A Proposal To Develop A Web-Based Consumer Health Information Portal (CHIP) For Firstgov.Gov That Would Achieve, Through Information Dissemination, Healthy People 2010's Goal To Reduce Health Disparities

INTRODUCTION

The role of the U.S. Public Health System is to ensure the Public's Health. Its activities are guided by a 10-year plan called Healthy People 2010. One of the main goals of Healthy People 2010 is to reduce health disparities (the other - To help individuals of all ages increase life expectancy and improve their quality of life). According to Satcher, "Our greatest opportunities for reducing health disparities are in empowering individuals to make informed health care decisions and in providing the skills, education, and care necessary to improve health," and "The underlying premise of Healthy People 2010 is that the health of the individual is inseparable from the health of the larger community." Related issues include improving access to quality health care, strengthening public health services, and improving the availability and dissemination of health-related information (Thompson, 2000). The National Center for Health Statistics' study of 1990-98 trends in racial and ethnic-specific rates for health status indicators shows that not all groups have benefited equally and substantial differences among racial/ethnic groups persist (Keppel, Pearcy,Wagener, 2002).

The goal of eliminating health disparities can be achieved by incorporating Aday's Deliberative Justice Paradigm for health policy:

> "The goal of health policy, as indicated in the expanded equity framework, is to contribute to improving the health of individuals and communities. The ultimate test of the equity of health policy from the social justice perspective is the extent to which disparities or inequalities in health among subgroups of the population are minimized. Substantive equity is reflected in subgroup disparities in health. Procedural equity refers to the extent to which the structure, process, or procedures intended to reduce these disparities may be judged to be fair, grounded in norms of deliberative, distributive, and social justice. " (Aday et al, 180-181).

In essence, "equity is concerned with health disparities and the fairness and effectiveness of the procedures for addressing them," and equity in health care can be assessed by examining and accounting for health disparities (Aday et al, 181). Finally, the Deliberative Justice Paradigm focuses on the importance of consumer involvement and community participation in the design and implementation of private and public health programs (Aday et al, 178). Such involvement supports patient empowerment and enhances bridge building among constituencies, which Grol (2001) sees are important factors for improving the quality of medical care.

STATEMENT OF THE PROBLEM

Social programs such as Medicare and Medicaid seek to ensure that when we are at the most vulnerable (elderly and poor), we would not suffer from lack of health care. Such programs comprise 19% of all Federal spending (GPO, fyi2001). Unfortunately, these programs are not comprehensive enough to cover everyone throughout their lifetime, nor all the possible services

necessary to maintain one's health. Furthermore, because employers primarily finance health insurance, economic downturns leave those without jobs also without health insurance. Such stopgap measures as having states use State Children's Health Insurance Program (SCHIP) waivers to provide health insurance to unemployed workers while at the same time reducing SCHIP funding is not a long-term solution to equitable health services (CBPP.Org, 2001). However, lack of health insurance should not also deprive people from accessing the information they need to make good decisions about their health and well being, and learn about community services that are available to them.

According to Fiscella et al, racial/ethnic AND (author's emphasis) socioeconomic disparities in the process and delivery of health care contribute to disparities in health outcomes (Fiscella, et al, 2000). This author proposes that the approach to eliminating health disparities needs to be broad, encompassing more than just the delivery of health services because the state of Health does not consist of just the diagnosis and treatment of disease. The solution must also account for the interplay of societal, cultural, environmental, behavioral, social and economic factors to ensure that there is equitable access to the information necessary to make good decisions about staying healthy and seeking health services.

SIGNIFICANCE: WHY IS THE PROPOSAL NEEDED?

The U.S. federal government is in a unique position to provide structure and direction for the development of rational health policy that would comprehensively eliminate the causes of health disparities through information dissemination using the Internet. This technology-based strategy to reduce health disparities would be accomplished by improving the public health infrastructure (Focus Area 28) [Appendix I] and health communication (Focus Area 11) [Appendix H], both of which are Healthy People 2010 objectives for improving health.

By supporting the development of a Web-based consumer health information portal (CHIP) within its Firstgov.gov Web site, the federal government would be ensuring that all American citizens, regardless of health insurance status, would be able to obtain the information they need about health issues that concern them, and how and where to obtain the services they need to maintain their health in the communities they live and work. This electronic system, CHIP, would be "globally available, locally accessible" and would bridge the digital divide created by new technologies that are also affected by socioeconomic disparities.

According to C. Fornell, high levels of satisfaction with government services help to build the public's trust (Fornell, 2001). The American Customer Satisfaction Index is an organization that sees itself as a substitute for market forces that helps to balance cost with quality of service by the federal government. Service areas evaluated are benefits, public information and recreational land use. In 2001, the federal government raised its overall American Customer Satisfaction Index score to 71, from 68.6 (out of a possible 100). Of the 10 Public Information/Web sites ranked, only one pertained to health – the Centers for Disease Control and Prevention, with a score of 74 (ACSI, 2001). Overall, 70% of surveyed respondents favor the government measuring customer satisfaction, and the satisfaction of information users was 76% in 2000 (CustomerService.Gov).

This proposal seeks to present a strategic plan for re-organizing, with participation of stakeholders (i.e., individuals and communities) [Appendix D], the current state of consumer health information that is available on the Firstgov.gov Web site. Such participation is an essential ingredient for good health policy, as advanced by the Deliberative Justice Paradigm (Aday et al, 1998). The principle of community participation is also found in the community health education models of Asset Mapping and the Social Reconnaissance Method for community social assessment (Green & Kreuter, 1999). At the national level, stakeholder participation was used by the Centers for Disease Control and Prevention (CDC) in developing disease surveillance guidelines, and by the Department of U.S. Health & Human Services in the development of Healthy People 2010.

The U.S. Health and Human Services Administration (USHHS) is the ideal federal agency to facilitate the implementation of this proposal because its network of agencies permeates service institutions that exist at the national, state and local levels. Other agencies to assist in this proposal's assessment activities include: The U.S. Public Health Service (USPH), the Office of Disease Prevention and Health Promotion (ODPHP), the Agency for Healthcare Research & Quality (AHRQ), and the Health Resources and Services Administration (HRSA) [Appendix B]. HRSA would coordinate the efforts of the accredited Schools and Programs of Public Health to provide the interface among the various entities that would be involved in developing the "Consumer Health Information Portal (CHIP)" [Appendix C]. These agencies' approach to problem-solving has always been collaborative in nature, as evidenced by USHHS's development of Healthy People 2010 with input from the Healthy People 2010 Consortium, and HRSA's Center for Public Health Practice that supports partnerships with state and local public health agencies and schools of public health.

SIGNIFICANCE: WHAT WILL THIS PROPOSAL ACCOMPLISH?

This proposal seeks to provide an education-based approach to addressing health disparities by ensuring that all citizens will have access to health information regardless of health insurance status. While the Internet has made information easily available, such information is not necessarily accessible. Accessibility is compromised by: (1) The lack of physical access to the Internet (computer literacy), (2) the lack of skills on how to access information on the Internet (information literacy), and (3) the lack of skills on how to use the information available on the Internet (information competence).

This proposal seeks to address these three issues by conducting a 3-year assessment in these 3 areas. Results of the assessment would provide the basis for: (1) Establishing a network of public facilities at which any citizen can access the Internet to obtain information about health and services available in the communities where people live and work, via the Firstgov.gov Web site; (2) establishing a conceptual framework for the development and organization of Web-based health information that includes the input and feedback of the audience – consumers, and contributors of the information (non-profit organizations and service providers) [Appendix D]; (3) recruiting the "hidden" public health workforce - students attending accredited schools and programs of Public Health who would serve in an interfacing capacity by: (a) Conducting the initial and ongoing assessments of all stakeholders (with HRSA); (b) developing the plans for implementing the structure, process and outcome elements of CHIP (with USPHS and ODPHP),

and (c) participating in the evaluation and dissemination of evaluation results to all stakeholders (with AHRQ) [Appendix C].

Finally, the proposed Web-based solution is modeled after the principles of public health surveillance systems, in which data are collected to track and control disease. However, citizens would be benefiting twice from the CHIP, first when they use it to obtain information about health issues and to make health care decisions, and when policies and programs are developed based on analyses of utilization data. Such data help government agencies and public health practitioners to: (1) Identify geographic-based health issues that are of interest to citizens of a particular community, (2) identify health educational needs and health services necessary to meet those health issues, (3) evaluate how effective community-based services are in eliminating health disparities at the community level, and (4) developing good health policy.

GOALS & OBJECTIVES OF THE PROPOSAL

Main Goal: Development of a nation-wide Web-based Consumer Health Information Portal (CHIP) for Firstgov.gov that would accomplish Healthy People 2010's goal to eliminate health disparities through efficient information dissemination (Appendix A)

Main Objective: To establish the basic structure, process and outcome components for a Web-based Consumer Health Information Portal (CHIP) (Appendices F1-3)

The U.S. Health and Human Services (USHHS) [Appendix L] will oversee a comprehensive 3-year assessment (Appendix K) to ascertain the readiness of the government to support a Consumer Health Information Portal (CHIP) for its Firstgov.gov Web site (Appendix F). This assessment of stakeholders will be conducted by the U.S. Public Health Service (USPHS), the Office of Disease Prevention and Health Promotion (ODPHP) and the Agency of Healthcare Quality and Research (AHRQ) [Appendix D], with the assistance of accredited schools and programs of Public Health, under the direction of the Human Resources and Services Administration (HRSA) [Appendix C].

Product: Six months after the completion of this 3-year proposal, the USHHS will issue a report on the state of: (1) The technology at the national and local levels needed to establish the CHIP, (2) readiness of federal lead agencies and state and local governments, national and local service organizations to provide health and services information for the CHIP, and (3) performance measurement strategies for the CHIP (Appendix. K).

Goal #1: To Ensure Computer Literacy

Objective: To assess the state of the Web-based infrastructure, at the federal, state and local levels (Appendix F1)

Accredited schools & programs of Public Health, under the direction of HRSA (Appendix C), and the USPHS will conduct assessments of the Web-based infrastructure of communities, local, state and federal government agencies to determine the technology strengths, weaknesses and needs of public institutions to provide Internet access (Appendix D1).

Product: By the end of Year One, a report will be issued by the USPHS about the status of integrating a Consumer Health Information Portal (CHIP) with Firstgov.gov, with recommendations for the development of a Web-based infrastructure that would support a national network of public Internet access (Appendix K).

Goal #2: To Ensure Information Literacy

Objective: To assess the state of information dissemination at the federal, state and local levels (Appendix F2)

Accredited schools & programs of Public Health, under the direction of HRSA (Appendix C), and the ODPHP will conduct assessments of communities, local and national non-profit organizations and service providers and Healthy People 2010 lead agencies, to determine the informational needs of individuals and communities, and the informational resources of non-profit organizations and service providers and federal lead agencies (Appendix D2).

Product: By the end of Year Two, a report will be issued by the ODPHP about the status of informational needs and resources, with recommendations for the organization of Web-based information that would be easily accessible and used by the general public to: (1) Maintain one's health and well-being, and (2) obtain necessary health and social services in the communities people live and work (Appendix K).

Goal #3: To Ensure Information Competence

Objective: To assess the state of evaluation of Web-based information in determining the usefulness of such information (Appendix F3)

Accredited schools & programs of Public Health, under the direction of the HRSA (Appendix C), and the AHRQ will conduct assessments of current Web-based evaluation strategies for measuring the performance of information dissemination over the Internet, and how well the CHIP would be at reducing health disparities by looking at leading indicators (Appendix D3).

Product: Six months after the completion of the three-year assessment period, the AHRQ will provide for the Final Report to be issued by the USHHS, an evaluation of the usefulness of existing performance measures (portal utilization and health indicators), with recommendations for the acceptance of existing measures and/or development of new measures (Appendix K).

BACKGROUND

A Public Health Approach to Eliminating Health Disparities

If eliminating health disparities can be conceptualized as eliminating a disease, then the proposed CHIP can be conceptualized as a public health surveillance system. Such a system is the ongoing, systematic collection, analysis, interpretation, and dissemination of data regarding a health-related event for use in public health action to reduce morbidity and mortality and to

improve health (CDC, 2001). Similarly, if the CHIP can be seen as a "passive surveillance system" that is triggered by Web site visitation, then the estimated expenses of maintaining the CHIP would be less costly than an "active surveillance system." Such a passive surveillance system is possible over the Internet as long as servers that support the network of computer terminals are active. Maintaining the CHIP hardware is more cost-effective than meeting the costs associated with the inappropriate use of emergency rooms by an uninformed public. Current Web tracking capabilities allow for the continual collection of geographic-specific anonymous data that can be used to identify community-specific health concerns and interests.

Developing and evaluating such a system can be guided by the Centers for Disease Control & Prevention (CDC)'s 1999 "Framework for Program Evaluation in Public Health," CDC's 1988's "Guidelines for Evaluating Surveillance Systems," and CDC's 2001 "Updated Guidelines for Evaluating Public Health Surveillance Systems." Finally, Donabedian's 1966 "Structure, Process and Outcome" conceptual model for evaluating health care and looking at service delivery systems (Donabedian, 1966; Lydick, 2001) will provide the main framework for this proposal (Appendices D – F). This seminal model has been used to look at various systems, i.e., hospitals (Shojania, Showstack, & Wachter, 2001), and public health programs (Handler, Issel, Turnock, 2001).

Computer Access

In their 1999 study of computer ownership, Kominski and Newburger concluded, except for gender, "unequal" access exists across racial, age, economic and educational levels. According to the 2001 U.S. Census report on home computers and Internet use, the top 5 uses of home Internet access were: 1) E-mail [87.7%], 2) Information search [64.2%], 3) News, weather, sports [52.5%]; 4) Shop/pay bills [39.8%]; 5) Job-related tasks [33.7%].

By demographic categories, there was home Internet access in 37.3% of all households; and by income, 11.3% of those making <$25K, 26% making $25-34K, 37.4% making $35-49K, 50.9% making $75+, and 66.5% making 75K+ have home internet access. By education, 8.4% of those with less than a high school diploma, 25.9% of those with a high school diploma/GED, 46.5% of those with some college, and 62.4% of those with a bachelors degree or more have home Internet access.

By race and ethnicity, 39.5% of Whites, 20.5% of Blacks, 43.7% of Asians and 17.5% of Hispanics, and by gender, 38.5% of men and 36.2% of women have home Internet access. By age, 55% of adults 18-54, 31% of adults 55-64, and only 13% of those 65 years and over have home Internet access. The percentages are higher for home computer access.

Only 10% of school age children had no access to a computer in any locale (home or school), which means that schools prove access for children who have none at home. For children 6-17 years old, computer use at school was more nearly equal across different income, race, or ethnic groups than computer access at home (U.S. Census, 2001). It was unclear if school computer access meant Internet access as well. In general, computer access would be required for Internet access, although accessing the Internet can now be done through other means (e.g., wireless), which, due to cost, is currently beyond the reach of most people.

Finally, Internet use is of media interest (Gill, 2001; Pastore, 2001), and computer skills have become a major issue of curriculum development (Eisenberg & Johnson, 1996) as well as a purpose for online tutorials (Bond University). Based on these statistics, the author proposes that schools would be a good venue for reaching children with Web-based health information. School health curricula can be developed using such access that would offer timely information and save schools the cost of purchasing textbooks that are expensive and rapidly outdated. Furthermore, because access issues do exist, the author proposes that public libraries and community centers be recruited to provide the level of access that school children enjoy in public schools for those segments of the population that do not have home Internet access.

While public schools, public libraries and community centers are public institutions; they are governed by local jurisdictions. However, it is not impossible to develop a network of public facilities in all American communities at which free access to the CHIP would be available to the local citizenry. For example, Connecticut publicizes such availability on the Internet (www.das.state.ct.us) as to where free Internet access is available at various state agencies, job centers and local libraries. Initiatives such as "Healthy Communities Without Borders" show promise for integrating Web-based health information, and suggest that free Internet access is an important component to ensuring equity in information access.

What Kind of Information is Available on the Internet?

According to the 2001 U.S. Census Computer/Internet study, information search is the second most common activity for people with home Internet access. What exactly does the Internet offer? The author conducted a search during January 2002 using Google.com, the most popular Internet search engine, entering topics that the author perceives to be of universal interest. If it can be assumed that Web pages are developed on the basis of demand for such information, then the total number of Web pages found for a particular topic would be suggestive of interest. Health is ranked 4th of the 24 topics searched (Appendix G – Table 1).

The State of Current Consumer Health Information

Although Google.com is the most popular search engine being used by Web visitors, is the number of pages found by this search engine reflective of what is truly on the Internet? On January 16, 2002, the author conducted a Web search of the terms, "Health Information" and "Consumer Health Information" using 7 commonly used search engines on the Internet (Appendix G – Table 2). The differences in the number of Web pages identified are reflective of the state of search engine technology, whereby each search engine has its own algorithm by which searches are conducted. Regardless of which search engine is used, the number of pages found is unmanageable without more selective search strategies, which requires some understanding of how to conduct searches (information literacy).

Next, the author explored if narrowing searches by geographic location would result in fewer results. California and Connecticut were arbitrarily chosen to represent a large state and a small state. Los Angeles and Bridgeport were chosen to represent large cities within these two states.

Even with using one search engine, results can differ by what terms are used (Health Information vs. Consumer Health Information), by how a term is spelled (e.g., California vs. CA), and that being more specific (by city) may reduce the number of pages found but the number of results would still be unmanageable (Appendix G – Table 3). Finally, a search for "Consumer Health Information in Spanish" was also conducted using Google.com to see if this would narrow the amount of information retrieved. Los Angeles, CA, Hartford, CT and New York, NY were arbitrarily chosen to represent "inner cities" known for their diversity (Appendix G – Table 4). These searches indicate there is plenty of information available, but city residents may not necessarily have the literacy level necessary to make use of what's available on the Internet (Appendix G – Table 5). According to the National Adult Literacy Survey, the proportion of African-Americans in a community is a predictor of lower literacy levels. Other predictors include immigration rate, civilian employment rate, occupational categories and rate of work disability (City of Hartford Task Force on Adult Literacy).

Information Literacy and Information Competence

The greater availability of information over the Internet does not necessarily mean that the information is being used properly or efficiently. While access to computer resources can be viewed as part of the broader issue of computer literacy, some educators tend to disagree (Harvey, 1983). Thus, the definitions of computer literacy include: Possessing "minimum" computer literacy standards (Computer Literacy and Technology Survey) of how to use E-mail, surf the World Wide Web and use a word processing program; those skills found on checklists (Smarterkids); understanding all the concepts found in a computer literacy glossary (Parker); and mastering the skills found in online tutorials (Computer Literacy 101).

A promising approach is having more precise definitions. Regent University defines "computer literacy" as "that level of knowledge and understanding of the personal computer… beyond the mere utilization of word processing software." SUNY's Council of Library Directors defines "information literacy" as "the abilities to recognize when information is needed and to locate, evaluate, effectively use, and communicate information in its various formats." California State University's CLRIT defines "information competence" as "the fusing or integration of library literacy, computer literacy, media literacy, technological literacy, ethics, critical thinking, and communication skills" (Smith, 2000).

In summary, the skills needed to access health information on the Internet can be seen as components of information literacy necessary to develop information competence. For example, though it may be true that a surgeon needs a scalpel to perform an operation, the surgeon must also possess the knowledge and skills to know what to look for and what to remove. Finally, in the fast-paced world of technology, it is probably safe to say, we are more prone to develop some form of "technology-based illiteracy" if we don't make concerted efforts to keep up.

What Kinds of Specific Health Information Are People Looking For?

Assuming that people value Life and Health over Death (Appendix G - Table 1), can it be assumed that people would like to find out more about the major killers of today so they can live longer? A search was performed for the top causes of death (Appendix G- Table 6). Findings

show that the total number of deaths for a particular cause is not necessarily indicative of the amount of information available for that disease. Though there appears to be a great interest in information about cancer, it should be noted that there are many types of cancer, which may contribute to the number of Web pages available for this disease. Although AIDS dropped out of the top ten causes for death, it still remains of great interest with 7,730,000 Web pages.

The State of Federal Government Health Information

The focus of media attention on medical errors has raised the public's concerns regarding health care quality. The trend is towards obtaining health care quality information from the Internet (28%). In the same study, 63% of those surveyed said the government should be involved in promoting, monitoring, or providing information about the quality of health care, with 73% favoring mandatory reporting and public availability of medical errors information (Kaiser Family Foundation, 12/11/2000).

During January 2002, the author conducted a search for information on "Health Disparities" which resulted in 3 separate pages that included the same material: U.S. Department of Health & Human Services. HHS Fact Sheet: "Closing the Health Gap": Reducing Health Disparities Affecting African-Americans" (http://www.os.dhhs.gov/news/press/2001pres/20011119a.html. http://www.aoa.dhhs.gov/pressroom/Pr2001/healthgap-FS.html, http://www.healthgap.omhrc.gov/hgfs.htm) The author visited the federal government's premier Web site, Firstgov.gov. The "Redesign Page" noted that the Web site would be redesigned, with gateways for Citizens, Business, and Government, but not for Health. Using the site's internal search engine, both "Health Information" and "Consumer Health Information" each resulted in 1,000 Web pages.

Using the "Keyword Internal Search Engine" – "Health Information" resulted in 2,134,995 matches, in which www.health.gov, described as "… a key portal to access health information from the U.S. government" came up as #105. When "Consumer Health Information" was entered, 253,246 matches resulted, and www.health.gov came up as #16. In the Health directory from Firstgov.gov's main page, www.health.gov was the link for "Health Promotion and Disease Prevention." The "Healthy People 2010" link resulted in http://hp2010.nhlbihin.net/ rather than the Healthy People 2010 Web site (http://www.health.gov/healthypeople/Default.htm) managed by the Office of Disease Prevention and Health Promotion (U.S. Department of Health and Human Services), the lead agency for implementing Healthy People 2010.

Following links noted as "Consumers" yielded a link to www.consumer.gov, which included a link to "Healthcare quality." "Health agencies, by state" yielded a link to a page listing state health departments that is maintained by FDA.gov. When the Health directory was chosen, the resulting page (www.firstgov.gov/health) provided an alphabetical listing of which a consumer health information link (http://www.consumer.gov/health.htm) was listed. This page included disease-based links associated with federal agencies. The Frequently Asked Question Page (www.faq.gov) contained no link to Health, and the "Consumer" link resulted in a "National Contact Page" which had no links to Health. The "FAQ sites by department or agency" resulted in an alphabetical listing, which listed "Health and Human Services" that resulted in an "FAQ Page" about HHS.

In summary, there is good web-based federal consumer health information (i.e., the Consumer Health Information page (http://www.consumer.gov/health.htm), USHHS/ODPHP's www.health.gov Web site and the www.healthfinder.gov search engine). Unfortunately, such information is not easily accessible from Firstgov.gov. Some disarray of federal health information can be seen in providing the same information as 3 separate Web pages, under 3 separate agency names. Although the intent may have been to show agencies are sharing common purposes, it only contributes to the confusion as to which agency is truly responsible for outcomes. If the federal government wants to be seen as a credible source of consumer health information, it must re-design the Firstgov.gov's health information to be consumer-friendly so it will fulfill the goals of rational health policy by soliciting input from users of this information – all citizens who have interest in obtaining health information to make health care decisions.

Who Would Be in the Best Position to Find Out More About What People Want to Know About Health?

Graduate students attending accredited schools and programs of Public Health would make the ideal workforce to implement the necessary assessment, planning, implementation, and evaluation of the CHIP. Students can provide a useful service to the country while completing their degree requirements, which in many instances require community projects, and/or research projects. This "hidden" public health workforce, as part of academic institutions, can serve as the ideal interface among government institutions, nonprofit associations and community groups, because they can elicit trust by the objectivity traditionally associated with academic institutions.

Currently, the 76 schools and programs accredited by the Council on Education of Public Health are found throughout the U.S. They are stable entities and are accepted by the communities they are located in. By participating in a nation-wide, multi-level, multi-disciplinary effort to address the national issue of health disparities, these public health students will obtain invaluable experience that would prepare them for the realities of trying to achieve the mission of Public Health – ensuring the Public's health. At the same time, public health academicians would be provided the opportunity to contribute their expertise in the areas of health policy, health services administration, health education, community health, and biostatistics and epidemiology in ways that would benefit everyone.

SUMMARY

In summary, this proposal seeks to provide a feasible, cost-effective (Appendix L – Budget) approach to achieving Healthy People 2010's goal to eliminate health disparities by addressing the objectives in Healthy People 2010 Focus Area 11 (Health Information) [Appendix H], and Focus Area 23 (Public Health Infrastructure [Appendix I]. The CHIP addresses a majority of these objectives by adopting a comprehensive approach that is presented here using Donabedian's Structure, Process and Outcome model (Appendices D - F). The CHIP provides a broader approach to eliminating health disparities by addressing access to the quality health information needed to make informed decisions about maintaining one's health and seeking health care. It is hoped the CHIP will be a long-term solution that not only contributes to

eliminating health disparities, but other societal problems that result from the impact of unaddressed health disparities.

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Council of Accredited M.P.H. Programs (CAMP Web site)
http://www.bettycjung.net/Camp.htm

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Consumer Health Information
http://www.consumer.gov/health.htm

FAQ Sites from U.S. Departments and Agencies
http://www.faq.gov/#fsection3

Firstgov.gov Help Page
http://www.firstgov.gov/featured/FGRedsign.html

Health Communities Without Borders.

“People in the two counties where Fargo, North Dakota and Moorhead, Minnesota are located have been working together to develop a health data/education website. The partners in this endeavor include the local hospitals, public health departments, private non-profit organizations, migrant health, our local cultural diversity organization and others. The coalition is known as Healthy Communities Without Borders. We are using the Healthy People 2010 as the information framework. The website is being developed and housed at North Dakota's state data center. At this point we feel we are just beginning to pilot the format and types of information that will be most valuable. One of our biggest challenges is finding health indicator data that accurately describes the local area. The region is composed of two main cities, two counties, two states and two federal regions so the data compatibility issues are large. We are actively seeking input and suggestions to improve the site.
http://www.hcwb.org

Top Ten Causes of Death
http://www.technopolitics.com/topten6-19.html