Proactive Prevention Adds Value to All Assets:
Spend Smarter, Function Better

> **"The greatest discovery of any generation is that human beings can alter their lives by altering the attitudes of their minds."**
> Rev. Albert Schweitzer, MD. Ph.D., 1875-1965,
> Nobel Prize in Peace, 1952

Attitudes, actions, asset classes, and community sustainability have intrinsic, subtle connections that shape health and financial values, practices, community prosperity and asset appreciation. Strategic, tactical and logistical connections are explored.

Learned beliefs act like lenses that bring selective focus to what people 'see' and use in making decisions. The links explored here are out of focus or invisible for those who look from outside in, the 'reductionists'. The links are 'self-evident' to those who look from the inside out, the 'integrative-ists'[1].

Health professionals are trained to fight disease and suppress symptoms of ill health. This learned focus on disease acts as a lense that excludes physiology in favor of pathology; that focuses on the signs and symptoms of ill health rather than the underlying causes in life style habits and attitudes. This leaves health professionals largely unaware of the 80% of issues that bring people to the doctor, problems of living or poor stress resilience skills.

Health professionals are largely trained in professional isolation from each other. Such professionals are equally untrained and ill equipped to work well within health teams.

One to four percent of all health professionals elect specialized training in health promotion. They then learn how to evoke human healing responses, how to motivate healthier behaviors. Education to meet needs of clients that

[1] The Medium is the message / Marshall McCluhan + Learned Optimism / U Pa Seligman

have not been covered in professional curricula nor in postgraduate training are available and a small, growing fraction of physicians, nurses and pharmacists practice in this more comprehensive, holistic, integrative and functional way.

Median annual savings of 250,000 lives[2] and $400 billion in unnecessary financial costs and healthcare expenditures[1] are available for near term harvest.

More than half of these savings come through use of health and financial 'quality check lists' and 'yield a harvest' within three to four years as noted below. Health information technologies that better use what we *know* consistently in clinics and pharmacies, in hospitals and at home contribute handsomely. Collateral benefits of avoiding avoidable morbidities and mortalities include reduced suffering for millions of people, better community stability and improved workplace productivity.

Common roots provide insight into solutions to these interwoven challenges. Those in physical and emotional need usually lack human and technical access, experiencing access as limited, at best, and hostile too often.

Attending to people with health and financial disparities is critical because as go those who live on the edge of survival so goes the surrounding community.

Those with disparities too often avoid health and financial issues as long as possible. The crises that eventually erupt consume substantial and disproportionate public and private resources. The return on investment for these resources expended "downstream" is marginal at best. The poor return is due to resources being used to 'put out fires' rather than 'rehabilitate the property to prevent it from catching fire'. At the individual level, an avoidable health crisis is a 'fire' that can be

[2] The range for possible lives saved from avoidable events is from 96,000 (American Medical Association, 2004) to 400,000 (Families USA, 2009) with a median value of 250,000 lives (Institute of Medicine/National Academy of Sciences, 2006; Kaiser Family Foundation, 2008). The same sources suggest of range of costs associated with these excess deaths from $200 to $800 billion with a median value of $400 billion annually.

prevented by changing or ‘rehabilitating’ the thoughts and linked habits of living people practice.

Neighbors as life coach mentors

Community based coaches are an emerging profession. Serving as mentors and solution providers to neighbors in need, neighborhood coachs work through brief intensive contacts focused on more effective solutions in the moment.

Neighborhood coaches can be certified and managed both efficiently and effectively. Coach supervisors, enabled by smart devices that facilitate interaction with their managers to find solutions… preferably when issues are pre-crisis and more manageable. In addition, real time outcome analytical measurements guide evidence based, best outcomes practices for the people and communities served.

CIP SCVS[3] brings together certified community coach mentors with smart, secure technologies and real time outcome measures. The CIP SCVS program speeds the transition from sick care to healthful caring; from being under banked and under employed to being smarter about financial goals and plans for personal, family, and career development.

<Figure 1. Major categories of savings from avoidable healthcare and financial losses and their costs:

Diabetes, Asthma and Autoimmune diseases ($160 Bn)
Tobacco related illnesses ($180 Bn)
Payroll, debit & credit card avoidable costs + fees ($310 Bn)>

Challenge of practicing what we know

> **“We can't solve problems by using the same kind of thinking we used when we created them.”**
> Albert Einstein, 1879-1956,
> Nobel Prize in Physics, 1921

[3] CIP SCVS = Community Investment Partners Sustainable Community Vital Sounds

Much *is* known about how to avoid unnecessary health crises, medication complications and other adverse events. Perverse disincentives, largely due to fragmented healthcare regulation and social support systems, provide resistance to widely practicing 'upstream' prevention[4].

- **In evaluating or scoring the budgetary implications of changes to healthcare**, the Congressional Budget Office (CBO) is prohibited by precedence from scoring behavior change[5]. Since prevention is largely about behavior change, CBO does not score prevention. This absence of data from CBO was largely taken as data of absence of predictable benefit from prevention[6].

  Primary prevention[7] uniquely redresses the underlying causes so the ill health consequence does not occur – in essence averting the 'bad' decree. Proactive prevention includes primary prevention and adds parallel financial literacy and mindfulness practices.

  In times of budget constraints, prevention is often an early budgetary casualty and a low priority for those with a reductionist, mechanistic view of life in the world[8]. This largely derives from the delay between investment and outcomes as well as a regulatory tendency to address immediate issues and defer or delay on long term issues.

  The aphorism 'why are we too soon old and too late smart' applies to this way of experiencing and 'seeing' life. Extractive capitalism has historically taken this view with the implied assumption that nature has capacity to absorb all disturbances without significant risk to people. Asbestos affects on lungs, 'sick building syndrome' affects on asthma and sinusitis, lead and mercury affects

[4] Starr, P, The Politics of Therapeutic Nihilism, Hastings Center Reports, October 1976; http://www.jstor.org/pss/3561255 and Social Transformation of American Medicine.
[5] Gingrich prohibition for CBO to score behavior change
[6] RMJF/KFF report on cost benefit of prevention
[7] Primary prevention source definition (Kerr White)
[8] Critique of reductionism

on neurodevelopment, dioxins affects on hormones, and kepone affects inducing liver cancers suggest the need to use an effective cautionary principle rather than the currently operative assumption of innocence until adverse effects are scientifically proven.

Prevention is among the *highest* priorities for those with an integrative, biological view of life in the world[9]. This largely derives from the remarkable, abundant yield for each and all when prevention is widely and thoroughly applied. Natural capitalism or wisdom based and spiritual communities are more likely to choose this view of governance and fiduciary priorities.

What we believe or assume operates like lenses that filter what we are able to see and comprehend. As we mature, our understanding ought expand. For lack of adequate parenting and mentoring, too many today plateau in adolescence and remain functionally so throughout there lives. Coach mentors help those ready to receive guidance to mature into more responsible adults who value their meaningful work and appreciate the opportunities they do have.

- **Health professionals are trained in isolation from each other.** Health professionals are also trained primarily to diagnosis and base treatments on symptoms. There is essentially no room in physician, nurse or pharmacist training nor in the two to six years of specialized training afterward for learning to effectively transmit stress reduction techniques, mobility practices, functional nutrition, relationship issues *etc* that are the bulk of what bring people to seek care.

  In mechanistic medicine, the symptoms determine the descriptive diagnosis and the standard of care in the community for its suppression[10,11,12].

[9] Jaffe & Morris HSC White Paper 1990
[10] Lewis Thomas, Medicine the Youngest Science
[11] Walter B Canon, Secret of caring is caring

In integrative, holistic and comprehensive or functional healthcare, the essential deficits or toxic excesses are sought at their cause in order to more effectively deal with the consequences.

The rapidly growing consumer driven health marketplace largely supports more functional, lower risk approaches. Consumer driven health became a market segment as recently as the 1980s and estimated to be in excess of $400 billion in 2010[13].

<Figure 2. Savings from Upstream Prevention, from Morris & Jaffe, figure peer reviewed literature synthesis of hundreds of billions of dollars per year from applying what is known but is not yet widely practiced]>

The rapidly increasing need for acute and chronic care to battle the rising tides of expensive disease have gradually cannibalized resources away from investments in community public health and primary prevention[14].

Today there is an *absence* of community public health, a *void* in primary prevention, a *lack* of workforce and basic money management skills.

Americans generally over…

- eat and are under nourished[15],
- stimulate[16] and are under active[17],
- medicate[18] and are under cared for[19],
- think and under sense[20],
- consume and under renew financial, personal and

[12] Sir William Osler Aequanimitas
[13] LOHAS estimate of CDH 2010
[14] Betrayal of Trust by Laurie Garrett, 1990
[15] Diet for a New America by John Robbins
[16] Consumption of stimulants 2008
[17] Sedantary life style 2008
[18] Overmedicate America by Ambrahamson
[19] Healing Words by Larry Dossey
[20] End of Stress by Bruce McKeon

family connections[21].

This analysis suggests intangible taxes of modern living a convenience and immediate gratification life style to be at least as substantial as the tangible taxes. Tax relief based on more efficient and effective use of public and private dollars is needed. The goal is a thriving economy and a robust, productive, healthy, hopeful middle class.

The current system largely waits for and then deals with the symptoms of poor health or poor financial management. In turn, this results in a treatment and reactive focus for healthcare systems and in avoidable crises and chronic ill health that increasingly undermine the competitiveness and financial stability of the greatest economies in the world[14,22,23,24].

The fraction of national wealth devoted to healthcare is increasing unsustainably in the industrial world. America leads this increase in absolute dollars *and* in the rate of increase in GDP devoted to healthcare while delivering modest returns on investment compared to other countries and compared to America's health potential[25,26,27,28,29,30].

< Figure 3. Expenditures: 70% spend all; money; 30% spend none and are healthier; assumptions on inevitable expensive illness *not* supported by data>

Synthesized here are the current human and financial costs and the economic and social implications of correcting acquired deficits in:

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[21] Nuriel Rubini on Financial overconsumption and over leverage
[22] Krugman, Paul ref
[23] Samuelson, Robert J ref
[24] Rivlin, Alice, ref
[25] Hot, Flat and Crowded by Thomas Friedman, 2008
[26] Unsustainable cost ref
[27] Prevention saves report by RWJF, KFF, 2009
[28] John Knowles, Spending more and feeling worse, 1978
[29] Mike McGuiness, OHIHPDP HHS report
[30] Konrad Adenauer Foundation Healthcare Delegation, Berlin, Germany, 7-11 December, 2009.

- Mobility and activity[31]
- Meeting essential nutrient needs[32],
- Money management[33],
- Learned stress resilience skills[34] and,
- Awareness of all creatures intimate interdependence[35].

<Figure 4. Savings from health basics to reduce chronic disease risk and cost by major category>

Lives and treasure can be saved while physical and capital assets appreciate in value and function. A big unmet need for individuals and communities is cultivating habits and practices that actually avoid the avoidable. Well-governed jurisdictions have compelling interests in these issues due to the social and financial costs of the obesity, diabetes to cardiovascular disease continuum as well as the costs from tobacco use. These two categories alone contribute equally to excess healthcare spending of over $250 billion annually[36]. The challenge is to practice and resource what we know from studies but do not *do* in regard to healthcare and financial practices. The stakes include physical and financial survival as well as community viability.

An analogy about the tangible value of prevention:
In fire prevention, the most important task is to know where are the flammable elements, to safely store them and to keep sparks and fire away from them[37]. While we want advanced fire fighting competencies, estimates vary from a quarter to half of fire department crisis calls are due to disregard for basic safety, prevention, and prudent practices[38].

When further investigated, fundamental links to learned and

[31] PCPF&S report on sedentary lifestyle costs
[32] NHANES USDA reports
[33] Del Fialco, Janice, Program for the Unbanked and the Underbanked in Hunters Point, Bay area; Wells Fargo program in financial literacy.
[34] Learned optimism (Seligman, UPenn; Tom Trezise)
[35] Statement of Interdependence
[36] Cost of diabetes + Tobacco = $250 Bn (2008)
[37] Fire Prevention ref avoidance of avoidable risks; liberty mutual
[38] Fire prevention, cost effectiveness of avoidance programs

acquired helplessness, hopelessness, homelessness, despair and isolation become all too clear[39]. More fundamentally, the risks relate to lack of health and financial values that were, in prior generations, taught by schools and reinforced through community public health organizations and campaigns[40]. Restoring incentives and making 'fire safety' a priority yield excellent returns on investments in the infrastructure, the environment and the inhabitants.

Another analogy about the tangible value of prevention:
In property and casualty loss insurance, the most important task is to avoid vagrancy and vacancy that promote vandalism. Promoting community celebrations and resident services[41] is an investment that pays substantial dividends when properly managed through meaningful outcome measures and metrics.

A third analogy about the tangible value of prevention:
A vehicle will run much longer and function much better when its oils, water, and replaceable parts are regularly replaced as recommended by experienced mechanics. Ever more so for life's physical aspects.

A further analogy about the tangible value of prevention:
Amory Lovins deconstructed the conventional view of energy production and end use in the mid 1970s. He then affirmatively constructed how a safer, more secure energy system can be more efficient and sustainable. For example, Americans want 'hot showers and cold beer' from their energy system although perhaps the opposite is desired in the UK. How energy is produced and how efficiently it is used is of much less interest. Opportunities emerged that are speeding a transition to a more resilient, efficient, responsive and cost effective energy chain.

A parallel analysis is needed in health care. Efficiencies and common sense solutions can be applied rapidly and widely to redress vexing aspects of the current resource constrained care

[39] Fire risk and social determinants of health / costs
[40] HSC CIP SCVS white paper, 2010 (Health Affairs?)
[41] Diana Meyer, Resident Services Programs

system focused too much on triaging symptomatic consequences, too little on primary prevention.

Systematically Appreciating Physical and Human Assets

> **"The relationships between inequality and the prevalence of health and social problems... suggest that if the United States was to reduce its income equality to something like the average of the four most equal of the rich countries (Japan, Norway, Sweden and Finland), the proportion of the population feeling that they could trust others might rise by 75 per cent -- presumably with matching improvements in the quality of community life; rates of mental illness and obesity might similarly each be cut by almost two-thirds, teenage birth rates could be more than halved, prison populations might be reduced by 75 per cent, and people could live longer while working the equivalent of two months less per year.**
> *The Spirit Level: Why fairer societies almost always do better* by Richard Wilkinson & Kate Pickett, 2008, p 261

People become the result of what they eat and drink, think and do.

The diet, activity, attitude, and environmental awareness, as practiced by typical Americans reveal ignorance or denial of basic physical realities. A convenience culture and immediate gratification marketing largely shape most people's 21st century habits of daily living**.**

Schools and public health facilities no longer have the resources to include healthy eating, physical education, stress resilience, and awareness of civic responsibility in the curriculum nor are they consistently reinforced through community organizations.

Reduced healthcare costs, improved health status, smarter

money management and higher occupancy rates in housing units are tightly linked, however disconnected they seem on the surface.

These connections are now further explored.

Assets increase or decrease in value in proportion to the strategic attention and tactical appreciation paid to them. Asset classes to which this applies include physical[42], capital[43], human[44], and environmental[45]. We suggest this is true for all asset classes[46].

<Table 1. Asset classes appreciation and depreciation: Commonalities across classes>

For people and buildings, fungible financials and ecosystems there are fundamental, subtle, under appreciated links between asset appreciation *or* depreciation and the kind of attention paid to those assets. This applies to health practices and to building maintenance, to investment choices and neighborhood health. An implication is that attention rich policies and practices focused on sustainability yield better returns than those that are passive or focused on short term returns on investment largely disregarding the physical and human assets involved.

< **Figure 5. Mercy Housing data; Enterprise Foundation Study on cost effectiveness of resident services in assisted housing>**

When people are appreciated, encouraged and given consistent examples of healthy behaviors, personal and group behavior shifts in that direction[47]. The same is true for workforce skills and financial literacy. When people are unappreciated and *lack* encouragement or healthy behavior

[42] Physical asset class gold standard ref
[43] Capital asset class gold standard ref
[44] Human asset class gold standard ref
[45] Environmental asset class gold standard ref
[46] Asset class primary definition source
[47] Harvard ucsf degrees of separation research

models, there is a drift toward sedentary, passive life style that correlates with asset erosion and high risk of high cost crisis services. The linked implications for property and casualty as well as mortgage insurance are presented in Figure 6.

<Figure 6. Appreciation as predictor of asset outcomes>

Solutions: Community based Coach Mentors

Community based coach mentors serve as role models for their neighbors. Coaches are sources of solutions to challenges and crises of daily living. Health and financial checklists and incentives for healthier and wiser financial decisions result in more productive and prosperous residents.

Built upon the success documented by Enterprise Foundation and by Mercy Housing for resident services, community coach mentors fill a critical gap that currently exists. The gap is between the classes or programs offered by resident services and the ability of residents to attend, benefit from and implement the 'fruits' of such programs. Working with neighbors to solve common problems of living in the moment is the responsibility of the coach mentor. This allows for clarification, deeper understanding and incentives for taking action and implementing the goal as identified and desired by the resident.

Physical and Human Assets: Cradle-to-Cradle Sustainable Cycles

There are positive links between appreciation of assets and the appreciation of those assets. For both people and buildings, paying attention pays dividends; lack of attention costs dearly.

An example is asset management. Attention to the built environment results in asset appreciation.

Opportunities for human and capital asset appreciation

and to concurrently reduce risks of property and casualty losses are synthesized here from housing specialists, risk managers, economists, educators, anthropologists, sociobiologists and biomedical scientists.

Mark Twain quipped that he, “Discovered he had been speaking ‘prose’ for his entire life.” Today, health promotion and primary prevention are being ‘discovered’ as something people have long favored in principle. However, based on a pragmatic ‘follow the money’ analysis, the promise of primary proactive prevention remains largely untapped.

Primary proactive prevention conserves precious resources as it restores resilience and vitality also known as homeostasis or self-restoring health. In practice, future risks are avoided or reduced, health status improves and there are quantifiable net savings of both lives and treasure. Results, however, flow from resources and priorities applied.

America puts less than a penny from each healthcare dollar toward the fundamental truths that a stitch in time *does* save nine, an ounce of prevention *is* worth a pound of cure, and we loose what we do *not* use.

Proactive prevention…

- invests resources in the practice of the above ‘truths’.
- shares with conventional medicine the aspiration to ‘above all else, do no harm’ or more succinctly, ‘help ever, harm never’.
- practice includes use of healing words to enable therapeutic moments that remove obstacles to recovery and to evoke the human healing capacities while correcting dietary, activity, environmental or attitudinal deficits.

Three Solution Oriented Approaches: The Triple Aim, Accountable Care Organizations and Primary Proactive Prevention

The **Triple Aim** seeks to provide better health, better care, and lower costs. Developed at the Institute for Healthcare Improvement, guided by Don Berwick, IHI working groups are implementing pragmatic, evidence based, outcomes driven strategies for transforming America's hospitals and health systems into financially viable institutions that demonstrably contribute to the health and well being of their communities. From quality assurance check lists to incentives for appropriate technology that advance better outcomes, the Triple Aim can be paraphrased as apply sensible systems and *save a million lives*.

Accountable Care Organizations (ACOs) help speed the transition from triage care to coordinated healthful care through rewarding *desired* outcomes and offering negative incentives for short term care that delivers *worser* overall outcomes. Healthful means functional ability measured, risk reduced or stress resilience demonstrated.

The Dartmouth Health Policy Institute, guided by Elliott Fisher, developed ACOs that are logical, even common sense. *Absence* of ACOs reflects one of the profound dilemmas of America's health care system: Precedence rather than evidence of best outcomes determines most of what is done. 87% of what is commonly done in medical practice is done by precedence and *not* evidence according to the Office of Technology Assessment of the U S Congress report in 1989. An update today would find about the same proportion by precedence, little more by evidence. While biomedical information doubles in less than four years, the translation from bench to clinic remains painfully slow and the current system given too little incentive to adopt disruptive, effective innovation.

Primary proactive prevention is integral to effective health care reform. Enhancing good health practices and mitigating the underlying, upstream risk or causes of future ill health means a renaissance of public health and primary prevention as developed by Health Studies Collegium fellows under Russell Jaffe. A key observation is that we can apply what is known yet largely un-resourced in redressing early the *causes*

of ill health and *promoting* the habits of good health at every level of community. As a dividend, short term savings from conventional care costs *not* incurred can be used to fund the transition from the current largely symptom driven, triage care to healthful outcomes. This includes the evidence that physiology before pharmacology achieve *better* outcomes at lower cost, lower risk, with better compliance and fewer complications.

These proactive prevention principles have yielded great dividends in the past and are pregnant with promise for today and tomorrow.

Yesterday, childbirth fever and childhood infections were conquered through a combination of better nutrition, improved home and hospital sanitation along with public health campaigns to improve people's health habits and practices.

For *today*, the opportunity abounds to spend less and function better through a renaissance of prevention. This creates sustainable jobs.

For *tomorrow*, the benefits of reinforcing habits that improve mobility, diet, and attitude rapidly reduce costs of care as the resource-consuming risks of chronic disease abate. Dividends include better social cohesiveness and quality of life.

Beneficial cycles can be started with small, attainable, reinforced and rewarded steps that become self-reinforcing as function and feeling improve. A combination of emotional, psychological, and financial incentives for healthier habits of living can systematically save at least $3-4 within just three to four years for each first year dollar invested in such primary proactive prevention programs in the workplace, institutions and homes.

The body's healthfulness and vitality have culturally distinct measures, metrics or assessments.

Examples include:

1. **Waist to height ratio** predicts metabolic syndrome, insulin resistance, diabetes and cardiovascular risks such as heart attack and stroke, amputation and impotence.
2. **Concentrating capacity** is the earliest and most predictive measure of kidney health and waste removal from the body years before conventional blood tests of renal health.
3. **Pencil taping** is a classic yet highly predictive measure of fine muscle motor coordination. This test predicts coordination, balance, and Parkinsonian coordination problems years to decades before other tests.
4. At the subcellular level we can assess how efficiently the **cell battery or mitochondria** respires as it produces the energy molecules that are put to work in making cell functions happen. This same symbiant is also responsible for rendering certain chemicals more water-soluble and less damaging. These include certain cell metabolic wastes as well as any hormone disrupting, persisting organic pollutants like phthalates, PCBs, and DDT/DDE or toxic metals like lead, mercury, cadmium, arsenic, and nickel.
5. **Pedometers** that measure how many steps are taken each day, with 10,000 or more being the goal for healthy adults.
6. **Skin relaxation** can assess hydration fluid status and predict both kidney stone risk and how much work the kidney has to do to eliminate daily wastes.
7. **Transit time** assesses digestive competence.
8. **Capillary fragility** assesses an overly active blood clotting system that is a risk for blood clots to the lungs known as pulmonary emboli, heart attacks known as coronary occlusions or stroke known as cerebral infarcts.

Solutions based on what people eat & drink, think & do.

“The fastest way to poverty is to be ill;
the fastest way to get sick is to be poor.

> **The fastest way to helplessness & hopelessness is being impoverished; the fastest way to be impoverished in spirit or wallet is lack of learned optimism or stress resilience skills."**
> Russell Jaffe, Senior Fellow, Health Studies Collegium

The focus of primary prevention is on better choices in eating, drinking, thinking, and doing that lead to 'feel the difference' results that are appreciated and reinforced.

Examples that are all associated with better health and lower costs include:

1. Elder co-care*, i.e.* caring for a peer
2. Foster grandparent, *i.e.* caring for future generations
3. Pets, social clubs and gardening, *i.e.* the values of connection, landscaping & school lunch gardens,
4. Art and music or great books and topical idea clubs,
5. Stretching, hiking, camping, or bodywork,
6. Neighborhood watch including shared childcare, shared homework monitoring, shared story time, and shared successes.

Importantly, these approaches deliver substantial savings rapidly enough to achieve a return on investment appetizing to bond investors because of their rapid and robust payback. Here is an example: Invest an annual $100 billion in Americans primary proactive prevention health to yield $300 billion in savings within three years. Replicating this process, additional long-term benefits are available through investments in preconceptional care and perinatal enrichment. In specific, each dollar invested in preconceptional and early life enrichment returns, over the life span, a *thousand dollars* and the additional dividend of reduced suffering. $72 billion – 3% of 2008 health care dollars or 0.5% of gross domestic product -- invested in this way yields $72 trillion in savings. Given the projected shortfall in Medicare and Medicaid over the same time period, such savings could reduce demands on the public purse while improving our social sustainability and financial vitality.

State Senator Mark Leno's AB1154, The Proactive Prevention of Obesity and Diabetes bill, is a unique public-private partnership mechanism that includes a dedicated fund in the state treasurer's office to enable implementation of proactive prevention services, documentation of preferred and most effective programs within each ethnic and socioeconomic community served, and demonstrate how efficient health promotion can be achieved using integrative, functional systems and mechanisms. Rapid return on investment appeals to certain classes of investors and bondholders. Improvements in community and individual health are of interest to public partner institutions. Similar legislation is being prepared in a dozen other states. Indeed, innovation in health care may come as much from Main Street as from federal initiative, as much from Wall Street as from reform initiated by disease care experts, as much from functional bioinformatics and technologies as from biopharmaceuticals.

Triple Synergy of Solutions: Triple Aim, ACOs, and Primary Proactive Prevention

> **"The first wealth is health."**
> Ralph Waldo Emerson, 1803-1882

Combining the Triple Aim, ACOs, and primary proactive prevention yield synergies that <u>can</u> fund out of *savings* the transition to a world leader in health care outcomes rather than a world leading sick care system, one that consumes too much of our productive resource while delivering too little effective outcomes.

America deserves to lead the world in more than resources consumed and life years sacrificed. American productivity and quality of life are reduced based on ranking 15th-37th on all health measures compared to 157 other nations. America does spend the most, by far, half again as much as Germany and triple what Japan spends per citizen.

Payments for procedures and tasks dominate reimbursement

today. This leaves a disconnection between the outcomes sought, the risk reduced, the quality of life enhanced and the payment system. Efficiency and effectiveness can be achieved and monitored by paying for and rewarding the outcome desired. Linking payments to outcomes can deliver a sustainable, robustly profitable health enhancement marketplace.

Payment for performance continues to be based on procedures and tasks rather than for more desirable outcomes and health delivered. Common sense remains uncommon in health care and in the debate about health care reform.

Examples <u>in</u> the direction of value based care and caring:

1. Kaiser Permanente, Geisinger, Mayo and Cleveland Clinics showing that efficiencies can improve outcomes at lower net costs,
2. State projects in Vermont, Pennsylvania, New Mexico, and Hawaii showing that care at home is often more effective than institutional care. In addition, an integration of caring systems services and reimbursements proves superior to the current disconnected systems that too often leave the consumer caught in an expensive limbo between places or coverages,
3. Triple Aim and Planetree hospital initiatives to improve responsiveness and effectiveness by design,
4. Sustainable communities initiative to reduce health and economic disparities,
5. Community coaches in workplaces and marketplaces to meet individual needs where people already are with minimal waiting and prompt resolutions,
6. Tax incentives to provide incentives for companies to include cost and outcome effective health enhancement programs for their employees and communities,
7. CityLab type programs, pioneered by Carl Franzblau and Lou Sullivan at Boston University Medical Center 18 years ago, to reduce health disparities and improve educational opportunities especially for those form disadvantaged communities.

Examples <u>not</u> in the direction of these proactive aims:

1. Bundling payments for procedures and tasks that leaves the focus on better disease management rather than proactive health promotion,
2. Medical home built around the same disease care model,
3. Single Payer plans built around the triage symptom care model,
4. Multi-payer health insurance marketplace that excludes incentives for health promotion and incentives to function and feel better

America has re-proven the adage that health cannot be bought yet it can be expensive.

> **"All parts of the body that have a function, if used in moderation and regularly exercised become thereby healthy, well-developed and age more slowly, but if unused and left idle they become liable to disease, defective in growth, and age quickly."**
> Hippocrates of Kos, 460-370 BC

Learning from other cultures, systems, and methods, we can evolve a uniquely American healthcare system that leads from its compassionate heart with competent hands and wise head. While we seek better care, there is an erroneous assumption that more care must somehow equal better care when much evidence to the contrary is in the peer reviewed scientific literature.

- Maria R is a wife and mother, a Latina nurse and diabetes specialist. Managing her diabetes and cardiovascular risk is a high concern in part because of family members whose amputations or strokes were directly linked to poorly controlled diabetes and the complications of not

keeping blood sugar, insulin, energy systems enabled and functional.

- Patrick M is a successful policy specialist in community college and public health issues. He also has ringing in his ears (tinnitus), lack of restorative sleep and memory issues that reduce his quality of life.
- Adam J is a twenty-year-old kinesthetic learner. This means he does well when mentored in the university of life. He learns by moving around and sensing his surroundings. He does much less well when behind a desk.

Already short-resourced public health departments, from clinics and practitioners to hospitals and medical centers, are about to be overwhelmed by tsunami waves of demand for services in rapidly increasing syndromes such as:

- Autism spectrum disorders and neurodevelopmental delays are documented by the Centers for Disease Control and Prevention (CDC) to be 1 in 110 births; in some areas it is reported to be more than one in 50 births. Epidemics are usually declared when 1 in 100 people are affected,
- Diabetes and the avoidable yet devastating consequences of impaired sugar-insulin-energy regulation linked to heart attacks, strokes, and loss of blood flow throughout the body. The cost of excess care due to diabetes is reported to be growing 6.4% per year or three times the consumer price index (CPI), $134 billion (2006) and $160 billion (2009 est.),
- Forgetfulness and early senility syndromes such as that named for Professor Alzheimer, to,
- Learning styles that include attention deficit, hyperactivity, touch deprivation, and social dwarfism due to disconnection from physiologic rhythms and nurturance from adequate essential nutrients, touch, and mobility.

Analogy to health care from energy security and efficiency

> **"I am not for myself, who will be for me?**
> **If I am only for myself, what am I?**
> **If not now, when?"**
> Hillel the elder, 1st century AD, Pirkei Avot

In the metaphor of this administration, *yes, we can* have better health, better care, *and* lower costs through improved communication and incentives for more sustainable habits of daily living – living beyond survival.

Implications of putting physiology first are discussed. Correcting acquired deficits in activity and essential nutrient consumption, money management, learned stress resilience skills and awareness of the intimate interdependence with the environment for all creatures are presented here. These needs serve as a sober reminder of where we are headed.

Communities and residents will thrive or dive depending on choices made about how to mentor people toward renewal along with outcome effective, value based, evidence based healthful caring and financial literacy for those at risk or who are in need.

Implications of deep, critical strategic, tactical, and logistical links between attitudes, actions and asset classes are explored. Beliefs act like lenses on what people are able to 'see' and use. Beliefs, like habits, can be relearned.

The cost of healthcare as a privilege is too high.

The cost of healthcare as a right is affordable and sustainable.

The 'unalienable right to pursue happiness' inscribed in America's Declaration of Independence suggests that being healthy – a necessary ingredient in being able to pursue

happiness – is implicit in America's spirit as a right more than a privilege.

If not now, when?