# **Designing A Portal To Validated Cosmetic Surgery Information Websites**

A Parikh, A Clarke, P Butler

#### Citation

A Parikh, A Clarke, P Butler. *Designing A Portal To Validated Cosmetic Surgery Information Websites*. The Internet Journal of Plastic Surgery. 2005 Volume 2 Number 2.

#### **Abstract**

Introduction: Patients are increasingly accessing the Internet to obtain medical information. However, there have been many concerns about the difficulty in assessing the accuracy of this information. Although many website rating tools exist, the vast majority of these are unusable by consumers. Finding valid and up to date information can be very challenging and time consuming for patients.

Methods: We analysed the first 200 websites are a Google search on "cosmetic surgery" using a combination of consumer and clinician based website rating tools. After identifying the "top scoring" websites we designed a "gateway" website and used these sites as links.

Results: Eighty-nine percent of the websites did not meet the standard as described by the website rating tools. We also describe the method of design of the "gateway" website.

Conclusions: Patients need to be better informed about the difficulty in obtaining accurate, valid information on the Internet. By directing patients to validated websites, clinicians can ease this problem. There are several resource issues that need to be addressed in order to maintain a website.

#### WHAT WAS KNOWN BEFORE THE STUDY?

- Obtaining valid, accurate and up to date medical information is very difficult for the layperson.
- The usage of the Internet to obtain medical information is on the rise.
- There have been many instruments designed to assess the quality of health information websites; the vast majority of these cannot be used practically by laypersons.
- Physicians are often unlikely to recommend other websites as URL's change and many sites are not maintained and reviewed regularly. In disciplines such as cosmetic surgery, physicians may be reluctant to recommend a competitor's website.

## WHAT THIS STUDY ADDS

 Independent clinicians are best placed to assess the quality of medical websites.

- There is no need to design anymore websites on cosmetic surgery (or any other discipline) as there are over 16 million in existence.
- Using a combination of consumer and clinician based website assessment tools a "gateway" website has been designed.
- This "gateway" site can be recommended without any prejudice and is regularly maintained.

#### INTRODUCTION

Access to the Internet to obtain health information is increasing<sub>1</sub>. Studies have shown that patients are increasingly basing their healthcare decisions on this information<sub>2</sub>. However there have been many concerns regarding the accuracy of medical information on the Internet. Due to the unregulated nature of the Internet, inappropriate, factually inaccurate and out of date sites often surround good information sites. Finding valid information can be very challenging and time consuming for patients.

Many organisations have designed a vast array of instruments to assess the quality of websites<sub>3</sub>. A recent study located 273 such instruments and established that the vast majority of these could not be used practically<sub>4</sub>. Patients face two main problems whilst seeking information on the Internet. Firstly, there is no gold standard website assessment tool that patients can be recommended to use. Secondly, patients cannot reliably assess the accuracy of the medical content on a website. This can probably only be done by a senior physician. Therefore considering the above factors one cannot expect patients to make a quality assessment of each individual website prior to utilising the information on it.

#### **AIMS**

We aimed to analyse and grade websites on cosmetic surgery. Using the "top scoring" websites our objective was to design a "gateway" website. This avoided simply designing yet another website on cosmetic surgery that would add to the plethora of websites that are already in existence. This "gateway" website would identify the most accurate and informative sites.

#### **METHODS**

The first 200 websites on "cosmetic surgery" that appeared on the Google search engine were identified. Due to the lack of a standard website scoring tool, we chose to utilise a combination of tools. We felt it was important to use patient/consumer based tools, but in order to validate the content of each site several clinician-based tools were also utilised. The website rating tools used included, "Discern", "QUICK", "HON code Site Evaluation Form", as well as the "European Committee Quality Criteria for Health related Websites",

A combination of laypersons and junior doctors graded the sites using the patient orientated tools. Consultant plastic surgeons and senior trainees were used to assess the scientific content of the website and to ensure that the information was up to date.

The "top scoring" scoring websites were used as links from the gateway website.

## **RESULTS**

Seventy-one (36%) of the websites were excluded from our analysis. These consisted of animal websites, media articles, and interviews with celebrities as well as advertisements from finance companies. Thirteen (7%) of these excluded

websites could not be accessed, as the host server could not be located.

In total 115 websites (89%) failed to meet the acceptable standard as required by our website rating tools. The vast majority of these sites failed to adequately address the description of the surgical procedure as well as the potential complications. Other problems included failure to state the expertise of the information provider or list any references.

The "gateway" website was designed using basic software and a model that had been previously successfully trialled<sub>9</sub>. The "top scoring" websites were incorporated into the short text passage as embedded links. Copyright laws were adhered to and permission was obtained from the hosts prior to using the link sites. The qualifications, contact addresses of the authors as well as the date of the last review were added to the site. The gateway site was allocated http://www.nisps.com as the Uniform Resource Locator (URL).

#### CONCLUSION

The provision of new websites has proceeded without any quality controls. Our Google search on "cosmetic surgery" yielded over 16 million sites! It is very challenging for patients to locate and access accurate information. Patients need to be protected and made aware of the limitations of medical information available on the Internet. This is especially relevant in disciplines such as cosmetic surgery where there are a vast array of aesthetic companies and individual physicians that promote themselves.

The utility of website rating tools is also questionable. Rather that design yet another website assessment tool, this paper suggests a "gateway" model of website design that makes efficient use of existing high quality websites that have been assessed by consultant physicians using a combination of website assessment tools. It validates the existing sites in a cost efficient manner and is easily transferable to other disciplines in medicine. Designing another website to add the plethora already in existence does not seem to be a suitable use of time or resources. It is however important to be aware of the resource implications in ensuring that the "gateway" remains up to date and valid.

#### **CORRESPONDENCE TO**

Apul Parikh 30 Broomsleigh Street West Hampstead London NW6 1QH Email: apulparikh@yahoo.com Tel: 0207-794-0500 ext 4340 (work) 07917-785777 (mobile)

Fax: 0207-472-6557

#### References

1. Fox S, Rainie L, Horrigan J et al. The online health care revolution: How the web helps Americans take better care of themselves. Pew Internet and American Life Project Online Report, November 26, 2000.

http://www.pewinternet.org/pdfs/PIP\_Health\_Repost.pdf
2. Sharp WJ. Locating and evaluating cancer information on
the Internet. Cancer Practice May/June 2001, Vol.9, No.3
3. Jejurkar SS, Rovak JO, Kuzon WM, Chung KC, Kotsis
SV, Cederna PS. Evaluation of plastic surgery information
on the Internet. Ann Plast Surg.2002 Nov;49(5):460-5.
4. Bernstam EV, Shelton DM, Walji M, Bernstam FM.
Instruments to assess the quality of health information on the
World Wide Web: what can our patients use? Int J Med Inf.

74(1), January 2005, 13-19.

5. Charnock D, Shepperd S. "Learning to DISCERN online: applying an appraisal tool to health websites in a workshop setting". Health Educ Res. 19.4 (2004):440-46.

6. The Quality Information Checklist.

http://www.quick.org.uk

7. Health on the Net Foundation.

http://www.hon.ch/HONcode/HONcode\_check.html

8. Communication from the Commission to the Council, the European Parliament, the Economic and Social Committee and the Committee of the Regions.

http://www.hi-europe.info/files/2002/9948.htm

9. Parikh AR, Lloyd M, Schofield J, Clarke A, Butler PEM. Patient information. Health Service Journal Oct 2005;26

## **Author Information**

## A.R. Parikh

Research Registrar, Department of Plastic & Reconstructive Surgery, Royal Free Hampstead NHS Trust

#### A. Clarke

Consultant Psychologist, Department of Plastic & Reconstructive Surgery, Royal Free Hampstead NHS Trust

## P. E. M. Butler

Consultant Plastic & Reconstructive Surgeon, Department of Plastic & Reconstructive Surgery, Royal Free Hampstead NHS Trust