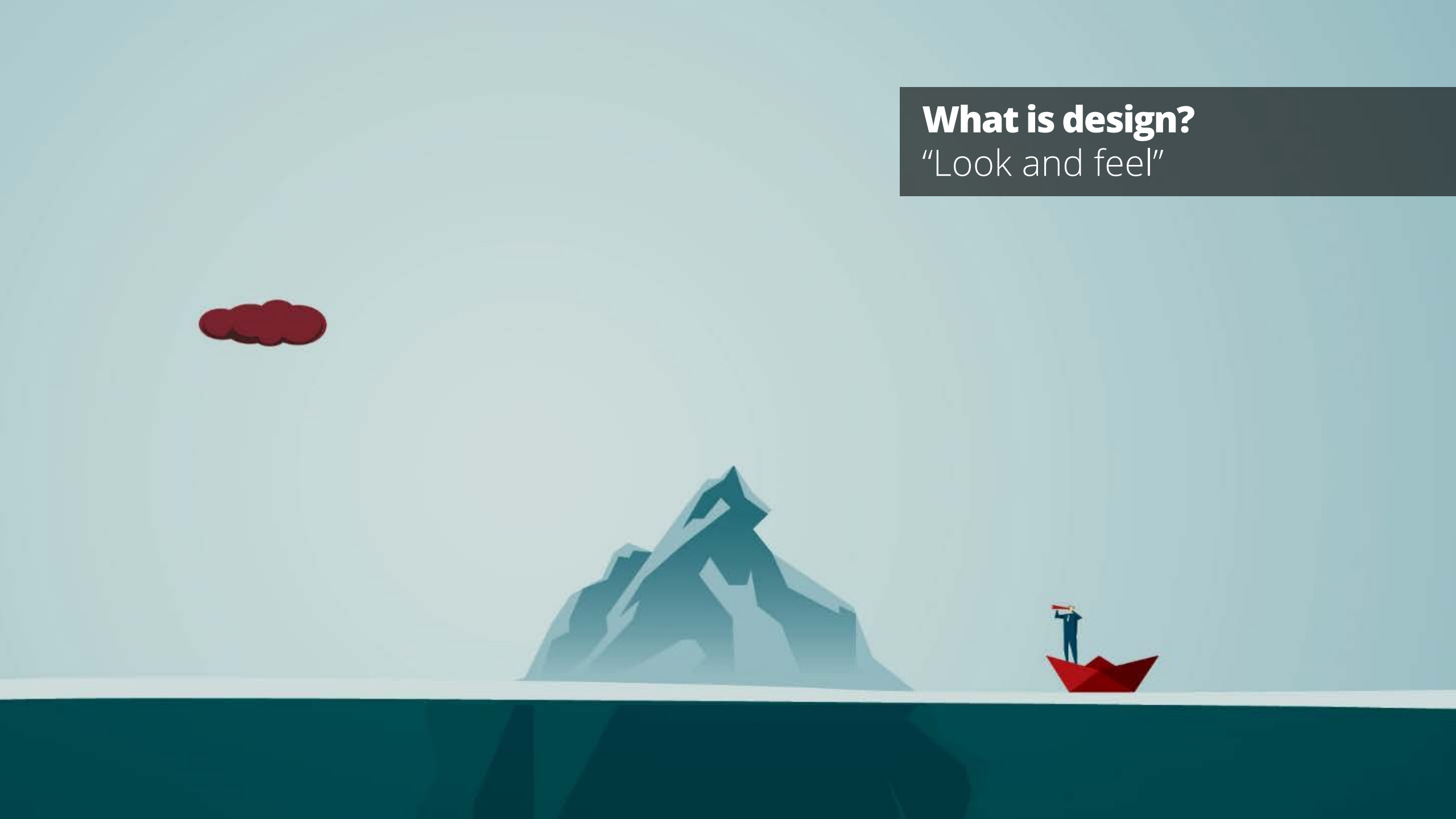
Beneath the Surface

How Web Design Impacts Your Site's Health

GEONETRIC®

What is design?
“Look and feel”



What is design?
"Look and feel" + how it's made.

JavaScript
CSS
SVG
Foundation
HTML
Web Fonts
Haml
PNG
JPEG
Jasmine
JQuery
React
Bootstrap
Angular
Backbone
Ember
LESS
SASS
Handlebars
Git
Bower

Who does “design”?

Who does “design”?

Design happens.

What are the impacts
of design choices?

Performance

+

Maintainability

What are the impacts
of design choices?

Accessibility
Mobile UX
SEO
Maintainability

Accessibility

https://www.geonetric.com/website-design/make-your-website-more-accessible/

18.7% of Americans
have some type of disability

Accessibility

- Americans with Disabilities Act (ADA) prohibits discrimination on the basis of disability in places of public accommodation
- Section 1557 ties web accessibility to ACA
- Updated Section 508 rules in effect in January 2018

March 7, 2017 Share

WEBSITE DESIGN

Lawsuits Put Web Accessibility On The Agenda For Healthcare

Making your web properties available to all visitors is the right thing for your organization to do, particularly for healthcare organizations.

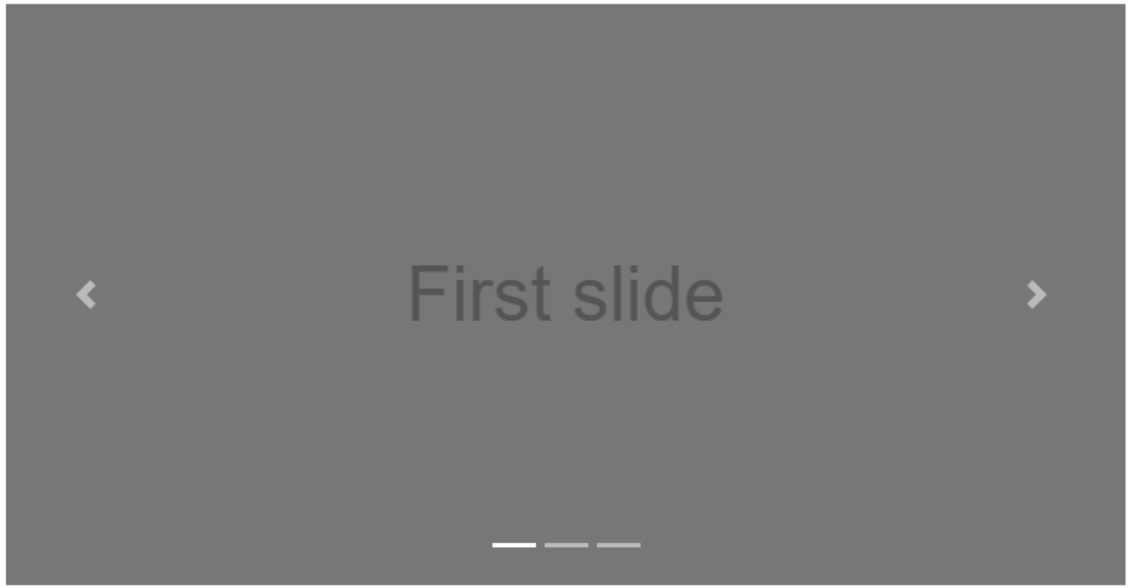
A class-action lawsuit against HCA in January, 2017 is only the latest in a growing list of actions taken by disability activists to make websites available and usable by everyone.

Legal actions against big brands has been a common tactic to raise awareness of the challenges of website accessibility and to encourage organizations to prioritize the costs and trade-offs of improved web accessibility. As far back as 2009, Target Corporation was sued

https://www.geonetric.com/website-design/lawsuits-put-web-accessibility-on-healthcare-agenda/

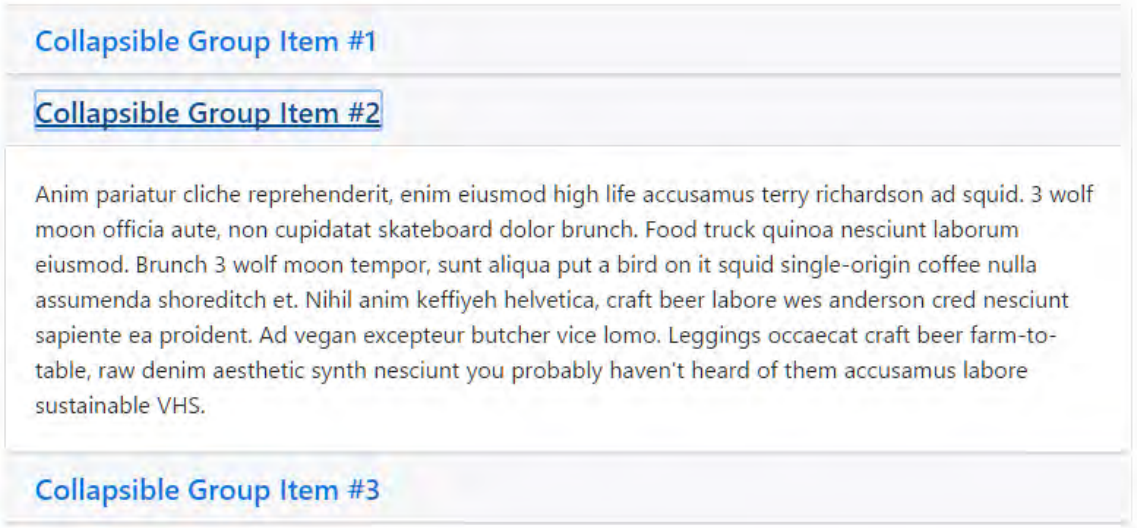
Common design-related accessibility pitfalls

- Photo sliders and carousels



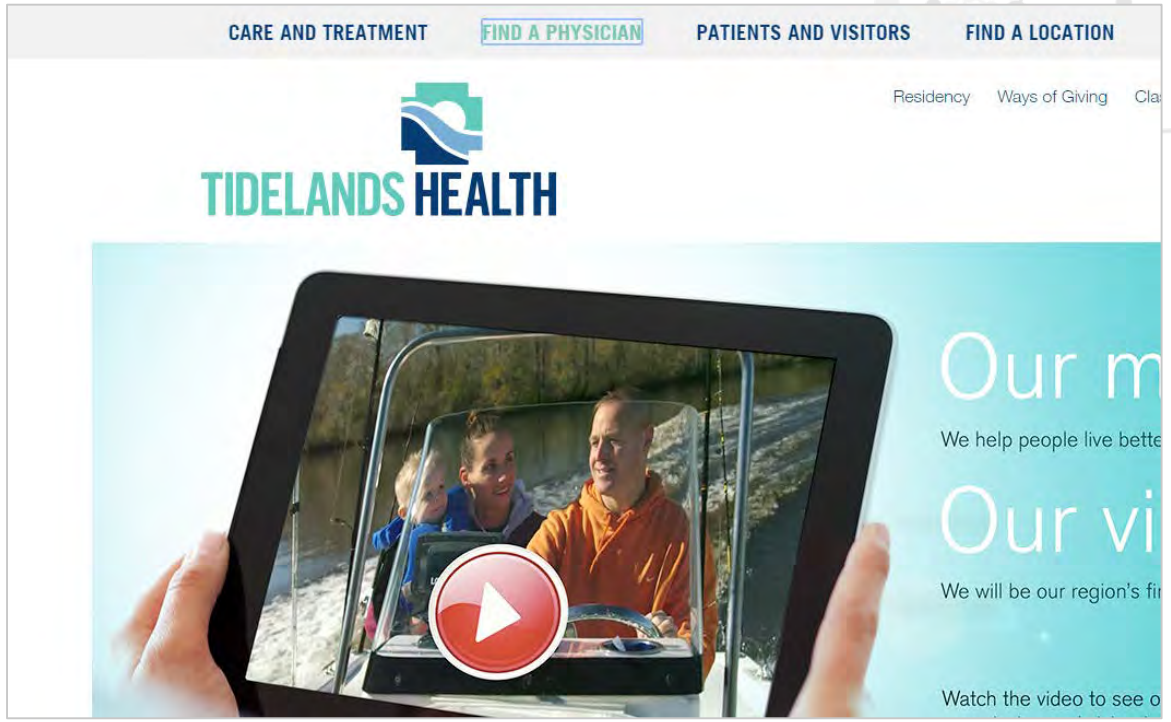
Common design-related accessibility pitfalls

- Photo sliders and carousels
- Hidden content and menus



Common design-related accessibility pitfalls

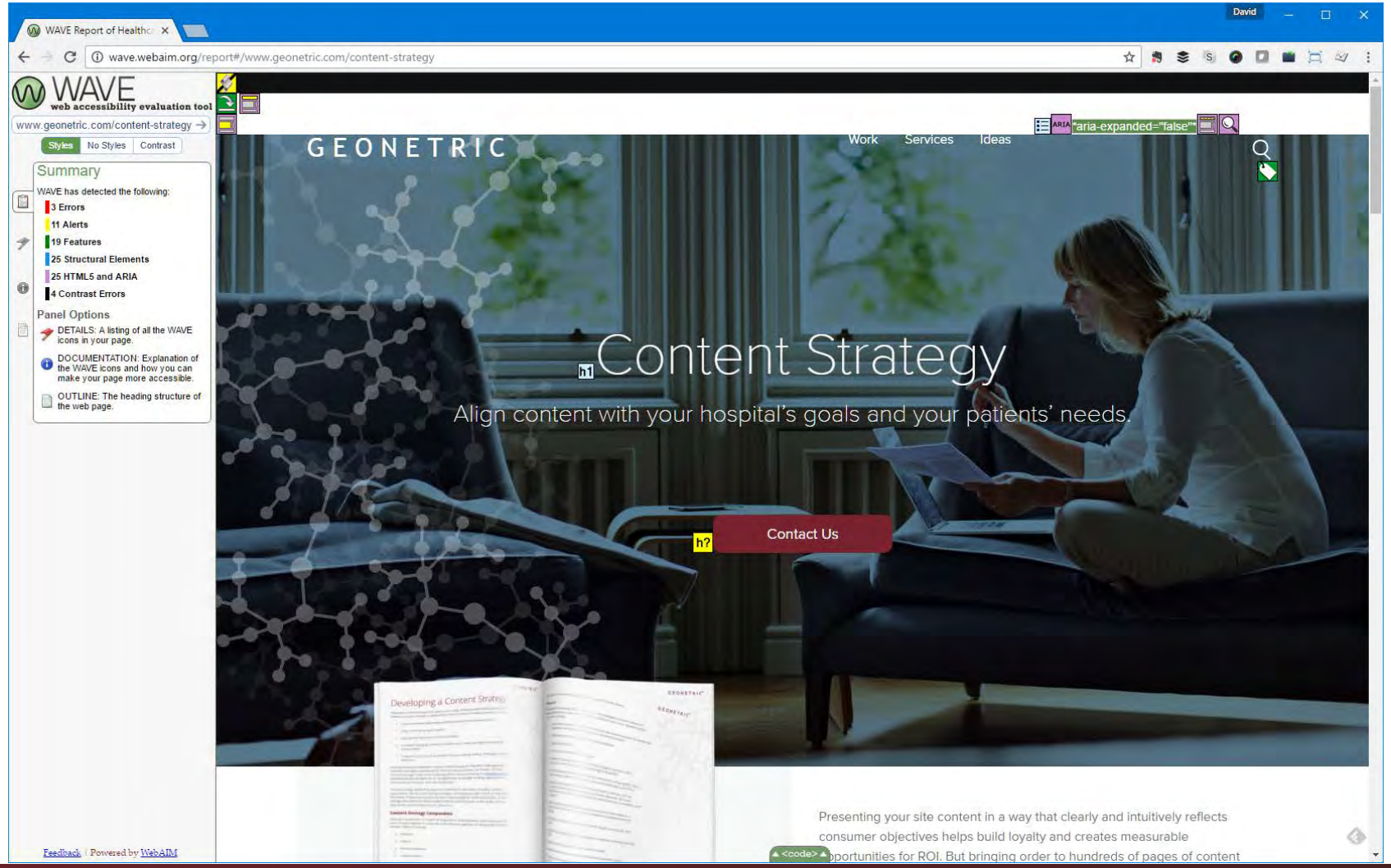
- Photo sliders and carousels
- Hidden content and menus
- Lack of keyboard accessibility and visible focus

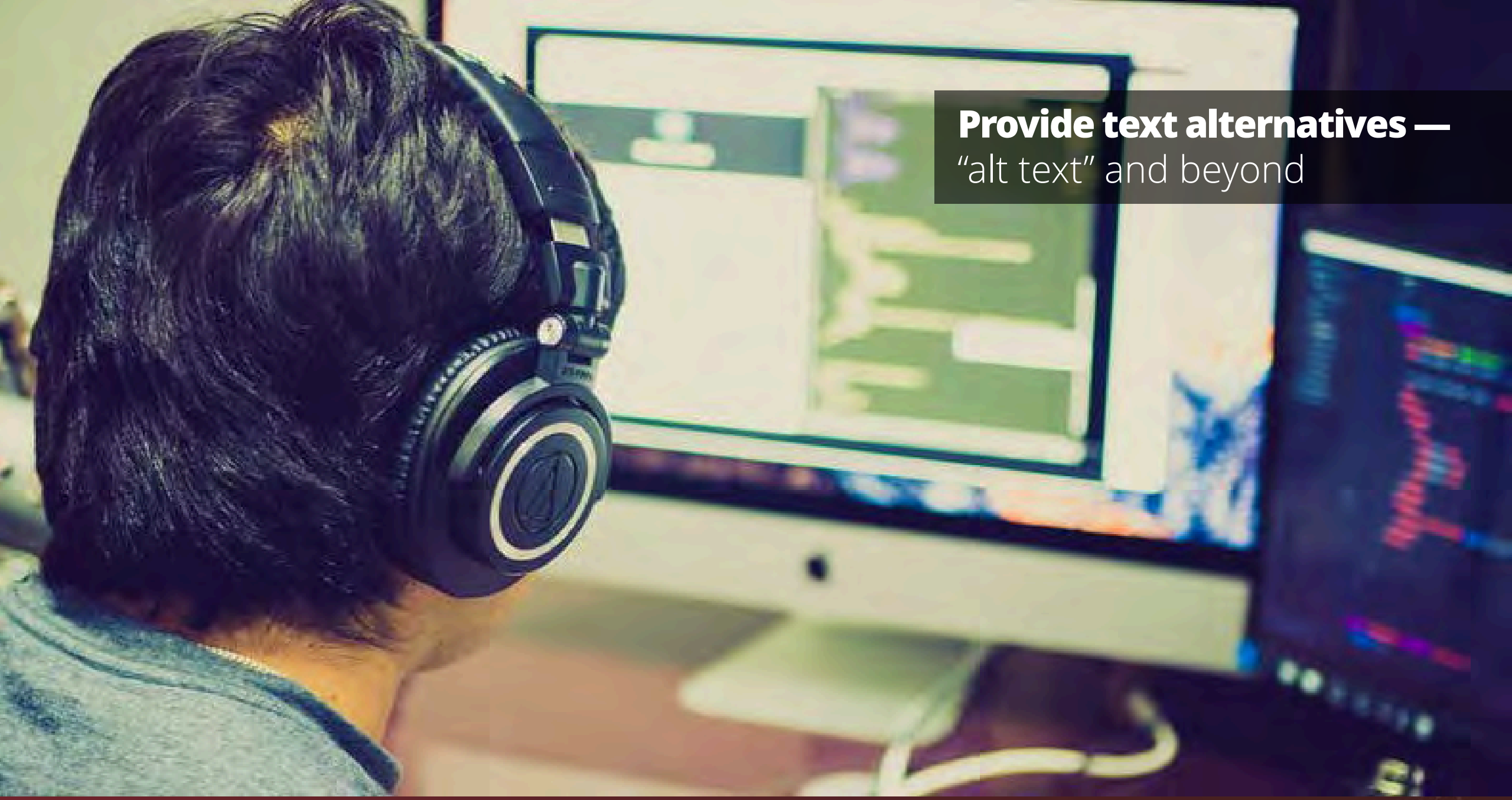


Common design-related accessibility pitfalls

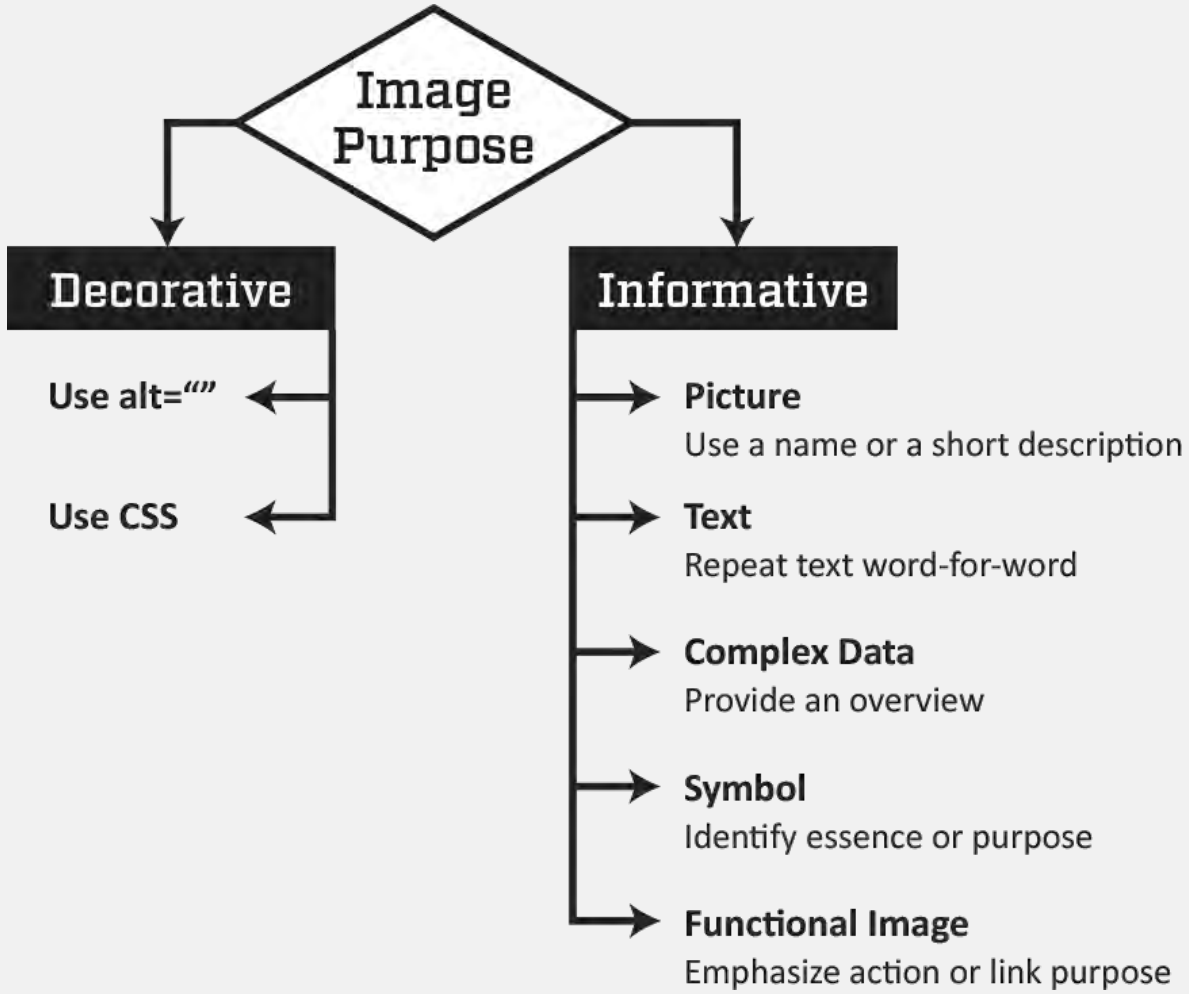
- Photo sliders and carousels
- Hidden content and menus
- Lack of keyboard accessibility and visible focus
- Lack of bypass blocks

Running a high-level accessibility test





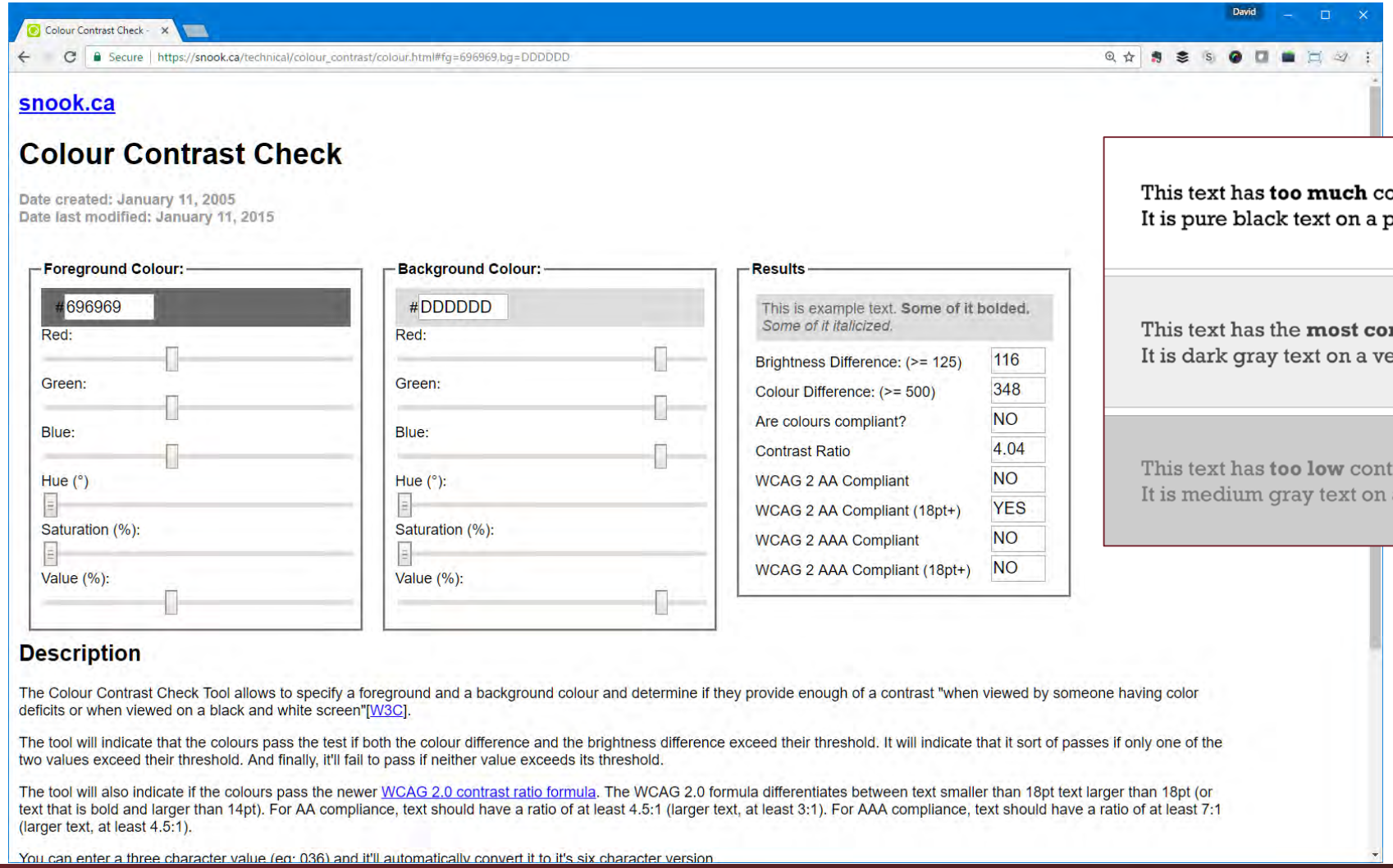
Provide text alternatives — “alt text” and beyond



Writing alt text

Should I describe what this image *is*, or what it *does*?

Check for color contrast

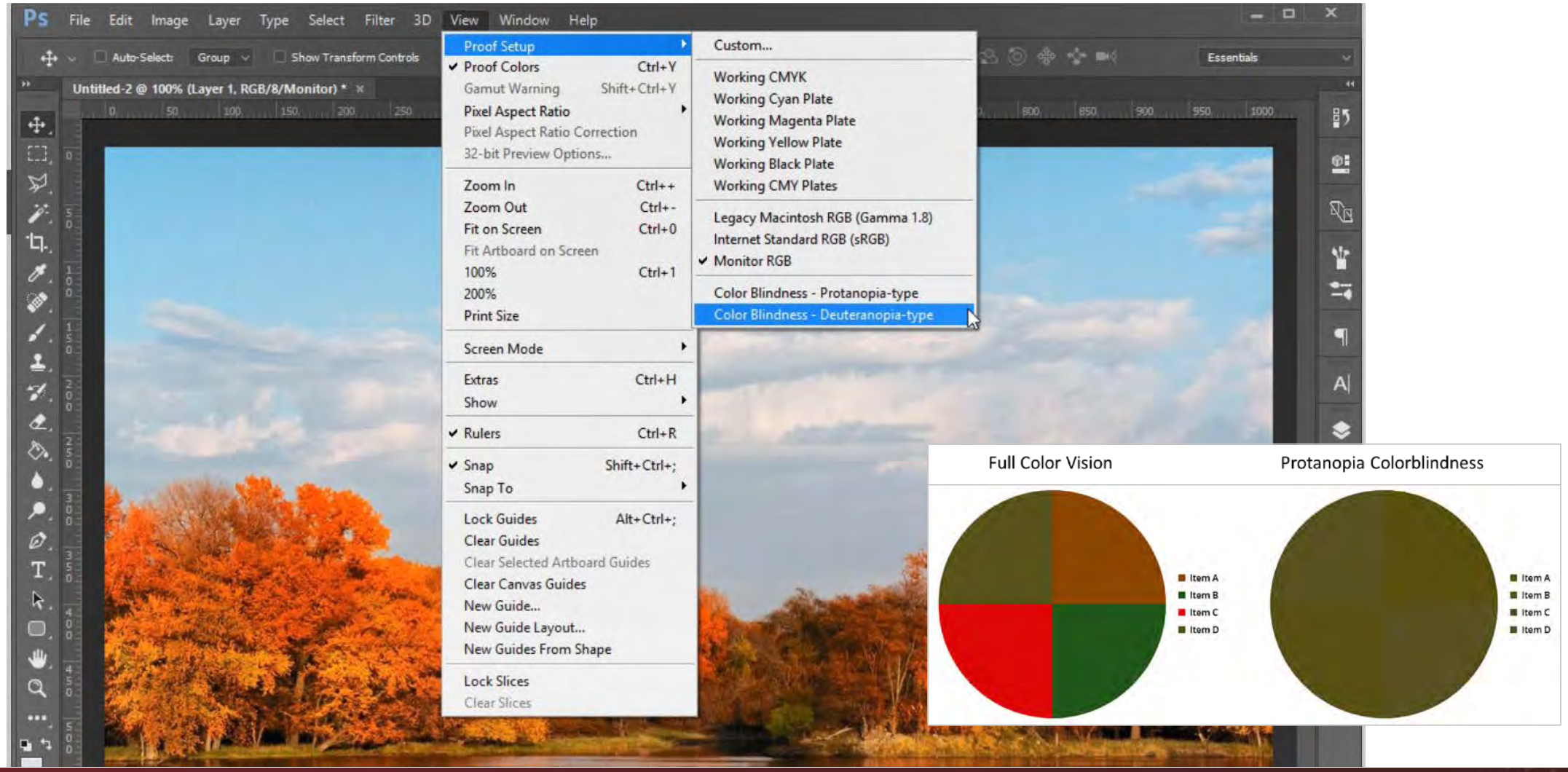


This text has **too much** contrast.
It is pure black text on a pure white background.

This text has the **most comfortable** contrast.
It is dark gray text on a very light gray background.

This text has **too low** contrast.
It is medium gray text on a gray background.

Test for colorblindness in Photoshop



http://www.adobe.com/accessibility/products/photoshop.html

What to do

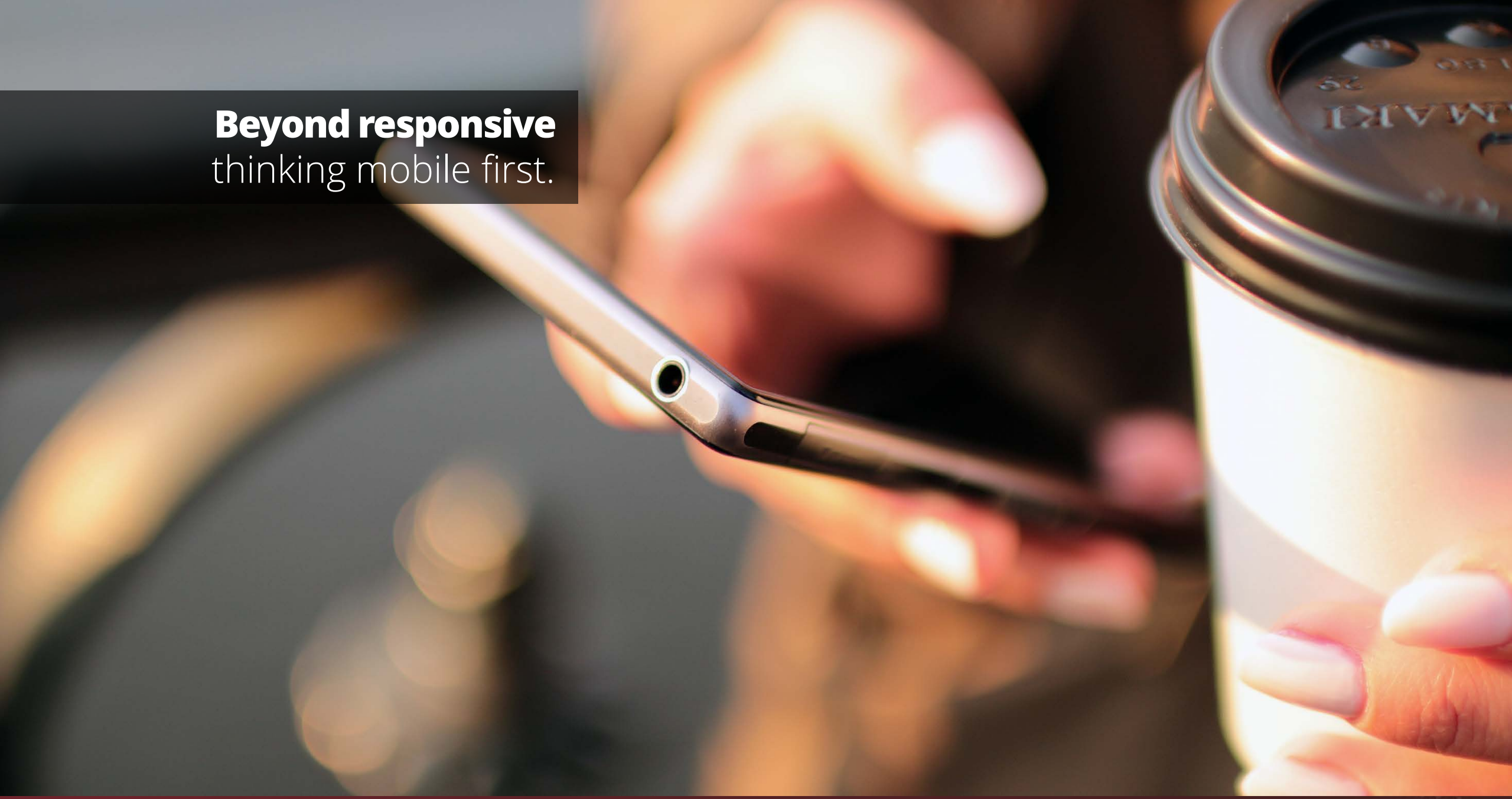
For designers

- Incorporate accessibility tools and checkpoints into your workflow

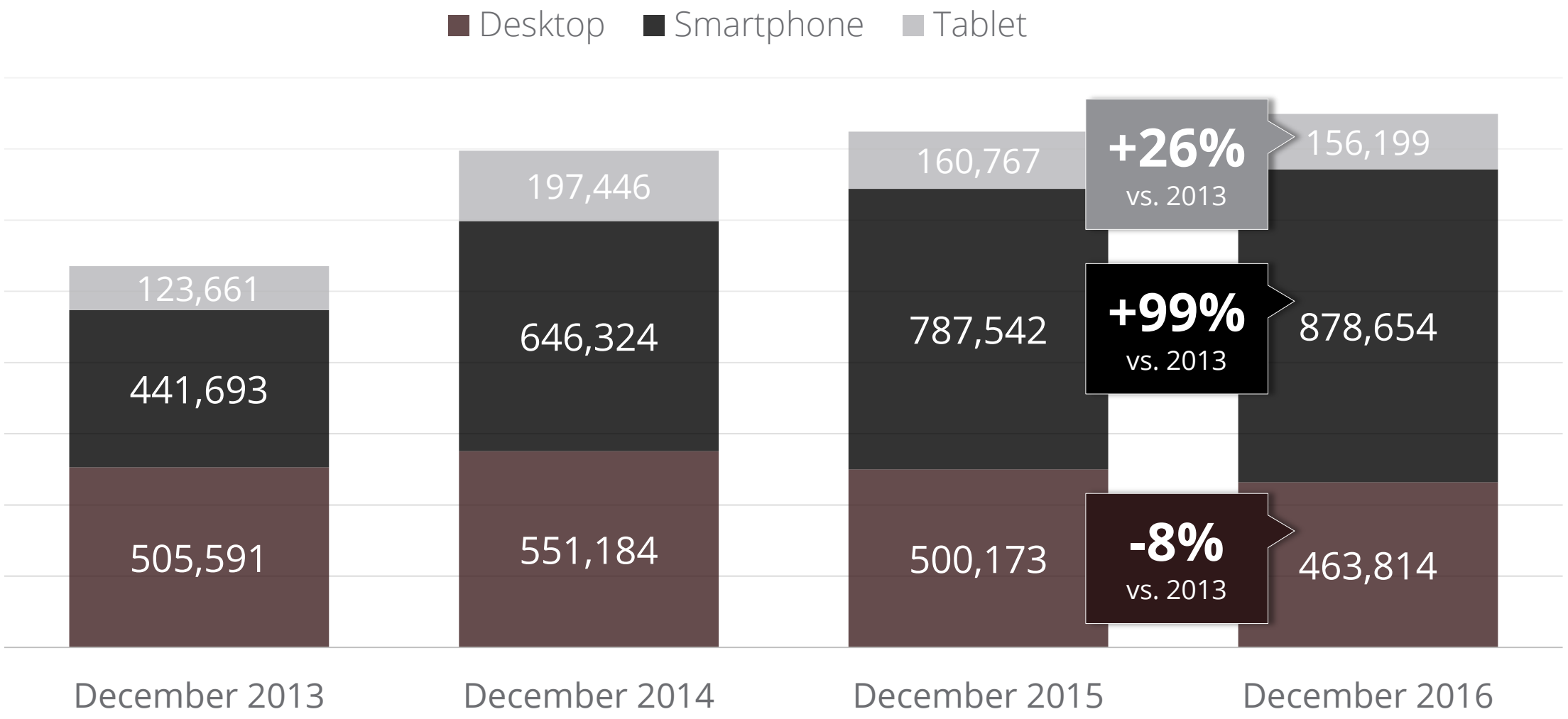
For everyone

- Consider an accessibility audit to create a baseline, work plan, and ongoing management

Mobile user experience


Beyond responsive
thinking mobile first.

Growth in digital media time spent in minutes (MM)



Source: comScore Media Metrix Multi-Platform & Mobile Metrix,, U.S., Dec 2013 - Dec 2013

Mobile represents almost 7 in 10 digital media minutes

69% of digital time spent on mobile

comScore Media Metrix Multi-Platform & Mobile Metrix, U.S., Total Audience, Dec 2016

"Mobile users are very goal-oriented. They expect to be able to get what they need, immediately, and on their own terms."

— Google Research Study

Using web analytics to identify mobile issues

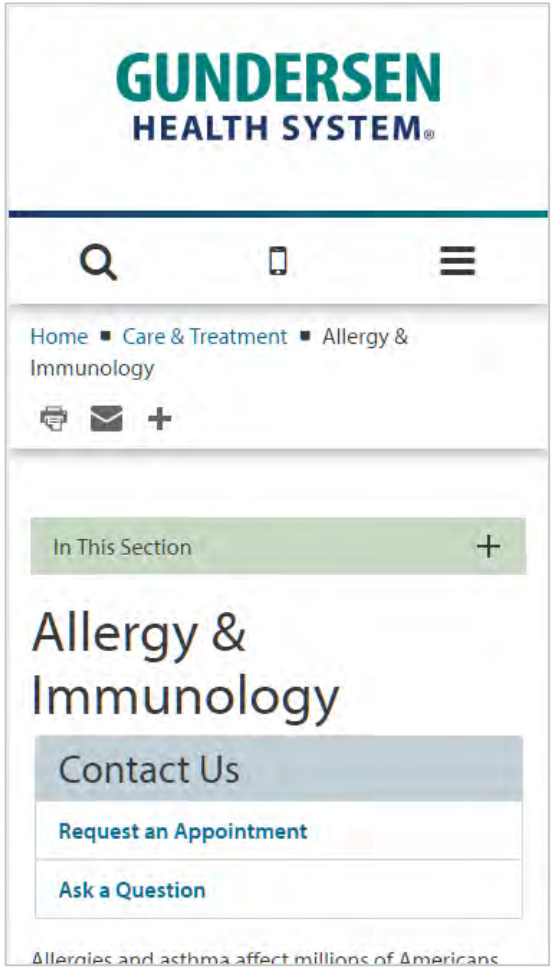
Symptoms of poor mobile user experience:

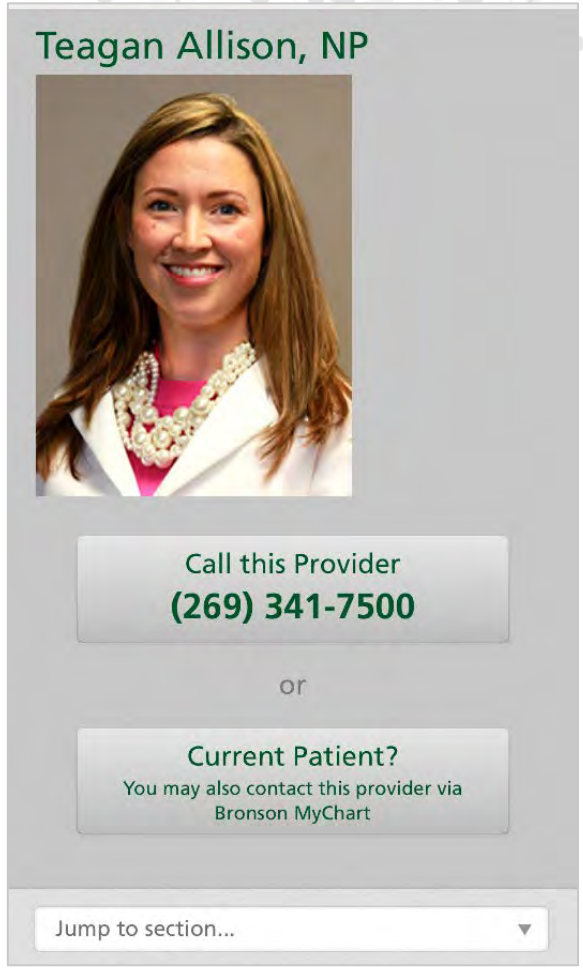
- Higher than average bounce rate — compare to desktop rates
- Average time on page is comparatively low
- Increased use of “lifelines” – contact us form, site search, pogosticking from search engines

Design for clarity and action

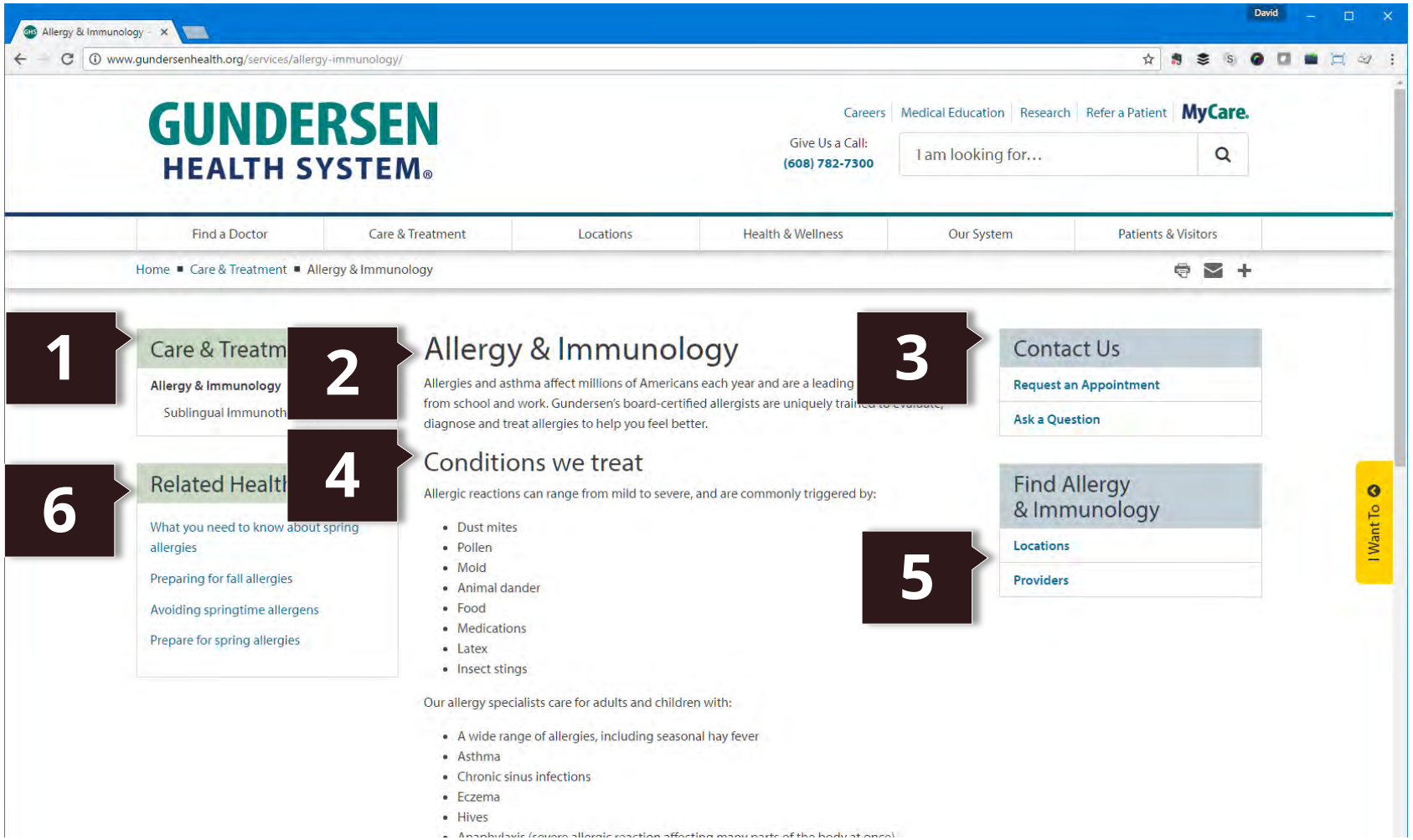
- Simplify navigation and menus
- Clickable phone numbers
- Short, simple forms
- Maps that work with native mapping apps
- Simple, clear instructions
- Above-the-fold calls to action

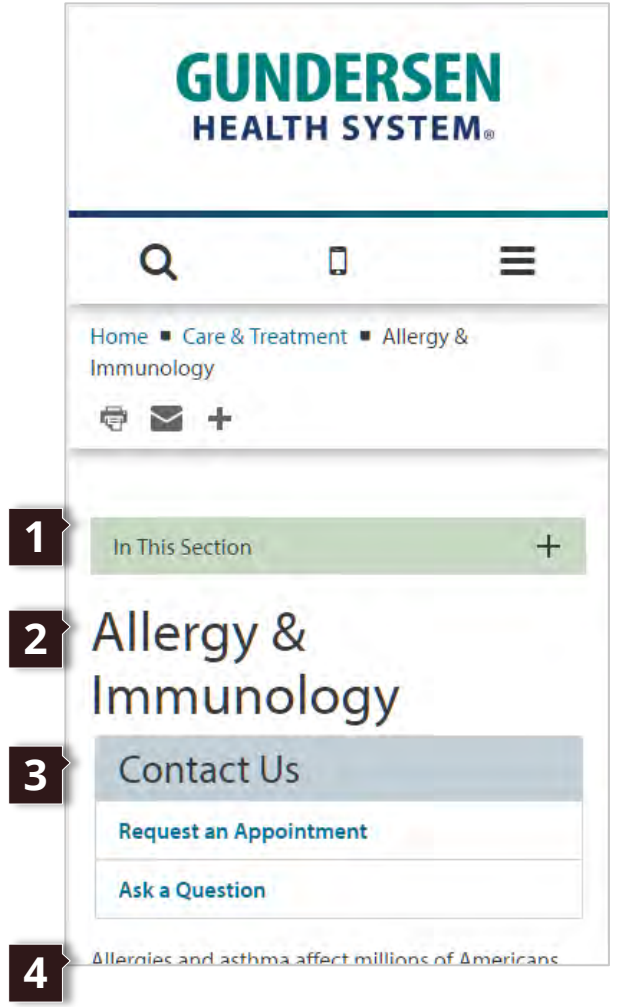
Tip: Identify and test page types with highest mobile traffic.





Setting mobile content priorities





Content length

Does mobile require shorter content?

Short-form and long-form measures

	# of articles	Total # of complete interactions	Average engaged time (in seconds)
Short-form	56,804	89,509,799	57
101-250	13,982	19,367,290	43
251-999	42,847	70,142,515	60
Long-form	18,011	27,562,137	123
1,000-4,999	17,470	26,208,589	116
5,000+	541	1,353,548	270

Source: Pew Research Center analysis of September 2015 Parse.ly anonymized data of digital news publishers.
"Long-form Reading Shows Signs of Life in Our Mobile News World"

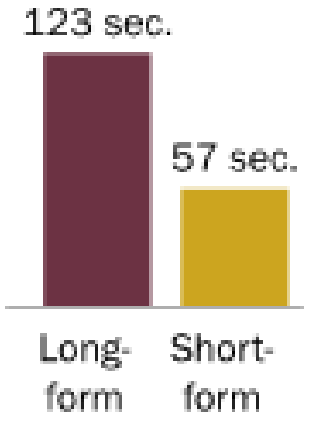
PEW RESEARCH CENTER

U.S. public show signs of engaging with long-form articles on cellphones

Within cellphone news habits ...

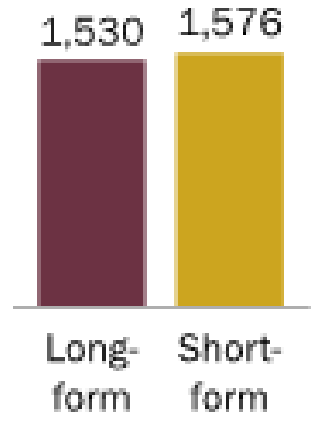
Long-form articles get more than **twice** the engaged time of short-form articles

Average engaged time across complete interactions

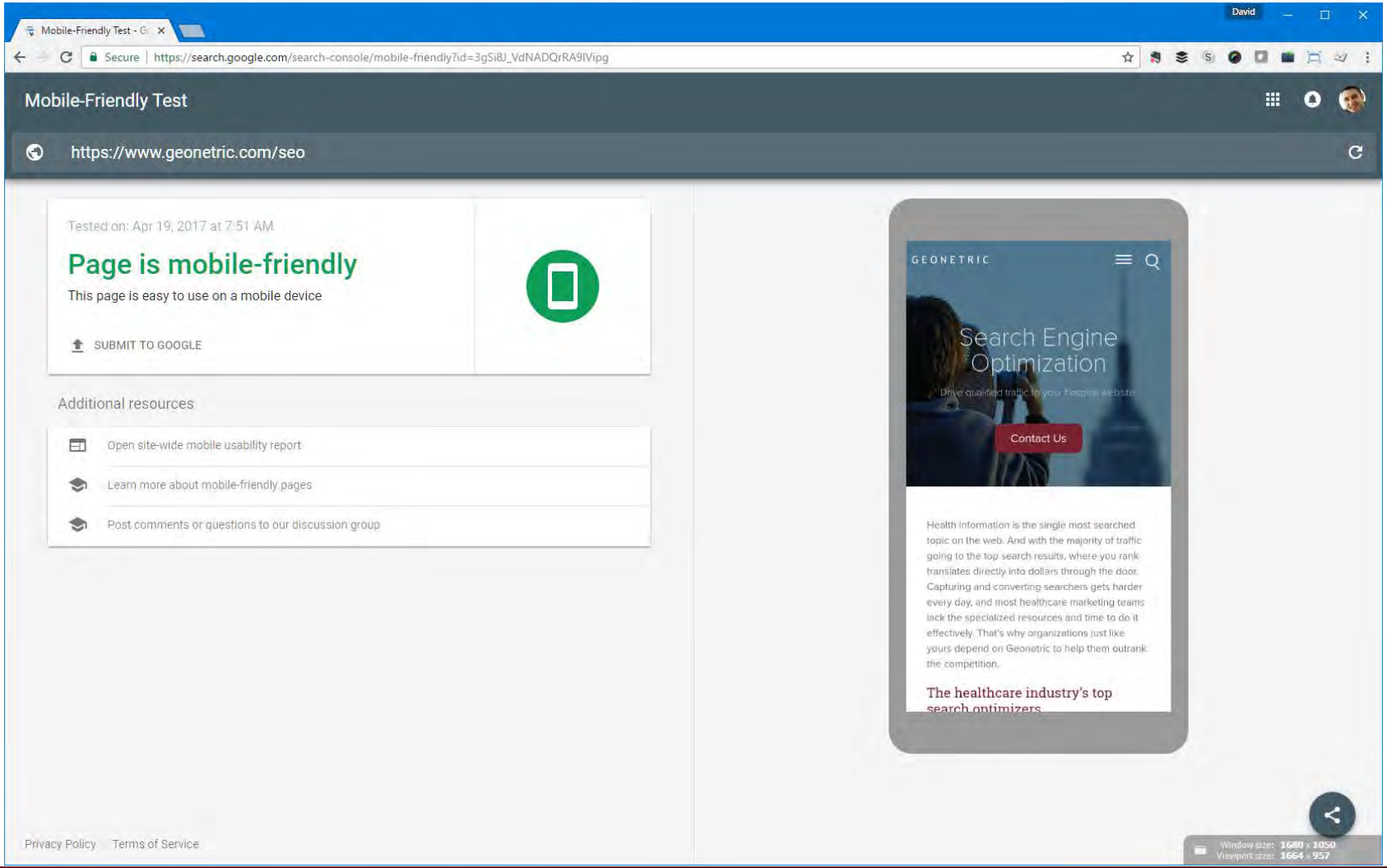


And they get **about the same number** of visitors

Average number of complete interactions per article

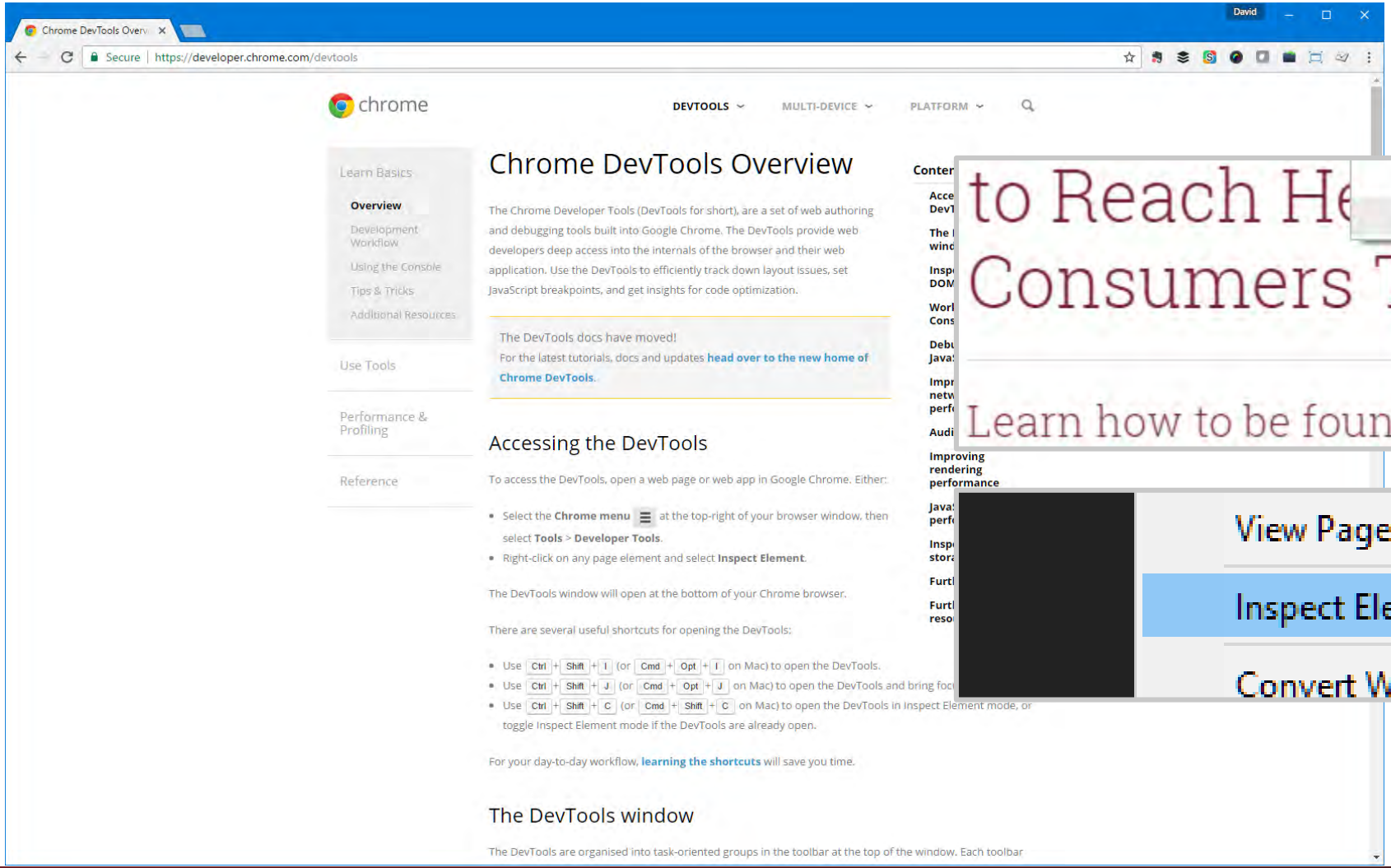


Google's Mobile-Friendly Test

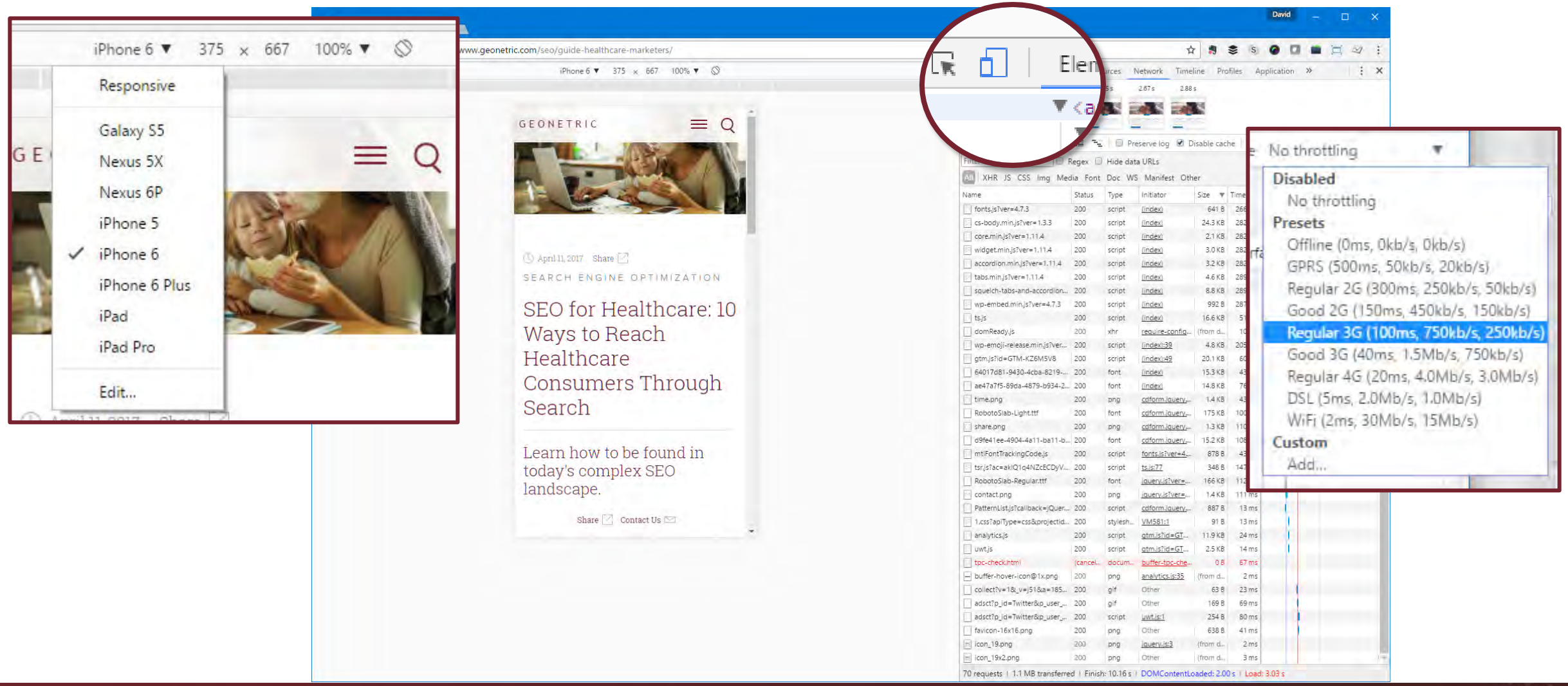


https://search.google.com/search-console/mobile-friendly

Accessing tools within your browser



Using Chrome's mobile toolbar



https://developer.chrome.com/devtools

What to do

For designers

- Spend more time with the non-desktop versions of your sites
- Look for ways to improve the clarity and focus of each page type or screen

For everyone

- Change your defaults – make a point of going to your mobile site first
- Be aware of how your role in the website impacts the mobile experience
- Identify opportunities to make small improvements

Search engine optimization

https://www.geonetric.com/seo/reaching-healthcare-consumers/

40% of people
abandon a website that takes longer than
three seconds to load

Source: KISSmetrics

Page speed affects SEO in multiple ways

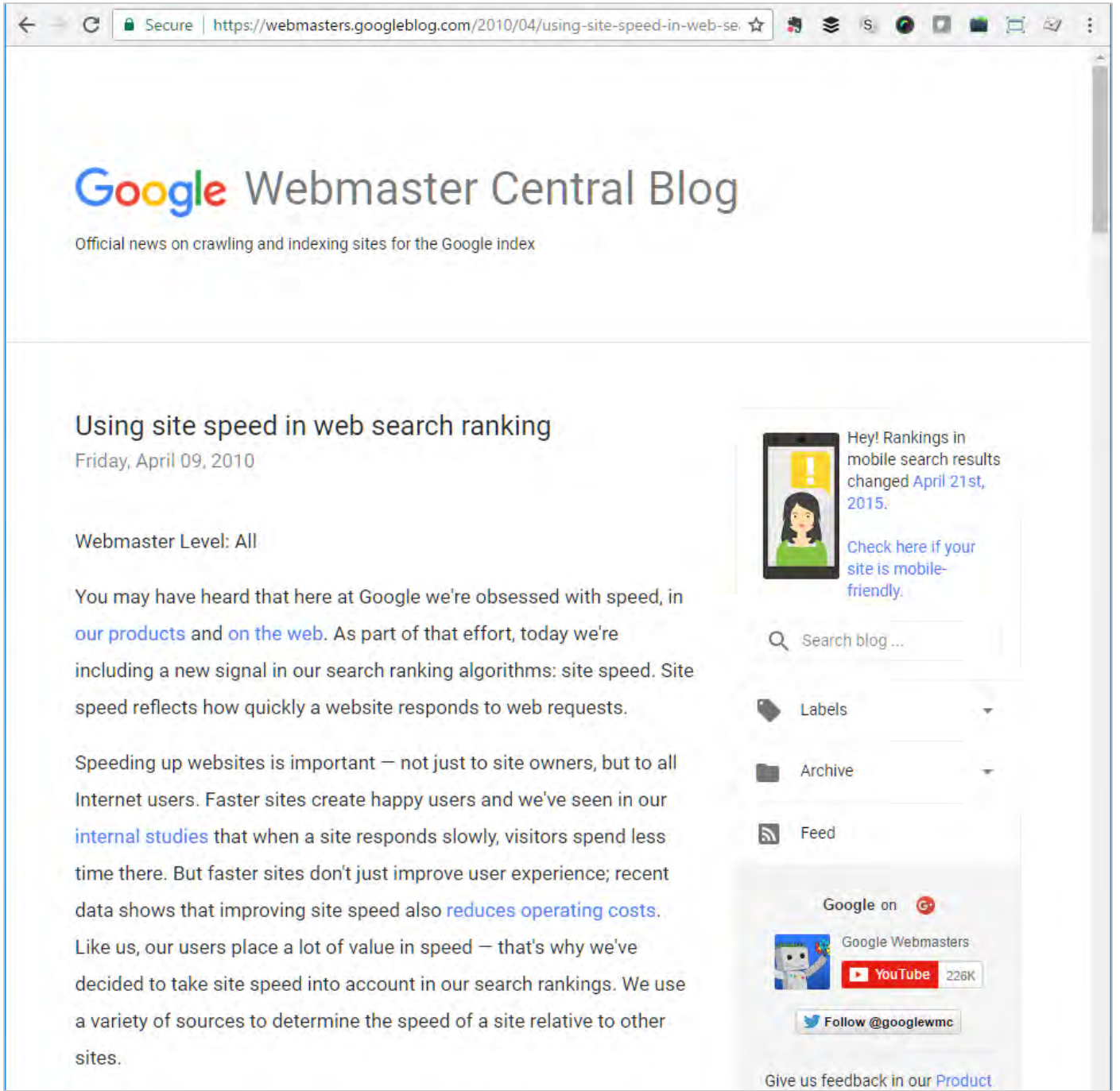
- Explicit ranking factor: Google's speed measures
- Bounce rates & "pogosticking" can have negative impact
- Crawlability of your site
- Potential for reduced shares and back-links

Not to mention overall site performance:

- *Reduced conversions*
- *Increased hosting and bandwidth costs*

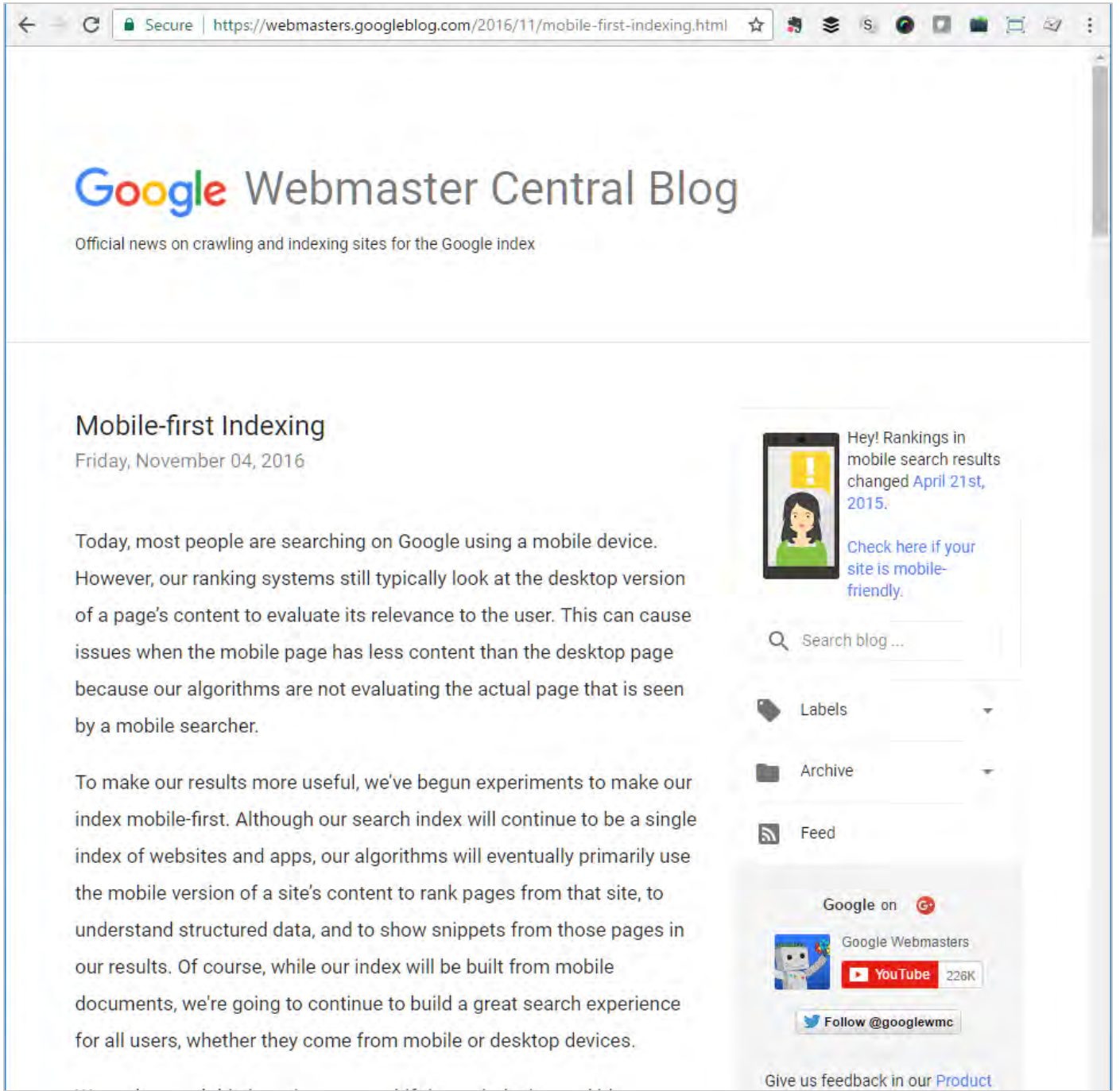
Site speed

The (perceived) performance of your site has been a ranking factor for a long time.



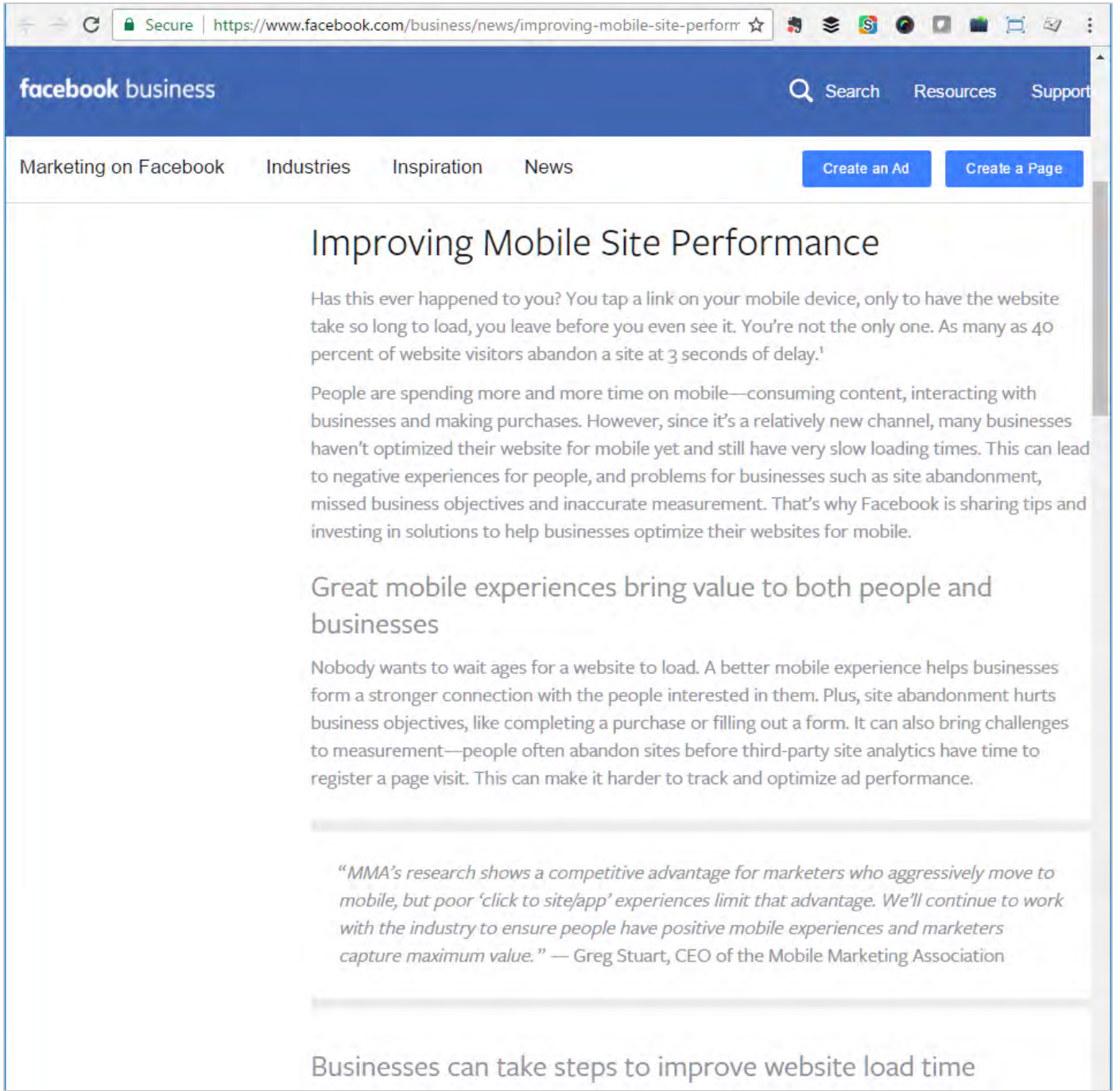
Mobile-first indexing

Many sites score lower on mobile speed tests.

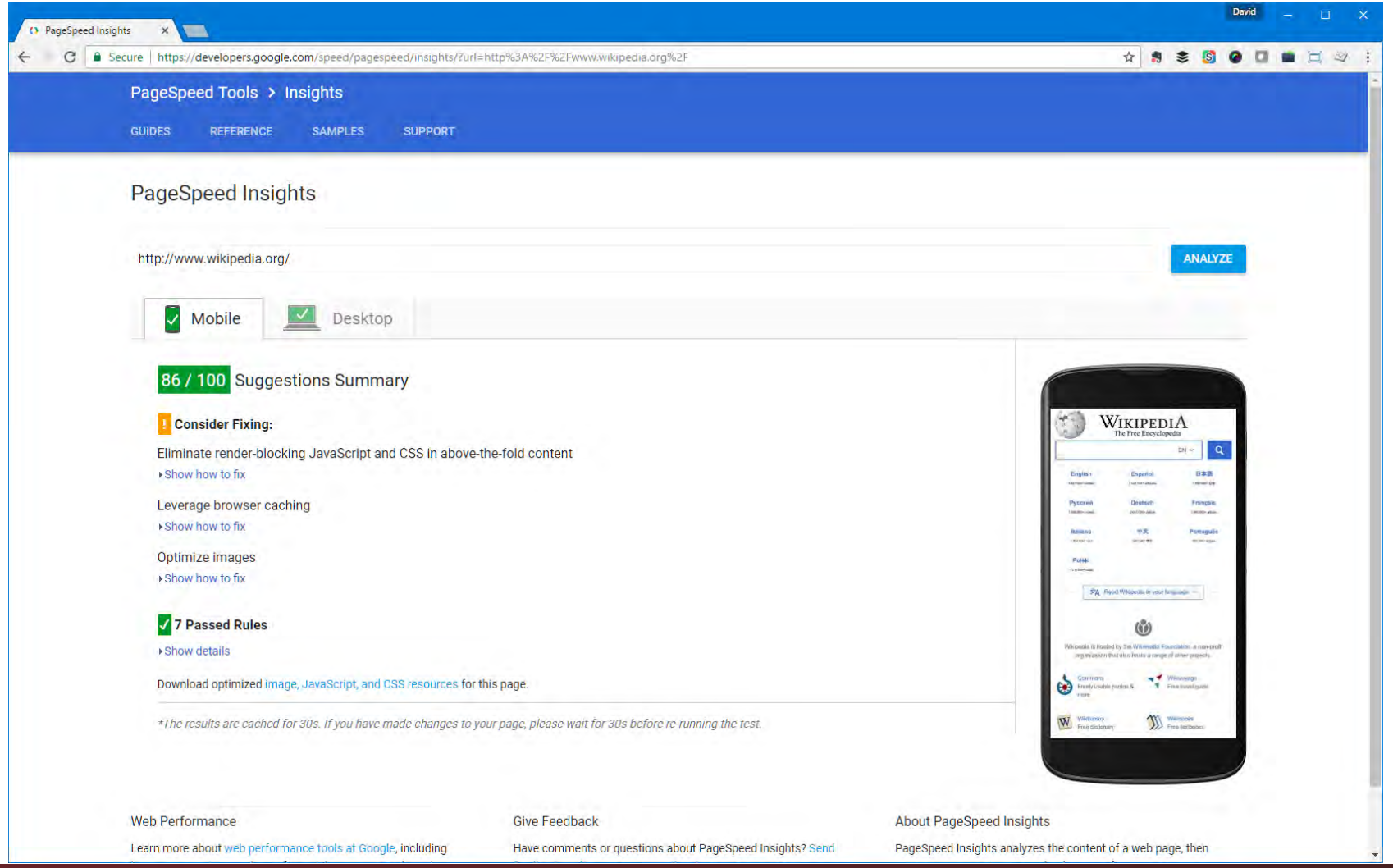


It's not just Google …

Facebook has also indicated that they will be "considering website performance and a person's network connection" in ad auctions.

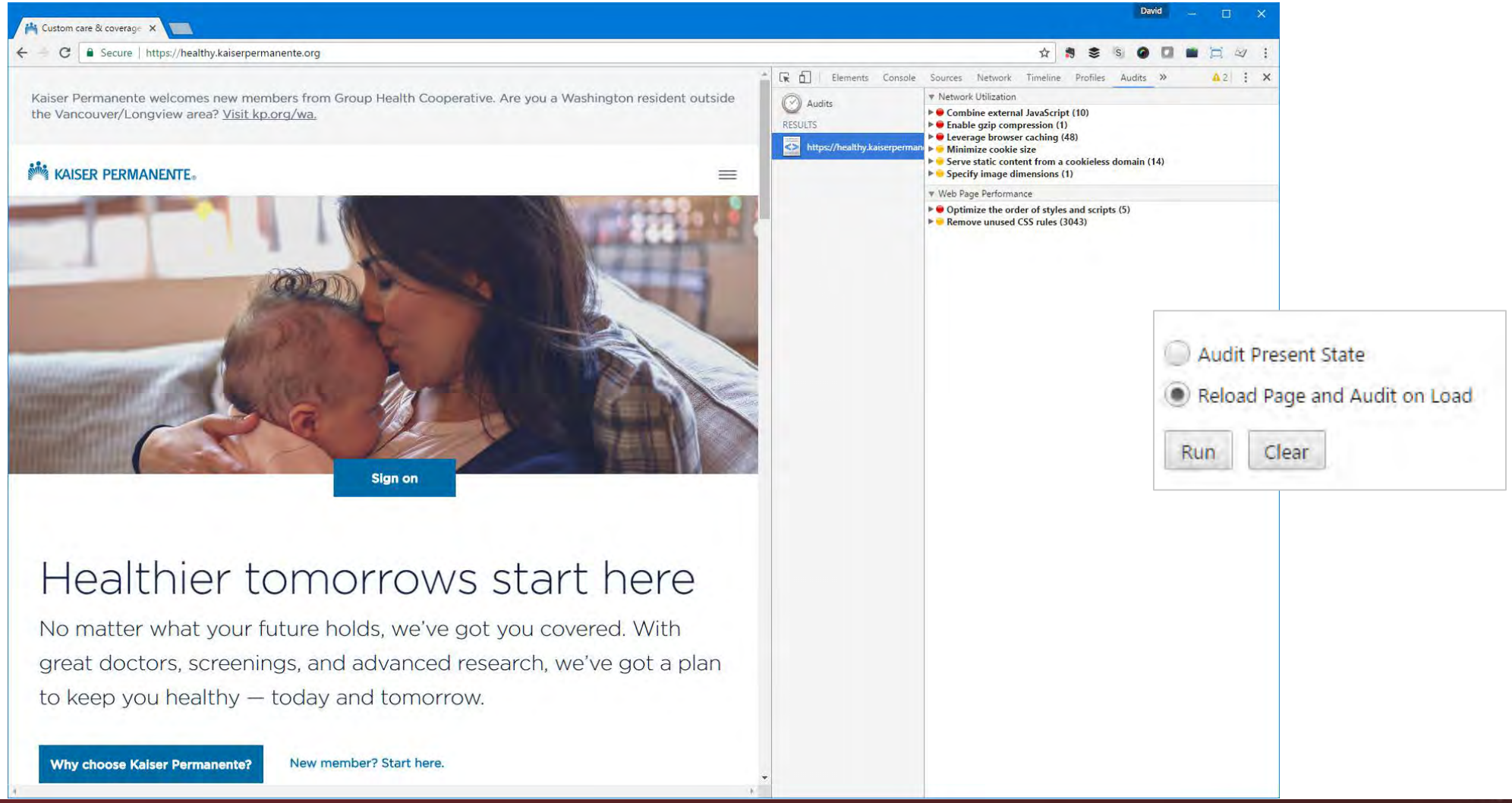


PageSpeed Insights testing tool



https://developers.google.com/speed/pagespeed/insights

Chrome Inspector: Audits

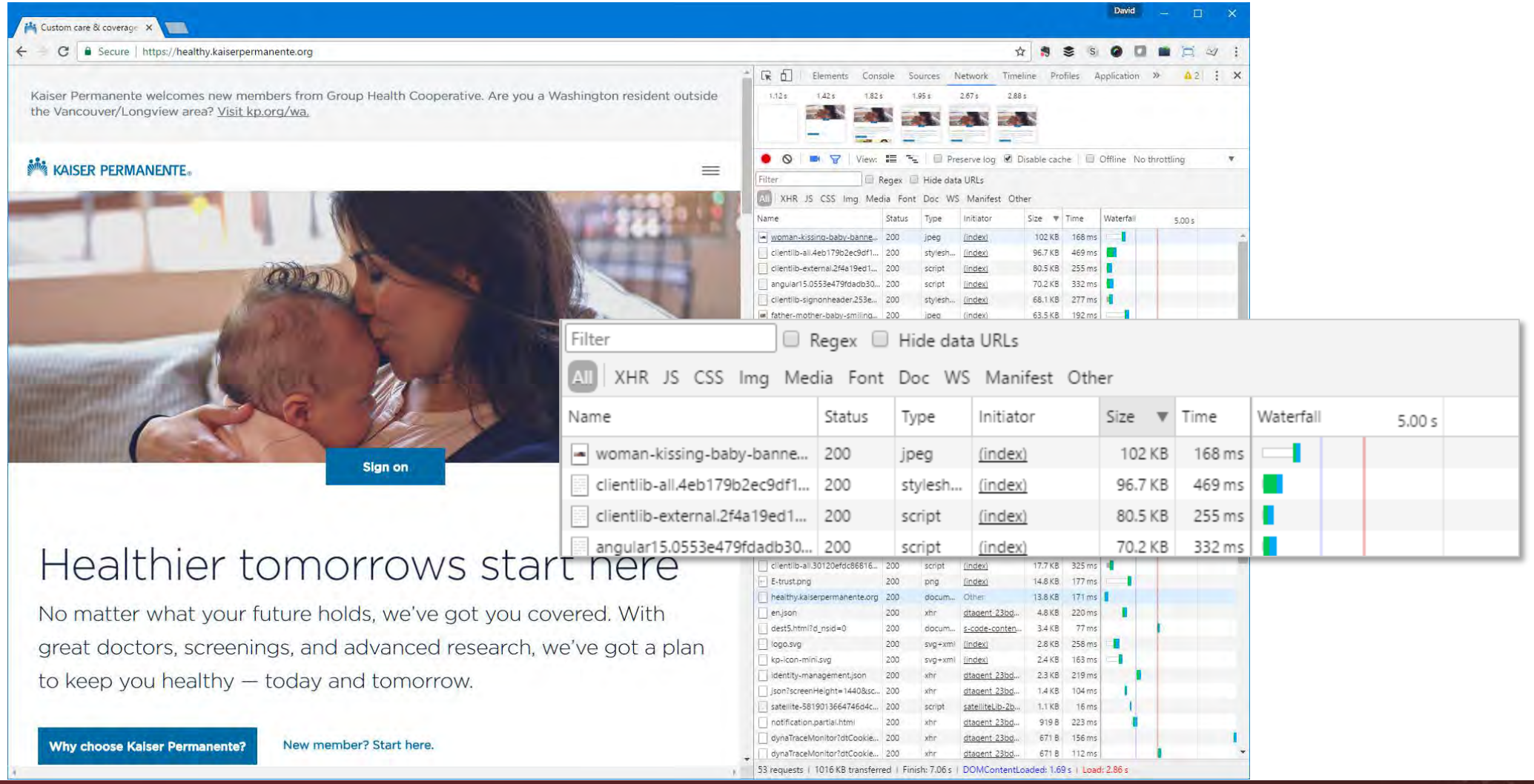


Who can fix common PageSpeed issues?

Author/editor + designer	Optimize images
	[Take care when adding JavaScript tags & widgets]
Designer + developer	Prioritize visible content
	Optimize CSS delivery
	Remove render-blocking JavaScript
	Use asynchronous scripts
	Minify resources
Developer + IT + software	Improve server response time
	Enable compression
	Leverage browser caching

https://developers.google.com/speed/docs/insights/rules

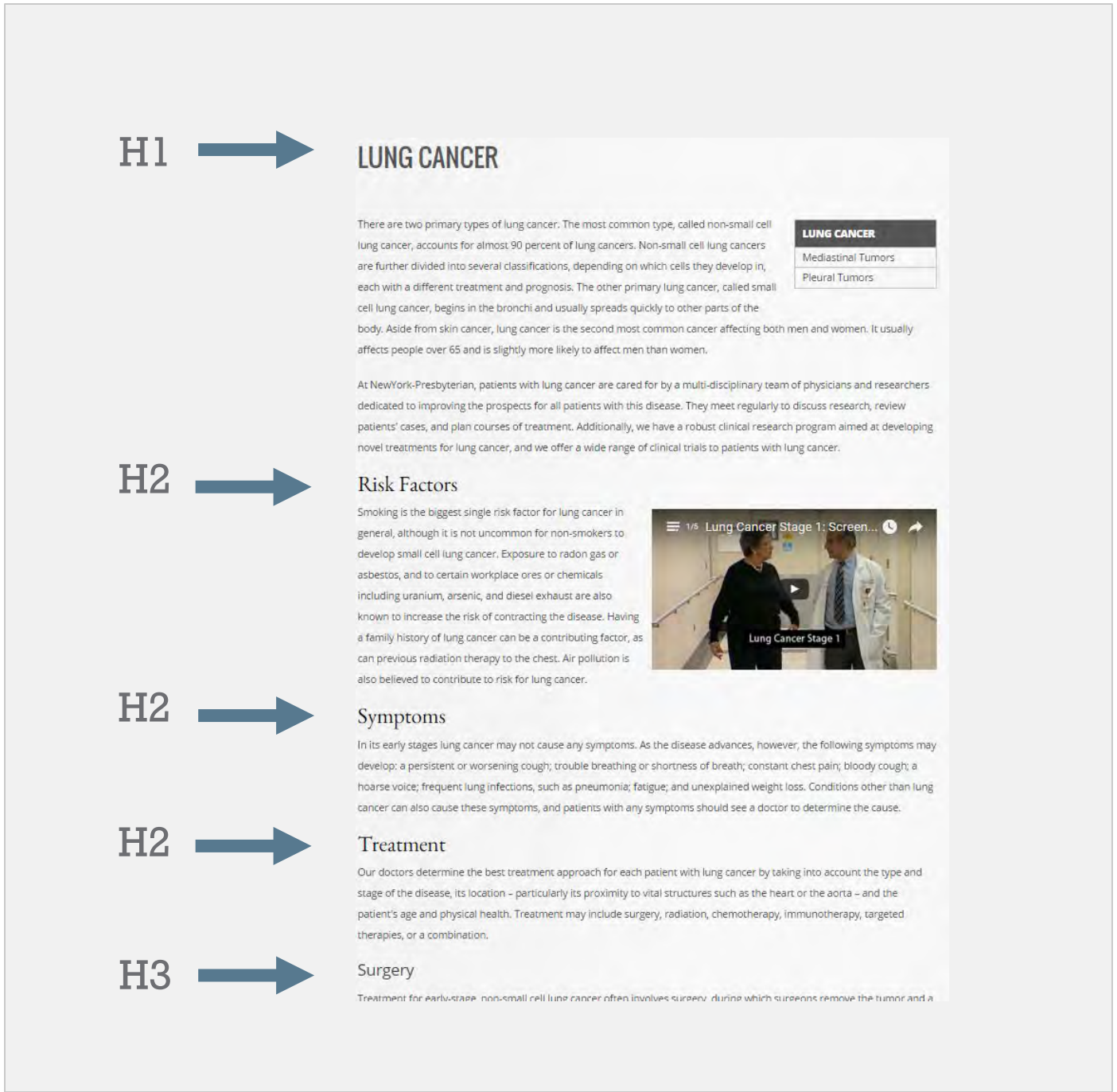
Chrome Inspector: Network



Proper use of HTML elements

For example, page headers:

- Only one H1 per page
- Properly nested sub-heads
- Phrases optimized for SEO



A word about JavaScript
and SEO.

What to do

For designers

- Review PageSpeed measures on a variety of page types
- Consider SEO when implementing JavaScript features
- Ensure HTML meets standards and is semantic

For everyone

- Become familiar with impact of images
- Use the semantic markup features of your site correctly
- Consider an audit

Maintainability

What is design?
"Look and feel" + how it's made.

JavaScript
CSS
SVG
Foundation
HTML
Web Fonts
Haml
PNG
JPEG
Jasmine
JQuery
React
Bootstrap
Angular
Backbone
Ember
LESS
SASS
Handlebars
Git
Bower

Avoiding spaghetti code

Symptoms that things have gone wrong

- Fear of making changes
- Feeling of being burdened by / locked into current sate
- Poor (or absent) coding practices: code reviews, automated testing, source control, etc.
- Only one person knows what will happen if we change ____
- Code-heavy pages
- Duplication of code – changes required in multiple (unknown) places, multiple versions of same code libraries

What to do

For designers

- Find a place to begin improving coding practices
- Looks for ways to weave improvements into ongoing projects

For everyone

- Acknowledge that maintaining your site's codebase requires an ongoing investment

Key takeaways

Who does “design”?

Design happens.

What are the impacts
of design choices?

Performance

+

Maintainability

Final tip: Ask these questions

- How will it work for mobile users?
- How will it meet our accessibility standards?
- What are the SEO impacts of this approach?
- Is there a simpler way?

Questions?

Email hello@geonetric.com