INDUSTRY PERSPECTIVE

Value Beyond the Data

Future-Proofing Medical Affairs for the Agentic Era

Industry Insights and an Actionable Blueprint for Medical Affairs Leaders

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INTRODUCTION

The Leader in the Middle

An MSL steps out of a meeting with a KOL. Twenty minutes earlier, the KOL expressed hesitation about a known side effect of a heart medication. Now, after discussing the latest clinical data with the MSL and how it relates to their particular patient population, they understand how rare this side effect is, and they are rethinking which of their patients are candidates.

The MSL has a flight to catch and three more meetings before they can log what they heard. By the time they do, the details have thinned to a quick jotting in the medical CRM. Now, imagine this multiplied across the entire field force and how that critical field insight never gets captured nor acted upon.*

Historically, there was an information asymmetry between HCPs and MSLs, where MSLs' primary value was clinical information delivery. With the rise of AI-powered medical search engines, HCPs now have information at their fingertips, reducing the information asymmetry. The ease of access to information raises the expected standard of scientific exchange. In a world where HCPs have already read the paper an MSL wants to discuss in a meeting, it's no longer enough to relay clinical summaries.

The MSL role needs to evolve towards personalizing the clinical information to the HCP's context to influence care decisions, and promptly capturing in-depth insights that the wider organization can leverage. An MSL who is more prepared to have deeper, more meaningful conversations, must also be prepared to capture them in almost real time, but they need a system that enables them to do so.

That system belongs to the Head of Medical Affairs. Most Heads of Medical Affairs will not meet many of the patients their work reaches. But their job is to align people, processes, and tools around the latest science, so the right evidence reaches the right clinician in time.

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For Heads of Medical Affairs, patient outcomes are the number one priority. For patients and families, outcomes can mean an earlier diagnosis, a therapy that finally works, or even another year at home. Medical Affairs makes sure the right scientific evidence reaches the clinicians who treat patients, so those clinicians can make more informed treatment decisions. In service of that priority, every Head of Medical Affairs is caught between two demands:

DEMAND 01

Empowering their MSLs to deliver value to clinicians.

MSLs are asked to cover more stakeholders, master more complex science and document more, in the same day, much of it on the road. With the rise of AI-powered medical search engines and platforms, clinicians can now find the data on their own. What they need from an MSL is value beyond the data: interpretation in the context of their own patients, and a knowledgeable partner who sharpens their thinking. Conversely, Medical Affairs leaders need to provide MSLs with the tools to make capturing these patient-specific insights easy and frictionless.

DEMAND 02

Proving impact.

It's no longer enough to document the number of meetings with KOLs as a metric; those meetings must tie back to meaningful insights. The organization wants to see that the Medical Affairs function, particularly Field Medical, produced valuable scientific exchange, how that translates to identifying new clinical study opportunities, and how it influenced care decisions.

The agentic era has sharpened the tension between the two. MSLs are under pressure to make their role more strategic, all while managing a growing workload with their territories, demanding travel, and a rapidly evolving clinical landscape. However, the tools, measures and support around this evolving role have not kept pace. This paper asks one question:

How does a Medical Affairs leader empower their team to deliver value to clinicians, and prove the impact?

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AT A GLANCE

Executive Summary

Medical Affairs has never mattered more to patients or to the organization. Its future depends on whether its people, tools and measures keep pace.

This paper draws on the 2026 MAPS Annual Benchmark Report[1], the ZS Medical Affairs Outlook Report 2026[2], and ACTO's RAIL Roundtables[3] with cross-functional Life Sciences leaders, alongside independent North American research on physicians, KOLs, and MSL performance.

PART 1

The State of Medical Affairs

1. **The patient at the end of every insight.** The path from field insight to evidence to patient care is now more complex, and it runs through more stakeholders.
2. **The MSL in the middle of the shift.** Information delivery is no longer enough; clinicians now expect interpretation and personalization, and MSLs are doing a harder job with yesterday's tools and a heavier workload.
3. **Showing the impact.** Leaders can show activity, but showing which medical decisions their work informed is still hard.

PART 2

Blueprint for Future-Proofing the Function

1. **Close the loop on scientific impact reporting**, and hand off the baton.
2. **Define what advancing science looks like for your team**, and establish a baseline.
3. **Give MSLs time back** for the work only they can do.
4. **Empower MSLs to capture decision-shaping insights** before context fades.

Underneath all four: a human stays accountable for everything that reaches a clinician, and trustworthy AI is held to a two-part standard: **compliant** and **capable**.

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01

PART ONE

The State of Medical Affairs

1 The patient at the end of every insight

Medical Affairs makes sure clinicians understand the latest science and can apply it to their care. That is how doors open for patients, but the path there is more complex than it has ever been.

Picture this: Months before a targeted therapy launches, MSLs in different regions keep hearing the same thing from KOLs. The biomarker the therapy depends on isn't routinely tested, and some labs don't offer it at all. Medical Affairs identifies this trend and turns it into an education effort with pathologists and treating clinicians. By launch, testing is routine, covered by insurance providers, and eligible patients can be identified and treated.

There's no doubt Medical Affairs' potential for impact is immense. Indeed, more than half of KOLs report changing their treatment approach, switching therapies, or sharing information with peers after MSL interactions.[2]

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~17 years

The time research can take to reach clinical practice.

MORRIS ET AL.[4]

61%

Of rare disease patients in one US survey had treatments denied or delayed because they needed insurer pre-approval.

NORD[5]

Why it matters more now. That story is what good looks like, but the default is far slower: in some cases, research can take about 17 years to reach clinical practice.[4] For patients, that lag shows up as late diagnoses and treatments that arrive after they're needed. Medical Affairs is the function best placed to shorten the journey of treatments from lab to bedside.

The path has more turns. The Medical Affairs mandate now spans evidence generation, insight strategy, and stakeholder engagement across the product lifecycle[1], what ZS calls the function's third era.[2] Stakeholder groups have become more complex to include payers, pharmacists, value committees, and patient groups, alongside KOLs.

Access often decides whether new treatments get adopted as standards of care. In one US survey, 61% of rare disease patients had treatments denied or delayed because they needed insurer pre-approval.[5] MSLs usually meet with payers and clinicians separately, or even have Medical Outcomes Liaisons that mainly interface with payers.[11] However, a payer restriction can come back to the MSL as a clinician's question about access.

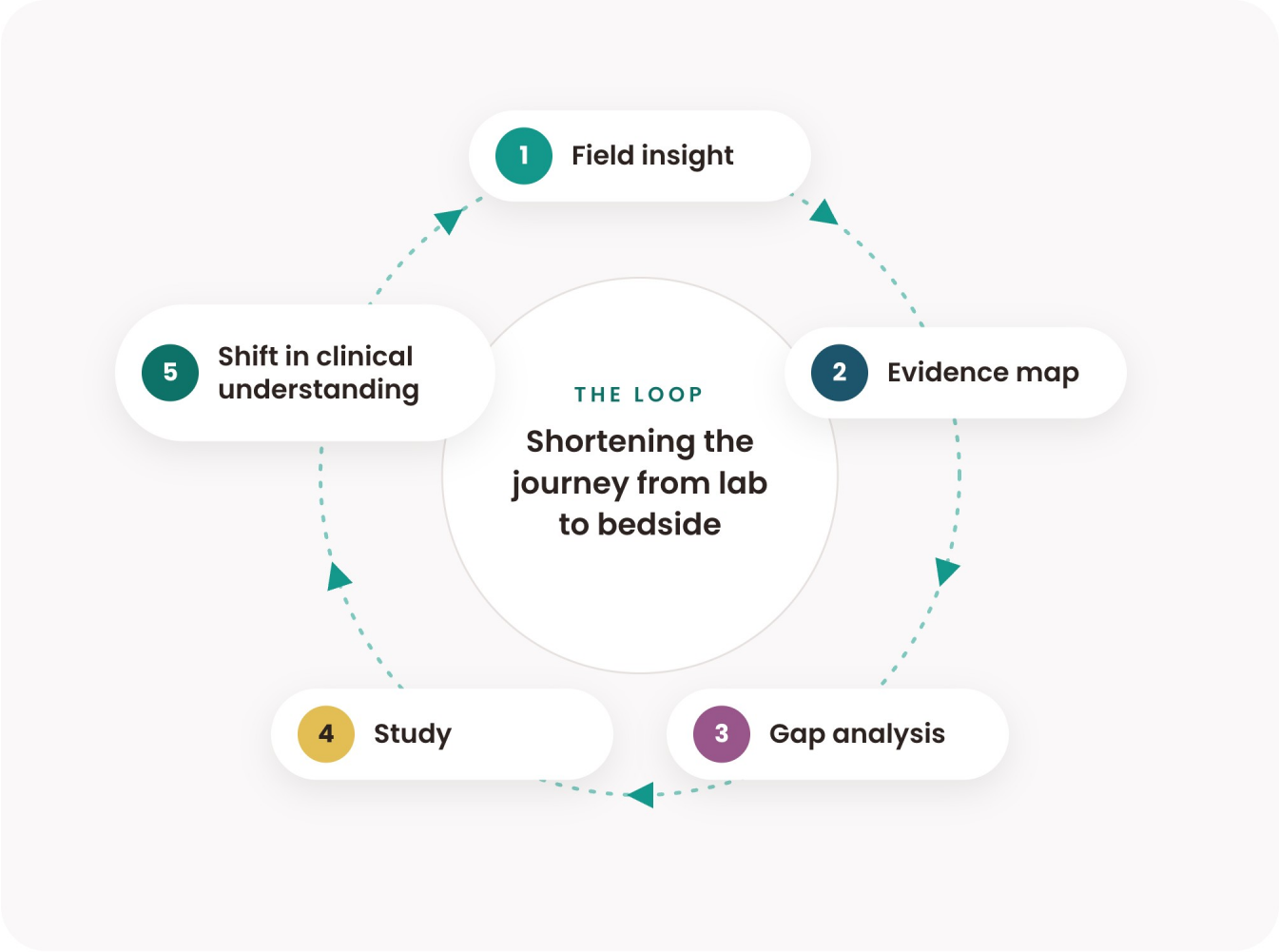
How the door opens for patients. It usually starts with something an MSL hears first: an evidence gap, an underserved subgroup, a promising investigator. Evidence mapping shows where the data is thin. Gap analysis names the missing study. Real-world evidence or an investigator-initiated study fills it. The result is clinicians who understand the latest science well enough to change how they care for patients.

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FIGURE 1

How the door opens for patients

From something an MSL hears first to a shift in how clinicians care for patients, and back again.



1 · Field insight	An evidence gap, an underserved subgroup, a promising investigator.
2 · Evidence map	Shows where the data is thin.
3 · Gap analysis	Names the missing study.
4 · Study	Real-world evidence or an investigator-initiated study fills it.
5 · Shift	Clinicians understand the latest science well enough to change how they care for patients.

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2 The MSL in the middle of the shift

81%

Of US physicians use AI in their practice, up from 38% in 2023.

AMA[6]

4,000+

New clinical papers are published every week, on average.

PATTERNS[12]

20%

Up to 20% of an MSL's time is spent on pre-call preparation.

ACTO[13]

An MSL sits down with a KOL, excited to discuss a new research pathway with her. To his surprise, the KOL has already read up on the new reaction pathway and steers discussion more toward unpacking clinical nuances that he wasn't prepared for. With the rise of AI-powered medical search engines and tools, this is the new normal. 81% of US physicians use AI in their practice, up from 38% in 2023.[6]

The summary isn't the answer. An AI summary covers the trial. It doesn't cover this clinician's patient population, and many KOLs say AI answers aren't specific enough to the people they treat.[7] What they want from an MSL is a short, valuable conversation that interprets the evidence and challenges their thinking.[2]

In practice, that means working through a specific patient: how comorbidities or prior treatment failures change the reading of the data. IQVIA frames the division simply: AI delivers information, and the MSL delivers judgment.[8] KOLs increasingly see the MSL as a connector, "primarily serving as the bridge between HCP needs (research interests, opportunities for collaboration, etc.) and the company's internal resources."[7]

AI DELIVERS
Information

THE MSL DELIVERS
Judgment

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The strain. The job scope of MSLs is quickly evolving and expanding, but they still only have so many hours in the day. MSLs now engage not only HCPs but a growing list of stakeholders. The science is getting increasingly complex, with an average of over 4,000 new clinical papers published every week[12], and up to 20% of an MSL's time is spent on pre-call preparation.[13] Despite all this, MSLs need to capture meaningful insights between flights and an increasing workload. Skill development is now the leading challenge for field medical teams[1], and re-skilling commitments often lag behind it.[2]

When the science shifts or a launch nears, the field has to be briefed fast without losing nuance. Sometimes, this pushes MSLs to reach for AI on their own to try to optimize their workflows. In H1 2026, ACTO hosted a series of **Responsible AI in Life Sciences (RAIL)** roundtables with over 80 leaders across North America and Europe in commercial, medical affairs, patient services, IT, and regulatory roles at pharmaceutical, biotech, and medical device companies.[3] At one RAIL Roundtable in San Francisco, leaders described MSLs building their own agents while their organizations were still piloting, a pattern MAPS also reports.[1] In an industry where patient outcomes are at stake, these kinds of compliance risks must be addressed urgently.

The worry underneath. Underneath the strain sits a quieter question MSLs are asking themselves: in a few years, will my role still matter, or will it be replaced by AI? Medical Affairs leaders must approach this watershed moment by leveraging AI for workforce transformation, rather than workflow optimization. This requires delicate change management and equipping field teams with the skills needed for their *new* roles. As one leader at the RAIL Roundtable in Basel said, *"These are tools to help you, not to replace you."*[3]

> **"These are tools to help you, not to replace you."**
>
> — LEADER, RAIL ROUNDTABLE, BASEL[3]

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3 Showing the impact

Medical Affairs leaders are increasingly expected to demonstrate how their work influences medical decision-making, yet most systems measure activity and reach rather than the impact of those interactions.

Remember the MSL and KOL interaction we introduced at the beginning of this paper? The KOL had expressed concerns about a known side effect of a heart medication. After reviewing the latest clinical data with the MSL and discussing its relevance to their patient population, the KOL left with a different perspective, reconsidering which patients might be appropriate candidates for the therapy.

Now, fast forward three months.

At the quarterly review, leadership wants to understand how Medical Affairs is influencing clinical decision-making. But that meaningful interaction has been reduced to a single entry in the medical CRM: "Discussed safety data, KOL engaged."

Why? The MSL had a flight to catch and several more meetings ahead. By the time they sat down to document the conversation, much of the detail had faded. Without a system designed to help capture, structure, and surface the most valuable insights from these interactions, what could have been evidence of meaningful influence became just another activity logged.

The dashboard can show that the meeting took place, but it cannot reveal what mattered most: *a clinician who gained a clearer understanding of the evidence and reconsidered their approach to patient care.*

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And therein lies one of Medical Affairs' biggest challenges: the inability to demonstrate the true value of its work.

The real value of an MSL isn't measured by how many meetings they conduct, but by the quality of the scientific exchange they enable. Their expertise lies in navigating complex scientific conversations, understanding the challenges clinicians face, and uncovering insights that can inform medical strategy and ultimately improve patient care. This ability to connect scientific evidence with real-world clinical needs, build trusted relationships, and engage in nuanced, meaningful dialogue is what makes the human MSL role so critical, even as AI reshapes Medical Affairs.

92%

Of organizations rely primarily on activity-based metrics, such as the number of KOL engagements, to evaluate MSL performance.

MSL SOCIETY[9]

Yet the industry continues to measure what is easiest to count rather than what matters most. According to the MSL Society, 92% of organizations rely primarily on activity-based metrics, such as the number of KOL engagements, to evaluate MSL performance.[9]

The result is a fundamental disconnect: Medical Affairs can demonstrate how much work is being done, but not the meaningful difference that work makes.

Why it happens. Activity counts are more quantitative, and so they can be tempting to lean on. But if teams are prioritizing counting interactions for the sake of hitting a metric rather than quality of insights and interactions, then this can result in misdirected focus.[10] A medical CRM note records that a conversation happened, but between flights and being on the road, it is onerous for MSLs to capture the context of every conversation: the clinician's concern, the evidence shared, or what shifted.

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A tag like “efficacy” tells us what was discussed, but nothing about why it mattered to the clinician. Was the clinician surprised by the data, skeptical of the findings, or encouraged enough to reconsider their perspective? Keyword tagging can organize information and quantify activity, but it cannot distinguish a passing mention from a meaningful shift in clinical thinking. **The insights that shape medical strategy aren’t found in the volume of conversations, but in the patterns that emerge from them**, particularly when trusted experts consistently challenge existing assumptions and reveal opportunities to rethink the approach.

Where the Gap Sits: Stated Priority Versus Reality

	WHAT LEADERS PRIORITIZE	WHAT’S IN PLACE
Insights	**64%** track insights in the CRM	**40%** track insights actioned
Capability	**74%** name capability a top priority	**Low** Reskilling commitments remain low
AI	**64%** name AI a top priority	**20%** have it integrated into daily operations

Sources: MAPS 2026 Annual Benchmark Report[1]; ZS Medical Affairs Outlook Report 2026[2].

Defining impact in Medical Affairs terms. Scientific impact means an evidence gap identified, a study informed, a treatment approach or guideline shaped, or a new patient population explored. It is never prescribing volume. Medical Affairs shows it opened the door, and what the organization does next belongs to other teams.

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02

PART TWO

A Blueprint for Future-Proofing Medical Affairs

So, as the role of the MSL and the wider Medical Affairs function both quickly evolve, what can Medical Affairs leaders do to future-proof the function? Here are four moves you can make today. Each is designed to better equip MSLs for their evolving role while giving leaders a clearer way to demonstrate their impact. Each presents questions to assess where your team stands today, and the guardrails that make implementation responsible.

MOVE 1

Define what advancing science looks like for your team, and establish a baseline

MOVE 2

Give MSLs time back for the work only they can do

MOVE 3

Empower MSLs to capture decision-shaping insights before context fades

MOVE 4

Close the loop on scientific impact reporting

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MOVE 1

1 Define what advancing science looks like for your team, and establish a baseline

Impact can't be shown until it has been defined. Start by agreeing on which outcomes count: evidence gaps identified, field insights that inform evidence-generation priorities, and shifts in HCP scientific understanding. Write them into the medical plan as milestones with measurable targets.

Then trace a small set of key medical decisions back to the evidence or exchange that shaped them, rather than tracking every interaction. Baseline where the team stands today on HCP sentiment, quality of exchange, quality of insight and MSL capability.

The baseline is also how AI will be judged. 79% of cross-functional Life Sciences leaders at the RAIL Roundtables say AI should be measured against the current human baseline.[3] Practitioners make the same case for the function itself: Medical Affairs should define how its value is measured, rather than wait to be measured.[10]

? QUESTIONS TO ASK

- Have we defined scientific impact in terms our team and our leadership both recognize?
- Which changes in scientific understanding or medical strategy can we realistically track this year?
- What would an improvement from our human baseline look like?

GUARDRAILS

- Bring IT and Legal in when you set the measures, not at sign-off. Medical Affairs leaders are accountable for responsible AI adoption, and they depend on both teams for approvals.
- Every AI agent the team adopts gets a success measure tied to this baseline.

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MOVE 2

2 Give MSLs time back for the work only they can do

Leverage AI for literature screening, evidence mapping, congress synthesis, investigator identification, and administrative reporting, with appropriate human oversight. Reinvest the time in higher-value work: preparing for more meaningful scientific exchange, building stronger KOL relationships, addressing complex HCP questions, and uncovering insights that reveal evidence gaps and inform medical strategy. That starts with call plans tied to the key intelligence questions in the medical strategy and ensuring the MSL has prepared and practiced for the toughest HCP conversations before they happen.

AI helps most before and after the conversation. Some organizations expect it to free up about 22% more engagement capacity.[2] The value comes from where that time goes next.

How Agentic AI Transforms the MSL's Day-to-Day

PART OF THE WEEK	TODAY	IN THE AGENTIC ERA
Preparation	Manual literature search before each meeting	AI screens and identifies most relevant literature; MSLs can practice responding to hard questions with AI roleplay practice sessions
Scientific exchange	Travel-heavy, time-boxed meetings	The same meetings, better prepared, with more time on patient-specific interpretation
Insight reporting	Logged hours or days later in the medical CRM, as context fades	Captured right after the meeting, with clinical context attached
Medical information requests	The MSL routes the question to Medical Information by hand and follows up	An agent drafts the request from the field note, MSL reviews, and system alerts the MSL when the signed response is ready
Congresses	Manual poster and presentation review	AI surfaces the trends that bear on the medical plan; MSLs spend their time with experts

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QUESTIONS TO ASK

- How much of an MSL's week goes to work AI could take on?
- Do MSLs practice the hardest questions before they face them? How do we know?
- Does every MSL know what work stays with them, and does every agent have a named owner and defined boundaries?

GUARDRAILS

- **Rewrite the MSL job description around what stays human.** Judgment, connection, and strategy stay with the MSL. Add in strategic data synthesis and navigating a complex stakeholder ecosystem. As one leader at the RAIL Roundtables in Toronto put it, put a job description "in a centrifuge" and see what rises to the top.[3]
- **Give every agent a job description too.**
- **Start where AI is high-value and easy to govern.** Quick wins can help drive adoption for more complex use cases.
- **Keep a person accountable for every output.** AI agents can draft scientific summaries or responses to Medical Information requests, but a qualified professional must review and validate the content before it reaches an HCP.
- **Replace unapproved AI tools with secure alternatives.** Assume some MSLs are already using generic AI tools for drafting and summarizing. Make the patient privacy, data security, and compliance risks clear, and move quickly to provide approved, secure alternatives.
- **Reinvest part of the time saved in training.** Deep-dive certification when new data arrives, refreshers in between, and digital literacy built into the annual plan and budget. As the MSL role evolves and more AI agents get rolled out, teams need to be upskilled accordingly so they feel confident in the room and with the technology.

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Give every agent a job description too.

AGENT JD **TEMPLATE**

Field	Prompt
Agent Name	What is this agent called?
Business Purpose	Why does it exist?
Role supported	Which human role is this agent built for? (Field rep, MSL, market access lead, etc.)
Responsible for	The specific task or workflow it owns, and the outcome it's meant to produce.
Owner	Named human accountable for it, and who they escalate to.
Authority boundary	What it can do on its own, and where a human must step in.
Approved inputs	Data sources and systems it draws on — and what it's explicitly barred from.
Success measure	The one or two before/after numbers that will prove it worked.

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MOVE 3

3 Empower MSLs to capture decision-shaping insights before context fades

A decision-shaping insight captures three things: what the clinician thought before the meeting, what evidence was discussed, and whether anything shifted in their understanding or perspective. A one-line CRM note rarely tells the full story. Instead of a general "Notes" field, use specific prompts and questions that help MSLs capture what was discussed, what mattered, and what, if anything, changed. These details are what turn meeting notes into meaningful field insights.

BEFORE
What the clinician thought before the meeting

DISCUSSED
What evidence was discussed

SHIFTED
Whether anything shifted in their understanding or perspective

Then close the gap between leaving the meeting and logging the insights. The details are freshest in the minutes after the conversation, but fade as MSLs move on to other meetings or travel. By the time they reach the CRM, much of what made the conversation meaningful may be lost.

Give MSLs easy ways and a variety of channels (voice notes, text, video) for capturing insights while the context is still fresh. Some MSLs might prefer voice notes, while others may prefer for an agent to ask them a few follow-up questions to which they type responses.

CAPTURE CHANNELS

- **Voice notes**
- **Text**
- **Video**

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Tag each insight with the clinician's reaction, whether surprised, skeptical, or encouraged, alongside what was discussed so important context isn't lost. Then route the insight to the team best positioned to act on it, including Medical Information when a formal response is needed.

TAG THE REACTION Surprised Skeptical Encouraged

? QUESTIONS TO ASK

- Do our MSLs know what a decision-shaping insight looks like?
- How long after a meeting does the insight reach the CRM?
- Does every insight reach someone who can act on it?

GUARDRAILS

- **No recording of calls without explicit consent.** Insight capture happens after the meeting, not in the room.
- **Protect the medical–commercial line.** Document unsolicited requests promptly and route them through the approved process, so AI in the field supports objective, balanced, and responsive scientific exchange.

MOVE 4

4 Close the loop on scientific impact reporting

Move 1 defined what counts. But the Head of Medical Affairs needs to make scientific impact visible to leadership, and get insights promptly to the teams who act next. Agentic AI can offer several transformations for not just the MSL, but also the Head of Medical Affairs.

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How Agentic AI Transforms the Head of Medical Affairs' Day-to-Day

PART OF THE WEEK	TODAY	IN THE AGENTIC ERA
Leadership reviews	Reads through scattered field reports and presents activity counts	An agent synthesizes qualitative field insights into the medical decisions that shifted across a therapeutic area; the leader spends the time judging whether the output is accurate
Medical plan alignment	Gaps between evidence generation and scientific priorities surface at the next periodic review	An agent flags where evidence generation falls short of priorities, so resources move before a bottleneck forms
Investigator-initiated studies	High-level milestones reviewed with therapeutic area leads from periodic reports	Deviations from the medical plan are flagged as they happen, so the leader can step in before launch readiness is affected
Budget	Justifies the functional budget to Finance with activity data	Past spend and the scientific milestones it achieved inform the next forecast; funds shift from low-impact activity to priority evidence generation
Launch readiness	Evidence gaps against the medical community's needs become clear late, delaying launch readiness	An agent compares current evidence with what the medical community needs, so the leader can prioritize which data to generate first

Close the loop on insights. When an insight reaches the right team, track what action was taken and what changed, then share that feedback with the MSL who captured it. According to MAPS, only 40% of organizations track whether insights are acted on.[1] When MSLs see how their insights inform decisions and drive action, they have a stronger reason to keep capturing meaningful ones.

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40% Of organizations track whether insights are acted on.

MAPS[1]

Hold a regular scientific impact review with leadership. Replace the activity dashboard with field insights synthesized into the medical decisions that shifted, and the milestones they advanced. The table above shows how this changes the leader's week.

Agree the handoffs in advance. Decide with each partner team what Medical Affairs passes on, and through which approved process: evidence gaps to Clinical Development, access questions to Market Access, real-world data needs to HEOR. Once Medical Affairs shows it opened the door, those teams carry the work forward.

QUESTIONS TO ASK

- Do we track insights actioned alongside insights submitted?
- Can we connect our team's work to a scientific outcome?
- Where do we have the opportunity to flag bottlenecks and delays sooner?

GUARDRAILS

- **Human in control, always.** Ensure agentic systems provide visibility into AI actions and decisions through clear logging, monitoring, and verification. Humans remain accountable, with the authority to review, approve, or intervene before the system moves to the next step.
- **Hold agents to certification standards.** Just like MSLs, agents should not be deployed until they have been adequately trained and certified.

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THE FOUNDATION

The Standard Underneath

Every move rests on one rule and one test.

ONE RULE

AI does the heavy lifting on data, and a human stays accountable for everything that reaches a clinician.

ONE TEST

Trustworthy AI is both compliant and capable. AI must meet medical, regulatory, and privacy obligations. It must also make the team measurably better at scientific exchange. A tool that passes only one half of the test isn't ready for Medical Affairs.

SIX COMPONENTS OF TRUSTWORTHY **AGENTIC AI**

Most of the market grades agentic AI on what is easiest to point at, Security and Governance, and stops there. Our market conversations point to four more components that must be graded to decide whether a system is trusted, used, and worth scaling: Testing & Certification, Human Centricity, Value Creation, and Orchestration. A system can be secure and well-governed and still be untested, unadopted, unmeasured, and stranded in a single tool. The RAIL Score grades all six components, and treats two of them, Security and Governance, as non-negotiable floors.

Compliant	Capable
Governance SOPs, guardrails, and disclaimers enforced in the system, at both agent and sub-agent level, named owners, and escalation paths	**Human Centricity** built from the role outward; augments a person and preserves human ownership of consequential action, role-based context
Security data integrity and IP protection; the floor everyone assumes, deploy and revoke	**Value Creation** (reword; measurable) measurable, comparative value against the human baseline.
Testing & Certification observability, black box to glass box, grade the agent's performance - certify the agent like a human	**Orchestration** coordinates multiple agents, systems, and data sets to complete complex workflow end to end

? QUESTION TO ASK

- For every AI tool our team uses, can we name its owner and show it passes both tests?

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IN CLOSING

Conclusion

Let's go back to the MSL stepping out of the meeting. This time, they are prompted through a few steps to capture the KOL's sentiments: their concern, the evidence shared, and what changed. This all happens in their preferred channel: voice, text, or video, making it easier for them to record this before their next flight. Now, imagine this replicated across the entire field force; how that magnifies the volume and quality of insights being routed back to HQ. The insight reaches the team that designs the next study. At the quarterly review, the Head of Medical Affairs can now show what changed in practice, and why.

This is where the role of the MSL becomes even more valuable. With AI supporting the work around them, MSLs can focus on what they do best: value orchestration, building trusted relationships, navigating complex scientific conversations, and helping HCPs make sense of the latest evidence in the context of their patients' needs.

The Head of Medical Affairs gains a clearer, more defensible picture of the science their team is helping advance. And the impact doesn't end with a report or a dashboard. It continues in the next scientific exchange, the next research question, and perhaps in a clinician reconsidering an option for a patient they hadn't considered before.

That is the value of Medical Affairs worth capturing. And the human expertise worth protecting. All towards the ultimate objective of transforming patient outcomes.

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ABOUT ACTO

Intelligent Field Excellence for Life Sciences

ACTO is an AI-forward technology company purpose-built for Life Sciences. Trusted by 16 of the top 50 pharmaceutical companies, high-growth biotechs, and leading medtech organizations, ACTO unites human intelligence with empathetic AI through an AI-powered Field Excellence Platform and AI SuperAgents—accelerating product launches, strengthening field execution, and deepening customer engagement.

To learn more about ACTO, visit acto.com →

APPENDIX

Sources

**This example is for illustrative purposes only and does not reflect a real scenario.*

CORE REPORTS

1. MAPS, 2026 Annual Benchmark Report (50 member organizations, January–March 2026)
2. ZS, Medical Affairs Outlook Report 2026 (senior Medical Affairs leaders at 20+ companies and 150 KOLs in the US, Canada and Europe, Q1 2026)
3. ACTO, RAIL Roundtables and survey (8 roundtables; 80 cross-functional Life Sciences leaders in person and 135 survey respondents, H1 2026)

ADDITIONAL SOURCES

4. Morris, Wooding & Grant, "The answer is 17 years, what is the question," JRSM (2011)
5. NORD, Barriers to Rare Disease Diagnosis, Care and Treatment in the US: A 30-Year Comparative Analysis (2020)
6. AMA, 2026 Physician Survey on Augmented Intelligence
7. Veeva, How AI Is Changing KOL Behavior (July 2026)
8. IQVIA, Redefining Global Medical Scientific Engagement (August 2026)
9. MSL Society, Challenges of KPIs and Metrics for Measuring MSL Performance, Pharmacy (2025)
10. MAPS podcast, From Incremental Change to Lasting Impact: Bridging Today's Metrics to Tomorrow's Medical Affairs ROI (September 2026)
11. MSL Talk Podcast: "What Is a Medical Outcomes Liaison | Medical Outcomes Liaison"
12. Patterns, The Landscape of Biomedical Research (April 2024)
13. ACTO, Medical Affairs Market Research (2026)

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