

# Medical Affairs 2025

## Excellence in the Era of Precision Medicine



## Introduction

Medical affairs is at the leading edge of a trend. As the life sciences industry shifts towards precision medicine, its investment in medical and scientific affairs has steadily increased. From 2014 to 2016, MSL teams grew by 12% overall, and 31% in specialty areas such as oncology.

The success of these MSLs hinges on greater scientific insights, deeper collaboration, and a focus on tangible medical outcomes. Leading organizations are reinventing their medical affairs functions to meet the needs of this new era.

“In the life sciences industry, we see a shift toward transparency and collaboration,” says Robert Groebel, vice president of medical strategy at Veeva Systems. “Medical affairs has a unique opportunity to add greater value to the journey.”

The industry is actively defining novel pathways to success. Veeva’s “Medical Affairs 2025” report comprises perspectives from leading life sciences executives and provides a roadmap for the coming decade. Organizations will better understand how their peers address challenges today and how to transform medical affairs into a leading function within the company.

### Medical Affairs 2025 Report Contributors

AstraZeneca  
Boehringer Ingelheim  
Bristol-Myers Squibb  
Lilly  
Merck  
Mitsubishi Tanabe Pharma America  
Novartis Pharma USA  
Spark Therapeutics

## Key Challenges and Priorities

### The scientific expert experience

Studies show that only a third of scientific experts are satisfied with their MSL experience.<sup>2</sup> In addition, those who found little value from their MSL interactions also had negative perceptions of the associated company or product. Part of the challenge is that the expectations of experts have evolved significantly in recent years. MSLs must accurately uncover and deliver on the individual’s scientific need.

Pete Piliero, vice president of field and scientific affairs at Mallinckrodt Pharmaceuticals, says, “As the complexity of personalized medicine increases, scientific experts seek value-add engagements in the form of disease state awareness, insightful data on new interventions, and partnerships that help them improve patient outcomes.”



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– Pete Piliero, Mallinckrodt Pharmaceuticals

<sup>1</sup> ZS Associates, *Medical Affairs Outlook Report 2017* (ZS Associates, 2017)

<sup>2</sup> Paul Meade and Mark Shoeman, *The Power of MSL Authenticity* (Pharmaceutical Executive, 2017)

Medical affairs can serve these needs by training MSLs with better listening and probing skills, and developing a more strategic mindset. In addition, MSLs are expected to know what their company counterparts are doing. This lack of visibility has long been a pain point for industry and a source of frustration for experts, especially when multiple product teams are involved. Companies that excel at providing timely, useful new information in a coordinated fashion will succeed at delivering positive expert experiences.

“Experts seek relationships that evolve and deepen over time, requiring more sophisticated understanding of expert profiles than has been possible in the past,” notes Piliero.

## Patient-centricity takes center stage

The range of medical stakeholders has expanded in the past decade beyond just regulators and physicians to also include payers and health authorities. Even patient advocacy groups have grown in influence as they increasingly participate in shaping the care paradigm. The industry is rapidly learning what it means to be patient-centric. With the overwhelming growth of clinical data and the expansion of clinical care teams, life sciences companies will need to reconsider how they align information to diverse stakeholders in each stage of the product life cycle. This requires identifying the right stakeholders, assessing scientific need, and commanding solid knowledge of the data—all with the goal of impacting patient outcomes. Within the life sciences industry, medical affairs is best positioned to lead this shift.

## Getting scientific value from vast troves of data

With medical literature doubling every three years<sup>3</sup>, pharma now has access to unprecedented amounts of scientific data. For the industry, this is an opportunity to gather actionable insights, leading to strategic interventions. But companies struggle to make sense of vast amounts of data and to leverage it to meet scientific experts' needs. This often results from technological barriers. Disconnected systems and fragmented data sources limit the flow of information and the development of scientific insights. Unfortunately, such incomplete views also prevent medical affairs from being fully optimized.

## Scientific insights for better outcomes

Companies understand that scientific insights often lead to better medical outcomes. Obtaining quality insights has never been easy. And knowing how to leverage them is even more complex. MSLs frequently do not know where to report insights back to the organization or who needs to know key information. There is an opportunity for the home office to improve the communication loop with MSLs, informing them of the results and value of the insights they generate in the field. This open feedback flow has the potential to lead to additional, new insights.

/// Precision medicine also requires precision engagement that goes beyond just experts. Medical affairs has an opportunity to develop relationships with a larger array of medical stakeholders. ///

– Robert Groebel, Veeva Systems

<sup>3</sup> Alessandra Curioni-Fontecedro, [A new era of oncology through AI](#) (BMJ, 2017)

## Vision for Medical Affairs

Medical affairs' more prominent role is likely to drive novel scientific insights arising from broader collaboration. "Companies that excel with timely, accurate, and credible science, while also understanding their experts, will be positioned for competitive advantage," says Groebel. "But precision medicine also requires precision engagement that goes beyond just experts. Medical affairs has an opportunity to develop relationships with a larger array of medical stakeholders."

Forward-thinking companies are already building new relationships:

- Spark Therapeutics, a specialty company that focuses on discovering and developing novel therapies for untreatable diseases, provides information to US payers on the economic impact of these diseases and update them on the progress of the company's investigational treatments.
- AstraZeneca's medical affairs organization has built patient-centric teams dedicated to sharing information with highly sophisticated advocacy groups, some of whom attend scientific conferences and may even have their own speaker tracks.

By interacting with patients and payers, these companies are at the forefront of the medical affairs transformation and they differentiate themselves through a best-in-class strategic engagement model.

To accelerate the shift to an outcomes-based and patient-centric model, medical affairs leaders can look to lessons learned from their commercial counterparts, who have traditionally excelled at evolving along with the market. Medical affairs may adapt to the new environment by delivering to expert and care team channel preferences, developing metrics aligned to the broader organizational objectives, gathering and communicating new insights, and evaluating engagements over time to measure the impact of the effort on patient outcomes.

Building and cultivating long-term relationships with a broad array of medical stakeholders leads to improved medical and commercial decisions. This stems from deeper insights, greater scientific credibility, and higher productivity through advanced organizational capabilities.

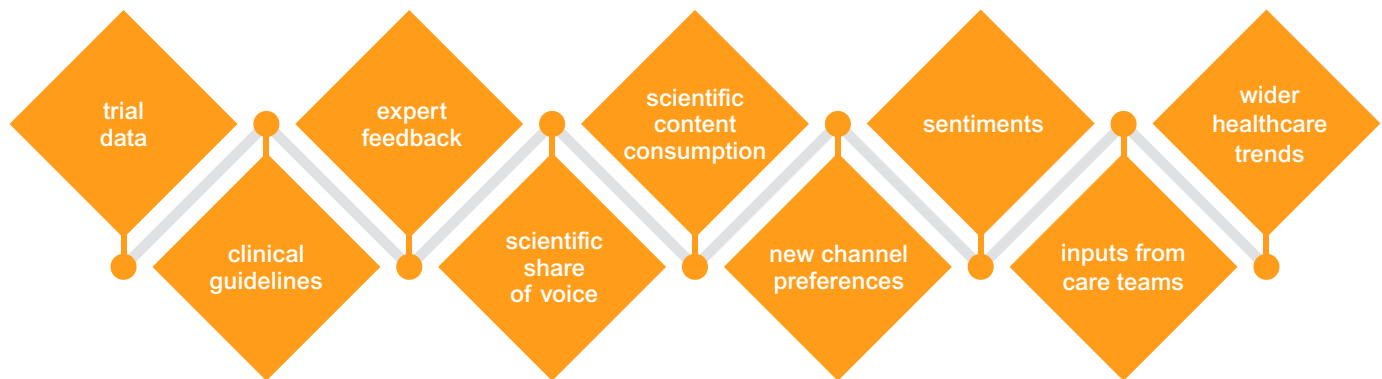
## Actionable Insights as Strategic Value Drivers

Insights provide a complete view of the patient journey over time, covering the spectrum from early disease state education, to management goals, therapeutic choices and therapy-specific outcomes, and future goals. While many insights are observational in nature, the goal is to identify actionable insights that inform medical strategies, leading to improved interventions and better patient outcomes. This requires a combination of both human and artificial intelligence (AI) to generate and understand the insights.

### Gathering and analyzing insights

With thousands of accessible data sources, technology plays an important role to help analyze and identify actionable insights. Once tagged and compiled, artificial intelligence tools that employ natural language processing help mine the data for new information. And while the practice of using free text for insight collection is not universal across the industry, companies such as AstraZeneca view it as an important means of maximizing the value of the information they gather, especially in the context of sentiments and perceptions.

### Examples of scientific insights:



However, the industry cannot fully rely on technology alone. MSLs need to be trained to recognize and follow-up on “aha” moments. Sales reps are already really good at asking probing questions that lead to additional information. Some companies actively cross-train their field medical teams to acquire the same capabilities through role-play and development of probing skills. Finally, to ensure appropriate follow-up, MSLs also need to understand the internal escalation process for new insights—an area frequently overlooked. With sufficient training, field medical teams can develop an “insights-biased” point of view.

## The Role of AI in Evolving Medical Affairs

With the growth of scientific evidence, the life science industry can use AI to guide care, improve comprehension, analyze trends, and identify opportunities for further research. It already has impacted other parts of the healthcare ecosystem. Payers leverage therapeutic information, as well as patient and claims data, to recommend treatments and impact outcomes. AI also helps inform provider therapeutic choice by presenting evidence-based recommendations to reviewers at larger, institutional networks.

The impact this new virtual “influencer” may have on product choice and patient outcomes must be accurately understood and addressed. Companies can also optimize the effect their medical teams can have. How do they compile credible data and insights? How do they ensure awareness of the data and insights by internal stakeholders while providing access in a consumable and actionable manner? Can AI ensure that the most relevant data and insights rise to the top to enhance guidelines, pathways, and treatment algorithms?

“For medical affairs, AI provides an opportunity to understand key stakeholders in a much more granular fashion,” says Cindy Chiang, director of CRM product management at Veeva. “The insights will effectively inform engagement strategies across channels and in real-time; aligning evidence, HCP, timing, and channel.”

AI-powered engagement helps guide customer-facing resources through the planning and execution process; surfacing actions, evidence, and insights based on real-time, integrated data. Acting as a “virtual mentor,” technology can guide engagements to meet both customer expectations and organizational objectives today, while further future informing decisions.

## A New Paradigm for Medical Affairs

### Rethinking the patient engagement model

Patient engagement is often uncoordinated. Most patients now get a significant portion of their education through online searches before even visiting a physician. And because the medical information about a product on the internet is not always correct, it is imperative for the industry to take a more proactive approach to ensuring that patients accurately self-educate.

Engaging with patients is complex. It is not clear whose role it is nor how often to communicate. Companies have traditionally preferred outreach with patients through advocacy groups. But with the rise of hyper-educated patients, there is a greater mandate for more direct education. This phenomenon was pioneered by HIV patient groups and has since spread to other highly engaged disease groups.

Even medical publications are starting to gear their content more towards patients. More organizations are bringing highly educated patients into trial design in order to address patient needs throughout the clinical study.

### Better understanding scientific experts

One of the keys to success for medical affairs is to help the organization better understand the scientific expert. It is no longer sufficient to simply engage on an ad hoc basis when the company needs information. Experts seek deeper relationships that add value to their particular role in the treatment journey. This type of relationship development has to be done in person, though it can be augmented through digital channels if the individual is open to utilizing them.

The challenge is that parameters for the MSL-expert relationship are not always clearly defined. Medical can expand beyond the traditional 'reach and frequency' types of measures and become more consistent about defining the desired relationship outcome. MSL measurements can be linked directly to the scientific and patient impact they are having, including knowing if the expert visited the medical portal, opened an email, or requested additional information.

MSLs are expected to know more than just what the expert does, but how they behave and how others behave around them. This is especially true for specialty care areas where a small community of experts are closely connected to each other. There is significant value in understanding those networks of interactions. Yet, many companies still rely on web searches to find basic expert information, such as where someone is published. Because this is insufficient for getting an accurate profile, some companies are turning to modern tools to bring together various sources of information, including claims and referral data, trials, publications, clinical guidelines, and many other sources. This provides a much more sophisticated, complete, and current expert profile view.

### Patient Engagement Best Practices

- AstraZeneca's medical affairs organization takes direct responsibility for proactively fixing misinformation on the web. This requires compliance and medical teams to work collaboratively with one another to craft a common policy.
- Merck has created the role of a Chief Patient Officer, whose team is responsible for interacting with and listening to patients.

## Defining the role of off-label discussions

Unlike commercial counterparts, medical affairs can engage in off-label discussion if it is focused on better understanding the disease state and gathering feedback that can be acted upon. There is at present little consensus in the industry regarding such proactive scientific exchange. Depending on the corporate level of comfort, some companies avoid it altogether while others actively engage in it. Medical affairs organizations of the future can help craft a policy with regulators to ensure maximizing scientific dialogue and knowledge transfer without causing any compliance concerns.

## Evolving Field Medical Teams to Adapt to the New Reality

Medical affairs professionals pride themselves on responsiveness. Scientific experts appreciate MSLs for their broad knowledge, differentiated insights, and comprehensive responses. The more active approaches outlined above will help them drive improvements in their companies and the industry overall.

For more on the evolving role of the MSL, see the [MSL 2020 Outlook](#). The report was written in collaboration with companies such as AstraZeneca, Sanofi, Alkermes, and others, detailing the strategic outlook of the MSL role and how it is set to change.

## Conclusion

Companies are evolving beyond the simple ad hoc transactional encounters of the past. Sustained MSL-expert relationships, complemented by multi-stakeholder engagement, is the way forward.

As the industry continues to rethink the profile of the MSL, it will also reevaluate and seek out new competencies, technology solutions, and data sources that better support patient-centric outcomes. Medical affairs leaders are at the forefront of this evolution and newly positioned to rewrite the traditional corporate formula for success.



### About Veeva Systems

Veeva Systems Inc. is a leader in cloud-based software for the global life sciences industry. Committed to innovation, product excellence, and customer success, Veeva has more than 675 customers, ranging from the world's largest pharmaceutical companies to emerging biotechs. Veeva is headquartered in the San Francisco Bay Area, with offices throughout North America, Europe, Asia, and Latin America. For more information, visit [www.veeva.com](http://www.veeva.com).

### Veeva Systems

Global Headquarters  
Pleasanton, California, USA  
4280 Hacienda Drive  
Pleasanton, California 94588  
+1 925 452 6500 | [veeva.com/contact-us](http://veeva.com/contact-us) | [veeva.com](http://veeva.com)