

# Oakwood Healthcare Goes Responsive in Website Redesign: Enhancing the User Experience



by Mary Zatina

Communications industry estimates indicate that sometime this year we will pass a

tipping point from which there is no going back. That is, more people will access the Internet with mobile devices such as smartphones and tablets than with desktop computers. And many of them will be searching for healthcare information and contacting hospitals for services. Desktops likely won't fade away for a while, so the trick becomes managing Web content in a way that users will have a satisfying experience no matter what type of device they access.

Traditionally, that has meant a healthcare organization had to maintain two or more websites: a full version for desktops and a smaller, stripped-down version for mobile devices. Management of the sites meant duplicate sets of content, at least two designs, and often separate URLs. More work, more personnel, more time, and more expense.

Oakwood Healthcare, a 1,200-bed, four-hospital health system, needed to accommodate mobile users. In any case, the Dearborn, MI-based system would have to redesign its extensive website, which incorporated more than 30 other sites. Oakwood's website information architecture had been developed such that major content sections were separate "sites" with their own content structures.

## Time to move beyond the usual

Dave Stanis, director of digital communications for Oakwood,

knew it was time to go beyond the usual, less-than-optimal visitor experience with healthcare websites. "The pinnacle of our organizational strategy is to provide a great patient experience. And a key part of that is how consumers interact with us online before or after their visit, and sometimes even during their hospital stay," says Stanis.

The Oakwood website design and functionality had become dated and not in tune with the latest user experience thinking and best practices. It was simply time for the update that every site should undergo every two years or so.

"At the same time, we knew that a growing number of people were coming to our website from places other than their standard desktop – and our site, as then designed, was not conducive to a good experience in the new environment," Stanis says.

During the last two years, according to Google Analytics, Oakwood saw the following increases in the use of mobile phones and tablets for the January 1 to May 7 period:

|      |                |
|------|----------------|
| 2011 | 27,022 visits  |
| 2012 | 67,689 visits  |
| 2013 | 142,257 visits |

At the time, Oakwood had no mobile site. The initial thought was to develop a separate site for mobile and execute a "facelift" for the desktop site. The possibility of responsive design came about as Stanis and the Oakwood team researched the available options to accommodate mobile, and the suggestion came up to look into the emerging trend of responsive design.

## Weighing the options

Responsive design is a cutting-edge programming technique that utilizes the most advanced code language of the Web, HTML5 and CSS3, to make a website viewable on any device. A single website will *automatically* adapt itself to the viewing device. One website for all screens means no more duplicate sets of content that require extra resources to maintain.

Stanis explains, "It was maybe a year and a half or so when we first started talking about it, weighing our options as our mobile market grew. But this was a very new technology. We're innovators, but we're not daredevils. We like to take a measured, reasonable risk at being first to market with something. But here we decided to take a leap of faith."

The team also took into account the misconception that the mere fact of having a mobile website would attract more users. That could in fact happen – but only if the site is promoted that way. Average visitors only know that they want information quickly and easily, from whatever device they're using. It became clear that responsive design would produce that result, as well as provide the efficiencies of maintaining a single site.

## What do users want?

Oakwood's redesign process began with a usability review of the current site, evaluating existing content and how it might fit into a new – and responsive – site. The team had extensive conversations about what would make a great user experience, discussing ease of navigation, clearly

marked popular destinations, such as location directions, phone numbers, and physician directories. It also considered best practices of usability as a springboard for the new design.

The team looked at Google Analytics to understand visitors' goals and online tasks. "There are certain things that you do on your phone while you're in a waiting room or at the airport or at home, and there are some things that you don't," says Stanis. "What we found is that people are looking for high-level *transactional* information." In other words, people used their phones for common tasks, such as getting travel directions or finding a doctor, location, or phone number.

### **Dealing with design and content**

As part of the process, the team created a number of wireframes to test various designs and how content would be viewed on a desktop, tablet, or phone. Once the page schematic was chosen, it was flushed out with various design elements, colors, photos, and buttons. Designers also continued to tweak the results and make a number of aesthetic changes.

Stanis and the team's Web content specialist audited all existing content to make sure it was responsive-ready. The team had to rebuild any Web page that used fixed-width table-based layouts, which would not accommodate the design as it changed from platform to platform. Content set in a table 980 pixels wide, for example, will zoom out when viewed on a phone with a screen width of 320 pixels, and the image will appear too tiny to read. Or the page may simply not respond.

Content, as written, also had to be easily read on a mobile device. The most important information had to

be at the top, with supporting details below to enable people to find what they want quickly in the first couple of lines.

Of Oakwood's 35 sites, 31 were converted. The remaining sites were either employee internal sites where the content was not conducive to viewing on a tablet or phone or involved third-party functionality that was not workable with responsive design. The conversion effort took a couple of months.

### **The 'fluid canvas'**

Stanis learned to free himself from seeing content as static pages. "It's not at all like print, or even a standard Web page, where whatever you lay out essentially doesn't change," he stresses. "You have to view the information as being very flexible – a *fluid canvas*. It's necessary to look at every piece of content through three different lenses – what it looks like on a desktop, tablet, and phone – all at the same time."

Elements will "break," that is, move around or stack according to the device. To a certain extent, an element will stay where it's designed to be, such as a picture with copy around it. However, when content reaches a "break point," copy will stack underneath the image. Or if the image is not that important, the decision might be made that content will shift to the top, and the image will slide underneath. The image itself could change size and scale down, and shift again if it's being viewed in portrait or landscape.

### **Final considerations**

From a cost standpoint, responsive-design conversion requires a somewhat larger initial investment in time and resources than the standard redesign of a site. The more advanced HTML5 code is different from traditional HTML; everything

on the site has to be reconsidered for the different platforms.

Using a hypothetical budget for two separate sites, mobile would cost \$20,000 and desktop would run \$80,000. At the same time, a single responsive site would cost \$90,000 – more expensive than a desktop site alone and involving a somewhat longer development process.

Stanis had no trouble gaining senior executives' buy-in for the project. "The concept of responsive design can be difficult to grasp," he says. "But the moment you start holding up your phone ... they're seeing the design change before their eyes. Then you show them the traffic steps, the analytics. No one gave me resistance."

The entire process to complete a single, responsive-design site took about nine months.


"People expect that a leader in any industry is going to have a website that's compatible with all devices today," says Stanis. "We really wanted to make it easy for current and prospective patients, who have busy lives, to schedule healthcare needs anywhere and anytime. Now we can do that."

### **The future is personal**

Oakwood has recently launched a mobile app with Medical Avatar, LLC, called Oakwood Medical Avatar. This new app allows viewers to see an anatomical image of themselves, including their face, in which they can learn more about different areas of their body, complete with health conditions and diseases. Eventually, the app will include symptom, blood pressure, and weight tracking. Functionality will continue to be added over the coming months, and future releases

will even be able to graphically display EMR data.

“As healthcare shifts from ‘sick care’ to ‘well care,’ we think this type of application will help us improve the health of our community,” says Stanis. “You can look at your blood pressure, your labs, or imaging results as data and text values on paper, but when you look at those results on an image of your own body, you are more likely to make positive changes in your lifestyle to improve your health. We think it’s the basis for a really unique, innovative way of connecting with our customers.”

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