



WHITE PAPER

Measuring the Impact of Field Medical Affairs

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September 2024

Executive Summary

Demonstrating the value of Field Medical Affairs has, to date, been a challenge due to its qualitative and non-promotional nature. Traditional, activity-based metrics have missed the mark on translating Field Medical Affairs activities to tangible milestones, such as changes in HCP perception, HCP advocacy or closing critical care gaps that impact overall patient outcomes.

When developing Key Medical Objectives (KMOs) and impact measurement models for Field Medical Affairs, several factors must be considered: the organization's size, structure, specific roles, therapeutic area, asset lifecycle stage and strategic priorities. A flexible, customized model is critical to adapt to the evolving role of Field Medical Affairs, allowing teams to prioritize different measures based on their unique needs and situations. Additionally, HCP perceptions and patient outcomes should be prioritized over quantitative activity metrics with the goal of enhancing clinical practice and standards of care. As an industry, we must acknowledge that implementing this paradigm shift requires time and thoughtful investment.

Trinity Life Sciences advocates for careful, rigorous planning and tailoring the right Field Medical Affairs impact measures to meet our clients at their point of need. Trinity offers extensive expertise and a wide range of capabilities to support clients through this transformation, helping them build a "Best in Class" Field Medical Affairs program.

Introduction

In the dynamic landscape of the biopharmaceutical industry, Medical Affairs stands tall as one of the three foundational pillars, alongside Research & Development and Commercial. The significance of Medical Affairs is not confined to a specific phase of an asset's lifecycle. Rather, it resonates throughout, profoundly influencing strategic decision-making and the ultimate success of therapeutic innovations. However, despite its pivotal role, the demonstration of the tangible impact and value of Medical Affairs has long been a challenge due to the predominantly non-promotional nature of the role.

“ We've learned the hard way that it is far easier to develop a scorecard tied to Sales than it is to track how hard my team has worked to drive underlying clinical convictions and educate physicians on a brand-new mechanism of action. ”

-Pharma Medical Affairs veteran

The unique ability of Medical Affairs to engage with a diverse spectrum of stakeholders throughout an asset's lifecycle underscores their indispensable contribution to the strategic fabric of pharmaceutical endeavors. Field Medical Affairs, in particular, finds itself in the paradoxical position of being indispensable yet challenged with quantifying outcomes and impact. While conventional metrics, Key Performance Indicators (KPIs) and Key Medical Objectives (KMOs) may capture the volume of engagements and indicators of impact, they often fall short in capturing the transformative influence that Field Medical Affairs teams wield.

How can you truly capture changes in the hearts and minds of treating physicians? How can you quantitatively measure clinical conviction in a product or novel pathway? These subtleties and ambiguities prove elusive in a bite-size, quantitatively oriented world.

In this white paper, Trinity embarks on a journey to reveal the multifaceted impact of Field Medical Affairs within the healthcare ecosystem and how this can be measured and communicated. As the paradigm has shifted with Medical Affairs firmly established as the third strategic pillar, there is a strong impetus among leadership to understand the return on investment and the overarching impact Field Medical Affairs has on the organization. Moving from a transactional, activity-based approach to a more holistic assessment of impact (capturing both qualitative and quantitative aspects) will better reflect the true value Field Medical Affairs brings to an organization.

Current Trends in Measuring the Impact of Field Medical Affairs

The assessment of Field Medical Affairs broadly falls into several categories, with the most common being field engagement frequency and duration. This is followed by measuring HCP sentiment, attitudes and behavior, as well as assessing the collection and impact of medical insights.

Benchmarking data from TGaS Advisors, a division of Trinity Life Sciences, has identified various ways organizations are currently capturing and communicating the impact of Field Medical Affairs. These measures have shifted over the last few years, partly due to the evolution of Medical Affairs into a more proactive and strategic leader, and the increased utilization of data and analytics to communicate impact.

While the COVID-19 pandemic led to a decline in the target number of engagements, there has been a steady increase over the past several years, with nearly all organizations noting they are back to pre-pandemic levels of engagement (Figure 1). Additionally, teams have begun to normalize multiple engagement approaches, with most organizations adopting a hybrid approach to meet customers where they are. In addition to engagement frequency, change in HCP perception (Figure 2), congress activities and clinical trial support are regularly assessed to determine Field Medical Affairs activity.

Figure 1. The average number of engagements per MSL per month in the U.S. is increasing

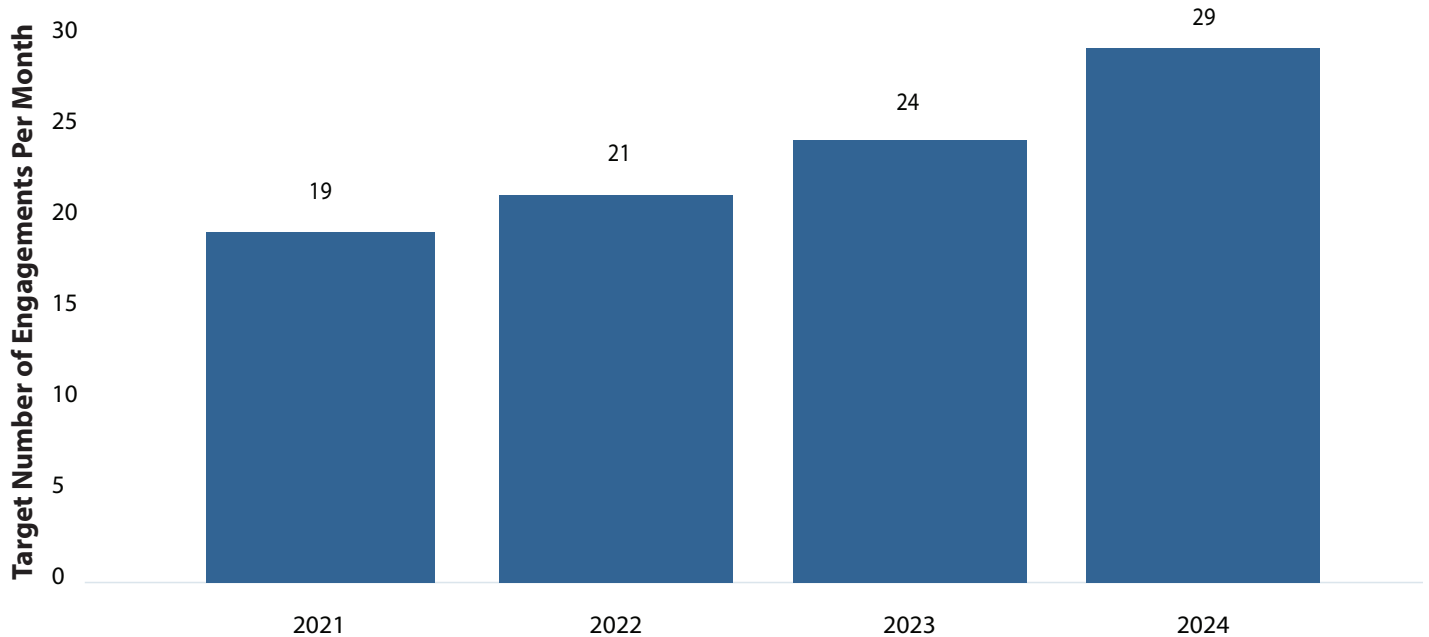
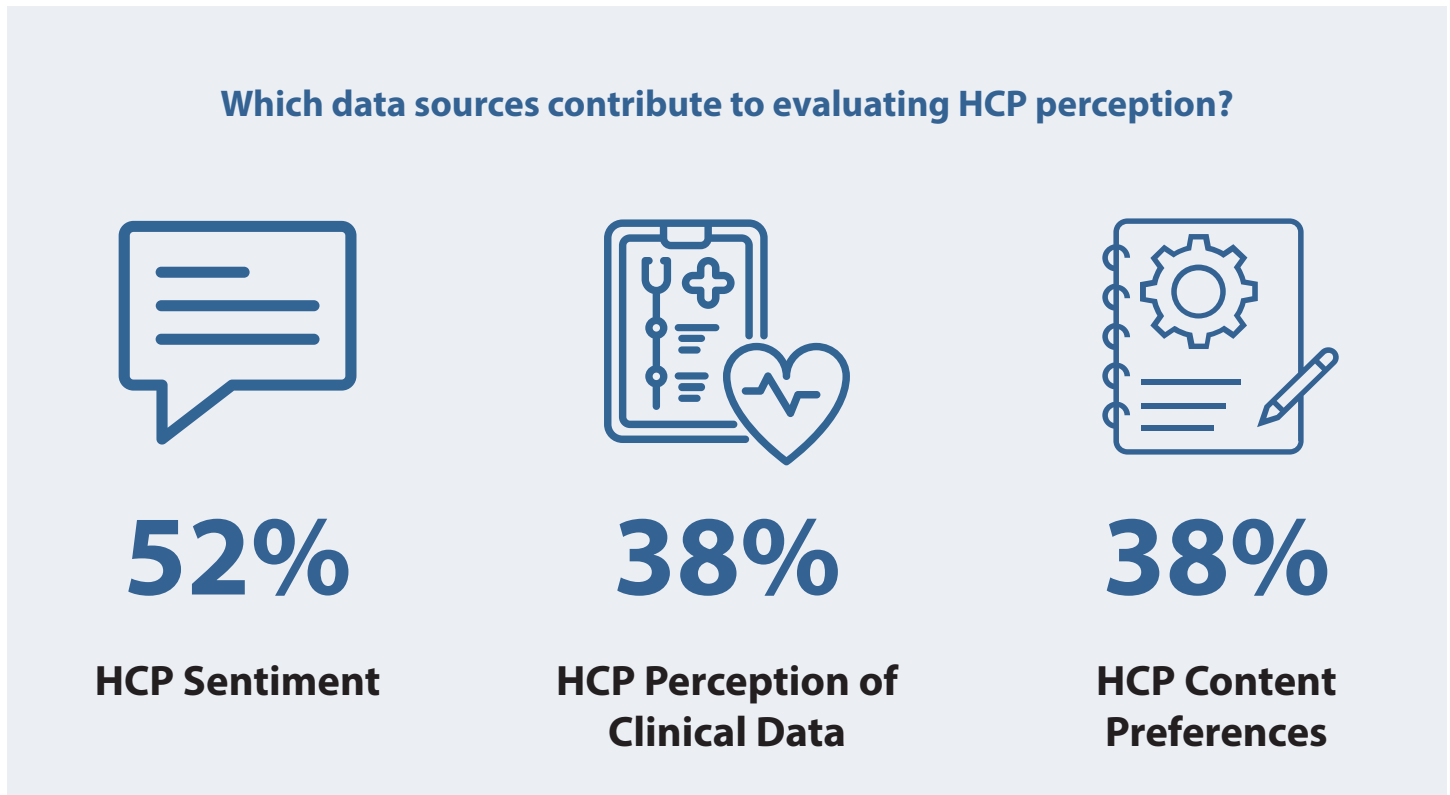


Figure 2. HCP perception, sentiment, attitudes and behavior are being tracked across most organizations to demonstrate impact and effectiveness of Field Medical Affairs teams.



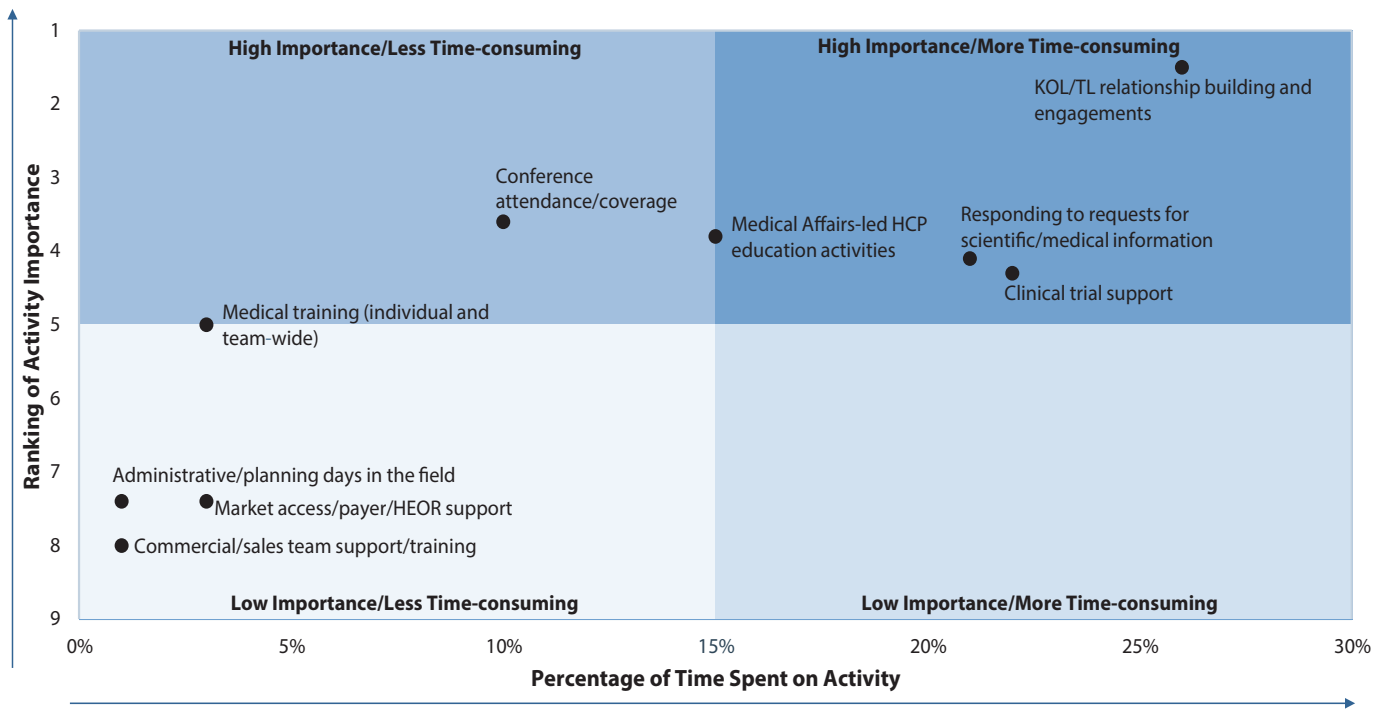
Beyond metrics, organizations have increasingly examined the utility of insights generated by Field Medical Affairs teams. According to TGaS Advisors benchmarking data, over 90% of organizations are using insights to inform medical strategy and planning, changes to upcoming medical activities and tactics, and content usage and development. However, significant gaps remain, with less than 50% of organizations leveraging medical insights to inform the next best engagement, brand strategies and overall business strategy.

Trinity believes that the true value of Field Medical Affairs lies in their ability to strategically align and deploy teams to change HCP perceptions related to unmet medical needs, highlight shortcomings in existing treatment pathways and educate them on new and novel mechanisms of action (MOAs). By effectively communicating evidence, Field Medical Affairs teams have the opportunity to drive HCP advocacy, improve clinical practices and positively impact downstream patient outcomes.

Trinity’s Point of View: Customized Impact Model to Demonstrate Impact

Leaders have identified several key activities that Field Medical Affairs should prioritize throughout the lifecycle of an asset, particularly those directed towards external stakeholders (Figure 3; 2023 TGAs Advisors benchmark assessment). While these activities are indicators of time spent in the field and are critical to relationship building and driving awareness, they do not fully capture the value and impact Medical Affairs has on the overall organization.

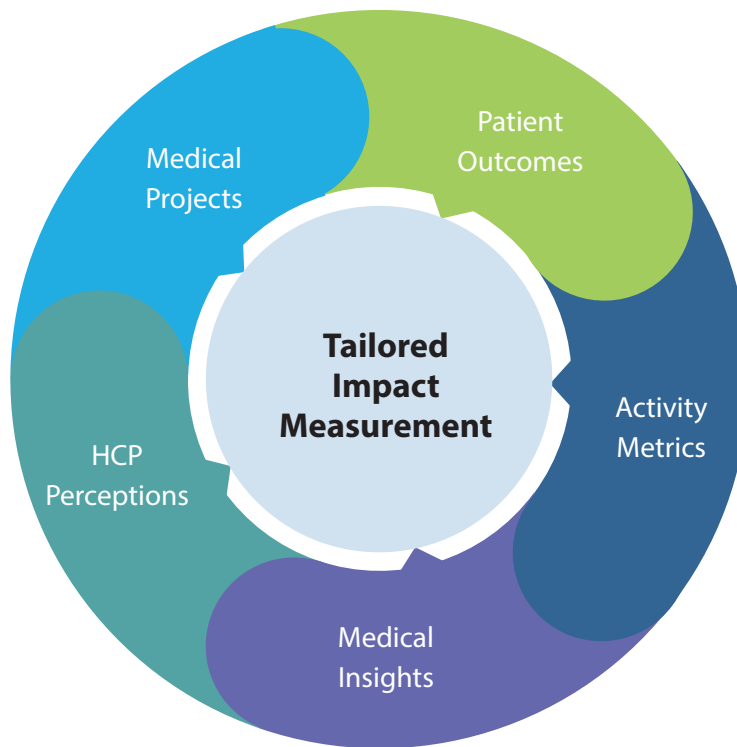
Figure 3. Time Allocation and Prioritization for Pipeline/Investigational Assets



Trinity believes that a tailored mix of the highest impact activities providing medical insights, change in HCP perceptions and improvements in patient outcomes, should be considered. This approach allows teams to build purposeful relationships and drive productive engagements with HCPs.

Tailored KMOs/impact measurement models will facilitate the implementation of medical strategies, ensuring Field Medical Affairs teams can provide HCPs with the education needed to fill critical knowledge gaps—ultimately improving patient care and outcomes (Figure 4).

Figure 4. A tailored KMOs/impact measurement model



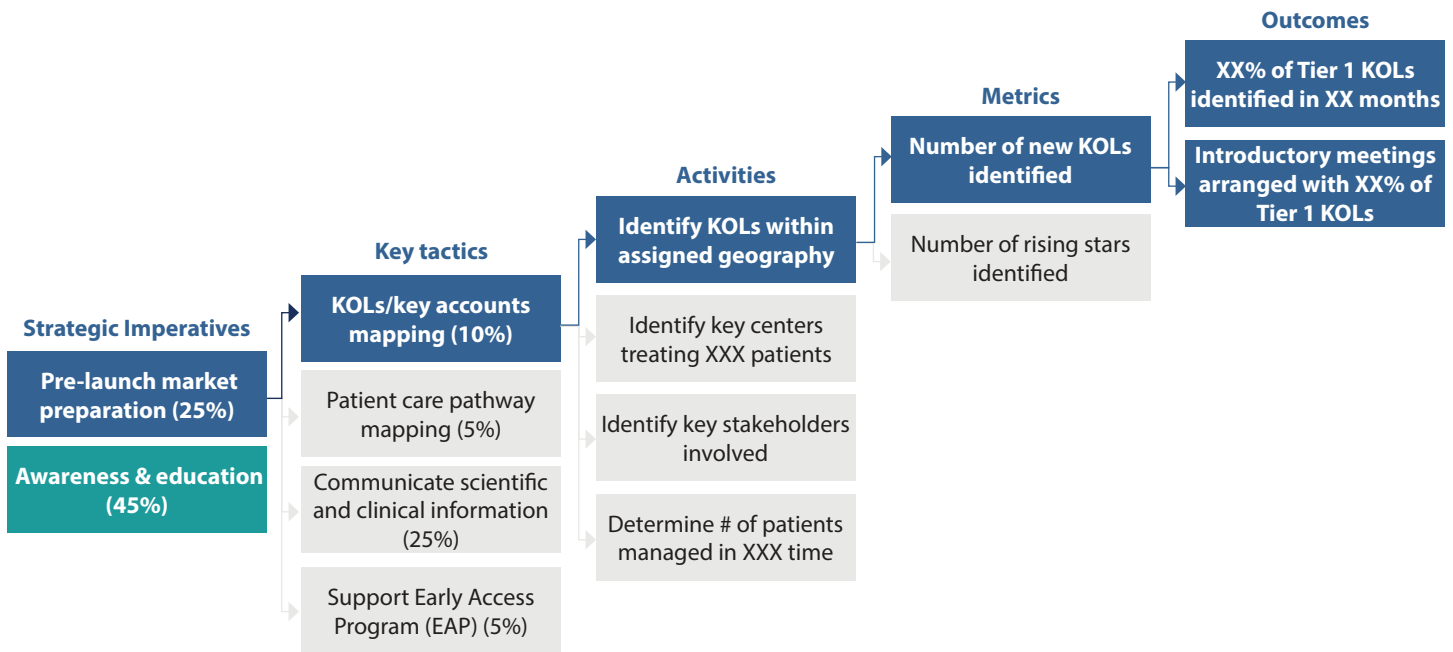
1.

Activity Metrics

Activity-based metrics, often collected manually or within a CRM, remain part of any KMOs/impact measurement model as they demonstrate the level of Field Medical Affairs activities to leadership. These metrics can be used to determine the level of investment and resources needed for success throughout the product lifecycle. However, emphasis needs to be placed on:

- » The link between strategic imperatives and associated tactics (Figure 5)
- » Prioritizing activities by giving them appropriate relative weight
 - Fewer metrics should be selected to keep Field Medical Affairs focused on high-priority activities
 - Periodic review and revision of metrics and their relative weight will ensure Field Medical Affairs teams remain focused on evolving priorities

Figure 5. An illustrative example of linking metrics with strategic imperatives



2. Medical Insights

Field Medical Affairs is often the first point of contact with external stakeholder groups. These interactions involve in-depth scientific discussions, which help identify insights, educational gaps, and areas where medical teams can focus and direct future content and education. The bi-directional sharing of scientific insights is considered one of the most important tasks that inform key strategic workstreams within Field Medical Affairs organizations and cross-functional counterparts, including aspects of disease area and market dynamics. Therefore, it is crucial to divide them into two categories to bolster the value these distinct insights can deliver.

Solicited Medical Insights:

Field Medical Affairs and cross-functional leadership can identify and inform others on the Field Medical Affairs team about strategically relevant topics, knowledge gaps and unanswered questions. This will provide clarity and focus for Field Medical Affairs to explore these topics in greater detail while engaging with HCPs, helping to inform internal stakeholders and refine strategic and tactical plans.

Unsolicited Medical Insights:

Field Medical Affairs are accustomed to gathering and disseminating medical insights internally based on what they deem important. However, the relevance of these insights and numbers is unpredictable. The focus should be on providing a definition and explanation of “Actionable Medical Insights.” Unsolicited medical information requests from HCPs can also uncover valuable medical insights.

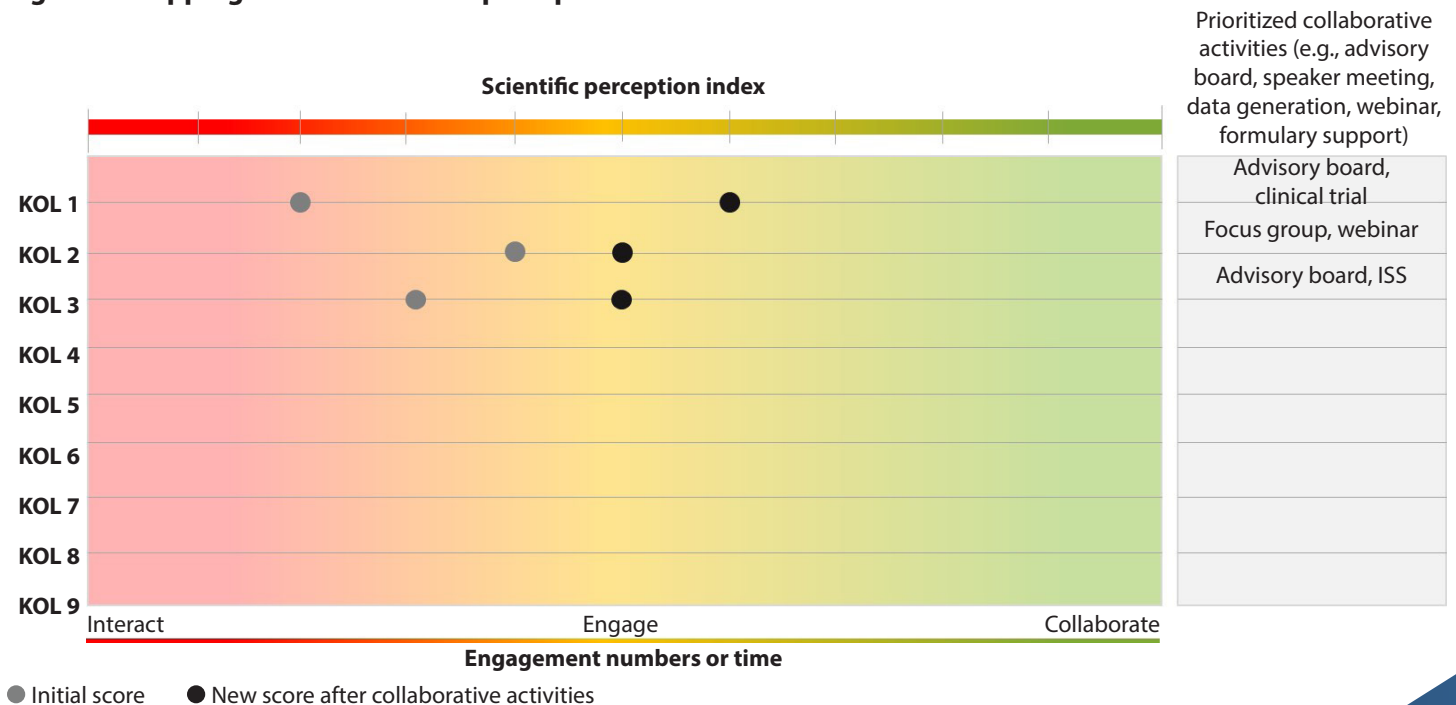
3. HCP Perception Measurement

A recent TGaS Advisors survey revealed that many organizations measure HCP sentiment, attitudes and behavior. Typically, changes in HCP sentiment, attitudes and behavior are recorded via the customer relationship management platform (CRM), which may be perceived as subjective. As an alternative, many organizations have leveraged direct surveys to HCPs, primary market research (PMR) or Awareness, Trial, Usage (ATU) assessments to understand the performance and effectiveness of their teams.

- » **Direct HCP surveys:** Following MSL engagements, many organizations ask HCPs to complete a short quantitative survey to gauge their perception of the disease state, unmet medical needs, scientific and clinical product profile and quality of MSL interactions. These surveys can be requested either immediately after MSL engagements or periodically, though the response rate is generally low (~10–15%).
- » **Third-party primary market research or ATUs:** An ATU is a PMR tool regularly used by commercial functions to measure performance and effectiveness of field teams. In a recent TGaS Advisors survey, Field Medical Affairs teams noted an increased interest in leveraging these tools to better understand their impact but cited cost and small team size as limiting factors. To mitigate these challenges, some teams collaborate with their commercial counterparts to execute ATUs or PMR.

Using direct surveys, PMR or ATUs enable leadership not only to demonstrate the performance and effectiveness of their Field Medical Affairs teams, but also to make strategic decisions surrounding customer engagement experience, close critical care gaps and address ongoing unmet medical needs (Figure 6).

Figure 6. Mapping the HCP scientific perception index



4. Delivery of Medical Projects

Depending on the organization and scope of roles and responsibilities, Field Medical Affairs may be responsible for or involved in medical projects, which are often high-impact tactics and qualitative in nature. These projects can be divided into a few standardized steps or milestones based on SMART (Specific, Measurable, Achievable, Relevant and Time-bound) objectives and progress can be tracked with a “traffic light” system. An advantage of this approach is that qualitative projects can be quantitatively integrated into a CRM and progress can be tracked within reporting dashboards. The completion and delivery of medical projects are critical for tactical implementation of medical strategy and can be considered an impact measure.

5. Patient Outcomes

Almost all organizations refer to improvement in patient outcomes in their vision and mission statements. One of the primary responsibilities of Medical Affairs is to communicate clinical and scientific information to educate HCPs on unmet medical needs, MOA and the relevance of scientific and clinical evidence to clinical practice. Ultimately, increasing HCP knowledge and awareness has the potential to drive changes to guidelines and standards of care. This allows for improvements in clinical practice and patient outcomes through faster diagnosis and treatment escalation, improving quality of life, morbidity and mortality.

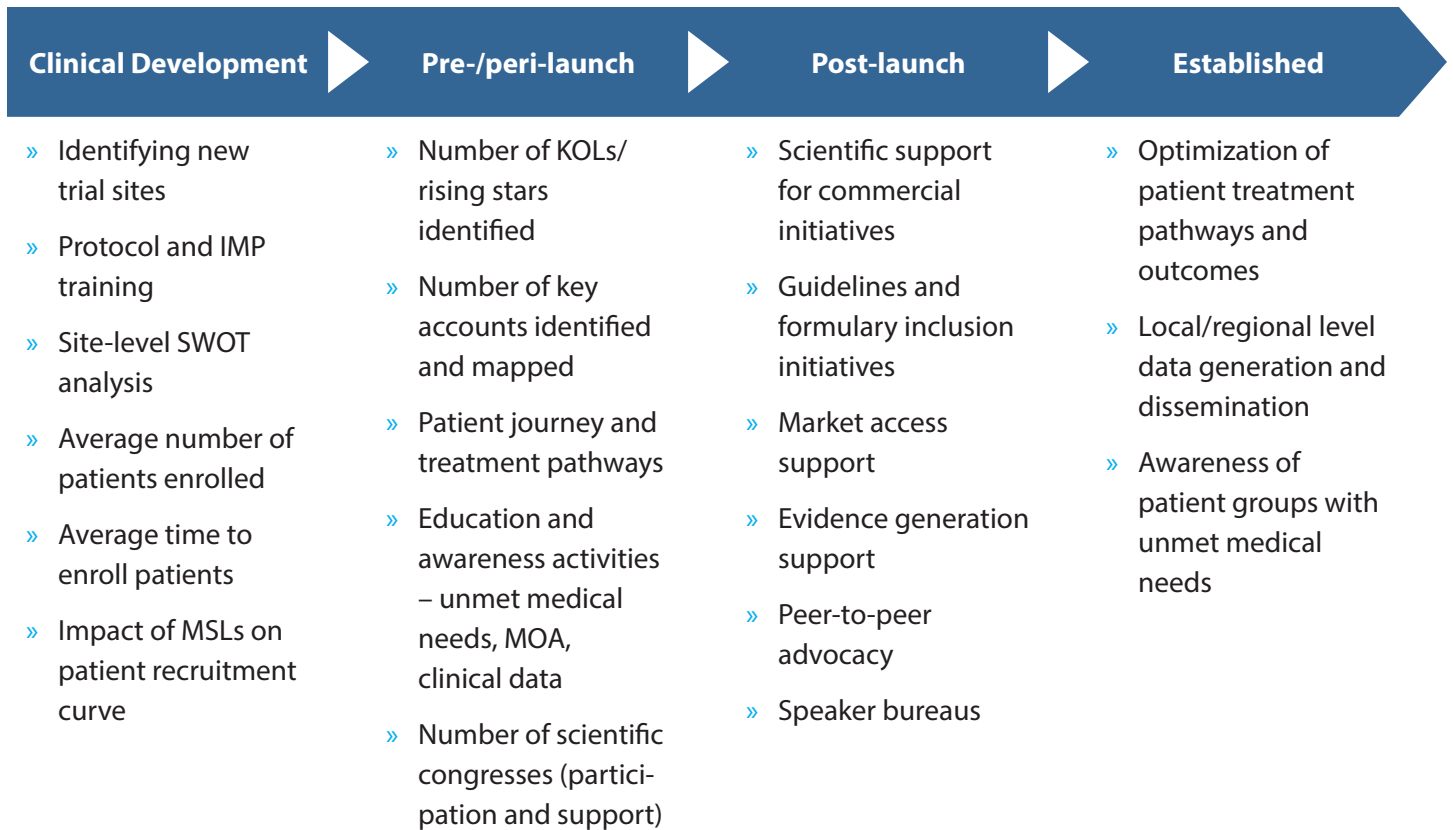
However, due to the relatively long time for patient outcomes to become apparent, their multifactorial nature and compliance considerations, few organizations currently consider these outcomes as a direct measure of impact for Field Medical Affairs. Nonetheless, these outcomes should be prioritized among impact measures to drive patient-focused engagements with external stakeholders and demonstrate the tangible impact and value of Field Medical Affairs to internal stakeholders. There is a need to educate and communicate the importance of patient outcomes, the complexity involved and their strategic value to internal stakeholders.

Customization of KMOs and Impact Measurement

When developing tailored KMOs/impact measurement models for Field Medical Affairs, Trinity believes it is critical to consider several factors including organizational size and structure, the specific role and responsibilities of Field Medical Affairs, therapeutic area, current stage of an assets lifecycle and overarching strategic priorities. This model not only guides exemplary Field Medical Affairs external engagement but also effectively showcases the strategic significance to internal stakeholders across functions. A flexible and tailored KMOs/impact measurement model is best suited to accommodate the evolving role of Field Medical Affairs, allowing teams to weigh various measures differently depending on their current needs and objectives.

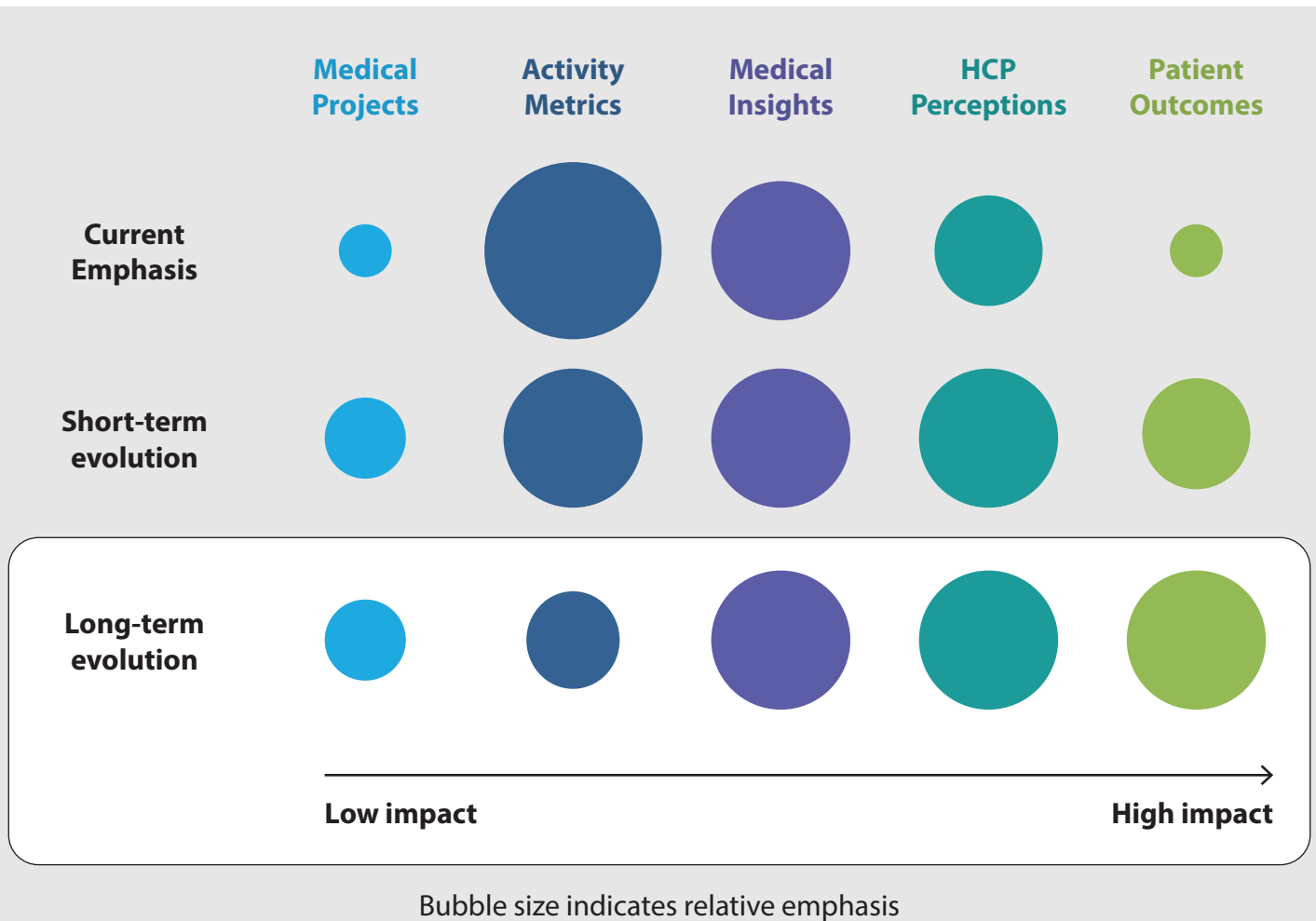
Although the main responsibilities and nature of Field Medical Affairs remains the same, the expected deliverables and outcomes in every stage of an asset’s lifecycle should be considered in the tailored KMOs/impact measurement model to drive optimal value and impact of Field Medical Affairs activities (Figure 7).

Figure 7. Examples of high-priority activities and measures across four distinct stages of an asset’s lifecycle



Trinity's Recommendations

Figure 8. Current state of Field Medical Affairs priorities and Trinity's forward-thinking approach



Trinity believes there is a strong need to rethink KMOs and impact measurement models for Field Medical Affairs. Currently, activity metrics and input measures are most frequently used to measure the value of Field Medical Affairs while patient outcomes are often overlooked. There is a great opportunity to place higher priority and weight on approaches that demonstrate significant improvements and impact on HCP perception, HCP advocacy, clinical practice, standard of care and patient outcomes. It is critical to recognize that these measures may not always be immediately observed.

Trinity recognizes the shift from activity metrics as an “input” to patient outcomes as an “output” requires careful thinking and planning. We strongly recommend a comprehensive approach to maximize the impact of this transformative shift, as outlined below:

Step 1: Medical value and scientific narratives

Review and revamp, if necessary, medical strategy and scientific narratives to align with market access and commercial value propositions. Ensure scientific materials and tools used by Field Medical Affairs reflect the medical strategy and scientific narratives and resonate with a variety of audiences, including HCPs, payers and health systems.

Step 2: Core skills and competencies

Review the current Field Medical Affairs competency model and ensure skillsets are fit for purpose. Robust training and coaching are highly recommended to effectively implement competencies in practice, communicate medical value and scientific narratives, and drive better clinical practice, standards of care and patient outcomes.

Step 3: Patient outcomes as an impact measure

Careful selection of patient outcomes is essential, prioritizing relevance, feasibility in routine clinical practice and achievability. Merely opting for outcomes from clinical studies may not be practical, as some are not routinely assessed or might require considerable time to manifest. It is crucial to select outcomes that are appropriate and clinically meaningful, such as changes in diagnostic rates, time to diagnosis or treatment initiation and healthcare resource utilization. Forward-thinking organizations have innovatively used Target Population Outputs (TPOs)*, which measure the percentage of individuals with a specific condition at a defined stage in their healthcare journey within a health system—impactful metrics for Field Medical Affairs.

Step 4: Data analytics and reporting

Leveraging analytics to assess and report on performance of Field Medical Affairs initiatives, including reach and impact, can help optimize tactics to maximize the strategic value of activities performed by the team. When it comes to HCP perceptions, meaningful differences due to Field Medical Affairs interactions can be collected and quantified through PMR or ATUs by comparing HCPs who recall recent interactions with Field Medical Affairs to those who do not recall any interactions.

* <https://www.hsph.harvard.edu/health-systems-innovation-lab/tpos/>

By including questions about Field Medical Affairs interactions, organizations can identify not only the impact of recalling the interaction itself but also which elements of the interaction drive the most change. Examples of questions that can be explored are:

- » What length of interaction translates to the highest impact of an MSL interaction?
- » Which communication/message drives the highest impact on perception?
- » How many interactions are required to drive changes in perception?
- » Does perception of the MSL impact how communication is received?

Similarly, activity metrics can be tracked through CRM systems and reported regularly to Field Medical Affairs and senior leadership. Indicators can include engagement by channel, purpose of medical engagement, medical information requests fulfillment, among others. Harnessing powerful data and analytics tools, such as Electronic Health Records (EHRs) and claims data through Health Economics and Outcomes Research (HEOR) and Real-World Evidence (RWE) methodologies, enable effective tracking, analysis and measurement of changes in patient outcomes.

As different sources of data become available to the organization, it is important that business insights are drawn by integrating secondary sources with PMR or ATUs and internal call activity data. Successful organizations append PMR data with other respondent-level data and field activity to provide a holistic, integrated interpretation of the market. For example, PMR data can be merged with internal claims data and Field Medical Affairs engagement activity to align and analyze HCP attitudinal and reported behavior in the context of actual behavior following interactions from Field Medical Affairs.

Summary and Conclusion

For Field Medical Affairs to effectively execute on performance measures, organizations must establish a strong foundation by developing an appropriate structure, size and mandate for the medical organization. This involves defining clear roles and responsibilities, aligning the Field Medical Affairs plan, activities and deliverables with asset and medical strategies, communicating key objectives and creating specialized roles such as HEOR/payer-focused liaisons or nurse-focused liaisons

Due to the nature of the role and the activities Field Medical Affairs undertake, a one-size-fits-all approach for performance and impact measurement is not effective. To effectively showcase the real impact of Field Medical Affairs activities, a comprehensive, customized model that integrates various quantitative and qualitative methods is essential. The selection of KMOs and impact measures should be driven by cross-functional requirements and aligned with expectations, ensuring they are tailored to the specific lifecycle stage of assets. Regular review and adjustment of KMOs and impact measures are necessary as assets progress through different lifecycle stages and as market dynamics and strategic priorities evolve.

Organizations must also consider how Field Medical Affairs allocates its time between traditional HCP engagements and other activities such as clinical trial support, conferences, advisory boards or patient advocacy to ensure adequate headcount and capacity to carry out their field-based activities despite shifting priorities.

We advocate for optimizing the impact of Field Medical Affairs on clinical practice, standard of care, HCP perception, patient outcomes and the commercial success of assets. This requires a strategic shift from tracking and measuring “inputs” like activity metrics to focus on “outputs” such as patient outcomes. Achieving this transformation entails developing a compelling medical value and scientific narrative, enhancing the skills and competencies of Field Medical Affairs through training and coaching, selecting appropriate patient outcomes and leveraging robust data and analytics tools and capabilities.

Trinity is a global end-to-end life sciences advisory service provider with over 300 pharmaceutical, biotech and medical device clients including the top 20 pharma organizations. We are an ideal partner to help devise a customized approach to make and demonstrate the optimal impact of Field Medical Affairs. Trinity possesses depth and breadth of capabilities and experience in Medical Affairs, HEOR, RWE and analytics capabilities, as well as industry-leading TGaS benchmarking services to help determine what “best in class looks like.” This breadth of capabilities supports organizations at every stage of their transformative journey and across diverse therapeutic areas.

Authors



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Khalil leads the Medical Affairs Center of Excellence with almost 2 decades of Medical Affairs & Clinical Development experience in the pharma industry. He has consulted at the national, regional and global levels, and has experience in 20+ therapeutic areas including CNS. Khalil advises on Medical Affairs strategic partnerships, operational excellence and value demonstration across the product lifecycle from early-stage clinical development to commercialization and beyond. Khalil has a PhD from Bristol University, UK and an MBA from Aston University, UK.



Sarah Odeh | Vice President, Medical Affairs

Sarah has 15+ years of experience as a Medical Affairs leader, successfully leading the development and execution of Medical Affairs strategies and launch plans at both large and emerging life science companies, across a plethora of therapeutic areas. She brings substantial experience in lifecycle management, medical communications, publication planning, KOL engagement and evidence generation. Sarah has a degree in biochemistry from the University of Illinois, Urbana-Champaign and is the 2024 National President of Women In Bio (WIB).



Mason Yeh | Engagement Manager, Medical Affairs

Mason has over 15 years of academic research and industry experience; 8 years in neuroscience research and 7 years in biopharma. He supported assets throughout all stages of development in CNS and rare disease with expertise in small molecule and cell and gene therapy. Mason holds a PhD in Cell & Developmental Biology from University College London; BA in Biology from Colgate University.



Navein Arumugasaamy | Service Director, Medical Affairs

Navein is a pharma industry professional with 5+ years of experience in Medical Affairs and Drug Discovery Research across several therapeutic areas. He has successfully supported product launch through U.S. and Global roles, with experience in developing and executing medical strategies, delivering innovative medical education and building omnichannel approaches for Medical Affairs. Navein supports clients in benchmarking and establishing best-in-class capabilities. He has a PhD in Bioengineering from the University of Maryland, College Park.



Amid Zand | Director, Commercial Analytics

Amid is a Director in Trinity's Commercial Analytics practice. Since joining Trinity in 2017, Amid has partnered with our clients across the breadth of Trinity's Analytics capabilities with a key focus on field team planning, incentive compensation and performance analytics. Amid leverages his deep understanding of life sciences data along with a holistic view of our customer's strategic objectives to provide tailored field team plans, insights and recommendations. Amid holds a B.S. In Biomedical Engineering from WPI and an MBA from Boston University.



Nandini Hadker | Partner, Evidence Strategy

An economist by training, Nandini is a Partner at Trinity Life Sciences with over two decades of experience in custom research and strategy consulting. She is an expert at helping clients identify what real-world evidence will "move the needle" and drive their product's success, generating that evidence using publication-grade research, and pulling the insights through scientific dissemination. Nandini has a Master's degree in Economics from Boston University. Her research has been widely published in peer-reviewed pharmacoeconomic journals. She has been a speaker at PMRG, and the lead feature in Boston Herald's 2010 special edition on "Women Leaders under 40".



About Trinity

With almost 30 years of expertise, a best-in-the-business team and unrivaled access to data and analytics, Trinity Life Sciences is a modern partner to companies in the life sciences industry. Trinity combines strategy, insights and analytics to help life science executives with clinical and commercial decision-making. We serve over 300 pharmaceutical, biotech and medical device clients, helping them develop the right drugs and devices for today's market and optimize them once in market. We have a diverse staff of over 1200 people and 11 global offices across the U.S., Europe and Asia. Ultimately, we know that every decision our clients make impacts a life, and when we help our clients achieve their goals, the world benefits. To learn more about how Trinity is elevating the industry and driving evidence to action, visit trinitylifesciences.com.

For more information, please contact us at info@trinitylifesciences.com.