

1 Define order in which to apply AutoCWW to a given website

To apply AutoCWW to an entire website it is most efficient to analyze the website elements and webpages in a particular order. This section treats the elements in the specified order.

1.1 Site-wide navigation system and information architecture

Content area links vary from webpage to webpage within a site, but some links are always available. The first step in AutoCWW analysis, therefore, is to identify the site-wide navigation system of the website under analysis by searching for conventional elements of the navigation

The screenshot shows the home page of Osteosarcoma Online. At the top left is the logo "Osteosarcoma Online" with the tagline "Improving the lives of teens and young adults with osteosarcoma". To the right is a news section with two items: "Osteosarcoma Program Explores New Diagnostic Tool for Osteosarcoma: New Equipment and Software Aid Project" and "New Move For Advocacy To Fund Osteosarcoma Research", with a "Read more >>" link. Below this is a navigation bar with buttons for "Home", "Osteosarcoma Facts", "Make a Gift", and "Contact Us". The main content area starts with the mission statement: "Our vision is to improve survival and quality of life for teens and young adults with osteosarcoma through advances in patient care, education and research." This is followed by a link: "More about the Osteosarcoma Clinical Care and Research Program." Below this are three photo galleries: "Patients" (a young boy with a shaved head), "Family & Friends" (a woman hugging a patient), and "Health Professionals" (two women looking at a document). At the bottom, there is a footer with text: "Osteosarcoma Online is a Web site of the Osteosarcoma Clinical Care and Research Program, a program sponsored by the Indiana University Cancer Center. The Indiana University Cancer Center is an NCI-designated Clinical Cancer Center." Logos for "Indiana University School of Medicine", "IU cancer center" (with tagline "The Future. Together."), and "National Cancer Institute" are present. There is also an "HON @ CODE" logo with the text "We subscribe to the HONcode principles. Verify here." and a "Web Site Disclaimer" link. The date "Date last modified: May 29, 2003" is also visible.

Figure 1. Home page of Osteosarcoma Online (<http://iucc.iu.edu/osteosarcoma>)

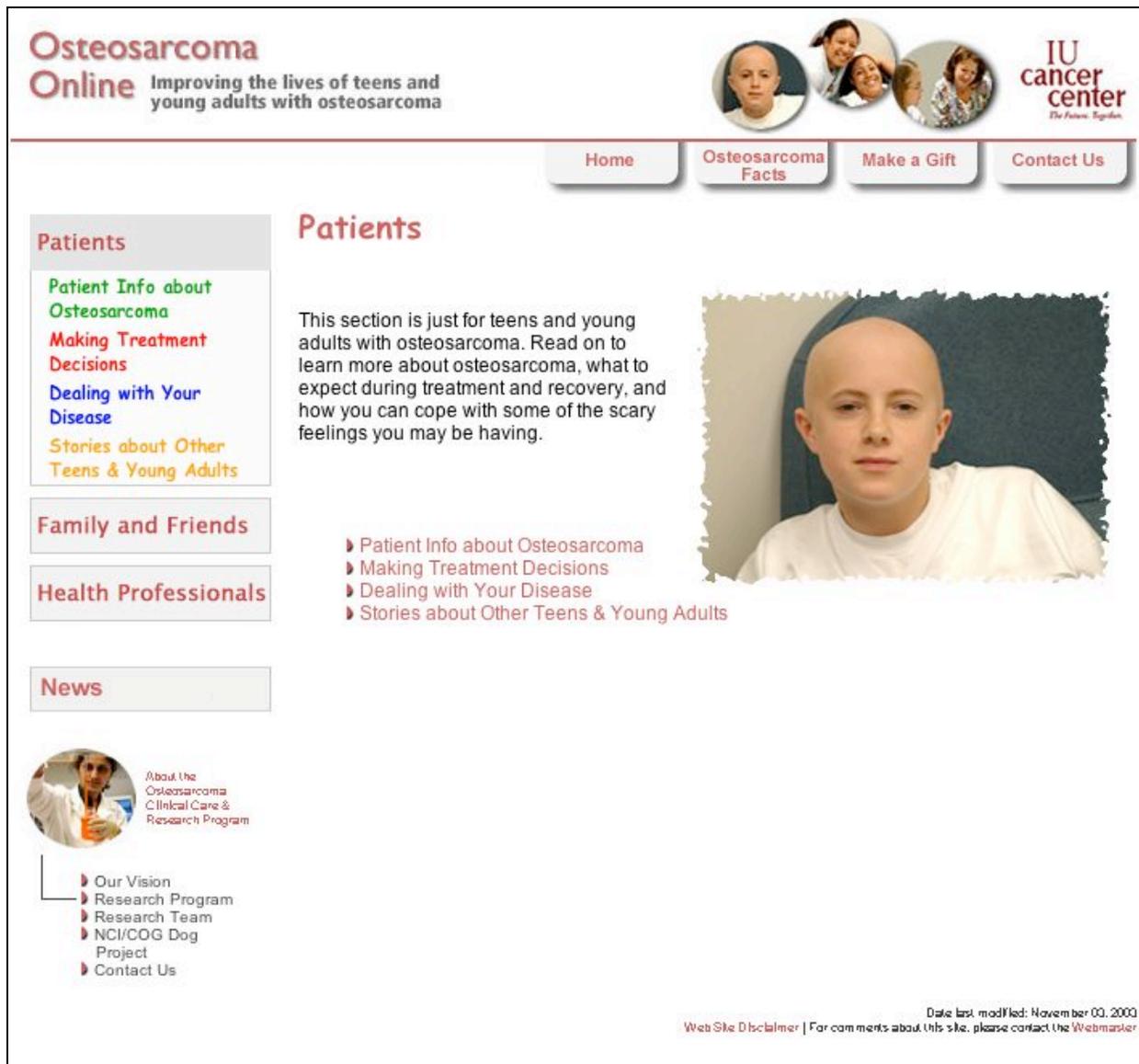


Figure 2. Patients subsite main page (level 2) of Osteosarcoma Online

system that appear on the home page and appear on all or most other webpages in the same website. Figure 1 shows the home page of Osteosarcoma Online, and Figure 2 shows the Patient subsite main page. To identify the site-wide navigation system we can extract the common elements of the navigation system that appear on these two pages. Subsequently we can verify whether these components are actually site-wide components by checking whether these same elements are present on all of the remaining subsite main webpages and principal sections of the website.

1.1.1 Site Logo

The site logo typically combines an image with text that names and explains the nature of the website. For example, the site logo of Osteosarcoma Online in Figure 3 uses an image of the words “Osteosarcoma Online” and then adds explanatory text: “Improving the lives of teens and young adults with osteosarcoma.” The

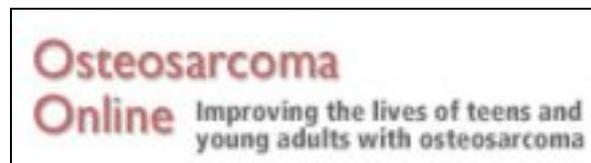


Figure 3. Site logo for Osteosarcoma Online

top right corner of Figure 2 displays a second site logo that links the images identifying the three subsites of Osteosarcoma Online (Patients, Family and Friends, and Health Professionals) to the parent organization, Indiana University Cancer Center: “IU cancer center: The Future. Together.” This full site logo appears on all webpages in the website except for the home page.

1.1.2 Navigation bar linking to main sections of website

The top navigation bar typically has buttons that link to important sections of the website. In Osteosarcoma Online, the top navigation bar displays four buttons and consistently appears in the upper right corner of the webpage, but the home page uses a distinct variant of this navigation bar.

Figure 4 shows the four-button navigation bar for the home page, and Figure 5 displays the comparable element from the Patients subsite main page. This visuospatial-semantic grouping has visuospatial unity. Four button images of the same shape and color scheme are mounted below the right end of a red line that spans the width of the webpage (see Figure 2).



Figure 4. Home page navigation bar linking to main sections of Osteosarcoma Online website



Figure 5. Patients subsite main page navigation bar linking to main sections of Osteosarcoma Online website

This visuospatial-semantic grouping also occupies a consistent location in the upper right corner of the webpage, and the grouping is reinforced by white space separating the pattern from other subregions of the page. Consistent semantic meaning of this visuospatial-semantic grouping comes from the four links that are always nested within this unit: Home, Osteosarcoma Facts, Make a Gift, and Contact Us.

1.1.3 Navigating information contents: headings and subheadings

Figure 6 shows two instances of the navigation component that displays the hierarchically organized information contents of the Osteosarcoma Online website, one taken from the Patients subsite main page and the other from the Family and Friends subsite main page. There are three main headings for the contents of the website: Patients, Family and Friends, and Health Professionals. A fourth heading is offset from the others: News. This last The News column has a distinct appearance on the home page, occupying the upper right corner of the webpage without use of the word “News.” This is liable to be confusing to users, and they may not realize that the upper right corner features headlines from the News section of the site. At the bottom of the column is one additional heading: About the Osteosarcoma Clinical Care and Research Program. This additional heading appears on all webpages except the home page.

Because this is the Patients subsite main page, the contents also displays the four subheadings that are nested under the Patients heading: Patient Info about Osteosarcoma, Making Treatment Decisions, Dealing with Your Disease, and Stories about Other Teens and Young Adults. One additional heading is displayed at the bottom of the column: About the Osteosarcoma Clinical Care and Research Program, and the subheadings for this heading are displayed on the home page and all subsite pages.

1.1.4 Footer navigation bar

Two links always appear in the footer navigation bar of the site. One link is the “Web Site Disclaimer.” The other link directs comments about the website to the “Webmaster.” The position of this visuospatial-semantic grouping is center bottom on the home page (see Figure 1), but right bottom corner on other pages (e.g., see Figure 2).

1.2 Home page

As a result of tagging all the site-wide visuospatial-semantic groupings and their variants, we have already identified most elements of the home page and need only look at the unique elements. Figure 7 (cf. Figure 1) shows that the unique elements are those that display the

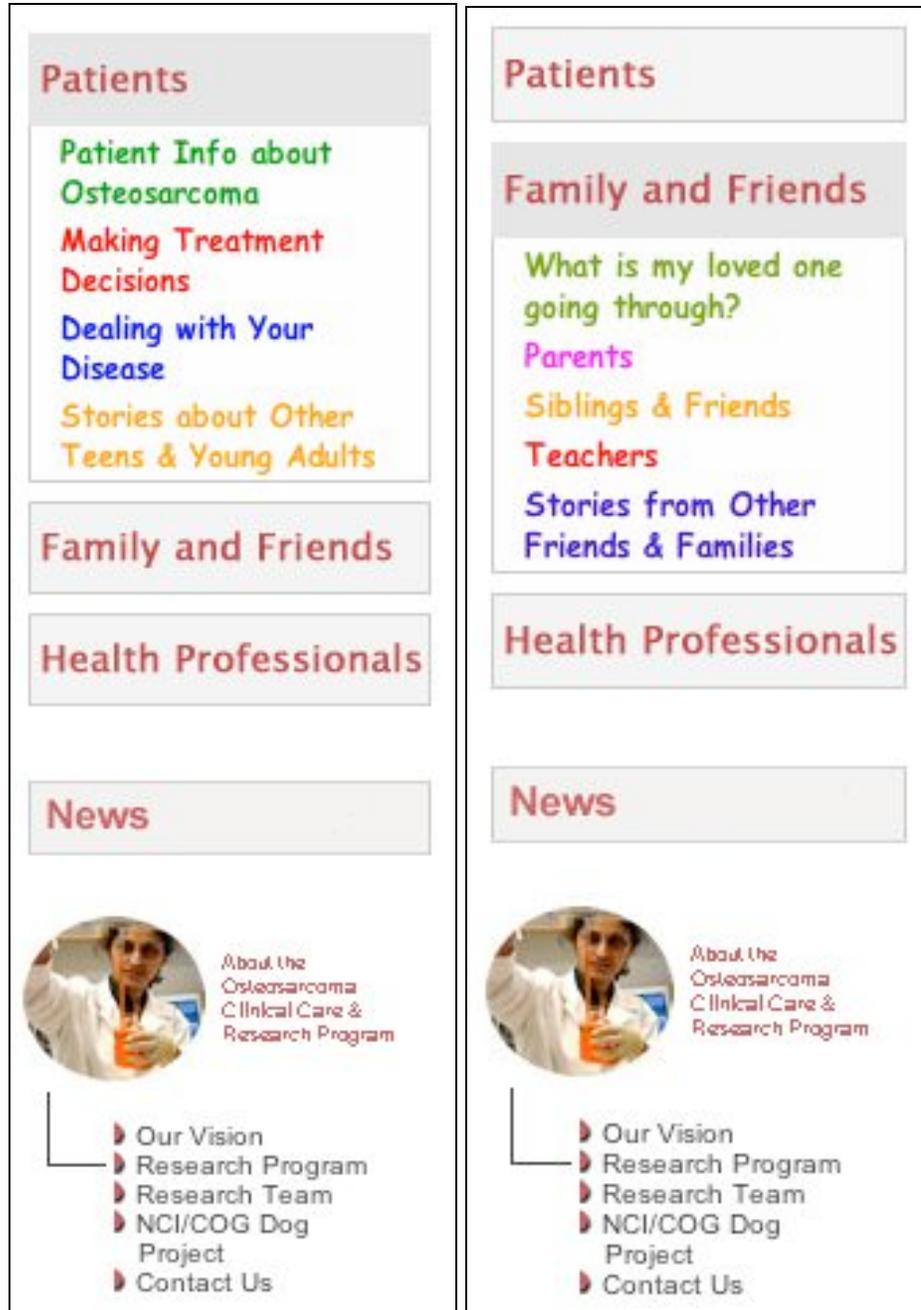


Figure 6. Information contents navigation column, juxtaposing the differences in you-are-here shading and subheadings for the column from the Patients subsite (left) and Family and Friends subsite (right)



Figure 7. Reliability information given in visuospatial-semantic grouping of externally linked images and explanatory text associated text, from the Osteosarcoma Online home page.

accreditation and the superordinate organizational affiliations of the website, verifying the reliability of the information presented on the website and eliciting the users' trust in the website content. Four images present external links. One links to and certifies that the site is accredited by the Health on the Net Foundation (HON) and adheres to the HONcode of ethics for providing trustworthy medical information on the Internet. The other three logos show that Osteosarcoma Online is part of the Indiana University School of Medicine and the Indiana University Cancer Center (IU cancer center), and that the National Cancer Institute (NCI) has designated the IU cancer center as one of its elite group of approved cancer care centers in the U.S. This set of four external links can be counted as a single visuospatial-semantic grouping.

1.3 Subsite main pages and subsite-wide navigation systems

Figure 8 shows the visuospatial-semantic grouping of four links that occur on every webpage within the Patients subsite. This is the only additional element of the subsite main page.

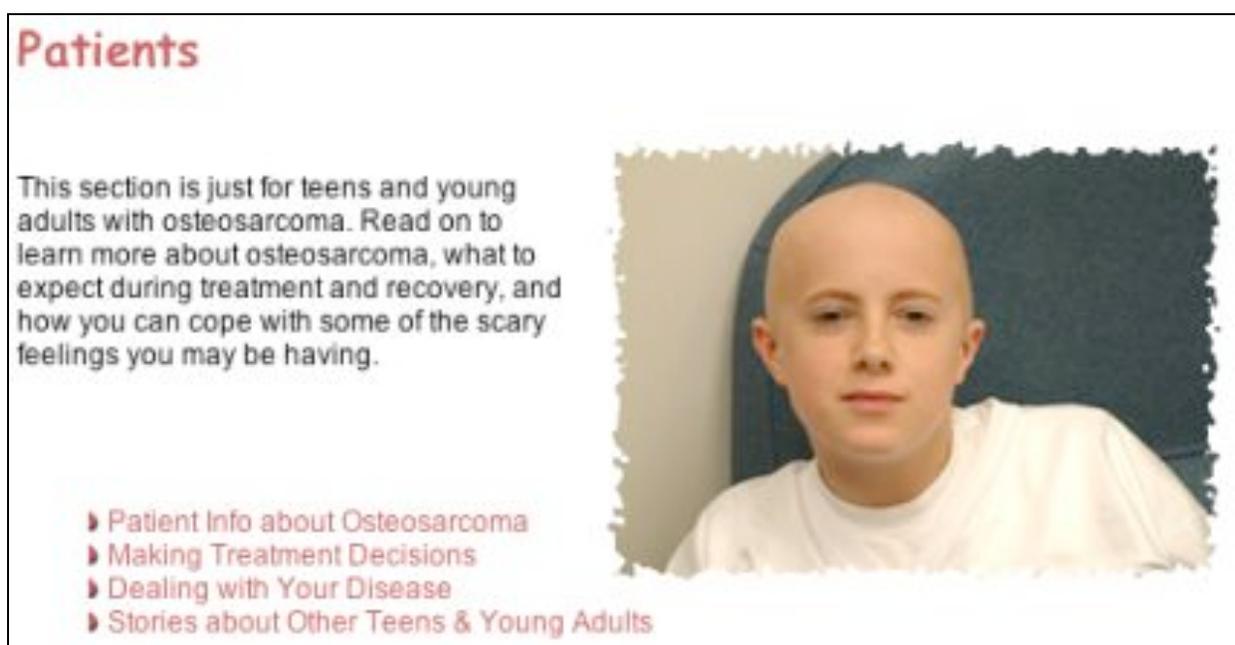


Figure 8. Four subsite-wide links of Patients subsite

1.4 Level three links webpages

There are four level-three pages within the Patients subsite, one for each of the subsite-wide links shown in Figure 8. Figure 8 shows one of these four level-three webpages with its content text and new set of links – labeled with the heading “More Info” – in the right-hand navigation column specific to the “Dealing with Your Disease” subheading. This set of links and its heading compose another visuospatial-semantic grouping for AutoCWW analysis.

Osteosarcoma Online Improving the lives of teens and young adults with osteosarcoma

Home Osteosarcoma Facts Make a Gift Contact Us

Patients > Dealing with Your Disease

Dealing with Your Disease

Especially during your first year of treatment, you may have the most difficulty adjusting to life with osteosarcoma. You will experience many feelings, side effects and physical changes due to your disease and the treatment you undergo. Your friends and family will be impacted as well. Also, osteosarcoma will have a great affect on your school, work or after-school activities. You may have problems keeping up with schoolwork, concerns about loosing your job, and questions about how and when you can resume normal activities.

It is important that you deal with these issues as soon as you start having problems. Learn about your disease and how to cope with your feelings and changes to your body. Learn how to better communicate with your friends and family, and how to share your feelings. This Web site is a good place to start and learn where you can go for more help. For example, support services at your treatment center and in your community are other helpful resources.

More Info

- ★ How can I cope with my feelings and emotions?
- ★ How can I cope with side effects?
- ★ How will I recover physically?
- ★ How will osteosarcoma affect my family?
- ★ How can I talk to my friends about osteosarcoma?
- ★ How will osteosarcoma affect my school year or work?
- ★ What support services are offered at Riley Hospital for Children?
- ★ What are other support services in my community?
- ★ What can I expect for life after osteosarcoma?
- ★ Where can I go for more information?

Date last modified: November 03, 2000
Web Site Disclaimer | For comments about this site, please contact the Webmaster

Figure 9. Level-three webpage: “Dealing with Your Disease” subheading of the Patients subsite

1.5 Level four links webpages

Clicking a link in Figure 9, for example, the link to “How can I cope with my feelings and emotions?” produces a webpage with that same title and content information appropriate to the title. The More Info visuospatial-semantic grouping of links remains the same and all the level-

four webpages. On some level-four webpages there are additional links to level-five webpages with additional content to supplement the content material of the level-four pages.

2 Steps of AutoCWW navigation system analysis

2.1 Formulate set of user goals

2.1.1 List user groups and semantic space that most validly represents each user group

2.1.2 Representative set of user tasks for each user group

2.1.3 Discount list of user tasks: full text or summaries of all content webpages

2.2 Identify visuospatial-semantic groupings

2.2.1 Previously unanalyzed components of navigation system

2.2.2 Subregions of the webpage content area

2.3 Identify and repair insufficient familiarity problems

2.4 Identify and repair confusable heading/link texts

2.5 Optimize semantic coherence within visuospatial groupings

2.6 Elaborate link and heading texts to simulate reading comprehension

2.7 Identify and repair goal-specific competing headings and links

2.8 Compile to-do list consequential changes for other webpages