



Integrative Early Disease Detection and Synergistic Preventive Strategies: *The Philosophy of the HealthWISE Wellness Diagnostic Center*

Overview:

HHS Secretary Tommy G. Thompson called on Americans to take steps that will lead to a healthier nation at a first of its kind national health summit he convened in Baltimore, MD, April 15, 2003. Focusing attention on the importance of prevention and promising approaches for promoting healthy environments, the Secretary laid out his priorities and programs for “Steps to a Healthier US”, a department-wide effort in support of the President’s Healthier US Initiative.

In the US, 7 out of 10 deaths and the vast majority of serious illnesses resulting in disability and sky-rocketing health care costs are caused by chronic diseases that often can be prevented if diagnosed early. Underlying these serious diseases are several common risk factors including poor nutritional and dietary habits, lack of physical activity, and tobacco abuse and exposure. Most of these disease situations can be modified years before they contribute to illness and death. These links to disease are often mis-understood by the general populace because of one common malady: lack of adequate education or opportunities for education.

Quoting Secretary Thompson: *“I am convinced that preventing disease by promoting better health is a smart policy choice for our future. Our current health care system is not structured to deal with the escalating costs of treating disease that are largely preventable through changes in our lifestyle choices.”*

At the heart of this program lies personal responsibility for the choices American make. This underlies the important fact that citizens must seek appropriate counseling in Wellness and Prevention, some of which will require that they assume the financial burden for these efforts. Making available to the population an *Integrated Prevention and Wellness Solution* is one way to combine early or pre-symptomatic disease detection with structured education and advice, in conjunction with an individual’s physician, to affect the true “Power of Prevention”.

The Problem:

Heart and vascular (CV) diseases are the number one cause of death in the world, now exceeding infectious diseases even in underdeveloped countries. Colon cancer is the number one cause of cancer deaths in both men and women, followed closely by lung cancer as the number two cause of cancer related deaths (in smokers, lung cancer displaces colon cancer in the leading spot). Finally, osteoporosis and related issues such as osteoarthritis is the number one cause of chronic pain and disability in middle-aged and older American adults.

These diseases share numerous commonalities. First of all, they all have the potential to be treatable or preventable if diagnosed early AND importantly, they share many common causative risks, as illustrated in the following table.

| Risk Factors | | | | | | | | | |
|---------------------|------|---------|-------------|-----|---------|------------|----------|----------|----|
| | Diet | Obesity | Abn. Lipids | HTN | Smoking | Inactivity | Heredity | Envrmnt. | DM |
| CV Disease | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Lung Cancer | | | | | ✓ | | ✓ | ✓ | |
| Colon Cancer | ✓ | ✓ | | | ✓ | ✓ | ✓ | ✓ | |
| Osteo | ✓ | ✓ | | | ✓ | ✓ | ✓ | | ✓ |

Abn. = Abnormal; Envrmnt. = Environment; DM = diabetes mellitus (type I and type II)

The Solution:

The good news however is that these diseases also share many common preventive strategies. Consider the following table listing these issues specifically.

| Prevention or Therapy | | | | | | | |
|-----------------------|-----|---------|-------------|----------|---------|------|----------|
| | ASA | Calcium | Weight Loss | Exercise | Antiox. | Diet | Lipid Rx |
| CV Disease | ✓ | | ✓ | ✓ | ✓ | ✓ | ✓ |
| Lung Cancer | | | | ✓ | ✓ | | |
| Colon Cancer | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | |
| Osteo | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |

ASA = aspirin; Antiox. = antioxidants; Rx = therapy; Calcium = oral calcium supplementation

All of these diseases benefit from education, early detection, and early goal-directed preventive strategies. Increasing public and physician awareness is very important. Additionally offering the patient opportunities to have access to the latest technology for imaging as well as the latest in advise for lifestyle changes is important. Often such services are not available from their doctor and neither the doctor nor the patient knows where to turn.

Conclusions and Challenges for the Future:

There is a clear synergy in considering an integrated approach to a given patient in dealing with all of these issues in a cogent fashion. Educational, diagnostic, and therapeutic methods offer an opportunity to have physicians from Primary Care, Rheumatology, Cardiology, Radiology, Colorectal Diseases and Thoracic Diseases, and Orthopedics work together along with education on diet, lifestyle, exercise, and medications (when appropriate) to affect this synergy under one banner.

The cost of healthcare to the in the community is rising and yet the quality of healthcare delivery to the individual is declining. The chronic diseases as discussed are major sources of current healthcare expenditures, and yet they are amongst the most preventable. Access to high-quality and affordable prevention measures, including education, screening, and directed follow-up, are essential if we are to save lives and reduce overall medical costs. Patients, or more appropriately “customers” are willing to take personal responsibility for prevention provided the “product” that they gain, via education, access to leading edge technology, and goal directed information is provided to facilitate and not hinder or abrogate them working with their doctor.

With a community-based, “customer” based infrastructure that embraces prevention and wellness as a priory, we will be able to see the overall health benefits. The potential to develop an integrated approach to these issues is very germane to goals expressed individually by all medical professions. A physician owned approach, independent of political and direct hospital system affiliation is good for the community as a whole. To complement these efforts, state of the art technology should be available and the system should be robust enough to be able to add ancillary services as required by the doctors and their patients.

HealthWISE Philosophy

The outlook for the HealthWISE Wellness Diagnostic Center and its goal is to become THE resource that empowers individuals, in concert with their physicians, through early detection and subsequent definition of individualized HealthPATHS to preserve their quality of life. To help accomplish this goal we have acquired the state of the art EBT e-Speed™ Scanner (General Electric Medical Systems), the 5th such installation in the United States and the 8th in the World.



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