.
- Care increasingly by protocol and computerized 'pay for performance' flow charts.
- The familiar and usual are accepted. The innovative and more effective have high standards to meet before they are accepted.
- From quality of life to health promotion, state administered healthcare remains focused on treating symptoms and signs of disease with improving proficiency.
- The gap or chasm between healthcare delivered and healthful caring needed grows more rapidly even than in Federal healthcare. Gap between healthcare delivered and healthful caring needed remains substantial.
- With resources increasingly strained, rationing of care is increasingly implicit.
- Incentives to deliver better outcomes are built in by market forces.
- Quality measures and transparency are rarely acknowledged as priorities.
- Caring and competent people are often constrained by institutional systems or processes with little incentive for delivering better, more personalized care.

"Discovery consists of seeing what everybody has seen and thinking what nobody has thought."

Albert Szent-Gyorgy, nobelist in Medicine & Physiology

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MANAGED CARE UPDATE

Category of Care	Score (Mean ± SD)	Potential (Mean ± SD)
Overall	C	B+ to A-
Quality	C-	B- to B+
Communication	D-	B+ to A
Compassion	D	B+ to A-
Competence	C	A- to A
Ethics	D+	B+ to A-
Information	C-	A- to A
Quality of life	C+	B+ to A
Trust	C-	B- to A-
Value / ROI	D	B- to B+

- Characterized by increasing administrative disconnection between needs, opportunities, and actions.
- Quality of life and health promotion are largely restricted to marketing messages. Large companies are increasingly self-insured with administrators handling claims for treating symptoms and signs of disease with proficiency.
- The gap or chasm between healthcare delivered and healthful caring needed grows.
- With profit margins and overhead taking a larger share of the healthcare dollar, incentives remain to delay, deny or avoid care whenever possible.
- A major issue is that caring and competent people are often constrained by institutional systems or processes with incentive for delivering less care to earn performance bonuses. Few health professionals in managed care environments report satisfaction in their professionals or that there are able to deliver the best quality of care possible.

"Those who say it can't be done should get out of the way of those doing it."

Oriental proverb

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PRIVATE / SELF-PAID CARE UPDATE

Category of Care	Score (Mean ± SD)	Potential (Mean ± SD)
Overall	B-	B+ to A-
Quality	C	B- to B+
Communication	C-	B+ to A
Compassion	C-	B+ to A-
Competence	B	A- to A
Ethics	C-	B+ to A-
Information	C+	A- to A
Quality of life	C+	B+ to A
Trust	C	B- to A-
Value / ROI	C-	B- to B+

- Characterized by increasing partnering between health professionals and their clients.
- Quality of life and health promotion are recognized.
- Focus is on evidence based, safer conventional therapies.
- The focus begins to shift to health promoted rather than procedures performed.
- Gap between healthcare delivered and healthful caring needed reduced.
- Consumers largely pay out of pocket for such services. This increases the accountability.
- Incentives to deliver better outcomes are built in by market forces.
- Quality measures and transparency are recognized as priorities.
- Caring and competent people are able to deliver more care and achieve a better ROI.

"What should be privatized and what should be left in the public sector? Who decides and on what basis?"

Ernst von Weizsäcker , Dean, Donald Bren School for Environmental Science & Management, University of California, Santa Barbara. Member of the German Bundestag (1998-2006)

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AMERICA'S HEALTH REPORT CARD 2008

PROACTIVE PREVENTION CARE UPDATE

Category of Care	Score (Mean ± SD)	Potential (Mean ± SD)
Overall	B+	B+ to A
Quality	B	B+ to A+
Communication	B-	B+ to A
Compassion	B-	B+ to A-
Competence	B	A- to A
Ethics	B	B+ to A-
Information	B+	A- to A
Quality of life	B+	B+ to A
Trust	B-	B- to A-
Value / ROI	B	B- to B+

- Characterized by increasing partnering between health professionals and their clients.
- Quality of life and health promotion are primary. An eclectic, broadly gauged interest in evidence based, safer therapies.
- Focus shifts to health promoted rather than procedures performed. Little gap between healthcare delivered and healthful caring needed.
- Consumers largely pay out of pocket for such services. This increases accountability. It is results that have largely driven the growth of such professions as acupuncture, therapeutic bodywork, and somatic psychology. Incentives to deliver better outcomes are built in.
- Quality measures and more transparency are assets. Comprehensive, lifetime, life cycle and anticipatory approaches included. This encourages technology innovation.
- Caring and competent people are able to deliver more care.
-

Conclusion: Better health can be achieved at lower cost and with favorable human and financial ROI.

"You can never solve a problem on the level on which it was created."

Albert Einstein, Nobelist in Physics