



G

Rethinking – *Design Thinking* – **Health Care**

The Government Role

Hanna Korel, Soo Yeon Paik, Amy Palit, Alexander Troitzsch

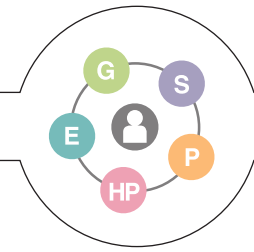
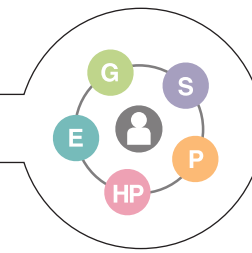


Table of Contents

Preface	i		
Introduction	1		
System Elements	3		
Voluntary Employer Health Reports	3	Health Information Kiosk	31
National Health Index	5	Emergency Alert Network.....	33
Electronic Medical Record Regulation	7	AlertUS	35
Health Care Expert Panel.....	9	Areyouprepared.gov	37
Score Cards	11		
Report Cards.....	13		
Health Care Compare	15	Conclusion	39
Health.gov	17		
Health Care Information Initiative	19		
Brand Identity	21	References	40
Style Guide.....	23		
Health Care Quality Seal.....	25		
Hands On Education Program	27		
Health Information Navigator.....	29		



Preface

The Problem

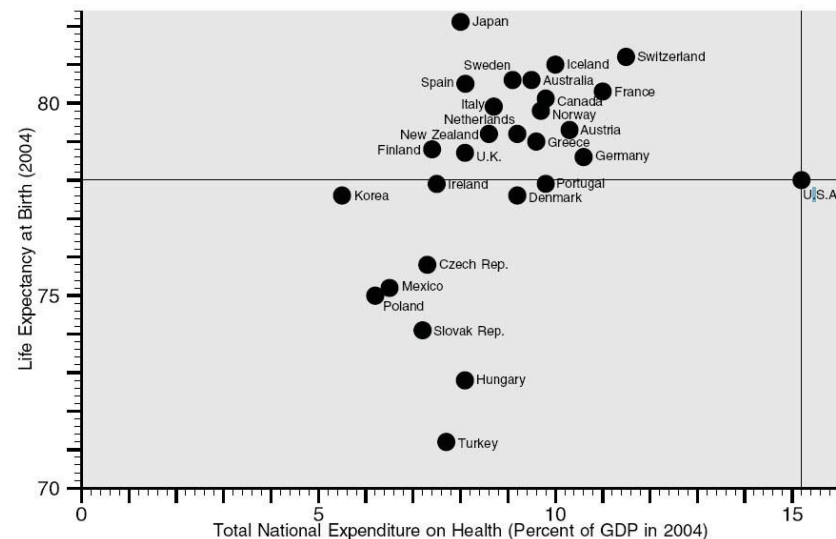
Health Care is a major priority for Americans. For decades, it has been a matter of national concern; it now demands attention. As health care costs have climbed, concerns about financial failure have joined concerns about quality and access. In 2004, health care nationally accounted for 15.2% of the GDP, far in excess of amounts spent by any other developed country. For this, the life expectancy of Americans born in 2004 was 78 years. In 2007, life expectancy in the U.S. actually declined by .3%, placing the country 44th among industrialized nations. The mediocre level of quality we have purchased we have paid for with far more of our treasure than that spent by any other nation.

The cost of health care in this country must be brought down. Now nearly 2 trillion dollars annually and climbing, health care costs threaten to destabilize the national economy. But we are in no position to allow health care quality to decline; we already trail nearly all of our peers. Health care quality must improve as costs go down. The major health care sectors must find ways to provide services where quality of medical care is the competitive issue, and results are measured at the medical condition level in terms of patient outcome per unit of cost.

Harvard business strategist Michael Porter and colleague Elizabeth Teisberg have analyzed the competitive health care environment from the standpoints of the five major sectors involved: providers, payers/health-plans, suppliers, employers and government. Their remarkable conclusions

are set forth in a recent book: “Redefining Health Care. Creating Value-Based Competition on Results”. Building on their strategic recommendations, the project described in this report examines how policy proposals might be implemented in the Government sector.

Design planning and policy planning join effectively in policy design synthesis at the point where policy requires means of implementation. This project proposes design concepts in a system context to implement strategy for the Government as part of a larger construct uniting all five sectors of the health care community.





The Course

The design concepts are results from a project-based course at IIT's Institute of Design. The semester-long Systems and Systematic Design course is a workshop in which teams of graduate students, deliberately of mixed international origins and different academic backgrounds, apply the computer-supported Structured Planning process to complex design planning problems. The goal for each project is to develop information thoroughly, propose innovative solutions that take maximum advantage of the information, and integrate those ideas into system concepts that can both be evaluated in their own right and (in a real situation) be the comprehensive project specifications for a follow-on detailed development project.

Course Issues

COMPLEXITY

What is the nature of “systems” concepts where policy, products, processes, services and communications are organized to act together to achieve multiple goals? What can be done to assure that a system concept is as complete as possible, covering many functions and attaining a high degree of “wholeness” and organic reliability?

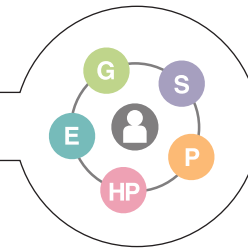
DESIGN PLANNING METHODS

What is Structured Planning and how can its tool-kit of methods be used to collect, structure and synthesize information in projects of greater complexity than can be

comfortably dealt with intuitively? How can such methods be used by a team to extend the effectiveness of all?.

TEAMWORK

How do individuals with different cultural origins and different academic backgrounds work together successfully on teams? What roles are there to be played and what difficulties must be overcome?



The Project Team

Twenty two graduate students from the U.S., Germany, South Korea, China, Singapore and India were assigned to five teams for study of the problems of the five health care sectors. Background experience for team members included degrees in automotive design, history, interior design, industrial design, electrical engineering, control and information technology, computer science, communication design, chemical engineering, environmental sciences & policy, media systems design, graphic design, English, marketing, international business and biotechnology.

Team members for this project team, studying health care services from *the Government's side, are:*

Hanna Korel

BS Marketing & International Business
Pennsylvania State University
(University Park, Pennsylvania)
Team Leader, Phase 2

Soo Yeon Paik

BA Visual Communications Design
Handong Global University
(Pohang, Republic of South Korea)
BS Product Design
Handong Global University
(Pohang, Republic of South Korea)
Team Leader, Phase 3

Amy Palit

BS Chemical Engineering
University of Texas
(Austin, Texas)
MS Environmental Sciences & Policy
Johns Hopkins University
(Baltimore, Maryland)
Team Leader, Phases 1 and 5
Honorary Project Leader

Alexander Troitzsch

Graduate Diploma Media Systems Design
University of Applied Sciences
(Darmstadt, Germany)
Team Leader, Phase 4



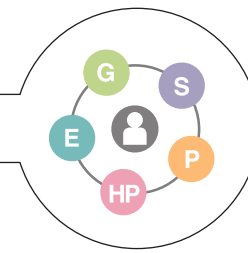
The Planning Process: Structured Planning

Structured Planning, the systematic planning process taught, is a process for finding, structuring, using and communicating the information necessary for planning. It is a front-end process for developing concepts thoroughly and cohesively.

A number of projects have been undertaken with it and used to further its development. Among over 100 of these, an early published project for Chicago's transit authority (CTA) was Getting Around: Making the City Accessible to Its Residents (1971). In 1983, the House of the Future project won the Grand Prize in the Japan Design Foundation's First International Design Competition. In 1985, the design of a habitation module for Space Station was undertaken for NASA. In 1987, the Aquitecture project won the Grand Prize again in the Japan Design Foundation's Third International Design Competition. In 1991, Project Phoenix on global warming was honored as Environmental Category Grand Winner in Popular Science magazine's "100 Greatest Achievements in Science and Technology" for the year. In 1993, two award winning projects, NanoPlastics and Aeritecture, were widely publicized in Europe and Japan; in 1995, the National Parks project developed plans for the future of the U.S. National Park Service. In 2001, Access to Justice, a project sponsored by the National Center for State Courts, was implemented for use in state courts across the United States, and in 2005, four projects on Home, Play, Work and Health were finalists in four of the five competition

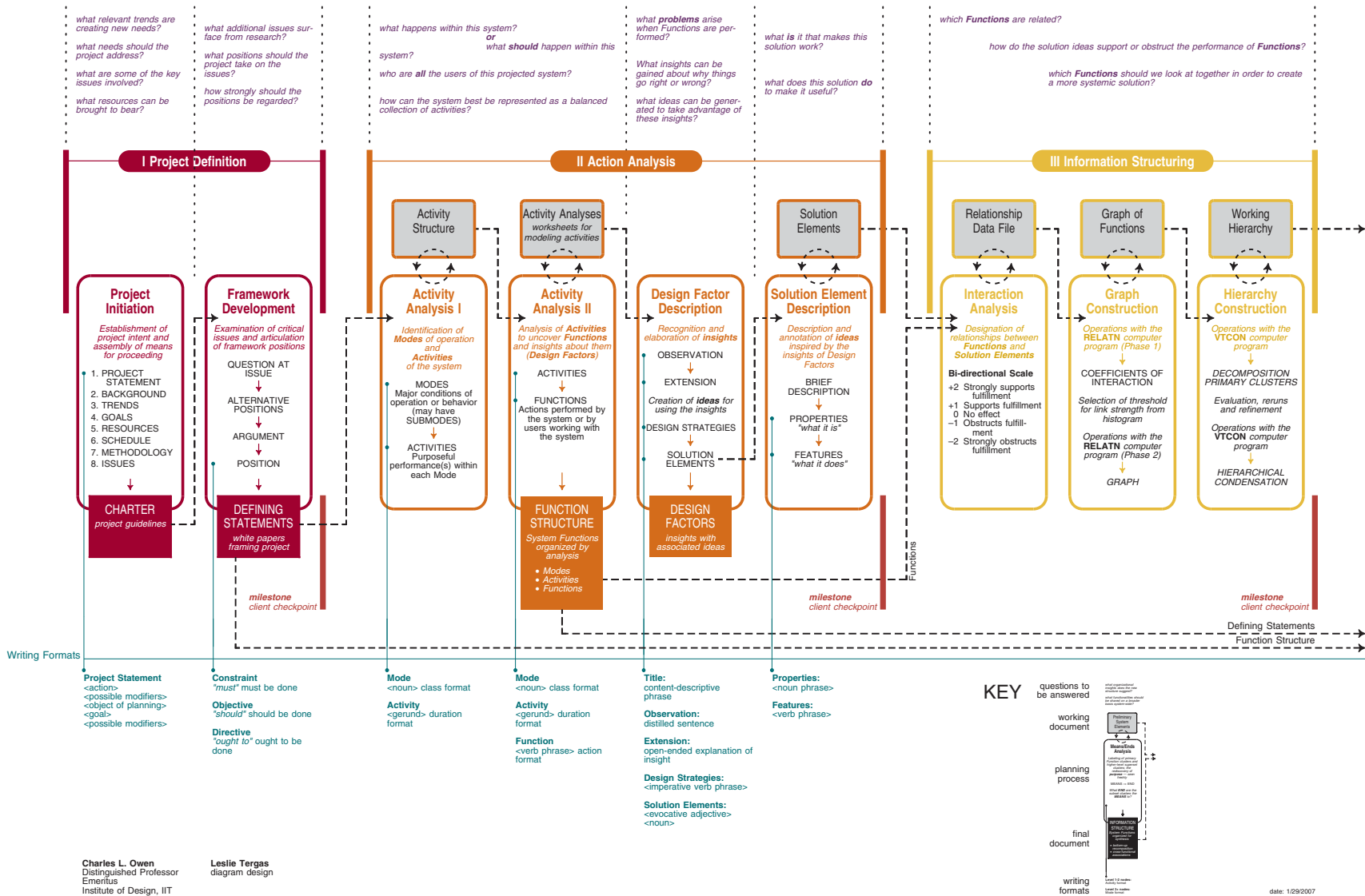
categories for Denmark's INDEX Awards, the world's richest design prizes. As the process has evolved, it has become an increasingly useful planning tool for business, institutions and government.

A diagram of the process, shown below in two figures, outlines the activities that make up Structured Planning and the working documents and final products that are produced along the way. The following general description follows the diagram. While products of the process are discussed here in the abstract, it is possible to see specific examples produced for this project in the appendices that accompany the report.



The Structured Planning Process (Phases I - III)

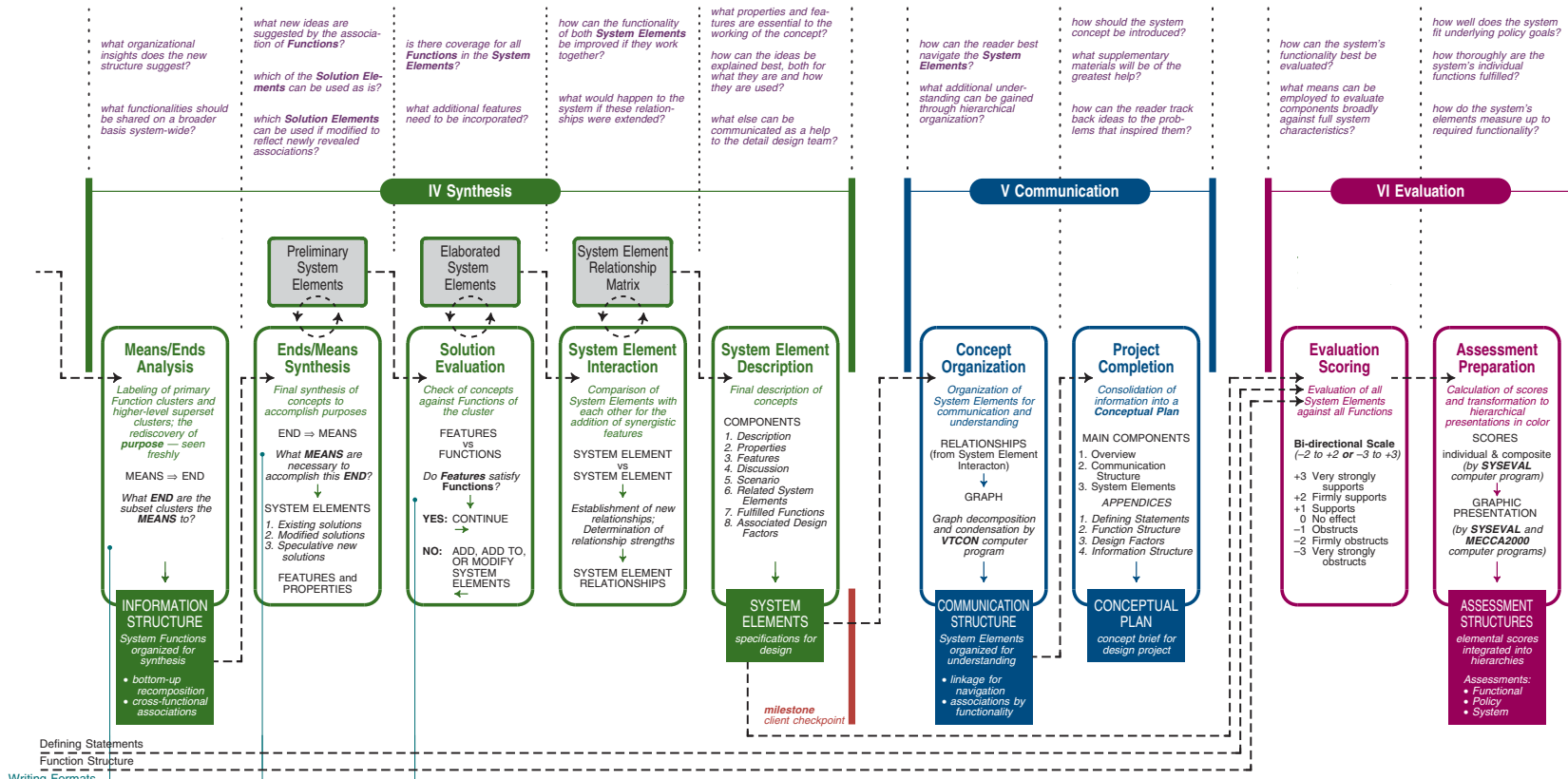
Structured Planning is a front-end, concept development process for finding, and communicating the information necessary for advanced planning





The Structured Planning Process (Phases IV - VI)

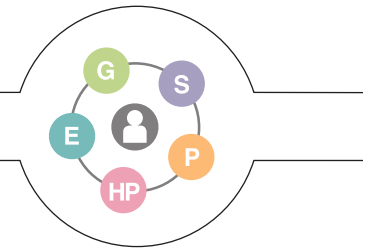
Structured Planning is a front-end, concept development process for finding, and communicating the information necessary for advanced planning



Charles L. Owen
Distinguished Professor
Emeritus
Institute of Design, IIT

Leslie Tergas
diagram design

date: 1/29/2007



I PROJECT DEFINITION

The Structured Planning process begins with Project Initiation and the production of a Charter. This is a “brief” that serves as an initial communication vehicle between client and planners. It contains background, context, basic goals, a project statement that cuts to the heart of the planning task, resources to be used, a schedule and an initial set of issues to be investigated.

Defining Statements are mini “white papers” produced in the Framework Development portion of Project Definition. They focus the project within the direction of the Charter, concentrating on the issues and arguing specific directions that the project should follow with regard to them. Together with the Charter, they define the project.

II ACTION ANALYSIS

Any system can be viewed as a complex entity working with its users in different ways appropriate to its modes of operation. To plan effectively, a planning team must recognize these Modes, identify Activities that occur within them, and isolate the Functions that the users and system perform or are intended to perform within each Activity. The result of the Activity Analyses is a Function Structure.

Half of the purpose of Action Analysis is the enumeration of Functions. The other half is the development of information about these Functions that reveals insight about what happens as they are performed. During Action Analysis,

insights are sought about why things go wrong in performing some Functions, and how other Functions manage to be performed well. These insights are uncovered in the Design Factor Description procedure and developed in documents that become part of a qualitative knowledge base. Activity Analyses record information at the Activity level; Design Factors document insights and ideas associated with Functions.

To capture as fully as possible the ideas suggested on Design Factor documents, solution ideas are written up in the Solution Element Description portion of Action Analysis. This is done on simple one-page forms designed to capture enough detail about ideas to give them substance when they are needed later. They have three important sections: “Description” -- a short explanation, “Properties” -- what the idea is, and Features -- what it does.

The product of Action Analysis is three sets of critical information: a set of Functions (the Function Structure), a set of insights (Design Factors) and a set of preliminary ideas (Solution Elements).

III INFORMATION STRUCTURING

Paradoxically, as useful as the Function Structure is for establishing coverage, it is not the best form of organization for developing concepts. Reorganizing information for use in concept development is the job of two computer programs, RELATN and VTCON.



The controlling factor for whether two Functions are associated from the planning standpoint is not whether they are categorically “related” in some manner, but whether a significant number of their potential solutions are of concern to both. Which Solution Elements are of concern to each Function is established in an Interaction Analysis procedure. The RELATN program uses this information in a Graph Construction process to establish links between Functions.

Another program, VTCON, completes the information structuring process. The graph of Functions and links established by RELATN is not easily arranged for visual comprehension. In the Hierarchy Construction activity, VTCON finds clusters of highly interlinked Functions and organizes them into a semi-lattice hierarchy, a visually understandable, very general form of hierarchy most appropriate for planning. The hierarchy is called an Information Structure.

IV SYNTHESIS

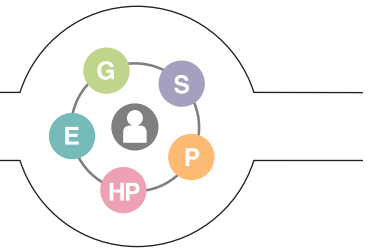
In its form from the VTCON program, the Information Structure is simply a hierarchical organization. Nodal points above the Function level do not have names. The task of Means/Ends Analysis is to create labels for all nodes in the hierarchy. Moving bottom-up from the known Functions in the bottom level clusters, the question is asked, “To what end are these Functions means?” The answering purpose, as a label, in turn is grouped with its siblings and viewed as means

to a higher level end. The process continues to a completely labeled Information Structure.

The process is then reversed as a top-down, structured brainstorming procedure: Ends/Means Synthesis. In this process, the planning team asks of high level nodes, “what means do we need to meet this end?” As means are established, they are treated in turn as new ends for which means must be found, until the means become concrete enough to be described as final elements of the system (System Elements). Solution Elements originally conceived for the Functions involved are constantly reviewed as possible end products. Original ideas are modified or combined in the light of the means that evolve, and new ideas are added to fill unmet needs revealed by the Information Structure.

System Element Interaction compares System Element with System Element in a search for additional synergies that can contribute to systemic qualities. More than simply recognizing relationships, the planning team proactively seeks out ways for System Elements to work together -- to the extent of modifying one, the other, or both. Changes and additions are incorporated in the properties and features of the individual System Elements.

The last task, System Element Description, completes the write-up of System Elements as specifications, including a succinct description, all relevant -- now essential -- properties and features, and extensive Discussion and



Scenario sections that contain detailed expositions of the ideas in both conceptual and operational terms.

V COMMUNICATION

Because the result of the Structured Planning process is a complex system, usually with a number of System Elements, a Communication Structure is frequently included as an aid to understanding. This is created during Concept Organization by the VTCON program from an assessment of how important the System Elements are to each other's operation. Using this structure, the reader can understand the system more easily and navigate its concepts with efficiency.

The product of the Structured Planning process, assembled in the Project Completion section, is a Conceptual Plan, made up of an Overview that provides background and introduces the system, the System Elements that describe the ideas and their relationships, and Appendices that contain all relevant support information, including the Defining Statements, Design Factors, Function Structure and Information Structure.

VI EVALUATION

Structured Planning incorporates evaluation among the steps of the process, most notably during Synthesis. It also offers an optional full-system evaluation technique that can be employed to evaluate final results against policy-level and/or function-level criteria. Used for this, it provides merit values hierarchically for the system, its component parts and individual system elements. It can also create similar

hierarchical evaluations for the assessment of functional performance and policy performance. Used to compare systems, it can provide system, functional and policy assessments for multiple competitive candidates measured against common function and system structure frameworks.

Project Advisors

Charles L. Owen Distinguished Professor Emeritus
John Pipino Adjunct Professors

Introduction

The government's role in the US health care system is extensive in both the number of people it provides direct care to as well as the regulations it imposes on the system itself. An estimated 100 million people receive health insurance through Medicare, Medicaid, the Veterans Health Administration, and other government health programs (NAS). Still, while the US spends more per capita on health care than any other country, more than 45 million people in America are uninsured (NAS, Porter). Flaws clearly exist in the system, mainly from a focus on what Porter terms "zero-sum competition" where one group benefits due to another group's loss. In the case of health care, the government programs gain cost savings by driving up costs for private patients (Porter).

Unintended consequences from policy decisions further harm the health care system. This includes rules and regulations as well as the incentives and constraints put on participants (Porter). For instance, Medicare's Pay for Performance program awards providers more for performing costly invasive procedures than delivering care that would prevent the invasive procedure in the first place.

Laying Infrastructure

Rethinking health care around the design thinking framework means that the system needs to be centered around the patient. One of the most significant ways

the government can steer the health care system towards patient value is by improving the flow of information. The US Department of Health & Human Services (HHS) is the principle agency for protecting the health of Americans and providing health information. HHS already sees the need for better transparency of health information and has established the National Health Information Network (NHIN) in order to create a health information exchange that connects consumers, providers, and other health care professionals. President Bush has set a goal for every provider and clinician to have complete electronic medical records by 2014.

However, the rate of EMR adoption by providers has barely improved, and hospitals have been reluctant to pay for a system that takes a long time to see financial reward. Bringing electronic medical records to every individual will require participation from every player in order to be successful, but before this can happen the government needs to lay the appropriate infrastructure over which records can be shared and distributed, akin to a health information superhighway. The government has understood this and is pushing for the NHIN to lead to a nationwide, secure, and interoperable infrastructure that can ultimately be used to share electronic medical records (EMRs).

Providing Incentives

In some cases the government will need to make mandates or other regulations in order to move the health care system

towards transparency. However, it is important that the government provides all the players incentives to change as well. For example, providers, especially small private practices, will need subsidies and tax benefits to introduce complete electronic medical systems into their offices. They will also need similar incentives to share their health information for the proposed **Health Care Compare** System. Another proposed solution is the **Voluntary Employer Health Reports**, and the government needs to communicate to employers and other parties about the benefits of this solution.

Empowering Consumers

The government is responsible for the well being of the public. Therefore, it needs to initiate the effort towards establishing a new health care system where consumers can be empowered to take an active role in their health. The **Health Care Information Initiative** is a proposal for a new communication campaign for the government to inform consumers about health information. This campaign is related to the proposed **Hands on Education Program** that targets the less computer savvy consumers and educates them through hands-on, personable methods like free computer literacy classes. Other methods include **Health Information Navigators**, government employees at public facilities that can teach consumers one-on-one about health information, and **Health Information Kiosks** which will be available in public places for consumers to use.

Another part of the **Health Care Information Initiative** is an improved **Style Guide**, which will be used to create communications that have a consistent look, feel, and message. The **Style Guide** will be used to design and create the content for **Health.gov**, the new information portal for the government.

The government is a source of neutral, unbiased information that can be trusted. It is in a position to collect valuable information from providers, health plans, suppliers, and employers. It can encourage the players to share health information and bring about a more transparent system focused on value based competition. The government is also in the position to educate consumers and empower them with the ability to use the new health information to improve their health.



Voluntary Employer Health Reports

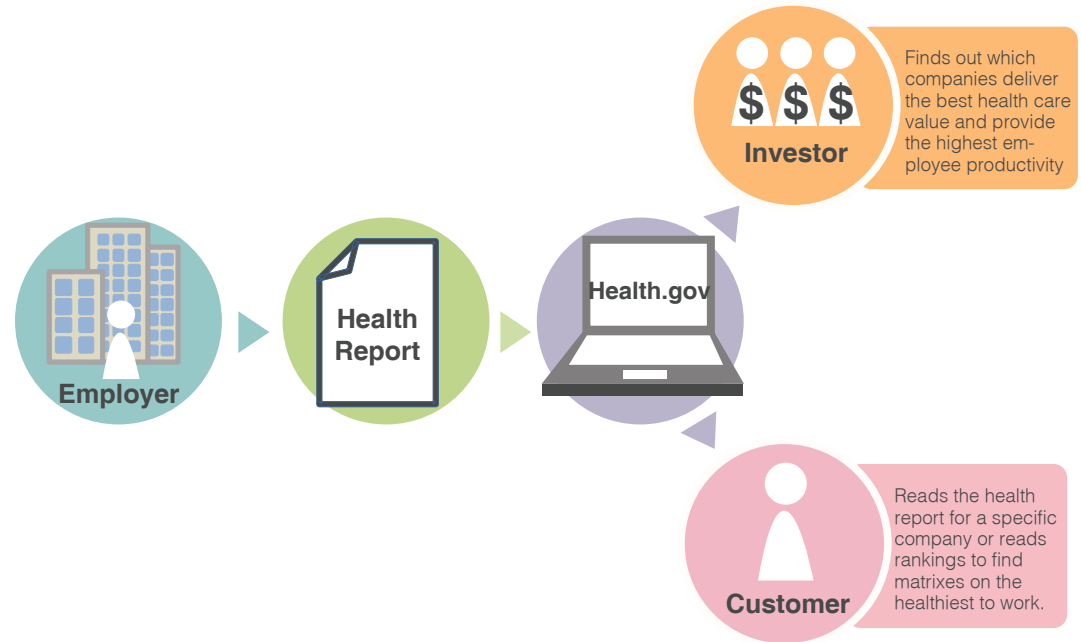
<p>Category</p> <p>SUPERSET ELEMENT</p> <p>Health.gov</p> <p>SUBSET ELEMENTS</p> <p>None</p> <p>RELATED ELEMENTS</p> <p>Employer Profiles National Health Index</p> <p>FULFILLED FUNCTIONS</p> <p>059 Collect information on employee productivity from employers</p> <p>060 Collect information on employee satisfaction with health plans from employers</p> <p>063 Create an information strategy on employer results information</p> <p>ASSOCIATED DESIGN FACTORS</p> <p>032 Information collection will be expensive for employers to carry out</p>	<p>Description</p> <p>System for voluntary health reporting for employers. Enables companies to report annually on the state of its employees' health. Standards for the contents of the report created by an organization. Reports are available on the consumer information portal (Health.gov) to the public. Used to create a company health index where companies can be compared industry and overall.</p> <p>Properties</p> <ul style="list-style-type: none"> • System for employers to create health reports • Annual, Voluntary Employer Health Reports • Standards for data reported created by Department of Health and Human Services (HHS) or an independent organization with government endorsement. <p>Features</p> <ul style="list-style-type: none"> • Provides information about health plan offerings, additional health programs, employee turnover, sick days, absenteeism, employee satisfaction, and other relevant health information • Provides consumers can read about potential employers on the consumer information portal 	<ul style="list-style-type: none"> • Allows for comparison of companies, similar to financial ranking indices • Aims to make health reporting as ubiquitous and relevant to companies as financial reporting • Enables investors to evaluate financial risk of companies <p>Discussion</p> <p>The idea behind Voluntary Employer Health Reports comes largely from the current trend in sustainability reporting. In the past few years several thousand companies have been voluntarily creating detailed reports about their environmental practices and making them available to the public (SustainAbility 2004). Companies are doing this for a number of reasons, partly because they see the importance of transparency in being competitive in today's marketplace.</p> <p>Similarly, employers should understand the importance of transparency of the state of their employees' health. A company that has an excellent record of employee productivity and employee satisfaction will be popular both to potential employees and potential investors.</p>
--	--	---



Scenario

David, an office manager in a telecommunications company in Denver, is considering changing jobs in order to move to San Francisco. He enjoys his current job and hopes to find a company in San Francisco that will offer him the same rewards and satisfaction as his old company did.

He goes to the **Health.gov** website which has a link to a site that rates employers across the country based on industry. He selects “Telcom” and “Bay Area” to narrow his search and finds a list of Telcommunications companies in the Bay Area. Most of the companies listed are ones that he recognizes by name but he is surprised to find that one of the companies, Company A, offers a slightly better range of health plans and also contributes to employee health savings accounts. He also notices that employees at Company A have a lower turnover rate and higher rate of job satisfaction than the other companies. David uses this information to narrow his job search to a few companies and submits resumes to those places. A month later he receives a job offer from Company A and gladly accepts it.





National Health Index

Category	Description	Discussion
<p>SUPERSET ELEMENT</p> <p>Health Care Information Initiative</p> <p>SUBSET ELEMENTS</p> <p>None</p> <p>RELATED ELEMENTS</p> <p>Voluntary Employer Health Reports</p> <p>FULFILLED FUNCTIONS</p> <p>025 Evaluate overall wellness of the country</p> <p>065 Create a national benchmark for employee health</p> <p>ASSOCIATED DESIGN FACTORS</p> <p>009 Image of the government</p> <p>035 What kind of employer benchmarks should be published?</p>	<p>Index to compare the value of health care based on data collected from providers, health plans, suppliers, employers, and other health professionals. Enables comparisons of the quality of health care delivery based on geography. State and local indexes are also created. Used to compare the value of health care to other developed countries.</p> <p>Properties</p> <ul style="list-style-type: none"> • Number derived from health care information and outcomes for a given region <p>Features</p> <ul style="list-style-type: none"> • Reflects the value of health care in a region • Reflects quality of care per dollar spent • Calculates quality at state, local, and national level • Compares quality and value of health care from one area to another 	<p>Health information collected through the government’s Score Cards, Report Cards, Health Care Compare, and Employer reports will be evaluated and be used to give a score or index number to each region. A weighted average of the regional scores will be used to calculate the state level index. Similarly, a weighted level of state scores will be used to determine the National Health Index.</p> <p>The health index can be used at all levels to compare health from region to region. The National Health Index can be used to compare American health with the state of other health care in other countries if it becomes adopted internationally.</p> <p>Scenario</p> <p>John is a father of an adorable 8 year old boy named Matthew. Unfortunately Matthew has had sickle cell anemia his whole life and John constantly worries about getting the best care for his son. After looking at the Health.gov information portal and accessing Health Care Compare to find a better hospital in his area, John comes across the site for the National Health Index. John begins reading and learns that the index is a number assigned to every region and that it represents the value of health care delivery in an area. John sees that his own city ranks fairly well, with an index of 70, which is around the average. John inspects the index listing and finds that another</p>



region a few hundred miles away from him has an index of 90! He is impressed that the region scored so highly and wonders why. He goes back to the **Health Care Compare** website and looks at how the hospitals rank in the other region. He notices that for sickle cell anemia, they perform outstanding and far superior to the hospital that he has been taking Matthew to, and at roughly the same price John has been paying. John thinks about what he has learned and does some more research over the next few months and calls some physicians in the new area. He decides that moving to the new region would really help out Matthew, and his work will let him transfer to the office in the other region.

A year later, Matthew's doctors report that his condition is much better than when he first arrived. John is happy he made the decision to move.



Electronic Medical Record Regulations

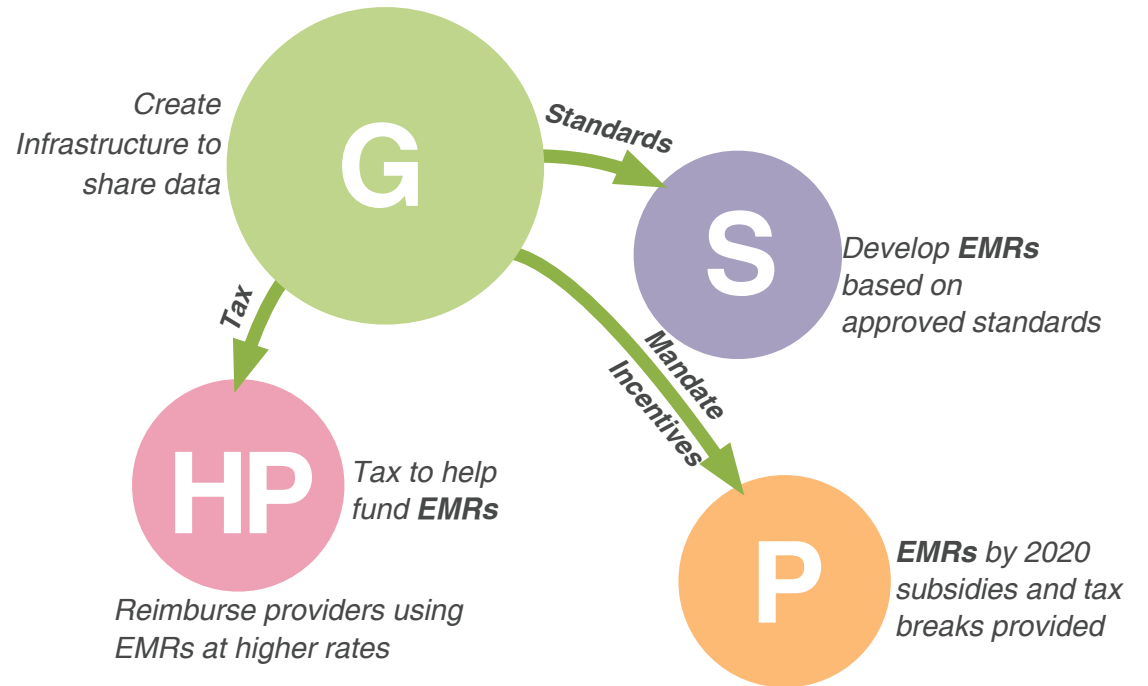
Category	Description	
SUPERSET ELEMENT	<p>Regulations standardizing the content and form of Electronic Medical Records (EMRs). Sets up framework for information network infrastructures run by third parties to connect health care providers, suppliers and health plans.</p> <p>Properties</p> <ul style="list-style-type: none"> • Infrastructure to share data through an endorsed third party • Health plans reimburse providers using EMRs at higher rates. <p>Features</p> <ul style="list-style-type: none"> • Provides accessible health record for every American • Enables interoperable medical information between providers • Reduces redundant treatments and medications • Provides incentives for adoption <p>Discussion</p> <p>Comprehensive use of electronic medical records will lead</p>	to a reduction in medical errors and increased efficiency and therefore cost savings. Currently in the United States, only a small percentage of hospitals have complete electronic medical records. President Bush has already seen the importance of sharing medical information for quality of care and has called for provider networks to install electronic medical records with the goal for every hospital and clinician to have complete electronic records before 2014. (HHS 2004)
None		
SUBSET ELEMENTS		However, the rate of EMR adoption by providers has barely improved, and hospitals have been reluctant to pay for a system that takes a long time to see financial reward. EMR adoption is even lower among doctors in solo or small-group practices where about 10% of practices have electronic records (AP 2007). Bringing electronic medical records to every individual will require participation from every player in order to be successful.
None		Having electronic medical records in every hospital and doctor's office also makes it easier for consumers to have complete Personal Health Records. A Personal Health Record is a consumer's own electronic health record which could be populated with information from various EMRs of hospitals and doctors that a consumer has visited. PHRs are critical in allowing the patient to access his or her information. Consumers could use a PHR to take an active role in his health. He can know what he is prone to, and take preventive measures in postponing diabetes.
RELATED ELEMENTS		
None		
FULFILLED FUNCTIONS		
005 Collect information on provider prices		
014 Create an IT system for providers		
015 Define IT system protocols and guidelines for providers.		
ASSOCIATED DESIGN FACTORS		
005 Incompatible file formats		
016 Too many forms to fill out		



Government creates infrastructure to share data through an endorsed third party. Government adopts standards for interoperability. Suppliers develop EMRs based on approved standards. Providers adopt electronic medical records by 2020. Health plans pay tax help fund EMR adoption. Health plans reimburse providers using EMRs at higher rates.

Scenario

After David moves to a new city he goes to a doctor for a checkup. The doctor is able to view his electronic medical record that shows his medical data from his doctors in his old city. The doctor realizes that David should get blood work done because his records show that he is a borderline case for diabetes.





Health Care Expert Panel

Category

SUPERSET ELEMENT

Health Care Compare

SUBSET ELEMENTS

Score Cards
Report Cards

RELATED ELEMENTS

None

FULFILLED FUNCTIONS

- 017 Establish a common set of measures for providers to report on.
- 018 Define a set of measures for provider reporting on disease, public health, mental health, long term care, and children's care

ASSOCIATED DESIGN FACTORS

- 012 Identifying and defining relevant data
- 019 Measures/standards/guidelines are undefined

Description

A panel of experts charged with defining and setting standards and measures that other players within the health care industry will be required to report on. It is established on a state level, and composed of several members within each sector of the industry.

Properties

- Multiple third party panels of experts in various health care information topics
- Members include several people within each sector of the health care industry

Features

- Sets standards and measures for their sector of the industry
- Writes **Score Cards** for each player to record outcomes.
- Evaluates player **Score Cards** by writing **Report Cards**.

Discussion

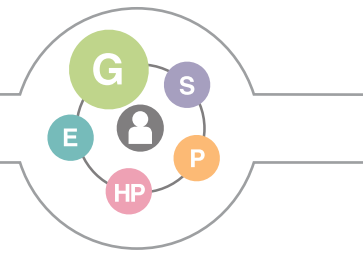
The **Health Care Expert Panel** is comprised of specialists

that represent each sector of the health care industry. Within each of these groups, the people representing their sector also come from different roles within the industry.

In 2005 Health and Human Services formed the American Health Information Community (AHIC) to advance efforts to improve health information technology. Seven workgroups and panels were formed based on the AHIC's top priorities: biosurveillance, consumer empowerment, chronic care, electronic health records, and confidentiality (HHS).

HHS should create another workgroup for setting standard provider outcomes for every condition. This outcome workgroup should base their decisions on quality and outcome measures currently being collected by the HHS Agency for Health Research Quality (AHRQ). The WTO (World Trade Organization), the WHO (World Health Organization), and the FDA (Food and Drug Administration) are other organizations that have good processes in place for setting standards. The new **Health Care Expert Panel** should use the guidelines within these organizations when setting standards.

Members of the workgroup should be representative of the entire health care industry and should include a range of providers, suppliers, employers, and health plans. More specific examples include practicing physicians, hospital network managers, nursing managers, pharmaceuticals managers, health plan managers, health information



technology experts, and human resource representatives from various sized companies.

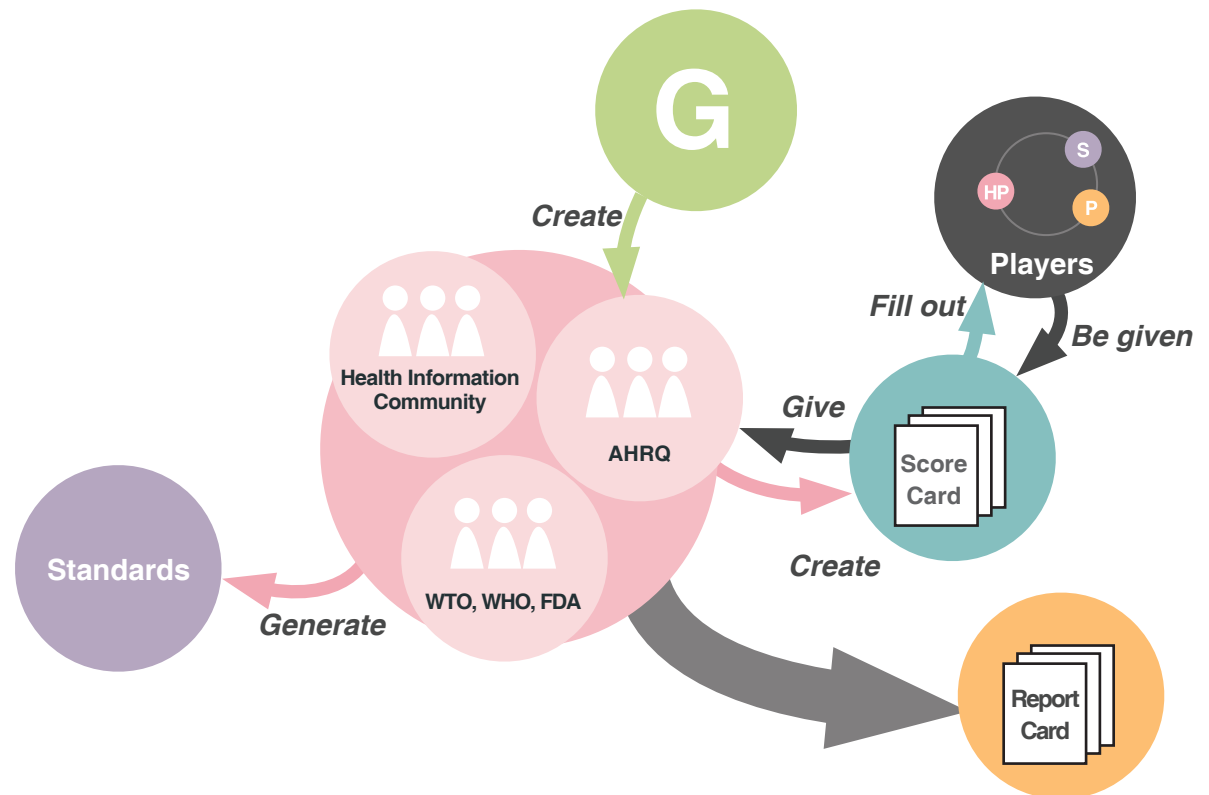
The goal is for representatives of the different players to work together in order to create measures and standards based on their sector's needs.

Scenario

The **Health Care Expert Panel** on outcomes begins a meeting. The agenda of today's meeting is to discuss what outcomes need to be measured and reported from hospitals and clinicians about diabetes. Members have come to the meeting with recommendations about the disease. Physicians discuss the importance for diabetics patients to keep their hemoglobin A1c levels at a low level. The group agrees that hospitals and clinicians must report on the hemoglobin levels of diabetics patients. Knowing this information, along with other diabetes outcomes, will provide consumers with information on which hospitals and clinics provide the best diabetes treatment across different regions.

After a few years of reporting have passed, doctors find that a hospital in Chicago has shown to have average levels of hemoglobin A1c levels at a significantly lower rate than anyone else in the country. Doctors and other diabetics experts from all over the country are interested

to find out how the hospital has been able to provide such excellent care for diabetes. After some research, they realize that the hospital had an exceptional community nutrition and fitness program which almost all patients actively participated in. The researchers and doctors try to emulate the program across the country.





Score Cards

Category	Description	
<p>SUPERSET ELEMENT</p> <p>Health Care Expert Panel</p> <p>SUBSET ELEMENTS</p> <p>None</p> <p>RELATED ELEMENTS</p> <p>Report Cards</p> <p>FULFILLED FUNCTIONS</p> <p>003 Collect provider results information on outcomes</p> <p>005 Collect information on provider prices.</p> <p>006 Collect information about provider methods and processes.</p> <p>ASSOCIATED DESIGN FACTORS</p> <p>012 Identifying and defining relevant data</p> <p>019 Measures, standards, and guidelines are undefined</p>	<p>Written by the Health Care Expert Panel and used to rate the players, they will be required by the government in order to enable value based competition.</p> <p>Properties</p> <ul style="list-style-type: none"> • Evaluation tool for measuring player outcomes at state level. • List of measures for players to report on. • Upon review of the submitted Score Card, players will receive the Quality Seal. <p>Features</p> <ul style="list-style-type: none"> • Are communicated electronically via web • Allows for each player to rate themselves based on set standards, and cost. • Sets standards and measures for their sector of the industry <p>Discussion</p> <p>The Score Card evaluation system is an electronic evaluation tool made available to players through a website. Each score card lists quantitative measures to</p>	<p>report on based on every condition.</p> <p>Score Cards are given to each player in order to measure the quality of product or service offered. Score Cards are written by the Health Care Expert Panel, and given to each player to fill out themselves. Once the Score Cards are filled out, they are given back to the state governments, who will then be in charge of aggregating all the data in order to rank individual providers and suppliers. These evaluations will be published in the Report Cards, and will be available to consumers on the Health Care Compare website.</p> <p>Score Cards will be written by the expert panel on a state level because each state has unique standards and measures that it is required to report on. This is due to that different areas of the country have variances in medical conditions.</p> <p>Score Cards are written with general categories in mind. For providers they are results outcomes on certain common conditions, including successes and infection rates, reportable diseases, facility standards of quality, cleanliness, length of stay in the hospital, etc., treatments offered and practiced on certain common conditions. Most importantly, information on costs and pricing must also be collected.</p> <p>Drugs are rated based on effectiveness. New drugs are rated based on clinical trial results. Devices and medical</p>



technology are rated in a manner that is similar to the existing model of “Consumer Reports.”

Health Plans are rated on different types of benefits offered. Additionally, if the health plan offers extra benefits beyond just paying for medical services received, that information will be collected as well. The cost of these benefits for all parties involved will be reported on. Finally, consumer satisfaction with their health plans should also be collected.

The government should impose a regulation that all **Score Cards** must be filled out. Every member of the health care industry will be rated in order to show transparency in quality over cost. There should also be financial incentives, such as tax breaks, for doing so initially.

Scenario

Dr. Jones is in charge of Administration for the Fairbanks Hospital. He receives an e-mail with a website link to a Government Issued Score Card. The e-mail asks Dr. Jones to fill out the Score Card and informs him that if he provides the Score Card back within two weeks, he'll receive a 1% tax break for the following year, when he goes to file the taxes for the hospital.

Dr. Jones looks at the Score Card to see what type of

data he needs to collect. Much of what needs to be filled out is information that Dr. Jones already collects for the hospital. He has little trouble finding these types of data because of the streamlined electronic system set up in the hospital. He also works with the billing department in order to get accurate costs of different procedures. Dr. Jones sends the Score Card back to the **Health Care Expert Panel** after about a week. They notify him with receipt of the Score Card, and he is eligible for the tax break as well.



Report Cards

Category

SUPERSET ELEMENT

Health Care Expert Panel

SUBSET ELEMENTS

None

RELATED ELEMENTS

Score Cards

FULFILLED FUNCTIONS

- 017 Establish a common set of measures for providers to report
- 024 Evaluate providers across geographies

ASSOCIATED DESIGN FACTORS

- 003 Inferior quality of information
- 017 Disparity of information via many sources

Description

Report Cards are the resulting outcome from the **Score Cards**. They rank the players against each other on value provided over cost.

Properties

- Compilation of the outcomes information from the **Score Cards**

Features

- Enables players to be ranked against each other.
- Enables value based competition
- Are available on **Consumer Health Central** website

Discussion

Report Cards are the resulting outcome of **Score Cards**. The data that is collected in the **Score Cards** is put into an easy to read format, so the layperson can understand it. Where the **Score Cards** are written in a medical language, the **Report Cards** are not.

Report Cards also rank each player on each data point as a percentile. The data from the **Score Cards** is held in a large database, and as new data enters the system, the

percentile ranking of each player changes based on how the other players scored.

After all the information has been collected and ranked, the **Report Cards** are given back to that player so they can review how they compare to other players within that sector. But in order to enable value based competition, the **Report Cards** are also published on **Health Care Compare**. This allows the public to see how each provider, supplier, and health plan ranks against others within the respective sector. Since costs are shown as well as quality, consumers know what they are getting for their money. This will hopefully encourage players to decrease or streamline their costs while at the same time improving quality..

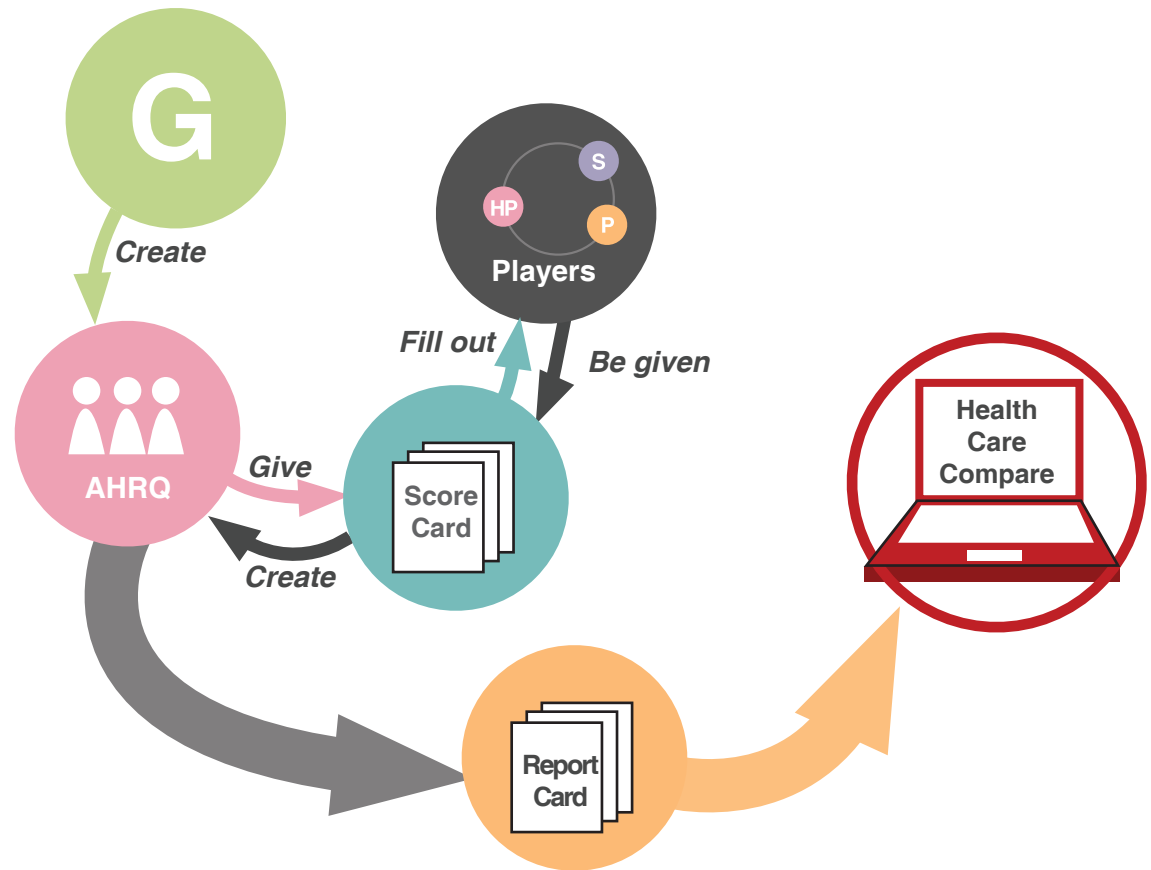
Scenario

A couple months after Dr. Jones completes the Government Issued Score Card, he gets the Report Card for his hospital back. He reads it, generally pleased with the results. But he also knows that he's been ranked against other hospitals in the county, in the state, and nationally. This prompts Dr. Jones to log onto the website **Health.gov** so he can go to **Health Care Compare** to see how Fairbanks Hospital scored against the one other hospital in the county.

As Dr. Jones scrolls through the measures, he notices that Fairbanks Hospital has around the same quality results as



the other county hospital in the area. He's happy to know this until he notices that the other hospital is on average less expensive for many of the procedures that have the same outcome results. Dr. Jones worries that the county residents will see this and choose to go to the other hospital over his. He calls together a meeting with all the department heads for figure out how to improve quality and lower costs.





Health Care Compare

Category

SUPERSET ELEMENT

Health.gov

SUBSET ELEMENTS

Health Care Expert Panel

RELATED ELEMENTS

Health Care Information Initiative

FULFILLED FUNCTIONS

- 030 Publish provider ratings information
- 031 Publish information on new provider practices, trends, and patterns

ASSOCIATED DESIGN FACTORS

- 001 Poor accessibility to governmental health care information
- 003 Inferior quality of information

Description

An online tool for viewing and comparing information on elements of the health care system as made available by providers, suppliers, health plans and employers. Translates information collected on **Score Cards** and presented on **Report Cards** to help consumers to make informed decisions.

Properties

- Part of **Health.gov**

Features

- Rates the full range of health care services in part and in whole
- Allows consumers to compare services in multiple ways
- Enables value-based competition

Discussion

Health Care Compare is one of the key features of **Health.gov**. It rates hospitals, clinicians, treatments, and suppliers. For hospitals and clinicians, it allows users to compare providers based on a number of ratings, such as overall quality of service and cost. Treatment options are compared by outcomes and success rates, and suppliers

are graded on devices and drugs, both name brand and generic.

AHRQ, the Agency for Health Research and Quality, is a branch under HHS that supports research designed to improve the outcomes and quality of health care. The **Health Care Expert Panel** should AHRQ should decide on set quantitative guidelines for every condition at the state level. Those will then be collected on **Score Cards** to be given to the players to fill out. The **Score Cards** will be returned to AHRQ, who will then take that raw data and write a report card about each provider based on it. It is these **Report Cards** that feed into **Health Care Compare**.

With **Health Care Compare**, consumers can evaluate and choose based on factors important to them. In looking for information about providers, they can search and access information based on geography, facilities, treatment options, outcomes, and cost. These are all the general categories the **Report Cards** contain information on.

In searching for information regarding suppliers, the consumer would receive information regarding drug evaluations such as evaluations of current drugs versus their generic counterparts or alternative treatments, if applicable. In rating devices, there is an overlap in audience. Some devices are intended for home use, and some, such as lasers, that the provider uses exclusively, but the consumer would also like information about. Medical condition trends would also be published in these reports.



These would be trends such as: an increase of this type of cancer in this area. They type of information would also allow suppliers to prepare themselves for an adjustment in manufacturing and logistics to support the treatments related to the trends.

The ultimate goal of **Health Care Compare** is to provide value by showing results versus cost. This allows consumers to make wise choices not only about their health, but also about they money they are investing in their health..

Scenario

Mary decides that she wants to undergo LASIK eye surgery to correct her vision. She logs onto **Health Care Compare** to see which providers in her area are offering the service.

Health Care Compare lists all the things related to LASIK surgery, so Mary chooses the factors most important to her: location, procedure type, and cost. Under procedure type, Mary notices that two of the providers in her area use one type of laser, and the third uses a different type. She clicks on each of the procedure types to learn more about the differences.

The procedure types and lasers used are also conveniently listed side by side for Mary in a separate window. She reads about the different procedure types then toggles

back to the previous window so she can then compare prices.

When making her appointment, Mary feels informed and confident that she made the right decision.

	Hospital A	Hospital B	Hospital C	Hospital D
What is the overall quality of the service?	 The Health care Commission rated the quality of services Fair .	 The Health care Commission rated the quality of services Weak .	 The Health care Commission rated the quality of services Good .	 The Health care Commission rated the quality of services Good .
How long will I have to wait for the operation?	★★★★☆	★★★★☆	★★★★☆	★★★★☆
Do patients share accommodation?	★★★★☆ This hospital scored 62 out of 100	★★★☆☆ This hospital scored 36 out of 100	★★★★☆ This hospital scored 84 out of 100	★★★★☆ This hospital scored 57 out of 100
How much does this operation cost?	\$\$\$\$	\$\$\$	\$\$\$	\$\$\$
Health Trends				
What was the overall rating of this hospital?				



Health.gov

Category

SUPERSET ELEMENT

Health Care Information Initiative

SUBSET ELEMENTS

Health Care Compare
Voluntary Employer Health Reports

RELATED ELEMENTS

Health Care Quality Seal

FULFILLED FUNCTIONS

- 030 Publish provider ratings information
- 031 Publish information on new provider practices, trends, and patterns

ASSOCIATED DESIGN FACTORS

- 001 Poor accessibility to governmental health care information

Description

A portal that includes a glossary where consumers can learn about medical conditions and treatment, can view provider and supplier ratings, and can connect to all government health websites.

Properties

- Website
- Portal for all government health related websites
- Trusted source for consumers to search for all related health topics

Features

- Informs consumers about their health
- Is administered by the Department of Health and Human Services
- Allows consumers to compare elements of the health care system on issues relevant to making choices

Discussion

This website is to be used by consumers to put them in control of their health. It supports people in making decisions about their health, including advice regarding

smoking, drinking, nutrition and exercise. The related sub-pages provide transparent information about issues like mandatory health insurance, quality evaluation in health care, future development plans, regulations and rules.

There are many components to this website. In looking for a provider, you can search based on geography, by specific hospital, or by specialty. A full search is also available, as well as a telephone number if a consumer has more questions related to their health. Upon calling that number, an automated systems finds the local Health and Human Services region for that particular consumer, and further narrows the location from there in order to put the consumer in contact with their local **Health Information Navigator**.

Health A-Z is a section of the website that is a health glossary, under which are listed different conditions and treatments. Searches within this section can be done three different ways: alphabetically by first letter, by subject, such as cancer or digestion, or by body map. Health A-Z allows consumers to explore treatment options, and also read success stories of these treatments.

Health Headlines is a section that compiles together the latest news in health research, new medical treatments and new drug treatments, drug recalls, new medical devices, and new medical technology. **Health.gov** also has a section where consumers can find and compare local health services via **Health Care Compare**.

Finally, the site links to all the government sites regarding health care, such as CMS (Centers for Medicare and



Medicaid services), NIH (National Institutes for Health), CDC (Centers for Disease Control and Prevention), and the FDA (Food and Drug Administration), just to name a few. All these sites have been approved by the **Health Care Quality Seal** for providers and services.

This website provides value by informing and educating the public on various health topics. It would ideally be one of the first places consumers think of when wanting to find information regarding health. It would be a place to search for further information if so dictated by the provider. The website is dedicated to ensuring information transparency by providing information that is easy to find, relevant, and correlated.

The government is an excellent source for trusted, neutral information. However, most consumers look elsewhere for health information from sources that can be biased, uninformed, and misleading. **Health.gov** will be a new effort by the government to reintroduce itself to the public. This effort is also part of our communication strategy..

Scenario

Mike has a history of colon cancer in his family. His grandfather passed away from it a few years ago. Mike knows that he must get himself checked for signs, but he does not know very much about the disease or treatment options. He logs onto **Health.gov** to see if he can learn

about colon cancer. He clicks on Health A-Z, which lists conditions alphabetically, by body map, or by subject. He sees that ‘cancer’ is one of the subjects, and starts there. He chooses ‘colon cancer’ and begins to read about all the different stages of the disease, what the symptoms are, and the different treatment options related to each stage. Also listed is a section on how to prevent or catch the cancer in it’s early stages. Mike reads this thoroughly, and decides, just to be safe, to get a colonoscopy.





Health Care Information Initiative

Category

SUPERSET ELEMENT

None

SUBSET ELEMENTS

Hands on Education Program
Health.gov
National Health Index
Health Care Quality Seal

RELATED ELEMENTS

Brand Identity

FULFILLED FUNCTIONS

092 Plan communication campaign

ASSOCIATED DESIGN FACTORS

001 Poor accessibility to governmental health care information
006 Language Issues

Description

A nationwide campaign to coordinate and promote governmental health care information efforts. Stresses education for the general public about health issues and how to gain access to governmental health care sites through the Internet and public or private computer resources

Properties

- Promotion initiative across various online and real world channels
- Initiative that informs people about health care issues with the aim the gain trust

Features

- Establishes and maintains a direct communication channel to the public.
- Promotes governmental health care information services
- Promotes health and healthy living issues like wellness, nutrition and exercise
- Informs the public about new concepts entering health care (e.g., mandatory health insurance)

- Educates the public regarding ways to find reliable information and make smart choices

Discussion

The **Health Care Information Initiative** is correlated to six system elements. Three system elements concern access to governmental information services. The **Health.gov** website is a portal that provides health information online for consumers. The other concept is called Hands on Education which includes the system elements **Health Information Navigator** and the **Health Information Kiosk**. The **Health Information Navigator** and **Health Information Kiosk** make health information accessible in the real world. They will be found in public places like community centers or libraries and help people better understand health information.

On the other side we have three elements that implement consistency as a basic strategy for all communication activities. The brand strategy and the **Style Guide** are system elements that change the face and the appearance of governmental communication. This should be done in a consistent way across channels with the aim to make the information more attractive to the users. The quality seal is a solution that marks health care services that meet governmental quality standards with the aim to provide reliable orientation for consumers.

A communication strategy is tremendously important to



regain trust among consumers and encourage them to actively make smarter choices about their health.

The **Health Care Information Initiative** covers a variety of topics. It promotes informational and preventive issues, health insurance information and related subsidy programs, and the importance of personal health responsibility. The initiative also discusses personal medical records and privacy protection issues, the **Health Care Quality Seal**, health info advisors and health info terminals as well as the new brand regarding governmental health care activities.

Furthermore, it informs and educates people about health insurance options for the uninsured, value based competition, and rights and responsibilities that derive out of new health care strategy, The initiative also teaches consumers how to find and use high-quality information sources, how to understand and compare health care information, how to rate health care services and/or share experiences with health care services as well as issues concerning and usage of personal medical records.

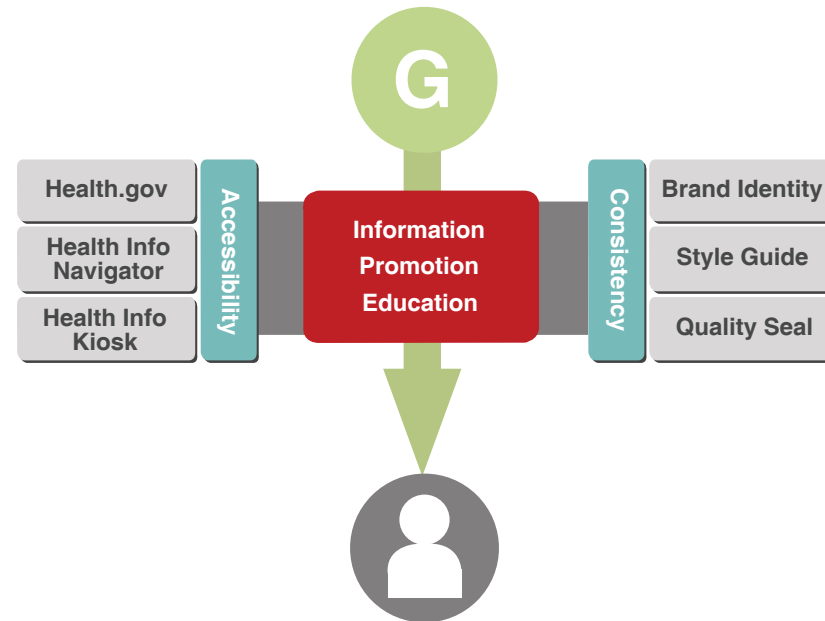
Scenario

Betty sits at home on her couch and is watching TV. Suddenly a TV ad calls her attention. The commercial is for the **Health Care Information Initiative** and

informs her about the importance of health information and education. It says that the government is providing approved health information and a special service she can access in her local community center. She has many questions, because she is a diabetic and decides to try the new governmental services.

ASSOCIATED DESIGN FACTORS

- 008 Public lacking knowledge on health issues
- 009 Unreliable image of the government
- 014 Costs caused by uninsured





Brand Identity

Category

SUPERSET ELEMENT

None

SUBSET ELEMENTS

Style Guide

RELATED ELEMENTS

Health Care Information Initiative

FULFILLED FUNCTIONS

092 Plan communication campaign

ASSOCIATED DESIGN FACTORS

002 Inconsistency among websites

009 Image of the government

Description

Many governmental information sources like websites or pamphlets are inconsistent and cause confusion and a lack of trust in governmental health care services and activities among the public. The new **Brand Identity** repositions governmental health care services and empowers governmental communication activities. It generates a consistent face of all communication activities with the aim to increase trust, loyalty, and awareness among the public. It represents the promise, the big idea, and the expectations that reside in people's minds about governmental health care services and the government itself.

Properties

- Nucleus of communication, awareness, and loyalty
- Appropriate messages that represent new governmental health care strategies
- Immediately recognizable image among all governmental health care communications
- Consistent look and feel
- Improved logo

Features

- Provides consistency across communication channels

- Makes services distinguishable.
- Helps consumers to better remember a service
- Builds brand equity. Increases trust and user loyalty

Discussion

The government has had difficulties establishing a strong **Brand Identity** regarding health care. Governmental health information sources do not have a consistent face to the users and it is difficult to distinguish governmental health care websites at first glance. A well defined brand strategy can help to address these problems by generating loyalty, awareness, and trust. Differentiation is essential for service offers to be remembered. A consistent **Brand Identity** needs to be implemented among all governmental health care communication activities and platforms. The identity should be:

- Reliable
- High quality
- Consumer centered
- Transparent
- Simple to understand
- Up to date

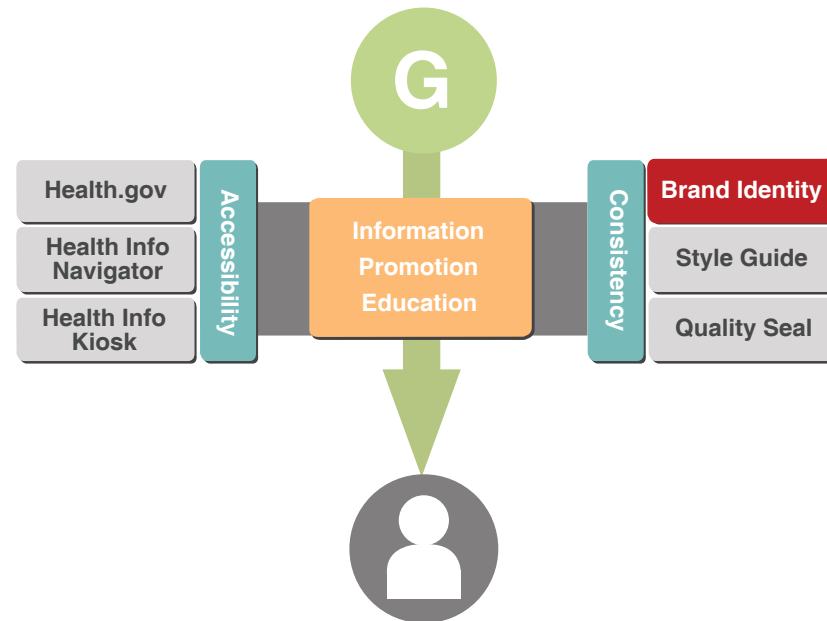


- Neutral and independent
- Holistic, complete

It is important to consider that implementing a new **Brand Identity** requires a vigilant strategic focus, advance planning and attention to detail. Attention needs to be paid to branding, public relations, communications, identity design, production, and organizational management. The biggest challenge is to create and maintain message consistency, build excitement and understanding, and effectively communicate the essence of the brand within time and money constraints.

Scenario

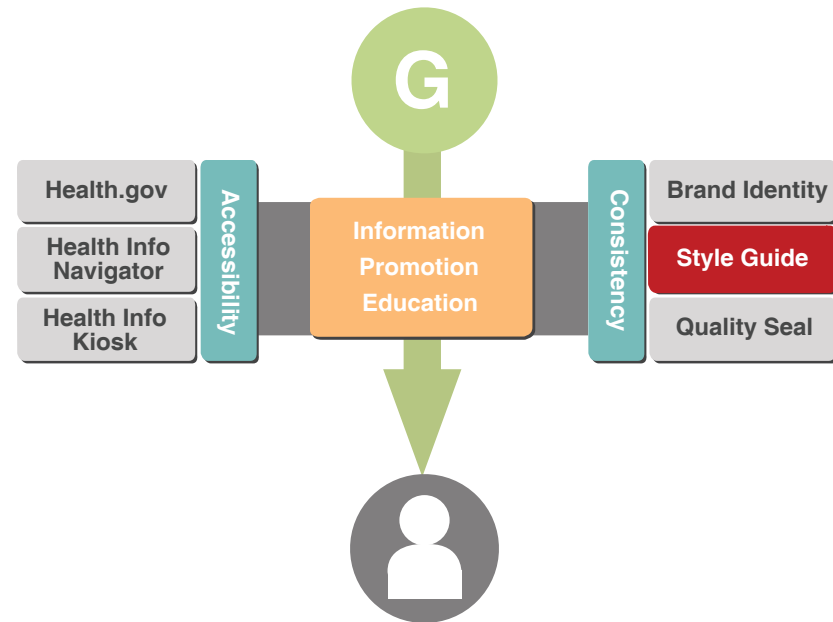
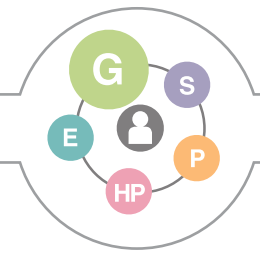
Betty goes to the library and meets with a **Health Information Navigator** at a **Health Information Kiosk**. The **Health Information Navigator** explains some health care issues and answers questions she has. Furthermore, he brings her to the **Health Information Kiosk** and shows her videos on health information and the **Health.gov** web site. She is impressed by how smart, engaged and friendly the **Health Information Navigator** is. Even the web site and the terminal match with the colors of the Health information Advisor. The logo of the government looks good to her. She feels very well and has the feeling that the government cares about her. Who would have thought?





Style Guide

<p>Category</p> <p>SUPERSET ELEMENT</p> <p>Brand Identity</p> <p>SUBSET ELEMENTS</p> <p>None</p> <p>RELATED ELEMENTS</p> <p>None</p> <p>FULFILLED FUNCTIONS</p> <p>092 Plan communication campaign</p> <p>ASSOCIATED DESIGN FACTORS</p> <p>002 Inconsistency among websites</p> <p>005 Incompatible file formats</p>	<p>Description</p> <p>The Style Guide is a set of intelligent standards and guidelines that enable a consistent communication. It contains standards regarding Brand Identity elements like color, typography, form, signatures, business papers, marketing materials, advertising, presentations, exhibits, signage and images. The Style Guide needs to be communicated to internal employees and external creative partners</p> <p>Properties</p> <ul style="list-style-type: none"> • A document with design guidelines and standards for internal employees and external creative partners <p>Features</p> <ul style="list-style-type: none"> • Provides guidelines on how to use Brand Identity elements • Provides guidelines on how to structure contents for communication activities <p>Discussion</p> <p>It is important for Health and Human Services to create a Style Guide so that the public understands that all of the services offered are part of the same organization. The Style Guide is a set of intelligent standards and guidelines</p>	<p>that enables a consistent communication. It contains standards regarding Brand Identity elements like color, typography, form, signatures, business papers, marketing materials, advertising, presentations, exhibits, signage and images. The Style Guide needs to be communicated to internal employees and external creative partners.</p> <p>Scenario</p> <p>Peter is a web designer who works for the government. He is working there for almost 12 years. He has an engineering background and does not know a lot about design, colors, fonts, usability and so on. It is difficult for him to take care of the design of the web site, because he does not have enough advice on how to visualize what. As he receives the Style Guide package he is not very happy. It looks like a lot of work. He opens the document and finds it very interesting to read. It explains basic design principles but more important it show him exactly how to re-design the web site and is also providing the necessary pictures, fonts and color schemes. The web site that he finds in the Style Guide looks just great. He gets exited and starts working on the new appearance immediately. He wants to improve his skills and get the award when he finishes the new site within 8 weeks.</p>
--	--	--





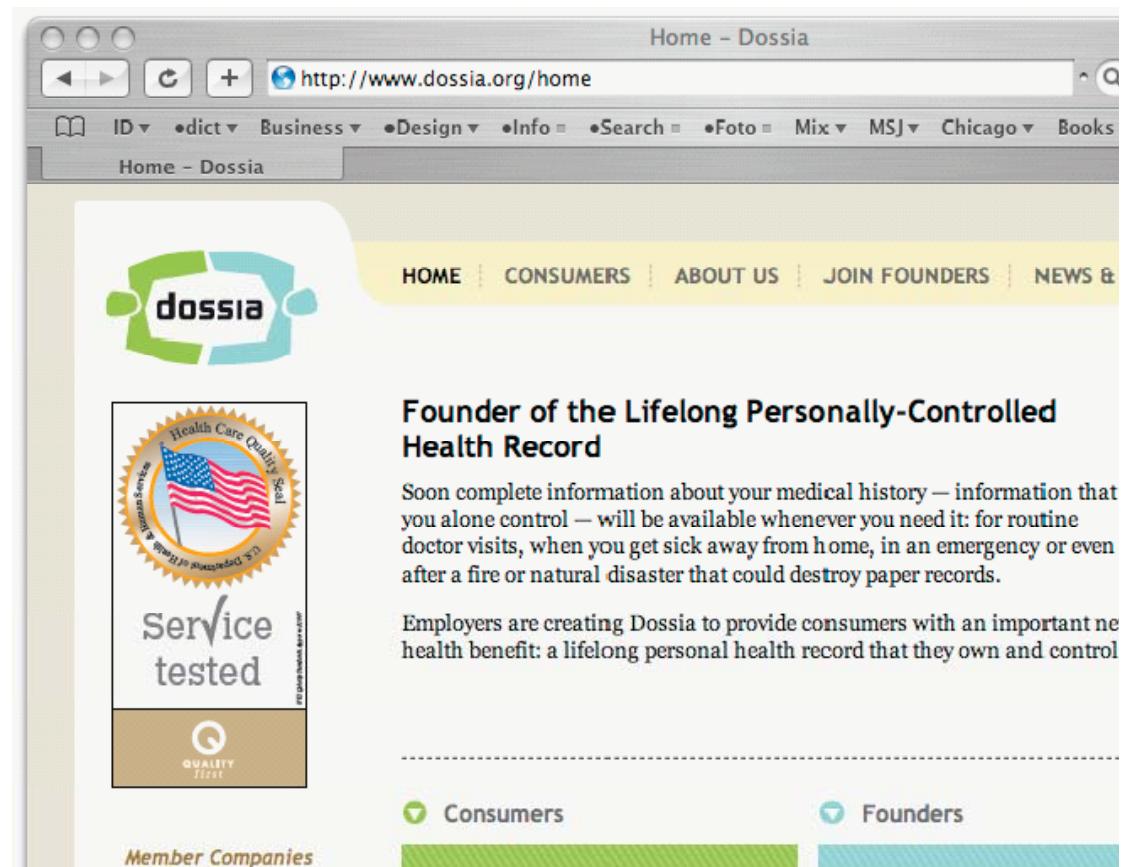
Health Care Quality Seal

<p>Category</p> <p>SUPERSET ELEMENT</p> <p>Health Care Information Initiative</p> <p>SUBSET ELEMENTS</p> <p>None</p> <p>RELATED ELEMENTS</p> <p>Health.gov</p> <p>FULFILLED FUNCTIONS</p> <p>093 Evaluate quality of data received from health plans</p> <p>ASSOCIATED DESIGN FACTORS</p> <p>003 Inferior quality of information</p> <p>004 Data security and privacy protection issues</p> <p>007 Too complex information</p> <p>009 Image of the government</p> <p>013 Unequal participation among players</p>	<p>Description</p> <p>A symbol identifying a health information site as being recognized and approved by the government for meeting high standards of quality</p> <p>Properties</p> <ul style="list-style-type: none"> • Seal that labels high quality health care services • A sign of high quality health information for consumers <p>Features</p> <ul style="list-style-type: none"> • Encourages and accelerates voluntary adoption of high quality standards and practices in the health care sector • Warrants reliable health information. • Assures viewers that approved sites have been audited in a timely way for the implementation of standards. • Assures viewers that governmental standards for security and privacy have been met <p>Discussion</p> <p>Because sites approved with the Health Care Quality Seal will be listed on Health.gov and promoted by other channels, health information sources in the private sector</p>	<p>will see the need to gain approval. The Health Care Quality Seal is a step to encourage and accelerate national adoption of high quality standards and practices in the health care sector.</p> <p>The seal is a privilege for players in the health care sector to use on their informational materials, advertisements, and web sites. It signifies that the information has been audited for the implementation of specific standards. Health Care Quality Seal candidates must agree to adhere to governmental quality standards, part of which includes submitting information to the Government in a timely manner to ensure conformance with quality requirements. Health Care Quality Seal candidates are required to demonstrate compliance with the following criteria over a certain period of time, before they are granted permission to display the seal:</p> <ul style="list-style-type: none"> • The service meets governmental security and privacy rules and regulations • The service meets all governmental requirements and standards • Information is transparent and up to date • Information is neutral and confirmed • Redundancies have been eliminated
--	--	--



Scenario

David is looking for some medical information about diabetes on the internet. He finds many different information sources. Some of the web sites he has found explain diabetes in differently which confuses him. Then he notices that one of the sites has a familiar seal, similar to the one he saw on TV. It is the **Health Care Quality Seal** and he remembers that this is the government seal of approval for credible health information. David continues reading about diabetes on the site that has the Health Care Quality and is now confident that he is receiving correct health information.





Hands On Education Program

Category

SUPERSET ELEMENT

Health Care Information Initiative

SUBSET ELEMENTS

Health Information Navigator
Health Information Kiosk

RELATED ELEMENTS

None

FULFILLED FUNCTIONS

092 Plan communication campaign

ASSOCIATED DESIGN FACTORS

001 Poor accessibility to governmental health care information

004 Data security and privacy protection issues

006 Language Issues

007 Too complex information

Description

A program created by the Department of Health and Human Services to reach those not knowledgeable about health care. Provides real-world, multilingual education in public settings

Properties

- Real world, multilingual education program that takes place in public facilities on how to access and understand health information

Features

- Teaches about health in public settings such as community centers, libraries and schools
- Addresses the needs of communities for which English is not well understood
- Provides a source of information for those not able to use computers
- Creates a direct channel to the public

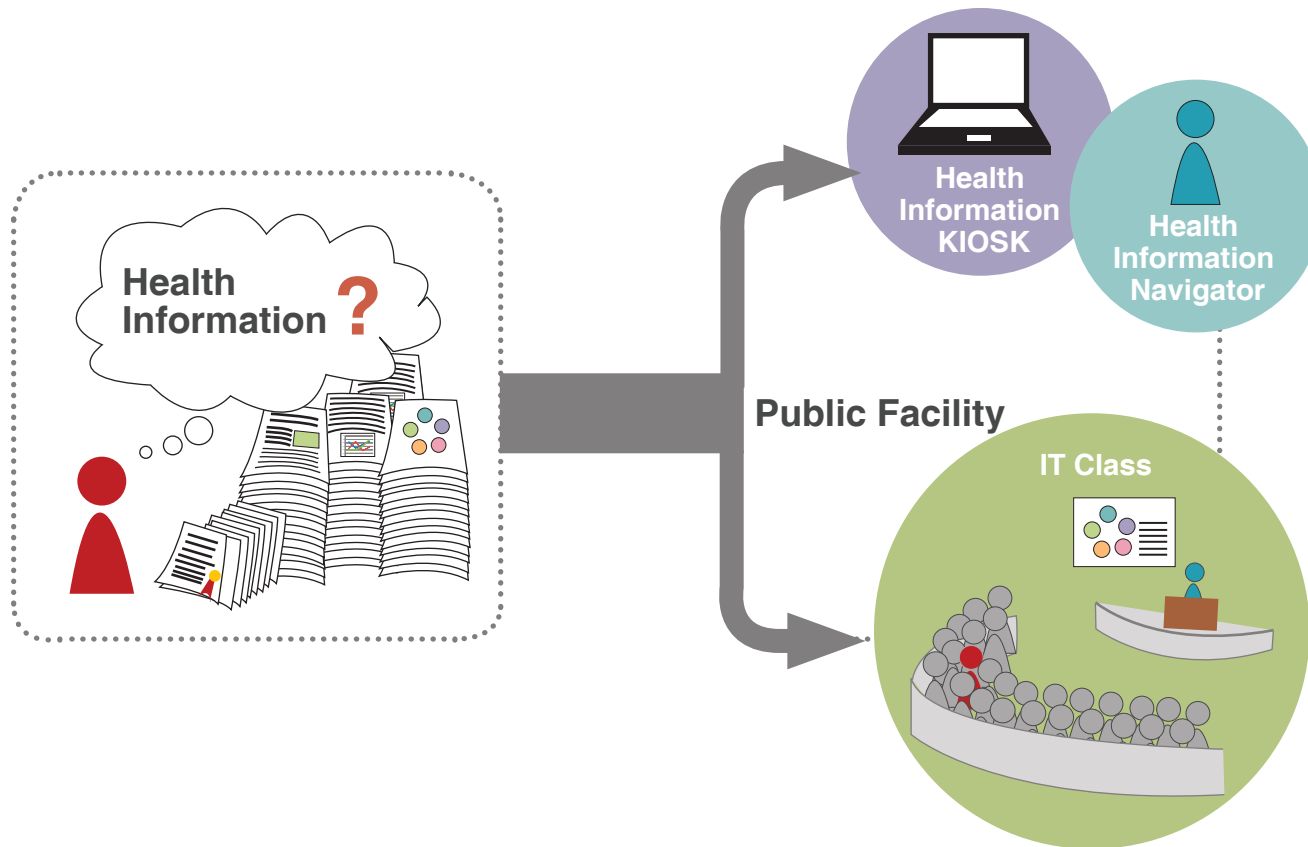
Discussion

In today's world many people are overwhelmed by the choices of health information and do not know where to turn. This is compounded by the fact that some of them

do not feel comfortable using a computer. Due to that matter of fact the government created a new channel that targets such kind of people in public facilities with the aim to teach them how to find and understand the appropriate health information they need.

Scenario

Betty meets the **Health Information Navigator** and uses the **Health Information Kiosk** at the public library. She learns that she can talk to a **Health Information Navigator** at a variety of public locations, including the community center that she often goes to. Betty also learns that the **Health Information Navigator** offers classes that she can take so she can learn how to use the computer to get on the internet to learn about health information. She starts taking computer literacy classes over the next few months and begins learning how to use the internet, how to use the **Health.gov** information portal, and what the health information means to her. The following year, she asks her son to buy her a computer and she uses her new home computer to manage her health information. She feels empowered by the health information and is grateful for the **Hands on Education Program** for empowering her.



- 008 Public lacking knowledge on health issues
- 009 Unreliable image of the government
- 012 Identifying and defining relevant data



Health Information Navigator

Category

SUPERSET ELEMENT

Hands On Education Program

SUBSET ELEMENTS

None

RELATED ELEMENTS

Health Information Kiosk

FULFILLED FUNCTIONS

092 Plan communication campaign

ASSOCIATED DESIGN FACTORS

001 Poor accessibility to governmental health care information

004 Data security and privacy protection issues

006 Language Issues

007 Too complex information

Description

The **Health Information Navigator** is a special trained governmental employee that educates people about health issues in general and how to use computers and the internet. A **Health Information Navigator** can be found in public places like governmental buildings, community centers, libraries or schools. His mission is to teach people how to better find and understand high quality health care information and how to compare and rate health services. He also encourages people to be more responsible and actively manage personal health.

Properties

- Special trained health care information specialist
- Skills in health, IT, teaching and languages

Features

- Answers questions and gives advice regarding health, healthy living, nutrition and exercise
- Informs people about health care issues like Electronic Medical Records
- Informs people where to find relevant health information and how to navigate health care information systems that are provided or recommended by the government

- Informs people in public places like libraries
- Teaches classes in schools or at public places like libraries

Discussion

People can go to a public facility like a community center or a library and get help from a specially trained expert in health information. This expert is called the **Health Information Navigator** and can help them find the appropriate information they need for their health issues. The **Health Information Navigator** uses the **Health Information Kiosk** to explain what information means and how they can use web sites like the **Health.gov** web site to find for example the best treatments. The government is also considering language issues. Most of the **Health Information Navigators** speak a foreign language like Spanish or Chinese to better teach people that are not fluent in English.

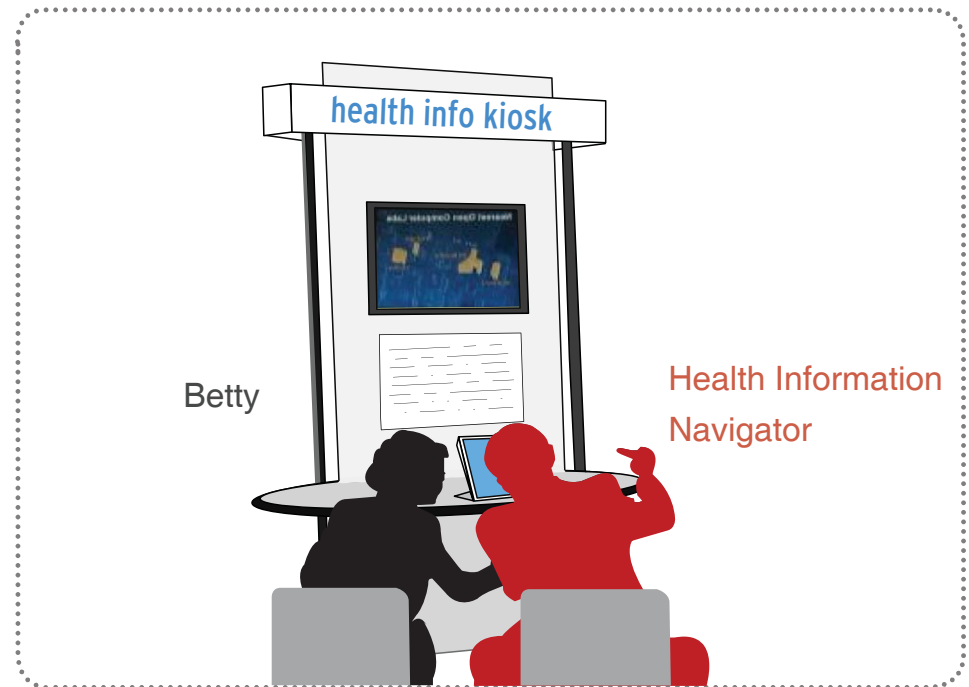
Classes on health care information and the usage of IT Systems and the internet in general are also offered by the government and conducted by the **Health Information Navigator**. This is providing the opportunity to educate more people at the same time. Furthermore one strategic goal of the government should be to bring people together with the aim to encourage networking among the them so they can share knowledge easily and maybe educate each other on the long run.



Scenario

While watching TV, Betty sees a commercial for **Health Information Navigators** that informs her that she can talk to one at public places like the library. At the library, Betty finds the **Health Information Navigator**, and is then directed towards the **Health Information Kiosk**. The **Health Information Navigator** sits with Betty and shows her the **Health.gov**, which describes all the different ways she can monitor and control her diabetes. She is pleasantly surprised by how helpful the **Health Information Navigator** is and appreciates the convenience of the process.

- 008 Public lacking knowledge on health issues
- 009 Unreliable image of the government
- 012 Identifying and defining relevant data





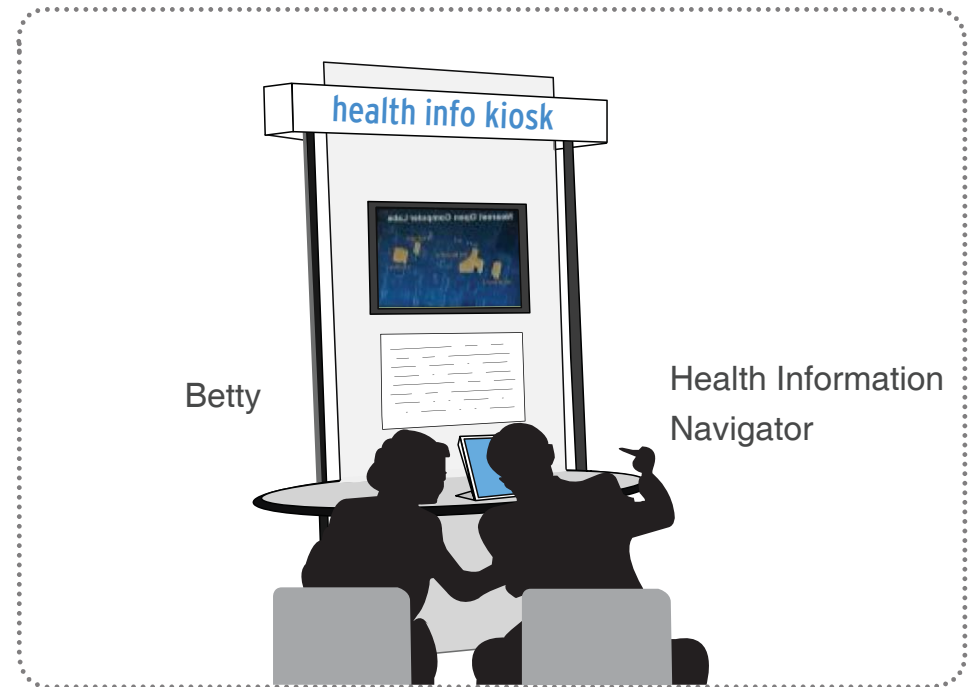
Health Information Kiosk

<p>Category</p> <p>SUPERSET ELEMENT</p> <p>Hands On Education Program</p> <p>SUBSET ELEMENTS</p> <p>None</p> <p>RELATED ELEMENTS</p> <p>Health Information Navigator</p> <p>FULFILLED FUNCTIONS</p> <p>092 Plan communication campaign</p> <p>ASSOCIATED DESIGN FACTORS</p> <p>001 Poor accessibility to governmental health care information</p> <p>006 Language Issues</p> <p>007 Too complex information</p>	<p>Description</p> <p>An information terminal usable in public buildings for educating the public about web-based information services provided by the government</p> <p>Properties</p> <ul style="list-style-type: none"> • Latest computer technology, touch screen, keyboard, mouse, printer, CD-ROM and DVD • Knowledge base for governmental Health Information Navigators during their promotion activities • A well designed, easy to understand and clear user interface that meets usability standards <p>Features</p> <ul style="list-style-type: none"> • Connected by Internet to the government web portal, Health.gov • Gives anyone easy access to governmental health care information and health care sites • Accesses a video database archive containing extensive information on health care issues • Provides tools and educational aids for Health Information Navigators to use in helping new users 	<ul style="list-style-type: none"> • Supplies easy-to-understand video tutorials in multiple languages • Helps users to better understand how to work with computers, the Internet and governmental services. <p>Discussion</p> <p>The Health Information Kiosk provides a platform for consumers to learn about health information from experts. It enables Health Information Navigators to register people for governmental information services. It enables Health Information Navigators to transmit information like links related to particular information or videos to e-mail addresses or cell phones of users. Furthermore, it enables Health Info Advisors to print and burn DVD's.</p> <p>Scenario</p> <p>Betty goes to the library to find out how she can learn more about her health. At the library, Betty meets a Health Information Navigator (HIN), and is then directed towards the Health Information Kiosk. The HIN uses the Health Information Kiosk to show her some easy to understand videos about healthy living and health insurance options. The HIN also uses the kiosk to show Betty the government's health information portal, Health.gov, which describes all the different ways she can monitor and control her diabetes. Betty comes to the</p>
---	--	---



library again a few times to use the kiosk with the HIN.
After some more visits she is able to use the kiosk on her own to learn about health information.

- 008 Public lacking knowledge on health issues
- 009 Unreliable image of the government





Emergency Alert Network

Category

SUPERSET ELEMENT

None

SUBSET ELEMENTS

AlertUS
Areyouprepared.gov

RELATED ELEMENTS

None

FULFILLED FUNCTIONS

092 Plan communication campaign

ASSOCIATED DESIGN FACTORS

- 001 Poor accessibility to governmental health care information
- 008 Public lacking knowledge on health issues
- 036 Many citizens do not have internet access

Description

Biosurveillance is a critical part of health information technology which the HHS has formed a health information technology workgroup for (HHS). The **Emergency Alert Network** is a communication system that allows information flow to continue during an emergency situation in order to protect the public's health.

Properties

- An **Emergency Alert Network** for the country
- Education program for preparing for emergency situations

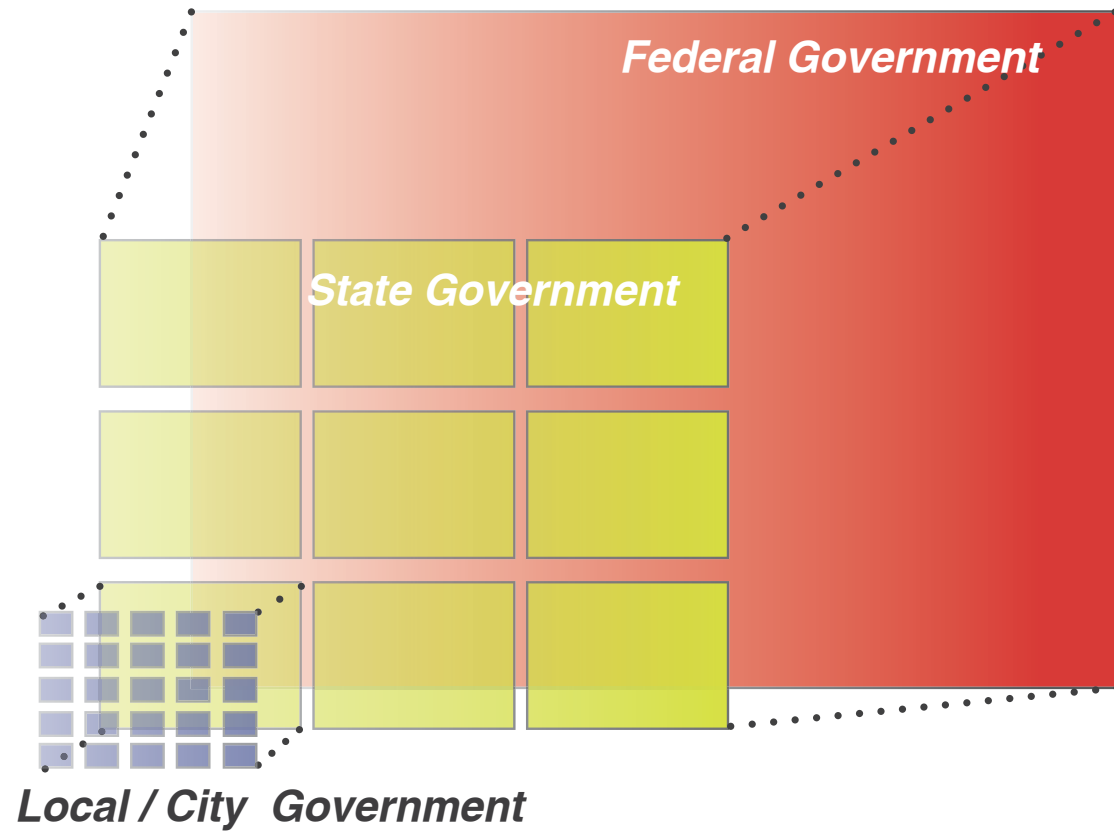
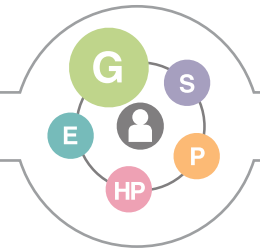
Features

- Manages state health care information for emergency situations
- Gathers and disseminates information efficiently to U.S. citizens
- Collects relevant real time data from local disaster departments

Discussion

The government plays an essential role in emergency response in the event of a natural disaster. The government needs to set up protocols to collect and disseminate information through biosurveillance initiatives.

Rich information stores exist within the scope of the Center for Disease Control and National Institutes of Health, but the government needs to work with providers and consumers to have bidirectional communication. Education and socialization of protocols is as necessary once the protocols are created. The government needs to establish standards to ensure that the information that is disseminated is capsulated and easily understandable and actionable by consumers. (E.g. consumers need to seek immunization against a certain strain of the flu, etc).





AlertUS

Category

SUPERSET ELEMENT

Emergency Alert Network

SUBSET ELEMENTS

None

RELATED ELEMENTS

Areyouprepared.gov

FULFILLED FUNCTIONS

092 Plan communication campaign

ASSOCIATED DESIGN FACTORS

- 001 Poor accessibility to governmental health care information
- 008 Public lacking knowledge on health issues
- 036 Many citizens do not have internet access

Description

The Government needs to notify citizens about disasters and provide information in real time. In order to disseminate information efficiently, the government needs to collect filtering data and provide distribution channels to citizens that do not have access to computers. Moreover, this information can help health care market players who need to exact information against a disaster.

Properties

- Text-based notification system for US citizens and health care players

Features

- Informs the real time emergency situation against disaster and information related to health care system
- Sends watches and warnings for country wide post-disaster information
- Provides information about outbreaks and locations of nearby hospitals
- Uses diverse delivery channels to disseminate information

Discussion

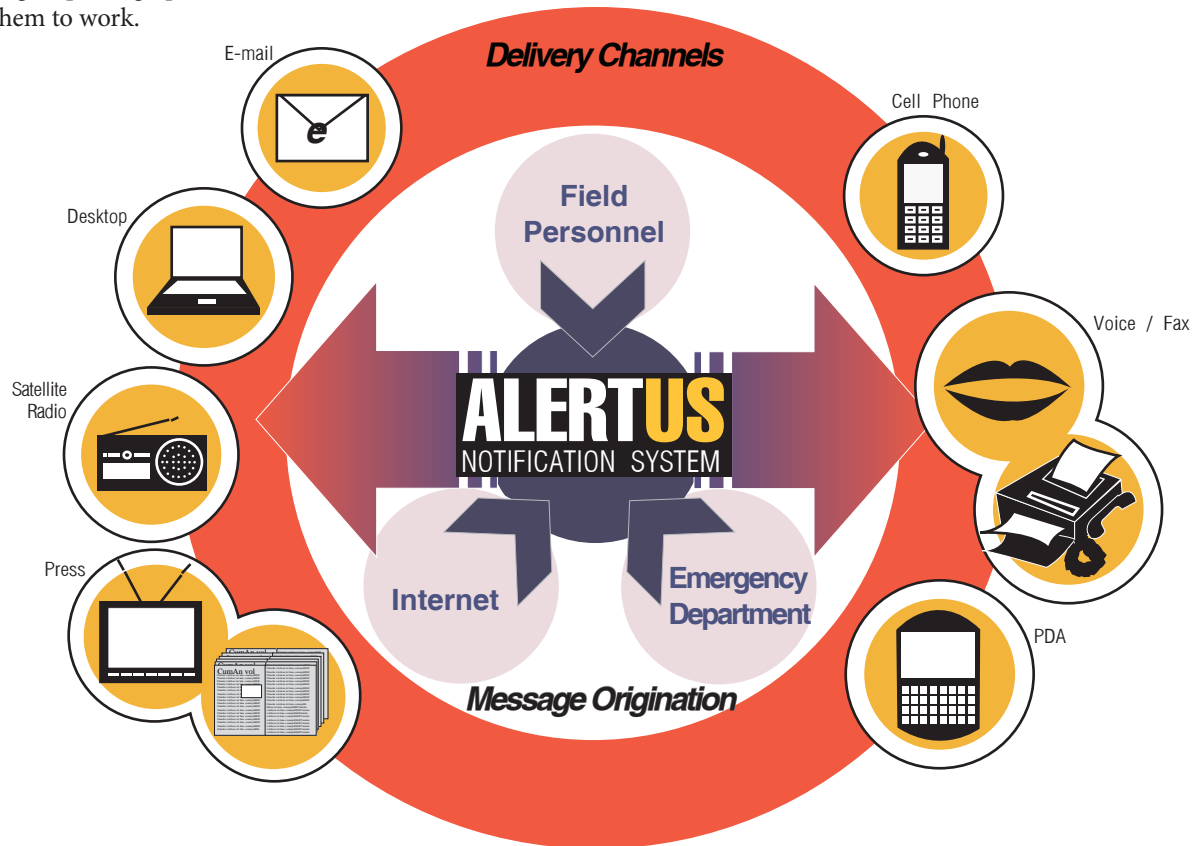
AlertUS is a notification system modeled after San Francisco's system, AlertSF. **AlertUS** will send watches and warnings for hurricanes, floods and tornados and country wide post-disaster information to a consumer's registered wireless devices and e-mail accounts. The information is made up of real-time input data by Field Experts, Officers in emergency departments, and citizens. These data are modified by the **AlertUS** system and sent to US citizens through diverse delivery channels. The messages discuss where to go during the emergency, what to avoid, and other time-sensitive information to secure public and personal safety during the emergency. The methods of dissemination include computers, online support structures, and the press.

Scenario

It is a snowy Monday evening. Kim is driving home from the store after picking up extra water, batteries, and other supplies to prepare for the big snow storm that is set to come tomorrow. Then her phone rings. She has received a text message from the **AlertUS** network. The message says that the local hospital needs volunteers with four wheel drive vehicles to pick up critical emergency staff and bring them to the hospital. When Kim gets home, she contacts the hospital as outlined in the message and



says she can pick up people with her Land Rover. Later in the early hours of the night, she begins picking up some emergency room nurses to take them to work.





Areyouprepared.gov

Category

SUPERSET ELEMENT

Emergency Alert Network

SUBSET ELEMENTS

None

RELATED ELEMENTS

AlertUS

FULFILLED FUNCTIONS

092 Plan communication campaign

ASSOCIATED DESIGN FACTORS

002 Inconsistency among web sites

042 Information format is not standardize

Description

Areyouprepared.gov is a website for educating consumers on how to act in the event of an emergency situation. The government website is easily accessible and provides a communication interface, so people can get touch easily during and after a disaster. Moreover, it provides the messaging system **AlertUS**, so people can access emergency updates more easily.

Properties

- The web site for educating US residents how to prepare to disaster and it can be strongly recommended to set to the mobile device

Features

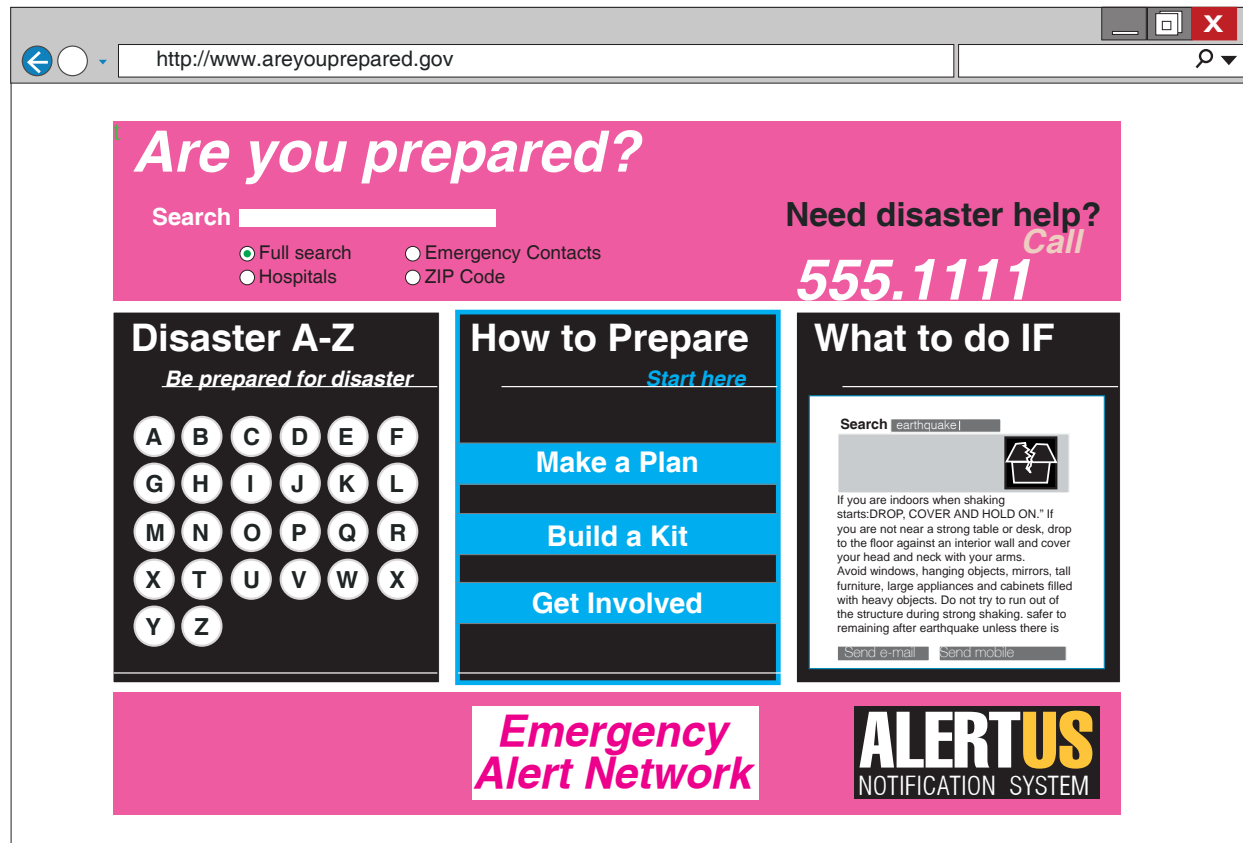
- Provides information for how to prepare for disasters
- Provides information for what to do in the event of a disaster
- Provides information on Emergency Contact Lists
- Educates citizen about disaster preparation
- Gives easy access to emergency information

Discussion

A disaster preparation website for the government already exists called ready.gov. However, ready.gov does not connect all websites operated by the government with each other and does not show the exact information that citizens need to prepare for disasters and emergencies. www.areuprepared.gov is connected to the government's health information portal **Health.gov** and is therefore more accessible to consumers. Moreover, it provides a mailing function to a mobile phone, PDA, or e-mail through the **AlertUS** service. This website is connected with other disaster systems which the government operates.

Scenario

Kim is at home looking at the **Health.gov** information portal, after having heard about it on a TV commercial. As she looks through the website, she notices a link on the site for **Areyouprepared.gov**. She finds that areyouprepared tells her about preparing for emergency situations. She types in her zip code and finds information about the snow storm that is supposed to come to her area in the next 36 hours. She reads about the kit that she should build and about making a plan that discusses other measures she should take to get ready for the storm. She makes a list and then heads to the store to start buying supplies to prepare for the storm.



Conclusion

All too often in the US, politics get in the way of creating valuable, effective legislation that can make a difference in people's lives. Hopefully this will not continue to happen with health care legislation, as steps must take place in order for the era of value-based competition and true information transparency to be viable. Namely, it is important for universal health care to be achieved in America, and there are a number of strategies and laws that can help make this happen. Porter talks at length about mandatory health insurance for every citizen, much like what the state of Massachusetts is currently in the process of doing (Porter). How America should achieve universal health care is left to the current and future policy makers. Without universal health care, the value of information transparency is of little help to someone who cannot attain access to good quality health care.

After universal health care, health information transparency will revolutionize health care delivery in America as consumers begin to gain a more complete picture of the choices they make in their health. The government's role in transparency is crucial, as they will act as the glue that brings the other players, health plans, providers, suppliers, and employers, to work together to increase value to consumers.

References

- Corrigan, M. Janet, Eden, Jill, and Smith, M. Barbara. Leadership by Example. Coordinating Government Roles in Improving Health Care Quality. National Academies Press. 2002.
(http://www.nap.edu/catalog.php?record_id=10537)
- Health and Human Services. Office of the National Coordinator for Health Information Technology: Executive Summary. <http://www.hhs.gov/healthit/executivesummary.html>
(Last accessed December 14, 2007)
- Health and Human Services. Health Information Technology: AHIC Workgroups. <http://www.hhs.gov/healthit/ahic/> (Last accessed December 14, 2007)
- Porter, Michael E. and Teisberg, Elizabeth O. Redefining Health Care: Creating Value-Based Competition on Results. Harvard Business School Press. 2006
- SustainAbility. Risk and Opportunity. <http://www.sustainability.co.uk/insight/reporting-article.asp?id=128>
(last accessed July 11, 2007)
- Tech News World. America Offline: Many Don't Surf. Many Don't Care. <http://www.technewsworld.com/story/c2nPYNQk3t3dHn/America-Offline-Many-Dont-Surf-Many-Dont-Care.xhtml> (last accessed December 14, 2007)