



The Comprehension Problem

Why Getting the Medical Record
Is Only the Beginning



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For decades, one of the most persistent challenges surrounding medical records has been getting them.

Medical information is created across hospitals, physician practices, imaging centers, laboratories, pharmacies, specialists, rehabilitation facilities and other healthcare organizations. Each encounter adds another piece to a patient's medical history, often within a different system and under the control of a different provider or custodian. When that history becomes relevant to an insurance claim, legal matter, independent medical examination or other professional review, someone has to identify those sources, request the appropriate records and bring the pieces together.

That work remains difficult. Despite enormous progress in digitizing healthcare information and improving interoperability, medical information remains fragmented. In 2024, approximately one in five individuals who had visited a healthcare provider reported waiting longer than they thought reasonable for test results, according to federal health information technology data.¹ Ten percent also reported having to repeat a test or procedure because earlier results were unavailable.¹ These findings point to persistent gaps in information exchange despite significant advances in interoperability.

For organizations that depend on medical records, obtaining the right records therefore remains a critical operational challenge. But retrieval is only the first challenge. Once the records arrive, another kind of work begins.

The reviewer now has to determine what actually happened. That can mean navigating hundreds or thousands of pages, reconstructing a chronology that spans years, separating meaningful information from repetitive or administrative material, connecting events documented by different providers and identifying gaps or inconsistencies. An attorney may be looking for evidence of prior symptoms before an alleged injury. A claims professional may need to understand the progression of treatment and what changed following an event. An independent medical examiner may need to reconstruct years of history before evaluating the condition presented today. In each case, the records have been obtained, but the information required to make them useful still has to be found, connected and understood.

Having the medical record and understanding the medical record are not the same thing.

This is **the comprehension problem**: the gap between having access to medical information and being able to efficiently understand, validate and act on what that information means.

For much of the medical records industry's history, progress has understandably centered on access: finding records, retrieving them and getting them into the hands of the professionals who need them. Access remains essential. But as the volume and complexity of available medical information continue to grow, access can no longer be considered the endpoint.

The next challenge is turning
records into understanding.

More Information Does Not Necessarily Mean More Understanding

Healthcare has undergone a remarkable digital transformation. Electronic health records have made enormous quantities of patient information more accessible and portable than the paper-based systems that preceded them. Information that once existed primarily in filing cabinets and physical charts can increasingly be stored, transmitted, searched and shared electronically. That transformation has created tremendous value for providers and patients alike.

It has also exposed a fundamental information-management problem. Making information available is different from making it easy to understand.

Research into electronic health records illustrates the distinction. A study published in the *Journal of the American Medical Informatics Association* examined the role of electronic health records and workflow fragmentation in documentation burden among emergency department clinicians. Researchers identified a high volume of manual work, workflow blockages, poor interface design and information overload among the factors contributing to cognitive burden. Clinicians described the difficulty of reconstructing information when work and information were fragmented across different tasks and areas of the EHR.²

The significance of that research extends beyond the particular EHR systems being studied. It illustrates an inherent challenge in working with complex medical information: **the effort required to assemble pieces of information into a coherent understanding can itself become a substantial part of the work.** A broader review of clinical documentation burden has similarly identified clinical documentation and review, cognitively cumbersome work including multitasking, and workflow fragmentation as distinct components of the burden associated with electronic health records.³

Those studies focus on clinicians rather than attorneys, claims professionals or independent medical examiners, so their findings should not be directly extrapolated to those professions. But they reveal something important about the information those professionals ultimately receive. A patient's medical history is not created as a single narrative designed for someone who may need to reconstruct it months or years later. It accumulates encounter by encounter and purpose by purpose.

A primary care physician documents one visit. A specialist documents another. A radiologist interprets an image. A laboratory reports results. A hospital generates admission, treatment and discharge documentation. A physical therapist records progress. Medications change. Diagnoses evolve. Symptoms appear, resolve or recur. Portions of the same medical history may be repeated across multiple notes, sometimes identically and sometimes with subtle differences.

Each individual document serves an immediate clinical, administrative or regulatory purpose. Collectively, however, those documents may later become the source material for an entirely different question. Did a condition exist before a particular event? When did symptoms first appear? How did treatment change over time? What was the patient's functional status before and after an injury? Is a current complaint consistent with the documented medical history?

The medical record was not created to answer those questions neatly. The person reviewing it has to reconstruct the answers from information created for other purposes.

The information may all be there.
The story may not be.



Retrieval Is Still Hard

The emergence of a comprehension challenge does not mean the retrieval problem has been solved. In fact, the quality of everything that happens after retrieval depends on the quality and completeness of the records obtained in the first place.

Medical information remains distributed across a fragmented healthcare ecosystem. A single person's history can span numerous providers, facilities and systems. The relevant records may cover many years. Requests require appropriate authorizations and compliance with varying provider processes. Responses can be delayed or incomplete, and reviewing one set of records may reveal another provider or episode of care that needs to be pursued. Even within healthcare itself, federal data continues to show gaps in the exchange of patient information despite significant advances in interoperability.¹

For legal and claims organizations, retrieval can be particularly complex because the objective often extends beyond obtaining documentation from a known provider. The organization may need to reconstruct a medical history relevant to an accident, injury, claim or allegation. That means determining where care occurred, identifying the appropriate custodians, obtaining the necessary documentation and recognizing when the universe of records may not yet be complete.

This is work Complex has performed at scale for more than 50 years. That experience matters because comprehension cannot begin with information that was never obtained. The ability to understand a medical history is only as strong as the underlying record set.

But successful retrieval does not mean the work is finished. It changes the nature of the work. The challenge moves from acquiring information to making sense of it.

What Makes Medical Records So Difficult to Comprehend?

Consider what happens after a large record request has been fulfilled. The reviewer may receive 200 pages, 2,000 pages or substantially more. Within those pages may be physician notes, hospital records, diagnostic imaging, laboratory results, medication histories, operative reports, physical therapy documentation, billing records and administrative material. Hospital records may include extensive nursing documentation and EKG tracings; physical therapy records may contain repetitive encounters, drawings and handwritten notes; and records assembled from multiple sources may not arrive in chronological order. Some information will be highly relevant. Some will not. Some will appear repeatedly. And some information that initially seems insignificant may become important only when connected with something documented months or years earlier.

Before substantive review can begin, the record set itself may need to be reconstructed. Records can arrive in disconnected batches over weeks or months, in different formats and without a consistent order. Reviewers may first need to sort and classify documents, identify duplicate pages, organize encounters chronologically and build a working index of providers and dates. A treatment note, bill and explanation of benefits may all describe the same encounter, but recognizing those relationships requires additional work. Only after that foundation has been assembled can the reviewer efficiently begin answering the question that prompted the request.

The first question may have been, *Do we have the records?* Now a much more demanding set of questions begins. What happened? When did it happen? What treatment occurred immediately before and after the event at issue? Were there prior injuries, surgeries or similar complaints? Are there meaningful gaps in treatment, missed appointments or instances in which treatment was declined? Did reported pain improve following physical therapy, injections or surgery? What do the records say about work restrictions or functional impact? Do different portions of the record tell a consistent story? And where, exactly, is the documentation supporting a potentially important conclusion?

Several characteristics of medical records make answering those questions particularly difficult.

The first is **fragmentation**. A patient's medical story rarely exists in one place. Relevant information may be distributed across providers, facilities, specialties and record types. Even within a single EHR, research has shown that fragmented displays and workflows can require users to move among different areas and reconstruct information that is conceptually related but physically separated.² When records from multiple organizations are assembled for a claim or legal matter, the fragmentation can become even greater. The reviewer is no longer simply reading a document. The reviewer is assembling a narrative from pieces that were never designed to function as one.

"What happened?"

"What treatment occurred immediately before and after the event at issue?"

"When did it happen?"

"What do the records say about work restrictions or functional impact?"

"Did reported pain improve following physical therapy, injections or surgery?"

"Do different portions of the record tell a consistent story?"

"Where, exactly, is the documentation supporting a potentially important conclusion?"

"Were there prior injuries, surgeries or similar complaints?"

"Are there meaningful gaps in treatment, missed appointments or instances in which treatment was declined?"

The second challenge is **volume**. Medical records frequently contain repetitive information, templated language, administrative content and extensive detail that may have little relevance to the issue being investigated. Yet relevance is not always obvious at the beginning of review. A seemingly routine complaint may become significant when a similar complaint appears years later. A medication change may matter because of what happened immediately afterward. A prior diagnostic study may become important only when compared with a subsequent one. The task is therefore not merely to eliminate information. It is to distinguish signal from noise without prematurely discarding context that could later prove important.

Then there is **chronology**. Medical records are fundamentally longitudinal, which makes time central to comprehension. A diagnosis has meaning on its own, but its significance may change depending on when it first appeared, whether it was documented consistently and what occurred before or after it. The same is true of symptoms and treatment. A complaint documented immediately after an event may raise different questions if similar symptoms appear elsewhere in the patient's history, while a treatment decision becomes more informative when viewed alongside the condition that prompted it and the patient's subsequent response. Understanding the record therefore requires more than identifying individual facts; it requires reconstructing how those facts relate to one another over time.

Context adds another layer. A diagnosis, test result, medication or physician observation viewed in isolation can tell a very different story than the same information viewed within the patient's broader history. Was the condition new or chronic? Was a diagnosis provisional or confirmed? Was a symptom documented once or repeatedly? Did treatment resolve the problem, or did the patient continue to seek care? Was there another event between two episodes of treatment? Professionals rarely need isolated medical facts. They need to understand what those facts mean in relation to the question they are trying to answer.

Finally, there is **traceability**. In a legal, insurance or medical evaluation environment, finding an answer is often not sufficient. A professional may need to know precisely where the information appears, review the original language, examine the surrounding context or share the source documentation with someone else involved in the matter. An attorney preparing for a deposition cannot rely only on a statement that a patient reported prior back pain; the attorney may need the date, provider, exact context and underlying note. A claims professional evaluating an injury may need to verify the treatment history before relying on a conclusion drawn from it. An expert may need to independently assess the source documentation.

For these professionals, confidence comes
not simply from receiving an answer
but from being able to validate it.

Comprehension requires more than an answer. It requires a path back to the evidence.

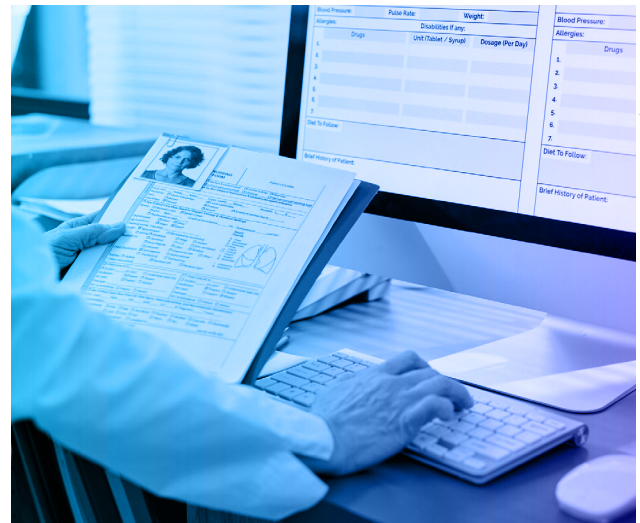
Taken together, fragmentation, volume, chronology, context and traceability explain why the comprehension problem is more substantial than a simple reading problem. A medical record can be complete, searchable and entirely digital and still require significant professional effort before it becomes useful.

The Hidden Cost Is Reconstruction

Medical-record review is often measured in pages or hours, but those measures can obscure what the reviewer is actually doing. The work is not simply reading. It is reconstruction.

As a reviewer moves through a complex medical history, that person is building a mental model of what happened. Dates, providers, symptoms, diagnoses, procedures and treatment decisions must be held in mind long enough to determine how they relate to one another. New information may require an earlier assumption to be reconsidered. A reference to previous treatment may send the reviewer backward through the record. An unfamiliar provider name may reveal another episode of care. The process is iterative rather than linear.

This distinction matters because professional attention is finite. Research in clinical settings offers a useful illustration. A *Health Affairs* study examining physician documentation time and the use of health information exchange found that each additional hour spent documenting was associated with a 7.1% reduction in the proportion of patients for whom physicians viewed an available outside medical record that day.⁴ The study concerned primary care physicians, not claims or legal professionals, but its broader implication is relevant: information-management work competes with other high-value work for limited professional time.



Complex has seen the same dynamic in its own customer research. In interviews with insurance carriers, claims organizations and law firms, customers described substantial time being spent simply preparing medical-record files for substantive review. One panel defense firm reported receiving approximately 25 files a day, ranging from 10 to 5,000 pages, and dedicating the equivalent of 4.5 full-time employees to sorting, ordering and consolidating those files before an attorney began substantive review. While one firm's experience is not representative of every organization, it illustrates how much work can accumulate between receiving the records and being ready to use them.

A similar dynamic can occur anywhere highly trained professionals must spend substantial time locating and organizing information before they can apply their expertise to it. For an attorney, hours spent manually reconstructing a chronology are hours not spent evaluating how that history affects legal strategy, preparing a witness or developing an argument. For a claims professional, time spent moving among documents to establish the treatment history competes with time available to evaluate the claim itself. For an IME professional, the effort required to organize years of prior treatment is a prerequisite to the medical analysis the professional is uniquely qualified to provide.

The burden can also recur throughout the life of a matter. One person reviews the record to understand the initial history. Another returns to it while preparing for a deposition. A claims professional revisits the documents when new treatment is reported. An expert reconstructs portions of the chronology again for an examination or report. Each person may approach the record with a different question, which means a static summary or a previous review may not eliminate the need to return to the source material.

In practice, much of that reconstruction remains manual. Reviewers may scroll through records page by page, create their own chronology or chart, and repeatedly search for terms related to the accident, claimed injuries, particular body regions or work status. The work may also pass through multiple hands. In many law firms, a paralegal or associate attorney reviews, organizes and summarizes the records initially, while the partner responsible for the matter may return to them before a deposition, a discussion with the handling adjuster or trial preparation. Each review may serve a different purpose, but each can require the professional to reorient to the medical history and reconnect information across the record.

Seen this way, the opportunity is not simply to make people read faster. Nor is the objective to eliminate professional review. It is to reduce the amount of professional effort consumed by the mechanics of getting oriented, locating relevant information and reconstructing context.

That distinction becomes particularly important as artificial intelligence enters the workflow.

Why Search and Summaries Are Only Part of the Answer

Technology has already transformed the way professionals navigate large bodies of information. Keyword search can locate a known term almost instantly. Digital records can be navigated far more efficiently than boxes of paper. Summaries can condense lengthy histories into a more manageable form. And generative artificial intelligence is creating entirely new ways to interrogate and organize complex information.

All of these developments represent meaningful progress. But the comprehension problem exposes the limits of treating any one of them as a complete solution.

Search works exceptionally well when the reviewer already knows what to look for. If an attorney needs every reference to a particular physician, diagnosis or procedure, search can dramatically accelerate the process. But many important questions begin without a known search term. What changed after the accident? Is there a meaningful pattern in the treatment history? Were there similar complaints before the event? Is there a period during which treatment appears to stop? Those questions require the reviewer to understand relationships across the record, not merely locate a particular word.

Summarization solves a different problem by reducing volume. A well-constructed summary can provide orientation and help a professional understand the broad contours of a medical history much more quickly. But compression and comprehension are not identical. Every summary involves choices about what to include, what to omit and how to organize the information. Those choices may be appropriate for one question and less useful for another. The information most relevant to an adjuster evaluating causation may not be the same information an attorney needs for a deposition or a physician needs before an IME.

The limitation becomes more apparent as a matter evolves. New records may arrive, another professional may take over the review, or a different question may become important. A static summary created for an earlier purpose may provide useful orientation without giving the next reviewer an efficient way to explore the underlying information. The broader opportunity is to organize medical information so that it can support multiple questions and uses over time, rather than requiring the same history to be reconstructed each time.

Generative AI makes this distinction even more important. Recent research demonstrates considerable promise for AI-assisted medical chart review while also underscoring why source connection and professional verification matter. In a 2026 evaluation of an AI chart-review tool, physicians provided positive feedback on many AI-generated summaries, but they also identified missing information, confusing content and some hallucinations.⁵ The researchers concluded that AI-assisted chart review could augment manual review, while emphasizing the importance of access to source data for verification.⁵

The most interesting lesson is not that AI should be avoided. It is almost the opposite. AI is increasingly capable of reducing precisely the kind of information-management burden that makes complex records difficult to use. But deploying a general-purpose language model on a large set of documents is different from designing intelligence around the requirements of medical-record workflows.

Those requirements include context. They include chronology. They include the ability to ask different questions of the same information. And, particularly in claims and legal environments, they include the ability to verify an insight against the underlying evidence.

The goal therefore should not be to ask technology to replace the professional's understanding of the record. It should be to help the professional reach that understanding more efficiently.

That is a more ambitious objective than summarization, and a more useful one.

Why Search and Summaries Aren't Enough

- Search quickly finds known terms but may miss broader patterns and relationships.
- Summaries reduce volume but can leave out information important to a different reviewer or question.
- Medical records evolve, requiring information that can be revisited as new records and questions arise.
- AI can improve efficiency, but may miss information or generate inaccuracies, making source verification essential.
- The goal: Use technology to help professionals understand complex records faster—not replace professional judgment.

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From Medical Record Retrieval to Medical Records Intelligence

If retrieval solves the problem of access, the next opportunity is to reduce the distance between access and understanding.

We call this **Medical Records Intelligence**: the use of technology and medical-record expertise to make complex records easier to navigate, understand and use while preserving the professional's connection to the underlying source information.

The distinction matters. Intelligence in this context is not simply an AI-generated output. A summary can be intelligent. A search result can be intelligent. But neither necessarily gives the professional what is required to move confidently from a large body of medical information to a decision.

A more complete approach begins with **orientation**. When a record set arrives, the professional should be able to understand its broad contours without first reading every page. Who are the major providers? What periods of treatment are represented? What significant events appear in the history? Where are the concentrations or gaps in care? A useful technology layer can reduce the time required to establish that baseline understanding and give the reviewer a more informed starting point for deeper analysis.

From there, the workflow needs to support **exploration rather than a single predetermined summary**.

Different professionals ask different questions, and even the same professional will ask different questions as a matter evolves. A claims professional may initially need to understand the treatment associated with an injury and later need to investigate prior similar complaints. An attorney may begin with a general chronology and subsequently focus on a narrow period in preparation for testimony. Medical Records

Intelligence should make the record easier to interrogate as those questions change rather than forcing the user to begin the review process again.

Context and chronology must remain intact throughout that exploration. Surfacing a diagnosis without showing when it appeared or a treatment without its relationship to other events may save time while sacrificing meaning. The technology should help professionals see relationships among information, not merely extract isolated facts from documents.

Just as importantly, every insight should remain connected to the underlying source. This is where traceability becomes a design principle rather than a convenience. A professional who sees something significant should be able to move back to the original record, examine it in context and decide independently how much weight to give it. That ability supports both efficiency and confidence: technology can accelerate the path to potentially relevant information without asking the user to accept an opaque conclusion.

Ultimately, the value of this approach is not measured by how much judgment can be transferred from people to machines. It is measured by how much low-value information-management work can be removed from the path of professional judgment.

The attorney still determines legal significance. The claims professional still evaluates the claim. The medical expert still interprets the clinical history. Technology helps each of them spend less time assembling the information required to do that work.

The progression is straightforward:

Retrieve » Organize » Understand » Verify » Act

Retrieval creates access. Organization gives the information structure. Technology accelerates understanding and exploration. Traceability makes verification possible. Human expertise determines what the information means and what should happen next. That is the promise of Medical Records Intelligence: not replacing expertise, but allowing expertise to begin sooner.

Complex: From Getting the Record to Understanding It

For more than 50 years, Complex has worked at the difficult front end of the medical-record workflow. We have helped organizations retrieve the records they need across a fragmented healthcare landscape and built deep expertise around the processes, people and systems involved in getting medical information from where it resides to the professionals who depend on it.

That experience provides a particular vantage point on the comprehension problem. When you spend decades helping customers obtain medical records, you also see what happens after delivery. You see that receiving the record is an important operational milestone, but it is rarely the customer's actual objective.

Organizations do not retrieve medical records because they want documents. They retrieve them because somewhere within those documents is information they need to evaluate a claim, prepare a case, conduct an examination, understand a medical history or make a decision. The value of retrieval is ultimately realized only when the information can be put to use.

That insight is shaping the next chapter at Complex.

Asabell™ represents an evolution from helping customers retrieve medical records toward helping them more efficiently understand and use the information those records contain. It brings technology together with Complex's medical-record expertise to address the work that begins after retrieval: getting oriented to the record, navigating a complex history, surfacing potentially relevant information and maintaining a connection to the source material.

Case Summary is an early expression of that vision. It helps make complex medical histories more approachable and gives professionals a faster starting point for review. But the broader opportunity is not simply to create better summaries. It is to build a more connected workflow between the moment records arrive and the moment a professional is ready to act on what those records reveal.

The impetus for that evolution came directly from the way customers were working with the records Complex delivered. Claims and legal professionals were being asked to manage more matters while still needing to thoroughly review increasingly complex medical histories. They were trying to reconstruct treatment around an accident, identify prior conditions or procedures, understand gaps in care, assess changes in reported pain, evaluate work restrictions and locate other medical evidence that could materially affect a claim or case. Much of that work still required manually moving through the record and assembling the relevant history before professional judgment could begin.

Asabell was developed to reduce that manual burden, informed directly by what Complex heard from the professionals working with these records. In interviews with insurance carriers, a state workers' compensation fund and panel defense firms, customers described the time required to reconstruct files, the repeated effort created when records arrived in multiple deliveries and the limitations of receiving a static summary when their real questions concerned treatment gaps, prior conditions, specific injuries, providers or billing.

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Those insights helped shape Asabell around a broader objective: creating structured, searchable, source-connected medical information that can support different questions as a matter evolves. Customer input has continued as Asabell has evolved, reinforcing a broader principle behind Compex's approach: Medical Records Intelligence should evolve around the questions professionals actually need medical records to answer.

That evolution is not a departure from Compex's retrieval heritage. It is a natural extension of it. The expertise required to retrieve medical records at scale creates a deep understanding of how those records are generated, where complexity enters the process and how customers ultimately need to use the information.

The Next Era of Medical Records

Medical information will not become less complex. Records will continue to accumulate across providers, systems and years of care. Improvements in interoperability will make more information accessible. Artificial intelligence will make it possible to organize, analyze and interact with that information in ways that would have been difficult to imagine only a few years ago.

Those developments create enormous opportunity, but they also raise the bar for what it means to solve the medical-record problem. Delivering a collection of documents is no longer the fullest expression of value when technology can also help professionals navigate what those documents contain. At the same time, producing an AI-generated answer is not sufficient when the professional needs context, chronology and confidence in the underlying source.

The future therefore should not be framed as retrieval versus intelligence, or technology versus human review. The strongest workflow connects all three.

The next question is no longer only, How do we get customers the records they need?

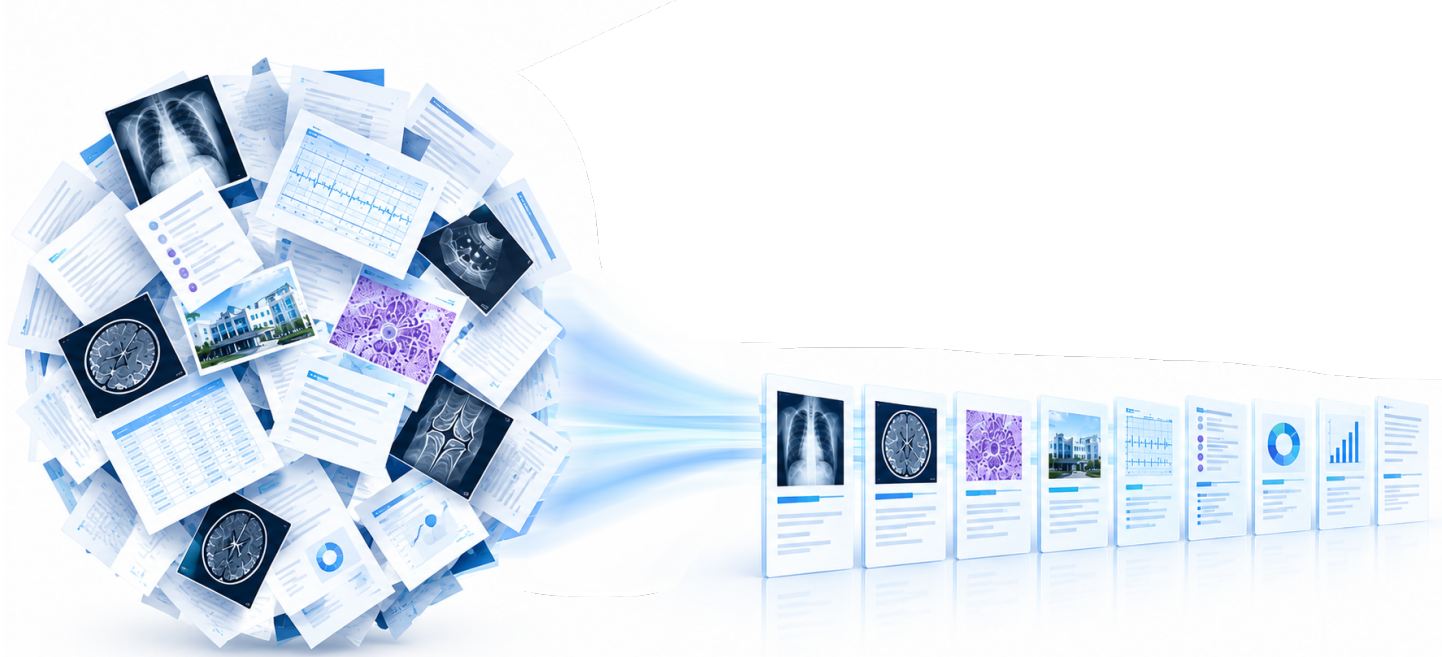
It is also, How do we help them get more value from those records once they arrive?

Retrieval ensures that the right information is available and that the record set is as complete as possible. Intelligence helps organize the information, surface what may matter and make complex records easier to navigate, understand and use. Human expertise evaluates the significance of what is found, applies judgment and determines what happens next.

Each layer makes the others more valuable.

For decades, progress in the medical-record industry has focused largely on improving access. That work remains essential and unfinished. But access alone is no longer enough to solve the full problem confronting the professionals who depend on medical information.

Getting the medical record is only the beginning.



The next era will be defined by how effectively we
turn those records into understanding.

Medical Records, **Understood.**

Learn more about Complex and our approach to medical records intelligence or [request a quick demo](#).

Sources

1. [Office of the National Coordinator for Health Information Technology \(ONC\)](#). "Gaps in Individuals' Information Exchange." Health IT Quick Stat #56. Updated September 2025.
2. Moy, Amanda J., et al. "[Understanding the perceived role of electronic health records and workflow fragmentation on clinician documentation burden in emergency departments](#)." Journal of the American Medical Informatics Association, Vol. 30, Issue 5, May 2023, pp. 797-808.
3. Moy, Amanda J., et al. "[Measurement of clinical documentation burden among physicians and nurses using electronic health records: a scoping review](#)." Journal of the American Medical Informatics Association, Vol. 28, Issue 5, May 2021, pp. 998-1008.
4. Holmgren, A. Jay, Julia Adler-Milstein, and Nate C. Apathy. "[Electronic Health Record Documentation Burden Crowds Out Health Information Exchange Use By Primary Care Physicians](#)." Health Affairs, Vol. 43, No. 11, November 2024, pp. 1538-1545.
5. Kahl, Nicolas M., et al. "[Evaluation of electronic health record-integrated artificial intelligence chart review](#)." npj Health Systems, Vol. 3, Article 6, 2026.

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