



The Premier Conference for
Healthcare Marketers and Digital Leaders



November
10-13, 2024

JW Marriott
AUSTIN, TX



Future-Proof Your Organization for AI and Search

Michael Meixner


Director of Digital Engagement
UT Southwestern Medical Center

Martha van Berkel

CEO
Schema App

Martha van Berkel's Knowledge Graph





Schema App is a scalable End-to-End Schema Markup Solution for Enterprise SEO teams.

We help organizations leverage Schema Markup and Content Knowledge Graphs to stand out in search with our industry-leading Schema App platform and High Touch Support services.

Trusted by Enterprises Worldwide

**HENRY
FORD
HEALTH.**

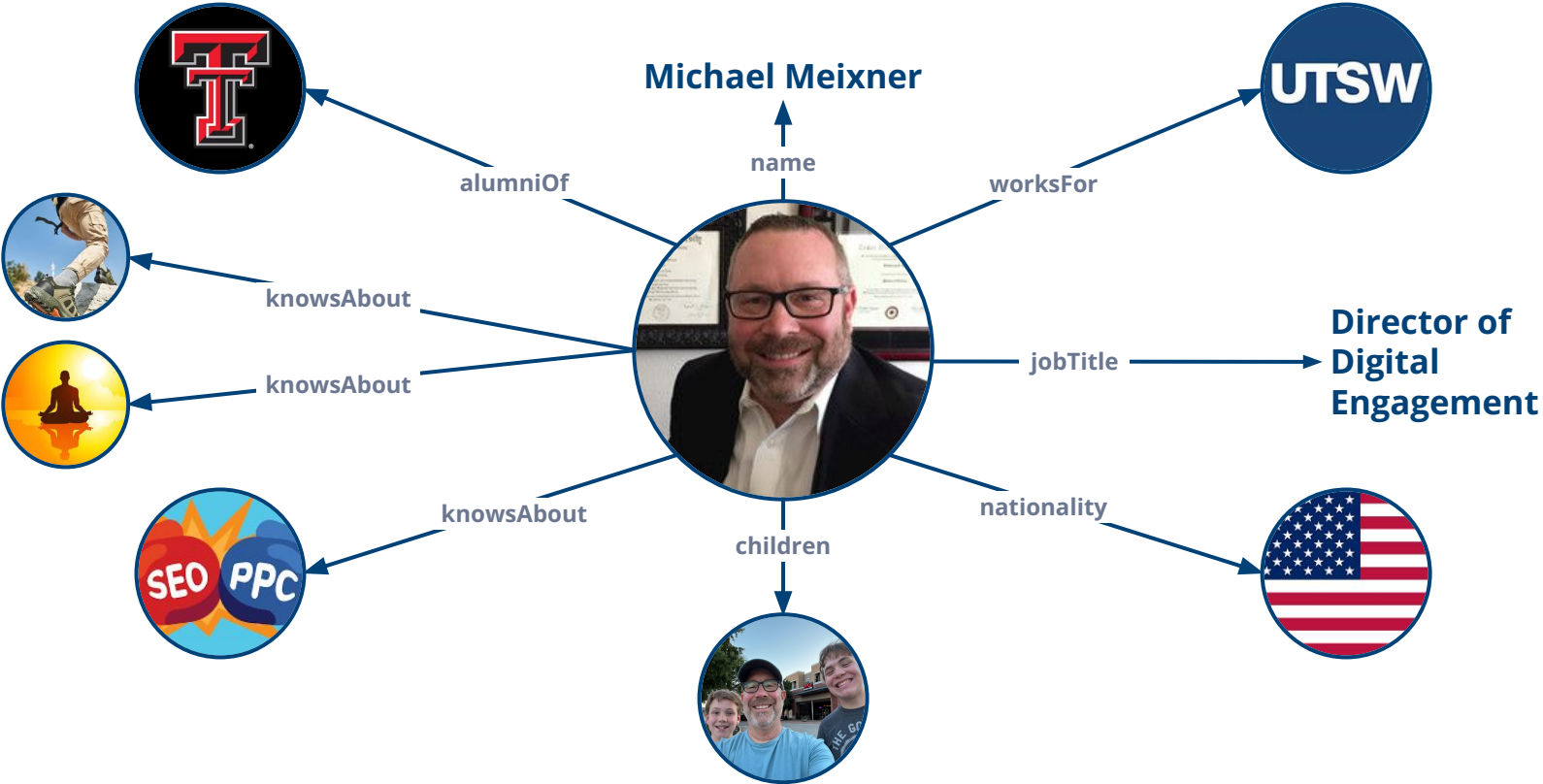
AdventHealth

**BAPTIST
HEALTH**

HOUSTON
Methodist
LEADING MEDICINE

SHARP




Michael's Knowledge Graph



How “Search” is changing



Google



Google Search

I'm Feeling Lucky

Google offered in: [Français](#)

Search has
moved from
strings to
things

Lexical search → Semantic search

Keywords → Entities and
Knowledge Graphs

Popular AI search engines

From sources across the web



Perplexity AI



Phind



YEP



Gemini



ChatGPT



You.com



ANDI



Brave Search



Google Search



DuckDuckGo



Microsoft Bing



Waldo



KOMO



Microsoft Copilot



NeevaAI



AI Overview (AIO) prefers specialist sites over generalist sites

Consumer News / General sites

Exposure in AIO



VerywellHealth.com – 77.9% decline

EverydayHealth.com – 95.6% decline

Specialized / Authoritative sites

Exposure in AIO



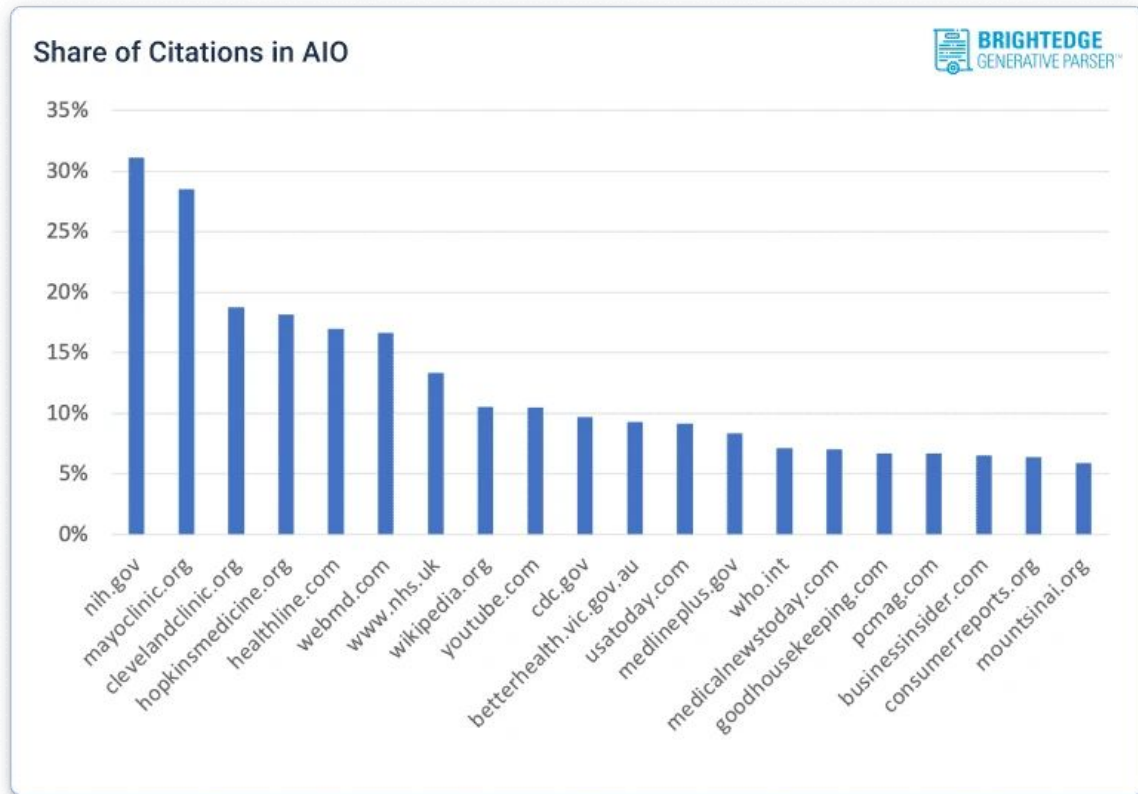
MayoClinic.org – 32.4% growth

U.S Dept of Health & Human Service –
83.2% growth

Source: BrightEdge. [August Brings Significant Changes in AI Overviews Rollout and Behavior](#)

63% of healthcare queries have an AI Overview

- There is **double** the concentration of citations for healthcare sites compared to the average.
- For marketers in healthcare, expect AI Overviews to appear for informational queries.



[Source: BrightEdge](#)

AI Overviews & Informational Queries

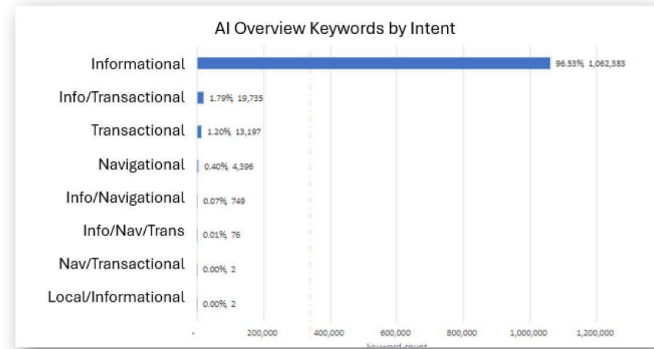
seoClarity released a report indicating that **96% of keywords triggering AIO are informational**

Recall categories of keyword intent:

- Informational
- Transactional
- Navigational

Optimizing informational content for AIO is critical to strong performance.

96% of AIO Keywords are Informational



seoClarity™

AI Overviews & Well Ranking Sites

Furthermore: in 99.5% of cases, **URLs that appeared in AIO *also* appeared in the Top 10 Results.**

Optimizing for AIO is familiar territory:

- Optimize for Google
- Publish useful content for humans
- Follow best practices
 - Consider Keywords
 - Linking (Internal, Backlinks, Entities)
- Lower site speed & maintain technical quality

The screenshot shows an AI Overview for the query "How Often Should You Change Engine Oil". The overview includes a summary, a list of factors (Manufacturer, Oil type, Driving conditions), a general recommendation (5,000-7,500 miles), and signs that oil needs changing. Below the overview is a list of search results. A red box highlights a result from "Car and Driver" with the URL "https://www.caranddriver.com/how-often-to-change-oil" and the title "When Should You Change Your Oil?". An orange arrow points from the red box to the "Car and Driver" result in the list above.

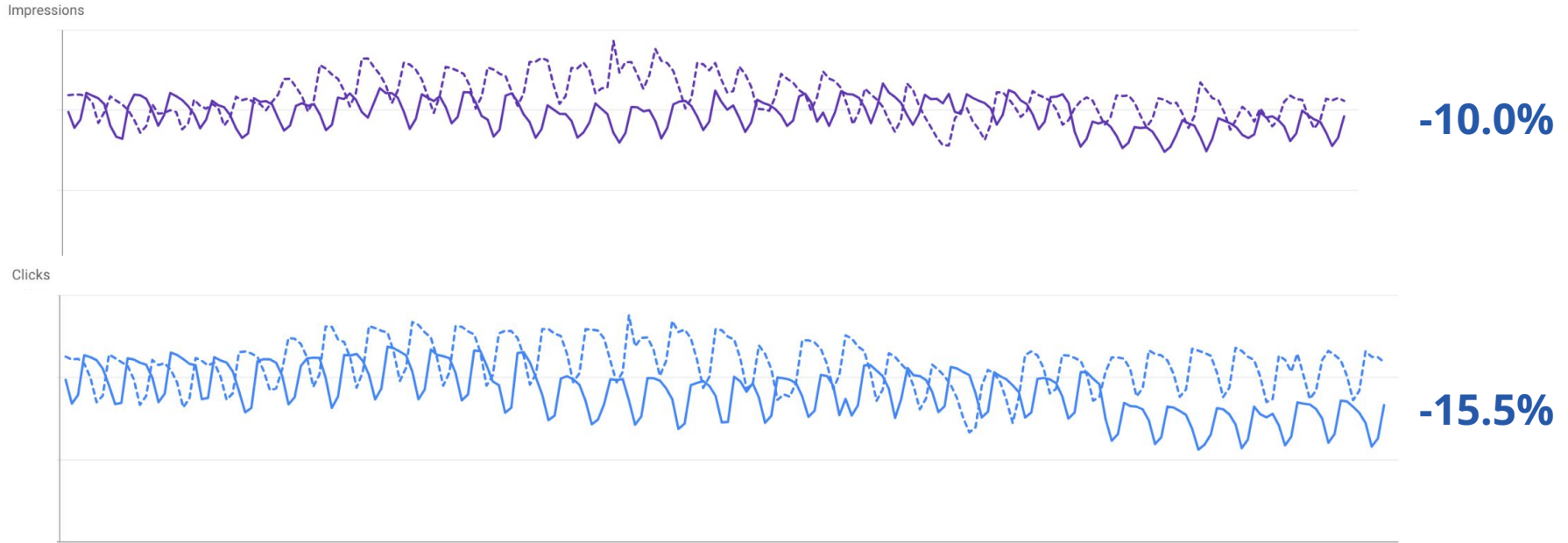
Sources: [Mark Traphagen](#)

How we measure success in search is changing



UTSW – Zero click impacts since March 2024

Google Search Console Trends (Mar -Sep 2024 vs previous period)



UTSW – Zero click impacts since March 2024

Site Impacts (Mar -Sep 2024 vs previous period)



Start with Quality, Informative Content



“Create
helpful,
reliable,
people-first
content”
- Google

Helpful Content should include:

- Factual information
- Comprehensive description of the topic
- Additional unique insights or information that other similar pages do not have
- Information that can demonstrate E-E-A-T

“Create
helpful,
reliable,
people-first
content”
- Google

Content should reflect *authority*

- Page must clearly indicate who the author is and link to the author page
- Good to also include author byline to demonstrate author’s knowledge in the subject

< MedBlog *Your Pregnancy Matters*

What does it mean to be a carrier for fragile X syndrome?

October 15, 2024



Ashley Zink, M.D.
Obstetrics and Gynecology



Heather Fisher, M.S.
Obstetrics and Gynecology

One of the genetic carrier screenings available to pregnant patients tests for fragile X syndrome, the most common inherited cause of intellectual disability.

Triggered by a mutation in the *FMR1* gene on the X chromosome, fragile X syndrome affects about 1 in 7,000 males and about 1 in 11,000 females. These individuals may have delayed speech and motor skills, hyperactivity, and social and emotional challenges. Fragile X syndrome is also associated with 1%-6% of cases of autism spectrum disorder.

While having fragile X syndrome is not particularly common, **it is far more common to be a carrier** – a person with an altered version of the *FMR1* gene who does not show any symptoms of the syndrome.

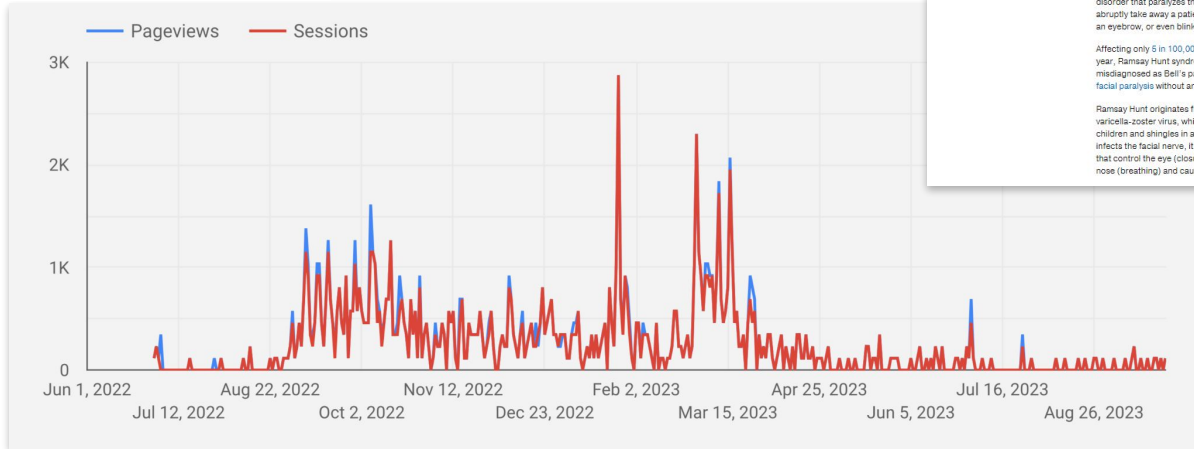


Fragile X syndrome is the most common inherited cause of intellectual disability. Learning about carrier status can help families prepare for and support their child's unique needs.

The Justin Bieber Effect

Pageviews

116,449



UT Southwestern Medical Center

MyChart Physician Referrals MedBlog Patient Resources Why UT Southwestern

Find a Doctor Conditions & Treatments Locations Academics Search

New Patient Appointment or 214-645-8300

What is Ramsay Hunt syndrome, the virus affecting Justin Bieber's face?

Chal M. Rozen, M.D.
Plastic Surgery

In June 2022, pop star Justin Bieber posted an Instagram video to announce to his 245 million followers that he had been diagnosed with Ramsay Hunt syndrome – a rare neurological disorder that paralyzes the facial nerve and can abruptly take away a patient's ability to smile, raise an eyebrow, or even blink on one side of their face.

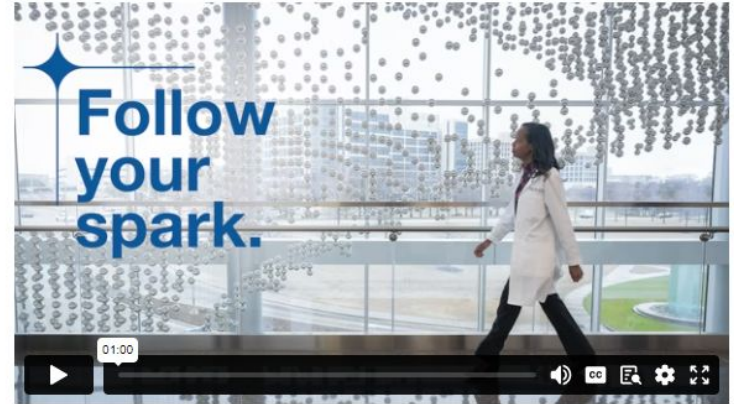
Affecting only 6 in 100,000 people in the U.S. each year, Ramsay Hunt syndrome is so rare it is often misdiagnosed as Bell's palsy, an umbrella term for facial paralysis without an identified cause.

Ramsay Hunt originates from reactivation of the varicella-zoster virus, which causes chickenpox in children and shingles in adults. When the virus infects the facial nerve, it can influence key muscles that control the eye (closure), mouth (smile), and nose (breathing) and cause temporary – sometimes permanent – paralysis on one side of the face.

Ramsay Hunt syndrome causes paralysis on one side of the face. The patient of Dr. Rozen had difficulty with smiling, speech, and eating. He restored her smile and facial symmetry with a free functional muscle transplant and Botox around the eye.

UTSW – Changes to Video Content

- Updated Vimeo file names and descriptions to be more clear on what they were about.
- Resulted in videos showing up more in search.
- Deployed Schema Markup at scale to provide clarity on what each unique page is describing



Schema.org

=

Vocabulary
used by search
engines

=

Information search
engines might want
to see on your page

Schema.org

Docs

Schemas

Validate

About

Schema.org is a collaborative, community activity with a mission to create, maintain, and promote schemas for structured data on the Internet, on web pages, in email messages, and beyond.

Schema.org vocabulary can be used with many different encodings, including RDFa, Microdata and JSON-LD. These vocabularies cover entities, relationships between entities and actions, and can easily be extended through a well-documented extension model. As of 2024, over 45 million web domains markup their web pages with over 450 billion Schema.org objects. Many applications from Google, Microsoft, Pinterest, Yandex and others already use these vocabularies to power rich, extensible experiences.

Founded by Google, Microsoft, Yahoo and Yandex, Schema.org vocabularies are developed by an open **community** process, using the public-schemaorg@w3.org mailing list and through [GitHub](#).

What do search engines want to know about Medical Conditions?

MedicalCondition

A Schema.org Type

[Thing](#) > [MedicalEntity](#) > [MedicalCondition](#)

[\[more...\]](#)

Any condition of the human body that affects the normal functioning of a person, whether physically or mentally. Includes diseases, injuries, disabilities, disorders, syndromes, etc.

Property	Expected Type	Description
Properties from MedicalCondition		
associatedAnatomy	AnatomicalStructure or AnatomicalSystem or SuperficialAnatomy	The anatomy of the underlying organ system or structures associated with this entity.
differentialDiagnosis	DDxElement	One of a set of differential diagnoses for the condition. Specifically, a closely-related or competing diagnosis typically considered later in the cognitive process whereby this medical condition is distinguished from others most likely responsible for a similar collection of signs and symptoms to reach the most parsimonious diagnosis or diagnoses in a patient.
drug	Drug	Specifying a drug or medicine used in a medication procedure.
epidemiology	Text	The characteristics of associated patients, such as age, gender, race etc.
expectedPrognosis	Text	The likely outcome in either the short term or long term of the medical condition.
naturalProgression	Text	The expected progression of the condition if it is not treated and allowed to progress naturally.
pathophysiology	Text	Changes in the normal mechanical, physical, and biochemical functions that are associated with this activity or condition.
possibleComplication	Text	A possible unexpected and unfavorable evolution of a medical condition. Complications may include worsening of the signs or symptoms of the disease, extension of the condition to other organ systems, etc.
possibleTreatment	MedicalTherapy	A possible treatment to address this condition, sign or symptom.
primaryPrevention	MedicalTherapy	A preventative therapy used to prevent an initial occurrence of the medical condition, such as vaccination.
riskFactor	MedicalRiskFactor	A modifiable or non-modifiable factor that increases the risk of a patient contracting this condition, e.g. age, coexisting condition.
secondaryPrevention	MedicalTherapy	A preventative therapy used to prevent reoccurrence of the medical condition after an initial episode of the condition.
signOrSymptom	MedicalSignOrSymptom	A sign or symptom of this condition. Signs are objective or physically observable manifestations of the medical condition while symptoms are the subjective experience of the medical condition.
stage	MedicalConditionStage	The stage of the condition, if applicable.
status	EventStatusType or MedicalStudyStatus or Text	The status of the study (enumerated).
typicalTest	MedicalTest	A medical test typically performed given this condition.

Make your Content Easy to Understand for Machines

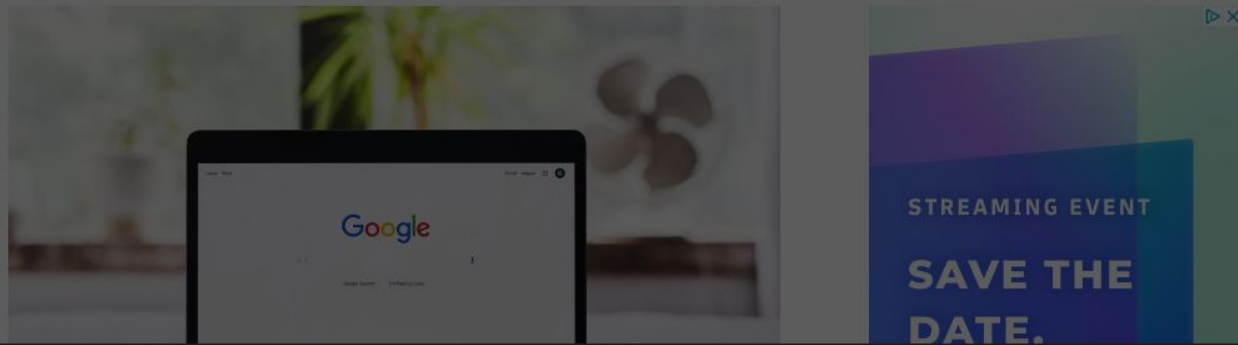


The AI Race: [AI Startups to Watch](#) | [AI's Real Carbon Footprint](#) | [Model Collapse Risk](#) | [Small AI Models](#) | [Why It's So Expensive](#) | [Global Energy Strain](#)

Technology
AI

Google's AI Search Gives Sites Dire Choice: Share Data or Die

Publishers say blocking the company's AI bot could also prevent their sites from showing up in search



Source: <https://www.bloomberg.com/news/articles/2024-08-15/google-s-search-dominance-leaves-sites-little-choice-on-ai-scraping>

What is Schema Markup?

- Data you add to your website to:
 - Help search engines better understand your content and entities
 - Provide users with better search results
- Also known as Structured Data
- Uses Schema.org standard vocabulary to define entities on your site
- Helps organizations achieve rich results on the SERP

Schema Markup
helps search
engines
understand the
content on your
site

```
<script type="application/ld+json">
{
  "@context": "https://schema.org",
  "@type": "Hospital",
  "@id": "https://utswmed.org/#Hospital",
  "url": "https://utswmed.org/",
  "name": "UT Southwestern Medical Center",
  "alternateName": "UTSW",
  "slogan": "The future of medicine, today.",
  "description": "UT Southwestern Medical Center in Dallas is one of the top academic medical centers, delivering compassionate care and the latest medical advances to patients.",
  "telephone": "+12146483111",
  "award": "#1 Best Regional Hospitals in Dallas-Forth Worth Metro",
  "areaServed": "http://www.wikidata.org/entity/Q16557",
  "telephone": "+18554448624",
  "sameAs": "https://twitter.com/UTSWMedCenter",
  "sameAs": "https://www.youtube.com/user/UTSWMed",
  "sameAs": "https://www.facebook.com/utswmed",
  "address": {
    "@type": "PostalAddress",
    "name": "UT Southwestern Medical Center Address",
    "@id": "https://utswmed.org/#PostalAddress",
    "streetAddress": "5323 Harry Hines Blvd.",
    "postalCode": "75390",
    "addressRegion": "TX",
    "addressLocality": "Dallas",
    "addressCountry": "US",
  },
}
</script>
```

Stand Out In Search with Rich Results

Physician Rich Result

<https://www.adventhealth.com> > find-doctor > doctor

Aaron Brodsky, MD - Hendersonville, NC - AdventHealth

Dr. Aaron Brodsky, Psychiatry. Make an appointment with Aaron Brodsky, MD at AdventHealth now, find contact information and more.

★★★★★ Rating: 4.9 · 33 votes

<https://www.adventhealth.com> > mar...

Maryam Kashi, DO | Gastroenterology | Orlando, FL | AdventHealth

Biography. Maryam Kashi, DO, is board certified in gastroenterology and...



4.8 ★★★★★ (213)

Job Listing



Dispatcher, Transporter, Full time, Baptist Jacksonville Baptist Health Jacksonville, FL, United States via Baptist Health

🕒 4 days ago 📁 Full-time

Review Snippet on Location Page


 Baptist Health | Jacksonville, FL
<https://www.baptistjax.com> > locations > beaches-family...

Baptist Primary Care Beaches Family Practice Office

Welcome to Baptist Primary Care Beaches Family Practice. From preventive care and sick care to management of ongoing conditions, we're here to care for you ...


★★★★★ Rating: 4.8 · 1,833 reviews · Price range: \$\$-\$\$\$\$

Video Rich Result

 Sharp HealthCare
<https://www.sharp.com> > health-news

How Do You Do a Home Colon Cancer Test? | Sharp Health News

Watch the video to learn how easy it is to do a fecal immunochemical test (FIT).



2:14




Recipe Rich Result

<https://www.sharp.com> > health-news > healthier-chicke...

Healthier Chicken Adobo Recipe | Sharp Health News

Ingredients - 2 cups water - 1 cup brown rice - 2 pounds boneless chicken breasts, or skinless drumsticks or thighs - 1/2 cup low-sodium soy sauce - 3/4 cup apple ...



 <h4>Recipe for Almost Instant Three Berry Parfait</h4> <p>AdventHealth No reviews Greek yogurt, oat granola bar, fresh strawberries, fresh</p>	 <h4>Recipe for Plant-Powered Pot Pie</h4> <p>AdventHealth No reviews Soy curls, almond flour, whole wheat pastry, new potatoes,</p>	 <h4>Recipe for Nut-Free Energy Squares</h4> <p>AdventHealth No reviews Garbanzo beans, pumpkin seeds, chia seeds, sunflower</p>
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If you want achieve rich results,
your content and website has to align with
Google's Structured Data Guidelines at all times

The screenshot shows the Google Search Central documentation page for 'General structured data guidelines'. The page header includes the Google Search Central logo, navigation links for Documentation, Support, Blog, What's new, and More, a search bar, and language settings (English). The left sidebar contains a navigation menu with categories like Introduction, Search Essentials, SEO fundamentals, Crawling and indexing, Ranking and search appearance, Monitoring and debugging, and Site-specific guides. The main content area features a blue banner with a LinkedIn link, a breadcrumb trail (Home > Search Central > Documentation), and a 'Was this helpful?' feedback prompt. The title 'General structured data guidelines' is prominently displayed with a bookmark icon and a 'Send feedback' button. The text explains that structured data should not violate Google's content policies to be eligible for rich results. A blue callout box highlights an important note: 'Important: Google does not guarantee that your structured data will show up in search results, even if your page is marked up correctly according to the Rich Results Test. Here are some common reasons why:' followed by a list of reasons, including that Google tailors search results based on user history and device type.

Google Search Central

Documentation Support Blog What's new More Search English

Documentation Search Console

Introduction Search Essentials SEO fundamentals Crawling and indexing Ranking and search appearance Monitoring and debugging Site-specific guides

We're now on LinkedIn. For news and resources from Google Search on making your site discoverable, follow us on LinkedIn.

Home > Search Central > Documentation Was this helpful? Send feedback

General structured data guidelines

To be eligible for rich result appearance in Google Search results, structured data shouldn't violate the [Content policies for Google Search](#) (which include our [spam policies](#)). In addition, this page details the general guidelines that apply to all structured data: they must be followed in order to be eligible for appearance as a rich result in Google Search.

If your page contains a [structured data issue](#), it can result in a manual action. A structured data manual action means that a page loses eligibility for appearance as a rich result; it doesn't affect how the page ranks in Google web search. To check if you have a manual action, open the [Manual Actions report in Search Console](#).

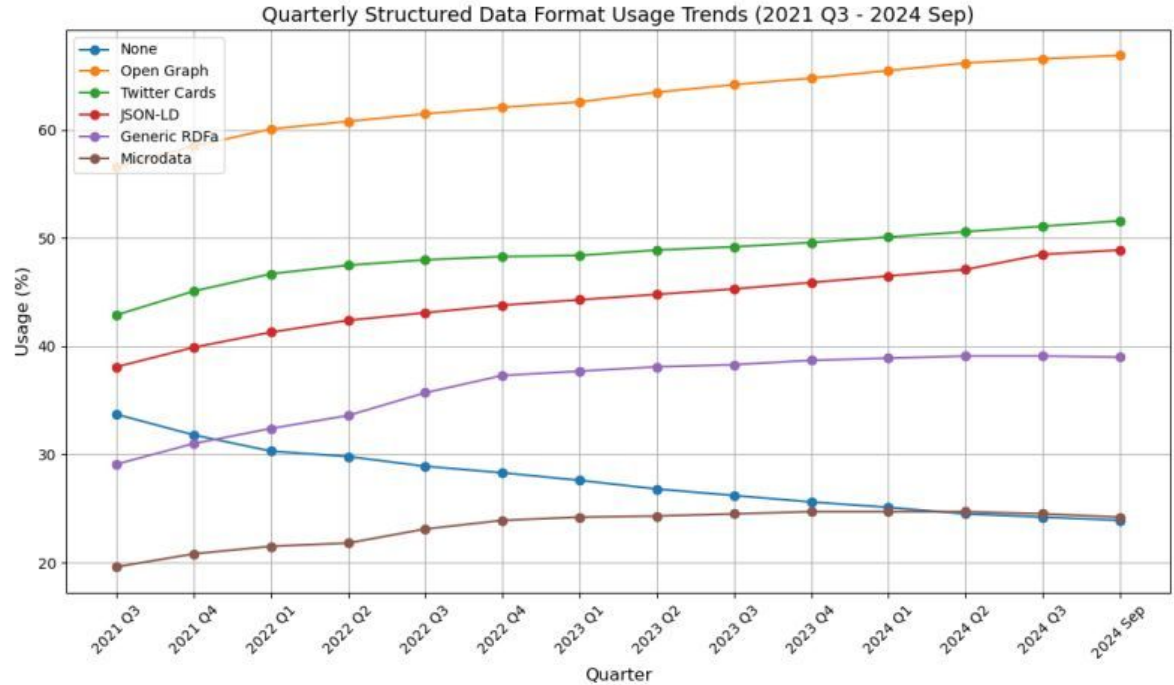
Important: Google does not guarantee that your structured data will show up in search results, even if your page is marked up correctly according to the [Rich Results Test](#). Here are some common reasons why:

- Using structured data *enables* a feature to be present, it does not *guarantee* that it will be present. The Google algorithm tailors search results to create what it thinks is the best search experience for a user, depending on many variables, including search history, location, and device type. In some cases it may determine that one feature is more appropriate than another, or even that a [text result](#) is best.

~50% of websites
are using
Structured Data



Structured data will play an increasingly critical role in the continued growth of AI and Voice search.



Understanding and Disambiguation

October 2023

Structured Data is “machine readable data that search engines can use to **understand the content**”.

New Types will be introduced and some might go away. – How-To and FAQs deprecated

Google introduced 5 new rich results

Aug 2024

Google updated Organization structured data documentation to emphasize that

- Organization **markup disambiguates** one organization from others using properties like iso6523 and naics.
- Certain properties can influence visual elements in search results and in a knowledge panel.

Structured Data for Rich Results

Structured Data for Semantics & Disambiguation

Evolving Value of Schema Markup

2011 - 2023

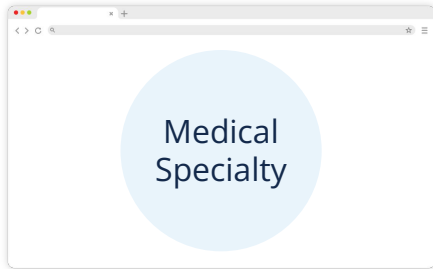
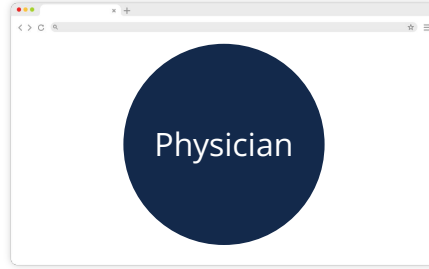
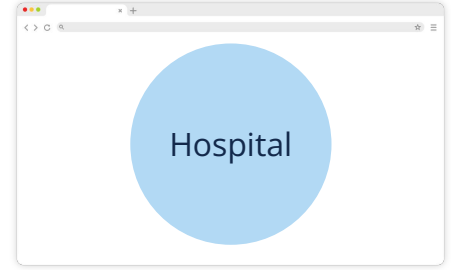
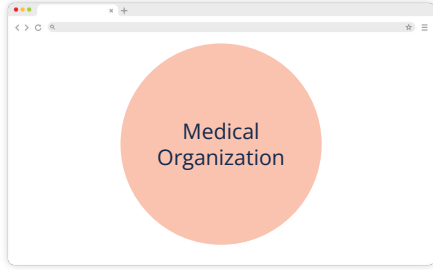
2023 - Present

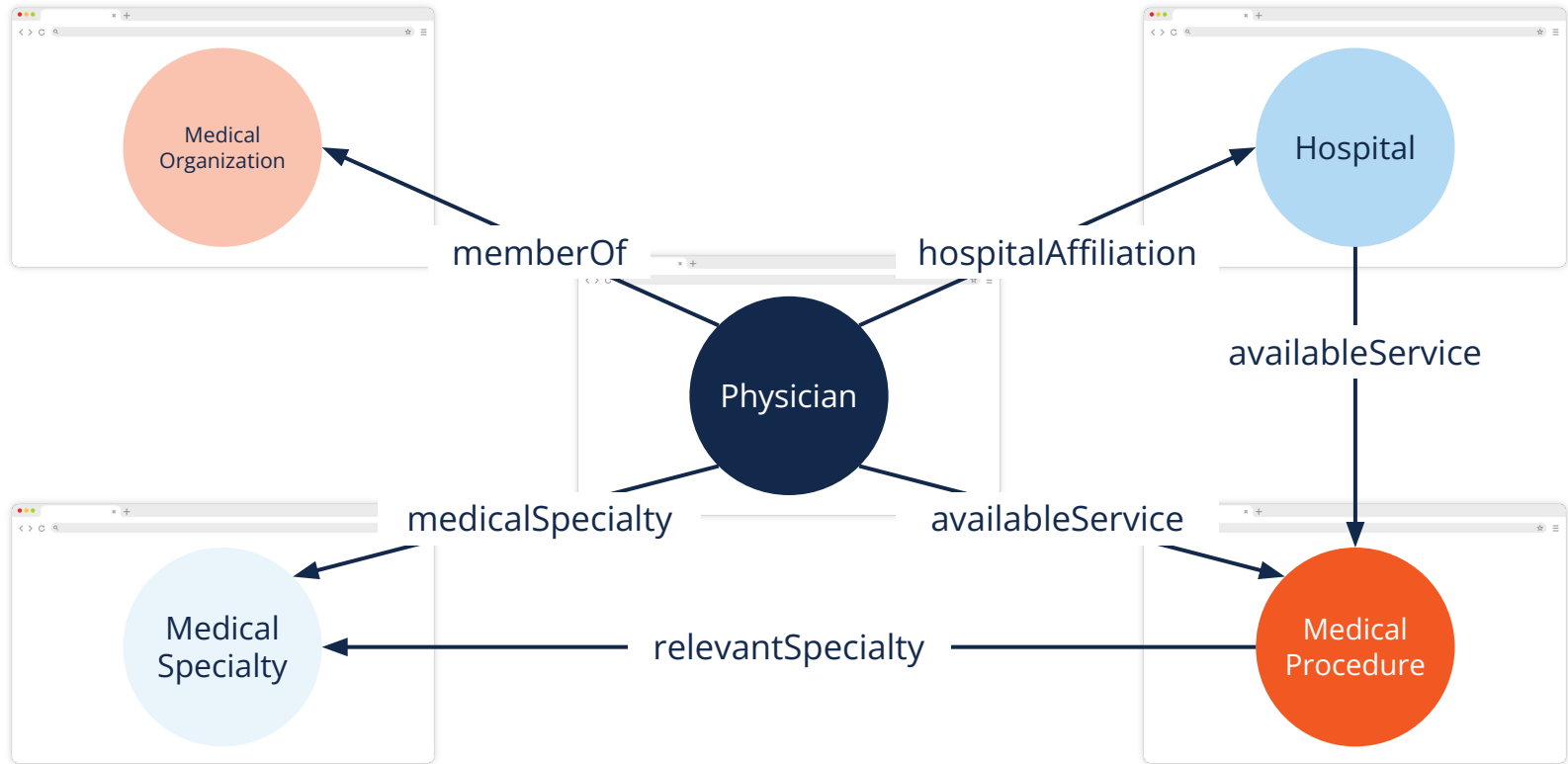
Future

Increased CTR from **Rich Results**

AI understanding in Search and AI from knowledge graph

Accelerating Insights from **Content Knowledge Graphs**





Schema.org
properties used to
describe the content
on the page and its
relationship to other
things on the
page/the website

memberOf

UT Southwestern
Medical Center.

Find a Doctor Conditions & Treatments Locations Academics Search

MyChart Physician Referrals MedBlog Patient Resources Why UT Southwestern

name
Elsa Abraham, M.S.N., APRN, AGACNP-BC

Internal Medicine - Cardiology

medicalSpecialty

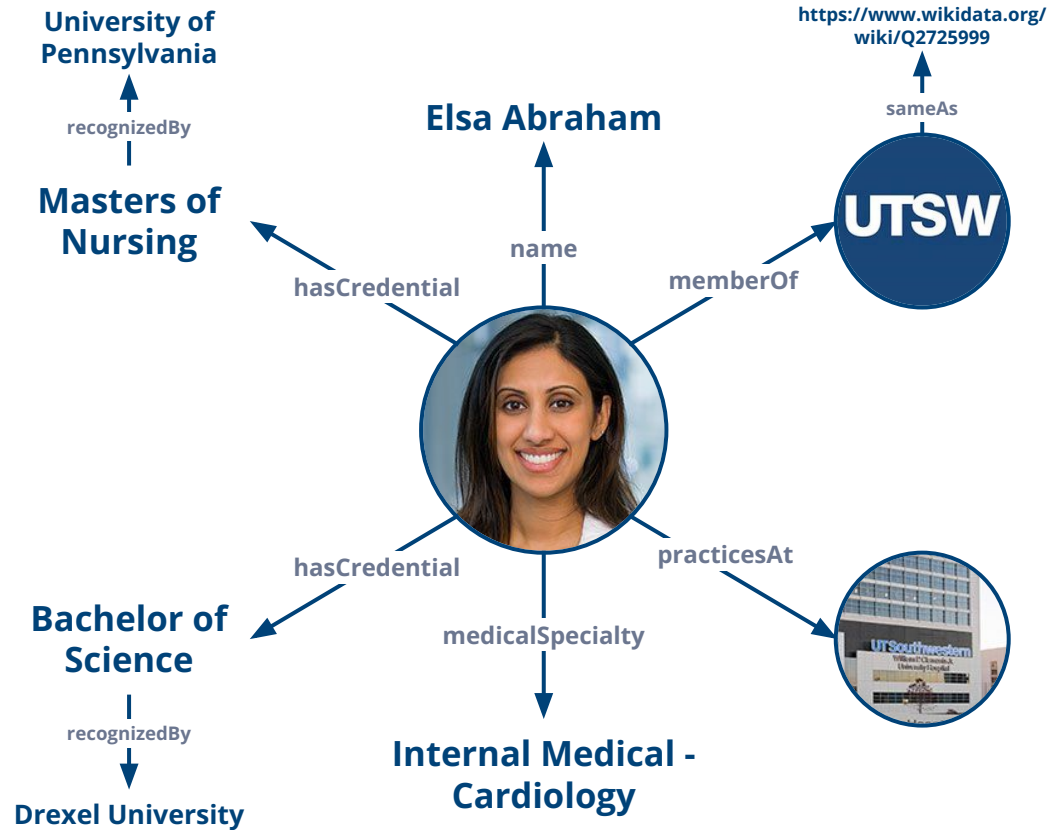
Locations
William P. Clements Jr.
University Hospital
practicesAt

description
Elsa Abraham, MSN, APRN, AGACNP - BC, is an Acute Care Nurse Practitioner in the Department of Cardiology - Electrophysiology at UT Southwestern Medical Center. She specializes in Cardiac arrhythmias. Ms. Abraham completed her undergraduate degree from the Drexel University in Philadelphia, PA and then earned her Master in Nursing from University of Pennsylvania in 2013. She is board certified as an Acute Care Nurse Practitioner and has worked in Cardiology for total of 5 years. She started with Interventional and Preventive Cardiology and now specializes in Cardiac arrhythmias (Electrophysiological disorder of the heart). She is a member of the North Texas Nurse Practitioners Association as well as several other professional organizations.

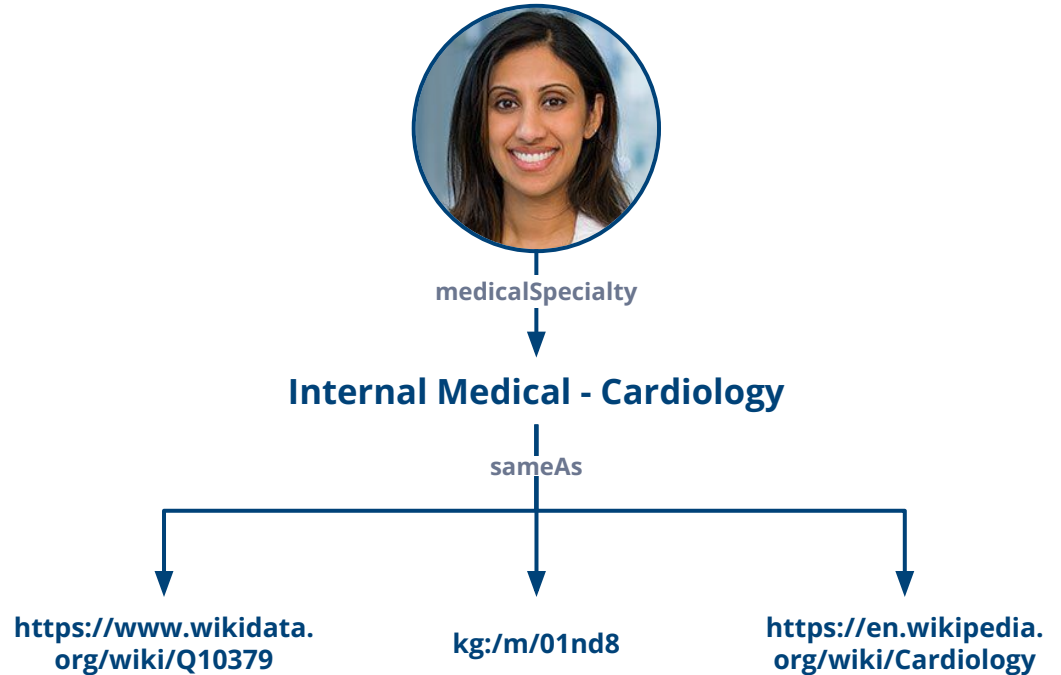
Education & Training

Masters in Nursing - University of Pennsylvania	hasCredential
Bachelor of Science - Drexel University	hasCredential

Schema Markup builds a Content Knowledge Graph



Entity Linking Supports Search Engine Disambiguation



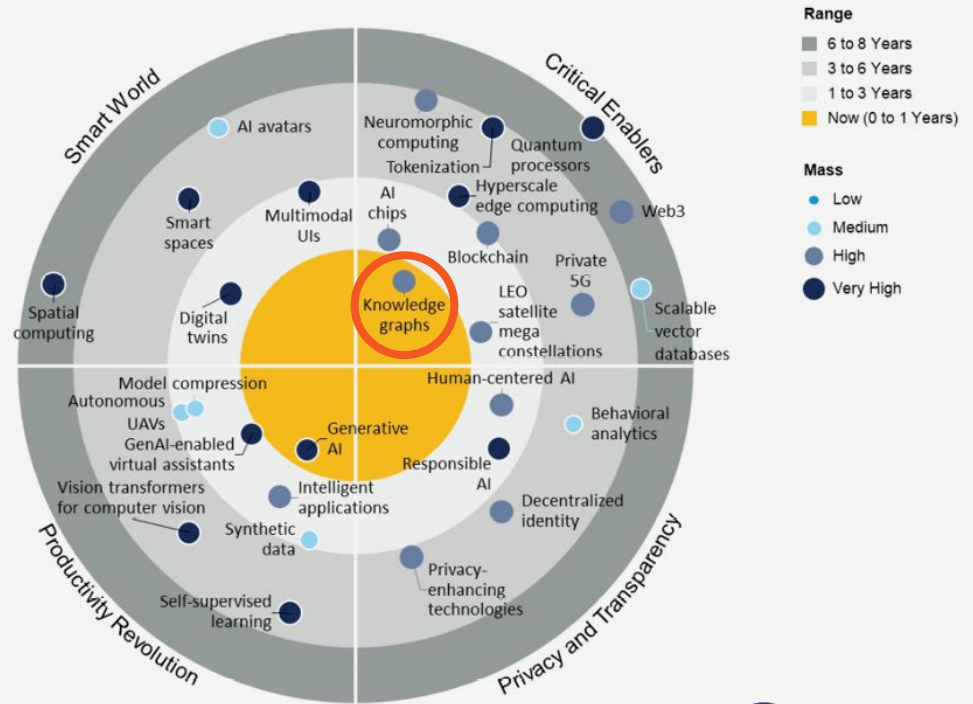
What is a Content Knowledge Graph?

A collection of relationships between the *entities defined within the content on your website* using a standardized vocabulary, from which new knowledge can be gained through inferencing.

Gartner names **Knowledge Graphs** as a “Critical Enabler” technology

[Gartner: 30 Emerging Technologies That Will Guide Your Business Decisions \(Feb 12, 2024\)](#)

Impact Radar for 2024



Source: Gartner
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Gartner

Data.world: Knowledge Graphs provide Higher Accuracy for LLM Responses in Enterprises by 300%

"If enterprises want to achieve higher accurate result in an LLM powered question answering system, they must *treat the business context and semantics as a first class citizen* and *invest in a data catalog platform with a knowledge graph architecture.*"

A BENCHMARK TO UNDERSTAND THE ROLE OF KNOWLEDGE GRAPHS ON LARGE LANGUAGE MODEL'S ACCURACY FOR QUESTION ANSWERING ON ENTERPRISE SQL DATABASES

TECHNICAL REPORT

Juan F. Sequeda
data.world
juan@data.world

Dean Allemang
data.world
dean.allemang@data.world

Bryon Jacob
data.world
bryon@data.world

November 13, 2023

ABSTRACT

Enterprise applications of Large Language Models (LLMs) hold promise for question answering on enterprise SQL databases. However, the extent to which LLMs can accurately respond to enterprise questions in such databases remains unclear, given the absence of suitable Text-to-SQL benchmarks tailored to enterprise settings. Additionally, the potential of Knowledge Graphs (KGs) to enhance LLM-based question answering by providing business context is not well understood. This study aims to evaluate the accuracy of LLM-powered question answering systems in the context of enterprise questions and SQL databases, while also exploring the role of knowledge graphs in improving accuracy. To achieve this, we introduce a benchmark comprising an enterprise SQL schema in the insurance domain, a range of enterprise queries encompassing reporting to metrics, and a contextual layer incorporating an ontology and mappings that define a knowledge graph. Our primary finding reveals that question answering using GPT-4, with zero-shot prompts directly on SQL databases, achieves an accuracy of 16%. Notably, this accuracy increases to 54% when questions are posed over a Knowledge Graph representation of the enterprise SQL database. Therefore, investing in Knowledge Graph provides higher accuracy for LLM powered question answering systems.

Keywords Knowledge Graphs · Large Language Models · Question Answering · SQL Databases · Benchmark · Retrieval Augmented Generation (RAG)

Source: [data.world](#). (2023, November 13). [A Benchmark to Understand the Role of Knowledge Graphs on Large Language Model Accuracy](#)

#6 Trend in Data Integration & Engineering: Knowledge Graphs

- Schema Markup is powerful tool for SEO but has additional applications.
- Knowledge Graphs that follow W3C standards enable you to re-use and contextualize data in new and useful ways.

Trend 6: Add Semantic Data Integration & Knowledge Graphs

Multirelationship data is complex.

Real-world is *situational, layered and changing* — this represents context to the data (often missing).

W3C standards such as RDF, OWL, SPARQL enable your data to speak a common universal language.

Semantic integration enables efficient data understanding and ontology mapping.

Create scalable knowledge representations of data with associated meanings called “*knowledge graphs*.”

Populating a knowledge graph from source data:

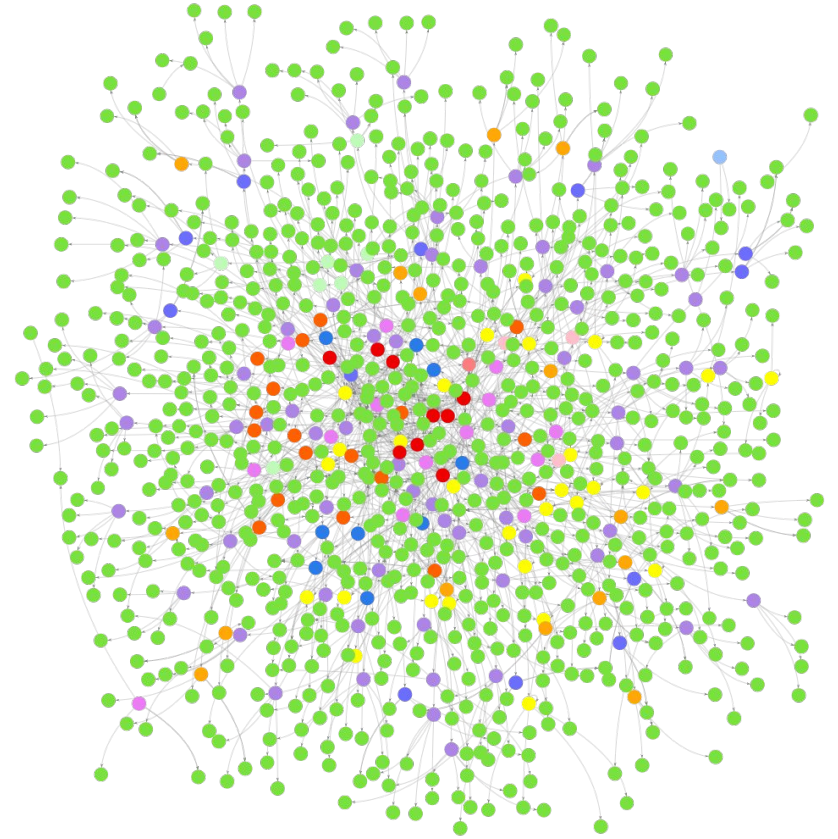
Mapping/Transformation → Entity Extraction → Graph Mapping → Knowledge Graph → Application/Storage (RDB, Product)

A knowledge graph acquires and integrates data into an ontology (or many) and then makes it available to applications.

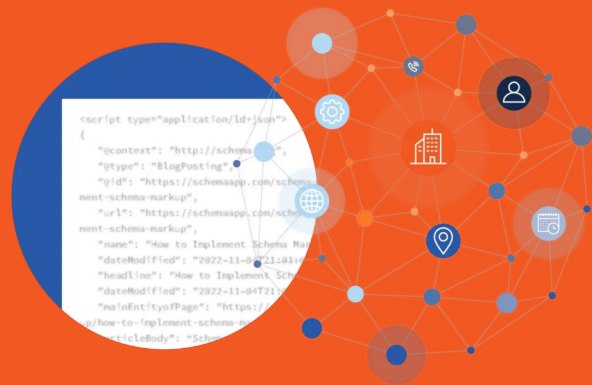
13 © 2024 Gartner, Inc. and/or its affiliates. All rights reserved. Gartner is a registered trademark of Gartner, Inc. and its affiliates. Gartner.

Source: Sequeda, Juan. (2024, May 14)
<https://x.com/juansequeda/status/1790341829683970193>

You get a content
knowledge graph
that is reusable for
insights



Knowledge Graphs can answer these questions...



Content Inventory

- What exists on my website?
- How widely is a specific entity covered across the website's content?

Content Coverage

- How much existing content overlaps with desired topics?
- Which entities are underrepresented, and where can additional content be created to improve coverage?

Content Optimization

- What new content should be added?
- What existing content should be improved?

Measure Performance

- How has this optimization impacted the performance of my content?

How do I know if my
Schema Markup is Building a
Content Knowledge Graph?

How to test your page for Schema Markup using Schema.org Validator

Schema.org

Documentation

Schemas

Validate

About

https://utswmed.org/medblog/ramsay-hunt-syndrome-facial-paralysis/

Run new test

あ

i

```
1 <!DOCTYPE html>
2 <html class="no-js" lang="en-us">
3   <head>
4
5
6
7
8   <link rel="dns-prefetch" href="https://s3-us-west-2.amazonaws.com/utsw-patientcare-web-production/stat:
9   <link rel="preconnect" href="https://s3-us-west-2.amazonaws.com/utsw-patientcare-web-production/static,
10  <link rel="dns-prefetch" href="https://cdnjs.cloudflare.com">
11  <link rel="preconnect" href="https://cdnjs.cloudflare.com">
12  <link rel="dns-prefetch" href="https://cdn.jsdelivr.net">
13  <link rel="preconnect" href="https://cdn.jsdelivr.net">
14  <link rel="dns-prefetch" href="https://www.google-analytics.com">
15  <link rel="preconnect" href="https://www.google-analytics.com">
16  <meta charset="utf-8">
17  <meta http-equiv="x-ua-compatible" content="ie=edge">
18
19
20  <title>What is Ramsay Hunt syndrome, the virus affecting Justin Bieber's face? | Plastic Surgery |
21
22  <meta name="title" content="What is Ramsay Hunt syndrome, the virus affecting Justin Bieber's face?
23
24  <meta name="description" content="Learn what causes Ramsay Hunt syndrome and why it's important to
25
26
27
28  <!-- Twitter Card data -->
29  <meta class="elastic" name="es_twitter:card" value="summary">
30  <!-- Open Graph data -->
31
32  <meta property="og:title" content="What is Ramsay Hunt syndrome, the virus affecting Justin Bie
33
34  <meta property="og:type" content="article" />
35  <meta property="og:url" content="http://utswmed.org/medblog/ramsay-hunt-syndrome-facial-paralysis/" />
36
```

MedicalScholarlyArticle

All (1)

MedicalScholarlyArticle

0 ERRORS 0 WARNINGS

ID: https://utswmed.org/medblog/ramsay-hunt-syndrome-facial-paralysis/#MedicalScholarlyArticle

@type	MedicalScholarlyArticle
@id	https://utswmed.org/medblog/ramsay-hunt-syndrome-facial-paralysis/#MedicalScholarlyArticle
url	https://utswmed.org/medblog/ramsay-hunt-syndrome-facial-paralysis/
inLanguage	en-US
mainEntityOfPage	https://utswmed.org/medblog/ramsay-hunt-syndrome-facial-paralysis/
name	What is Ramsay Hunt syndrome, the virus affecting Justin Bieber's face?
headline	What is Ramsay Hunt syndrome, the virus affecting Justin Bieber's face?
description	Learn what causes Ramsay Hunt syndrome and why it's important to talk with a doctor who specializes in the facial nerve if you have symptoms of paralysis.
datePublished	2022-06-29
author	
@type	Person
@id	https://utswmed.org/medblog/ramsay-hunt-syndrome-

1. Your Schema Markup is **Nested**

Explains the *hierarchy* and *relationship* between the entities on your page

✓ **Nested** Schema Markup

```
<script type="application/ld+json">
[
  {
    "@context": "https://schema.org/",
    "@type": "Product",
    "name": "White Tshirt",
    "description": "Soft, cotton white Ts."
    "aggregateRating": {
      "@type": "AggregateRating",
      "bestRating": "100",
      "ratingCount": "70",
      "ratingValue": "81",
    }
  }
]
```

✗ **Unnested** Schema Markup

```
<script type="application/ld+json">
[
  {
    "@context": "https://schema.org/",
    "@type": "Product",
    "name": "White Tshirt",
    "description": "Soft, cotton white Ts."
  },
  {
    "@context": "https://schema.org/",
    "@type": "AggregateRating",
    "bestRating": "100",
    "ratingCount": "70",
    "ratingValue": "81",
  }
]
```


You use the appropriate properties to **connect the entities across your site**

1. Pick the property that best describes the relationship between both entities
2. Include the @id of the entity you want to connect to using the chosen property

```
<script type="application/ld+json">
[
  {
    "@context": "https://schema.org/",
    "@type": "BlogPosting",
    "@id": "What is Schema Markup?",
    "headline": "What is Schema Markup?",
    "url": "https://www.schemaapp.com/schema-markup/what-is-schema-markup/#BlogPosting",
    "datePublished": "2024-05-02T05:48:56+00:00",
    "publisher": {
      "@type": "Organization",
      "@id": "https://schemaapp.com/#Organization",
      "url": "https://www.schemaapp.com/"
      "name": "Schema App",
    }
  }
]
```


Schema Paths Tool

- Helps users determine how to connect two schema.org types by listing all possible schema.org properties that can connect both types
- Good for connecting content across your pages
- <https://www.schemaapp.com/schema-paths/>

1. Select two Schema Types you want to connect

From Class 1

Individual Physician

to Class 2

Medical Clinic

Click to find a path

2. See all possible paths

- Individual Physician has property department which expects Organization, which Medical Clinic inherits from
- Individual Physician has property area Served which expects Place, which Medical Clinic inherits from
- Individual Physician has property sponsor which expects Organization, which Medical Clinic inherits from
- Individual Physician has property member Of which expects Organization, which Medical Clinic inherits from
- Individual Physician has property founder which expects Organization, which Medical Clinic inherits from
- Individual Physician has property contained In Place which expects Place, which Medical Clinic inherits from
- Individual Physician has property location which expects Place, which Medical Clinic inherits from

2. Your Schema Markup includes **Uniform Resource Identifiers (URIs)**

- For your entity to be *identifiable* and *retrievable*, it must have a distinct URI so that machines and search engines can:
 - Identify the unique entities on your site and
 - Know which entities you are referring to when you connect your entities in your knowledge graph
- In JSON-LD, URIs are expressed with the '@id' attribute

Organization		0 ERRORS 0 WARNINGS ^
ID:	https://www.schemaapp.com/#Organization	
@type	Organization	
@id	https://www.schemaapp.com/#Organization	
description	Schema App is an end-to-end Schema Markup solution that helps enterprise SEO teams develop a knowledge graph and drive search performance.	
name	Schema App	
url	https://www.schemaapp.com/	
address		
@type	PostalAddress	
@id	https://www.schemaapp.com/#PostalAddress	
streetAddress	201 - 412 Laird Road	
postalCode	N1G 3X7	
addressRegion	Ontario	
addressLocality	Guelph	
name	Schema App Address	
founder		
@type	Person	
@id	https://www.schemaapp.com/author/vberkel/#Person	
sameAs	https://www.linkedin.com/in/markvanberkel/	

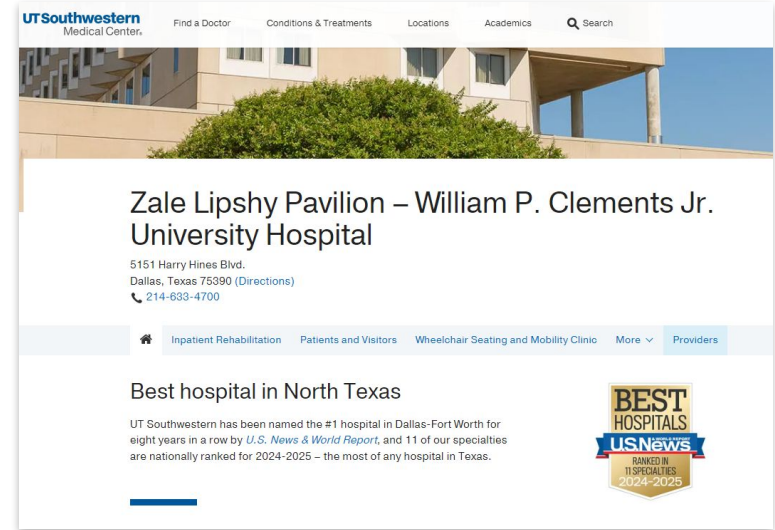
3. You do **Entity Linking** using your Schema Markup

- Identify entities mentioned in the text on your website and link them to the corresponding known entities on external authoritative knowledge bases such as Wikipedia, Wikidata, and Google's Knowledge Graph.
- Can help machines to disambiguate the entity mentioned in your content

```
<script type="application/ld+json">
  [
    {
      "@context": "https://schema.org/",
      "@type": "BlogPosting",
      "@id": "https://www.schemaapp.com/schema-markup/what-is-schema-markup/#BlogPosting",
      "headline": "What is Schema Markup?",
      "url": "https://www.schemaapp.com/schema-markup/what-is-schema-markup/",
      "datePublished": "2024-05-02T05:48:56+00:00",
      "publisher": {
        "@type": "Organization",
        "@id": "https://schemaapp.com/#Organization",
        "name": "Schema App",
        "mentions": {
          "@type": "Thing",
          "name": "Structured Data",
          "sameAs": "kg:/m/05p2j70",
          "sameAs": "http://www.wikidata.org/entity/Q26813700",
          "sameAs": "https://en.wikipedia.org/wiki/Structured\_data",
          "alternateName": "Schema Markup",
        }
      }
    }
  ]
}
```

Schema for Local SEO

- Identified each unique Physician's location and their medical specialty
- Identifies each unique Medical Clinics' location and provides disambiguation about these places through entity linking



areaServed	
@type	Place
@id	https://utswmed.org/locations/zale-lipshy-pavilion/zale-lipshy-pavilion/#MedicalOrganization_areaServed_Place
name	Dallas
sameAs	https://en.wikipedia.org/wiki/Dallas
sameAs	kg:/m/0f2rq
sameAs	https://www.wikidata.org/entity/Q16557

4. You're using a glossary to **define the terms** on your website

- Use Schema Markup to manage and disambiguate terms on your site
- A form of controlled vocabulary

```
<script type="application/ld+json">
[
  "@context": "https://schema.org/",
  "@type": "DefinedTerm",
  "@id": "https://www.schemaapp.com/glossary/Entity/#DefinedTerm",
  "name": "Entity",
  "url": "https://www.schemaapp.com/glossary/Entity/",
  "disambiguatingDescription": "A thing or concept that is unique and distinguishable, with specific and well-defined attributes. An entity can also be described as a Data Item, a Resource, a Node, or a Thing.",
]
```

Questions?

Thanks for joining us!

Scan the QR code to
download our
**Definitive Guide to
Healthcare Structured
Data in SEO**



Link: <https://bit.ly/hcic-2024>



Michael Meixner

Director of Digital Engagement

UT Southwestern

<https://www.utsouthwestern.edu/>

 /michaelmeixner/



Martha van Berkel

CEO & Co-Founder

Schema App

<https://www.schemaapp.com>

 /martha-van-berkel/