WHITE PAPER

SEVEN ANALYTICS IMPERATIVES FOR MEDICAL AFFAIRS

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The life sciences industry has struggled to define what success looks like when it comes to medical affairs. This core function is deemed as an essential cost center led by clinicians or scientific leaders with terminal degrees, but with no visible ROI. While there is a general consensus that the medical affairs team is a crucial pillar connecting external and internal stakeholders and unearthing and creating latent value across the pharma ecosystem, demonstrating its value has been challenging for the team.

The life sciences industry is undergoing a tremendous transformation, where the role of the medical affairs team is becoming more crucial. Three factors are reshaping the industry:

- **The growth of precision medicine** and complex treatment algorithms that are more targeted, personalized and require a unique combination of scientific knowledge and business acumen to communicate with diverse stakeholders.

- **Increasing burden on healthcare professionals**, compounded with the COVID-19 pandemic has imposed restricted access to healthcare professionals (HCPs). Thus, creating a situation where every interaction with the external stakeholders needs to bring value.

- **With the proliferation of digital platforms**, medical information is available to physicians on demand. However, the amount of information is overwhelming. To sift through the latest relevant information, HCPs need the support of industry representatives.

Given this scenario, field medical affairs teams or medical science liaisons (MSL) have become a critical bridge between the life sciences industry and external stakeholders, elevating the role of medical affairs into a strategic partner. This new imperative demands medical teams to proactively align with strategic priorities and demonstrate value to project return on investment.

With the ongoing digital transformation, data is becoming the foundation. The medical affairs team can build data-driven strategies, demonstrating the value and ROI of an individual set of tactics. Translating data into actionable and directional insights is crucial in setting the foundation for data-driven and outcomes-based decisions. Specifically for medical affairs, the analytics on integrated data gathered from disparate sources including medical CRM, medical information, clinical trials, patient advocacy, and congresses can potentiate eliminating roadblocks and highlight the value the team can deliver. The key to the desired outcome lies in using passive meaningful data for actionable insights. The clue to gathering insights and intelligence lies in aggregating data into a single pool and investing in analytics to realize the value with respect to key opinion leaders (KOLs), depth and quality of relationships nurtured, trends in patient care outcomes, and market sentiment. Sharing this intelligence across business functions could become a critical asset, enabling educated business decisions.
1. Defining value and impact of field engagement –

With more MSLs competing for the attention of KOLs, securing valuable connections have become challenging and resource-intensive, due to which, it is often easier to measure field teams’ performance using quantitative metrics like the number of KOL/DOLs meetings, upcoming experts identified, conferences supported, partnerships with professional societies, and the number of scientific presentations conducted. However, these number-focused metrics tend to incentivize the field teams to prioritize the volumes of interactions over the quality of relationships built. Hence, they do not accurately assess the downstream impact of the medical affairs’ relationships and initiatives.

There is an increased impetus to enhance the traditional performance evaluation to be able to truly measure MSL’s impact, by utilizing data from medical CRMs, digital communications, and overall sentiment on varying platforms, etc. Tracking qualitative metrics, such as eliciting strategic feedback from stakeholder interactions, networking with high-value KOLs, and gathering competitive market intelligence can provide actionable insights to the medical leadership. Hence, despite the hard-to-define and evaluative nature of qualitative indicators, they need to be equally prioritized to get a measure of the influence, outcomes, and impact that field medical affairs teams bring.

2. Personalized engagement –

With a massive input of data coming from CRMs, digital channels, and professional and social media; medical affairs analytics can inform the MSL field force about HCP/KOL preferences to tailor engagement tactics. By implementing personalized omnichannel interaction tactics with real-time monitoring of engagements – MSLs can deploy the right content in the right format on the right platform for optimal engagement.

3. Moving beyond traditional KOL relationships –

In the rapidly developing space of drug development and research – the definition of a KOL is continuously changing. Using data from published research, clinical research, congresses, and social media discussions can support the medical affairs teams to identify and drive influence with established KOLs/DOLs/patient advocacy groups to understand the unmet needs and support new launches to improve patient outcomes.

4. Emerging thought leadership and circle of influence –

Identifying and engaging with emerging thought leaders is an equally intensive yet fruitful investment of time. Medical teams can leverage analytics to identify up-and-coming leaders in the paradigm of medical research, published literature, conference proceedings, social media, and other online platforms. The network mapping allows for identifying the KOLs who can be collaborators or influencers in the context of an area of strategic focus that can fulfill the commercial needs e.g., disease education, unmet needs, regulatory approval, and market access.

5. Stakeholder perception –

The analytics on interaction data, including the areas of stakeholder interest, therapeutic area focus, specific content/medical information requests, and availability for speaking engagements can help in establishing the stakeholder perception of the drug and the company, satisfaction with the scientific content being shared and overall engagement feedback.

6. Delivering science - backed with real-world data –

The key need for HCPs is to remain up to date with complex treatment plans, hundreds of open clinical trials, new drugs, and the latest published articles to understand the science behind each therapy, to make the best decisions for patients. Medical affairs teams can deploy advanced analytics and AI to understand and extract knowledge and insights for supporting HCP interaction in activities ranging from - extracting inference from published/available data, using real-time HCP interactions data to identify HCP trends/perceptions and patient insights for understanding disease burden, access/adherence related challenges, thus enabling medical affairs teams to be precise and impactful.

7. Insights generation –

The unstructured raw data gathered by MSLs can be a goldmine of insights to discern the key topics, concepts, and trends with respect to the therapeutic area; keeping track of observed adverse events, competitive advantage, and identifying opportunities for label extension leading to actionable insights. The use of NLP along with visualization of data in the form of word cloud, temporal graphs, or co-occurrence networks can provide actionable data, whether it is for shaping future publication plans, investigator-initiated studies, or planning a phase IV study.
Conclusion

As the medical affairs function continues to grow in stature, and the marketplace evolves, defining key performance metrics and utilizing them effectively will help leaders to create high-impact organizations that drive results. The application of analytics and AI/NLP in conjunction with visualization tools on disparate passively collected data can amply support medical teams to maintain focus while generating insights. Identification of strategic opportunities and providing organizations with efficient and effective output that enables innovation across the value chain to support the common goal of improving patient outcomes would be key for medical affairs to gain their rightful stature and make them future-proof.

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- Abhitosh has overall ~ 10 years of experience in business and strategy consulting for life sciences and medical device clients  
- His expertise are in areas of digital and connected health, LS R&D operations, Commercial analytics-based insights generation, medical device product development strategy, design-thinking based unmet need analyses and voice of customer studies  
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- Ramya has 4 years of experience as project lead for an NGO - conducted over 40 training programs for more than 1000 people  
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- Worked extensively with multiple POCs in the Predictive Analytics and AI Domain while creating offerings. Lead POV in TPRM for a Pharmaceutical company.  
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