AN ORANGE 142 AI COUNCIL PUBLICATION

GEO Best Practices Guide for Healthcare Marketers

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Forward: AI Is Changing How Patients Find Care and Choose Providers

Healthcare has always been a deeply personal decision. Healthcare decisions usually begin with uncertainty, not with a provider name. They search for symptoms, often asking questions about a potential diagnosis, severity, timing for receiving care, outcomes, insurance, and proximity. Their goal is to understand what is happening and what to do next.

In the past, those questions were asked in a traditional search engine, with patients clicking through links and piecing together answers from multiple sources. Increasingly, however, patients are turning to AI-driven systems such as ChatGPT, Gemini, or Perplexity for answers. These platforms can interpret questions, summarize relevant information, and recommend providers or next steps. (source: "Online Health Information Seeking Behavior: A Systematic Review.")

AI is well-suited to healthcare questions because of how it can handle complexity and context. Rather than returning a list of links, AI synthesizes information into direct answers that reflect a patient's situation. Symptoms, location, insurance constraints, and urgency can all be considered at once. If a response is unclear, users can ask follow-up questions and receive more tailored explanations.

This shift is profound, and it's changing how patients choose care. The shortlist of providers a patient considers is no longer built by clicking through websites or healthcare practices and comparing options. It's assembled within AI-generated answers, search summaries, and recommendation layers, generated well before a patient visits a provider's site. (source: "Why Generative AI Search Matters for Health Systems — And What To Do About It.")

While it's true that many healthcare seekers still turn to a traditional search engine to begin their journeys, a growing share of those searches end without a click, as patients find answers in AI-generated summaries. Healthcare marketers report a 10-20% decline in organic traffic. (source)

Of course, a decline in website traffic does not necessarily mean a decline in patient demand. Rather, it means that a critical touchpoint has moved. Patients are still

making decisions online, but they're doing so based on what appears in AI-generated answers, knowledge panels, and review aggregations rather than on a provider's website.

For healthcare practices, this creates a new requirement. Visibility is no longer defined by rankings alone. It's defined by whether your practice is included in the answers patients rely on to make decisions.

This trend doesn't mean that healthcare practices should abandon search engine optimization (SEO) efforts. SEO remains essential as it ensures your content can be found. But in an environment where AI systems interpret data and make recommendations, visibility alone isn't enough. Your content must also be structured, consistent, and free of any ambiguity so that AI systems can understand and use with confidence.

To help practices adapt to the rise of AI, the Orange 142 AI Council developed this GEO Best Practices Guide for Healthcare Marketers. The goal is to provide a clear, practical framework for improving visibility in AI-driven search environments without adding unnecessary complexity.

About the Orange 142 AI Council

The Orange 142 AI Council was founded to address a growing concern: the widening divide between organizations that embrace generative AI and those that are hesitant to adopt it. Generative AI is rapidly reshaping how we work, raising the overall caliber while enabling teams to innovate faster. We understand that for many business leaders, generative AI remains an unfamiliar technology with many risks. We aim to demystify generative AI and provide the education and insights business leaders need to build a roadmap for its adoption, with complete confidence that its use will be safe and transformative.

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1. The Healthcare Discovery Shift

Most healthcare practice websites are designed around a traditional discovery process: patients search, click, compare. That pattern still exists, but it's no longer the dominant place where decisions begin.

Today's patients are more likely to start with AI systems, asking about symptoms, conditions, and treatment options prior to searching for a provider. By the time they do, the AI platform has already narrowed the set of options based on the patient's stated needs, healthcare preferences and the context developed through their questions. (source: The New Patient Journey: How Behavior Has Shifted in the Digital Age and What It Means for Healthcare Leaders.)

This type of symptom-based search isn't new. What's changed is how deeply it penetrates into the patient journey. AI systems can take a single question and turn it into a set of possible conditions, treatment options, and provider recommendations, all within a single interaction. Moreover, due to the nature of generative AI, patient queries are far more specific, often including details about severity, timing, insurance, cost concerns, personal belief systems about healthcare, and even location. (source: "That's just Future Medicine" — a qualitative study on users' experiences of symptom checker apps.)

The result is an ultra-compressed decision path. Patients may move from an initial question to a provider shortlist without visiting a single practice website. This is especially true in urgent or location-sensitive scenarios.

For healthcare practices, this shifts where competitive differentiation now occurs. It's no longer enough to have a strong website; to compete for a patient's consideration, your services must be structured so AI systems can confidently interpret and surface them in response to patient questions.

That places greater importance on generative engine optimization, or GEO. GEO is the practice of structuring website content so that it may be interpreted and matched to patient needs. In this environment, the competitive advantage isn't only other providers; it also includes the AI systems that sway the patient in meaningful ways.

2. What GEO Means in a Healthcare Context

Search engine optimization (SEO) remains the foundation of digital visibility. It ensures your website can be found when patients search for relevant topics.

Generative Engine Optimization (GEO) builds on that foundation. It focuses on whether your content can be clearly understood, trusted, and used by AI systems when they respond to patient questions.

In simple terms:

- SEO helps your content appear
- GEO helps your content get used

This distinction matters because search is no longer limited to returning a list of links. AI systems interpret questions, evaluate available information, and present a smaller set of answers or recommendations.

For healthcare organizations, this changes how visibility works. Patients are increasingly making decisions based on summaries provided in search results and AI-generated responses, rather than reviewing multiple provider websites. As a result, content is evaluated differently. It's no longer selected based primarily on keyword alignment; It's selected based on how clearly it matches what a patient actually asks, whether stated or implied, including symptoms, timing, insurance, cost, and location.

AI systems combine these factors with available provider information to surface care options that fit the patient's situation. Research into zero-click behavior in healthcare shows that many of these decisions now occur within summaries and AI-generated answers rather than on traditional results pages.
(source: Zero-Click Search Strategies Every Health Care Marketer Should Know)

For healthcare practices, this means visibility depends on more than being present in search results. It depends on whether your services can be interpreted accurately and matched to patient needs.

Why Healthcare Raises the Bar

Healthcare isn't just another vertical adapting to GEO; it's one where the stakes demand a higher standard of accuracy.

AI systems are designed to avoid getting things wrong. As concerns about hallucinations proliferated, platforms have become more conservative about what they include in their responses. They're more likely to exclude information than to present something in which they lack confidence.

This means that content must be clear, consistent, and supported by credible signals before it is used. AI systems look for definitions that don't shift, claims that are backed by evidence, and relationships between concepts that are explicitly stated rather than implied.

In healthcare, that threshold is even higher.

McKinsey and others describe AI as a "front door" to care, where systems must interpret provider and service information and guide patients toward appropriate options. (source: Harnessing AI to reshape consumer experiences in healthcare.)

When the AI-generated responses concern someone's health, AI systems are less willing to rely on incomplete or ambiguous information. They need complete confidence in what your services are, as well as how your services relate to specific conditions, who such services are appropriate for, and why your practice is a qualified provider to deliver them.

This is where many healthcare websites fall short. Information may be accurate, but it is often fragmented, inconsistently labeled, or difficult to connect across pages. Services are described in different ways, relationships between conditions and treatments are implied rather than stated, and credibility signals are separated from the content they're meant to support. From an AI perspective, this creates ambiguity, and when ambiguity is present, AI systems tend to exclude rather than infer.

This is why clarity at the level of definition and relationships matters. AI systems need to encounter the same concepts, described the same way, and connected in predictable ways across a site. Without that consistency, even strong clinical offerings can be difficult for AI systems to interpret and recommend. source: Before Patients Find You, AI Already Has: What Health Systems Must Do Now)

3. Why Healthcare Organizations Struggle with AI Visibility

Most healthcare organizations that struggle with AI visibility don't have a technical problem; they have a structural and editorial one.

Generative AI systems, such as ChatGPT, Gemini, Claude, Perplexity, and others, need to understand what you do, who you do it for, and why you're credible. Moreover, they need to extract that understanding from your content without guessing. (source: "What Experience Means for Healthcare Content.")

When clarity is missing, AI platforms don't attempt to fill in the gaps; they simply default to exclusion. And as noted in the previous section, where the cost of a wrong answer is as high as it is in healthcare, that threshold is even stricter.

The Common Challenges
Healthcare websites are full of content, but much of it is difficult for AI to parse confidently. The same issues come up repeatedly:

- **Service definitions that are vague or inconsistent across pages.** For example, an orthopedics overview page may refer to "Advanced Joint Care," while a services page refers to "total joint replacement" or "hip replacement." While these may describe the same offering, the variation makes it difficult for AI systems to determine that they are connected.

- **Blended pages that mix conditions, treatments, and marketing language into a single page.** A "Back Pain Treatment" page may list multiple conditions, multiple treatment options, and general statements about quality of care, without clearly connecting which treatments apply to which conditions or when they are appropriate.

  While this may feel comprehensive, it makes it difficult for AI systems to extract clear meaning. Without explicit relationships between conditions, treatments, and services, the content is harder to interpret and less likely to be surfaced in response to patient questions.

- **Proof points that are weak or disconnected from the claims they're supposed to support.** Healthcare websites often include strong credibility signals such as awards, accreditations, or patient outcomes. However, these are frequently presented in isolation, rather than tied directly to specific services.

  For example, a page may highlight “Top-Rated Orthopedic Care” without linking that claim to measurable outcomes, specific procedures, or the providers responsible for those results. When proof is not clearly connected to what it validates, AI systems have difficulty using it to establish credibility.

- **Overreliance on brand language, where clinical clarity would be more effective.** Many pages rely on broad phrases such as “comprehensive care,” “advanced treatment options,” or “patient-centered approach” without clearly explaining what those terms mean in practice.

  While this language may support brand positioning, it does not provide the specificity AI systems need to interpret services or match them to patient needs. In healthcare, clarity about conditions, treatments, and outcomes is more useful than general positioning statements.

None of these are SEO problems in the traditional sense. There are communication problems, and they directly determine whether AI systems can understand your content well enough to recommend it.

What Healthcare Content Must Answer

The fix isn't more content, it's clearer content. Every service page, condition page, and provider profile should make it easy for both patients and AI systems to extract answers to five fundamental questions:

1. What condition is being addressed?
2. What treatment or service is offered?
3. What type of patient, and at what stage, is this treatment for?
4. When is and isn’t this service appropriate?
5. Why is this provider credible for this specific need?

When content answers these questions directly, AI systems can confidently match it to patient queries. When it doesn't (i.e. when the meaning is buried in jargon, scattered across tabs, or diluted by brand messaging) no amount of technical optimization will compensate. Schema markup, structured data, and metadata all matter. But they can only organize what already exists on the page. They can't create it.

4. AI Confidence: The Hidden Gatekeeper

Generative AI systems don't recommend healthcare providers lightly. Before including an organization in an answer, AI needs complete confidence that the information is accurate, that the relationships among conditions, treatments, and providers are clear, and that the content can be cited without risking patient misguidance.

That confidence is built from specific signals in your content:

- Consistent terminology is used the same way across every page
- Clear and explicit relationships between conditions and the treatments available for them
- The providers who deliver that care
- Verifiable credentials and proof points that back up clinical claims
- Language precise enough to be quoted or summarized without distortion.

This represents a fundamental shift in how visibility works. Traditional search rewarded relevance; if your page was reasonably related to a query, it had a chance to appear.

Generative AI operates differently. It avoids speculation. When it encounters ambiguity, conflicting details, or claims it can't verify, it doesn't guess; it omits. In a healthcare context, where a bad recommendation could affect someone's health, that instinct is even stronger.

The implication for healthcare organizations is stark: ambiguity is no longer a branding problem or a content quality issue. It's a visibility problem. If your service pages use different names for the same procedure, if your provider credentials are buried or missing, if the connection between a condition and your treatment for it requires inference rather than a clear statement, AI will skip your practice in its answers. That omission isn’t based on the quality of your care; it is based on the fact that your content didn’t instill confidence in the AI platform.

5. What Strong Healthcare GEO Looks Like

Healthcare organizations that consistently appear in AI-generated answers operate with greater clarity and consistency in how their services, content, and expertise are defined and presented.
Their digital presence forms a coherent system that AI can interpret without hesitation.

This level of clarity is not accidental; it's the result of deliberate structuring of how information is defined, connected, and reinforced across the site.

Several characteristics tend to recur.

Clear Clinical Definitions
Strong performers distinguish clearly between conditions, treatments, and services, and they maintain those distinctions across every page.

- Conditions are defined as patient needs or diagnoses
- Treatments are defined as the interventions used to address those conditions
- Services describe how those treatments are delivered within the organization

These distinctions are not left to implication. They are stated directly and used consistently.

This level of clarity is established through entity mapping, where core concepts such as conditions, treatments, services, and providers are explicitly defined, and their relationships are structured before content is written or revised.

Once those relationships are defined, they are reinforced across the site so that AI systems encounter the same meanings consistently

Consistent Use of Language
Terminology is controlled and stable. Key services, specialties, and concepts are referenced using the same language across pages, headings, and supporting content.

This consistency is rarely achieved through writing alone. It is maintained through Named Entity Recognition (NER) standards that define how key entities, such as services, credentials, specialties, and provider roles, are referenced throughout the site.

NER ensures that:

- The same service is not described in multiple ways
- Provider credentials are consistently and visibly tied to expertise
- Critical concepts are not diluted by variation or shorthand

This consistency strengthens AI confidence by removing ambiguity and reinforcing meaning at every touchpoint.

Content Structured Around Real Decisions

Content reflects how patients and healthcare professionals actually make decisions. Pages are aligned to real questions: symptoms, conditions, treatment options, timing, eligibility, and next steps. Information is presented in a sequence that mirrors the decision-making process.

This is where the emerging practice of Answer Engine Optimization (AEO) becomes critical.
AEO focuses on structuring content so that:

- Each page answers a clear, intent-driven question
- Explanations are direct and extractable
- Definitions do not shift across pages

One of the most important roles AEO plays is preventing drift. As sites grow and evolve, definitions and positioning often change subtly over time. AEO, combined with NER, enforces consistency so that AI systems continue to encounter stable, reliable answers.

Credibility That Is Explicit and Contextual

AI systems seek verifiable evidence before including a healthcare provider in a response. These proof signals function as proof entities, which help establish whether a service or provider can be trusted.

Common proof entities include:

- Provider credentials and certifications
- Years of experience or specialization
- Patient outcomes or success rates
- Accreditations or affiliations
- Documented case examples

For these signals to be useful, they need to be clearly connected to the services they support. For example, it is not enough to state that a practice offers "top-rated orthopedic care." AI systems look for specific connections, such as:

- Which providers perform joint replacement procedures
- What qualifications do those providers hold
- What outcomes or experiences support those claims

When proof is presented in general terms or separated from the services it validates, AI systems struggle to use it. They cannot reliably determine what the proof applies to. This is where structure and consistency matter. Using Named Entity Recognition (NER) standards and a clear content structure ensures that:

- Credentials are consistently tied to the correct providers
- Providers are clearly linked to specific services
- Proof is attached to the claims it is meant to support

When these relationships are explicit, AI systems can use that information to establish credibility. When they are not, the content is more likely to be excluded.

Content That Can Be Reused Without Interpretation

AI systems don't just read content. They extract, summarize, and reuse it when answering patient questions.

For that to work, content must be written so that it can be quoted without requiring interpretation. Explanations should be direct, relationships between concepts should be clearly stated, and claims should be specific and supported where needed. For example, a page should clearly state what a service is, who it is for, and when it is appropriate, rather than relying on general descriptions or implied meaning.

This is a direct outcome of AEO-driven content development, where content is intentionally written to be reusable within AI-generated answers, not just readable on a page.

Structural Consistency Across the Site
High-performing organizations do not treat pages as isolated assets. Their content works together.
Service pages, condition pages, and provider profiles reinforce one another. Definitions remain aligned. Relationships between offerings are clear.

This structure is reinforced through internal linking strategies that reflect entity relationships rather than just navigation.

Internal links signal:

- which services relate to which conditions
- which providers deliver which treatments
- how different parts of the organization connect

This allows AI systems to build a coherent model of the organization, rather than encountering disconnected or conflicting signals.

The Result
When these elements are in place, AI systems can do three things reliably:

- Understand what your organization offers
- Match those offerings to patient and workforce intent
- Represent your organization accurately in generated answers

This is what drives inclusion.

6. GEO Best Practices for Healthcare Websites

As AI-driven search becomes a primary way patients find care, optimizing for visibility requires more than traditional SEO tactics. Healthcare content must be structured so that AI systems can understand it, trust it, and use it to respond to patient questions.

The following best practices help healthcare organizations improve AI visibility while maintaining accuracy, clarity, and credibility.

1. Define Your Services Clearly and Consistently
AI systems need to understand exactly what you offer before they can recommend it. This requires clearly separating:

- Conditions you treat
- Treatments you provide
- Services you offer
- Providers who deliver that care

Each of these should be defined explicitly and described consistently across your site. Avoid using multiple names for the same service or grouping unrelated concepts under broad terms like “comprehensive care.”

This level of clarity is typically established through entity mapping, which ensures that key concepts and their relationships are defined before content is created or updated.

2. Use Consistent Language Across Your Site
AI systems rely on consistency to build confidence.

Key services, specialties, and credentials should be referenced consistently across pages, headings, and supporting content. Small variations in terminology can make it harder for AI systems to recognize that two pages are describing the same thing.

This is where Named Entity Recognition (NER) standards come into play. They ensure that:

- Services are described consistently
- Provider credentials are clearly and repeatedly tied to expertise
- Important concepts are not diluted by variation

Consistency is what allows AI systems to connect the dots across your site.

3. Structure Content Around Patient Questions
Patients don't search using marketing language. They ask questions. Content should be organized around real patient concerns, such as:

- What is this condition?
- Do I need treatment now, or can it wait?
- What are my options?
- What does this cost, or what insurance is accepted?

Each page should answer a clear question and present information in a way that is easy to interpret and summarize.

This is the focus of Answer Engine Optimization (AEO). It ensures that:

- Content is direct and easy to extract
- Answers are clear and not buried in long paragraphs
- Definitions remain stable across pages

AEO also helps prevent content drift, in which definitions and positioning change over time, creating inconsistency.

4. Make Relationships Between Services Explicit
AI systems do not infer relationships as easily as people do. They rely on clear signals. Your content should make it obvious:

- Which treatments address which conditions
- Which providers deliver which services
- How different services relate to one another

This is reinforced through internal linking strategies that reflect real relationships, not just navigation. For example:

- Condition pages should link to relevant treatments
- Treatment pages should link to providers
- Provider pages should link back to services

These connections help AI systems build a coherent understanding of your organization.

5. Connect Credibility Directly to Services
In healthcare, credibility is critical to visibility. Credentials, certifications, outcomes, and experience should be:

- Easy to find
- Clearly stated
- Directly tied to the services they support

Avoid placing proof in isolated sections disconnected from the content they validate. NER and structured content help ensure that:

- Provider expertise is consistently associated with relevant services
- Claims are supported where they appear
- AI systems can verify credibility without guessing

6. Write Content That AI Can Reuse
AI systems don't just read content. They reuse it. Content should be written so that:

- Key points can be quoted or summarized without losing meaning
- Explanations are direct and precise
- Unnecessary complexity or ambiguity is removed

This does not mean oversimplifying medical information. It means organizing it so it can be clearly interpreted and accurately represented.

7. Support Meaning with Technical Structure
Technical elements still matter, but they support clarity rather than replace it.
Best practices include:

- Using structured data (schema) to reinforce defined services and providers
- Organizing content with clear headings and hierarchy
- Ensuring pages are easy to crawl and interpret

Schema and metadata help AI systems process information more efficiently, but they cannot fix unclear or inconsistent content.

8. Align Measurement with AI Visibility

Traditional metrics such as traffic and rankings remain useful, but they no longer capture the full picture. Healthcare organizations should also monitor:

- Whether they appear in AI-generated responses
- How accurately their services are represented
- Whether their content aligns with the questions patients are asking

Tools, such as SEMRush, can help healthcare organizations quantify:

- Frequency of brand mentions in AI overviews
- Contextual relevance in AI-generated responses
- Depth of citations in generative search results