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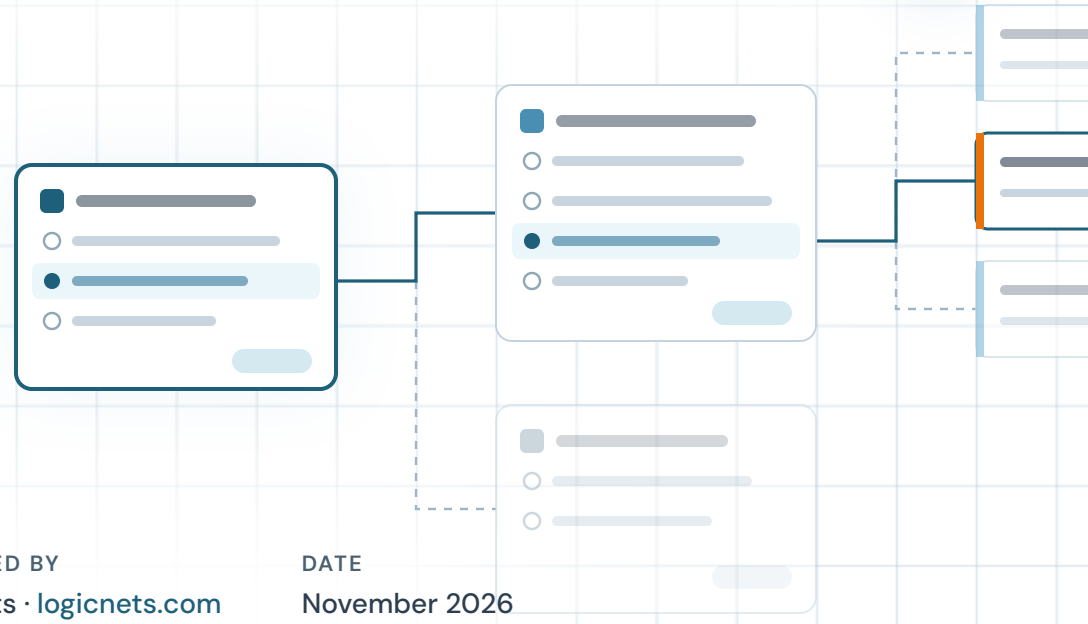
WHITE PAPER

Strategies for

Digitizing and Delivering Clinical Guidance

in the Age of AI

A white paper for leaders of medical societies and other organizations developing authoritative clinical guidance



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OVERVIEW

Executive Summary

AI is creating unprecedented demand for authoritative clinical guidance, offering medical societies and other guidance developers significant opportunities to expand their reach, influence, and commercial value.

Yet HIT partners often seek to license guideline content in formats that provide little control over downstream use. In the age of AI, this creates new risks: vendor licensees may actually wish to use the content to train their own models or generate their own clinical recommendations, while still presenting the results as grounded in authoritative guidance. The originating organization may then be left with little control over how its knowledge is interpreted, attributed, updated, or reused.

Addressing the opportunities and risks of licensing clinical guidance to third parties requires two distinct but related strategic decisions:

DECISION 1 · WHAT TO DEVELOP

Digitization

Moving beyond electronic documents to structured, computable guidance, interactive applications, and machine-consumable services creates new capabilities and value.

DECISION 2 · HOW TO PROVIDE ACCESS

Delivery

Validated applications, controlled knowledge services, and other delivery methods can meet licensee needs without necessarily transferring reusable knowledge assets or relinquishing control.

THE GUIDING PRINCIPLE

Make clinical guidance actionable for a wide range of scenarios, while granting each licensee only the access and autonomy its use case reasonably needs.

The goal is not to restrict the use of clinical guidance, but to enable its broader use while preserving its integrity, authority, and long-term value. Organizations that make deliberate choices about digitization, delivery, and licensing will be best-positioned to shape and benefit from the emerging AI-enabled healthcare market.

SECTION 1

Introduction

1.1 The Opportunity

Organizations that develop and publish clinical guidance are experiencing a remarkable increase in demand for their knowledge.

The rapid adoption of conversational and generative AI is driving a new need for credible, authoritative, and deterministic knowledge sources[1] to support the accuracy and fidelity of the clinical answers and guidance these products seek to provide. This need is reinforced by evidence that generative AI systems can produce information that is unfaithful, factually incorrect, or inconsistent with source information.[2] A wide range of AI developers, healthcare technology companies, electronic health record (EHR) vendors, and others are therefore seeking to incorporate authoritative clinical knowledge into a rapidly expanding set of products and services. These technologies promise to make clinical guidance easier and faster to access, potentially reaching a much broader audience than the clinical specialists who have traditionally used it.

1.2 The Risks

For clinical guidance organizations, this represents an exciting opportunity to extend their reach and influence while developing significant new revenue streams. However, licensing knowledge in the age of AI can have consequences that extend far beyond those associated with traditional publication and content licensing. When licensees independently interpret, transform, or incorporate clinical guidance into their products, important conditions, exceptions, and qualifications may be lost or misrepresented. Guidance may become outdated without timely updates, and AI-generated recommendations may be attributed to the originating organization even when they have been substantially modified or combined with other sources. These risks can affect clinical integrity, patient safety, organizational reputation, and the authority of the guidance itself.

Beyond these immediate concerns, AI introduces less obvious but potentially far-reaching commercial and intellectual property risks. Licensees may use clinical guidance to train or improve AI models, generate derivative datasets, reconstruct structured knowledge and decision logic, or create independently valuable products that compete with those the originating organization might otherwise develop or license itself. Once knowledge has been transferred in reusable form, monitoring these activities, enforcing restrictions, and withdrawing or correcting the information can become substantially more difficult. Without a deliberate strategy, organizations may inadvertently grant rights whose long-term value greatly exceeds the compensation received, while surrendering important opportunities to control and benefit from future uses of their knowledge.

AT A GLANCE

What Is at Stake in AI-Era Licensing?

Loss of Clinical Fidelity

Licensees may rely on generative AI to interpret or reconstruct guidance, potentially losing conditions, exceptions, qualifications, or essential clinical context.

Inability to Ensure Currency and Timeliness

Outdated recommendations or derivative versions may remain in use after the authoritative guidance has changed.

Loss of Attribution and Authority

Guidance may influence AI-generated advice without acknowledgment, or modified advice may be incorrectly presented as endorsed by the originating organization.

Uncontrolled Downstream Use

Licensed knowledge may be incorporated into AI models, datasets, or other reusable assets that persist beyond the original licensing relationship.

Diminished Commercial Value

Licensees may create independently valuable or competing knowledge products, capturing value the guidance organization could otherwise retain.

Lack of Oversight and Control

Once reusable knowledge is transferred, the organization may have limited visibility into its use or practical ability to correct, restrict, or withdraw it.

This paper is intended to help organizations that originate and manage clinical guidance capitalize on these opportunities while protecting their critical interests. Written for organizational leaders, clinicians, product teams, legal counsel, and commercial teams, it examines the strategic choices involved in digitizing, delivering, and licensing clinical knowledge, their practical and commercial implications, and the safeguards available to preserve the integrity, authority, and long-term value of that knowledge.

1.3 How AI Is Changing the Use and Value of Clinical Knowledge

The licensed embedding of clinical guidance in third-party health information technology (HIT) products is not new. What has changed is both the ways technology can use that knowledge and the value it can derive from it. Two developments in particular have transformed the licensing landscape:

- AI is creating new opportunities for clinical knowledge organizations to make their authoritative guidance available to a growing range of AI-enabled products and services. This expands the potential reach, influence, and commercial value of their knowledge.
- Technology can now derive substantial value from clinical knowledge without simply displaying or reproducing the underlying content.

These new uses represent an important departure from traditional publishing and content licensing, where broader distribution generally also meant broader exposure of the source, its authorship, and its brand.

In an AI-mediated environment, the use of clinical knowledge and the visibility of its source are no longer necessarily linked.

Consequently, the value and implications of a licensing arrangement can no longer be assessed simply by the content being provided. They also depend on what the licensee can do with that knowledge, how it is made available, and what control the originating organization retains. Understanding the available approaches to digitizing and delivering clinical knowledge is therefore an essential starting point for developing a sound licensing strategy.

1.4 Digitization and Delivery: Two Dimensions of the Clinical Guidance Strategy

In developing a strategy for making clinical knowledge available to third-party HIT products, there are two main components to consider. The first is the organization's **digitization strategy**. How extensively the content is digitized determines the knowledge-based products and capabilities the organization can offer. The second is its **delivery strategy**. How those capabilities are delivered directly affects how much control the organization retains over their use, monitoring, updating, and ongoing improvement.

FIGURE 1

Aligning Two Decisions

Digitization sets what you can offer; delivery sets how much control you keep.



Bars show what each option gives the organization: computable capability (Digitization) and direct control retained (Delivery).

The **Digitization Model** and **Delivery Model** presented in the following sections provide frameworks for understanding these two strategic dimensions. Together, they establish the foundation for developing and delivering digital clinical knowledge offerings while preserving appropriate control over their use.

SECTION 2

The Stages of Digitization

Clinical guidance can now be developed from traditional prose-based documents into increasingly structured and computable forms. Each stage adds new capabilities, but also requires additional investment, governance, and maintenance. The stages are cumulative rather than replacements: each successive stage builds on the knowledge represented in earlier stages, preserving the clinical rationale, supporting evidence, and narrative guidance while adding increasingly sophisticated structure and computable capabilities.

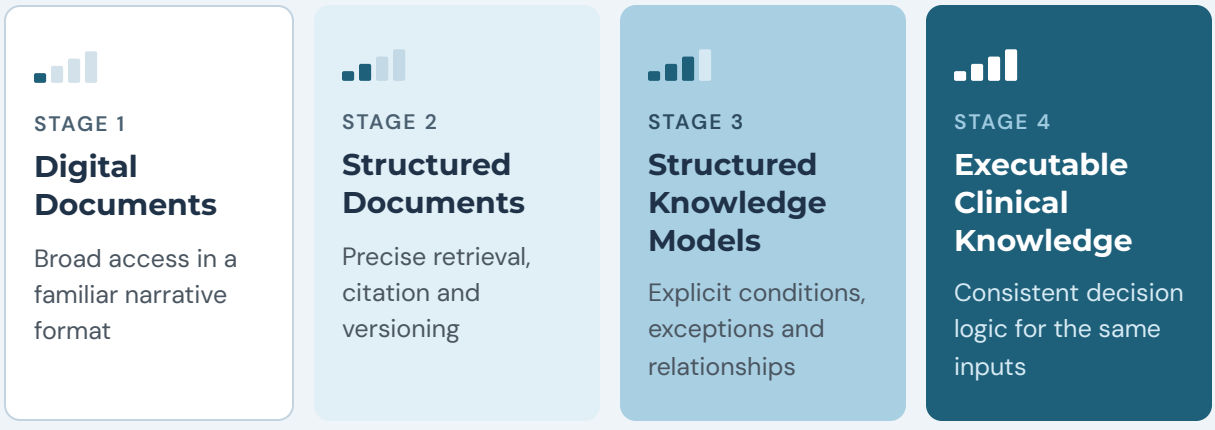
Organizations should therefore consider which portions of their clinical knowledge warrant development to each stage, based on their intended uses and the capabilities they wish to offer. The following table illustrates four stages in the progressive digitization of clinical guidance, from traditional electronic documents to sophisticated, computable knowledge.

FIGURE 2

The Digitization Model: Four Stages

Each stage is cumulative, building on the knowledge represented in the stages before it.

From narrative documents to computable knowledge →



STAGE 1 Digital Documents

Clinical guidelines are published electronically as PDFs, web pages, or similar narrative documents. This provides broad access to authoritative guidance in a familiar format, preserving the explanations, evidence, and clinical context that support recommendations.

HOWEVER

Electronic publication does not make clinical knowledge computable. Clinicians must locate relevant recommendations and interpret when and how they apply. AI systems can retrieve and summarize the text but must still infer the applicability of recommendations from narrative information.

↓

STAGE 2 Structured Documents

The components of clinical guidance, such as recommendations, evidence categories, references, qualifications, and footnotes, are identified within a consistent machine-readable structure, using digital formats or appropriate healthcare data standards.

This enables more precise retrieval, citation, version tracking, and identification of authoritative source information. It also provides a stronger foundation for grounding AI-generated responses in specific guideline content.[3]

HOWEVER

Organizing information into a structured format does not necessarily encode its clinical meaning. A system may be able to retrieve a recommendation without being able to determine whether it applies to a particular patient or clinical situation. Structured documents alone generally do not provide the explicit clinical logic, conditions, dependencies, and exceptions needed to support advanced clinical decision support (ACDS) or other applications involving complex decision pathways.

↓

STAGE 3 Structured Knowledge Models

Clinical recommendations are represented as explicit knowledge models that capture the conditions under which they apply, together with relevant exceptions, dependencies, qualifications, and relationships to other recommendations. These models may use decision trees, graphs, rules, or other formal representations.

Structured knowledge models make clinical information and relationships accessible to software for identification, retrieval, and basic processing. They can explicitly represent conditions, qualifications, and dependencies associated with recommendations, providing a foundation for more consistent interpretation. However, representing these relationships does not necessarily provide the sophisticated decision logic required to evaluate complex clinical circumstances and determine how multiple recommendations and their constituent elements should be applied.

REQUIRES

Developing these models requires careful clinical review, validation against the authoritative guidance, and ongoing maintenance.[4] The resulting models also represent significant new intellectual property beyond the original publication.

STAGE 4 Executable Clinical Knowledge

At this stage, clinical knowledge is developed into executable decision logic capable of evaluating complex combinations of patient characteristics, clinical findings, and other relevant inputs. The logic accounts for the conditions, exceptions, dependencies, and alternative pathways that determine not only which recommendations apply, but how their individual components should be applied in a particular clinical situation.

Unlike an AI system independently interpreting narrative guidance, validated executable logic can produce consistent results for the same inputs. This creates opportunities to incorporate authoritative clinical guidance directly into clinical processes and technology products.

REQUIRES

Executable clinical knowledge also brings increased responsibility for clinical validation, version management, handling incomplete or out-of-scope inputs, and assessing applicable regulatory requirements.

NOTE

These are not necessarily sequential development steps. An organization may develop an interactive application, a machine-consumable service, or both, using the same underlying computable knowledge. Each requires additional design, implementation, validation, and ongoing support appropriate to its intended use.

Executable clinical knowledge can be made useful through two complementary forms:

Interactive Clinical Applications

A designed user interface enables clinicians to navigate guidance, provide relevant information, follow clinical pathways, and receive applicable recommendations. The presentation itself adds value by organizing complex guidance into an understandable, interactive clinical experience, potentially making specialist knowledge more accessible to clinicians outside the originating specialty.

Machine-Consumable Knowledge Services

The same underlying clinical logic can be made accessible to EHRs, AI assistants, clinical decision support systems, and other applications through defined interfaces, such as APIs or Model Context Protocol (MCP) tools. These systems can submit relevant inputs and receive structured results, incorporating authoritative guidance into their own applications and workflows without independently reconstructing the clinical logic.

2.1 Strategic Implications

Progressive digitization creates opportunities to move beyond licensing published content toward offering increasingly valuable knowledge-based products and capabilities. Structured documents can improve retrieval and AI grounding; knowledge models can formalize clinical relationships; and executable knowledge can deliver validated, context-specific guidance directly to clinicians or other technology systems.

Not every organization needs to develop all of its guidance to the highest stage. The appropriate investment depends on the nature of the content, the intended applications, the needs of potential licensees, and the organization's strategic objectives.

Importantly, greater computational sophistication does not inherently require surrendering control over the resulting knowledge assets. How those assets are made available to third parties is a separate strategic decision and the subject of the Delivery Model that follows.

BACKGROUND

What Is MCP?

Model Context Protocol is an open standard that enables AI applications to connect with external information sources and invoke tools. Introduced in late 2024, MCP has rapidly gained widespread industry adoption, including support from leading AI platforms such as ChatGPT, Claude, Gemini, and Microsoft Copilot.[5] Supporting MCP enables central control while easily interoperating with AI-driven third-party systems.

FIGURE 3

One Interface, Many AI Products

An organization can make its digitized guidance accessible to multiple AI products through a common interface, substantially reducing the need for bespoke integrations.



SECTION 3

The Delivery Model: Balancing Flexibility and Control

Digitization determines what clinical knowledge capabilities an organization can offer. **Delivery** determines how those capabilities are made available to licensees, what responsibilities each party assumes, and how much control the originating organization retains over their use.

The most straightforward delivery approach is to make the organization's fully developed and validated clinical knowledge capabilities available to licensees in their internally preferred format. When these capabilities meet the licensee's requirements, the benefits extend to all parties: the organization avoids duplicative clinical validation and oversight, the licensee avoids independently reconstructing and maintaining the guidance, and end users receive the organization's own authoritative representation of its knowledge. This approach makes the most of the organization's investment in digitization, clinical logic, presentation, and quality assurance.

However, licensees may have technical, operational, or product requirements that cannot be accommodated through a standardized offering. Some licensees:

- Need to host applications within their own environments
- Need to integrate clinical knowledge into their own user experiences
- Require reusable content or knowledge assets for independent processing

Historically, when working from traditional PDFs, many licensees have had to invest substantial clinical resources in interpreting and reconstructing guidance for use in their own applications.

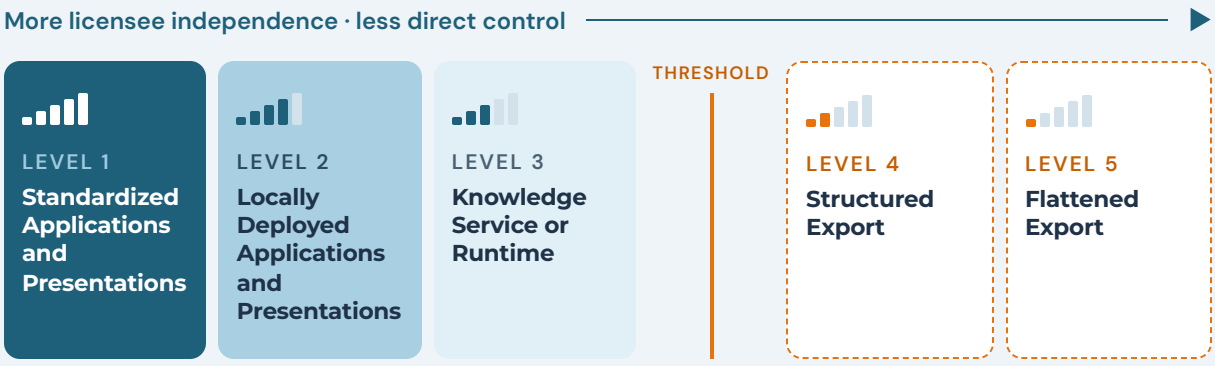
The Delivery Model explores the approaches available to accommodate these requirements and the implications of each. As licensees assume greater responsibility for implementing and using clinical knowledge, they may incur additional development, maintenance, and quality assurance costs. At the same time, the originating organization may need additional mechanisms to preserve clinical fidelity, keep guidance current, monitor use, and enforce licensing requirements.

The model identifies five delivery levels, reflecting progressively greater licensee independence and corresponding changes in the controls available to the originating organization:

FIGURE 4

The Delivery Model: Five Levels

Moving across the levels, the licensee gains independence and the organization's direct control gives way to contractual safeguards.



The levels are not necessarily sequential. Some are complementary and may be combined to meet particular requirements. Nevertheless, moving through the levels generally involves greater licensee independence and a corresponding shift in the responsibilities and controls associated with using the knowledge.

LEVEL 1 Standardized Applications and Presentations

The organization provides dynamic access to its own hosted, validated application or presentation, typically through a link, embedded interface, or similar mechanism. The organization retains control over the underlying knowledge, application functionality, and updates.

FOR THE LICENSEE

Incorporates the organization's complete, validated clinical experience. Minimal independent clinical implementation and QA.

FOR THE ORGANIZATION

Retains centralized control over knowledge, presentation, updates, and clinical QA.

LEVEL 2 Locally Deployed Applications and Presentations

The organization supplies its standardized application or presentation for deployment within the licensee's environment. The licensee controls the hosting environment, while the application continues to use the organization's prescribed presentation and clinical logic. Operational oversight and the enforcement of updates depend on the deployment arrangements.

FOR THE LICENSEE

Hosts the standardized experience in its own environment. Assumes deployment, integration, and operational responsibilities.

FOR THE ORGANIZATION

Retains control of the supplied clinical logic and presentation but must establish mechanisms for updates, monitoring, and compliance.

LEVEL 3 Knowledge Service or Runtime

The licensee integrates the organization's structured clinical knowledge into its own applications through APIs, MCP tools, or a controlled runtime. The licensee can develop its own user experience while relying on the organization's validated knowledge and decision logic. The service or runtime may be hosted by either party.

FOR THE LICENSEE

Creates its own end-user experience using the organization's validated clinical logic, hosted centrally or deployed locally. Assumes presentation-specific development and QA.

FOR THE ORGANIZATION

Retains control over the underlying knowledge and logic but requires additional oversight of licensee presentations and potentially local deployments.

BETWEEN LEVELS 3 AND 4

Control Threshold

A critical control threshold exists between Levels 3 and 4. With the first three levels, the organization's application, service, or runtime continues to govern the processing of its clinical knowledge, although the extent of operational control varies by deployment. With reusable exports, the licensee takes independent possession of the knowledge assets, and the organization's ability to control their use becomes substantially more dependent on contractual safeguards.

LEVEL 4

Structured Export

The licensee receives reusable structured knowledge assets that it can incorporate into its own systems. This provides greater implementation flexibility but also enables independent processing, interpretation, and potentially modification of the knowledge.

FOR THE LICENSEE

Receives reusable structured knowledge for independent implementation. Assumes substantial development, validation, and maintenance responsibilities.

FOR THE ORGANIZATION

Relinquishes direct technical control over transferred knowledge. Relies heavily on contractual safeguards, reporting, and audits.

LEVEL 5

Flattened Export

The licensee receives conventional documents or other representations that do not preserve the full computable structure of the knowledge. More sophisticated applications may require the licensee to independently interpret or reconstruct the clinical relationships and conditions represented in the original guidance.

FOR THE LICENSEE

Receives content without preserved computational structure. Must independently reconstruct relevant clinical meaning and context.

FOR THE ORGANIZATION

Has limited technical control over downstream interpretation, currency, and reuse, with additional fidelity risks.

TABLE 1

Delivery Model: Impact of Each Level

Relative ratings from one to four for each factor; longer is more favorable.

◀ Impact on the Licensee	DELIVERY LEVEL	Impact on the Organization ▶
Cost benefits ■■■■ QA efficiency ■■■■	LEVEL 1 **Standardized Applications and Presentations**	■■■■ Control ■■■■ Governance
Cost benefits ■■■ QA efficiency ■■■■	LEVEL 2 **Locally Deployed Applications and Presentations**	■■■ Control ■■■ Governance
Cost benefits ■■■ QA efficiency ■■■■	LEVEL 3 **Knowledge Service or Runtime**	■■■ Control ■■■ Governance
CONTROL THRESHOLD		
Cost benefits ■■ QA efficiency ■■■■	LEVEL 4 **Structured Export**	■■ Control ■■ Governance
Cost benefits ■ QA efficiency ■■■■	LEVEL 5 **Flattened Export**	■ Control ■ Governance

The appropriate delivery method for any particular organization depends on the licensee's intended use and its technical, operational, and commercial requirements. Organizations should generally seek to preserve the advantages of their standardized, validated knowledge capabilities while accommodating legitimate needs for greater flexibility.

Historically, licensing static documents left licensees with little alternative but to independently interpret, reconstruct, and implement the underlying clinical guidance. This became an accepted practice despite the substantial development effort, duplicated clinical quality assurance, and non-trivial risks to fidelity and currency it introduced. More sophisticated digitization and delivery capabilities fundamentally change that equation, allowing licensees to benefit directly from the originating organization's validated knowledge rather than recreating it.

The important consideration is therefore to grant the flexibility a licensee genuinely requires, while understanding the additional responsibilities, costs, and risks involved. **Permitting independent reconstruction of clinical knowledge should therefore be a deliberate choice, not the default consequence of limited delivery options.**

REAL-WORLD EXAMPLE

From Licensing PDFs to Delivering Clinical Guidance

Request for PDF Exports

An HIT vendor developing an AI-driven clinical assistant approaches a medical society seeking PDF copies of its guidelines. It plans to use AI to ingest the documents, independently interpret and process the guidance, and generate and present its own clinical recommendations identified as "based on" the society's guidelines.

An Opportunity for MCP

Rather than simply licensing the PDFs, the society explores what the vendor actually needs: reliable access to current recommendations, the ability to determine when they apply, and clear, authoritative presentations of the guidance, including visual pathways, supporting context, and appropriate citations. The vendor had anticipated investing in its own clinical interpretation, presentation, and quality assurance capabilities. Instead, it discovers that the society's MCP service provides optimized access to LLMs for validated, computable guidance, with direct links to the society's own interactive guideline presentations, eliminating much of that development and ongoing maintenance burden.

Licensee Retains Flexibility, Organization Retains Control

The HIT vendor continues to control its AI processing, clinical workflows, and how it generates and presents recommendations. The MCP service supplies authoritative guidance and validated decision logic, while links to the society's interactive presentations allow clinicians to examine the original guidance, including its visual pathways and supporting context. The vendor can develop its own recommendations informed by the society's guidance without having to recreate or independently validate the society's underlying clinical content.

COMPARING THE TWO APPROACHES	TRADITIONAL PDF LICENSE	MCP-ENABLED SERVICE
Development and QA	Build, validate, and maintain independent clinical interpretations	**Use the society's validated guidance and decision logic**
Presentation and Context	Recreate and validate visual pathways, qualifications, and presentations	**Link directly to authoritative interactive guideline presentations**
Clinical Fidelity	AI reconstructs conditions, exceptions, and dependencies	**Society's validated models determine applicable guidance**
Currency	Reprocess files whenever guidelines change	**Access current guidance through the managed service**

The Strategic Lesson

The HIT vendor retains the flexibility to differentiate its AI product while avoiding substantial clinical interpretation, presentation, and quality assurance costs. The society retains authority over its guidance and creates a scalable, commercially valuable service. Clinicians benefit from current, validated guidance with direct access to the society's authoritative presentations.

SECTION 4

Aligning Digitization and Delivery

Digitization and delivery should ideally be planned together, but they serve distinct purposes. An organization's digitization strategy determines the capabilities and value it can create from its clinical knowledge. Its delivery strategy determines how those capabilities can be made available to licensees while retaining appropriate control over their use.

DIGITIZATION

As a general strategy, organizations should develop their clinical knowledge into structured, computable, and clinically useful forms to the extent justified by their mission and anticipated applications. More sophisticated digitization enables new uses, from precise information retrieval to complex clinical decision support. Importantly, greater sophistication does not require transferring greater control to licensees.

DELIVERY

In fact, the more sophisticated the digital knowledge, the greater the value of preserving the organization's investment. Structured knowledge models and executable clinical logic represent substantial additional intellectual property, clinical review, and quality assurance beyond the original published guidance. By making these capabilities available through standardized presentations, hosted services, or controlled runtimes, organizations can extend their value across multiple licensees without requiring each to independently reconstruct and validate the underlying knowledge.

THE GUIDING PRINCIPLE

Make clinical guidance actionable for a wide range of scenarios, while granting each licensee only the access and autonomy its use case reasonably needs.

Note that technical, clinical, commercial, and regulatory requirements may justify greater independence, including reusable exports. However, such decisions should reflect genuine requirements and a clear understanding of the associated responsibilities and risks, rather than an assumption that more advanced knowledge must be more freely transferred.

Together, these choices also establish the foundation for a product and commercial strategy: different combinations of knowledge capabilities, delivery methods, and permitted uses can become distinct offerings, with licensing terms and pricing that reflect the value provided and the rights granted.

SECTION 5

When Other Factors Shape the Strategy

The appropriate combination of digitization capabilities and delivery methods depends on the circumstances in which clinical guidance will be used. The following common scenarios illustrate how different requirements and risks can influence the application of the framework and the choices an organization makes.

5.1 Technical Requirements

A licensee may have legitimate reasons why a particular delivery method will not work:

- A tool used in a critical clinical workflow may not be able to depend on an external service's availability or response time.
- Security, privacy, or data-residency requirements may prevent information from leaving the licensee's environment.
- High volumes may raise performance or cost concerns.
- Some applications must continue operating without an internet connection.

These requirements should be understood before selecting a delivery method. A licensee requesting a local copy of clinical content may actually need local execution, predictable performance, isolation, or control over when a new version takes effect. A standardized application or controlled knowledge runtime deployed within the licensee's environment may satisfy these needs without transferring reusable knowledge assets for independent processing.

Sometimes a structured export is genuinely required. The objective is not to rule out such arrangements, but to identify the underlying requirement and grant only the access and autonomy it reasonably calls for.

? THE KEY QUESTION

What requirement is the actual driver for a non-standard delivery method, and can it be satisfied without transferring independent control of the underlying knowledge?

5.2 When Guidance Is Combined with Other Sources

AI products often draw on multiple clinical knowledge sources. A licensee may therefore be using an organization's guidance as one input into a new recommendation, rather than presenting the original guidance itself. When sources differ, the licensee must decide which takes precedence or how to reconcile them. These are new clinical judgments that none of the originating organizations necessarily made or approved.

Licensing arrangements should distinguish between presenting authoritative guidance and using that guidance to develop a broader recommendation. Where combining sources is permitted, the parties should establish how sources are identified, how differing recommendations are handled, and when the resulting output may or may not be attributed to the originating organization.

? THE KEY QUESTION

Will end users receive the organization's authoritative guidance, or a new recommendation that is only partly based on it?

5.3 When the Intended Audience Changes

Clinical guidance is generally developed for a defined professional audience. Guidance intended for specialists may rely on terminology, qualifications, evidence ratings, and clinical assumptions that those specialists are expected to understand. The same presentation may not be appropriate for general clinicians, patients, or caregivers.

Reaching a different audience may require selecting, explaining, simplifying, or reorganizing content. In doing so, a licensee may be interpreting the guidance rather than simply presenting it. The greater the transformation, the more important it becomes to distinguish the organization's authoritative recommendations from the licensee's own explanations or interpretations.

The intended audience should therefore be considered explicitly when defining a license. Organizations may choose to offer different content or presentations for different audiences, with corresponding attribution, review, and approval requirements. Permission to use guidance in a professional clinical product should not automatically extend to other audiences.

? THE KEY QUESTION

Is the licensee's target audience the one for whom the guidance was developed, and what additional interpretation might be required?

5.4 When AI Derives New Value from Clinical Knowledge

Traditional content licenses generally focus on reproducing, displaying, distributing, or modifying content. AI introduces an additional consideration: systems can process clinical knowledge and use it to create valuable new capabilities without reproducing the original content in recognizable form.

Model training is one example, but structured knowledge can also be systematically processed to generate question-and-answer pairs, synthetic datasets, evaluation materials, or other resources that can subsequently train, test, or improve an AI system.[6] The original content may never appear in the resulting product, even though it contributed substantially to its capabilities and value.

Organizations should explicitly determine which of these activities they intend to permit. Licensing terms may need to distinguish ordinary use of knowledge within an authorized product from model training, systematic extraction, creation of derived datasets, or development of independent knowledge assets. These restrictions should be appropriately defined so they do not inadvertently prevent legitimate testing, quality assurance, or safety evaluation.

The central consideration is that permission to use clinical knowledge within a licensed product should not automatically confer permission to build a separate, enduring knowledge asset or AI capability from it.

? THE KEY QUESTION

Could this license allow someone to create a lasting asset from our knowledge beyond the product or use we intended to authorize?

5.5 When Clinical Fidelity and Currency Are at Stake

The meaning of a clinical recommendation depends on more than its principal statement. Conditions of applicability, qualifications, exceptions, supporting evidence, footnotes, and relationships to other recommendations may all be essential to its correct interpretation. When content is extracted, reformatted, summarized, or combined with other sources, important context can be lost.

Clinical guidance also evolves. Recommendations are revised, new evidence emerges, and previously valid guidance may be superseded.[7] An implementation can therefore become clinically misleading simply by continuing to present outdated information.

Delivery strategy has a direct bearing on both risks. Standardized presentations and controlled knowledge services allow originating organizations to maintain authoritative versions and implement updates or withdrawals directly, subject to the technical arrangements in place. Reusable exports transfer to the licensee much greater responsibility for maintaining fidelity and currency.

The more clinically consequential the intended use, the more important it is to treat fidelity and currency as **continuing operational obligations**, rather than conditions assessed only when a license is first granted.

These considerations should inform not only the selection of knowledge capabilities and delivery methods, but also the rights, responsibilities, and safeguards established in the license itself.

? THE KEY QUESTION

How will we ensure that our guidance remains accurately represented and current throughout the life of the licensed product?

SECTION 6

Turning Strategy into Licensing Safeguards

Licensing clinical guidance for use in third-party products introduces responsibilities and risks that may not be adequately addressed by traditional content licensing agreements. Depending on how the content is delivered and used, an organization may face exposure arising from outdated or inaccurate clinical representations, unauthorized reuse, loss of attribution, or the creation of competing knowledge assets derived from its intellectual property.

Organizations must consider the specific contractual protections needed to preserve clinical fidelity, maintain appropriate oversight, define responsibilities, and protect the continuing value of their knowledge. Some of these protections can be supported or enforced through the delivery technology itself; others depend on explicit contractual obligations, reporting, verification, and remedies.

The following safeguards deserve particular attention because they may fall outside the provisions traditionally associated with licensing published clinical content.

6.1 Delivery-Enabled vs Contractual Controls

The control threshold introduced in the Delivery Model distinguishes between protections that can be exercised through the delivery technology itself and those that depend primarily on contractual obligations and enforcement. The following table illustrates how these different mechanisms apply to several important elements of control.

TABLE 2

Delivery-Enabled vs Contractual Controls

Levels 1–3 can enforce controls through the delivery technology; Levels 4–5 rely on the agreement.

ELEMENT REQUIRING CONTROL	LEVELS 1–3 Delivery-Enabled Control	LEVELS 4–5 Contractual Control
Updates and Corrections	Applied through managed services or controlled runtimes.	Licensee must implement updates within specified periods.
Content Removal or Deactivation	Access or versions can be disabled through technical mechanisms.	Licensee must withdraw or discontinue specified content.
Usage Visibility	Direct monitoring through service or runtime mechanisms.	Usage reporting and audit requirements.
Presentation and Attribution	Standardized presentation controls; technical constraints where available.	Licensee must conform with presentation, review, approval, and certification standards.
Knowledge Extraction and AI Training	Controlled interfaces such as MCP provide responses without exposing the underlying knowledge assets for direct extraction or processing.	Prohibitions or restrictions on extracting knowledge, training AI models, or creating derived knowledge assets.

6.2 Know What You Own and What You Are Licensing

Before granting rights to clinical knowledge, organizations should identify both the assets being licensed and the rights they hold in those assets. Published guidelines may incorporate contributions from panel members, licensed terminology, images, staging systems, drug information, or other third-party materials. Existing permissions may not extend to sublicensing, redistribution, or new digital uses, and these limitations should be identified before entering into licensing commitments.

Digitization also creates new intellectual property beyond the original published guidance. Structured knowledge models, clinical algorithms, and executable decision logic may represent substantial investments in development, clinical review, and validation. Licensing agreements should distinguish these assets from the underlying content and establish which capabilities the licensee is authorized to use. Where licensees are permitted to create their own structured representations or derivative knowledge assets, the agreement should address ownership, permitted reuse, and what happens to those assets when the license ends.

6.3 Define Permitted Uses and Boundaries

Providing access to clinical knowledge does not, by itself, establish how that knowledge may be used. The same content or service could support an approved clinical application, a new recommendation combining multiple sources, or the development of an independent AI capability. Licensing agreements should define the authorized products, intended audiences, and permitted activities, including the extent to which licensees may reformat, summarize, interpret, combine, or otherwise transform the knowledge.

Equally important are uses that should not be implied by the primary license. Permission to retrieve or process clinical knowledge need not include permission to systematically extract it, train AI models, generate derived datasets, develop substitute knowledge bases, or redistribute it to other parties. Where such uses are appropriate, they should be explicitly authorized and may warrant separate commercial terms.

6.4 Establish Attribution and Representation Requirements

Attribution serves a purpose beyond acknowledging the source of licensed content. In clinical applications, it communicates the authority behind recommendations and may create reputational or clinical risk if an organization's name is associated with inaccurate or misleading representations.

Licensing agreements should distinguish between presenting the organization's authoritative guidance and presenting recommendations developed or interpreted by the licensee using that guidance. Requirements may include identification of the source, applicable version, and date, as well as limitations on statements suggesting the organization's endorsement of licensee-generated advice. Permission to use the organization's name, logo, or trademarks should be addressed separately, with appropriate review and correction rights where the representation does not meet agreed standards.

6.5 Protect Clinical Fidelity and Currency

Licensing agreements should establish the responsibilities necessary to preserve the clinical meaning and accuracy of guidance throughout its use. Depending on the delivery method and intended application, this may need to include clear-cut requirements on the part of the licensee to retain essential qualifications and context, follow presentation standards, validate clinical implementations, and obtain review or certification before release or after significant changes.

Currency requires equally explicit attention. Agreements should define licensee responsibilities for incorporating updated guidance, implementing corrections, and discontinuing use of superseded or withdrawn content. They should also establish applicable timeframes, notification procedures, and verification requirements. The more independent the licensee's implementation, the more important these contractual obligations become.

6.6 Provide for Oversight and Remedies

Contractual requirements have limited practical value unless an organization can determine whether they are being followed and respond when they are not. Licensing agreements should establish appropriate mechanisms for monitoring compliance, which may include usage reporting, implementation reviews, periodic certification, attestations, or audit rights.

The agreement should also provide practical remedies when requirements are violated or clinical representations become inaccurate. Depending on the circumstances, these may include corrective action requirements, removal of misleading attribution, suspension of access, discontinuation of particular uses, or termination of the license. The scope of oversight and available remedies should reflect the risks associated with the licensed use and the degree of control retained through the delivery architecture.

The considerations outlined here are intended to identify business, clinical, and operational risks that organizations should address when structuring licensing relationships. They are not intended as legal advice or proposed contractual language. Organizations should work with qualified legal counsel to determine the specific provisions, obligations, and remedies appropriate to their circumstances.

CHECKLIST

Before Each License: Seven Questions Worth Asking

The following questions provide a practical starting point for evaluating a prospective clinical knowledge licensing arrangement.

- [ ] **What Are We Licensing?**
  Do we own or control the necessary rights, including rights to newly digitized knowledge and any third-party content?
  → Section 6.2

- [ ] **What Does the Licensee Actually Need?**
  Can a validated presentation or controlled knowledge service meet that need without transferring reusable knowledge assets?
  → Section 5.1

- [ ] **Who Will Use It, and How?**
  Are the intended audiences, applications, and clinical contexts appropriate for the guidance being licensed?
  → Section 5.3

- [ ] **Will Our Knowledge Be Transformed or Combined?**
  Who will be responsible for the resulting clinical interpretations, representations, and attribution?
  → Section 5.2

- [ ] **Can the Licensee Create Additional Value from Our Knowledge?**
  Are AI training, systematic extraction, derived datasets, or independent knowledge assets permitted?
  → Section 5.4

- [ ] **How Will Clinical Integrity Be Maintained?**
  Who will validate implementations, manage updates, and ensure outdated or withdrawn guidance is no longer used?
  → Section 5.5

- [ ] **Are the Protections and Economics Appropriate?**
  Can we monitor compliance, enforce requirements, and obtain fair value for the capabilities and rights being granted?
  → Section 6.6

SECTION 7

Conclusion

The rapid adoption of AI-driven healthcare products is creating unprecedented opportunities for organizations that develop authoritative clinical guidance. Their knowledge can now reach clinicians through AI assistants, decision-support applications, EHR workflows, and other technologies, extending its reach and influence far beyond traditional publishing.

Realizing this opportunity requires a deliberate approach to how clinical knowledge is digitized, delivered, and licensed.

By developing authoritative digital knowledge capabilities and making them available through appropriately controlled delivery methods, organizations can enable innovative third-party applications while preserving clinical fidelity, maintaining currency, protecting intellectual property, and capturing the value of their investments.

The objective is not simply to maximize access or impose the greatest possible restrictions. It is to establish a sustainable model in which clinical knowledge can be used broadly and effectively without compromising the authority, integrity, and long-term interests of the organizations responsible for its development.

Avoiding the emerging opportunities to license clinical guidance to AI-driven products does not necessarily protect an organization's authority. It may instead leave others to interpret, represent, and apply its knowledge without its direct involvement.

Organizations that proactively define their digitization, delivery, and licensing strategies will be better positioned to shape how their clinical guidance is used, ensure that its value is appropriately recognized, and remain authoritative participants in an increasingly AI-enabled healthcare environment.

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About LogicNets

LogicNets helps healthcare organizations transform expert clinical knowledge into interactive, computable guidance, so that authoritative knowledge is available when and where it is needed most, including at the point of care. For more than two decades, LogicNets has worked with organizations worldwide to turn complex knowledge into practical decision-support tools. The company is headquartered in Washington, DC, with a European technology center in Eindhoven, the Netherlands.

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