



ZS Medical Affairs Outlook Report 2019

Analysis of field medical
growth and industry trends

By Sarah Jarvis and Sunil John
With Rina Farah and Shrikanth Gopalan





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Executive Summary

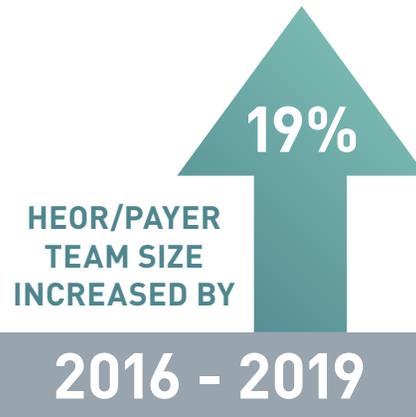
ZS's 2019 Medical Affairs Outlook Report explores the current perceptions and future trends of medical affairs organizations as well as the impact that these organizations are having across healthcare. This report draws on survey findings, benchmark analyses and ZS experience working across more than 80 clients globally. It also leverages baseline data established in ZS's [2017 Medical Affairs Outlook Report](#).

Key Findings Include:

- + **Field medical teams continue to be an important asset to the industry**, collaborating cross-functionally and taking on more responsibilities throughout the life cycle in an ever-evolving healthcare landscape.
- + **Consensus is emerging to improve collaboration of medical teams with other departments.** Compliance and guideline issues were the most frequently cited barriers to this collaboration; a misunderstanding of medical roles was the next most common reason cited.
- + **Medical roles and responsibilities are increasing**, expanding medical team engagement with a broader range of stakeholders with specific educational needs. Field-based health economics and outcomes research (HEOR) and payer engagement roles are growing most prominently.
- + **Access to HCPs remains broadly consistent**, with half of the respondents citing no change in medical science liaison (MSL) access to HCPs or institutions over the past year.



All of these factors have contributed to the growth of field medical over the past few years. Overall, MSLs have increased in the U.S. by 9% since 2014; at the same time, we've continued to see a decline of the median ratio between the number of sales reps and MSLs employed by life sciences companies: The ratio went from 10:1 in 2014 and 9:1 in 2016, dropping to 8:1 in 2018.



There is a growing presence of new field medical roles based on the need for specialized knowledge: HEOR/payer team sizes have increased by 19% since 2016.

The growing importance of field medical brings in its own set of challenges and opportunities for medical affairs organizations. These opportunities mirror the increasing expectations of customers from medical teams and changes in the pharma landscape.



The Study

Methodology

In 2018, ZS fielded an industry-wide survey to gather insights on current and future trends across medical affairs organizations: More than 100 respondents from more than 45 global companies participated in the survey. Eighty-eight percent of respondents held leadership positions in medical affairs and 12% worked in-field. More than a third of respondents were global; the remainder held U.S.-based roles. Respondents provided their perceptions across several issues such as collaboration, field medical effectiveness, metrics and current and future field medical roles and activities.

A Word of Caution About Field Team Size Benchmarking

As in years past, ZS analyzed sales team sizes vs. MSL team sizes to understand broadly how team sizes compare. Continuing the trend from 2014 to 2016, we saw the ratio between sales reps and MSL teams in the U.S. decrease again, from 10:1 in 2014 and 9:1 in 2016 to 8:1 in 2018, according to PharmaForce reports from 2014, 2016, and 2018. This new 8:1 ratio appears to point to a broad trend across the industry, though variations still exist across therapeutic areas and specialty markets.

While 8:1 is the median ratio of sales to MSL teams, ZS does not recommend using these ratios alone to size an MSL field force. This is because MSL roles and responsibilities vary across the industry, and there are significant variations in product and market needs that would point to the need for more or fewer MSLs. The variability in roles is also an important consideration: For example, at one company MSLs may spend 20 to 40% of their time supporting clinical trials and at another, they may have very limited engagement with investigators. Sizing these two roles the same way would not be appropriate.

The 8:1 median of sales to MSL team sizes also hides variability across different therapeutic areas. Historically, we've seen areas like oncology have much lower ratios (7:1), and individual



Those in headquarters-based roles consistently reported a higher rate of cross functional collaboration than those in field-based roles.

companies with ratios as low as 3:1 or 2:1. This year, however, the oncology ratios were unexpectedly higher. This could be attributed to difficulty recruiting MSLs in these more complex therapeutic areas, or increases in oncology sales team sizes. In our experience, we're seeing MSL team sizes increase across the board, and for unrelated reasons in most therapeutic areas, we're seeing sales team sizes decrease.

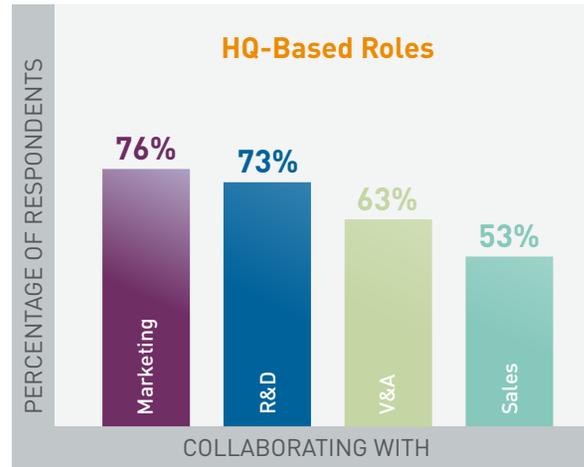
Cross-Functional Collaboration and Compliance

Industry leaders recognize the importance of finding appropriate ways to operate cross-functionally. Medical affairs respondents indicate that their organizations are continually seeking ways to collaborate with marketing, R&D, V&A and sales at all levels and prioritization of long- and short-term goals.

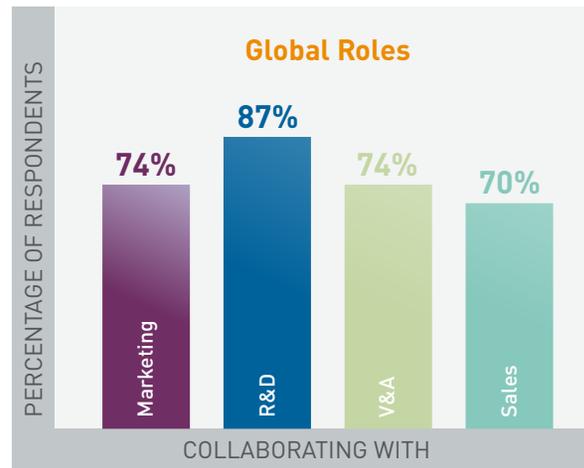
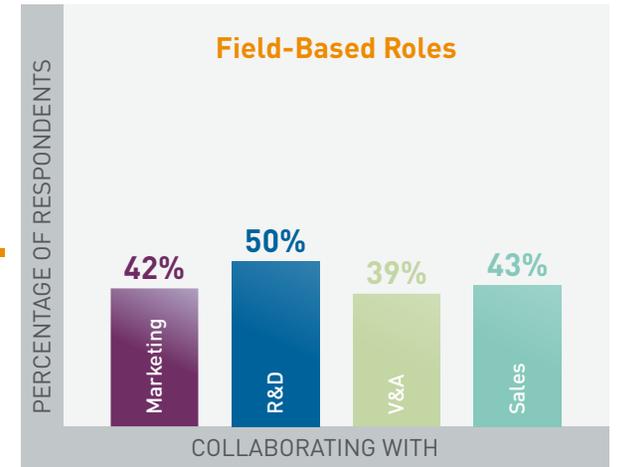
Higher Collaboration Internally and Globally

Those in headquarters-based roles consistently reported a higher rate of cross-functional collaboration than those in field-based roles. Unsurprisingly, collaboration was also higher from those in global roles compared to U.S.-focused roles.

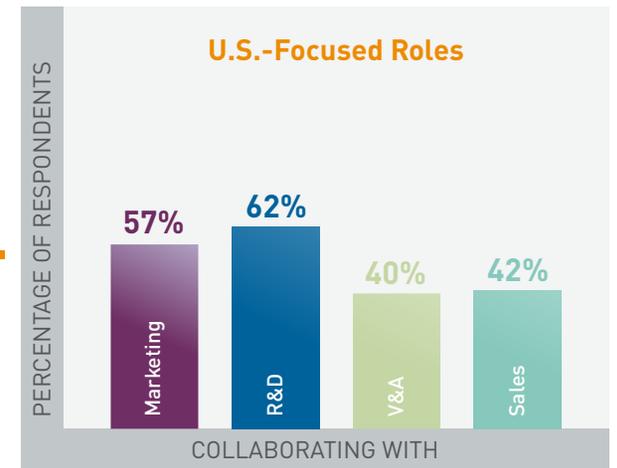
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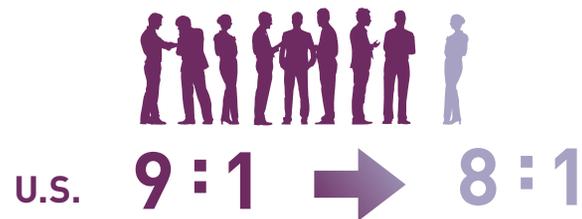


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CHANGE IN SALES REP TO MSL RATIO SINCE 2016

This comes as no surprise as increased collaboration is a necessary requirement when working globally where the scope of work is much larger. However, this does not justify the lower scores from the U.S. and should be considered an area of opportunity as effective internal collaboration is a key driver for ensuring customer centricity and alignment with overall company objectives.

One in four respondents cite that their medical affairs organizations collaborate with sales and V&A teams through SOPs and guidelines. This represents an opportunity for the establishment of clear guidelines and regulations that can help teams coordinate in a compliant and efficient manner. Often, the lack of clarity on guidelines is a major hindrance to teams collaborating on various tactics.

Addressing Issues Beyond Compliance

While compliance is most often cited as a barrier to optimal cross-functional collaboration, respondents noted that the barrier is also due to the lack of understanding of medical roles. This aligns with what ZS has heard while working with clients in the industry. How can you collaborate when you don't understand your collaborator's role? Leadership can encourage efficient and effective cross-functional collaboration by helping teams navigate gray areas in role understanding and establishing what is compliant and what is not. In short, one SOP or training is not going to solve this problem; this is an ongoing, iterative and reiterated issue that leadership needs to take on.

Medical Science Liaisons' Growth and Activities

In 2017, we reported that MSL team sizes increased 12% between 2014 and 2016, and we saw a decline in the sales rep to MSL ratio. This held true for 2018 as the ratio dropped from 9:1 to 8:1 in the U.S. and from 11:1 to 9:1 in the EU. This is despite the appearance of other specialized roles within medical teams and indicates the value that MSLs provide to the medical organization as access continues to decrease for the sales force.

A higher percentage of field-based respondents believe that MSLs contribute to HEOR and payer support compared to HQ-based respondents.

On access to HCPs, half of the respondents indicated there was no change while the other half reported a mild to moderate decrease in access. In ZS discussions with MSL leadership and key opinion leaders (KOLs) through qualitative interviews, limited access was most often caused by unique situations such as HCPs not liking an MSL (rating the MSL as “too pushy,” for example) vs. a broader issue with the role. In other words, most KOLs and HCPs still see MSLs but may close their doors to individuals that do not meet their standards.

Field Medical Activities Continue to Expand Across the Life Cycle

In 2017, when surveying medical affairs personnel on the timing of when medical affairs should become involved in the clinical development process, 82% of respondents indicated that they believe that medical affairs should begin involvement by phase II. Building on this, the 2018 survey highlights the continuing need for field medical involvement across pre-launch and post-launch activities.

The primary focus of MSL pre-launch activities continues to be HCP and KOL identification, relationship-building, education and obtaining industry insights from the field. In addition to maintaining external relationships and uncovering insights, MSLs are used as an internal resource to conduct trainings and support clinical trials, including recruitment. A key takeaway from the survey data included a geographical difference in pre-launch activities. There are notable differences between U.S.-based respondents vs. global and HQ respondents; global or HQ respondents reported a significantly higher percentage of MSL support for all pre-launch activities.

Post-launch, MSLs are expected to shift activities and focus on additional tasks such as attending conferences, managing new sponsored research, HEOR and payer support, and planning medical publications. Of note, a higher percentage of field-based respondents believe that MSLs contribute to HEOR and payer support compared to HQ-based respondents (67% vs. 46%).

The challenge that companies encounter is around the placement and structure of the HEOR/payer liaison teams: Should they fall under the medical or commercial side?

While the MSL role and activities continue to remain significant, changing customer needs are driving the demand for additional MSL responsibilities. This data aligns with ZS clients' experience. A key point to consider is what, if anything, is being removed from MSLs' activity remit to compensate for the extra responsibilities. Currently we only see MSL activities and responsibilities being added. This could potentially have a broader impact on recruitment, retention and overall job satisfaction for MSLs.

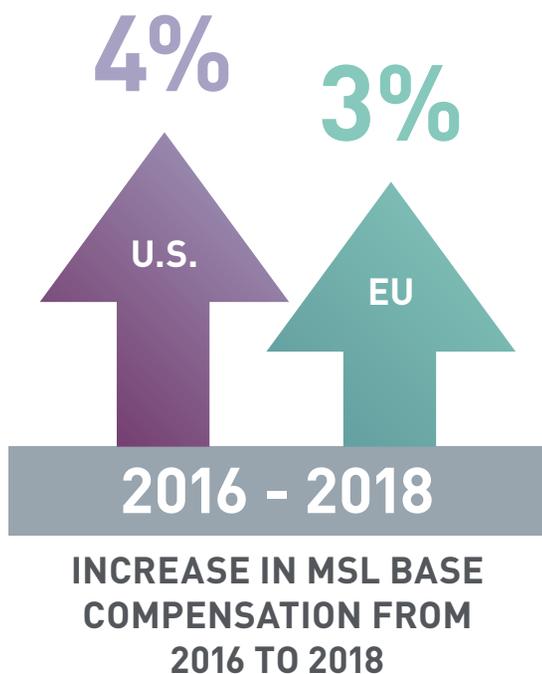
HEOR/Payer Liaison Growth Inside and Outside of Medical

Field-based HEOR/payer liaisons are expected to see the most growth in the future. Sixty-seven percent of respondents cited that they either have or plan to hire HEOR/payer liaisons, the highest among all other roles assessed. The need for liaisons with specialized knowledge of healthcare reimbursement and real-world evidence is on the rise due to the evolving healthcare landscape. This is evidenced by the increased MSL-to-HEOR ratio in 2018, growing from 5:1 in 2016 to 4:1 in 2018; additionally, we also saw an increase in HEOR and payer MSL team sizes, up 19% from 2016 to 2018, according to PharmaForce 2016 and 2018 reports.

One trend we're also watching tracks where these roles reside. While HEOR and payer MSLs most often remain on medical teams, many companies are considering or have already moved these roles to V&A groups. The challenge that companies encounter is around the placement and structure of the HEOR/payer liaison teams: Should they fall under the medical or commercial side? In our experience, most still lean toward medical, but the answer truly depends on a myriad of factors: therapy area dynamics, company objectives, budgets, role descriptions, etc.

Compensation, Recruitment and Effectiveness

- + **MSL compensation is on the rise.** Over the past two years, there has been a 4% increase in MSL base compensation in the U.S., with a 3% increase in the EU according to the 2016 and 2018 PharmaForce International Reports; however, the average compensation



in 2018 for HEOR field teams in the U.S. was 19% higher than that of MSLs. While these increases could be due to many factors, we believe a driving force among this highly compensated group is the increased specialization and recruitment challenges of all field medical roles. Finding, attracting and retaining top talent is difficult in field medical.

- + **MSL recruitment is challenging.** In addition to the rise in compensation, finding the right people for the job is becoming increasingly difficult. On average, it takes about four months to fill open positions. In the U.S. alone, it can take up to five months or more to find the right candidate, compared to the global average of three months. Once a candidate is recruited, then onboarding and training is key for success, according to field medical leadership.

- + **MSL training is expanding.** To meet customer needs, we're seeing the focus of MSL leadership shift to newer training topics. Together, customer centricity and value-based discussions now account for 42% of all training time for MSLs. The majority of respondents cited at least some training time dedicated to these topics.

What we see is a pressing need for the right talent pool with the desired medical and business skills to develop a multidimensional field medical team to navigate the dynamic landscape and meet customer needs.

- + **Field medical effectiveness is inconsistently measured.** Aside from counting interactions and completion of compliance trainings, there are still no industry standard metrics to evaluate the effectiveness of field medical teams. When asked, respondents mentioned that customer awareness, knowledge and satisfaction are often measured through independent, third-party market research. Such research provides a voice-of-the-customer perspective and scientific concept testing through real-time feedback. To continue to show value to the organization, medical teams must develop metrics to effectively assess performance and create an industry standard of measurement.

Next Steps for Field Medical Teams

- 1. Responding to the growing emergence and need for new roles:** Almost half of respondents plan to set up some type of patient advocacy role or a dedicated clinical trial support role in the future. The need for a nurse educator role has also increased (from 30% in 2017 to 40% in 2018).
- 2. Focusing on MSL recruitment in an increasingly competitive environment:** Our study revealed an overall duration of approximately four months to recruit MSLs; therefore, it's important to determine the right resourcing needs with the right roles, responsibilities and expectations while aligning with the overall company strategy.
- 3. Developing metrics for assessing field medical effectiveness:** Basic metrics such as the number of unique KOLs or HCPs visited and the completion of compliance trainings are most commonly used to assess field medical effectiveness; as an industry we need to commit to better metrics.
- 4. Increasing cross-functional collaboration and addressing compliance challenges:** Compliance issues and a lack of understanding of roles are major issues cited.

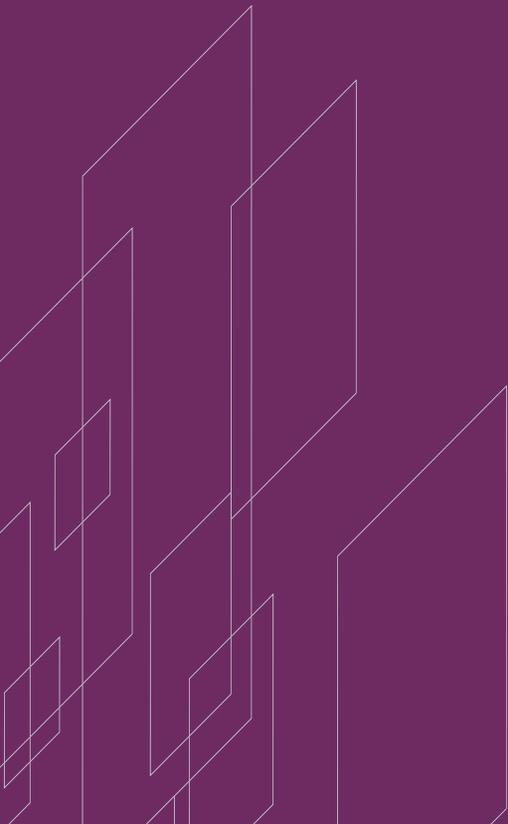
Conclusion

Cross-functional collaboration is a critical contributor to organizational success. Finding ways to increase collaboration between medical teams and other functions while remaining compliant with all rules and regulations is an area of opportunity. To move the needle, leadership has to get involved early and often to drive the creation of clear guidelines, working hand in hand with compliance and legal while also shifting mindsets across the organization. Clear SOPs and one-time training won't cut it; this is an all-in, ongoing endeavor.

Additionally, as MSL roles continue to evolve based on customer needs across the life cycle, leadership needs to consider clearly defining the scope of MSL responsibilities to ensure maximum effectiveness. With recruitment times creeping up and the competitive nature of recruitment potentially increasing with the rise of HEOR/payer field medical roles, this will be even more important as roles become increasingly more difficult to recruit.

The development of consistent metrics for evaluating effectiveness is needed. Medical leadership continues to struggle with evaluating effectiveness, and—now more than ever—a framework for measuring effectiveness is necessary to show the value of medical affairs and field medical.

At the end of the day, though, customers are the ones driving field medical to grow and change as they continue to seek an unbiased scientific partner. Creating the right impact becomes even more challenging with the ever-changing knowledge landscape, but it remains vitally important. Efficient collaboration, effective resourcing and robust role definition is the way forward for medical affairs.



About the Authors



Sarah Jarvis is a principal in ZS's San Francisco office and leads the medical affairs consulting space. Sarah has worked in the healthcare space for more than 20 years, and currently helps medical affairs clients bring business- and customer-oriented solutions to teams across medical affairs organizations. Before joining ZS, she worked at Genentech as a market planning manager for approved products in the pre-launch phase and throughout their life cycle.



Sunil John is an associate principal in ZS's Pune, India, office. He co-leads ZS's medical affairs consulting space and has played a key role in building this space from the ground up. Sunil has been with ZS for nine years. For the last six years, he has focused exclusively on medical affairs teams, such as medical science liaisons, medical information, and medical communications and publications, helping clients across geographies devise a wide variety of business- and customer-oriented solutions in corporate strategy, organizational design, branding, visioning and performance assessments.



Rina Farah is a strategy insights and planning consultant in ZS's Philadelphia office. She works within ZS's R&D excellence practice area and focuses specifically on the medical affairs space. She has more than eight years of experience in the pharmaceutical industry. Rina is a member of the ZS medical affairs leadership team and contributes to many medical affairs projects, deriving insights to increase the effectiveness of medical affairs teams.



Shrikanth Gopalan is a decision analytics consultant in ZS's Pune, India, office. He is also a part of the ZS medical affairs leadership team. He has experience across multiple medical affairs issue areas, from strategy to implementation. Shrikanth has enabled the delivery of various medical affairs projects across various pharma, biotech and medtech clients in the last five years.

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About ZS

ZS is a professional services firm that works side by side with companies to help develop and deliver products that drive customer value and company results. We leverage our deep industry expertise, leading-edge analytics, technology and strategy to create solutions that work in the real world. With more than 35 years of experience and 6,000-plus ZSers in more than 20 offices worldwide, we are passionately committed to helping companies and their customers thrive. To learn more, visit www.zs.com or follow us on Twitter and LinkedIn.



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