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Evaluating the Quality of Information Found in the Most Common Health Websites in Google Using DISCERN and CRAAP

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Comments

This poster was presented at the [Medical Library Association virtual conference](#) in August 2020.



Evaluating the Quality of Information Found in the Most Common Health Websites in Google

Using DISCERN and CRAAP



Most searched health-related topics on

GOOGLE

Skin Cancer, Lupus, Ear Infection, Cardiovascular Disease, Hashimoto's Disease, STI, Strep Throat, Contusion, UTI, Shingles, ADHD, Exocrine Pancreatic Insufficiency, Parkinson's Disease, Listhesis, Lymph, Genital Herpes, Dysuria, Flu, Herpes, Fibromyalgia, Syphilis, Anorexia, Hepatitis A, Hemorrhoid, Angiography, Celiac Disease, Autoimmune Disease, Chlamydia, Mental Disorder, Breast Cancer, Brain Embolism, Pneumonia, Depression, Melena, PTSD, Lyme Disease, Caduceus, Endometriosis, Hand, Foot, and Mouth Disease, Body Dysmorphia, Stroke, Ulcerative Colitis, Bronchitis, Schizophrenia, Diverticulitis, Anxiety, Hypertension, Yeast Infection, Scabies, E.coli, Diabetes, Sclerosis, Bradycardia, Psoriasis, HPV, Edema, Cyst, Candida Auris, Rabies, HIV/AIDS, Menorrhagia, Insomnia.



Most Common Health Websites and Quality Rankings

1. MedlinePlus – Health Information from National Library of Medicine

DISCERN Mean Score: **67.5** | DISCERN Quality Rank: **Excellent**
CRAAP Test Mean Score: **21** | CRAAP Test Quality Rank: **Excellent**

2. Mayo Clinic – Nonprofit Academic Medical Center

DISCERN Mean Score: **57.5** | DISCERN Quality Rank: **Good**
CRAAP Test Mean Score: **18.5** | CRAAP Test Quality Rank: **Good**

3. WebMD – Corporation

DISCERN Mean Score: **53** | DISCERN Quality Rank: **Good**
CRAAP Test Mean Score: **18** | CRAAP Test Quality Rank: **Good**

4. Centers for Disease Control and Prevention – Public Agency

DISCERN Mean Score: **50** | DISCERN Quality Rank: **Good**
CRAAP Test Mean Score: **18** | CRAAP Test Quality Rank: **Good**

5. MedicineNet – Medical Website owned by WebMD

DISCERN Mean Score: **46.5** | DISCERN Quality Rank: **Fair**
CRAAP Test Mean Score: **16** | CRAAP Test Quality Rank: **Good**

6. Medical News Today – UK Medical News Outlet

DISCERN Mean Score: **44.5** | DISCERN Quality Rank: **Fair**
CRAAP Test Mean Score: **14.5** | CRAAP Test Quality Rank: **Good**

DISCERN Instrument Questions

- 1 Are the aims clear?
- 2 Does it achieve its aims?
- 3 Is it relevant?
- 4 Is it clear what sources of information were used to compile the publication (other than the author or producer)?
- 5 Is it clear when the information used or reported in the publication was produced?
- 6 Is it balanced and unbiased?
- 7 Does it provide details of additional sources of support and information?
- 8 Does it refer to areas of uncertainty?
- 9 Does it describe how each treatment works?
- 10 Does it describe the benefits of each treatment?
- 11 Does it describe the risks of each treatment?
- 12 Does it describe what would happen if no treatment is used?
- 13 Does it describe how the treatment choices affect overall quality of life?
- 14 Is it clear that there may be more than one possible treatment choice?
- 15 Does it provide support for shared decision-making?
- 16 Based on the answers to all of the above questions, rate the overall quality of the publication as a source of information about treatment choices

Score out of 5; 1 for a definite no, 5 for a definite yes, and 2-4 partially.

CRAAP Test Questions

- 1 Currency: the timeliness of the information
- 2 Relevance: the importance of the information for your needs
- 3 Authority: the source of the information
- 4 Accuracy: the reliability, truthfulness, and correctness of the content
- 5 Purpose: the reason the information exists

Score out of 5; 1 for unreliable, 5 for excellent, and 2-4 partially

Objectives

Google search results can have an outsized impact on the health information that consumers find and trust. The researchers analyzed the health-related websites that show up most frequently on the first page of Google search results. After determining the websites that appear most frequently, the authors would evaluate the quality of the health information on these websites using the DISCERN instrument and the CRAAP test.

Methods

To replicate common health information searches, a list of 62 search terms was gathered from the most frequently searched health-related topics on Google Trends. Each term would then be searched on Google and the authors compiled a list of the first 10 search results. The researchers would determine the websites that appeared most frequently from the search results. The websites were then evaluated independently by two of the authors using the DISCERN instrument and CRAAP (Currency, Relevance, Authority, Accuracy, and Purpose) test to determine if these sites were providing quality information. For DISCERN, the researchers would evaluate each website based on sixteen questions and would give a score of 1-5. Similarly, the CRAAP test requires the researchers to rate each website on five questions, rating its reliability on a scale of giving each a score from 1-5.

Results

174 unique websites were found through the search results from all the terms. The top six websites that appeared most frequently for all the Google searches were WebMD, Mayo Clinic, MedlinePlus, Medical News Today, Center for Disease Control, and MedicineNet. The only website to rate an excellent score in both evaluation tools was MedlinePlus. The next highest scoring website was Mayo Clinic, followed by WebMD, CDC, and MedicineNet. The lowest rated website was Medical News Today. Overall, none of the website rated as below “fair” or “average” on either scale.

Conclusion

Evaluating the information from these six websites revealed that there was a wide range in terms of quality. Based on this assessment, MedlinePlus should be recommended by health information professionals and those in the healthcare field for general health information. The health information on the most popular websites is of at least average quality, regardless of which website is used.