

Improving SEO & Patient Acquisition with a Headless CMS

July 11, 2023



Who we are



Matt Klawitter

Senior Digital
Access Strategist

Beacon Health System



Carrie Liken

Head of Industry,
Healthcare

Yext





amazon.com[®]

NETFLIX



Dropbox

ebay



twitch



airbnb



Uber



YouTube

Google

Pinterest



OpenAI

DOORDASH

Lemonade

KAYAK





The numbers: Google + HC

1B

Healthcare searches a
year

70k

HC searches per minute

7%

Of all searches on Google
are healthcare



Conversational AI or Search?



ChatGPT, Bard, etc.:
conversation, research,
exploration



Google, Bing, etc. for:
Research, transactions,
converting



**Future of your website will need to be a combination of both
Conversational & Generative AI and SEO optimized web pages.**





Legacy Architectures Cannot Deliver Consumer-Grade Digital Experiences

LEGACY ARCHITECTURE

Monolithic

Proprietary

Limited to first-party
(web, mobile)

Not optimized for AI

Single-channel CMS

Bad search

Slow page speed

Manual content creation

Built for websites

NEW ARCHITECTURE

Composable

Open source

Multichannel support
(web, mobile, third-party, etc.)

AI Foundation

Headless CMS

Great search

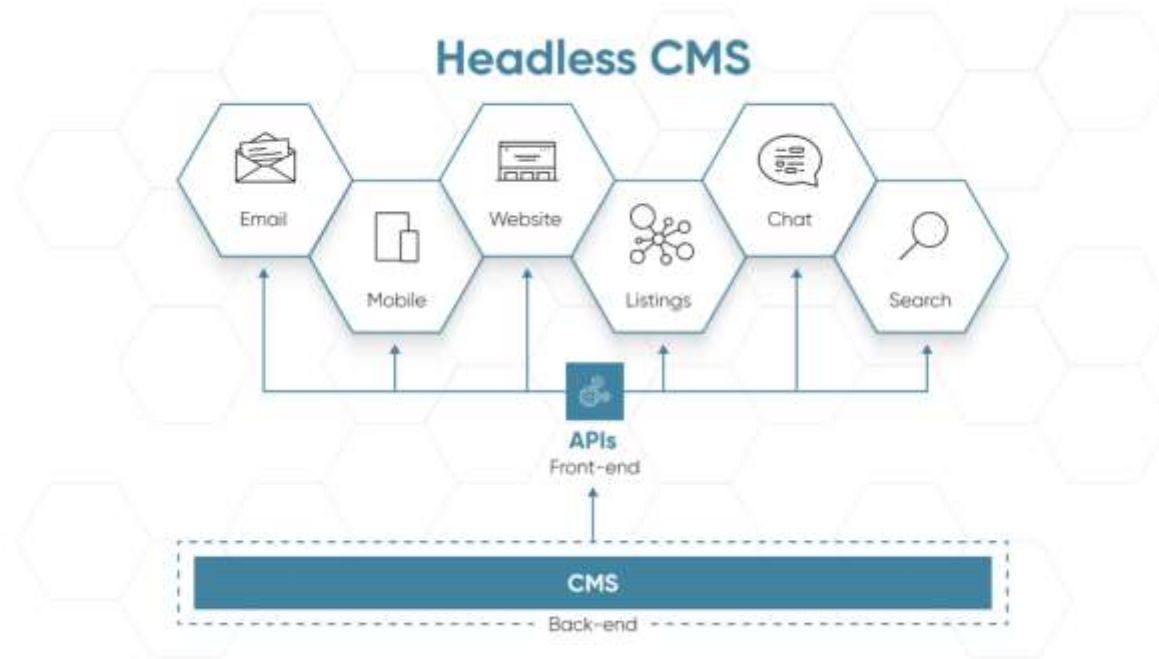
Super fast page speed

AI content creation

Built for a conversational future



Headless CMS is your platform of the future



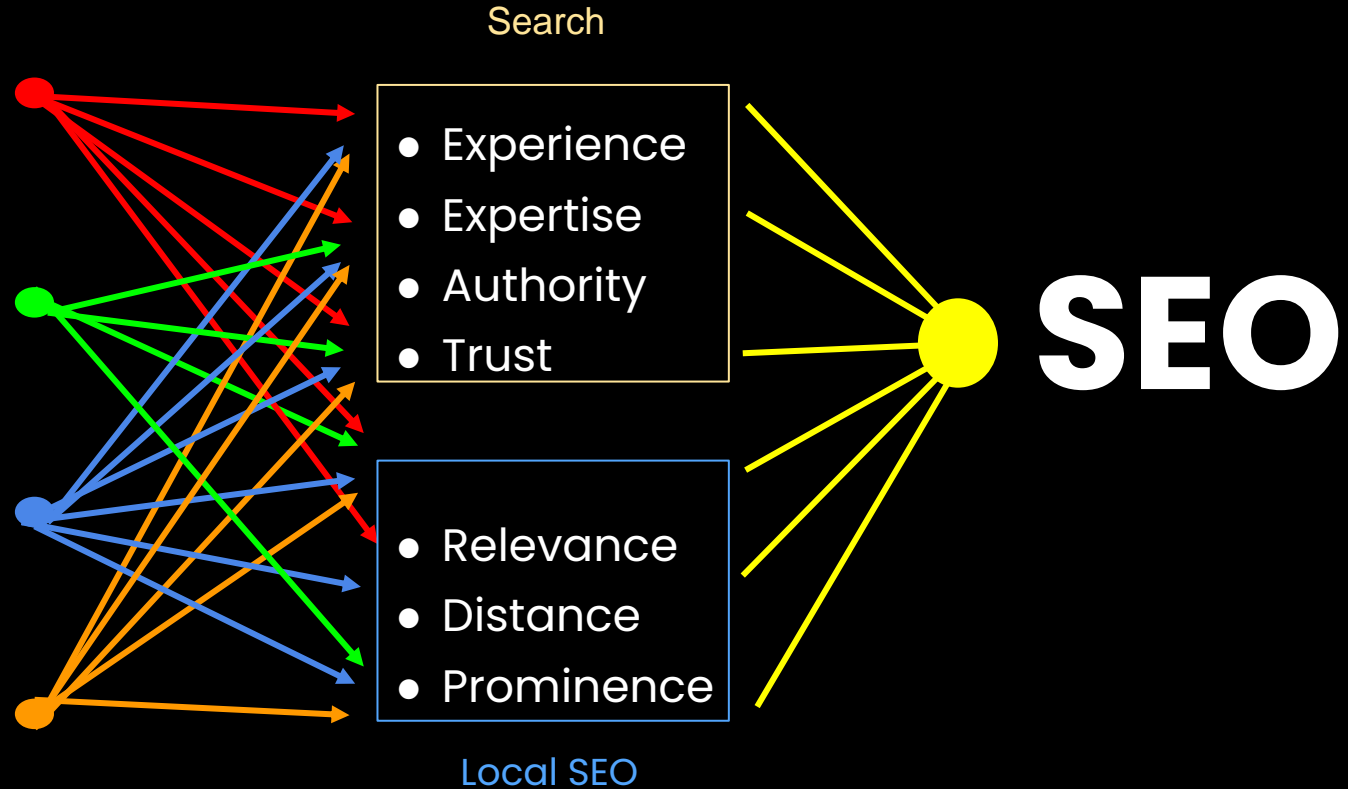
What do you need to know about SEO to capture this traffic?

E-A-T

Structured Data

Ripples and Impacts

- Listings data
- Performant Pages
- Content
- Reviews
 - Responses



E-A-T

Expertise

- Content is high quality and sourced from experts

Authoritativeness

- Content is factually accurate and from an “authority” on the subject

Trustworthiness

- Content can be trusted because it comes from a reputable source



Content should also:

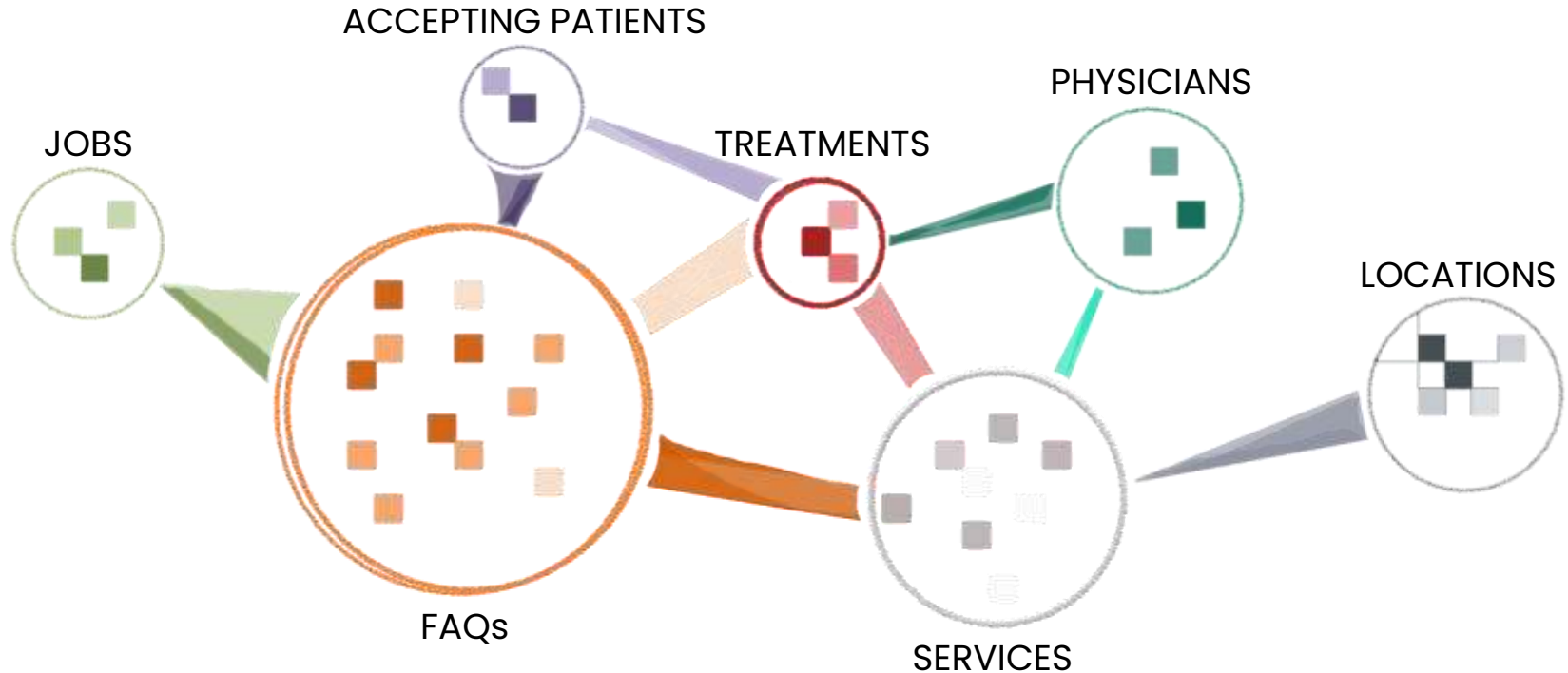
- Help users
- Be posted on an authoritative site
- Be trustworthy
- Be updated frequently

Structured Data

- Increasingly more important for ranking in search engines.
- Represents relationships between entities. The algorithm “reads” these relationships through schema markup language.
- Allows you to “spoon feed” Google and other search engines what they need to make sure they are delivering results to searches based on accurate relationships.
- Will become critical to Conversational AI platforms like ChatGPT and Bard and others the more they are able to connect their data sources to the overall web!



Relationships should look like this



How can you structure data?

Think about where you store your data today.

- Can you build relationships among entities?
- Can you distribute your content to places where people are searching for it?
- Can you quickly sync new data sources and create new entities based on new insights you are seeing with your website activity and behavior, or based on changes in SEO?

Your CMS may not be able to fulfill on this promise to drive optimal SEO now and in the future.



How did Beacon Health leverage a Headless CMS to improve SEO and Patient Acquisition?



What did Beacon Health achieve with structured data?

Background: Beacon is the first organization in Indiana to be selected as a member of the Mayo Clinic Care Network.

The **Mayo Clinic Care Network** is a clinical collaboration between Mayo Clinic and independent health care organizations across the globe.

Through this network, Beacon doctors have special access to Mayo Clinic knowledge, resources, team of specialists, second opinions and more.



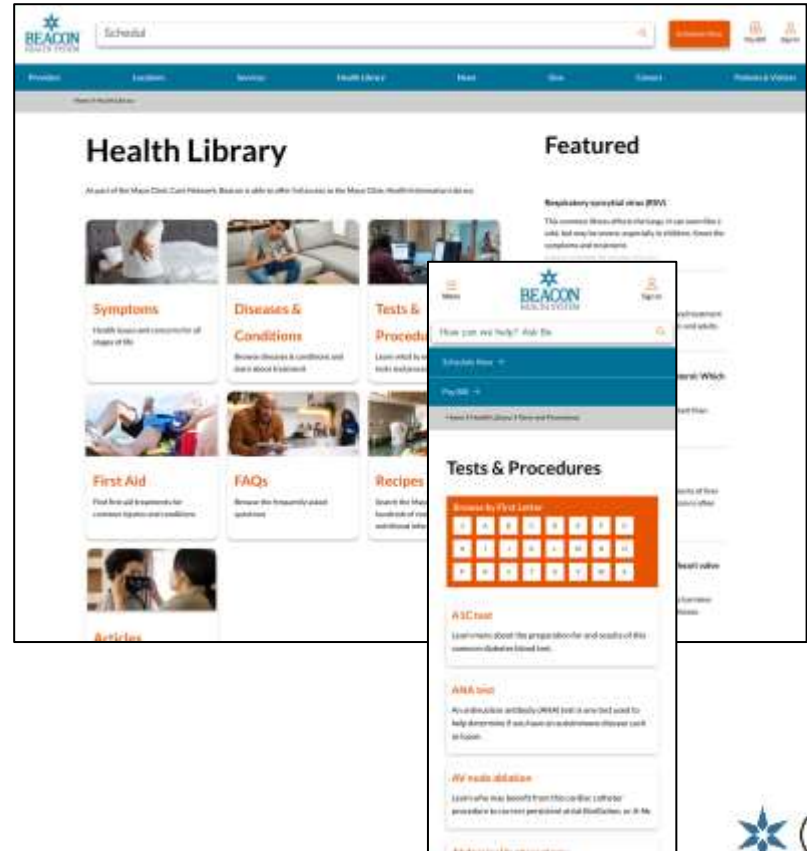
The Mayo Clinic = EAT

Beacon Health **added Mayo Clinic Health Information**—a library of health content available to members—to its website.

Mayo Clinic health information is an online portfolio of original, evidence-based health and wellness content that is topical, relevant, engaging and is written in a way that is easy to understand, and rooted in more than 150 years of clinical practice, research and science.

Mayo Clinic offers more than **11,500 pieces of web content** in a variety of formats on topics within the general health and wellness arena. Delivered automatically to your site via APIs.

Data analytics along with innovative thinking and programming led us to a new approach for **leveraging the content**...with exciting demand-generation results.



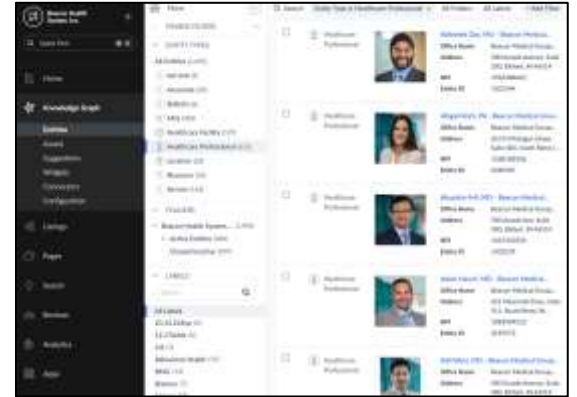
Beacon Health's Hypothesis

EAT + Knowledge Graph = Appointments

We can get increased traffic to our site with improved SEO if we create pages that include condition content, associated providers, treatments, procedures, locations, AND use this to drive appointment scheduling.

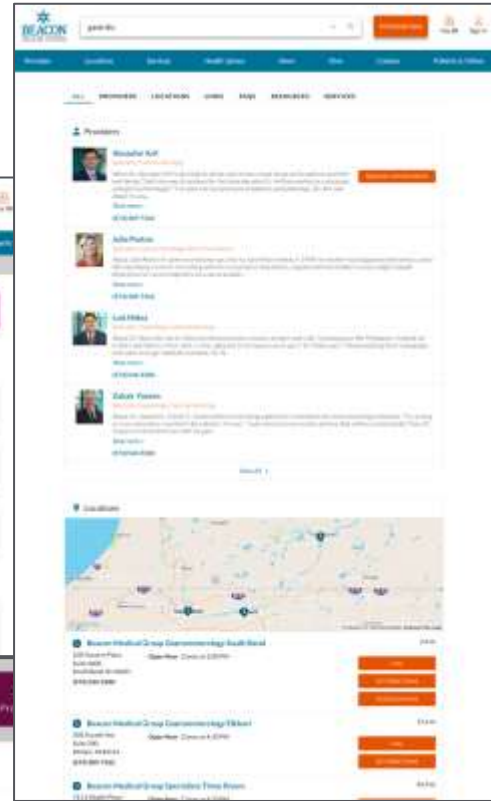
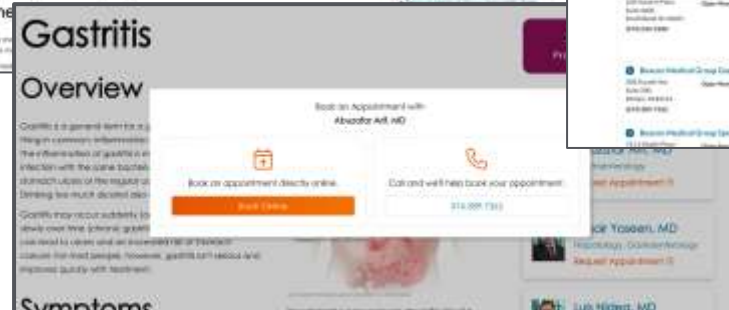
How did we test and learn?

- April 2020
 - Launched Mayo content API alone
 - Huge increase in pageviews, but few conversions to appointments
- February 2021
 - Experimented with adding providers manually
 - Data from provider directory and APIs hard to make matches
- April 2022
 - Hired senior web developer, added to our API team
 - Advanced our training
 - Recoded the pages to **integrate with our knowledge graph**
 - A.I. finds holes where matches did not exist



Beacon's Strategy

1. Deploy the Knowledge Graph to:
 - a. Improve search experience
 - b. Match Providers on all pages
 - c. Display structured data such as locations, services
 - d. Increase calls-to-actions (CTAs) for appointment initiations
 - e. Capture enhanced analytics with conversion data
2. Build Web and APIs for:
 - a. Natural Language Process (NLP) to make matches from A.I.
 - b. Faster page loads = SEO
 - c. All pages build dynamically (headless)



Results

Since adding knowledge graph:

- 4,000+ appointment initiations from Mayo Library **271% increase**
- Funnel conversions **79% increase** booked online
- Traffic up
 - 42% in Indiana
 - 66% in Michigan
 - 98% in Illinois
- Engagement rates continue to improve
- SERP average position U.S. trending down (this is good)

Looker Reports tracking results with % change

Beacon Health System - Indiana and Michigan
 Mayo Clinic Health Library
 Jan 1, 2023 - Jan 7, 2023

Page Title	Users	% Δ	New users	% Δ	New users	% Δ	Engagement %	% Δ
1. Sore throat	8,954	-21.3% ↓	8,898	-21.0% ↓	99,37%	0.4%	48%	4.1%
2. Hand washing during exercise: A concern?	3,140	3.2%	3,129	2.9%	99.36%	-0.3%	47%	1.5%
3. Can you recommend a diet after gallbladder removal?	2,602	4.0%	2,557	3.7%	98.27%	-0.3%	54%	2.2%
4. Detox foot pads: Do they really work?	2,484	13.6%	2,472	13.7%	99.52%	0.1%	52%	17.9%
5. Elevated liver enzymes	2,019	0.8%	1,993	0.3%	98.71%	-0.5%	60%	7.1%
6. High blood protein	1,543	-12.2%	1,525	-11.6%	98.83%	0.7%	56%	0.1%
7. Leg pain after prolonged standing or sitting	1,308	105.0% ↑	1,387	104.6% ↑	99.21%	-0.2%	61%	-4.4%
8. High hemoglobin count	1,227	8.8%	1,210	8.7%	98.61%	-0.1%	58%	-2.2%
9. High red blood cell count	1,175	-37.4% ↓	1,152	-38.0% ↓	98.04%	-0.9%	60%	4.3%
10. Tendinitis pain: Should I apply ice or heat?	1,163	-14.5% ↓	1,154	-14.4%	99.23%	0.1%	47%	-4.9%
11. Pain medications after surgery	1,047	810.4% ↑	1,036	808.8% ↑	98.95%	-0.2%	51%	17.4%
12. Retrograde ejaculation	997	-10.8%	988	-10.9%	99.1%	-0.1%	51%	-0.1%
13. Mucus in stool: A concern?	962	67.6%	954	67.7%	99.17%	0.0%	63%	8.9%
14. Polymyositis left wrist	864	56.8%	856	56.9%	99.31%	0.0%	49%	21.0%
15. High white blood cell count	840	-4.9% ↓	832	-4.8% ↓	99.05%	0.1%	57%	-4.7%
Grand total	103,289	-3.0% ↓	99,726	-3.3% ↓	96.55%	-0.3%	54%	1.9%

1 - 100 / 395

Pages with Appointment Initiations:

Session	Session	Session comp...	Page with Link	Event name	Event Click Text	Event count	
1.	meta	workplace	heart	Heart scan (coronary calcium scan)	appt_ini_id	Schedule Now	20
2.	meta	workplace	heart	Heart scan (coronary calcium scan)	appt_ini_id	Talk to a Beacon Provider about Heart scan	14
3.	meta	workplace	heart	Heart scan (coronary calcium scan)	appt_ini_text	Call Now	15
4.	google	organic	(organic)	Bariatric surgery	appt_ini_id	Talk to a Beacon Provider about Bariatric su...	9



2.	<u>Can you recommend a diet after gallbladder removal?</u>	2,855	-6.9% ↓	2,819	-6.8% ↓	98.74%	0.0% ↑	52%	0.9% ↑
3.	<u>Strep throat</u>	1,837	52.1% ↑	1,829	52.7% ↑	99.56%	0.4% ↑	49%	1.1% ↑
4.	<u>High blood protein</u>	1,366	2.4% ↑	1,351	2.5% ↑	98.9%	0.1% ↑	52%	-7.4% ↓



30-day Growth Comparison



Providers with Appointment Initiations from Mayo Clinic Content:

Page with Link	Providers Appt Initiations	Source / Medium	Appt Init.
1. Bacterial meningitis	appt-provider-request-2181305	google / organic	7
2. Bacterial meningitis	appt-provider-request-1501718	google / organic	6
3. Intracranial infection	appt-provider-request-1501718	google / organic	5
4. Intracranial infection	appt-provider-request-1501683	google / cpc	4
5. Intracranial infection	appt-provider-request-2181305	google / organic	4
6. Intracranial infection	appt-provider-request-1501533	google / cpc	3
7. CSF leak, Cerebrospinal fluid leak	appt-provider-request-1502956	google / organic	2
8. Ulcers	appt-provider-request-1302172	google / organic	2
9. Leg cellulitis	appt-provider-request-2006689	google / organic	2
10. Phantom limb. What causes phantom limb sensations?	appt-provider-request-1010527	google / organic	2
11. Elastic connective tissue (ECGT)	appt-provider-request-1502926	google / organic	2
12. Elevated liver enzymes	appt-provider-request-2014784	google / organic	2
13. CSF leak, Cerebrospinal fluid leak	appt-provider-request-1501855	google / organic	2

Grand total 189

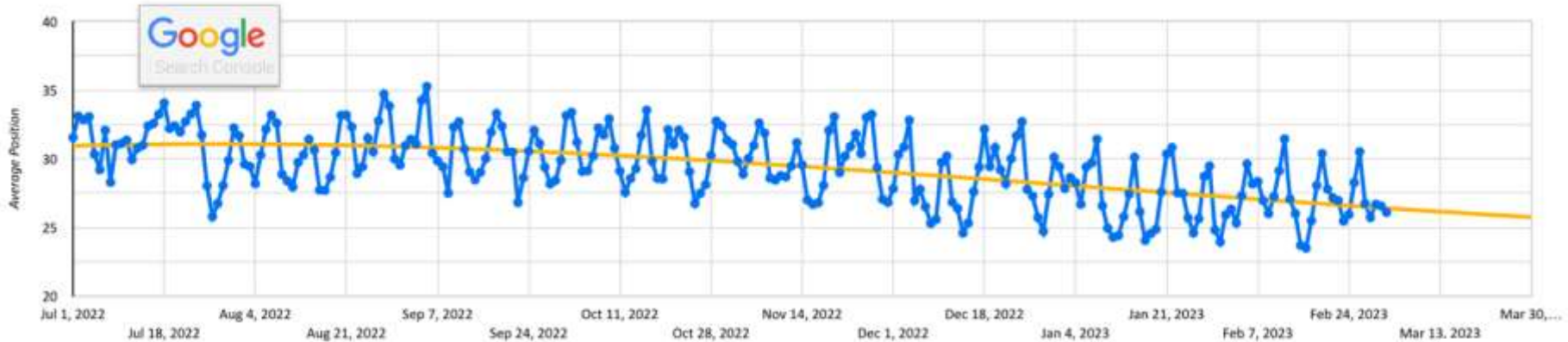
1 - 100 / 100 < >



SEO has improved!

- SERP average position U.S. trending **improved for over 5,000 pages**
- New gains in position #1 -5 on many health topics nationally
- 100mm “blue links” in Google

Average Position on Google (lower number better)



Take-aways

If you are considering:

- Learn to track **SEO**
- Prepare for a **knowledge graph** by committing to data as the source
- Build a **design system** to prepare for dynamic content
- Use or build a **content api**

If you already have it running:

- Put the **composable data on the page** with the content and let it work for you
- Track the clicks and follow them all the way through your marketing **funnel**
- Review the trends with marketing and **CRM** teams
- Integrate into your **A.I.**, natural language processing, and design systems

If you need to prioritize this:

- Knowledge graph can drive KPIs if you **make it easy** for the web users
- Pages can serve as **landing pages** of social and paid web campaigns, and also drive SEO
- You can focus on driving **conversions** with data and optimize
- Built in **multi-language support** such as Spanish



Q & A

Thank you

