



ZS Medical Affairs Outlook Report 2025

Advancing capabilities, customer engagement
and patient-centric strategies to drive impact

By Sunil John and Sarah Jarvis



Executive summary

As the pharmaceutical industry experiences rapid advancements, medical affairs organizations must adapt to the shifting landscape and address the diverse needs of an expanding stakeholder network.

The ZS Medical Affairs Outlook Report 2025 explores insights and emerging trends, while emphasizing the enhancement of medical affairs capabilities, the evolution of engagement strategies and the growing integration of technology alongside changes in clinical practice. This report provides a thorough analysis of perspectives from both internal medical affairs professionals and external key opinion leaders (KOLs).

By exploring these perspectives, the report aims to provide medical affairs organizations with the strategic insight needed to engage meaningfully with their expanding stakeholder network and create impact in the industry through clinical practice change. As the industry continues to evolve, this comprehensive analysis serves as a vital resource, offering guidance to help teams adapt and excel in a rapidly changing environment.

Key findings

An analysis of this year's survey data identified the following key trends:



Evolution of medical affairs organizations: With the addition of a key organizational dimension, most medical affairs organizations are striving to continually adapt to a changing landscape. Over the past year, the percentage of organizations identifying themselves as best in class declined from 19% to 13%, while those classifying themselves as nascent increased from 11% to 16%.



External perception of pharmaceutical companies: The likeliness of KOLs recommending medical science liaisons (MSLs) as a source of information was high overall, with only one of the top 20 pharmaceutical companies earning an average score below 6 out of 10 in our survey. However, there are variations in the value KOLs derive from MSLs and their likeliness to recommend an MSL to a colleague. These variations are driven by quality and relevance of information, MSL attributes and communication and engagement styles, along with expectations of company support.



Priority investment areas: Outside of research and medical education, field medical continues to be the top area of investment in medical affairs at 27% of budget allocation. Investments in insights collection, analytics and digital engagement platforms are being prioritized to enhance technological capabilities and impact in medical affairs. Medical affairs organizations also plan to increase investments in nonpersonal engagement channels such as websites, virtual congresses and social media to drive efficiency, adapt to a shifting landscape and broaden their reach. Medical affairs professionals indicate that

outcomes such as reduced unmet needs in the clinical landscape and improved patient outcomes through real-world evidence (RWE) justify investments in medical affairs.



Diverse customer universe and engagements: Of the external respondents surveyed, 65% said they are a part of professional societies and committees, and 95% of them mentioned that they are a part of professional societies. These KOLs also participate in pharmacy and therapeutic (P&T) committees, clinical steering committees and more. In addition to KOLs, MSLs should continue to interact with nurse practitioners (NPs), physician assistants (PAs), pharmacists and clinical research teams, among others.



Engagement preferences and KOL accessibility: KOLs expect 56% of total planned interactions to be in-person in 2026 and beyond. Additionally, KOL accessibility has also gradually increased over the past year, with more KOLs being moderately to extremely accessible for MSL interactions. In fact, the majority of KOLs anticipate their accessibility to increase or remain the same in the future.



Technological and omnichannel advancements: While the maturity levels of large pharma companies are evenly distributed across key organizational dimensions, midsize pharma companies lag in technological integration. The current adoption of generative AI is moderate overall, but organizations are planning to invest in generative AI for data analysis and insights generation in the future. Similar to last year, the majority of medical affairs professionals indicated their organizations are in the ideation or foundational phase of omnichannel engagement. Overall, medical affairs organizations face budget constraints, limited leadership buy-in and challenges in technology adoption, all of which hinder their progress toward future readiness.



Early scientific awareness: More than 60% of KOLs expect MSLs to start engagements by phase 3. KOLs expect to gain 63% of scientific knowledge about the product that will eventually be required of them by peri-launch, and most KOLs seek clinical trial information and patient population details from MSLs during phase 3 and peri-launch. As a product progresses toward launch and postlaunch, the demand for information becomes increasingly patient-focused as KOLs seek RWE and patient-reported outcomes (PROs), along with information about cost effectiveness and coverage.



Impact measurement: Sixty-five percent of medical affairs professionals reported they rely on outcomes-based measures, such as impact on clinical practice and treatment decisions, as well as healthcare provider (HCP) advocacy, engagement and feedback. Specifically, the impact of medical affairs activities on community HCPs is assessed by how effectively engagements address local healthcare needs, digital reach and real-world patient impact.



Broader impact and patient centricity: Patient centricity continues to be a key go-to-market (GTM) enabler, with medical affairs organizations implementing key patient-centric initiatives. These include identifying and addressing unmet patient needs, partnering with patient advocacy groups (PAGs) and advancing health equity through HCP education and outreach. In fact, 69% of KOLs indicated they expect data on RWE and patient-reported outcomes from MSLs.



Practice change enablement: Interactions with MSLs encourage KOLs to take specific actions that help drive clinical practice changes. On average, KOLs said they take three to four actions after an MSL interaction, with the most common actions being changing how they treat patients in clinical practice and sharing information with a patient or caregiver. KOLs take the latter action most frequently, followed by carrying out medical coverage- and reimbursement-related discussions with formulary decision-makers.

Methodology

In the first quarter of 2025, ZS fielded two industrywide surveys that yielded insights into current and future trends across the medical affairs landscape. More than 200 medical affairs professionals from more than 35 global companies participated, as did 150 KOLs from the U.S., Canada and Europe. Of the internal respondents surveyed, 76% worked at the director and executive level. External respondents were spread across therapy areas including, but not limited to, neurology, oncology, gastroenterology, rheumatology and cardiology.

Revamping the reconfigured GTM framework

In the current pharmaceutical industry environment, medical affairs organizations have a number of priorities, including responding to the need for personalized engagement, accelerating digital adoption, addressing diverse stakeholder expectations, strengthening internal collaboration and playing a critical role in post-approval evidence generation. Against this backdrop, traditional models of scientific engagement are being re-evaluated. The role of medical affairs is expanding—not just as a source of credible scientific information, but as a strategic connector that drives tailored, meaningful interactions across the ecosystem.

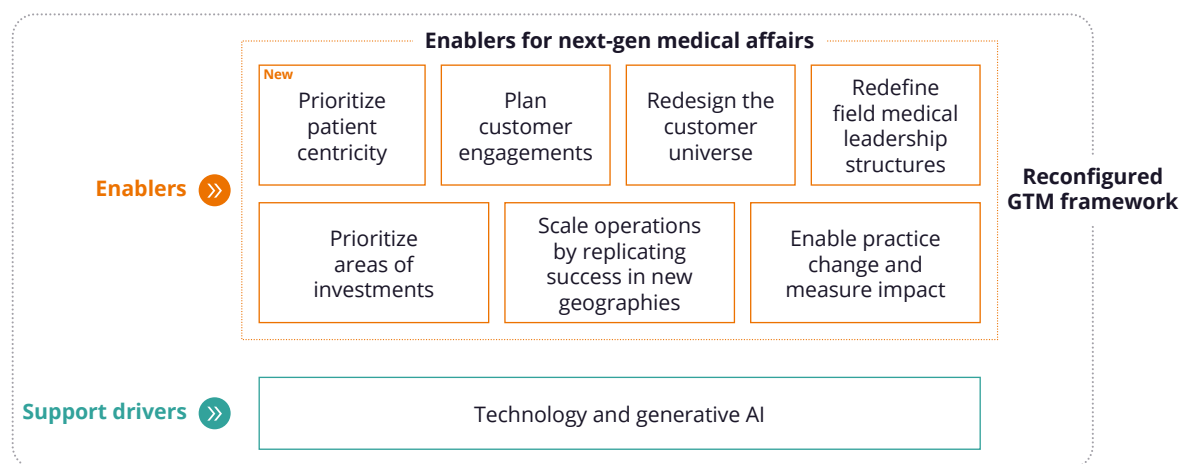
In the face of changing stakeholder expectations, a fundamental question persists: Who truly gains from medical affairs initiatives? Without a clear focus on patient outcomes, even the most advanced data and engagement efforts may fail to achieve their intended impact. Scientific excellence alone no longer sets organizations apart—what truly resonates with stakeholders, particularly KOLs, is maintaining a clear and consistent focus on patient outcomes. When patient centricity is considered early, it not only accelerates trust and alignment but also drives quicker impact in scientific engagement, shortens the path to shared goals and ensures stronger advocacy.

Patient centricity has long been an important element for medical affairs and it's now being reaffirmed as a critical enabler in the next phase of transformation. There is a renewed focus on ensuring that the end impact on patients is clearly reflected through RWE, patient-reported outcomes and other measurable indicators. Demonstrating tangible value to patients is essential for validating investments, shaping strategic decisions and reinforcing the role of medical affairs in delivering outcomes that matter in real-world clinical practice. In fact, it also correlates to a higher likelihood of KOLs to recommend MSLs to their colleagues as a source of information, as it signals relevance and commitment to impact.

Patient centricity is not just an ethical obligation. It's a strategic approach that helps medical affairs lead with purpose and provide value that is scientifically sound and relevant to human needs.

FIGURE 1:

The reconfigured GTM framework



With the important addition of patient centricity, the reconfigured GTM framework now identifies seven key enablers for next-gen medical affairs. By integrating patient centricity, medical affairs can better align their efforts with real-world clinical practice, ultimately delivering more meaningful and impactful results.

Patient-centric strategies and their impact on the field

As we revamp the reconfigured GTM framework, it's increasingly clear that focusing on patient centricity is essential. Integrating patient centricity into medical affairs engagement strategies better aligns activities with real-world clinical practice, ultimately delivering more meaningful patient outcomes and impactful results internally.

Keeping patient care at the center resonates strongly with stakeholders. The impact of patient centricity on engagement outcomes is also tangible. When KOLs were segmented into two groups—those who seek patient-centric information and those who comparatively do not—a striking difference emerged. MSLs across companies had to invest approximately nine additional hours annually in planned interactions with the second group to achieve an average likeliness to recommend (LTR) rating of 7.6 (LTR is rated on a scale of 1-10). In contrast, MSLs reached a peak LTR of 8.3 with the first group much earlier and with less effort, underscoring how patient focus accelerates relationship-building.

By embedding patient-focused approaches, medical affairs can foster more relevant, trusted and meaningful interactions with KOLs. This shift not only accelerates change but also strengthens the foundation for long-term scientific partnerships.

In addition to patient centricity, it's important to focus on ever-changing enablers such as customer engagement. Half of the senior medical affairs professionals surveyed pointed to enhanced customer engagement as the primary enabler for the continued enhancement and reinvention of medical affairs. Looking ahead, teams plan to increasingly focus on personalizing engagement strategies through seamless omnichannel integration and delivering modular, evidence-based content, as they target a 39% anticipated improvement in achieving their engagement objectives.

This underscores the need for medical affairs to reorient their execution strategies. It starts with a deep understanding of the external stakeholder landscape: who to engage, when to engage and with what information. Designing interactions tailored to stakeholder needs and expectations, building capabilities that support this level of customization while improving operational efficiency and leveraging insights to continuously refine engagement approaches are all vital. The goal is clear: create impact that is measurable, patient-relevant and aligned with the evolving demands of a more complex and connected healthcare ecosystem.

Customer engagement as a strategic lever for driving impact

Effective customer engagement begins with a clear-eyed assessment of current organizational capabilities and resource allocation. Before strategic planning can take place, it's essential to understand where the organization stands in terms of engagement maturity, operational readiness and available tools or platforms. This includes evaluating internal competencies, cross-functional alignment and the scalability of existing engagement models.

Once the baseline is established, organizations can design targeted and impactful engagement strategies that are tailored to stakeholder needs and aligned with broader medical affairs objectives. Equally important is establishing mechanisms to measure the effectiveness of these engagements. This involves not only tracking activity and reach but also assessing qualitative outcomes such as perception shifts, knowledge uptake and behavior change. By linking efforts to measurable outcomes, organizations can justify investments, optimize future initiatives and continuously evolve their approach to deliver greater value. We recommend this four-step process:

- Assess organizational readiness
- Align resource allocation and prioritization
- Design targeted, insight-driven engagement plans
- Measure outcomes and iterate for impact



Assess organizational readiness

As medical affairs evolves from a supportive role to an important function within pharmaceutical organizations, it's facing higher expectations. Today, delivering value goes beyond scientific exchange, as it includes:

- Generating actionable insights
- Driving evidence dissemination
- Enabling strategic stakeholder engagement

In this environment, organizations must take a structured approach to assess where they stand today and identify the capabilities needed to lead tomorrow. A maturity assessment offers a critical lens for organizations to benchmark their progress, prioritize investments and guide the evolution of medical affairs into a high-performing, future-ready function.

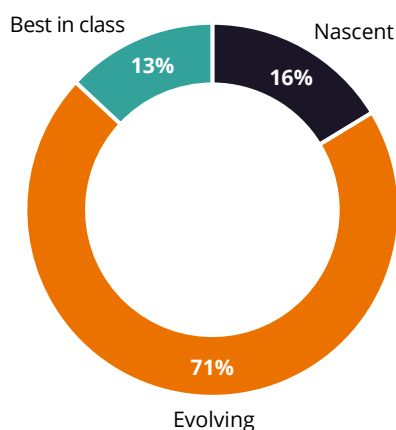
ZS has developed a proprietary maturity model called M-cube (M³) that benchmarks the maturity of medical affairs organizations across the industry. This model has helped medical affairs leaders understand organizational expectations and devise strategies for areas of improvement. M³ is based on four key dimensions:

- Strategic planning and alignment
- Technological integration and data-driven decision-making
- Execution readiness and collaboration
- Impact evaluation and agility

M³ assessments have helped us classify medical affairs organizations as nascent, evolving or best in class.

FIGURE 2:

How internal respondents rated their medical affairs organizational maturity using M³



A significant majority of respondents view their pharmaceutical companies to be in the evolving stage. Notably, 16% of respondents identified their medical affairs organizations as being in the nascent stage, up from 11% in 2024. Conversely, only 13% now view their organizations as best in class, a decline from 19% last year. Large pharmaceutical companies tend to have maturity levels that are evenly distributed across key organizational dimensions. In contrast, midsize pharmaceutical companies have room for improvement in technological integration and data-driven decision-making. Meanwhile, emerging pharmaceutical companies can focus on enhancing their capabilities in impact evaluation and agility to be more future-ready.

Align resource allocation and prioritization

Before we explore resource allocation and investment strategies for various capabilities within medical affairs, it's crucial to address the issue of funding. Historically, securing investment for medical affairs has been challenging, with commercial departments currently receiving 10 times the funding from leadership. However, as the landscape evolves—along with the function, its capabilities and its impact assessment frameworks—medical affairs is increasingly finding ways to justify its investment. More than one-fifth of medical affairs professionals view reducing unmet needs in the clinical landscape and improving patient outcomes via RWE as the most significant outcomes that validate investment in the function.

Within the medical affairs function, the field medical and publications teams receive about 45% of the total investments from leadership, outside of allocations for research and medical education. Additionally, investment in medical information teams has fallen to 11% from 14% last year.

Although field medical continues to receive the highest investment from medical affairs, there was a slight decrease of 2% from last year. According to internal respondents, future investments are increasingly focused on nonpersonal engagement channels for scientific knowledge dissemination to achieve similar levels of impact. Historically, investment in personal engagement channels has been five times that of nonpersonal channels—but this is expected to decrease to four times, reflecting a shift toward nonpersonal methods for achieving comparable impact.

The need to enhance efficiency, optimize resources and improve organizational scalability is driving the increased investment in nonpersonal channels. Nearly 30% of internal respondents noted that changing HCP preferences and engagement behaviors are driving this shift, as it expands reach and access to stakeholders who have traditionally been less accessible. This approach also supports digital transformation efforts and better omnichannel enablement. While striving for omnichannel enablement, the majority of respondents (78%) consider their organizations to still be in the ideation or foundational phase of omnichannel engagement, similar to last year. This means medical affairs must improve how it develops comprehensive omnichannel strategies so that it can better integrate its technological investments with strategic engagement approaches, as it aims to enhance its ability to connect with healthcare professionals and patients effectively.

This progression is essential for maximizing the impact of both personal and nonpersonal engagement channels, ensuring that medical affairs can deliver value at scale and adapt to the evolving preferences of stakeholders.

Pharmaceutical organizations are strategically investing in advanced technologies to enhance the precision, speed and impact of medical affairs activities. Modern CRMs are being leveraged to guide field strategy, prioritize scientific discussions and align medical plans with broader objectives. At the same time, generative AI is streamlining tasks and reducing manual workloads to accelerate decision-making. Gen AI tools are being deployed with specific use cases in mind, enabling medical affairs teams to turn insights into action and deliver scientific value more effectively across the organization.

- **Technology:** A major focus for investment is technology that improves the collection and processing of customer insights. Nearly three-fourths of internal respondents indicated their organizations are prioritizing investments in insights collection and analytics systems. Over 60% of MSLs said AI and analytics, digital engagement platforms and CRM systems are receiving the next levels of investment.
- **CRM systems:** By advancing their CRM capabilities, the industry is moving toward better data capture to drive personalization. Veeva and Salesforce are identified as the most commonly used CRM systems among medical affairs teams. Approximately 80% of respondents said their organizations are concentrating on platform integration, scalability and advanced analytics to enhance their CRM capabilities.
- **Gen AI:** The current adoption of generative AI for optimizing operations and enhancing stakeholder engagement is moderate. However, nearly 90% of respondents indicated their organizations plan to invest in generative AI for data analysis and insights generation in the future. Additionally, gen AI will be used for scientific literature review and summarization, as well as content creation and personalization.

Investing in various aspects of medical affairs will only be effective if MSLs are well prepared to engage and deliver relevant insights. Without their active involvement and expertise, these investments may not translate into improved customer engagement and satisfaction. In fact, 26% of medical affairs professionals highlight the importance of redefining the role of future MSLs as a key enabler of the next generation of medical affairs. By focusing on improving digital proficiency, scientific expertise and involving MSLs throughout the product life cycle, organizations can ensure their investments lead to meaningful outcomes. Therefore, upskilling and training MSLs is critical to unlocking their full potential and enhancing the impact of their engagements. The majority of KOLs consider delivering personalized and valued engagement, along with strong scientific and clinical knowledge, as essential skills for MSLs. More than a quarter of these leaders believe that medical affairs organizations should prioritize training MSLs in these areas to enhance their capabilities and effectiveness. This focus aligns with the strategic initiatives organizations are undertaking to develop MSLs, ensuring they are well equipped to meet the evolving demands of the field.



The strategic focus on technology, nonpersonal engagement channels and MSL development is transforming medical affairs into a more agile and insight-driven function. Through technological adoption and advanced analytics, teams can track engagement patterns, identify unmet needs and tailor content delivery accordingly. MSLs, equipped with enhanced digital skills and data-driven insights, can prioritize high-impact interactions and leverage virtual platforms to engage at scale without compromising depth. This expands the reach of medical affairs, positioning it as a proactive force in shaping clinical conversations.

Design targeted, insight-driven engagement plans
















Once MSLs have been properly trained and upskilled, the next crucial step is implementing a pre-engagement planning process. This ensures that each customer interaction is strategically aligned to therapy area objectives and tailored to the specific needs of the KOL. Having a structured pre-engagement approach not only enhances the effectiveness of engagement but also maximizes the value delivered, leading to more impactful outcomes in clinical practice. Over 65% of medical affairs professionals reported their organizations follow a formal, primarily qualitative, pre-engagement planning process for MSL-KOL interactions. The most common step in this process, as indicated by 88% of respondents with a formal process, is prioritizing and mapping relevant stakeholders to effectively communicate scientific educational information. The pre-engagement planning process also emphasizes optimizing stakeholder engagement frequency and identifying the right stakeholder mix throughout the product life cycle. Medical affairs organizations that don't follow a formal pre-engagement planning process often rely on factors such as engagement history, relationship quality, KOL influence and expertise, engagement objectives and strategic alignment to prepare for interactions.

Building on this foundation, MSLs invest significant effort in tailoring engagements to a diverse set of stakeholders by adjusting frequency, activity type, content, format, channels and modes of engagement. The true impact of these efforts is reflected in the actions KOLs take following MSL interactions—particularly those actions indicative of changes in clinical practice. Additionally, a KOL's likeliness to recommend serves as an additional proxy for the effectiveness and impact of engagement. Ultimately, the ability to optimize this effort-to-impact will be a key determinant of success for customer engagements.

We observed that the most significant impact occurred when a KOL changed the way they treated patients in their clinical practice. This was primarily driven by MSLs engaging with community KOLs and addressing their unmet clinical needs and customizing the engagement. When a similar set of KOLs were presented with evidence supporting value-based care, a substantial number opted to switch treatments or lines of therapy. While this is a noteworthy outcome, it is slightly less impactful than the former, as only 54% of KOLs viewed this as a practice change indicator compared to 69% for “changed how they treat patients in their clinical practice.” Therefore, to optimize outcomes, it is essential to tailor the frequency and depth of interactions, as well as the type of MSL activities across diverse KOL segments, each with varying levels of accessibility. One way of looking at this engagement strategy is illustrated in Figure 3. Each engagement strategy combined with an MSL activity will lead to a desired action from the KOL, which could be impactful by changing the way KOLs treat their patients in their practice.

FIGURE 3:

Clusters of KOLs mapped by MSL activity and impact delivered

Engagement strategy	MSL activity	Action-oriented KOL response	Level of impact
Five interactions of about 15 minutes with highly accessible (>8) community KOLs	 Address unmet clinical needs and customize engagement	 Changed how I treat patients in my clinical practice	
Five interactions of about 10 minutes with a moderately accessible (<7.5) mix of academic and community KOLs	 Address unmet clinical needs and customize engagement; facilitate peer-to-peer knowledge exchange	 Changed how I treat patients in my clinical practice	
Four interactions of about 18 minutes with accessible (>7.5) academic KOLs	 Provide evidence on value-based care	 Changed how I diagnose patients in my clinical practice	
Five lengthy interactions with highly accessible (>8) academic KOLs	 Provide evidence on value-based care	 Changed how I treat patients in my clinical practice	
Four interactions of about 18 minutes with highly accessible (>8) community KOLs	 Provide evidence on value-based care	 Switched treatment or line of therapy	
Driving meaningful impact through KOL engagement cannot rely on a single factor alone. To optimize outcomes, it's essential to tailor the frequency and depth of interactions across diverse KOL segments—each with varying levels of accessibility.			

Another important consideration in planning MSL-KOL interactions: balancing planned versus reactive engagements. Currently, MSLs plan about 75% of interactions, while KOLs reactively initiate the others. MSLs respond to these via emails, phone calls or virtual meeting platforms.

Looking ahead, KOLs expect 56% of planned interactions to be in-person in 2026 and beyond. On average, MSLs have five interactions with a KOL annually, with KOLs having twice as many interactions (eight) with their most preferred MSLs compared to their least preferred MSLs (four). Currently, internal respondents state that the average face-to-face interaction takes 36 minutes, although KOLs expect them to be 25 minutes. In virtual settings, internal respondents stated that interactions currently take an average of 28 minutes, while KOLs expect them to be 21 minutes.

To optimize these interactions, medical affairs organizations should strive to maintain a balanced mix of KOL types, with each being capable of driving changes in clinical practice and impact. Archotyping KOLs is a powerful tool and may lead to better insights while enabling more effective engagement planning. Figure 4 shows one way to archetype KOLs.

FIGURE 4:

Relationship between time spent and LTR ratings

By archotyping KOLs based on average LTR rating and time spent on interactions, we can segregate KOLs in four segments and compare profile attributes for suitable engagement focus and planning.



The different profiles developed based on this analysis can help organizations focus efforts on efficient interactions while sustaining KOL satisfaction.

As the dynamics of MSL-KOL interactions continue to evolve, it's essential to measure the outcomes and impact of these engagements. By systematically evaluating the effectiveness of interactions, organizations can ensure their strategies are effectively meeting the needs and expectations of KOLs. This approach not only enhances the overall success of medical affairs initiatives but also strengthens the relationships between MSLs and KOLs, leading to more informed and impactful scientific exchanges.

Measure outcomes and iterate for impact

With all the capability assessments, resource allocation and stakeholder engagement planning, there is a need to measure the outcomes and impact that can also help justify investments. And this measurement is crucial for demonstrating the value and effectiveness of medical affairs initiatives. According to 21% of internal respondents, the most important outcomes that can justify investments in medical affairs include reducing unmet needs in the clinical landscape through targeted medical initiatives—such as providing new insights and improving patient outcomes through RWE like enhancements in quality of life (QoL). Additionally, 16% of respondents view driving early awareness prior to product launch as a key outcome that can validate the investments made in medical affairs.

Sixty-five percent of internal respondents reported their organizations track outcomes-based measures. Some of the examples of these outcome-based measures are impact on clinical practice and treatment decisions, HCP advocacy, engagement and feedback and actionable field insights to inform strategy. There are other tracking metrics to measure the impact of medical affairs activities when engaging community healthcare professionals, and these metrics are often focused on addressing local healthcare needs and broader planned reach for engagement.

When it comes to assessing the effectiveness of customer engagements externally, we often focus on understanding customer satisfaction with the level of engagement, the relevance of information provided and the responsiveness of MSLs to follow-ups. Two-thirds of KOLs have expressed high satisfaction with the level of engagement with MSLs to meet their scientific needs. This high level of being well-engaged is largely due to MSLs providing timely, unbiased and relevant clinical data, while effectively communicating and being responsive. However, those who said they were fairly well-engaged noted opportunities for improved preparedness and a greater focus on relevant, nonpromotional educational discussions. KOLs rated the relevance of information and MSL responsiveness highly (6/7) with their most preferred MSLs, while these ratings were moderate (about 4.5/7) with their least preferred MSLs.

Among the top 20 pharmaceutical companies, KOL likeliness to recommend (LTR) an MSL to a colleague as a source of information was generally high, with six companies achieving an average rating of 7 or above (out of 10), and only one company falling below 6. Additionally, the time spent with MSLs from 18 out of 20 companies was considered extremely valuable (6-7 out of 7) by KOLs. Initially, we hypothesized a direct correlation between MSL value ratings and LTR ratings, assuming that KOLs who find MSL interactions highly valuable would also be likely to recommend them. However, the data did not support this assumption,

revealing that KOLs might perceive time spent with an MSL as extremely valuable yet may not necessarily recommend them as an information source to colleagues. This variation in ratings could be attributed to factors such as: the quality and relevance of information, an MSL's professionalism, their responsiveness and knowledge, and differences in communication styles and expectations from companies. Moreover, KOLs may prefer MSLs from one pharmaceutical company over another due to the company's existing or pipeline products, available engagement opportunities and specific MSL attributes.

When designing customer engagement strategies, enhancing organizational capabilities and determining measures of impact, understanding KOL preferences and expectations is crucial. These insights not only ensure engagements are meaningful and impactful but also help in establishing stronger relationships with KOLs, enhance the effectiveness of their interactions and ultimately drive better outcomes in clinical practice and patient care.

Understanding stakeholder expectations and perceptions

Once an organization has defined what impact means to them and established what a good outcome looks like, it's essential to understand what KOLs want, value and expect. The opportunity for medical affairs to be front and center in the field is expanding, as KOL accessibility for MSL interactions has gradually increased over the past year, with more KOLs becoming moderately to extremely accessible. The average accessibility score has increased to 7.9 from 7.5 in 2024, with an 11% increase in moderate to extreme accessibility since last year, and a corresponding reduction in KOLs who were previously less or not at all accessible.

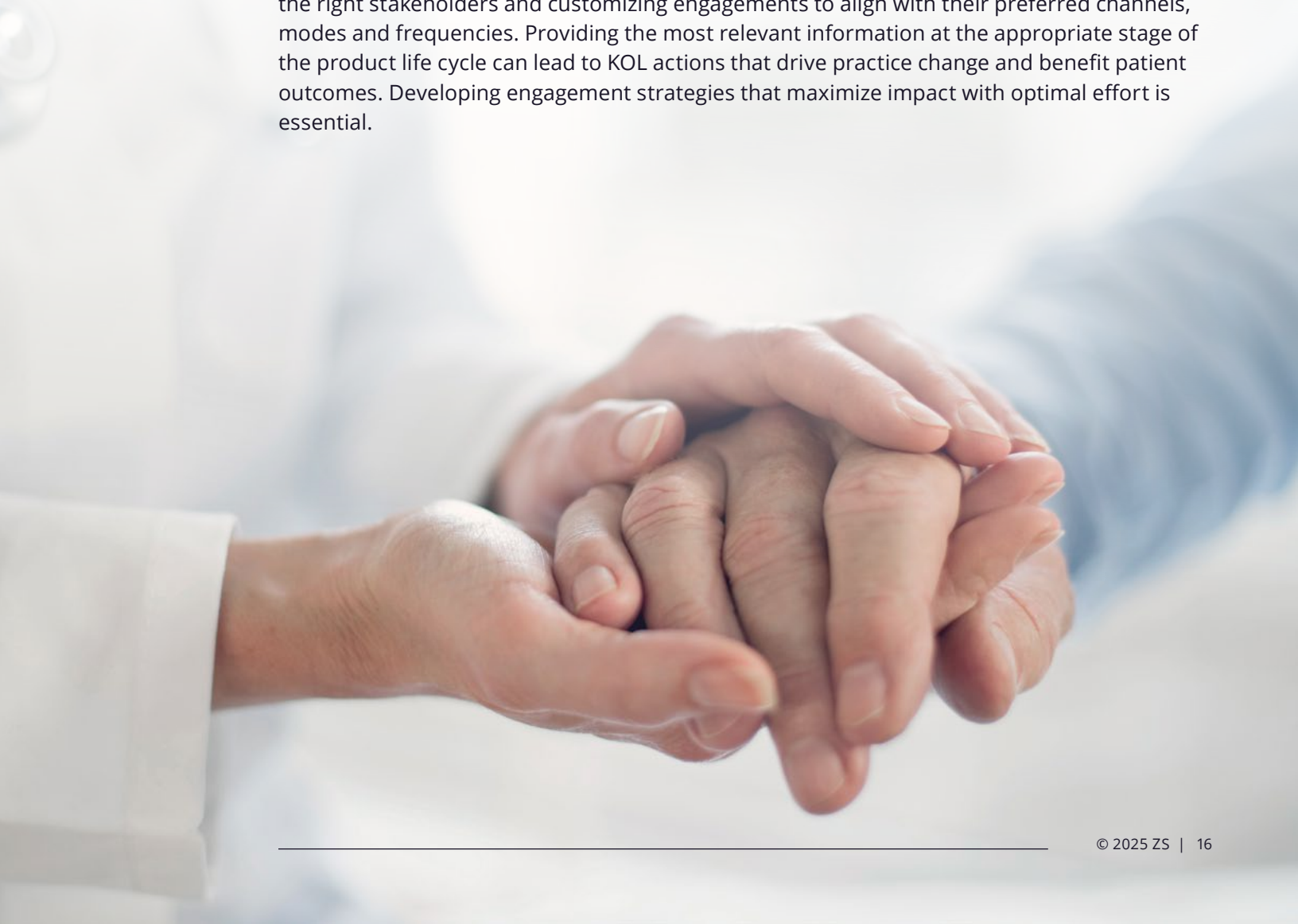
Additionally, 60% of KOLs surveyed don't anticipate any changes in their accessibility to MSLs in the coming years—and only 5% of KOLs are anticipating a decrease. KOLs who expect their accessibility to remain unchanged in the coming years cite a lack of influencing factors, including satisfaction with current interaction frequency or constraints, such as limited availability and organizational guardrails. KOLs anticipating increased accessibility attribute it to the growing value of scientific interactions and the need for trial results, RWE and patient support amid new product launches. Conversely, those expecting a decrease cite limited availability and access to technology-driven insights or declining MSL demand due to either a lack of new products or mature products.

In terms of their engagement preferences, 81% of KOLs favor one-on-one interactions over group settings to drive changes in clinical practice. However, KOLs said they plan to attend an average of three congresses between March and December 2025. At these congresses, KOLs consider increasing their scientific knowledge as the most important indicator of successful interactions with pharmaceutical companies. This is followed by gaining a deeper understanding of a company's pipeline and current products and establishing new connections and networking within the organization.

Similar to last year, half of KOLs expect MSLs to begin engagements across phase 3 and the peri-launch stage of the product life cycle, and they acquire 50% of their scientific knowledge in these two phases. Phase 3 is particularly important, with 33% of KOLs preferring medical affairs engagement start at this stage. During these phases prior to launch, most KOLs seek clinical trial information and patient population details from MSLs. This highlights the importance of timely engagement planning and field deployment.

Further, as the product progresses toward launch and postlaunch, the demand for information becomes increasingly patient-focused as KOLs seek RWE and PROs along with information about cost effectiveness and coverage. Fifty-three percent of KOLs said the most important quality for the MSL of the future is being a scientific expert in clinical and real-world data, as this helps boost the KOL's confidence and supports clinical decision-making. Specifically, KOL needs and expectations from evidence and data include additional information on trial data, RWE and PROs. They rank scientific thoroughness as the most important factor that makes evidence compelling, followed by its impact on clinical guidelines. Additionally, they want MSLs to be facilitators in integrating new therapies or precision medicine in clinical practice, while also advocating for patient-centric care by providing educational materials and establishing patient advocacy partnerships.

Therefore, medical affairs organizations must focus on building capabilities while engaging the right stakeholders and customizing engagements to align with their preferred channels, modes and frequencies. Providing the most relevant information at the appropriate stage of the product life cycle can lead to KOL actions that drive practice change and benefit patient outcomes. Developing engagement strategies that maximize impact with optimal effort is essential.



With scientific exchange comes message resonance and recall, both of which are critical to ensuring KOLs understand, retain and act upon key insights. Relevance and conciseness are the key factors that enhance the resonance and recall of scientific messages for KOLs, especially on varied topics such as clinical data, disease state education, the scientific landscape and company updates. For more specific topics such as product information, the actionability of information facilitates high recall and ensures visible impact at the time of launch.

While there is a comprehensive understanding of KOL needs and expectations, there hasn't been a significant perceived change in their satisfaction and quality of engagements over the past year. This means medical affairs organizations should focus on another enabler of the GTM framework: redefining the customer universe. Fifty-one percent of KOLs believe that apart from them, MSLs should continue to interact with NPs and PAs to ensure a continuum of knowledge and internal insight sharing. On the other hand, apart from MSLs, the majority of the KOLs are interacting with medical teams such as medical education (often via webinars), medical communications and publications teams and virtual MSLs. There is an opportunity for medical affairs to streamline and enhance engagements across these avenues to ensure KOL information needs are timely met. This is especially crucial with the growing relevance and expanse of digital and AI, where a deluge of scientific information is available and accessible.

More than half of the KOLs reported using social media for guidelines, policies, quick updates on emerging evidence and peer discussions and cases (see Figure 5).

FIGURE 5:

Use cases for leveraging social media in clinical decision-making



Additionally, while most KOLs are yet to adopt gen AI in their practices, those who have used it leveraged it for treatment planning, insight generation, note taking and presentations and more. KOLs said gen AI has improved patient care mainly by streamlining processes, improving efficiency and providing faster, easier access to information.

Keeping patient care at the center, 77% of KOLs consider themselves practice change enablers because of their contributions to treatment guidelines and patient outcomes. KOLs demonstrate expertise, leadership and knowledge while adopting and disseminating new and innovative treatments. Therefore, meeting stakeholder needs isn't just about improving engagements, it accelerates changes in clinical practice at scale. When medical affairs delivers the right information at the right time, through the right channels, it builds stronger scientific credibility and deepens partnerships. But the reward is even more than better relationships with stronger advocacy across stakeholder networks—medical affairs can move from meeting expectations to setting the pace for impact.

Enabling practice change and measuring broader impact

Engaging with HCPs to drive practice change and impact patient lives should be the North Star for organizations as they guide their strategic initiatives and measure success. Medical affairs activities play a pivotal role in powering and enabling these changes. Medical affairs professionals across organizations view changes in how HCPs diagnose or treat diseases, the integration of new therapies into clinical guidelines and improvements in patient outcomes as key indicators of practice change resulting from medical affairs activities. These align with the actions KOLs consider indicative of clinical practice change following MSL interactions and are also consistent with ZS's understanding of practice change. The top actions include:

- Changed how I treat patients in my clinical practice (69% of KOLs)
- Changed how I diagnose patients in my clinical practice (56% of KOLs)
- Switched treatment or line of therapy (54% of KOLs)
- Incorporated information into my recommendation on clinical treatment guidelines (43% of KOLs)

KOLs on average take three to four unique actions after MSL interactions. Overall, post-MSL interactions, the most common actions KOLs take are changing how they treat patients, sharing information with the patient or caregiver and switching treatments or line of therapy. Whereas the actions taken most frequently by KOLs in a year are:

- Sharing information with the patient or caregiver (an average of 11 times)
- Carrying out medical coverage and reimbursement-related discussions with formulary decision-makers (an average of 10 times)
- Sharing information with colleagues (an average of eight times)

To encourage KOL actions that drive practice change, MSLs should strategically plan their engagements based on the specific needs of their KOLs, while providing them with the most relevant and credible information to make informed, patient-centered decisions. KOLs indicate MSLs drive most of the actions they take, as MSLs provide them with evidence on value-based care, as well as other impactful activities such as addressing unmet clinical needs and customizing engagement, and providing patient-centric resources, including educational materials and testimonials.

With patient centricity being a key GTM enabler, medical affairs organizations are implementing important patient-centric initiatives such as identifying and addressing unmet patient needs, partnering with PAGs and advancing health equity through HCP education and outreach.

Of course, change becomes meaningful only when it leads to real improvements in patient care. KOLs see true practice change reflected in the actions that directly impact patients, such as treatment decisions, shifts in therapy lines or enhancements in care delivery. When medical affairs focuses its efforts on patient outcomes and provides KOLs with timely, relevant and actionable insights that drive those decisions, it reinforces its value. With focused intent and strategic alignment, medical affairs can not only support better health outcomes but also establish itself as a key driver of clinical practice change.



Shaping next-gen medical affairs to enable GTM success

Enabling next-generation GTM success requires actively driving change where it matters the most: in clinical decisions and patient outcomes. This starts with understanding who influences care, what barriers they face in applying evidence and how medical affairs can better support them. The goal is not just scientific excellence, but practical impact—turning insights into actions that shift real-world practice.

KOLs consider themselves practice change enablers, with medical affairs currently supporting them by providing the latest clinical data, RWE, educational materials and congress summaries. Looking ahead, there are opportunities for medical affairs to enhance practice change by providing unbiased scientific information, highlighting unmet needs and supporting patient access. However, challenges such as resource allocation, budget constraints, leadership buy-in, technology adoption, shifting role expectations, cross-functional alignment and workforce readiness can hinder medical affairs organizations as they strive to become future-ready.

When it comes to patient centricity, KOLs indicate there are various challenges that prevent them from providing the best possible treatment to patients. These include a lack of RWE, difficulties navigating payer reimbursement policies and limited patient access due to cost, availability or geographic constraints—to name a few. KOLs expect roles like MSLs, medical account managers and patient services to address these issues. Significant patient drop-offs occur at various stages of the patient journey, particularly in the reimbursement and healthcare access stage, as well as during pre-treatment diagnosis and post-treatment side effect management.

Medical affairs professionals, in the field and at headquarters, including MSLs, account managers, HEOR teams and patient advocates can help address these challenges by offering patient support and access programs, assisting with insurance and reimbursement navigation, providing KOLs with RWE for coverage justification and sharing disease burden data for faster reimbursement approval. They can also educate KOLs on diagnostic tools and share resources for managing side effects and drug interactions. One-third of KOLs say medical affairs can help them prepare for payer discussions by sharing educational materials, such as clinical data and RWE.

Medical affairs organizations should start by facilitating interactive and collaborative engagements based on KOL needs and deliver timely updates on clinical advancements, trials and drug use. Further, they should continue to share the latest events summaries, RWE and training opportunities while being responsive to KOLs. Additionally, they should stop disseminating irrelevant clinical data, eliminate promotional data research and dissemination, and avoid excessive interaction frequency that does not contribute to meaningful engagement. Medical affairs must strive to ensure effective MSL-KOL interactions that maximize value, satisfaction and patient outcomes.

With MSLs in medical affairs playing a pivotal role in external engagement, it's important to appropriately motivate them. In the U.S., MSLs earn an average annual salary of about \$245,000, with about 25% as variable pay. Management by objectives (MBO)—in which activity-based KPIs and internal feedback largely determine the variable component—is the predominant approach for structuring variable pay for MSLs. Even in organizations that don't use MBO, activity and outcomes-based KPIs, along with internal feedback, are key drivers of variable pay. Therefore, it's crucial to decide on a structure that best aligns with your organizational goals and optimally motivates your MSLs.

Looking ahead, medical affairs organizations must adopt a strategic, future-focused approach to elevate their impact and become best in class. Achieving this requires a holistic transformation, with patient centricity serving as a critical enabler that informs and enhances all initiatives. As engagement models shift more toward nonpersonal channels, the role of field medical becomes even more critical, serving as a bridge between personalized scientific exchange and scalable outreach. Simultaneously, engaging with diverse stakeholders beyond KOLs—including NPs and PAs, pharmacists and patient care coordinators—demands more nuanced, tailored engagement strategies. Technological adoption to enable data-driven decisions and agile content delivery is essential, but these investments, like field medical initiatives, require time to yield measurable outcomes. Building trust and scientific credibility with KOLs and other stakeholders depends on consistently delivering relevant, actionable insights over time. By integrating these core elements, medical affairs can enhance its strategic execution, increase its value proposition and significantly contribute to improved healthcare outcomes at scale.

About the authors



Sunil John leads ZS's global medical affairs practice. He has authored several articles and provided perspectives on various medical affairs issues, including reinventing the go-to-market strategy for medical affairs, next-gen medical affairs and future customer engagement models. He has deep expertise in defining the value and impact of medical affairs, agile resource planning and deployments, productivity assessments and omnichannel. Sunil focuses exclusively on global medical affairs across strategy and advisory, field medical, medical excellence, medical information and medical education. Across emerging, midsize and large pharma companies, Sunil helps biotech and medtech clients with business strategy, launch planning, patient-focused outcomes and organizational design. Sunil assists with outcome-based KPIs, frameworks for patient centricity, digital strategy visioning and planning. He also drives the use of tech, AI, medical insights and data to define and assess the future of medical affairs.



Sarah Jarvis is a principal in ZS's San Francisco office who leads the medical and evidence practice. Sarah has worked in healthcare for more than 25 years, and currently helps medical affairs clients bring business, evidence and customer-oriented solutions to teams across their organizations. Sarah partners with clients across different stages of development, from emerging pharma where medical affairs organizations have yet to be established, to large organizations with thousands of people globally. ZS teams supported over 100 medical affairs organizations in 2023 and 2024.



About ZS

ZS is a management consulting and technology firm that partners with companies to improve life and how we live it. We transform ideas into impact by bringing together data, science, technology and human ingenuity to deliver better outcomes for all. Founded in 1983, ZS has more than 13,000 employees in over 35 offices worldwide.

Learn more: [Medical affairs pharma consulting, solution and strategy | ZS](#)

