

The AI Search Revolution: Why Your Radiology SEO Strategy Needs to Evolve

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PART 1 OF 2: UNDERSTANDING THE NEW SEARCH LANDSCAPE

If your radiology practice has seen organic website traffic decline over the past year, you're not alone—and you're not imagining it. The search landscape has fundamentally changed, and the traditional SEO playbook that served us well for two decades is rapidly becoming obsolete.

The Death of the Click

For years, digital marketing success meant one thing: getting the click. We optimized meta descriptions, crafted compelling headlines, and fought for position 1 in Google search results. But that era is ending. Recent data reveals that 58% of Google searches now end without a single click. These “zero-click searches” mean patients are getting their answers directly on the search results page—without ever visiting your carefully designed website.

When someone searches “how to prepare for an MRI” or “best quality mammogram near me,” Google’s AI now generates a comprehensive answer right at the top of the page. Your website might be cited in that AI-generated summary, or it might be invisible—even if you historically ranked well for those terms.

As Aaron Brown, Digital Director at Ali'i Marketing By Design, points out, this represents a 30-50% decline in traffic for many healthcare organizations. It's not a temporary algorithm adjustment—it's a fundamental transformation in how patients find and consume medical information.

Welcome to the Age of AI Search

Google's Search Generative Experience (SGE) is rewriting the rules. Instead of simply ranking websites, Google's AI now reads content like a research assistant, pulling information from multiple sources to create synthesized answers. The platform evaluates whether your content is trustworthy, factually accurate, and well-structured enough to cite.

For radiology practices, this changes everything. Patients researching breast density notifications, comparing imaging center quality, or understanding insurance coverage for advanced imaging are increasingly getting their answers without clicking through to any provider's website. Traditional SEO metrics like keyword rankings and click-through rates no longer tell the complete story.

The Radiology-Specific Impact

The implications for radiology marketing are particularly acute. Consider these patient search behaviors that AI is now intercepting:

PROCEDURE PREPARATION QUERIES: “Can I eat before a CT scan with contrast?” or “What should I wear to a mammogram?” Previously drove significant traffic to preparation pages.

“NEAR ME” SEARCHES: “X-ray open now near me” or “urgent imaging center” once reliably brought patients to local imaging centers.

INSURANCE AND COST QUESTIONS: “Does insurance cover 3D mammography?” or “average cost of brain MRI” are now answered directly in AI summaries.

QUALITY COMPARISONS: “Best imaging center in [city]” or “newest MRI technology” queries that used to drive competitive differentiation now get answered with AI summaries instead of sending patients to your site.

Each of these search types now often returns an AI-generated answer, leaving your website unseen.

From Rankings to Relevance

The transformation requires a complete mindset shift. Brown emphasizes that the future of radiology marketing means moving from rankings and clicks to relevance and visibility. Success is no longer measured by traffic volume alone, but by whether AI systems recognize your practice as an authoritative source worth citing.

THIS MEANS EVOLVING FROM:

- Traffic-first thinking to qualified engagement and cited expertise
- Content sprawl to value-rich, structured, multimodal content
- Set-it-and-forget-it SEO to continuous testing and optimization

The practices winning in this new environment aren’t necessarily those with the most content—they’re the ones creating content that AI systems can easily parse, verify, and quote.

What AI Systems Want

AI search engines reward specific content characteristics that many radiology websites currently lack:

CLEAR, FACTUAL WRITING: AI cross-verifies information from multiple sources. Outdated statistics or unverified claims result in your content being filtered out.

STRUCTURED FORMATTING: Lists, headers, FAQ sections, and concise paragraphs help AI extract and cite your content. Wall-of-text blog posts don’t make the cut.

DEMONSTRATED CREDIBILITY: Schema markup, physician credentials, facility accreditations, and consistent NAP (name, address, phone) data across your Google Business Profile build algorithmic trust.

ANSWER-ORIENTED CONTENT: Direct responses to common questions perform better than promotional content or general overviews.

The Risk of Inaction

Healthcare organizations that treat this as “just another Google update” face serious consequences. Data from healthcare marketing agencies tracking these changes show significant drops in organic traffic since AI Overviews launched.

Meanwhile, early adopters who’ve restructured their content strategy are maintaining visibility and even gaining ground as competitors fade into irrelevance. AI isn’t just another update—it’s a paradigm shift.

Your First Steps Forward

The transformation doesn’t require abandoning everything you’ve built, but it does demand evolution. Brown’s adoption of “being ruthlessly helpful”² provides a practical starting point:

AUDIT FOR AI READINESS: Review your top-performing content through an AI lens. Is it structured with clear headers? Does it include schema markup? Are facts current and properly sourced?

START SMALL: Choose one high-priority service line—perhaps breast imaging or interventional radiology—and optimize that content first.

TEST AND MEASURE: Track not just rankings, but whether you’re being cited in AI summaries. New tools are emerging to measure “AI visibility” alongside traditional metrics.

FOSTER CURIOSITY: Make AI literacy a team priority. The practices thriving in this environment are those where marketers experiment with AI tools and share learnings.

What’s Next

Understanding the problem is only half the battle. In Part 2 of this series, we’ll explore how paid media has become the essential counterbalance to organic visibility losses—and why radiology practices can no longer treat paid search as optional. We’ll examine specific campaign structures, budget allocation strategies, and how to prove ROI when traditional attribution models no longer apply.

The question isn’t whether to adapt to AI search—it’s whether you’ll adapt before or after your competitors do. The practices that move decisively now will own the visibility advantage for years to come.

PART 2 WILL COVER:
“Adapting to Win: How Paid Media Secures Your Radiology Practice’s Visibility”

1 Eric Enge, President of Pilot Holding, SMX Advanced 2025 interview

2 Ross Hudgens, Siege Media



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