National Institute on Aging:

NIHSeniorHealth Web Site

NIHSeniorHealth is a website for older adults, designed in keeping with scientific evidence on the cognitive and vision changes that occur with age and the effect of these changes on computer use. The site makes aging-related health information easily accessible to those seeking reliable, easy to understand online health information. It also has specially designed features to make the web site easier for older adults to use such as large print, short, easy-to-read segments of information, simple navigation and a read-aloud feature.

Lead Agency:

National Institute on Aging (NIA) and National Library of Medicine (NLM)/
National Institutes of Health (NIH).

Agency Mission:

- Support and conduct genetic, biological, clinical, behavioral, social, and economic research related to the aging process, diseases and conditions associated with aging, and other special problems and needs of older Americans.

- Foster the development of research and clinician scientists in aging.

- Communicate information about aging and advances in research on aging to the scientific community, health care providers, and the public.

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Partner Agency:
National Library of Medicine
National Institute on Aging

General Description:

NIHSeniorHealth.gov
NIHSeniorHealth is a web site specifically designed for older adults. This site was developed by the National Institute on Aging (NIA) and the National Library of Medicine (NLM), both part of the National Institutes of Health (NIH). It features authoritative and up-to-date health information from institutes and centers (ICs) at NIH. In addition, the American Geriatrics Society provides expert and independent review of some of the material found on this web site. Each health topic includes general background information, quizzes and frequently asked questions (FAQs). Most topics include open-captioned videos. New topics are added to the site on a regular basis.

A research-based approach guided the development of NIHSeniorHealth. The design of the site grew out of NIA's research on the types of cognitive and vision changes that are a part of the normal aging process. Changes in memory, text comprehension, information processing speed and vision can interfere with older adults' use of computers. Research indicates older adults can effectively use computers if information is provided in a cognitively-friendly manner. NIH extensively tested NIHSeniorHealth with adults age 60 to 88 to ensure that it is easy for them to see, understand and navigate.

The web site features include large print, short, easy-to-read segments of information and simple navigation. A "talking" function reads the text aloud and special buttons to enlarge the text or turn on high contrast make text more readable. NIHSeniorHealth complies with Section 508 of the Rehabilitation Act of 1973, which aims to make federal electronic technology accessible for persons with disabilities.

In the future, NIH intends to add more topics and more videos, as well as improve the navigation and accessibility of the site, using evidence from usability testing, customer satisfaction surveys and industry best-practices to ensure the site continues to be as senior-friendly in the future as it has been thus far.

Excellence: What makes this project exceptional?

NIHSeniorHealth.gov is exceptional because it was conceived as a website to meet the cognitive and visual needs of older adults, primarily 60 or older. Many web sites have information aimed at seniors, but few have carefully designed the entire user experience around that age group. The site's design grew out of research conducted and supported by the National Institute on Aging and others about cognitive and vision changes that people experience as they age. The site presents basic health information in easy-to-read, consumer-friendly language and then reinforces it with quizzes, videos, and FAQs to help counteract changes in memory. To address aging-related changes in text comprehension and information processing speed, the text is presented in short snippets of information (one or two paragraphs per page) using a large text size as default with a very simple navigation structure. Finally, to aid older adults with vision changes NIHSeniorHealth includes a set of accessibility buttons across the top of each page that users may use to enlarge the text, change the color contrast, or hear the text read aloud

Significance: How is this research relevant to older persons, populations and/or an aging society?

By putting health information into a format that recognizes age-related changes, NIHSeniorHealth gives seniors tools to help understand their own health care and wellness concerns. Topics on the site range from diseases such as Alzheimer's *Disease, Arthritis,* and *Glaucoma* to wellness topics such as *Eating Well as You Get Older* and *Exercise and Older Adults*. NIHSeniorHealth also functions as a training resource for older adults. Many seniors are just beginning to use the Web. NIHSeniorHealth features a simple navigation structure and large text and navigation buttons, "easing" seniors into using the Internet. Older adults can then use the skills they've built on NIHSeniorHealth to effectively navigate the larger universe of government and health resources available online. In fact, the web site features a series of training materials called the Toolkit for Trainers developed by the National Institute on Aging. Trainers can use these free, easy-to-use training materials to help older adults find reliable, up-to-date online health information on their own. The training features two web sites from the National Institutes of Health: NIHSeniorHealth.gov and MedlinePlus.gov. Trainers start students off with NIHSeniorHealth and then transition them to the more complex MedlinePlus web site.

Effectiveness: What is the impact and/or application of this research to older persons?

NLM and NIA have consistently sought to assure the effectiveness of NIHSeniorHealth. NIH extensively tested the site with adults age 60 to 88 before launching the site. As the site has grown, NIH determined that the top-level navigation needed an update so it could accommodate many more topics. Usability testing with adults aged 60 and above was again included as an integral part of the design process. NIH also employs the American Customer Satisfaction Index to regularly monitor the effectiveness of the site for older adults. Content is reviewed and updated every 18 months to make sure it remains authoritative. The increasing numbers of unique visitors to the website reflect the growing interest in and awareness of the website by the public. For example, during the first quarter after it was launched in 2003, NIHSeniorHealth had around 94,000 unique visitors. As of March 2008, that quarterly total had risen to nearly a quarter million people.

Innovativeness: Why is this research exciting or newsworthy?

NIHSeniorHealth has been innovative in a number of ways. It was the first website developed for older adults using cognitive aging and vision research and has served as a model for web developers seeking to make their websites senior-friendly. NIHSeniorHealth has also been innovative in its use of accessibility features. Not only does it allow users to easily change the font size – a feature now found on a number of senior-friendly sites – it also lets them change the color contrast and hear the text read aloud, functions not typically available on other websites targeted to older adults. NLM regularly reviews the pronunciation by the computerized voice that reads the text, continually improving the dictionary the system uses to include new terms as they are added to the web site. Finally, as a repository of health information from 13 institutes and centers, NIHSeniorHealth is a unique and successful example of inter-Institute collaboration and was featured as a model for project managers at a STEP (Staff Training in Extramural Programs) forum presentation for NIH staff.