

THE MSL

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Highly Effective Use of a Medical Affairs Team With Medical Science Liaison-Delivered Education: The SMART-MSL Study

Conference Proceedings: Empowering MSLs in Transition - Strategy, Identity, and Tools for Reinvention

The Future of KOL Engagement: Transforming Scientific Collaboration with AI Support

Reducing Diagnostic Delays in Rare Diseases: The MSL's Role in Closing Knowledge Gaps

Digital Transformation of Medical Affairs Through Artificial Intelligence

Reflections from a Malaysian MSL - Growing With the Profession

The Class of 2018: Where Are They Now?

From Sales Rep to MSL, a Journey of Evolution and Discovery

Redefining Value in Medical Science Liaison Performance: From Activity Metrics to Patient Outcome-Focused KPIs

What Makes an MSL Truly Exceptional? Lessons From the Best MSLs Around the Globe

From Biomedical Insights to Decisions: A Future-Ready Playbook for Medical Science Liaisons

Integrating HEOR and Real World Evidence: The Expanding Strategic Function of Medical Science Liaisons

Applied Neuroscience to the MSL Role: How to Train the Brain to Influence With Integrity

How to Thrive as an MSL in 2026: From Scientific Expert to Driver of Change

2025 MSL of the Year Awards: Perspectives from Winners

A Quantitative Approach to Medical Metrics: Insights and KOL Tier Scoring

The Science of Culture: How Values-Driven Leadership Improves Results, Retention, and Reputation in Medical Affairs

Business Acumen in Medical Affairs: Towards a New Paradigm of Leadership in the Pharmaceutical Industry

The Clinician's Compass: Why Those Who Care at the Bedside Lead Best in Medical Science Liaison Roles

From Transaction to Interaction: Leveraging Commercial Acumen for Deeper Scientific Exchange

Beyond Science: Why Rare Diseases Make MSL Work Truly Meaningful

Five Bioethical Foundations for Good Clinical Research & Practice

From Insights to Impact: Redefining the Role of Advisory Boards in Medical Affairs

Welcome to the Age of Coaching

Navigating KOL Engagement During Healthcare Policy Transitions: Maintaining Scientific Dialogue Amid Coverage Uncertainty

Bridging the AI Dilemma Across Commercial, Medical Affairs, and Market Access Teams

Trust in Government Agencies Falters: MSLs Can Fill Credibility Gap and Combat Misinformation

The Role of Medical Science Liaisons in Medical Affairs Booth Support at Regional Conferences

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Survey Reveals How Many Days per Week MSLs Engage With KOLs, and Why the Numbers Matter

Letter From the Editor

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Table of Contents

Letter from the Editor	1
2025 MSL of the Year Awards: Perspectives from Winners	1
Survey Reveals How Many Days per Week MSLs Engage with KOLs, and Why the Numbers Matter	6
Provider Insights: Working with Medical Science Liaisons	11
Digital Transformation of Medical Affairs Through Artificial Intelligence	13
Conference Proceedings: Empowering MSLs in Transition - Strategy, Identity, and Tools for Reinvention	15
Business Acumen in Medical Affairs: Towards a New Paradigm of Leadership in the Pharmaceutical Industry	19
Reflections from a Malaysian MSL - Growing With the Profession	25
Beyond Science: Why Rare Diseases Make MSL Work Truly Meaningful	31
Redefining Value in Medical Science Liaison Performance: From Activity Metrics to Patient Outcome-Focused KPIs	33
The Class of 2018: Where Are They Now?	36
How to Thrive as an MSL in 2026: From Scientific Expert to Driver of Change	41
From Insights to Impact: Redefining the Role of Advisory Boards in Medical Affairs	43
Highly Effective Use of a Medical Affairs Team With Medical Science Liaison-Delivered Education: The SMART-MSL Study	46
What Makes an MSL Truly Exceptional? Lessons From the Best MSLs Around the Globe	57
From Transaction to Interaction: Leveraging Commercial Acumen for Deeper Scientific Exchange	59
Navigating KOL Engagement During Healthcare Policy Transitions: Maintaining Scientific Dialogue Amid Coverage Uncertainty	63
The Future of KOL Engagement: Transforming Scientific Collaboration with AI Support	65
From Biomedical Insights to Decisions: A Future-Ready Playbook for Medical Science Liaisons	68
The Clinician's Compass: Why Those Who Care at the Bedside Lead Best in Medical Science Liaison Roles	71
Welcome to the Age of Coaching	74
The Role of Medical Science Liaisons in Medical Affairs Booth Support at Regional Conferences	78
A Quantitative Approach to Medical Metrics: Insights and KOL Tier Scoring	81
Applied Neuroscience to the MSL Role: How to Train the Brain to Influence With Integrity	84
From Sales Rep to MSL, a Journey of Evolution and Discovery	89
The Future of Personalized, Measurable MSL Engagement	92
Reducing Diagnostic Delays in Rare Diseases: The MSL's Role in Closing Knowledge Gaps	93
Bridging the AI Dilemma Across Commercial, Medical Affairs, and Market Access Teams	95
Five Bioethical Foundations for Good Clinical Research & Practice	98
Integrating HEOR and Real World Evidence: The Expanding Strategic Function of Medical Science Liaisons	101
Trust in Government Agencies Falters: MSLs Can Fill Credibility Gap and Combat Misinformation	105
The Science of Culture: How Values-Driven Leadership Improves Results, Retention, and Reputation in Medical Affairs	108

Letter from the Editor

By Cherie Hyder, PharmD, MSL-BC | Fall 2025

Dear Readers,

The Future of Medical Science Liaisons is in Harnessing AI and Technology for Deeper Scientific Impact! As the landscape of Medical Affairs continues to evolve at an extraordinary pace, the role of the MSL has never been more dynamic or more critical to support organizational, KOL and patient needs. This edition of The MSL Journal includes an array of amazing articles with many electing to focus on exploring how AI and emerging technologies are reshaping the way MSLs engage with data, HCP/KOLs and strategic decision makers throughout organizations and in alignment with medical strategy.

We are standing at a remarkable intersection where human expertise meets digital innovation. AI, once a distant concept, is now an everyday partner in medical communication, empowering MSLs to analyze large data sets assimilated from a variety of sources, identify emerging trends and gaps as well as deliver tailored scientific insights with unprecedented precision and efficiency. From predictive analytics that enhance field insights and suggest next best action steps to digital engagement platforms that redefine KOL interactions and strategic planning, technology is transforming the MSL toolkit in ways we could only imagine a few years ago.

In this issue, you will find many new ideas, best practices and thought provoking articles that examine how MSLs are elevating excellence, the journey to evolve their careers and how AI driven solutions are advancing key areas such as evidence generation, improving stakeholder engagement and supporting ethical, data informed decision making. All of this is intended to enhance patient care and outcomes as MSLs focus on serving their needs foremost. We also explore the balance between technology efficiency and the irreplaceable human element that MSLs bring – empathy, curiosity, perspective, context and critical thinking – that remains at the heart of every successful MSL interaction.

As you peruse the articles in this edition, I invite each of you to reflect on how innovations, particularly with AI and technology, can enhance your MSL activities. The future of the MSL role is not about replacing human expertise, it is about amplifying it. Embracing AI and digital transformation will strengthen our shared mission to bridge science and medicine that improves patient lives.

As we move into chilly Fall weather, grab a warm cup with your favorite beverage, cozy blanket and bring your screen to take in all that this edition offers readers to learn and grow together in our professional community! Thank you for taking time to read this edition and join us on a journey of exploration and innovation with global colleagues in Medical Affairs who have contributed impressive content! I hope this issue inspires you to see technology as a catalyst for greater scientific impact and collaboration in the MSL role!

With warmest regards,

Cherie Hyder, PharmD, MSL-BC

Editor in Chief
The MSL Journal

2025 MSL of the Year Awards: Perspectives from Winners

By Samuel Dyer, MD, PhD | Fall 2025

The 2025 MSL of the Year Awards took place during the 13th Annual MSL Society Conference in Miami on October 13-14, 2025. The awards recognize excellence in field Medical Affairs and are open to all MSLs and MSL managers worldwide. There are eight categories, including MSL of the Year, MSL Rookie of the Year, and MSL Manager of the Year for both the USA and international regions.

This year, 20 finalists were selected, and the winners were announced during the Awards Night Celebration. The judging process was conducted by an independent panel of nine MSL leaders from the pharmaceutical, biotechnology, and medical device industries. Each nominee submitted four letters of recommendation from key stakeholders, and judges scored all applications using defined evaluation criteria. Scoring was blinded to ensure fairness, and winners were only revealed during the event.

Following the event, we spoke with several winners about what the recognition meant to them, their journey to success, and advice to others including:

Kimberly Jaramillo

Syneos Health

MSL Rookie Manager of the Year USA

Jodi Mann

Corcept Therapeutics

MSL of the Year USA

Maren Stoeber

Orphalan GmbH

MSL of the Year Outside the USA

Bhrugu Yagnik

Thermo Fisher Scientific

MSL Rookie of the Year USA

1. What has winning the award meant to you?

Kimberly Jaramillo: Winning Rookie MSL Manager of the Year has been one of those moments where you pause, smile, and think, “Wow...okay, this actually happened.” Our work in Medical Affairs isn’t glamorous—it’s rooted in evidence, relationship-building, operational discipline, and a great deal of humanity. For the MSL Society to recognize that work is incredibly meaningful. It reinforces what I’ve always believed: you can lead with compassion, uphold scientific rigor, and keep people—patients, sites, colleagues—at the center of every decision.

And while the recognition is special, it also grounds me. I’m still very much a work in progress. The best leaders I know keep learning, refining, and evolving—and I plan to stay in that camp, award or not.

Jodi Mann: Receiving the award has meant so much to me on two levels: personally, and professionally. Personally, it has so much weight because I feel rewarded for the commitment and passion I have shown to my role and it also serves as a reminder for me to continue working on things with great dedication. On a professional level, it has enabled me to initiate and extend my contribution to the community and network in this field to a greater extent. More than anything, the award holds immense significance for me. It serves as an unwavering inspiration, propelling me to continue my journey of self and community upliftment. This journey aims to broaden the horizons of individuals who share my passion for advancing medical science and providing compassionate care to patients.

Maren Stoeber: Winning this award has been deeply meaningful to me and fills me with a great sense of gratitude. It represents not only a personal milestone, but also an affirmation of the principles that guide my work as an MSL: scientific integrity, collaborative engagement, and an unwavering commitment to improving the lives of patients. This recognition has reinforced how essential it is to translate complex evidence into meaningful clinical value, to build trusted scientific relationships, and to act on medical insights in ways that can truly support better patient outcomes. It serves as a powerful reminder of the privilege and responsibility that come with this profession.

I am also genuinely grateful to the exceptional cross-functional team I have the privilege to work alongside. Their dedication, expertise, and shared passion for making a difference play a crucial role in everything we accomplish. Together, we make an impact.

Bhrugu Yagnik: Winning the MSL Rookie of the Year award has been a humbling and affirming moment in my professional journey. It represents more than a personal achievement — it reflects the collective effort of mentors, colleagues, and cross-functional teams who believed in my potential. Transitioning from academia into the MSL profession was both exciting and challenging, and this recognition reinforces that the pursuit of scientific excellence, curiosity, and patient-centric impact truly matters.

It has also given me renewed purpose: to not only keep advancing as a Medical Science Liaison at The Binding Site (part of Thermo Fisher Scientific), but also to inspire and mentor the next generation of scientists aspiring to join our profession. It's a reminder that the MSL role is not defined by tenure, but by commitment, credibility, and contribution to science and healthcare.

2. Why did you enter the competition?

Kimberly Jaramillo: I entered the competition because representation matters. None of our paths into Medical Affairs look the same but if your north stars are aligned with service, science, people, and purpose, you eventually land where you're meant to contribute.

I also wanted the next generation to know that grit, consistency, and surrounding yourself with people who support your growth can take you far. What's meant for you will be yours – maybe not in the timeline you want and sometimes you only realize it only in retrospect. There is no single mold to fit—only the courage to embrace your narrative and own your path.

The MSL Society creates space for these diverse stories to be seen, respected, and celebrated. Showing up authentically—in the truest version of who I am and how I lead—felt important.

Jodi Mann: I received a nomination from the Senior Director, Medical Affairs at Corcept for the Medical Science Liaison (MSL) of the Year Award. Competing for me meant a chance to grow and to share my journey with others who may be traveling the same road as me. It was a chance to appreciate the difference I raised and to understand others with a similar MSL passion. The veteran competitors are passionate about the MSL work, and I wanted to use my work to encourage colleagues to reflect and appreciate the work I hope collectively adds to the advancement of the MSL profession.

Maren Stoeber: I decided to enter the competition because it felt like a meaningful moment to reflect on why this profession is so important to me. I am motivated by the chance to bring science into real clinical contexts, to understand the challenges and questions that matter to medical experts, and to help ensure that evidence can genuinely support patients in their journeys. Participating in the competition gave me an opportunity to express that motivation and to highlight the elements of the MSL role that inspire me and give my work purpose every day.

Bhruhu Yagnik: I chose to enter because I wanted to benchmark myself against peers within a profession I deeply respect. Having transitioned from a decade of translational immunology research into the MSL space, I saw this as an opportunity to reflect on my growth — how I've applied scientific expertise to real-world patient impact.

Equally important, I wanted to contribute to the visibility of early-career MSLs. Our field attracts brilliant scientific minds who often underestimate how transferable their skills are from the bench to the field. By participating, I hoped to demonstrate that strong scientific training, coupled with strategic engagement and empathy, can lead to immediate impact in industry-medical collaboration.

3. How do these awards benefit the MSL community?

Kimberly Jaramillo: These awards shine a light on the real, day-to-day impact of Medical Affairs—the bridge-building, the scientific stewardship, the operational finesse, and the emotional intelligence that rarely fit neatly into job descriptions.

The recognition also comes at a pivotal time for our industry. We're seeing a clear shift toward valuing Medical Affairs' perspective earlier in research and development because our insights matter. Field insights, site realities, and patient experiences bring nuance that data alone can't capture. When our perspective informs study design, feasibility, and strategic decision-making, it elevates the entire development process.

The MSL Society further elevates what excellence looks like in this evolving landscape: curiosity, credibility, collaboration, and a patient-centered compass. By recognizing leaders across different backgrounds and levels, these awards validate the work that anchors science back to what healthcare is fundamentally about: taking care of people—and not abstract “patients,” but real individuals who are someone's parent, sibling, partner, or child.

In doing so, these awards encourage all of us to keep raising the bar...and to remember that we're all still growing.

Jodi Mann: Awards like MSL of the Year have several implications for our community and these awards do not go unnoticed. First, such awards highlight actionable best practices and innovation, inspiring and motivating all MSLs to improve. Second, they foster industry pride and construct a sense of unity to bolster self-worth and recognition in a tight and difficult industry. Third, they increase the visibility of the MSL role internally in organizations and externally in the broader healthcare market, thereby driving MSL career development and position them as reliable scientific partners.

Maren Stoeber: These awards benefit the MSL community by showing how meaningful and multifaceted our role truly is. They offer a moment to recognize the impact MSLs can have — from raising disease awareness and strengthening scientific understanding to fostering meaningful, evidence-based scientific exchange across our field. By sharing real examples of how medical insights are translated into practical value, the awards help make our work more visible and better understood. They also inspire our community to continue evolving, stay curious, and value the contribution we can collectively make to the healthcare community and, ultimately, to the people they care for.

Bhruhu Yagnik: Awards like these elevate the entire MSL profession by reinforcing its strategic and scientific value. They:

- Showcase best practices: Recognizing excellence highlights how field medical teams drive innovation, insight generation, and scientific credibility within organizations.
- Inspire professional development: Seeing peers succeed encourages others to refine their communication, leadership, and data-driven decision-making skills.
- Foster community and mentorship: The awards create a platform for dialogue, networking, and collaboration across therapeutic areas and geographies.
- Increase visibility of MSL impact: Recognition brings attention to how MSLs bridge science and business — influencing research priorities, product strategy, and ultimately, patient outcomes.

These awards don't just celebrate individuals; they elevate the collective narrative of what MSLs contribute to modern healthcare.

4. As someone recognized for excellence within the MSL profession, what advice would you give others?

Kimberly Jaramillo: Lead with clarity and heart. Listen like it's your superpower. Follow through even when it's inconvenient. And give yourself permission to still be learning; in this field, the moment you think you've "arrived" is usually a sign you haven't.

Know your biases, too. We all have them, and they influence how we read a room, interpret signals, and decide what we think we already understand. Checking those assumptions isn't about being perfect — it's about staying open. And in Medical Affairs, staying open is everything, because real insights only surface when we listen without filtering them through our own lenses.

Stay curious, stay grounded, and make your leadership human. Medical Affairs moves fast, people are nuanced, and science never stops evolving. Don't let your warmth be mistaken for weakness — gracious and assertive can absolutely coexist. And above all, embrace your narrative. Your path, voice, and lived experience are part of what make this profession stronger.

Jodi Mann: To fellow MSL professionals, I would say: have a sense of curiosity, be true to yourself, and always remember how important relationships are. It is important to take the time and listen to your colleagues, stakeholders, and to do some introspection. Work with your strengths and be open to people teaching you something new. The most competent MSLs are the ones that paired their knowledge and skills on the science with emotional and social skills, in addition to a real interest in making a difference in the field of health care.

Maren Stoeber: My advice would be to stay grounded in the values that give our work meaning: genuine scientific curiosity, integrity in every action, and a consistent focus on the patient. Staying open-minded — to new ideas, different perspectives, and continuous learning — is essential for long-term growth in this role. Let your motivation come from the impact you can create, even when it isn't immediately visible. Turning evidence into something that supports understanding, raises disease awareness, or improves the patient journey can be incredibly rewarding. Cultivating this mindset — curiosity, integrity, and a willingness to learn — helps you navigate the role with purpose and authenticity.

Bhruhu Yagnik:

- Be scientifically grounded, but people-focused. Your credibility starts with science, but your success grows from relationships built on trust and empathy.
- Listen more than you speak. Understanding stakeholder needs is more powerful than simply presenting data.
- Be a bridge, not a broadcaster. Translate complex scientific concepts into actionable insights that help clinicians make informed decisions and your organization advance patient-centric strategy.
- Embrace technology and innovation. Integrate digital tools (like CRM and analytics) to strengthen engagement and insight generation.
- Seek mentorship — and offer it. I've benefited from remarkable mentors, and now I make it a priority to mentor PhD and postdoctoral fellows exploring the MSL path.
- Stay authentic and ethical. Integrity is the cornerstone of credibility. Every conversation, slide deck, or publication

should reflect scientific honesty and a focus on improving patient care.

5. What are the keys to being successful within the MSL profession?

Kimberly Jaramillo: Success in the MSL profession lives at the intersection of several truths:

- Scientific excellence: Understanding not just the data, but the “why” behind it.
- Operational discipline: The structure, clarity, and accountability that keep field work credible.
- Emotional agility: Reading a room and adapting your approach with respect for the person across from you.
- Cross-functional fluency: Collaborating effectively with Clinical, Medical, and external partners while maintaining objectivity.
- Humanity: Recognizing that every dataset, every protocol, and every insight ultimately touches real people who matter deeply to someone.

The strongest MSLs I know bring clarity into complicated conversations and calm into chaotic ones. They communicate with intention, treat people with respect, and never lose sight of the impact behind the science. At its best, this role becomes more than a job; it becomes a privilege. And that’s what the MSL Society continues to champion—professionals who are brilliant, compassionate, and still evolving.

The MSL Society has created a community where science, service, and humanity harmonize—and where insights are recognized as catalysts for stronger, more patient-centered research and development. I’m grateful to be part of that ecosystem. This recognition is not a finish line but a milestone, and I’m excited for the continued learning, collaboration, and impact ahead. Our work is never done—and that’s exactly what makes it meaningful.

Jodi Mann: It all comes to three core components: being active, working together with people, and having a growth mindset. Get actively involved, participate in initiatives or discussions, join events, and volunteer. Collaboration is crucial for the growth of every community, and for the MSL Society as well. Construct sincere connections with your colleagues and mentors, and offer your time and knowledge in support. Lastly, learning something new should be a constant throughout your life, the MSL occupation is being adapted to new things almost daily, and to stay on top of it, new ideas and ways of thinking should be embraced.

Maren Stoeber: In my view, success in the MSL profession begins with staying current on new evidence, clinical developments, and emerging data. A strong scientific foundation enables us to contribute relevant and accurate value to the medical community.

Equally important is the ability to recognise meaningful medical insights — from unmet needs to recurring clinical challenges — and translate them into clear, actionable contributions. This relies heavily on close cross-functional collaboration to ensure that insights are shared, aligned, and developed into initiatives that genuinely support the healthcare community. Working as one team amplifies our impact far beyond what any of us could accomplish individually.

Authenticity also plays a key role. It fosters the credibility and trust required to build lasting scientific relationships.

And throughout all of this, keeping the patient at the centre of our decisions provides direction and purpose. When scientific expertise, actionable insights, collaboration, and patient focus come together, the MSL role becomes a powerful driver of meaningful progress in healthcare.

Bhrugu Yagnik: From my experience, success as an MSL requires the intersection of scientific depth, strategic thinking, and emotional intelligence:

- Scientific Expertise: A strong command of your therapeutic area allows you to earn trust and navigate nuanced scientific discussions.
- Strategic Insight: Understanding the business and medical landscape enables you to align your field insights with company objectives.
- Cross-Functional Collaboration: Success comes from breaking silos — partnering with commercial, regulatory, and R&D teams to transform insights into action.
- Communication Skills: Whether presenting to a KOL or a regional leadership team, the ability to tailor and simplify complex information is vital.
- Adaptability: The healthcare environment is dynamic. Successful MSLs embrace change, leverage new technologies, and continuously learn.
- Patient Focus: Ultimately, everything we do should circle back to improving patient outcomes — that’s the

compass guiding every scientific exchange.

About the author:



Samuel Dyer, MD, PhD

Dr. Samuel Dyer is the CEO of the Medical Science Liaison Society and has over 25 years of international MSL experience. During his career, he has managed MSL teams and operations in over sixty countries across the United States, Canada, Europe, Africa, the Middle East, Australia, and New Zealand. He has facilitated the successful launch of pharmaceutical and medical device products for both Fortune 500 pharmaceutical companies and small biotechnology companies.

Dr. Dyer has coached, interviewed, and reviewed the CVs of countless aspiring MSLs. His insights and guidance have resulted in hundreds of aspiring MSLs successfully breaking into their first roles.

While leading the MSL Society, he has conducted MSL training programs for over 60 pharmaceutical, biotechnology, and medical device companies in more than 15 countries. Dr. Dyer has also written extensively on the Medical Science Liaison profession, including numerous published articles, benchmark studies, and reports. He has been the keynote speaker and moderated numerous international conferences on various MSL-related topics, including creating teams, management, MSL training, proper utilization of MSLs, global trends, and the KPIs and metrics used to measure MSL performance. Dr. Dyer has also served as a resource and consultant on a number of MSL-related projects for several organizations, including McKinsey & Company and Bain & Company.

Dr. Dyer has an MD from Washington University (Health & Science) School of Medicine, a PhD in Health Sciences from Touro University, a Master's degree in Tropical Biology (where he studied in the Amazon) from Southern Illinois University Edwardsville, and a Bachelor's degree in Biology from the University of the State of New York. Dr. Dyer also completed a certificate program for Executive Leadership and Strategy in Pharmaceuticals and Biotechnology at the Harvard Business School.

Dr. Dyer is the author of the multi-award-winning and Amazon #1 Best Seller "The Medical Science Liaison Career Guide: How to Break into Your First Role." The book is the first and only step-by-step guide on how to break into the MSL career (www.themslbook.com). He is also the author of the Medical Science Liaison Job Application Tracking & Interview Self-Evaluation Journal, which is available on Amazon.

Survey Reveals How Many Days per Week MSLs Engage with KOLs, and Why the Numbers Matter

By Samuel Dyer, MD, PhD | Fall 2025

One of the most frequent questions I am asked during Medical Science Liaison (MSL) training programs is how many days per week an MSL should engage with Key Opinion Leaders (KOLs) or other health care professionals (HCPs). Engagement may be in-person or virtual, although email communication is excluded from this article. Defining the ideal engagement frequency is challenging because the definition of “KOL” varies across organizations, therapeutic areas, and geographic regions. This variability affects expectations, performance metrics, and the overall interpretation of field effectiveness. Nevertheless, the frequency of engagement remains an essential indicator of the strategic impact of any field Medical Affairs team.

The MSL function continues to expand and evolve beyond its historical focus on KOL engagement. MSL responsibilities vary but typically include cross-functional collaboration, evidence generation support, insights collection, internal training, and contributions to the medical strategy for the product they support. However, despite this broader scope, consistent scientific interaction with external experts remains the core function of the role. The primary purpose of an MSL is to help KOLs and other HCPs make more informed clinical decisions based on published clinical data and real-world evidence while serving as an unbiased medical resource. With limited scientific exchange, MSLs may miss opportunities to fulfill this purpose, demonstrate value, and impact clinical decision-making.

Limited KOL engagement may, in part, be a consequence of restricted access to KOLs. Across more than 80 companies in more than 20 countries where the Medical Science Liaison Society has conducted formal MSL training programs, a recurring concern is KOL access. Whether driven by clinical pressures, institutional restrictions, virtual fatigue, or scheduling challenges, MSLs consistently report difficulty securing time with KOLs or receiving less time per engagement than before 2020. These obstacles make it even more important to understand typical engagement frequency and how it compares with expectations.

A 2015 global MSL Society survey revealed that many organizations expected MSLs to engage with KOLs approximately four days per week. To gain updated insight, I conducted a new poll in November 2025 with 471 global MSL professionals. Respondents were asked how many days per week they engage with KOLs, excluding email interactions. The results are presented below.

Table 1: On average, how many days per week do you speak/engage (in-person or virtually) with a KOL? (not including emails)



Source: Poll Survey conducted in November 2025

While the majority of MSLs engage with KOLs two to three days per week, the proportion consistently reaching four or more days remains small (Table 1). This finding becomes even more meaningful when comparing weekly KOL engagement volume data from the 2024 Global MSL Salary and Compensation Survey.

Table 2: Average Weekly MSL/KOL Engagements (In Person and Virtual)

Q. On average, how many in-person KOL engagements do you have per week?

Metrics	KOL Engagements
Average	3
Min	0
25th percentile	1
50th percentile (median)	3
75th percentile	4
Max	10
Number	1031
Number (10+)	
28	

Q. On average, how many virtual (i.e., Zoom, MS Teams, Webex, etc.) KOL engagements, do you have per week?

Metrics	KOL Engagements
Average	2
Min	0
25th percentile	1
50th percentile (median)	2
75th percentile	3
Max	10
Number	1020
Number (10+)	
11	

Source: 2024 Global MSL Salary and Compensation Survey

The survey found that on average, MSLs have a total of five KOL interactions (in-person and virtual) per week (Table 2). When compared to the poll results, which revealed that most MSLs concentrate engagement into just one to three days per week (Table 1), a structural imbalance becomes evident. Rather than a steady scientific presence throughout the week, engagements are compressed into narrow intervals, increasing the risk of superficial follow-up, reduced continuity, and missed opportunities for relationship development.

The implications deepen further when examining the number of KOL relationships MSLs are expected to maintain.

Table 3: How many KOLs do you maintain a relationship with? (i.e., how many KOLs are on your “list” that you engage with regularly throughout the year)

Company Type	Mean
Overall	49
Large Pharmaceutical / Biotechnology	53
Medium Pharmaceutical / Biotechnology	50
Small Pharmaceutical / Biotechnology	46
Medical Devices	38
Contract Research Organization (CRO)	38
Diagnostic Company	31
Contract MSL Organization	45
Other	34

Source: 2024 Global MSL Salary and Compensation Survey

Maintaining an average of forty-nine active KOL relationships while conducting only five total weekly engagements and concentrating those interactions into one to three days per week presents a significant structural challenge (Tables 1-3). If the primary purpose of the MSL is to help KOLs and other HCPs make more informed clinical decisions through unbiased scientific exchange, then an important question must be asked: are MSLs truly being positioned to maximize their scientific impact, or are

access constraints, internal administrative load, and competing priorities unintentionally limiting their impact and value?

The concern becomes even more evident when examined alongside the primary activities MSLs report performing. The 2024 Global MSL Salary and Compensation Survey demonstrates that nearly all MSL activities focus directly or indirectly on external scientific engagement.

Table 4: Which of the following activities do you participate in? (select all that apply)

Activity	Percentage	Number	Activity	Percentage	Number
Attending medical conferences (and other conference support)	97%	996	Supporting and coordinating company sponsored research/trials	64%	661
KOL relationship management	96%	992	Providing input for Medical Strategy	64%	658
Educating KOLs & other Health Care Professionals	94%	972	Tools Development (slides, training materials, etc.)	59%	607
Delivering scientific presentations	92%	948	Identify and training speakers	56%	574
Gathering Insights	90%	933	Material Review (publications, educational materials, slides, etc.)	52%	538
Responding to Medical Information Requests (MIR)	77%	799	Continuing Medical Education (CME) activities	26%	269
Competitive intelligence gathering	75%	774	Medical publications	25%	255
Supporting investigator led research (IITs, ISTs, etc.)	73%	755	HEOR presentations or research	13%	134
Training and supporting sales force	71%	729	Managed Care Activities	11%	110
Supporting Advisory Boards	68%	704	Other (please specify)	2%	23
Mentoring/Training new MSLs	68%	702			

Source: 2024 Global MSL Salary and Compensation Survey

These activities highlight the primary purpose of the MSL role. Nearly every typical or core MSL activity depends directly on consistent and meaningful engagement with KOLs. When only one to three days per week are dedicated to external scientific exchange, MSLs are forced to condense complex scientific, strategic, and relational responsibilities into narrow intervals. This compression increases the risk of diminished scientific depth, lower quality or missed insights, and less continuity across interactions. It also limits the ability of MSLs to cultivate value-added relationships over time, which require repeated scientific discussions, progressive trust building, and a deepening understanding of each KOL’s evolving clinical and research priorities.

This pattern also has important implications for performance measurement and internal perception of the MSL role. A recent global survey on the challenges of Key Performance Indicators (KPIs) and metrics for measuring MSL performance revealed that the most preferred method of performance indicators includes the number of KOL engagements (in-person, virtual, phone call), actionable insights submitted, and KOL relationships maintained. Lower engagement frequency may inevitably reduce the visible evidence that Medical Affairs leadership relies on to justify budget allocation, headcount decisions, and the overall strategic influence of MSL teams.

While the data reveals that most MSLs engage with KOLs one to three days per week, maintain nearly fifty active KOL relationships, and conduct an average of five total engagements weekly, it simultaneously exposes a significant tension between expectations and execution (Tables 1-3). If the primary purpose of the MSL role is to support informed clinical decision-making through unbiased scientific exchange, then engagement models, access strategies, and internal prioritization must be realigned to ensure MSLs are structurally enabled, not unintentionally constrained, from achieving their full scientific impact.

These findings do more than describe current performance. They raise foundational questions about how the profession must now evolve.

Provocative Questions for the Future of the MSL Profession

As the Medical Science Liaison profession continues to evolve in response to increasing scientific complexity, operational pressure, and digital transformation, the engagement data presented here should prompt not only an evaluation of current performance but also a critical evaluation regarding the future structure and purpose of the profession.

If most MSLs are engaging with KOLs only one to three days per week, yet are expected to maintain nearly fifty KOL relationships and deliver impact across education, insights, research support, and strategy, what will sustainable excellence look

like five years from now?

As artificial intelligence (AI) becomes more integrated into Medical Affairs, will AI meaningfully reduce the internal burden that currently competes with external engagement, or will it create new layers of complexity that further fragment MSL focus?

If virtual engagement continues to expand, will organizations utilize it to increase their total scientific reach and depth of exchange, or will it primarily become a tool for efficiency rather than impact?

As leadership teams increasingly rely on metrics and performance scoring, are current MSL KPIs truly measuring scientific influence and clinical decision impact, or are they still overly weighted toward internal priorities?

Finally, if the primary purpose of the MSL is to enable more informed clinical decision-making through unbiased scientific exchange, how will organizations ensure that the structural design of the role consistently protects and prioritizes this purpose amid expanding internal demands?

These are not theoretical questions. They represent the practical decisions that will shape the value, credibility, and long-term strategic relevance of the MSL profession in an era defined by accelerating science, constrained access, and rapid AI digital transformation.

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Dr. Samuel Dyer is the CEO of the Medical Science Liaison Society and has over 25 years of international MSL experience. During his career, he has managed MSL teams and operations in over sixty countries across the United States, Canada, Europe, Africa, the Middle East, Australia, and New Zealand. He has facilitated the successful launch of pharmaceutical and medical device products for both Fortune 500 pharmaceutical companies and small biotechnology companies.

Dr. Dyer has coached, interviewed, and reviewed the CVs of countless aspiring MSLs. His insights and guidance have resulted in hundreds of aspiring MSLs successfully breaking into their first roles.

While leading the MSL Society, he has conducted MSL training programs for over 60 pharmaceutical, biotechnology, and medical device companies in more than 15 countries. Dr. Dyer has also written extensively on the Medical Science Liaison profession, including numerous published articles, benchmark studies, and reports. He has been the keynote speaker and moderated numerous international conferences on various MSL-related topics, including creating teams, management, MSL training, proper utilization of MSLs, global trends, and the KPIs and metrics used to measure MSL performance. Dr. Dyer has also served as a resource and consultant on a number of MSL-related projects for several organizations, including McKinsey & Company and Bain & Company.

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Dr. Dyer is the author of the multi-award-winning and Amazon #1 Best Seller "The Medical Science Liaison Career Guide: How to Break into Your First Role." The book is the first and only step-by-step guide on how to break into the MSL career (www.themslbook.com). He is also the author of the Medical Science Liaison Job Application Tracking & Interview Self-Evaluation Journal, which is available on Amazon.

Provider Insights: Working with Medical Science Liaisons

By Alex Childs, DMSc, PA-C | Fall 2025

Working with medical science liaisons (MSLs) across various companies, I've come to appreciate aspects of skill sets as we interact and work together. Let me give you some of those insights.

I'm a doctor of medical science (DMSc), physical associate/assistant (PA) clinical provider. I've practiced in family medicine these past years, but have a special interest and focus for my practice with genetic testing. This is both in the hereditary cancer risk assessment/testing space, as well as in pharmacogenetics.

Communication and timing can encompass a lot of the following insights I'd offer to MSLs from a provider perspective, as one main role of an MSL is to gather insights.

Insights

1. Extending an introduction and providing a role explanation

Working with industry companies is like traveling. The overall steps can be similar; you get to an airport, get on a plane, land, and get to the hotel, then the activities. However, the landscape can be vastly different wherever you go.

For providers new to a medical test and a company offering this, the process and integration can be vastly different. From quality integration or not, ordering flow, results interpretation, and coordinating out the initial issues. This can be a lot. Many times I've heard about the wizard science professional in the background that can be available; however, most of the time, the person is unknown, and NO communication has been established.

Thus, insight number one would be to make contact and reach out to new utilizing providers. You never know if this new provider will be the next key opinion leader (KOL) that you'll be trying to contact later on. Help establish a good relationship and guide test interpretation if needed and desired. Establish and explain your role to separate out questions from sales representatives who are great but different from the role of an MSL. Once the relationship is established and the MSL understands the provider's direction, questions, goals, and needs, then the MSL can effectively customize responses and give valuable communication. I always appreciate the MSLs who are able to communicate quickly and effectively with accurate information directed to what I'm looking for specifically.

2. Following up

Time slips on and away like the day of a busy worker. Initial help is valuable, but quality long-term follow-up is the gold at the end of the rainbow: the long game.

Everyone is busy, including the MSLs, but also the providers with whom they are trying to coordinate and work with. If a good initial relationship is established, why not continue that with long-term follow-up on what the provider is working on or has asked about? It will pay off. Sometimes, initial enthusiasm for utilizing a specific test fades when other items continuously take up a provider's time, and other items aren't at the forefront. When an MSL follows up based on the known provider interest and experience, then many important insights can be gathered. How a company's test is doing months after implementation tells much about the quality and future direction of the product. I've attempted to implement various tests, but the ones that last past a few months tend to be the ones utilized for years and spread to other locations or providers. Play the long game and stay in contact.

3. Coordination with sales reps and providers

A provider may not be familiar with the role of an MSL, or perhaps they didn't know the role existed at all. Maybe they think the MSL is a sales rep. Remember, this role can be made clear initially with introductions. This doesn't eliminate the other team members. They are still coordinating with the provider and possibly making plans. The left hand needs to know what the right hand is doing. A provider can discern quickly when a group isn't driving in the same direction.

If a site visit is planned and the sales rep is coming with other members of the team, including the MSL, how will that be organized for compliance and provider time? Was this what the provider wanted, or was it made on assumptions? Easy coordination and communication can solve most issues. If the sales rep wants to introduce one of the MSLs who is flying out for this visit, timing will be important so compliant conversations and education can occur, rather than the provider shaking hands and then going on to their next patient.

What impact will the MSL have on the provider? What information will be ready to share based on the provider's interest or educational need?

Sometimes, a quick coordinating team meeting can make all the difference for both sides of the involved groups.

Insights wanted

4. If an insight is wanted, why not ask for it?

I've appreciated the direct approach when an MSL wants something specific. Dancing around the topic takes time and energy, where I might be wondering why we are spending time on this topic rather than knowing the prime objective. Being upfront with what you are looking for helps guide communications rather than having a secret or unknown motive. Providers are natural helpers and desire to contribute where they can; if then tied to their interest, most are happy to offer their insights for improvements and guidance. On a pharmacogenetic report, I've been asked where I see the report going in the years to come. This specific question is great and allows PGx future outlooks from a provider perspective; however, I'd recommend following up on adjustments made or considered to show its value and can make a difference.

In summary, when working with providers as an MSL, consider being proactive about the first introduction and explaining your role, have follow-up, coordinate with sales and providers, and ask for insights!

About the author:



Alex Childs, DMSc, PA-C

I'm a doctor of medical science (DMSc), physical associate/assistant (PA) clinical provider. I've practiced in family medicine these past years, but have a special interest and focus for my practice with genetic testing. This is both in the hereditary cancer risk assessment/testing space, as well as in pharmacogenetics.

Digital Transformation of Medical Affairs Through Artificial Intelligence

By Dustin M. Dunham, DMSc, DC, MBA, FRSM, FRSPH, FACHDM | Fall 2025

The digital transformation of medical affairs through artificial intelligence (AI) is a rapidly evolving field with significant potential to reshape the pharmaceutical and MedTech industries. AI is moving beyond tactical use cases and becoming a crucial part of medical affairs strategy and operations. It enables medical affairs to transform its role, becoming more strategic, data-driven, and patient-focused. By leveraging AI's capabilities, medical affairs can improve efficiency, gain deeper insights, and ultimately contribute to better patient care and business results.

The burgeoning interest in AI applications was demonstrated at the recent 13th Annual Medical Science Liaison Society meeting, where over 50 medical science liaisons (MSLs) gathered for a didactic and hands-on workshop to explore and share best practices in artificial intelligence use cases. Guided by Kolb's four stages of experiential learning, the workshop highlighted reflections across concrete experience, reflective observation, abstract conceptualization, and active experimentation. With an emphasis on generative artificial intelligence (GenAI) modeling and its capacity to create text, images, videos, audio, software code, and other data types, the group of MSLs identified AI-enabled opportunities in a) medical affairs strategy, b) communications, c) field insights, d) evidence generation, and e) stakeholder engagement.

- **Medical Affairs Strategy:** When defining and shaping medical strategy and strategic decision-making, AI isn't just a tool; it's a strategic partner. AI enables dynamic strategy refinement by assessing the impact of medical affairs activities and suggesting real-time tactical adjustments. AI-powered solutions are transforming key opinion leader (KOL) engagement by streamlining KOL identification, forecasting impact, and personalizing engagement strategies. Thanks to real-time KOL intelligence tools, the days of slow, manual searches for KOL details across clinicaltrials.gov, PubMed, academic medical center faculty websites, clinical guideline writing committees, and appropriate use criteria (AUC) authors are gone.
- **Communications and Content Development:** GenAI solutions can help save time on routine tasks, allowing teams to focus more on higher-impact activities. Digital tools can assist in managing incoming Medical Information queries by generating content tailored to their complexity, urgency, and context. For more complex inquiries, AI can prepare detailed initial responses or summaries, which are then forwarded to specialists for review. New solutions can also analyze incoming queries to identify recurring themes, enabling the development of targeted FAQs, standard response letters, or educational materials. AI may also curate educational content and

communications based on audience preferences and behavior.

- **Field Insights:** One of the most valuable initiatives performed by MSLs is the gathering, synthesis, collation, and sharing of actionable insights captured during scientific exchange with health care professionals, thought leaders, and industry experts. AI-enhanced insight methods can act as insight sorters and amplifiers, detect emerging trends and KOL sentiments, and both automate and customize reporting. Reports enriched with actionable next steps and useful visualizations turn raw data into strategic outputs. GenAI offers a revolutionary opportunity to distribute insights compliantly and on a broader scale.
- **Evidence Generation:** MSLs play a key role in gathering real-world evidence, addressing scientific and knowledge gaps, enabling clinical differentiation, and supporting investigator-sponsored research. AI-powered evidence generation helps identify knowledge gaps and unmet needs among KOLs and patients, guiding research initiatives, content creation, and engagement plans. The extensive computing capabilities of AI can quickly analyze patient data, clinical trials, publications, and more to uncover crucial insights, monitor adverse events, and provide data-driven advice to healthcare professionals.
- **Stakeholder Engagement:** GenAI can act as a coordinator for cross-functional communication, improving and clearly conveying synthesized data to internal stakeholders. AI-enabled multichannel and omnichannel communications may enhance internal stakeholder interactions and collaboration by quarterly sharing of field insights, intelligence gathered during advisory boards, emerging data from scientific congresses, and summaries of MSL activities as part of performance reviews with medical affairs leadership, among other things.

Despite the benefits and transformative potential of AI-driven tools, many issues must be considered and addressed, including data quality, ethics, compliance, and the risk of depersonalizing the MSL/KOL relationship. The black-box nature of AI algorithms can lead to inaccuracies in training data, which may cause biased outputs. Additionally, over-reliance on digital tools could diminish essential human elements, resulting in a dehumanized experience. Therefore, medical affairs teams must implement effective mitigation strategies, identify key risks, establish responsible AI principles, develop an AI governance model, and put a compliance policy framework into practice. To prevent dehumanization in the MSL/KOL relationship, it is crucial to prioritize strategies that incorporate an understanding of complex data and human qualities. This includes emotional intelligence, authenticity, compassion, empathy, active listening, social awareness, adaptability, and a focus on shared human experiences.

As illustrated during the recent MSL Society AI workshop, the future of AI-enabled medical affairs is indeed promising, thanks to the profession's ability to manage ethical and compliance issues by strategically, deliberately, and systematically integrating digital tools as a forward-thinking partner.

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Dustin is a board-certified clinician and scientist, an executive MBA, and a Medical Affairs strategist with 20+ years of combined

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Conference Proceedings: Empowering MSLs in Transition - Strategy, Identity, and Tools for Reinvention

By Eytayo Fakunle, PhD, MPH, MBA, MSL-BC | Fall 2025

The 13th Annual MSL Society Conference was held in Miami, Florida, from October 13–14, 2025, and included a workshop addressing career transitions for Medical Science Liaisons amid significant pharmaceutical workforce disruptions. With 128 layoff rounds reported in the first half of 2025—an increase of approximately 32 percent year over year (1)—the session provided practical frameworks for MSLs navigating career uncertainty. Thirteen MSLs and aspiring MSLs attended this interactive workshop, which emphasized peer-to-peer knowledge sharing, competency assessment, technological tools, cultural fit evaluation, and resilience strategies.

Session Framework and Approach

Tayo Fakunle opened the session by asking how many attendees had experienced job transitions. She clarified her approach: *"I'm no expert—this isn't a lecture; it's a conversation we're going to have together. I'm just a peer, a Medical Science Liaison in transition, just like some of you are."* Cherie Hyder, a senior leader with 35 years of experience in Medical Affairs, co-led the session with insights from decades of industry evolution. This dual perspective fostered both relatability and strategy, helping attendees frame career transition as a manageable and navigable professional phase rather than a setback.

The session addressed five key learning objectives: understanding Medical Affairs trends, conducting competency assessments, using innovative tools for job search and interviews, evaluating company culture through the Competing Values Framework (CVF), and building visibility during transitions.

Before diving into content, a live Poll Everywhere activity allowed participants to share their transition challenges and career concerns anonymously. Responses highlighted themes of confidence loss, challenges transferring to new therapeutic areas, limited network visibility, and concerns about company stability during job searches.

Figure 1. Poll results from the workshop *"Empowering MSLs in Transition: Strategy, Identity, and Tools for Reinvention"* at the 13th Annual MSL Society Conference (Miami, October 2025).

What is your biggest challenge during career transition as an MSL?



Powered by  Poll Everywhere

Industry Context and Disruption Patterns

The discussion framed industry restructuring as structural rather than personal. Major companies—including Gilead, Bristol Myers Squibb, and Novo Nordisk—implemented broad reductions in 2025, while smaller biotechs faced 70-90 percent workforce cuts (2). Key disruption drivers included patent cliffs, clinical-trial failures, investor pressure, AI automation, limited venture funding, and portfolio consolidation. Participants were encouraged to reframe job loss from “*I was let go*” to “*The system is evolving, and I’m evolving with it.*” A case study illustrated warning signs of organizational instability: executive turnover, pipeline reprioritization toward late-stage assets, and budget freezes on approved projects. Participants were reminded that early recognition of such patterns enables proactive career planning. The workshop also reviewed Medical Affairs model evolution toward hybrid field structures, increased reliance on contract MSLs, and AI-enabled workflows. The idea of a “career lattice,” emphasizing lateral skill-building and adaptability, was presented as a modern replacement for traditional hierarchical career ladders.

Psychological Dimensions of Career Transition

The session acknowledged the emotional impact of job transition using the grief model—denial, anger, bargaining, depression, and acceptance—as a framework to normalize experiences. A four-step reinvention model was introduced: reflection (self-assessment), mindset shift (choosing growth over fear), action (rebuilding intentionally), and value proposition (recognizing enduring strengths). Tayo emphasized the importance of community and identity beyond company affiliation. She described the MSL Society as a stable professional home for all Medical Science Liaisons—employed or in transition—providing both emotional grounding and tangible professional support.

MSL Competency Framework

Cherie presented the MSL Competency Framework, which defines eight enduring competencies: relationship management, communication, leadership, evidence generation, business acumen, scientific expertise, technology fluency, and industry awareness. These competencies serve as anchors for career adaptability across company types and therapeutic areas. Following the overview, participants engaged in a discussion reflecting on how the MSL role is evolving, including changes in KOL expectations, leadership influence on medical strategy, evidence generation, value demonstration, and future competency priorities.

Technological Tools for Career Transition

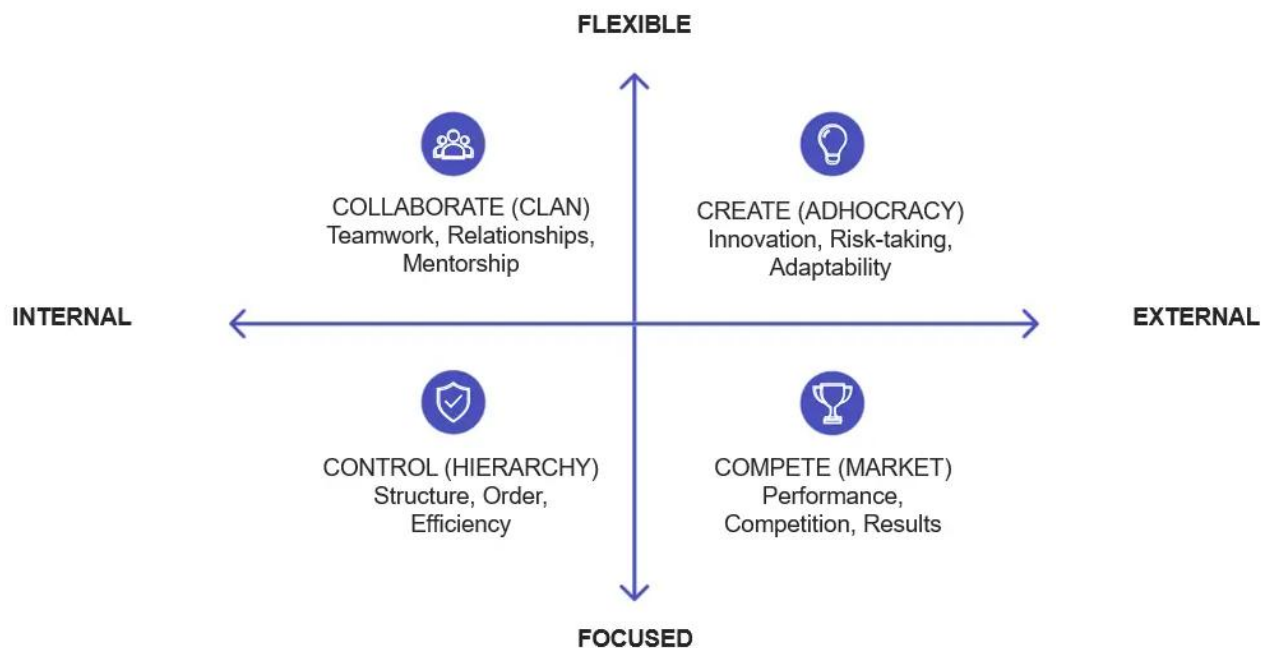
The session also explored how AI-driven and bibliometric tools can serve as strategic assets for MSLs in transition (3-7). AI tools

were discussed as iterative thinking partners for practicing interviews, summarizing publications, creating scientific narratives, and refining medical messaging. Bibliometric tools were highlighted for their ability to map key opinion leader networks, identify publication clusters, and track emerging trends. Many of these tools are freely available, allowing MSLs to continue scientific engagement and territory analysis without reliance on proprietary platforms while between roles.

Cultural Fit Assessment

A model called the Competing Values Framework (CVF) was introduced to assess company culture and improve role alignment (8, 9). When attendees were asked if they were familiar with it, none raised their hands, showing its novelty for many MSLs. The CVF defines four culture types: Clan (collaboration and relationships), Adhocracy (innovation and risk-taking), Market (competition and results), and Hierarchy (structure and efficiency). Most organizations reflect aspects of all four, but one type typically dominates. Understanding these cultural profiles helps MSLs decide whether a company fits their natural work style—or where adaptation might be necessary. A reflective activity prompted attendees to evaluate past or current role satisfaction and identify alignment criteria for future roles.

Figure 2. The Competing Values Framework (CVF) illustrates four organizational culture types across two dimensions—flexibility vs. control and internal vs. external focus. Although most organizations reflect elements of all four quadrants (Collaborate, Create, Compete, Control), one typically dominates. Knowing the dominant quadrant helps MSLs assess cultural fit and adapt to succeed.



Risk Assessment, Visibility, and Resilience Strategies

The presenters shared practical guidance for assessing company risk when evaluating future opportunities, highlighting key indicators such as shifts in corporate culture or leadership, pipeline strength, investor activity, and the level of restructuring or single-asset dependency. Recognizing these patterns was emphasized as essential to making informed career decisions. Visibility was discussed as a strategic differentiator through maintaining a consistent professional presence on platforms like LinkedIn and expanding professional networks. Practical methods for sustaining professional and financial momentum included pursuing short-term MSL contracts, consulting, advisory roles, and medical writing opportunities. MSLs with clinical qualifications can pursue part-time clinical roles, such as per diem pharmacist or nursing positions, during transition periods.

Conclusion

The session reframed transition as an evolution rather than an interruption. Participants were encouraged to approach career change with structure, strategy, and community support. The closing message reinforced that Medical Affairs careers are nonlinear driven by adaptability, purpose, and lifelong learning.

Author Note

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Tayo Fakunle is a Senior Medical Science Liaison with a career spanning the pharmaceutical, biotechnology, and medical device industries. She brings therapeutic experience across oncology, respiratory disease, allergy and immunology, orthopedics, cell therapy, and regenerative medicine. Tayo is committed to evidence-based scientific exchange, the generation of actionable medical insights, and building impactful partnerships with healthcare professionals and academic institutions. She is also passionate about professional development in Medical Affairs and advancing career resilience strategies for scientific professionals.



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Cherie Hyder is Senior Director of Medical Affairs Consulting at Syneos Health, where she supports strategic medical affairs capability building across therapeutic areas. With more than 35 years of industry experience, she has held leadership roles across drug development, medical strategy, and field medical excellence. Her career includes contributions at the U.S. Food and Drug Administration (CDER), Pfizer, Novartis, Eli Lilly, Avanir, Solvay, and Biohaven Pharmaceuticals, where she supported the virtual launch of Nurtec ODT. Cherie also serves as an adjunct faculty member and is recognized in the Medical Affairs community for her mentorship and leadership in MSL development.

Business Acumen in Medical Affairs: Towards a New Paradigm of Leadership in the Pharmaceutical Industry

By Juan de la Parra, PhD | Fall 2025

Introduction: The Traditional Conflicts Between Marketing and Medical Issues

The pharmaceutical industry has evolved considerably in recent decades, transforming from a model focused exclusively on the research, development, and commercialization of drugs to a complex ecosystem where science and commercial strategy are forced to work together. However, this evolution has generated significant structural tensions, particularly between marketing departments and medical affairs which have resulted in operational inefficiencies and conflicts of interest that limit the potential for innovation and, ultimately, in maximizing and optimizing the use of new medicines.

We can find many examples of these conflicts in the literature. These are not merely operational, but reflect fundamental differences in objectives, evaluation metrics and most seriously, a chronic blindness that prevents us from seeing and assuming how the combination of these functions allows us to maximize and optimize the company's results.

A paradigmatic example of these conflicts arises in the role of Medical Science Liaisons (MSLs). MSLs are scientific advisors and communicators who provide objective medical-scientific information in a reactive manner, while the sales representative's focus is commercial and promotional. In practice, however, this tension manifests itself particularly acutely when marketing teams sometimes push for traditional business metrics that are incompatible with the role that defines the MSL role.

Marketing departments traditionally focus on business metrics such as market share, sales volume, and return on investment, operating under the pressure of quarterly results and growth targets. On the other hand, medical affairs works to provide unbiased information to opinion leaders about pathology and the pharmaceutical solutions they work on; However, if pharmaceutical companies do not develop, establish, and convince themselves of adequate alignment policies between teams, they may find themselves in an ethically compromised situation.

The Emerging Paradigm: Medical Affairs as a Strategic Bridge

The Medical Affairs function has undergone a fundamental transformation, evolving from a traditionally reactive and supportive

role to a central strategic position. The Medical Affairs role in pharmaceutical companies creates a unique opportunity to ensure internal linkage between Research and Development (R+D) and Commercial/Marketing functions, as well as manage external scientific engagements with multiple stakeholders.

This evolution has been particularly evident in the role of the Medical Advisor (MA), whose role and responsibilities continue to evolve. The MA is a hybrid office-field position whose primary mission is to foster collaborative relationships with key opinion leaders and catalyze the two-way transfer of scientific knowledge between internal and external stakeholders.

However, for this transformation to be successful, MAs require competencies that have not traditionally been part of their basic medical or scientific training. Understanding business strategies, market analysis, financial management, organizational leadership, and effective communication has become indispensable to effectively navigate this new ecosystem.

The Skills Gap: Beyond Scientific Knowledge

The traditional profile of the MA has been fundamentally based on clinical excellence and in-depth scientific knowledge. However, the current demands of the role require a sophisticated understanding of the strategic context in which they operate. To illustrate this fundamental transformation, it is essential to compare traditional roles with the emerging competencies that the modern business context demands.

Comparison Table: Medical Advisor Functional Evolution

Dimension	Medical Advisor Tradicional	Strategic Medical Advisor	Justification of the Transformation
Main Focus	Specialized clinical knowledge and therapeutic domain	Integration of clinical expertise with strategic business understanding	The complexity of the pharmaceutical ecosystem requires professionals who can simultaneously navigate multiple scientific and commercial frameworks

Dimension	Medical Advisor Tradicional	Strategic Medical Advisor	Justification of the Transformation
Success Metrics	Number of medical interactions resolved, accuracy of scientific information	Hybrid KPIs that include scientific impact, strategic alignment and business insights generation	Traditional metrics don't capture the strategic value that MAs can generate for the organization as a whole
Interaction with Marketing	Reactive and often conflictive relationship, with clearly separated roles	Proactive collaboration as a strategic partner in the planning and execution of initiatives	Traditional conflicts limit organizational efficiency and require a new collaborative paradigm
Stakeholder Management	Interaction mainly with KOLs and the medical community	Integrated management of internal stakeholders (marketing, sales, regulatory) and external stakeholders (payers, authorities)	Modern market access requires alignment with multiple stakeholders with diverse goals

Data Analysis	Interpretation of clinical studies and scientific evidence	Synthesis of clinical, epidemiological, economic, and market data to generate actionable insights	Informed decision-making requires integration of multiple data sources beyond clinical evidence
Communication	Technical communication aimed at specialized medical audiences	Adaptive communication that translates scientific concepts for commercial audiences and vice versa	Organizational effectiveness depends on interdisciplinary communication skills

Dimension	Medical Advisor Tradicional	Strategic Medical Advisor	Justification of the Transformation
Strategic Planning	Limited or no participation in corporate strategic planning	Active contribution in the formulation of product and portfolio strategies	MAs possess unique insights that can inform critical strategic decisions
Financial management	Basic or no knowledge of economic and budgetary aspects	Understanding of financial models, cost-effectiveness analysis, and return on investment	Medical decisions have significant economic implications that require financial understanding
Innovation and Development	Focus on existing evidence and established protocols	Proactive identification of research and development opportunities based on market needs	Effective innovation requires an understanding of both scientific gaps and market opportunities
Risk Management	Identifying clinical and safety risks	Comprehensive risk assessment including clinical, regulatory, commercial and reputational aspects	Modern risks are multidimensional and require holistic assessment

This transformation does not simply represent an expansion of responsibilities but a fundamental reconceptualization of the role of the Medical Advisor as a catalyst of strategic value. The rationale for each of these new competencies is based on the reality that the modern pharmaceutical environment operates as an interconnected ecosystem where scientific, commercial, and strategic decisions cannot be made in isolation.

The need for an integrated approach becomes particularly evident when we consider that traditional Medical Advisors, despite their exceptional clinical expertise, are often limited in their ability to generate organizational value due to their limited understanding of the broader strategic context.

The evolution towards the strategic model allows Medical Advisors to function as true business partners, capable of translating scientific insights into viable commercial opportunities and, conversely, interpreting commercial imperatives within appropriate ethical and scientific frameworks. This “two-way translation”

capability is particularly critical for resolving traditional conflicts between marketing and medical affairs, as it makes it easier to create shared goals and mutually beneficial success metrics. Since medical affairs is considered the “data custodian”, they need to know how to identify unmet medical needs of the relevant market, and fill in the gaps in the local medical literature by facilitating data generation. In addition to market research, the medical department can contribute by doing what is called

medical research, collecting epidemiological data (incidence, prevalence), which can refine business forecasts/estimates.

This broadening of the functional scope requires specific competencies in *business acumen* that include an understanding of pharmaceutical business models, competitive analysis, stakeholder management, and the ability to translate scientific insights into strategic opportunities. The absence of these skills generates not only operational inefficiencies but also lost opportunities for value.

Business Acumen training: Critical components

Business acumen training for Medical Advisors must address multiple complementary dimensions that allow a comprehensive understanding of the pharmaceutical business environment. First, it is critical to develop competencies in strategic analysis that allow Medical Advisors to understand not only the positioning of their products in the market but also competitive dynamics, regulatory trends, and opportunities for innovation.

Second, training should include strong components of financial management and value analysis. Modern Medical Advisors must be able to assess the return on investment of medical initiatives, understand reimbursement and market access models, and articulate the economic value of medical interventions in terms that resonate with commercial and health policy stakeholders.

Third, competencies in stakeholder management and strategic communication are critical. To ensure that medical information specialists perform their role accurately and compliantly, companies must have robust training processes in place. This need extends beyond mere medical information to the ability to influence and align diverse internal and external stakeholders around common strategic objectives.

Transformational Leadership: From Conflict to Collaboration

Business acumen training represents more than just an addition of technical skills; it constitutes a fundamental transformation in the leadership model within the pharmaceutical industry. Medical Advisors equipped with these competencies can serve as catalysts for organizational change, facilitating the transition from conflicting models to collaborative paradigms.

This new leadership model is characterized by the ability to simultaneously navigate multiple frames of reference: scientific, commercial, regulatory, and ethical. Medical Advisors trained in *business acumen* can act as organizational translators, facilitating effective communication between traditionally siloed departments and aligning seemingly divergent objectives around common strategic goals.

Leadership transformation also involves a reconfiguration of success metrics. Rather than evaluating performance exclusively in terms of isolated scientific or business activities, the new paradigm requires integrated metrics that capture the holistic value generated through interdisciplinary collaboration and the creation of organizational synergies.

Implications for Organizational Development

The successful implementation of *business acumen* training programs for Medical Advisors has profound implications for organizational development in the pharmaceutical industry. First, it requires an institutional commitment to investing in talent development that goes beyond traditional technical training approaches.

Second, it needs a reconfiguration of organizational structures that facilitates interdisciplinary collaboration and formally recognizes the expanded strategic role of Medical Affairs. This can include creating permanent cross-functional teams, modifying incentive systems to reward collaboration, and establishing communication channels that facilitate the two-way flow of information between departments.

Third, transformation requires a cultural shift that values diversity of perspectives and competencies as a strategic asset. Organizations must evolve from cultures that reward close specialization to ecosystems that celebrate the integration of knowledge and the ability to generate value through the synthesis of diverse disciplines.

Conclusion: Towards an Integrated Future

The need for *business acumen* training for Medical Advisors is not simply a response to current competitive pressures, but a strategic investment in the sustainable future of the pharmaceutical industry. The traditional model of organizational silos and interdepartmental conflicts is fundamentally unsustainable in an environment characterized by increasing regulatory complexity, price pressure, and demand for comprehensive value evidence.

Medical Advisors equipped with strategic competencies represent a unique opportunity to lead this transformation, functioning

as catalysts for organizational change and facilitators of new value creation models. Their unique position at the

The intersection of science and strategy makes them ideal agents to drive the evolution towards more integrated, collaborative, and effective organizations.

Investment in this training will not only benefit the individuals and organisations directly involved, but will contribute to the overall strengthening of the pharmaceutical sector, improving its ability to respond to global healthcare challenges while maintaining economic viability and continuous innovation. The future of the pharmaceutical industry depends heavily on our collective ability to transcend the limitations of traditional organizational models and embrace more integrated and collaborative paradigms of professional leadership.

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He has participated in different drug launches in the field of neurology at Eli Lilly, GW Pharmaceuticals/Jazz Pharmaceuticals, and Angelini Pharma.

Juan earned his PhD in biomedicine from the Complutense University in 2017 with an abroad experience at The Hospital for Sick Children in Toronto (Canada). After moving to the pharma industry, he worked as an MSL in different projects of Medical Affairs, launching several breakthrough innovative solutions in the field of epilepsy, migraine, and rare diseases. Currently, he is Medical Advisor Neurology at Angelini Pharma, focusing on epilepsy, and as he is Director of a master's degree programme for future MSLs at CESIF.

Reflections from a Malaysian MSL - Growing With the Profession

By Dr Arumtathy Chandran, MD, USM | Fall 2025

My journey into the Medical Science Liaison (MSL) role did not begin in the pharmaceutical industry, it began in the hospital. I spent five years working in a clinical setting, learning firsthand about patient care, the challenges of treatment, and the realities faced by both patients and healthcare providers. Those years shaped my perspective deeply; I saw where medicine could change lives, but also where gaps lie, be it in the ever-advancing medical field, limitations in resources, and ever-changing policies. This experience eventually led me to pursue a career in the pharmaceutical field with a local pharmaceutical distributor in the SEA (Southeast Asia) region, where I discovered the role of the MSL, a position uniquely designed to bridge the worlds of science and patient care. What once began as a profession focused on disseminating clinical knowledge has now become a platform for driving insights, collaborating with healthcare professionals on clinical research, and shaping the future of healthcare management in Malaysia and beyond.

An MSL is a scientific professional within Medical Affairs who engages with healthcare providers to exchange knowledge, generate insights, and support evidence-based decision-making. MSLs focus on science and serve as trusted partners in advancing patient care. To me, the essence of the role is simple yet profound: ensuring the right medicine reaches the right patient for the best possible outcome.

One challenge I faced early in my MSL career was learning how to build trust with key opinion leaders (KOLs). Malaysia's healthcare system is diverse, including both public and private settings. Every conversation revealed different needs of the healthcare professionals in their respective settings. Malaysia's diverse patient populations also demanded various needs, thus providing valuable insights into treatment practices and highlighting gaps where improvements could be made, such as patient access to treatments, a multidisciplinary approach, inter-usage of insurance reimbursement, and public health funds. Earning the trust of KOLs required patience, consistency, and cultural sensitivity. But once trust was built, these partnerships became powerful drivers of change, leading to more meaningful exchanges and even collaborative research initiatives.

The most rewarding part of my work has been collaborating with KOLs on clinical studies and real-world data projects. While Malaysia may not conduct the same volume of large-scale trials as bigger markets, the data we generate is no less important. It reflects our unique patient populations, our local practices, and the unmet needs that must be addressed. Contributing to these projects has been a reminder that science is global, but solutions must always be locally tailored.



Fig 1: As a Medical Affairs team, we participated in the Real-World Evidence Conference to equip ourselves with knowledge on real-world evidence.

In my current organization, I also play a role in product evaluation. This means critically reviewing scientific evidence for new products that the product sourcing team is considering for distribution. At first, this responsibility felt daunting as our assessments could influence whether or not a therapy was introduced into the country. Over time, I came to see it as a privilege; an opportunity to safeguard scientific credibility and ensure that only therapies backed by robust data and aligned with patient needs reach the market.



Fig 2: Medical Affairs team with two interns during their farewell.

Technology has added new dimensions to the MSL role. My organization has built an online platform where healthcare professionals can access scientific modules, discuss evolving disease management, and engage with peers. It has expanded our reach and offered flexibility for busy clinicians. Yet, even with these advances, I've found that face-to-face interactions remain

irreplaceable. Whether in hospitals, academic centres, or scientific congresses, in-person conversations carry an authenticity that deepens trust and builds lasting professional relationships.

Over time, I've also come to appreciate the broader responsibilities of the role. Reviewing promotional materials to ensure compliance with the local Pharma Code reinforces the importance of ethical communication. Supporting commercial colleagues by providing them with strong scientific foundations helps ensure that healthcare professionals always receive accurate, responsible information. These tasks may not always be visible, but they are essential for maintaining integrity across the organization and the industry.

In Malaysia, the MSL role often collaborates across multiple functions. In smaller markets, leaner MA teams often mean MSLs collaborate across multiple subfunctions, such as business development support, training, or contributing to areas like Medical Information, PV, or clinical trial activities. At times, balancing this breadth with the depth required for scientific engagement can be challenging. What has kept me grounded is remembering the true core of the role: to enable patient access and improve patients' outcomes. That clarity has guided me through every new responsibility.

Fig 3: This picture was taken during one of the collaborative initiatives between the Commercial team and Medical Affairs at an HCP event.

Looking back, I realize the MSL role has been as much a personal journey as a professional one. My years in clinical practice taught me the realities of patient care, and my years in pharma have shown me how science, collaboration, and trust can change those realities for the better. The most fulfilling moments are still the simplest ones, hearing a story of a patient who benefited from a therapy I once reviewed as data on paper.

As the profession continues to evolve in Malaysia, I believe we have an important role in shaping the future of Medical Affairs. By blending scientific rigor with compassion, digital tools with personal connection, and global knowledge with local realities, we can continue to deliver on the purpose that drew me here in the first place: making sure the right patient gets the right medicine, for the best possible outcome.

Disclaimer: The author acknowledges the use of ChatGPT for language refinement, specifically for grammar and sentence structure editing only.

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Dr Arumtathy d/o Chandran, MD, USM

With over five years of clinical experience and more than two years in the pharmaceutical industry, I bring a unique blend of patient-centred insights and industry expertise. My work centres on supporting healthcare professionals and advancing medical strategies through evidence-based insights.

Beyond Science: Why Rare Diseases Make MSL Work Truly Meaningful

By Viviana Anelli, PhD | Fall 2025

The role of the Medical Science Liaison (MSL) has evolved from being a “bridge” between R&D and the field to becoming a strategic pillar of Medical Affairs. In no area is this transformation more visible than in rare diseases. Here, where patient populations are small, awareness is low, and therapeutic options are scarce, every interaction carries disproportionate weight. For MSLs, rare diseases represent both a challenge and a privilege: the opportunity to contribute where science and unmet need are most tightly intertwined.

A journey shaped by rarity

My career as an MSL began in **acute myeloid leukemia (AML) with a specific rare genetic mutation**, an area where innovation moves at remarkable speed. Later, I worked in **Wilson disease** and **sickle cell disease (SCD)**, where awareness was limited, resources scarce, and patients often faced long delays before diagnosis or adequate care. Today, my focus is on **thalassemia** and **pyruvate kinase deficiency (an ultra-rare condition)**. Each step has taught me that in rare diseases, being an MSL is not only about delivering science, but about serving a mission.

Value beyond numbers

In traditional therapeutic areas, performance is often measured by the number of interactions. In rare diseases, numbers tell only part of the story. The real metric is impact:

- Did we shorten the time to diagnosis?
- Did we enable a clinician to consider a rare condition at the right moment?
- Did our insights influence trial design, registries, or access strategies?

Even one meaningful discussion can shift practice, open a study, or change the trajectory of a patient’s life. Quality, not quantity, defines success.

Starting long before launch

One unique aspect of rare diseases is timing. An MSL can start working **up to six to seven years before a therapy reaches the market**. This means building disease awareness, supporting early research, contributing insights to clinical trial design, and preparing the ecosystem for innovation long before approval. In rare diseases, the journey does not begin with launch—it begins with diagnosis, awareness, and trust, often many years earlier.

Science with a human face

Rare diseases bring data closer to people. When I share results from a thalassemia trial or discuss a biomarker in PK deficiency, I know that behind each endpoint there are patients who have been waiting decades for answers. These experiences remind me that every chart, every slide, every conversation must ultimately serve those who live with the disease.

Building trust and networks

In thalassemia, I have seen how **patient associations** amplify awareness, support families, and work alongside clinicians. Partnering with these associations has shown me that MSLs can serve as true facilitators—connecting science, healthcare providers, and communities. In ultra-rare conditions such as PK deficiency, trust is built not by frequency of visits but by reliability, authenticity, and the ability to bring tangible solutions.

Growing through challenges

Rare disease MSLs face unique hurdles: delayed diagnoses, fragmented care, and limited awareness. At times, the obstacles seem daunting. Yet these same challenges drive professional growth. They teach resilience, adaptability, and creativity. They remind us that celebrating small wins—such as a new diagnostic test being ordered or a patient being referred to the right center—can mean life-changing progress.

Looking ahead: the privilege of rarity

For MSLs, rare diseases offer something unique: the chance to combine **science, empathy, and strategic impact**. In AML, I saw the power of rapid innovation. In Wilson’s disease and SCD, I learned the urgency of visibility. Today, in thalassemia and PK deficiency, I witness how persistence and collaboration can transform the future of patients who too often remain unseen.

That is the true beauty of being an MSL in rare diseases: every effort counts, every connection matters, and every insight leaves a visible mark. It is more than a profession—it is the privilege of knowing that our work, step by step, truly changes lives.

Disclosure: The author is an employee of Amplify Health. The ideas discussed in this manuscript belong to the author and do not represent the views or endorsements of his employer.

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About the author:



Viviana Anelli, PhD

Viviana Anelli is an MSL with extensive expertise in rare diseases and oncology, committed to transforming innovative research into meaningful clinical practice. Holding a PhD in Biochemistry and authoring over 23 peer-reviewed publications, she has contributed to the development of therapies for acute myeloid leukemia (AML), Wilson disease, and hereditary hemolytic anemias, while collaborating with leading pharmaceutical companies.

Currently, Viviana is the sole MSL in Italy for Avanzanite Bioscience (via Amplify Health). In her role, she builds trusted partnerships with healthcare professionals, advances scientific exchange, and actively supports patient advocacy initiatives.

Beyond her field responsibilities, Viviana is the founder of MSL Networking Group Italy, the first LinkedIn community dedicated to Italian MSLs, and the creator of a widely followed LinkedIn newsletter on the MSL profession. She also serves as a faculty member of the MSL Academy by Medical Talent Solutions (MTS), Italy.

Recognized as a proactive leader and mentor, Viviana combines scientific rigor with strong interpersonal and organizational skills. She brings impactful contributions to Medical Affairs and continues to inspire the next generation of MSLs.

Redefining Value in Medical Science Liaison Performance: From Activity Metrics to Patient Outcome-Focused KPIs

By Yusuke Izumi, MBA | Fall 2025

Abstract

Background: Medical Science Liaisons (MSLs) play a critical role in pharmaceutical organizations; however, performance measurement systems for MSLs are often oriented toward activity-based metrics rather than value creation. This paradigm fails to capture the strategic contribution of MSLs to patient outcomes and organizational objectives.

Objective: To examine the limitations of traditional MSL performance metrics and propose a framework for patient outcome-

focused key performance indicators (KPIs) that better reflect the true value of MSL activities.

Methods: A comprehensive analysis of existing literature on MSL performance measurement was conducted, incorporating recent global survey data and industry position statements to identify current challenges and opportunities for improvement.

Results: Current MSL evaluation systems exhibit significant misalignment between measured activities and strategic value creation. The proposed framework shifts focus from quantitative activity metrics to qualitative patient outcome indicators, emphasizing the direct connection between MSL activities and healthcare improvements.

Conclusions: A fundamental redefinition of MSL performance measurement is necessary to align organizational evaluation systems with the strategic value MSLs provide to patients, healthcare providers, and pharmaceutical organizations.

Keywords: *Medical Science Liaison, Key Performance Indicators, Patient Outcomes, Value Creation, Performance Measurement*

Introduction

Medical Science Liaisons (MSLs) have evolved from product-focused sales support roles to strategic scientific partners within pharmaceutical organizations (Battaglia & Landi, 2023). Despite this evolution, performance measurement systems have largely remained anchored to traditional activity-based metrics that fail to capture the true value MSLs provide to healthcare ecosystems. This disconnect creates organizational challenges in demonstrating MSL value and optimizing resource allocation for maximum patient benefit.

The pharmaceutical industry increasingly recognizes the need for MSL performance measurement systems that align with strategic objectives and patient outcomes (Theron et al., 2021). However, the complexity of MSL activities and their long-term impact on healthcare delivery create unique measurement challenges that traditional KPI frameworks inadequately address.

Current Challenges in MSL Performance Measurement

Recent global survey data reveal significant dissatisfaction with current MSL performance measurement approaches. Dyer et al. (2025) found that 67% of medical affairs professionals reported difficulty in accurately measuring MSL performance, with only 3% considering current KPIs “very effective” in capturing MSL contributions. This dissatisfaction stems from fundamental limitations in existing measurement paradigms.

Traditional MSL metrics typically focus on easily quantifiable activities such as the number of key opinion leader (KOL) engagements (92% of organizations), scientific presentations delivered, or conferences attended (Dyer et al., 2025). While these metrics provide operational visibility, they fail to address critical questions: Did these activities improve patient outcomes? Did they enhance healthcare provider decision-making? Did they contribute to advancing medical science?

The Japan Pharmaceutical Manufacturers Association (2019) consensus statement emphasizes that MSL activities should contribute to progress in medical science and the development of medical care. However, current measurement systems inadequately capture these contributions, creating a paradox where MSL success is measured by activities that may have minimal correlation with their intended outcomes.

The Paradigm Shift: From Activity to Value

The proposed paradigm shift requires redefining MSL performance measurement from activity documentation to value creation assessment. This transformation involves three fundamental changes in measurement philosophy:

First, KPIs must transition from retrospective activity counting to prospective value planning. Rather than measuring how many interactions occurred, organizations should assess how these interactions contributed to predefined patient outcome objectives. This requires establishing clear causal links between MSL activities and healthcare improvements.

Second, measurement systems must incorporate the temporal dimension of MSL impact. Unlike sales metrics with immediate quantifiable results, MSL value creation often manifests over extended periods through improved clinical decision-making, enhanced healthcare provider knowledge, and ultimately, better patient outcomes. Performance measurement systems must accommodate these extended impact timelines.

Third, qualitative value indicators must receive equal or greater weighting than quantitative activity measures. Dyer et al. (2025) found that 52% of respondents favored mostly qualitative metrics, yet organizations predominantly use quantitative measures due to measurement convenience. This misalignment undermines the validity of performance evaluations.

Discussion

The transition from activity-based to value-focused MSL performance measurement presents both opportunities and challenges. The primary opportunity lies in better alignment between organizational investment in MSL activities and demonstrated value creation. When MSLs are evaluated based on patient outcome contributions, their activities naturally orient toward maximum healthcare impact.

However, implementation challenges include establishing reliable measurement methodologies for patient outcome contributions, managing the temporal lag between MSL activities and measurable outcomes, and developing organizationally feasible data collection systems. These challenges require systematic approaches to measurement system design and implementation.

The benefits of value-focused measurement extend beyond improved performance evaluation. Such systems provide clearer strategic direction for MSL activities, enhance organizational understanding of MSL contributions, and facilitate more effective resource allocation decisions. Additionally, they support MSL professional development by providing meaningful feedback on value creation rather than activity completion.

Conclusion

The current state of MSL performance measurement represents a significant missed opportunity for pharmaceutical organizations to optimize their investment in scientific engagement activities. The proposed shift from activity-based to patient outcome-focused KPIs addresses fundamental limitations in existing measurement approaches while better aligning performance evaluation with MSL strategic value.

Successful implementation of this paradigm shift requires organizational commitment to measurement system redesign, investment in appropriate data collection capabilities, and acceptance of more complex but more meaningful performance indicators. The potential benefits—improved patient outcomes, enhanced MSL effectiveness, and better organizational resource allocation—justify the required investment in measurement system transformation.

Future research should focus on developing standardized methodologies for measuring patient outcome contributions and establishing industry benchmarks for value-focused MSL performance indicators.

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A strategic, collaborative leader, he builds high-performing teams and embeds continuous improvement, standardization, and best practices across organizations. Known for reliability and pragmatism, he advances enterprise initiatives, strengthens field medical impact in rare disease portfolios, and delivers measurable outcomes aligned with organizational and customer objectives.

The Class of 2018: Where Are They Now?

By Maria Abunto, MD, MPH, MBA | Fall 2025

A Story of Perseverance, Success, and Growth in Medical Affairs

Prologue: The Beginning of Something New

It was **May 7, 2018**, in **Raleigh, North Carolina**.

Seven nervous healthcare professionals stood in the lobby of a Marriott Hotel, clutching notebooks and name tags, waiting to be ushered into a three-day “Communication and Presentation Skills” course.

The room buzzed with unspoken questions.

Is this legit?

Am I making the right move?

Do I really need this training?

What followed over those next three days was more than a workshop — it was a **turning point**. Behind every PowerPoint slide and role-play exercise unfolded something deeper: a shared hunger for purpose, a quiet resilience, and the birth of a small community that would stay connected through the seasons of their careers.

This was the **Class of 2018** — a cohort bound not by title or employer, but by a common pursuit: to find meaning in science, communication, and human connection.

And seven years later, their journeys tell a story of **perseverance, success, and growth** in Medical Affairs.

Chapter 1: Why We Begin

What makes someone leave the familiar for the uncertain?

For **Angela Valadez**, a clinical pharmacist at the time, the pull toward the Medical Science Liaison (MSL) role began with one simple desire — **to make a broader impact on patient care**. In her pharmacy, she could touch one life at a time. But in the MSL role, she saw the chance to **influence outcomes at scale**, shaping the conversations that inform how medicine is practiced.

She recalls how collaboration drew her in: *“Working alongside healthcare professionals, researchers, and internal teams creates an environment where shared expertise drives innovation.”* It was no longer about the single prescription—it was about the ecosystem that supports every patient’s journey.

For **Dr. Maria Abunto**, the turning point came during her years in **cancer research**.

She had witnessed powerful data—life-saving data—sit idle in journals, **never reaching** the clinicians or patients who needed it most. “I realized,” she reflected later, “that being a science communicator was just as important as being a scientist.”

The MSL role offered her the best of both worlds: **connection to science and connection to people**. It allowed her to **bridge the gap** between research and real-world impact—where knowledge meets action.

Chapter 2: The Mentors Who Shape Us

Who believes in us before we believe in ourselves?

Every professional journey is punctuated by mentors who see what we cannot yet see.

For Angela, it was a **former supervisor** who first said the words that would change her life: *“You’d make a great MSL.”* At the time, she didn’t know what the role even entailed. But that conversation opened a door — one that led to countless others. Through mentorship, networking, and professional guidance, Angela began to **understand her value in a larger context**.

For Maria, the name **Dr. Samuel Dyer** stands as a pillar in her story.

He didn’t sugarcoat things. His mentorship was rooted in **tough love** — the kind that pushes potential into motion. One quote of his stayed with her:

“The difference between a successful person and others is not a lack of strength or knowledge, but rather a lack of will.”

That became Maria’s compass. Every time she faced a roadblock, she repeated it to herself like a mantra: *If there is a will, there is a way.*

Chapter 3: Skills That Open Doors

What makes someone truly effective in the MSL role?

For both women, the answer wasn’t found in textbooks—it was found in people.

Maria discovered that **emotional intelligence** was her greatest differentiator. Her ability to listen deeply, adapt her message, and connect authentically transformed data into dialogue. Whether speaking with a resident, a KOL, or a C-suite leader, she learned that people remember **how you make them feel**, not just what you say.

Angela brought a different strength — **determination**.

Resilience became her currency. The role demanded not only scientific knowledge but also the ability to **navigate uncertainty** with grace. To grow, she leaned into discomfort, polishing her public speaking skills and refining her strategic mindset.

“I didn’t just want to communicate data,” she said. “I wanted to inspire confidence in it.”

Chapter 4: The Challenges That Shape Character

What happens when ambition meets reality?

Breaking into the MSL world wasn’t easy. For Maria, it took **ten months of persistence**. She hired a career coach, devoured *How to Break into the MSL Role*, and attended the MSL Society training in 2018—the very course where the Class of 2018 first met.

At times, the path was unclear.

She faced ambiguity, rejection, and the occasional doubt. But mentorship guided her, and persistence paid off. Soon, she landed her first MSL role—and within a few years, earned the title 2021 **MSL of the Year**.

Angela's challenge was different.

Transitioning from pharmacy to field medical work meant redefining balance. "As a new MSL," she recalls, "the role can feel all-consuming." Learning the science, mastering travel, building relationships—it was exhilarating, but exhausting.

Her lesson was simple yet profound: **boundaries and self-care are not luxuries; they're survival tools.**

Chapter 5: Lessons from the Unexpected

What do we learn once the job begins?

Maria's biggest revelation came from realizing that success wasn't just about mastering data—it was about mastering **relationships**.

"The MSL role," she explains, "depends on emotional intelligence and trust. We influence through credibility, not authority."

Angela echoes this sentiment but adds another layer.

"I thought the MSL role was purely scientific," she admits, "but I quickly discovered it's also deeply strategic." It demanded not only adaptability but the ability to **connect science, business, and humanity** into a single narrative.

Both learned that the MSL role is not just a career — it's an identity shaped by growth, humility, and purpose.

Chapter 6: Growth and Evolution

How do we grow once we find our footing?

The pandemic, the rise of AI, and the shift to virtual engagement forced everyone in Medical Affairs to rethink how they work. Angela adapted by integrating **AI tools** into her workflow, focusing on productivity and smarter communication. "Work smarter, not harder," she says, "but always stay compliant and ethical."

Maria, meanwhile, evolved into a **problem solver across Medical Affairs**. She identified gaps, contributed to insights committees, and developed algorithms to uncover actionable data trends.

That mindset led to rapid progression — from **MSL** to **Regional Lead**, then **Senior Manager of Medical Affairs**, reporting directly to the VP — all in under three years.

But growth also brought introspection.

To lead strategically, Maria knew she needed to understand the business side.

That realization led her to pursue an **Executive MBA** in healthcare, where she learned to align medical strategy with organizational goals — blending science with strategy in equal measure.

Chapter 7: Defining Impact

How does one measure the true impact of an MSL?

Maria's moment came on stage.

At a major primary care conference, she was the **only physician MSL** representing her company. Standing under the lights, she spoke about a proof-of-concept **blood-based diagnostic test for early cancer detection**—a test powered by machine learning.

She didn't just present data; she translated it.

Through her storytelling, she helped clinicians connect science to patient lives. She later built an **educational platform** that combined publications, slide decks, and real-world evidence into one accessible hub for providers.

Angela's impact emerged in a different form. Early in her role, she identified a **gap in onboarding** for new MSLs. Rather than accept it as the status quo, she designed a **comprehensive resource guide**—a solution that became the foundation of her company's training program.

Their contributions, though different, shared a common thread: they turned **problems into progress**.

Chapter 8: Lessons and Legacies

What wisdom would they pass on to those just starting out?

Maria's advice begins with a question: *"What is your why?"*

She believes clarity of purpose separates good professionals from great ones.

She often reminds new MSLs that **70% of jobs are filled through internal advocates**—the hidden job market where relationships open doors before résumés do.

Her guidance is both practical and timeless:

"Work hard in your first year. Build the reputation you want others to associate with you. That will set the tone for your entire career."

Angela's advice carries a softer strength.

She urges aspiring MSLs to **grant themselves grace**.

"There's a steep learning curve," she says. "You won't know everything on day one—and that's okay. Give yourself time to grow."

Both agree: mastery in Medical Affairs isn't a destination; it's a continuous evolution.

Chapter 9: Paying It Forward

What does success look like when shared?

Maria and Angela both emphasize that the true measure of success isn't personal achievement—it's how much you lift others along the way.

Maria recalls helping aspiring MSLs break into the field—even when she herself was between roles. "That's how you build real influence," she says. "By giving without expecting."

Angela champions the same philosophy: "Be a trusted resource, not a salesperson." She encourages curiosity, humility, and adaptability as the cornerstones of longevity.

Their journeys remind us that leadership begins when the spotlight shifts from self to service.

Epilogue: The Long View

Where are they now?

Seven years after that fateful spring in Raleigh, the Class of 2018 has scattered across the country—some leading teams, some pioneering AI-driven diagnostics, others mentoring the next generation.

They've weathered layoffs, promotions, relocations, and reinventions. Through every twist, they've stayed connected—sharing advice, celebrating wins, and cheering one another on.

Their story is not one of perfection but of perseverance.

Each setback became a **catalyst for growth**. Each "no" brought them closer to the right "yes."

As the seasons changed, so did they — shaped by resilience, guided by purpose, and anchored by friendship.

Their story reminds us that success in Medical Affairs isn't measured by titles or timelines, but by **impact, integrity, and endurance**.

And perhaps the most powerful lesson of all?

You never really graduate from growth.

Disclaimer: AI tools were used to assist with the organization and structural flow of this article, while all content, interpretations, and conclusions reflect the authors' original ideas.

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Dr. Maria Abunto is a physician-leader, public health advocate, and healthcare innovator whose career spans clinical medicine, oncology research, and medical affairs leadership. She holds an MD, an MPH, and an Executive MBA from the University of Pittsburgh, where she distinguished herself as a scholar committed to bridging the fields of medicine, business strategy, and public health.

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Dr. Abunto is equally committed to shaping the future of healthcare innovation and leadership. She serves as the Pittsburgh Branch Leader and Empowerment Speaker of the Healthcare Businesswomen's Association and was selected as the first Ambassador for the American College of Artificial Intelligence and Medicine, where she was distinguished with the Ambassador Award for her pioneering efforts to advance responsible AI adoption in healthcare. In these roles, she advances collaboration, equity, and innovation, guiding the responsible integration of AI into medical affairs, academia, and clinical practice to enhance impact across science and patient care.



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How to Thrive as an MSL in 2026: From Scientific Expert to Driver of Change

By Paul Riley, MBA, PhD, CMgr | Fall 2025

Medical Affairs is still often confused about its role, particularly when it comes to initiatives that may result in more patients being prescribed a company's medicines. Too many assume this is "promotion" and therefore not Medical Affairs territory. In reality, Medical Affairs is best placed to engage with the HCP community to co-develop new ways of working that improve outcomes — and yes, that means more patients on the right medicines. Far from being forbidden, this is supported by industry codes, by law, and by the direction many governments are giving industry: to collaborate transparently with healthcare systems to improve care.

The MSL role has already evolved from pure scientific exchange into something broader. But the pace of change in healthcare means evolution is no longer enough. MSLs must shift into a higher gear. The ones who thrive in 2026 will be both trusted scientific partners *and* drivers of transformation — people who achieve measurable, rapid impact in how patients access appropriate medicines.

That requires a sharper focus: moving beyond *only* traditional Medical Affairs activities such as investigator-initiated studies, publications, or multi-year real-world evidence projects. These are still vital and must continue — but they are not sufficient to address today's urgent challenges. Patients need to change now, not only in three or five years when a study reads out. Alongside the long-term work, MSLs must take on short, decisive initiatives that identify barriers and enable prescribing change in real time.

This means not just presenting data, but conceiving, facilitating, leading, and supporting solutions that accelerate patient access

to the right treatments. It demands new expectations — from the MSLs themselves, from the leaders who train them, and from the organizations that define what “good” looks like.

Here are three tenets for MSLs to embrace if they want to thrive in 2026 and beyond.

Tenet 1. Focus on Deep, Rapid Impact

Traditional Medical Affairs initiatives deliver value, but they tend to operate on long timelines. Future-ready MSLs will add to this by prioritizing **short-cycle interventions** that make a visible difference within months, not years.

Imagine if an oncology MSL convened a short workshop with oncologists, nurses, and pharmacists, and uncovered that the biggest barrier to appropriate therapy was inconsistent insurance paperwork — and then helped the team create a standardized checklist that sped up approvals.

Imagine if in cardiology, an MSL facilitated a meeting between primary care and specialists to agree on a shared protocol that enabled PCPs to start treatment earlier, cutting months off the patient journey.

Imagine if an MSL in neurology supported a centre to pilot a weekend infusion service, removing scheduling bottlenecks and enabling dozens more patients to start therapy on time.

Each of these scenarios shows how decisive, short-term initiatives can drive immediate impact for patients. They do not replace IIS or RWE studies — but they complement them, by ensuring that evidence translates into practice faster.

Tenet 2. Redefine the MSL Capability Set

Being a trusted scientific expert remains foundational. But thriving in 2026 requires more than scientific mastery. MSLs must also be facilitators, problem-solvers, and system thinkers. That means developing capabilities such as:

- **Facilitation skills** — running workshops that uncover barriers and align stakeholders around solutions.
- **Change management skills** — helping HCPs adopt and sustain new practices.
- **Systems thinking** — seeing the full ecosystem of actors (pharmacists, nurses, payers, administrators, advocacy groups) who influence outcomes.
- **Decisiveness** — focusing on actions that deliver immediate patient benefit, not just long-term data accumulation.

Imagine if an immunology MSL partnered with specialty nurses to co-develop a simple side-effect management guide, increasing their confidence and helping patients stay on treatment.

Imagine if a rare disease MSL, after hearing repeated frustrations about prior authorization hurdles, synthesized the insight and worked with colleagues to prepare anonymized evidence that informed payer policy change.

Imagine if an oncology MSL connected two hospital teams facing similar challenges, enabling them to share and adopt a proven service model in weeks rather than years.

For this to happen, companies must rethink training. Journal clubs and compliance refreshers are important, but they are not enough. MSLs also need coaching in facilitation, change leadership, and rapid-cycle project design — skills that are not traditionally part of the role specification, but which are now essential.

Tenet 3. Change What We Measure

If we keep measuring MSLs on call activity, slide delivery, or the number of IISs supported, we will get more of the same. These metrics are easy to count but do not reflect the true value MSLs can deliver. If we want MSLs to drive change, we must measure them on **impact**.

That means asking:

- Have prescribing barriers been identified and addressed?
- Are more patients receiving the most appropriate medicines more quickly?
- Has a service or pathway been improved in collaboration with HCPs?

Imagine if a diabetes MSL convened a group of PCPs and endocrinologists to design a referral template, cutting initiation times

from months to weeks.

Imagine if a respiratory MSL helped a regional health system adopt a standardized patient identification tool, ensuring the right patients were diagnosed earlier and treated sooner.

Imagine if a haematology MSL facilitated a payer-provider discussion that reduced administrative hurdles, directly improving patient access.

Impact like this matters far more than the number of visits logged. Medical Affairs leaders need to create frameworks that capture and reward these outcomes, even if they are harder to quantify. Otherwise, the function risks being seen as busy rather than transformative.

The New Ethos for 2026

The MSL role has always been about trust and science. But science alone is no longer enough. Patients need change now. HCPs need partners who will help them overcome barriers, not just present data. Companies need to recognize that Medical Affairs is not “non-promotional sales support,” but a function designed to enable medicines to reach their full clinical potential.

That means training MSLs differently, tasking them differently, and measuring them differently. It means empowering them to lead short-cycle, patient-centric initiatives alongside the longer-term evidence work.

Because the MSL who thrives in 2026 will be both a trusted scientific partner and a driver of transformation — not in theory, but in visible, measurable reality for patients.

Disclaimer: This article was created with the help of AI (ChatGPT). All concepts and topics were developed by the author.

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From Insights to Impact: Redefining the Role of Advisory Boards in Medical Affairs

By Adil Anwar, PhD, MBA | Fall 2025

Abstract

Advisory boards remain a cornerstone of Medical Affairs, enabling scientific dialogue and strategic alignment between industry and external experts. When planned and executed with scientific rigor and compliance, these engagements generate actionable insights that shape evidence generation, enhance clinical decision-making, and ensure patient-centered strategies. This article discusses the purpose, design, and impact of advisory boards, highlighting best practices that uphold transparency, optimize cross-functional value, and translate expert feedback into meaningful outcomes for patients and the healthcare ecosystem.

Introduction

In today's rapidly evolving therapeutic landscape, advisory boards serve as critical platforms for Medical Affairs to engage key opinion leaders (KOLs), healthcare professionals (HCPs), and thought leaders. These structured scientific discussions foster exchange of unbiased, evidence-based insights that inform organizational strategy, address data gaps, and guide evidence dissemination.

Beyond information gathering, advisory boards embody the Medical Affairs mission—bridging clinical science with patient needs. When grounded in compliance and executed with excellence, they elevate both scientific credibility and strategic impact.

Purpose and Strategic Value

The overarching goal of an advisory board is to gain objective, experience-driven insights that refine data interpretation, evidence generation, and educational priorities. They help clarify evolving standards of care, unmet clinical needs, and patient experience gaps.

For Medical Affairs, such forums also foster cross-functional alignment among clinical development, HEOR, regulatory, and field teams—ensuring patient-centricity and scientific accuracy guide all actions. Advisory boards frequently shape trial designs, validate real-world evidence strategies, and reinforce post-launch education efforts.

Types of Advisory Boards

- Pre-Launch Advisory Boards: Explore disease landscape, refine value propositions, and identify barriers to adoption.
- Post-Launch Advisory Boards: Gather real-world feedback on safety, tolerability, sequencing, and patient outcomes.
- Scientific Advisory Boards: Focus on translational science, biomarkers, mechanisms of action, and data interpretation.
- Multistakeholder Boards: Incorporate payers, patient advocates, or pharmacists to expand insights into access and adherence.

Each requires thoughtful participant selection and clear objectives to ensure meaningful, actionable dialogue.

Planning and Compliance Framework

Compliance and transparency are foundational to advisory board credibility. Key elements include:

- Establishing a legitimate scientific purpose and written rationale.
- Selecting participants based solely on expertise, not prescribing behavior.
- Providing fair market value compensation for time and contribution.
- Avoiding any promotional content or intent.

Internal and external codes—such as PhRMA, OIG, and EFPIA—must be strictly followed. Proper documentation of objectives, participants, and outcomes ensures audit readiness and reinforces scientific integrity.

Facilitating Effective Discussion

A successful advisory board blends structure with open scientific exchange. Moderators should encourage balanced participation, manage time effectively, and synthesize divergent perspectives. Best practices include:

- Providing pre-read materials to optimize discussion.
- Using clinical cases, polling, or data visualization to stimulate dialogue.
- Capturing both consensus and dissenting views.

For virtual or hybrid settings, shorter sessions, digital interactivity, and post-meeting engagement can sustain momentum and maximize insight quality.

Capturing and Applying Insights

Post-advisory deliverables are as vital as the meeting itself. Medical Affairs should:

1. Summarize key themes, observations, and recommendations objectively.
2. Share de-identified insights with cross-functional partners to inform strategies.
3. Integrate learning into publication, education, and evidence-generation plans.

Documented insights should influence strategy, not merely report opinions—reinforcing Medical Affairs’ role as the organization’s scientific conscience.

Outlook

As digital tools and data analytics evolve, advisory boards are transitioning from episodic meetings to continuous scientific dialogues. Hybrid and virtual formats enable broader participation and longitudinal engagement.

The inclusion of patient advocates, community clinicians, and health economists ensures perspectives that are more reflective of real-world practice. Looking ahead, data-driven insight capture and longitudinal engagement tracking will further enhance the strategic value of these interactions.

Conclusion

Advisory boards are indispensable in shaping evidence-based strategy within Medical Affairs. Their success depends on rigorous planning, scientific focus, compliance adherence, and a genuine commitment to transforming expert feedback into action. When executed thoughtfully, they strengthen partnerships, enhance scientific credibility, and improve patient outcomes.

Disclaimer

The views expressed are those of the author and do not necessarily represent those of Taiho Oncology, Inc. or its affiliates. This article is intended for educational purposes within the Medical Affairs community.

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Highly Effective Use of a Medical Affairs Team With Medical Science Liaison-Delivered Education: The SMART-MSL Study

By Janelle O. Poyant, PharmD, BCCCP | Fall 2025

Introduction

Cangrelor is an intravenous P2Y₁₂ inhibitor indicated as an adjunct to percutaneous coronary intervention (PCI) for reducing the risk of periprocedural myocardial infarction (MI), repeat coronary revascularization, and stent thrombosis. [1] Cangrelor provides immediate platelet inhibition (onset within 2 minutes following administration of a 30 mcg/kg IV bolus, followed by a 4 mcg/kg/min IV infusion), resulting in improved major adverse cardiac event (MACE) outcomes in patients undergoing PCI [1,2]. However, due to its short half-life (about 3–6 minutes), the antiplatelet effect quickly dissipates after discontinuation, making prompt initiation of oral therapy critical to maintain platelet inhibition [1]. Delays or deviations from the labeled dosing and oral P2Y₁₂ inhibitor transition administration instructions may create a window of vulnerability where patients may be inadequately protected from thrombotic events. The most common adverse effect seen with the use of cangrelor is bleeding, and cangrelor is contraindicated in patients with significant active bleeding [1].

The CAMEO registry, a multicenter observational study, revealed variability in cangrelor administration and transition practices. Patients treated per the established strategy had lower rates of bleeding (4.5% vs 6.6%) and MACE (6.3% vs 10.3%). An extension to the CAMEO Registry was granted in Fall 2022 to extend enrollment, increase educational activities, and offer quality improvement (QI) opportunities among participating sites; however, these QI efforts were not available to hospitals not participating in the CAMEO Registry.

To address this gap, the SMART-MSL study evaluated the impact of Medical Science Liaison (MSL)-led education on improving adherence to cangrelor's established treatment strategy at non-CAMEO hospitals. The hypothesis was that strategic MSL-delivered education would enhance customer understanding, satisfaction, and clinical practice.

Study Design

Hospitals that purchased cangrelor between June 2022 and June 2023 were identified, excluding those in California and those participating in CAMEO. Hospitals were selected based on formulary status and stocking in the cardiac catheterization lab (CCL).

MSLs targeted “superusers,” defined as healthcare providers involved in ordering, preparing, or administering cangrelor. These included interventional cardiologists, CCL staff, nurses, and pharmacists. MSLs prioritized hospitals with cangrelor on formulary and educated superusers across diverse geographic regions.

Engagement began with a standardized email inviting superusers to discuss CAMEO findings. Educational sessions were held virtually or in-person, using Medical Review Board (MRB)-approved materials focused on treatment strategy and common issues. No compensation was provided to participants.

After each session, participants were invited to complete a brief electronic survey via QR code or email link. The survey, developed using medical education literature, assessed satisfaction, relevance, and perceived impact. Response types included Likert scales, checkboxes, and open-text comments. [4]

MSLs documented interactions using Microsoft Lists and Salesforce, tagging SMART-MSL-specific data. A minimum 40% survey response rate was required for publication. [5-6] Uncompleted surveys were excluded. Descriptive statistics summarized responses. Mann-Whitney U tests compared Likert score responses.

Results

Out of 460 invitations, 144 interactions occurred, with 130 yielding Net Promoter Score (NPS) data and 127 complete surveys. NPS, a measure of customer satisfaction, was calculated from responses to “How likely are you to recommend this educational activity?” The overall NPS was 72, considered “excellent.” [7] Virtual sessions had an NPS of 80, while in-person sessions scored 67. Pharmacist interactions scored 75, and other HCPs (healthcare providers, including advanced practice providers, nurses, physicians) scored 100.

Key findings:

- 92% found the content relevant to their practice.
- 95% rated the format as helpful.
- 90% felt better equipped to provide patient care.
- 70% intended to change practice behaviors.
- 91% identified operational barriers.
- 95% reported increased awareness of treatment strategies.

Discussion

The SMART-MSL study suggests that strategic MS-led education may help improve HCP understanding and application of cangrelor's treatment strategy. High NPS scores across formats and roles reflect strong satisfaction and perceived value. Targeting superusers ensured education reached those most capable of driving institutional change. Standardized, MRB-approved content and structured feedback mechanisms supported consistency and quality.

Virtual education proved highly effective, with higher NPS than in-person sessions, suggesting remote engagement can be impactful when well-executed. The high NPS among diverse HCP roles highlights the importance of multidisciplinary education in optimizing patient care. Survey responses indicated strong alignment with clinical needs and intent to implement changes. Operational insights gained during sessions suggest broader system-level benefits beyond individual practice changes.

Qualitative feedback reinforced the value of MSL professionalism and session quality. Suggestions included earlier engagement during formulary adoption and providing concise materials for frontline staff.

Strengths of the study include standardized materials, real-world hospital settings, and diverse HCP roles, enhancing generalizability. Limitations include reliance on self-reported data, potential response bias, absence of comparator group, and lack of long-term outcome measurement. NPS offers a snapshot of satisfaction, but not direct clinical impact. To our knowledge, and at the time of this writing, there is no comparable assessment published on the impact and customer satisfaction of an MSL-driven educational intervention.

Conclusion

MSLs play a critical role in delivering targeted education that empowers healthcare providers, improves satisfaction, and promotes evidence-based practice. The SMART-MSL study supports continued investment in MSL-led initiatives to enhance clinical outcomes and operational efficiency. Future research should assess long-term practice changes and clinical impact, incorporating pre- and post-intervention metrics and expanding outreach to less experienced institutions and HCPs.

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What Makes an MSL Truly Exceptional? Lessons From the Best MSLs Around the Globe

By nolie.gutierrez@themsls.org | Fall 2025

Lessons from the Best MSLs Around the Globe

As a member of the judging panel for the *Medical Science Liaison Society* (MSLS) Awards, I had the opportunity to thoroughly review and evaluate the submissions from candidates aspiring to be recognized among the best MSLs worldwide. Based on this experience, the present document analyzes a series of testimonies and perspectives from three groups of professionals: **MSL rookies**, representing the early stages of development in the role; **experienced MSLs**, offering a consolidated vision grounded in years of practice; and **MSL Heads**, responsible for leading and guiding teams within the field of Medical Affairs.

The questions, elaborated by the *Medical Science Liaison Society*, were designed to explore three key dimensions: their five-year career projection, their most impactful contribution in the performance of their MSL role, and the ways in which they have supported the growth of the MSL or Medical Affairs community both within and beyond their organizations.

The following sections present a detailed analysis of the findings, aiming to identify common patterns, differences across experience levels, and key insights relevant to the ongoing evolution of the MSL function at a global scale.

Career Paths and Five-Year Vision

The professionals interviewed agree that the MSL career is characterized by a continuous pursuit of patient impact, scientific expertise, and leadership development.

The most common aspirations include:

- **Progression toward leadership roles:** Many MSLs aspire to become managers, medical directors, or global leaders, aiming to influence medical strategy and build high-performing teams.
- **Specialization and international expansion:** There is a clear interest in gaining experience in emerging therapeutic areas and participating in international projects that connect local needs with global resources.
- **Innovation and digital transformation:** Technological advancements, particularly the integration of AI and digital platforms, are viewed as opportunities to enhance scientific communication and improve data management efficiency.

Most Impactful Contributions as MSLs

The contributions of the award candidates center around three main areas:

1. **Education and Access to Innovative Therapies**
 - **Development of educational materials:** A notable example includes creating guides and brochures to support disease management, helping both patients and healthcare professionals better understand treatments and improve adherence.
 - **Launch of new medicines:** Several MSLs have led to the introduction of pioneering therapies for hard-to-treat conditions, ensuring global access and proper training of medical teams.
2. **Mentorship and Strengthening of the MSL Community**
 - **Internal and external mentorship:** MSLs have promoted mentorship programs for new professionals, both within their organizations and in external forums, contributing to the professionalization and growth of the role.
 - **Creation of networks and interest groups:** The establishment of communities and specialty groups has fostered knowledge exchange and collaborative professional development.
3. **Innovation and Leadership in Strategic Projects**
 - **Implementation of digital platforms:** The creation of interactive tools and platforms for medical education has improved communication among hospitals and professionals, as well as the organization of scientific meetings.
 - **Participation in clinical studies and evidence generation:** MSLs have led research initiatives and clinical trials, contributing to the generation of relevant data for clinical and regulatory

decision-making.

Impact on the Medical and Pharmaceutical Community

The analysis reveals that MSLs act as true **agents of change**, capable of:

- **Bridging educational gaps:** Through continuous education and the simplification of scientific information, MSLs empower healthcare professionals and patients to make informed decisions.
- **Promoting interdisciplinary collaboration:** Interaction with pharmacovigilance, market access, and professional associations enhances the quality and reach of medical initiatives.
- **Advancing equity and access:** Several accounts highlight initiatives aimed at improving access to clinical trials and therapies for underrepresented populations and resource-limited countries.

Future Challenges and Opportunities

The main challenges identified include:

- **Adaptation to digitalization:** The integration of AI and digital tools demands constant upskilling and a proactive attitude toward change.
- **Talent management and mentorship:** The growth of MSL teams and the development of new leaders are essential to sustain excellence and innovation in the field.
- **Measuring impact:** Implementing KPIs and protocols to assess the impact of MSL activities is critical to demonstrating their strategic value.

Comparative Analysis: Distinctive Patterns and Commonalities

The comparative analysis of responses also allowed to identify **differentiating patterns and similarities** among the three groups of professionals evaluated, which are presented below:

Similarities:

- All groups demonstrate a clear orientation toward continuous learning, mentorship, and contribution to the MSL community.
- Regardless of experience level, there is a shared motivation to improve patient care and advance healthcare professional education.
- Networking—both internal and external—and cross-departmental collaboration are highly valued.

Differences:

- **Temporal and strategic perspective:** Rookies tend to focus on personal development and immediate impact, whereas senior MSLs and MSL Heads adopt a more strategic, long-term view emphasizing organizational transformation and innovation.
- **Type of contribution:** Rookies highlight individual and learning achievements; senior MSLs emphasize influence on clinical practice and education; and MSL Heads underscore team building, strategic direction, and the institutionalization of best practices.
- **Level of influence:** As professionals advance in their careers, their influence evolves from individual or team-level impact to organizational and, in some cases, global reach.

Conclusion

The MSL role is evolving toward leadership, innovation, and digital transformation, while maintaining patient care and medical education at its core. The contributions analyzed demonstrate that the MSL's impact extends beyond the organization, influencing the global medical community and shaping the evolution of the pharmaceutical industry. The future of the MSL profession will be defined by collaboration, mentorship, and the ability to adapt to technological and scientific challenges.

Disclaimer: This article was written by the author and translated and styled with the assistance of AI tools.

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Victor has more than 20 years of experience in the pharmaceutical biotech industry, Medical Affairs, and R&D. Professor in several master's and Pharma MBA Coordinator. Passionate and author of various publications related to the MSL position. He is currently a Senior MSL Head at Amgen, with responsibility for Bone Metabolism, Neuroscience, Inflammation, and Rare Diseases. Victor has previous experience at Parke-Davis and Pfizer. In 2018, he received the MSL Award of the Year-Outside USA from the MSL Society. Victor is also a Board-Certified Medical Science Liaison (MSL- BC®).

From Transaction to Interaction: Leveraging Commercial Acumen for Deeper Scientific Exchange

By Fady Morcos | Fall 2025

For many of us who transition into the Medical Science Liaison (MSL) role from commercial backgrounds, there's a moment of deliberate recalibration. We learn to set aside the language of "sales targets" and "prescription volume" and embrace the principles of non-promotional, scientific exchange. This is not just a necessary shift; it is the very foundation of our credibility and ethical support.

However, in this necessary transition, a valuable asset can be mistakenly left behind: our hard-earned commercial acumen. Having spent nearly two decades in pharmaceutical sales, marketing, and e-commerce before becoming an MSL, I've learned that these experiences are not liabilities to be hidden. When reframed correctly, they are powerful tools that can foster deeper, more meaningful, and more strategic relationships with Key Opinion Leaders (KOLs).

This article is a call to reframe our thinking. Let's explore how the core skills from our commercial past can be ethically and effectively leveraged to enhance our scientific present.

Bridging the Perception Gap

The first hurdle is often internal. Many of us carry a lasting concern that any scent of our commercial history could challenge our scientific integrity. We must move past this. Understanding the commercial landscape and the business realities of healthcare does not compromise our science; it frames it. A KOL doesn't operate in an academic vacuum. They work within complex healthcare systems with budgetary constraints, administrative hurdles, and evolving reimbursement landscapes. When we understand these pressures, we can engage as more empathetic and insightful scientific partners.

The goal is not to discuss these commercial aspects with the KOL, which is firmly outside our scope. The goal is to use our

understanding of them to listen more effectively and to anticipate the unspoken challenges that sit alongside the pure science.

Reframing the Funnel: From Sales Pipeline to Engagement Landscape

One of the most direct transfers of skill lies in strategic planning. In sales, we were taught to manage a territory using a sales funnel: prospecting, qualifying, engaging, and closing.

As MSLs, we can adapt this model into a Scientific Engagement Funnel.

Prospecting becomes KOL Identification: Instead of looking for high-prescribers, we use scientific metrics, publications, clinical trial involvement, and conference presentations to identify true experts and emerging voices in our therapeutic area.

Qualifying becomes KOL Profiling: This is where commercial acumen adds depth. Beyond their research interests, we seek to understand their influence, their network, their clinical environment (e.g., is it a large academic center or a community practice?), and their educational needs. What are their challenges in patient care? This holistic profile helps us tailor our scientific approach.

Engaging becomes Scientific Exchange: The goal of engagement is not a transaction, but mutual understanding. It's about providing the right data, at the right time, in the right format to address their scientific curiosity and, ultimately, to improve patient outcomes.

This structured approach ensures our limited time is invested in the most impactful scientific relationships.

The Art of Listening for the Unspoken Need

In sales, success depended on hearing not just what the customer said, but what they meant. Were they concerned about cost? Was there a logistical barrier? Was a competitor better at addressing a hidden need?

This skill is pure gold for an MSL. During a scientific exchange, a KOL might comment on the "practical challenges" of a treatment regimen or the "difficulty in identifying the right patient." A beginner might hear only a surface-level statement. An experienced MSL, with an ear for distinction, hears an unspoken evidence gap.

This is our cue. It's not a signal to offer a commercial solution, but to dive deeper scientifically. We can respond with, "That's a critical point. Could you elaborate on those practical challenges? There may be specific data or ongoing research I can share that addresses those real-world considerations." This transforms a simple data dissemination into a truly collaborative dialogue that addresses the KOL's holistic experience.

From Product Pitch to Scientific Narrative

Marketing excels at crafting a compelling narrative. It connects features to benefits in a story that resonates. As MSLs, we are not crafting product pitches, but we are storytellers of science.

A dense clinical trial manuscript is a collection of facts. Our role is to help the KOL interpret that story. What is the scientific narrative? How does this new data fit into the existing treatment landscape? What are the implications for future research or clinical practice?

Your marketing background equips you with the ability to structure a conversation for maximum clarity and impact. You know how to lead a discussion from a shared premise (the clinical need), through the evidence (the data), to a logical conclusion (the scientific implications). This isn't about persuasion; it's about communication. A well-structured, data-driven narrative is easier for a busy KOL to understand, remember, and apply to their own work.

Conclusion: Your Past is Your Strategic Advantage

Embracing a non-promotional role does not require us to erase our past. Instead, it invites us to refine those skills for a higher purpose. The strategic thinking from sales and the stakeholder mapping from marketing are not contrary to the MSL mission; they are its enablers.

They allow us to move beyond being messengers of data to becoming true scientific partners. We become MSLs who don't just understand the what of the science, but also the who, where, and why behind its application. We transform the historical

dynamic from a one-way transaction into a rich, two-way interaction, building the trust and collaboration that ultimately improve patient outcomes.

So, the next time you reflect on your career path, don't see a divide. See a unique and powerful continuum. Your commercial acumen is your secret weapon; use it to build deeper scientific relationships.

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Fady Morcos

Fady Morcos has more than 15 years of experience in the pharma sector within the UAE, GCC, and Egypt. He is currently in a Medical Science Liaison (MSL) role at Chiesi Group, where he focuses on respiratory medicine, neonatology, and interventional cardiology. He provides scientific exchange, as well as clinical evidence, to assist healthcare professionals educate their way to clinical decisions.

Fady has held different roles in medical affairs, marketing, product management, and e-commerce, providing a broad spectrum of experience that demonstrates his ability to translate scientific evidence into business strategy. Prior to his current role, he was tasked with leading marketing and e-commerce at New Country Healthcare, where he won the Star of the Year award in 2021 and the Think Out of the Box award in 2020.

Navigating KOL Engagement During Healthcare Policy Transitions: Maintaining Scientific Dialogue Amid Coverage Uncertainty

By Keith Willis | Fall 2025

Multiple healthcare policy changes are converging to create unprecedented uncertainty for key opinion leaders and their patients. HR 1 implementation beginning January 2027, and enhanced premium subsidies for ACA marketplace plans expire at the end of 2025. The Inflation Reduction Act's drug price negotiation program continues to reshape formulary decisions and prior authorization requirements. Most Favored Nation policies under consideration could further impact access to medications and medical devices.

For Medical Science Liaisons, these policy shifts directly affect the patient populations that KOLs treat, prescribing patterns MSLs observe, and the conversations that emerge during scientific exchanges. Understanding these implications helps MSLs maintain productive relationships while navigating sensitive topics professionally.

How Policy Changes Affect KOL Priorities

Key opinion leaders increasingly manage patient populations with unstable insurance coverage. This reality affects their clinical decision-making, research interests, and the types of scientific discussions they value with MSLs.

Research priorities shift as KOLs observe more patients struggling with access issues. Academic physicians become more interested in studies examining treatment interruption effects, medication adherence during coverage transitions, or simplified treatment regimens for patients with unstable insurance.

Maintaining Scientific Integrity During Access Discussions

MSLs must balance providing valuable scientific information with addressing legitimate access concerns without crossing promotional boundaries. This requires a clear understanding of appropriate scientific dialogue versus promotional activities.

Scientific discussions about treatment adherence, disease progression, and outcome optimization remain entirely appropriate even when coverage issues provide the context. MSLs can share published research on medication adherence challenges, discuss clinical studies examining treatment interruption effects, and provide data on simplified treatment regimens without making promotional claims.

Real World Evidence (RWE) becomes valuable during these conversations. KOLs treating patients with unstable coverage appreciate data showing how treatments perform under less-than-ideal adherence conditions. Studies examining treatment effectiveness in diverse patient populations or resource-constrained settings provide relevant scientific context for clinical decision-making.

However, MSLs must avoid making direct connections between scientific data and specific access programs or suggesting that their company's products are preferred solutions for coverage challenges. The focus should remain on objective scientific information that helps KOLs make informed clinical decisions rather than steering toward therapeutic choices.

Supporting KOLs Through Evidence and Education

KOLs managing patients with unstable coverage benefit from scientific information that helps them optimize outcomes despite access challenges. MSLs can provide valuable support through evidence-based education that addresses real clinical needs without promotional bias.

Adherence research takes on increased relevance when patients face coverage disruptions. MSLs can share studies examining factors that influence medication adherence, interventions that improve treatment compliance, and outcomes associated with different adherence patterns.

Comparative effectiveness research helps KOLs make informed decisions when formulary restrictions or coverage limitations affect treatment options. Studies comparing clinical outcomes, safety profiles, and real-world effectiveness across different therapeutic approaches provide objective information for clinical decision-making.

Health economics and outcomes research gains importance as KOLs increasingly participate in value-based care arrangements or institutional cost management initiatives. MSLs with expertise in pharmacoeconomic studies and budget impact analyses provide a valuable scientific perspective on treatment value propositions.

Adapting Engagement Strategies

Traditional KOL engagement models may require modification as healthcare delivery patterns change in response to policy pressures. MSLs should consider how coverage uncertainties affect KOL availability, priorities, and preferred communication methods.

Virtual engagement becomes more important as KOLs manage increased patient loads and administrative burdens. MSLs should develop proficiency in conducting meaningful scientific discussions through digital platforms while maintaining personal relationships.

Timing considerations change when KOLs face increased clinical demands due to coverage disruptions. MSLs may need to offer more flexible scheduling options and shorter, more focused interactions that respect time constraints while providing valuable scientific information.

Regional variations in policy implementation require MSLs to understand local conditions that affect their KOLs. States implementing work requirements at different times or with varying verification approaches create different challenges for KOLs in different geographic areas.

Professional Development for Policy-Aware MSLs

The evolving healthcare landscape requires MSLs to develop new competencies that complement traditional clinical and scientific skills. Understanding policy implications helps MSLs anticipate KOL needs and provide more relevant scientific support.

Health policy literacy is becoming increasingly important for MSLs working in policy-sensitive therapeutic areas. Understanding how healthcare financing works, what drives coverage decisions, and how policy changes affect patient access helps MSLs have more informed discussions with KOLs facing these challenges.

Health economics knowledge helps MSLs understand the broader context of clinical decision-making when budget pressures intensify. Basic understanding of pharmacoeconomic principles, value-based care concepts, and institutional cost management enables more sophisticated scientific discussions.

Ethical Considerations and Compliance

Policy-driven access challenges create new compliance considerations for MSL activities. A clear understanding of appropriate boundaries helps maintain scientific integrity while providing valuable support to KOLs.

Avoiding promotional implications requires careful attention to language and positioning when discussing access-related topics. MSLs should focus on providing objective scientific information rather than suggesting solutions that favor their company's products or programs.

Documentation standards become more important when conversations touch on sensitive topics like patient access or coverage challenges. Clear records of scientific discussions help demonstrate appropriate professional conduct and compliance with regulatory requirements.

Building Long-Term Value

Healthcare policy uncertainty creates opportunities for MSLs to demonstrate value through consistent, reliable scientific support that helps KOLs navigate challenging clinical situations. Building trust during difficult periods strengthens relationships for long-term collaboration.

Proactive communication helps KOLs prepare for policy changes that may affect their practices. MSLs who understand policy timelines and implications can provide advance notice of potential changes, allowing KOLs to plan appropriate responses.

Resource sharing becomes more valuable when KOLs face new challenges. MSLs who can provide relevant clinical guidelines, treatment algorithms, or patient education materials help KOLs adapt their practices efficiently.

The key is recognizing that policy changes affect the environment in which scientific discussions occur without changing the fundamental importance of objective, evidence-based information sharing. MSLs who adapt their approaches while maintaining scientific integrity will continue providing valuable support to the healthcare community during uncertain times.

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Keith Willis is the President of Core Management Training. His experience includes sales, sales leadership, operations, and sales training in diverse therapeutic areas. He has worked with several large pharmaceutical companies including Ciba Geigy, Johnson and Johnson, Wyeth, Pfizer, Otsuka, and Bristol Myers Squibb. Keith utilizes his rich experience to offer tailored solutions that empower clients from various sectors to achieve excellence in their performance.

The Future of KOL Engagement: Transforming Scientific Collaboration with AI Support

By Hans Joachim Hutt, MD | Fall 2025

Healthcare also enters an era of unprecedented digital transformation. Hence, Medical Science Liaisons face both extraordinary opportunities and complex challenges in engaging with Key Opinion Leaders. From an external medical doctor's perspective, the evolution of KOL engagement represents a fundamental shift from traditional relationship-building to AI-enhanced scientific partnerships that promise to revolutionize patient care.

The “Digital Renaissance” in Medical Collaboration

The pharmaceutical industry stands at a pivotal moment where artificial intelligence is reshaping the very foundations of scientific exchange^{[1][2][3]}. For external medical experts, this transformation represents more than technological advancement. It signals a new paradigm of evidence-based collaboration that transcends geographical boundaries and time constraints.

Today's healthcare professionals increasingly prefer virtual or hybrid interaction models with pharmaceutical companies, fundamentally reimagining the traditional field-based MSL function[4]. This shift has accelerated the integration of AI-driven insights, predictive analytics, and digital platforms that enable more precise, personalized, and impactful scientific exchanges[5][6].

Building Trust Through Intelligent Scientific Partnership

From the perspective of healthcare professionals (HCP), the most compelling aspect of AI-enhanced KOL engagement lies in its potential to deepen scientific credibility while maintaining the essential human element of trust-building[7][8]. Modern AI platforms can analyze vast datasets from publications, clinical trial participation, and digital engagement metrics to create comprehensive profiles that outline specific needs, preferences, and behaviors of each KOL[2][9].*

This data-driven approach enables pharmaceutical companies to move beyond generic engagement strategies to truly personalized scientific dialogues. **For HCPs, this means receiving relevant, timely information that directly addresses their clinical challenges and research interests[10][11].** The transformation from broad-based outreach to precision engagement represents a significant advancement in respecting the valuable time and expertise of medical professionals.

The Power of Predictive Analytics in Scientific Exchange

AI's predictive capabilities are revolutionizing how pharmaceutical companies identify emerging thought leaders and anticipate future scientific trends[2][9]. This foresight allows early engagement with "rising" KOLs in emerging therapeutic areas, creating opportunities for collaborative research initiatives that might otherwise be missed. **For medical experts, this proactive approach means access to cutting-edge research opportunities and the chance to "co-create" therapeutic development from its earliest stages.***

The integration of machine learning algorithms enables real-time sentiment analysis and engagement optimization, allowing MSLs to adapt their communication strategies based on objective feedback[6]. This technological sophistication ensures that each scientific exchange maximizes value for both parties while maintaining the highest standards of medical ethics and compliance.

Virtual Advisory Boards: Redefining Global Collaboration

The evolution of virtual advisory boards represents perhaps the most transformative aspect of AI-supported KOL engagement[12][13][14]. These platforms offer 24/7 accessibility, structured dialogue, and complete security compliance, enabling global participation without the traditional barriers of travel and scheduling conflicts[14].

From an external medical doctor's perspective, virtual advisory boards provide unprecedented flexibility to contribute to medical innovation while maintaining clinical responsibilities. Research indicates that 97% of KOLs believe virtual participation would not negatively impact their interactions, with 68% noting that avoiding travel reduces risk to patient care[15].

AI-powered moderation assistants enhance these virtual engagements by summarizing discussions in real-time, suggesting conversation focal points, and identifying key insights that might otherwise be overlooked[14]. This technological support ensures that advisory board discussions remain productive and generate actionable outcomes for therapeutic development.

Ethical Foundations in the Digital Age*

The transformation to AI-enhanced engagement must be grounded in robust ethical principles that protect the integrity of scientific collaboration[8][16][17]. The most successful pharmaceutical companies recognize that technology should amplify, not replace, the fundamental values of transparency, mutual respect, and patient-centered focus that define ethical KOL relationships.

External medical professionals expect AI-driven engagement to enhance scientific rigor while maintaining clear boundaries between educational exchange and promotional activities[8][17]. This requires sophisticated compliance frameworks that ensure all AI-generated insights and engagement strategies align with regulatory requirements and professional medical standards.

The integration of blockchain technology and advanced security protocols addresses growing concerns about data privacy and confidentiality, creating secure environments where sensitive medical information can be shared without compromising patient privacy or institutional protocols[2][18].

The Collaborative Imperative

Modern KOL engagement transcends traditional vendor-client relationships to embrace genuine scientific partnerships that benefit all stakeholders[19][20]. **For external medical experts, this evolution represents an opportunity to directly impact therapeutic development while accessing resources and expertise that enhance patient care delivery.***

The most effective AI-supported engagement strategies recognize that healthcare professionals seek meaningful collaboration opportunities that advance their research interests, support their professional development, and ultimately improve patient outcomes[8][21]. This requires pharmaceutical companies to invest in understanding the unique motivations and priorities of each external expert, using AI insights to create value propositions that resonate with individual professional goals.*

Looking Forward: The Future Landscape

As we advance into 2026 and beyond, the convergence of AI technology, digital health tools, and advanced analytics will continue reshaping the MSL profession[22][23]. **For external medical professionals, this evolution promises more efficient, personalized, and scientifically rigorous collaboration opportunities that respect their expertise while advancing shared therapeutic goals.**

The successful integration of AI support in KOL engagement requires a balanced approach that leverages technological capabilities while preserving the human elements of trust, empathy, and scientific curiosity that define the best medical partnerships[24]. **The future belongs to organizations that can seamlessly blend digital innovation with authentic relationship-building, creating collaborative frameworks that inspire both scientific advancement and professional fulfillment.**

The transformation of KOL engagement through AI support represents more than technological progress. It embodies the pharmaceutical industry's commitment to evidence-based collaboration that ultimately serves patients and advances medical science. **For external medical experts willing to embrace these innovations, the opportunities for meaningful contribution to therapeutic development have never been greater or more accessible.**

* **Caveats:** Any collaboration of pharmaceutical employees with healthcare professionals (HCP) has to address a medical or scientific need or purpose in a transparent way complying with local compliance regulations.

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During his career, he has managed MSL teams with other departments as Regulatory Affairs, Pharmacovigilance, Clinical Operations, and Medical Affairs in Germany, Austria & Switzerland. He has facilitated the successful launch of pharmaceutical products for big and mid-sized pharmaceutical companies. He contributed to evidence generation, guideline appraisal, lifecycle management, and held responsibility/accountability for value-added dossiers and pricing negotiations for new molecular entities.

Dr. Hutt has coached, interviewed, and reviewed the CVs of many aspiring MSLs. His insights and guidance have resulted in MSLs successfully breaking into their first roles and fostering careers within the industry.

He has been a keynote speaker and moderated many conferences on various industry-related topics, including creating teams, management, MSL training, and proper utilization of a competency framework used to measure MSL performance.

Dr. Hutt has also served as a resource and consultant on many compliance-related projects for several organizations, including the German Code of Conduct Body (AKG e. V.), chairing a committee assessing audited organizations regarding HCP-/HCO-Compliance. For the German trade association BPI, he acts as a senior expert focusing on patient support programs, medical education, and AI.

He was recently announced as a member of the expert group „off-label“ at the German drug authority and acts as Information Officer according to the German Drug Law. As a consultant, he assesses business plans of start-ups developing digital health applications/devices in Germany and Singapore.

From Biomedical Insights to Decisions: A Future-Ready Playbook for Medical Science Liaisons

By Sandra F. Gomes, MSc | Fall 2025

Medical Affairs is moving from “science conduit” to **decision partner** – a role that asks **Medical Science Liaisons (MSLs)** to spot **real-world signals**, turn them into **timely actions**, and **explain numbers** so clinicians and patients actually change what they do next (1,2). The good news: you do not need a data lake or a PhD in artificial intelligence (AI) to start; what you need is a disciplined way to **rate insights**, a **lightweight dashboard** to close the loop, **clear number-communication habits**, and a few **AI-assisted workflows** that save time without risking compliance – because organizations capture value when they **rewire**

workflows, not when they add point tools (3).

What the evidence says about measuring MSL impact

Across a global sample of 1,023 medical affairs professionals, teams still default to **counting interactions** (92 %) even though respondents prefer qualitative, impact-oriented metrics; only 3% rate their current key performance indicator (KPI) sets as “very effective,” which is precisely why we should track **insight-to-action** and **time-to-action** instead of raw activity (4). A national survey of Canadian Medical leaders echoes the point: **healthcare professionals (HCP) feedback**, the **quality of insights**, and even **interaction length** (as a proxy for depth) are judged more useful than volume counts, yet they are tracked less consistently; leaders also anticipate more digital engagement and want metrics that reflect that reality (5,6). The core message is simple: **measure outcomes and learning, not just activity** (7).

Make insights decision-ready

Treat every field note as a **testable hypothesis** that either triggers an action or gets archived. A practical scorecard keeps teams aligned: Is it **new** for the therapeutic area (TA)/brand? Will it **trigger a concrete action** within 90 days? Is it **on strategy** (evidence, engagement, access)? Is it **well-grounded** in auditable data (trials, real-world evidence (RWE), guidelines)? And how **fast** can we move from capture to implementation? Insights that score highly should convert into actions – content refreshes, advisory boards, targeted education, or evidence plans – and we should track that conversion over time, because these are the qualitative outcomes leaders say actually demonstrate value (4,5).

Close the loop with a light dashboard

You do not need enterprise business intelligence (BI) to see what matters. A **single-page view** – in Power BI, Tableau or Looker – should answer three questions: **what are we seeing**, **what changed because of it**, and **how fast did we act**. In practice, that means a live pipeline of insights by theme and status; a view that shows **quality versus volume** so “interesting” does not crowd out “useful”; and a conversion panel showing the **share of insights that triggered actions** and the **median time-to-action**. Share this routinely with Medical leadership; impact narratives beat raw counts – indeed, Canadian leaders report that dashboards gain value when they reflect **insight quality** and **downstream outcomes**, not just interactions (6,7).

Use AI where it genuinely helps

The cleanest early win is in **medical information (MI)** and **congress follow-up**, where AI can cluster similar questions, surface trends, and standardize responses **without inventing facts**. One open-access implementation – MUFASA – turns free-text MI cases into vectors, runs semantic search, tracks topic frequencies over time, and clusters themes. Teams reported faster case handling, better onboarding, improved response consistency, and lower compliance risk. In plain terms: you can spot a sudden uptick in stability questions after a pack-size change, then route a targeted asset to the right HCPs (7). These gains came with **observability** (who did what, when) and human checkpoints for judgment calls – showing that AI adds value when embedded in a **governed workflow**, not pasted onto old steps (8,9).

Respect the red lines

The **Japan experience** is a crisp reminder that medical must be **independent of sales**, with scientific exchange and evidence generation anchored in patient benefit, not promotion. After high-profile compliance failures, companies formalized the separation of medical affairs, clarified non-promotional roles, and prioritized visible trust-building with key opinion leaders (KOLs) and regulators; your processes, dashboards, and AI tools should reflect that independence and leave an **audit trail** (10).

Speak numbers people can act on

How we present data changes decisions: lead with **absolute risks** and **fixed denominators** (per 100 or per 1000), not “1-in-X” or relative risks without context; pair percentages with **part-to-whole visuals** (icon arrays; stacked bars) (**Figure 1**). For biomarkers, add **thresholds** and the **minimal clinically important difference** so “what now?” is obvious. These small choices **improve comprehension and trust** in shared decision-making (2).



Figure 1. Five main recommendations for communicating medical numbers.

Practical steps you can implement

Tag the next 90 days of incoming insights with a simple **quality rubric** and link each item to a concrete action – or a documented reason for “no action.” Publish a one-page dashboard that shows pipeline, quality vs. volume, and conversion. Re-map one **high-friction workflow** – for example, congress debrief to content update – so repetitive steps are automated (search, clustering, templated summaries) and **human checkpoints** are explicit (8). Finally, refresh key slides and medical letters using the **number-communication** rules above; pilot one “snackable” visual per message with two HCPs before you scale – this better reflects what leaders actually want to see in metrics: **insight quality, clearer HCP feedback loops**, and **faster time-to-action** rather than bigger activity counts (5,6).

Why does this approach travel with you

Whether you are new in role or a seasoned MSL, the combination of a **quality-first insight habit**, a **tiny-but-useful dashboard**, **AI-assisted pattern finding**, and **clear number framing** works across brands, countries, and lifecycle stages. It aligns with how leaders already judge value (qualitative outcomes and learning) and with where Medical Affairs is heading next – more digital, more analytics, and tighter governance (1). It also fits the profession’s north star: **field medical as a trusted, non-promotional engine for evidence and decisions** (11).

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The Clinician's Compass: Why Those Who Care at the Bedside Lead Best in Medical Science Liaison Roles

By Tracy R. Wilson, DNP, FNP-C | Fall 2025

Disclaimer: This article was developed with the assistance of generative AI tools.

Abstract

Clinicians—nurse practitioners, physician associates, pharmacists, and physicians—are uniquely equipped to lead in Medical Science Liaison (MSL) roles because they bring the human experience of care into the science of communication. This editorial explores how the clinical mindset, grounded in empathy, ethics, and systems thinking, translates complex data into meaningful dialogue and trust within the medical community. Drawing from real-world examples and recent literature, it argues that clinicians do not leave patient care when entering industry; rather, they expand it—advocating earlier in the chain of influence to

shape evidence generation, health equity, and patient-centered innovation. Clinical experience provides not only credibility but also the ability to discern context, interpret the unsaid, and safeguard integrity in scientific exchange. As the pharmaceutical and biotech landscapes evolve, clinician-MSLs serve as living bridges between data and humanity, ensuring that science remains accountable to the lives it is meant to improve.

Keywords: Clinicians in industry; medical science liaison; nurse practitioners; medical affairs; scientific communication; health equity

Main Article

When I first graduated from nursing school, my purpose was clear: listen, heal, and advocate. I never imagined that one day I'd trade patient charts for medical slide decks. Yet the through-line remains the same—connection. In every role, whether at the bedside or in a boardroom, I am still translating science into something deeply human and usable. That translation is the heartbeat of the Medical Science Liaison (MSL) role, and it is why clinicians—nurse practitioners, physician associates, pharmacists, and physicians—are uniquely equipped to lead it.

Clinicians bring something that cannot be trained in orientation or replicated by analytics: the lived experience of care. We've heard the tremor in a caregiver's question and watched evidence collide with access. That grounding in humanity turns data into understanding. As Theron et al. (2021) observed, effective MSL practice depends on scientific exchange "grounded in clinical realities, not abstract trial results." Clinicians already live that reality.

The MSL role is often described as a bridge between industry and healthcare, but clinicians make that bridge a living opportunity. We carry the rhythm of the hospital, the pace of primary care, and the gravity of real-world outcomes. When an NP, PA, or pharmacist transitions into industry, every conversation becomes more authentic. Clinical background allows us to translate endpoints into meaning—moving from "risk reduction" to "reduced readmissions," from "efficacy data" to "a patient getting back to work."

A 2023 MSL Journal feature noted that clinicians entering industry impact "hundreds to thousands of lives at a time" by expanding their reach beyond direct care (Wilson, 2023). That expansion is not a departure from patient care; it is an evolution of it. Clinician-MSLs extend advocacy upstream—into the design of trials, the language of education, and the frameworks of equity.

Trust is the MSL's currency, and credibility is its foundation. Clinicians don't borrow credibility—they embody it. Years of synthesizing complex information under pressure train us to read both data and people. We instinctively recognize hesitation behind a question, skepticism behind a tone, or curiosity behind silence. That sensitivity—the ability to translate what's unsaid—is the clinician's superpower in scientific exchange. We can detect understanding, hesitation, and true buy-in from the clinicians we interact with.

According to MSL Consultant (2025), "the strongest MSLs connect not by overwhelming with data, but by interpreting data through the lens of real-world practice." This is exactly what clinicians do best. When we discuss an emerging therapy, we think in workflows, comorbidities, and community context—how will this impact not only the patients but the clinician's time? Our credibility comes not from the badge we wear but from the bedside stories we carry.

In a field where the line between education and promotion must remain crystal clear, clinicians serve as ethical anchors. Our professional codes—ANA, AMA, APhA—teach that transparency is not optional; it is care in another form. We bring that ethos into every scientific conversation.

The MSL Society (2024) guidelines reaffirm that MSLs must operate as non-promotional scientific peers, prioritizing accuracy, balance, and patient benefit. Clinicians, trained to uphold patient welfare above all else, naturally align with these standards. We are not just messengers of data—we are guardians of integrity.

Clinicians think in systems. We see how a therapy interacts with electronic health records, staffing shortages, and reimbursement realities. That system's awareness enables clinician-MSLs to anticipate barriers before they appear. It also helps connect medical affairs strategies to public-health goals—like trial diversity, patient adherence, and equitable access.

A 2023 MSL Journal commentary on clinician transitions emphasized that those from clinical backgrounds excel in field medical strategy because they can "connect micro-level patient insight with macro-level health outcomes" (Bishop, 2023). That ability is precisely what the industry needs as the landscape becomes more data-driven yet still human-dependent.

The myth persists that moving from clinical care to industry leaves patients. In truth, it is advocating earlier in the chain of

impact—where data decisions determine care realities. Clinician-MSLs ensure that science serves diverse communities, that educational materials reflect cultural humility, and that evidence generation includes the populations most affected by disease.

We are not stepping away from care; we are scaling it. The same compassion that guided our clinical hands now guides our scientific voices. Every slide deck, every field exchange, and every investigator dialogue is an act of advocacy—one that shapes what reaches patients tomorrow.

The best MSLs are more than scientific experts; they are interpreters of meaning. Clinicians possess the empathy, ethics, and systems understanding to ensure that innovation remains tethered to humanity. As industry evolves toward more equitable, data-rich, patient-centric models, clinician-MSLs will be essential navigators.

The clinician's compass—anchored in care and guided by integrity—keeps science aligned with its true purpose: improving lives. That is why those who have cared at the bedside are best suited to lead in the science of care.

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Dr. Tracy R. Wilson has over 23 years of experience in healthcare and patient advocacy, with expertise in clinical education, family nursing, and interdisciplinary course design. She holds a Doctor of Nursing Practice from Belmont University, a Post-master FNP certification from the University of Kentucky, and a Master of Science (MS) in Bioethics from Tulane School of Medicine, as well as an MS in Nursing Education from Bellarmine University.

Currently, she works as a Medical Science Liaison at ARS Pharma, focusing on an FDA-approved product for allergies and anaphylaxis, providing medical education to Key Opinion Leaders and healthcare professionals. Previously, as a field medical

director for antivirals at Pfizer (2019-2024), Dr. Wilson launched six new products and contributed to healthcare disparity initiatives. She is a recognized speaker and panelist, with numerous awards, including being inducted as a Fellow of the American Association of Nurse Practitioners, the President's Award from the National Black Nurse Practitioner Association, and the Patient Impact Award for Pharmaceuticals.

She was recently awarded the Daisy Award for Nurses Advancing Health Equity. Dr. Wilson was also nominated as an MSL of the Year finalist and nominated for Young Black Pharma's Cultivate, Inspire, Connect Award. She will be inducted in December as a Fellow of the Academy of Diversity Nurse Leaders. Dr. Wilson has redefined what it means to be an international nurse leader—uniting science, advocacy, and innovation to bring nasal epinephrine to market. Her groundbreaking work is helping to revolutionize emergency anaphylaxis care by increasing access, improving safety, and reducing reliance on injectable epinephrine, all while minimizing infection risks and administration errors. As both a nurse scientist and industry nurse practitioner, her powerful voice and clinical insight have already accelerated adoption across healthcare systems worldwide—proving that “when nurses lead, the world listens.”

Welcome to the Age of Coaching

By Marcus West | Fall 2025

Coaching has always been treasured by the wise, and it has become an imperative for survival and growth in a highly competitive market with multiple launches and activity, yet limited connection with healthcare professionals.

Lamenting the past will have no impact on sales performance and MSL teams' ability to influence and convince clients, but adapting to a fresh approach where staff are coached to capitalize on a new skill set can be transformative.

Barack Obama's nation-moving speeches were not off the cuff – every moment, every pause, inflection, and emphasis were practiced before being delivered with spell-binding effect. Tennis stars Rafael Nadal and Roger Federer work out an approach for each match and practice till it is grooved into their soul. They lose the moment, the game, set, and match if they are not pitch-perfect.

Companies across industries that are investing time and resources into coaching are being rewarded with improved balance sheets, business efficiencies, and employee satisfaction.

This whitepaper analyses the benefits of technology-based coaching programs and examines how business leaders are reaping rewards from improved productivity, organizational strength, enhanced teamwork and job satisfaction, and staff retention

New Era - New Skills

Picking through the debris of the pandemic's impact on the pharmaceutical industry reveals one shining element – the opportunity to raise the bar on excellence in sales performance and MSL interaction.

The safety net of regularly timetabled meetings with HCPs has been removed, so it will take a new set of skills to survive and prosper post-pandemic. Sales forces, MSLs and their corporate structures need to embrace fresh techniques, strategies and channels that enable them to deliver vital information and detail without being lost in the tsunami of digital content unleashed to make up for the lack of traditional contact.

Product knowledge and a sales pitch will no longer be enough, and each moment in front of an HCP – be it via an online platform, a phone call, or in person – needs to be laden with credibility and value. “You grow business by progressing as an individual or as a company, and you do that by driving credibility, competence, and performance,” says Michael Cassar, regional sales manager at Galderma, who has a track record with pharmaceutical multi-nationals such as GSK, MSD, Pfizer, Liberty Medical, and Indivior.

He operates at the sharp edges of sales force performance, where connecting with clients and delivering clear, compelling messages and details is the lifeblood of campaigns. Providing regular coaching with relevant feedback enhances his team's ability to make the best of every contact, deploying a spectrum of skills from scientific knowledge, through active listening and acute understanding of an HCP's needs and the rhythms of their workload.

“Given the accessibility issues to get in front of our customers in healthcare, I think a new skill set is critical,” adds Cassar. “These include developing a rapport, reading a situation and getting to see an HCP in the first place, then what they do in that

meeting will determine whether or not the door remains open for subsequent visits.”

HCPs are time poor and have demonstrated they are comfortable with a hybrid relationship with medical affairs, sales force, and MSLS via face-to-face and online contact. Casual drop-ins for coffee, sandwiches, and updates were a casualty of the pandemic with a poor long-term prognosis.

Coaching is a game-changer

The new potent forces are the strategic use of online platforms with tailored messaging sent via preferred channels, and all with a hallmark of credibility. Many existing skills used by field forces are relevant but they – and competencies with new channels- benefit from consistent and continuous coaching.

Distinguished leadership coach Carol Kauffman, assistant department of psychiatry at Harvard Medical School, observed that coaching is an effective force for change at the individual and organizational level. “It empowers all of us to be at our best,” she states.

Dr Kauffman, founder of the Institute of Coaching who has advised a range of healthcare clients on her resumé, believes that coaching optimizes ‘the performance of a person or organization in diverse arenas, including leadership, healthcare, and public service.’

Developing new skills alongside traditional talents needs a forensic understanding of corporate goals, client requirements and digital capabilities. “It’s a mix that will change from client to client,” says Chris Costandi, a sales and commercial excellence leader who has worked for Reckitt Benckiser and at GSK as a Regional Sales Manager. “But, if you don’t recognize that new skills and a new approach are needed, then you will be left behind.

“Communications skills that reps have spent years developing need to be refined for the remote engagements that have become a fixture of healthcare. They work differently for phone calls and video meetings, and messages and language must be shaped accordingly.

“Reps need to ask the right questions of their clients and listen and develop competency in hosting virtual meetings.”

A report from Boston Consulting in June 2020 advocated for learning to be embedded in corporate culture rather than being episodic for launches and campaigns. It stated: “Building knowledge requires focus, practice, coaching, and the forming of new attitudes, all of which take months. If organizations want to win at learning, they need to incorporate their skill-building efforts into the work that people do every day. And they must build skills at all levels of the enterprise—top to bottom—as an integrated part of the business and use regular business metrics to measure impact.”

Adding Value

Coaching was once marginalized as a diversion from routine work – sometimes welcome, other times not –with focus on adding skills, knowledge and competencies surfacing only at product-specific sales conferences and launch meetings. But its value is becoming more evident in sales figures and in strengthening individual and team performances across a landscape radically reshaped by the pandemic.

“Coaching is what will ultimately drive overall results and the bottom line. It brings value and should be valued,” adds Cassar. “In coaching, you are aiming to bring about a change of behavior and, in healthcare, that is probably mainly about how you secure access and then convey the key selling points of your product.

“You have to demonstrate to an HCP that you are adding value and are not wasting their time. You have to make every interaction a positive one so you can build on what you have been discussing. Even if it does not result in a sale or contract, the client needs to feel those precious moments they gave up were well spent.”

Investing in coaching need not be a bank-breaker; failing to invest could be. “The pharma industry, like many others, is very competitive with some products doing pretty much the same thing, so you have to stand out, you have to add value,” says Cassar.

“You do that by presenting in a way that actually delivers on the needs of the customer – ultimately the patient – and if can home in on that you add value. “You have to bring something to the table and, therefore, add value and you do that by demonstrating competence and that you are knowledgeable. You have to actually show that you are

not wasting the healthcare professional’s time. Each interaction should enable you to build on that in the future “But you can’t

do that without understanding them and adapting, shaping and practicing your message.”

More companies are now making coaching an integral part of their organisations with managers and field forces being given time and space to learn and problem solve in a positive environment. But the value of coaching can be compromised if managers and team leaders – often promoted directly from successful field careers – are not upskilled in training techniques themselves.

“This is a critical part of the jigsaw that needs to be addressed as they are often thrust into management roles without the necessary skills or training,” says Chris Costandi.

He sees coaching bringing value across the corporate structure with digital tools freeing up time and investment in technology bringing clear, measurable returns.

Coaching as part of the DNA

Coaching needs to be a fundamental characteristic of a company with its status enshrined in the core mission statement. But, as research reveals, industry has some distance to travel. Studies across sales reps of all sectors shine a light the issue: The Voice of the Sales Rep Study, from SalesFuel in 2020, reported that only 30% of reps get frequent coaching personalised to their unique needs while Gartner recorded that only 38% felt their manager was helping them develop the skills for their role and just 34% were confident they were being prepared for the future.

It is only a snapshot but early adopters in coaching, and using technology to deliver it, are racing ahead both in terms of performance and job satisfaction. “Coaching should be a part of the culture,” says Emma Booth, Executive Director Global Business at Amgen.

“One of the common hurdles is that people responsible for coaching have multiple roles so that needs attention. But if you can put in weekly touch points with your teams and ask the right questions about their priorities and found out how you can help then that will help them advance.”

“Sometimes, it might feel impossible to imagine how better coaching can be achieved without big organizational commitment and restructures. But, if you break it down and have it as part of weekly catch ups, it can become more readily adopted. The main thing is for an organisation to say ‘coaching is a priority’ and find things that support the journey to make it happen.”

Booth adds that coaching can empower MSLs to deliver their scientific knowledge and passion in an engaging narrative. “It is truly something we can all benefit from,” she states. Her strategy identifies a simple, effective, inexpensive entry point into adopting coaching as a core quality, but the pursuit of behavioural change and skill development needs a long-term commitment.

It also has to be timely with specific feedback, observes Galderma’s Michael Cassar.

“The ad hoc nature of coaching in most organisations means that staff sometimes just end up practicing bad habits,” he says. “Investment in coaching needs to start with the managers who invariably have been excellent performers out in the field, but they now need a new set of skills.”

Focus and Feedback

He advocates continuous coaching that focuses on a small range of messages and delivery techniques rather than a bucket list of performance targets. The results will flow from staff having the time, space and positive environment to learn with regular feedback.

“All the best athletes in the world have coaches who provide specific feedback,” he adds. “This commitment has to be ring-fenced in terms of the time, the equipment and the environment. “It will enable managers to enhance their staff’s capabilities and ultimately result in more sales.

“One way companies demonstrate that a coaching is valued is by allocating time for it to happen and not letting it become a tick-box exercise. Coaching is constant and for that to be effective at changing behaviour, the feedback must be timely and specified. It cannot be an afterthought.”

Chris Costandi adds: “We all understand that you have to prepare and lay the foundations for a successful sales call. But now this is more important because the reps or MSLs have to communicate on different platforms.

“It has to be a part of a business structure, not a bolt-on for special occasions.”

The challenges - The rewards

Establishing a dedicated coaching strand in a corporate structure requires an economic assessment of the return on investment. Many business leaders and coaching experts believe the outlay – often measured in redefining work commitment, roles and timetables rather than hefty capital investment – will pay swift dividends across a range of metrics from office camaraderie through business efficiencies to balance sheet performance.

Episodic coaching, even when well-directed and resourced, plays to a single performance and has little impact on staff developing problem-solving and knowledge acquisition skills. “Some companies do get it and are being rewarded, but others are still exploring its potential and they could be left behind,” says Cassar. “One of the critical parts is that these changes have to start from the top of the company, and it should be an all-in approach.”

Chris Costandi believes that coaching is often overlooked in time-poor organisations. “From my experience, managers are the busiest people with multiple priorities and people development can get left by the wayside. I would argue that it’s the number one priority,” he says.

“The most successful apps and technology platforms that I’ve seen are easy to use, execute and understand, and they should be viewed as an essential tool. “Teams must be given the time to practice and make the best of their coaching. It is clear that the more you put in, the more you will gain from it.

“Using an app like 60 Seconds helps build confidence in the delivery via practice and insightful feedback so that the MSL thinks ‘How can I improve? How can I be more targeted? It shows your strengths but also where you can develop improvements.

“It gives an individual an opportunity and a platform to practice and see feedback. The continuous coaching drives confidence and knowledge.

“The benefits are realised by the employee and by the customer – the entire customer engagement experience is improved. The MSL can deliver on their objectives, which means they’ll be able to hit their targets, which, in turn, means the organisation is going to have a good performance.”

Conclusion

Coaching capabilities have advanced and forward-looking companies are taking full advantage. They are not delaying to survey the wreckage of the pandemic storm but are re-building with dynamic methods of developing staff capabilities.

By deploying digital coaching, they are equipping staff with new skills, energising their performance and giving them the space to develop problem-solving mindsets. Contact with healthcare professionals is becoming like gold dust and face-to-face opportunities will remain hard chiselled as they struggle with overbearing workloads and a digital bombardment.

Adding to that burden – with ill-defined, disjointed approaches – will only condemn companies to a procession of closed doors and out-of-office responses. Coaching is needed to elevate a sales representative or MSL above that swamp of poor, ill-directed information and foster the confidence and credibility to bring genuine value to customers.

Every contact must be viewed as a moment in the spotlight in front of a demanding audience – it would be unthinkable to walk on stage without the confidence of workshoping and rehearsing a speech or scene. Company messages need every bit of that respect and time taken for coaching will pay dividends.

About the author:



Marcus West

I have directed 35 plays and coached performances for 30 years. I have worked with the likes of LA director, Robert Benedetti, US playwrights, Edward Albee and Will Eno, voice coaches, Kristin Linklater and Cicely Berry, Alexander teacher, Nadia Kevan, LA acting coach, Ivana Chubbuck, British playwright and screenwriter, Stephen Jeffreys, LA screenwriting master teachers, Steven Kaplan, Chris Vogler and Michael Hauge. I use these experiences with the world's leading performing arts practitioners and my own background in theatre, to inform my work in presentation coaching. I work with a host of CEOs and their firms around Australia including KPMG, DLA Piper, CBA, QBE, Merck, and BOQ, as well as politicians and barristers, to help them present their message with punch. I am also a talent coach with Seven, Nine, SBS, ABC, and Fox Sports working with reporters and presenters on their presentation and storytelling skills, as well as many of Australia's leading sportspeople. Clients have included Michael Slater, Wally Lewis, John Aloisi, Sharelle McMahon, Lara Bingle, Mark Ferguson, Ben Fordham, Allison Langdon, Mike Baird, Jonathon Brown, Glen Boss, and Tom Carroll.

In the past five years, I have created a new performance coaching app called 60 Seconds which is a crystallization of my experience.

The Role of Medical Science Liaisons in Medical Affairs Booth Support at Regional Conferences

By Anna Frank, PA-C | Fall 2025

Purpose and Context

Regional scientific conferences serve as accessible, cost-effective venues for fostering meaningful scientific exchange among healthcare professionals (HCPs). When Medical Science Liaisons (MSLs) participate in Medical Affairs booths at these events, they play a pivotal role in building local connections, facilitating evidence-based conversations, and contributing to the overarching mission of Medical Affairs: advancing science and improving patient outcomes through education and collaboration.

This article presents a practical framework for MSLs to support Medical Affairs booths at regional conferences—highlighting alignment with Medical Affairs goals while upholding scientific integrity and compliance standards.

Defining the Medical Affairs Booth

At medical and scientific conferences, a Medical Affairs booth serves as a neutral, non-promotional space for sharing scientific information. Unlike commercial exhibits, which may focus on product promotion, these booths are designed to educate and promote dialogue among attendees, without influencing clinical decision-making.

Subject to local regulations, company policy, and compliance approval, common materials used in support of booth activity include:

- Peer-reviewed reprints or journal articles.
- Approved scientific posters and presentations.
- Therapeutic area summaries and research updates.
- Information on ongoing or planned research initiatives.

Regional Booth Set-Up:

Medical Affairs booths at regional meetings often rely on simple, compliant setups—such as tablecloths with company logos, banners, and approved tabletop signage—offering an efficient, low-cost approach while maintaining high visibility and a professional appearance.

Identifying and Selecting Regional Conferences

MSLs can identify target conferences by reviewing local or regional chapters of relevant professional societies. Selection criteria should be guided by therapeutic area relevance, audience composition, and the potential for meaningful scientific engagement. Before committing resources to a booth, it's often helpful to attend a conference as an observer. This allows MSLs to assess the relevance of the audience, the quality of sessions, and the potential for networking, ensuring the event aligns with Medical Affairs goals.

MSL Responsibilities: Before, During, and After the Event

MSL involvement spans the entire conference lifecycle, with responsibilities tailored to maximize scientific impact and compliance.

Before	During	After
• Review the agenda, speakers, and attendee list to identify key contacts. • Align internally with Medical Affairs and compliance teams on booth objectives, key communication points, and approved materials. • Notify relevant HCPs of booth's presence to encourage visits, where appropriate.	• Staff the booth to provide scientific and evidence-based information and responses. • Document interactions and insights according to company policy. • Identify opportunities for follow-up engagement.	• Send thank-you emails and address any outstanding scientific inquiries promptly. • Log and analyze insights, emerging trends, unmet needs, and collaboration opportunities. • Share findings with appropriate stakeholders to inform strategy and future activities.

Strategic Value of Regional Booth Support

Regional booth participation offers benefits that extend beyond immediate interactions:

- **Local Engagement:** Regional events give MSLs a chance to connect with clinicians in their own territories, offering insights into local practice patterns and challenges.
- **Building Scientific Relationships:** Face-to-face conversations at the booth help establish MSLs as trusted scientific partners and opens the door for ongoing engagement.
- **Insight Generation:** Conferences provide valuable opportunities to capture real-time feedback on evolving clinical practices and emerging data.
- **Expanding Networks:** Regional booths often attract early-career clinicians, local thought leaders, and potential investigators—valuable contacts for long-term collaboration.
- **Reinforcing Non-Promotional Roles:** By maintaining a clear separation from commercial activities, booth participation enhances trust through demonstrated compliance and transparency.

Alignment with Medical Affairs Objectives

MSL booth support for regional booths directly contributes to Medical Affairs goals, including scientific exchange, insight generation, and mapping of local HCP networks. It can also aid in identifying potential advisors, speakers, or research collaborators. Ultimately, it reinforces Medical Affairs' commitment to compliant, high-value field engagements that prioritize education and scientific evidence over promotion.

Conclusion

Regional conferences offer MSLs a unique opportunity to engage with local clinicians, share scientific knowledge, and gather insights that can shape future strategy. When approached thoughtfully, booth participation strengthens relationships, builds

trust, and reinforces the identity of Medical Affairs as an independent, respected scientific partner – distinct from commercial endeavors and focused on advancing science for better patient care.

Best Practices for Booth Success

Category	Key Takeaways
Preparation	• Confirm booth logistics and setup requirements early. • Ensure all materials are approved and compliant. • Coordinate with internal teams on FAQs, key literature, and communication guidelines.
Engagement	• Keep conversations focused on science and education. • Use open-ended questions to learn about clinical perspectives. • Avoid any promotional or product-related messaging.
Documentation & Follow-Up	• Collect contact information in accordance with privacy and compliance standards. • Summarize and share key insights with relevant stakeholders. • Plan follow-up scientific exchanges where appropriate.

The processes and practices described in this article reflect the author’s experience as a United States-based Medical Science Liaison. In the U.S., Medical Affairs booths at regional conferences are distinct from commercial booths, and MSL participation is subject to internal approval from Legal and Ethics and Compliance. Practices may vary by company or country, and readers should consult their own organizational leadership, legal, and compliance teams regarding appropriate booth engagement at regional meetings

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CoPilot was used for assistance in the initial draft language refinement and flow.

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Anna Frank received her B.S. in Health Sciences from Clemson University and her M.S. in Physician Assistant Studies from Albany Medical College. She practiced clinically as a physician assistant in transplant for nearly 8 years at Duke University Hospital and then MedStar Georgetown University Hospital. She has prior leadership and management experience having served as both the Director of the Transplant APP Fellowship Program at Duke and the Inpatient Lead APP at MedStar Georgetown. She transitioned into a healthcare industry role as a medical science liaison in 2022. She previously supported two transplant diagnostic companies with assays using cell-free DNA and gene expression testing to help predict rejection risk in transplant recipients. She joined the Purdue Pharma MSL team in July 2023, where she supports the company's public health initiatives with a focus on opioid overdose.

She resides in Charlottesville, VA with her husband Mikel, their four children: Maeve (7 years old), Maren (4 years old), Tobin (2 years old), Millie (9 months old) and their two doodles, Duke and Sophie.

A Quantitative Approach to Medical Metrics: Insights and KOL Tier Scoring

By Marc Piniés Prat, PharmD | Fall 2025

Situation and Purpose

In many organizations, the Key Performance Indicators (KPIs) used in medical affairs are inherited from commercial functions. As

a result, they often emphasize activity volume, such as the number of meetings or materials produced, rather than measuring the true strategic or scientific impact of these activities.

This approach limits our ability to demonstrate value and alignment with the unique objectives of medical affairs. To address this, there is a clear need to define medical-specific KPIs that go beyond activity counts, aim to capture outcomes and are tailored to the medical department goals.

Developing a standardized, quantifiable framework tailored to medical affairs would not only align performance tracking with our goals but also enhance transparency, consistency, and strategic decision-making.

Insights Scoring

Medical insights are a cornerstone of strategic decision-making, yet their value is often assessed subjectively or inconsistently. This scoring model provides a structured, quantitative way to evaluate insights based on their strategic relevance and geographic or conceptual impact. The goal is to transform insights into measurable KPIs, improving prioritization and demonstrating medical affairs' contribution to strategy.

Procedure

1. Assign a score to each insight depending on how much influences the medical strategy and its geographical impact:

$$\text{Score} = \text{Relevance} * \text{Geographical impact}$$

	GEOGRAPHICAL IMPACT				
		LOCAL (1)	REGIONAL (2)	NATIONAL (3)	INTERNATIONAL (4)
STRATEGIC RELEVANCE	PARADIGM CHANGE (4)	4	8	12	16
	NEW OPPORTUNITY (3)	3	6	9	12
	TACTICAL ALIGNMENT (2)	2	4	6	8
	OPERATIONAL (1)	1	2	3	4

Figure 1: Insights tiering table.
 Paradigm change: Correct or change drastically one previous assumption.
 New Opportunity: Open areas for differentiation, competitive advantage, or new strategies.
 Tactical Alignment: Support refinement or optimization of current strategies.
 Operational: Help fine-tune field execution or logistics

Benefits

- Specific and standardized way to evaluate insights
- Qualitative measure turned into a quantitative one

Potential uses

- Measurable and quantitative KPI of medical insights

Weaknesses and things to improve

- Need for an unbiased classification

- Still not natively quantitative and objective

KOL Tiering with Scoring

Traditional KOL tiering methods often rely on strictly meeting several criteria, limiting their flexibility and long-term tracking value. This model introduces a quantitative, criteria-based approach to KOL classification that reflects both influence level and strategic alignment to each medical department's needs. It enables more dynamic tracking, tailored weighting by therapeutic area, and clearer support for KOL development planning.

Objective:

Procedure step by step

1. Decide the relevant criteria to evaluate if the stakeholder is a KOL and how influential (participation in clinical trials, advisory boards, publications...).
2. Assign a weight to each of the criteria depending on its relevance for the specific company, therapeutic area and therapy.
3. SUM(Criteria met * Geographical impact) is the score for each KOL.
4. Establish each Tier threshold creating a profile of the minimum criteria to be considered a KOL of that Tier.
5. Fill the table with the criteria met by each KOL to calculate the score and the assigned tier. (This are not strict criteria to be met to be in that tier but the criteria that will get them to the minimum score to be in that tier)

Figure 1: KOL Tiering with Scoring

THRESHOLD	TIERING CRITERIA							
		C1 (5)	C2 (4)	C3 (4)	C4 (3)	C5 (2)	C6 (1)	SCORE
	TIER 1	N	I	N	N			52
	TIER 2		N	N	N	R		37
	TIER 3		R	R	R		R	24
	TIER 4		R		R		L	15

Figure 2: KOL tiering with scoring. This is an example on how a threshold profile could be established to tier KOLs depending on their score.

Strengths and Benefits over traditional KOL tiering

- Allows giving different weights to each criteria depending on its relevance (1-5 to keep it simple)
- More progressive tiering allows seeing which KOLs are closer to a higher or lower tier
- Allows more accurate tracking of KOL progression over time
- Simple to use. Can be prepared as an Excel sheet/CRM to just fill the criteria met with (I/N/R/L) and calculate the score

Potential uses

- More detailed KOL tiering
- Score of individual KOLs could be used as a KPI of their development, especially in the case of rising stars (example: MSL rising stars should have an average increase of 5 points/year)

Weaknesses and things to improve

- The weight of each criteria must be established arbitrarily
- Still not natively quantitative and objective

Conclusion

This approach represents a solid step forward in developing specific and quantitative metrics tailored to medical affairs. It offers a useful, standardized, and easy-to-implement procedure that builds on traditional methods with minimal additional effort. At the same time, it remains flexible enough to adapt to different organizations and therapeutic areas. By transforming qualitative inputs into measurable outputs, it adds structure to data, making it easier to interpret and apply. While medical metrics will always retain some degree of subjectivity, there is still room to improve towards greater objectivity, and we should try to actively pursue it.

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I'm Marc Piniés Prat, a pharmacist with a multidisciplinary background in drug discovery research, bioinformatics, and artificial intelligence. I hold a master's degree in Medical Affairs and currently work in the Medical Affairs department, focusing on Medical Excellence and Operations. My role involves improving internal processes and promoting the integration of technology to enhance the efficiency and impact of medical teams. I'm passionate about bridging science, data, and strategy to drive innovation in the pharmaceutical industry.

Applied Neuroscience to the MSL Role: How to Train the Brain to Influence With Integrity

By Martina Riosalido, MS | Fall 2025

Introduction

Imagine this: you walk into a meeting with a leading Key Opinion Leader (KOL). This person barely looks up from his phone, nods while you speak, and leaves you wondering—*did my message even land?* The very next day, you're facing a player who insists on cost-effectiveness data, followed by a Digital Opinion Leader DOL asking for a visual summary he can share on his channel. Three different stakeholders, three different brains—and three very different ways of processing your message.

That's where neuroscience comes in. For MSLs, understanding how the brain decides, filters, and builds trust can transform routine interactions into conversations that truly matter.

One Brain, Two Systems

Psychologist Daniel Kahneman describes two systems of thinking. System 1 is fast, automatic, intuitive—always on, but

sometimes biased. System 2 is slower, deliberate, and effortful—more accurate, but harder to sustain (1).

Picture this: a payer under budget pressure leans on System 1 shortcuts, favoring “cheaper is safer.” A KOL, by contrast, slows down, activating System 2 to analyze clinical endpoints. Patient associations often combine both—the emotion of lived experience with the rational review of quality-of-life data.

For MSLs, spotting which “system” your stakeholder is using allows you to adjust short, intuitive cues for the fast thinker, or structured depth for the analytical one.

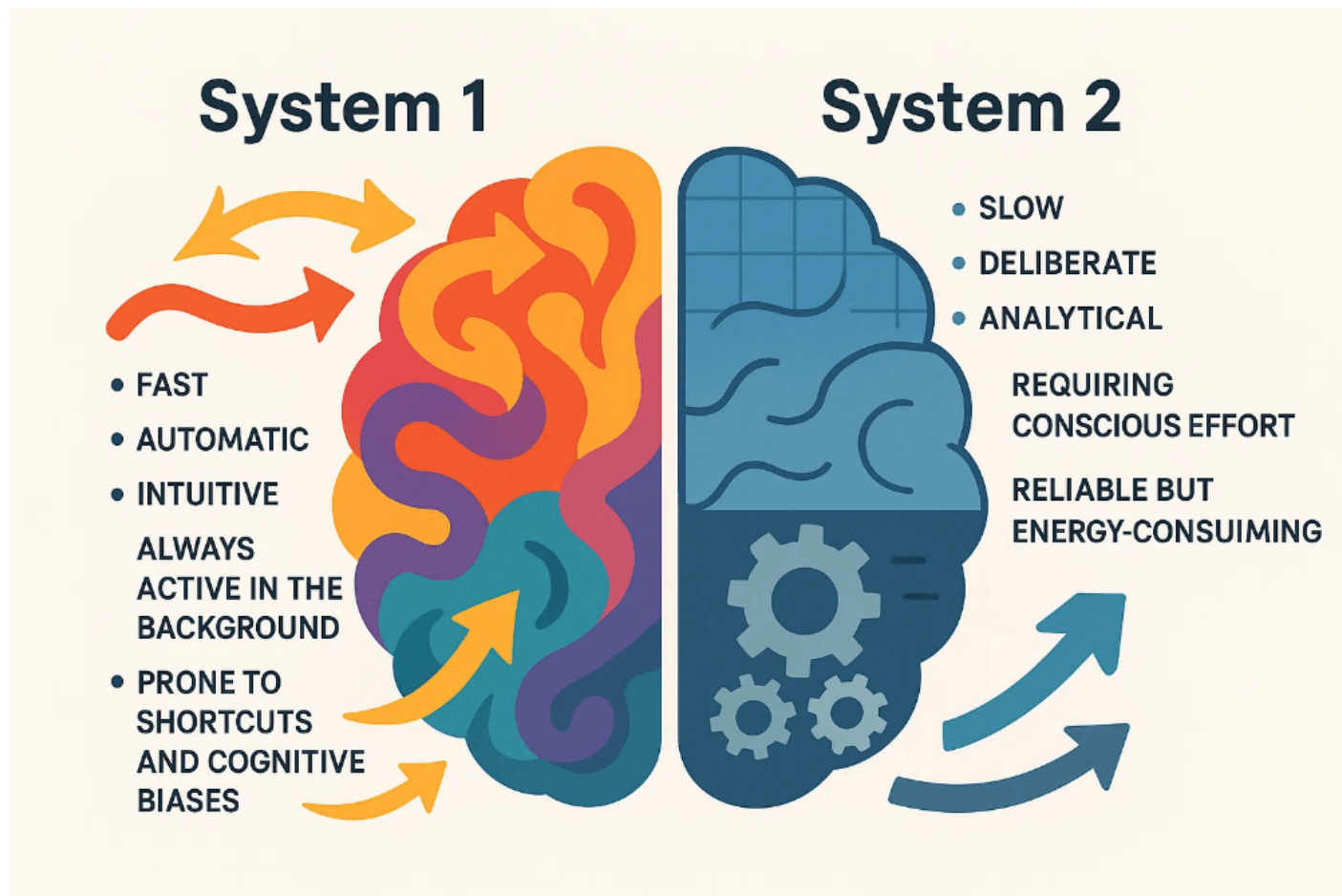


Figure 1. Schematic representation of Kahneman’s two systems of thinking.

Cutting Through the Noise

Every stakeholder is drowning in stimuli: physicians juggling back-to-back congresses, payers overwhelmed by health economics, DOLs scrolling through thousands of digital posts. The brain filters ruthlessly.

Here’s the MSL advantage:

- Open with something that resonates in their world—a patient story, a cost-saving figure.
- Use visuals; the brain processes images faster than text.
- Repeat your core message in scientific, practical, and emotional language.

Think of it like leaving mental “bookmarks.” When a DOL later shares your visual meta-analysis online, it’s because you made it memorable—and easy.

The Trust Hormone

Trust is not abstract; it’s biological. The hormone oxytocin reinforces human connection (2). But for stakeholders, trust takes different forms:

- For a KOL: your scientific rigor.
- For a payer: transparency and consistency.
- For a patient association: empathy and validation.
- For a DOL: being a reliable filter in a flood of digital noise.

The common thread? Authenticity. Admitting “*this is still under investigation*” often builds more trust than overstating certainty.

Biases Everywhere

Cognitive shortcuts shape decisions in clinics and online alike (3,7).

- **Confirmation bias:** a DOL may amplify information aligned with preexisting beliefs.
- **Halo effect:** a manager may judge a whole company through the “halo” of one bad drug experience.
- **Loss aversion:** a payer may cling to a suboptimal status quo out of fear of costly change.

Cognitive Biases in Medical Affairs



CONFIRMATION BIAS

A Digital Opinion Leader may amplify information that matches prior beliefs



HALO EFFECT

A manager may extrapolate a negative experience with one drug to the entire company



LOSS AVERSION

A payer may prefer to keep a suboptimal standard risk an expensive innovation

Figure 2. Common cognitive biases affecting Medical Affairs practice.

As MSLs, we can't erase biases—but we can name them, reframe them, and gently open space for reflection. A phrase like, “*It's natural to trust what feels familiar,*” lowers resistance and makes new evidence easier to consider.

Training the MSL Brain

Here's the exciting part: neuroscience shows the brain can be trained. Exercise literally reshapes brain structures, improving memory and executive function (5). Mindfulness regulates stress and sharpens focus (3). Visualization—mentally rehearsing an advisory board or a payer negotiation—boosts readiness and calm (4).

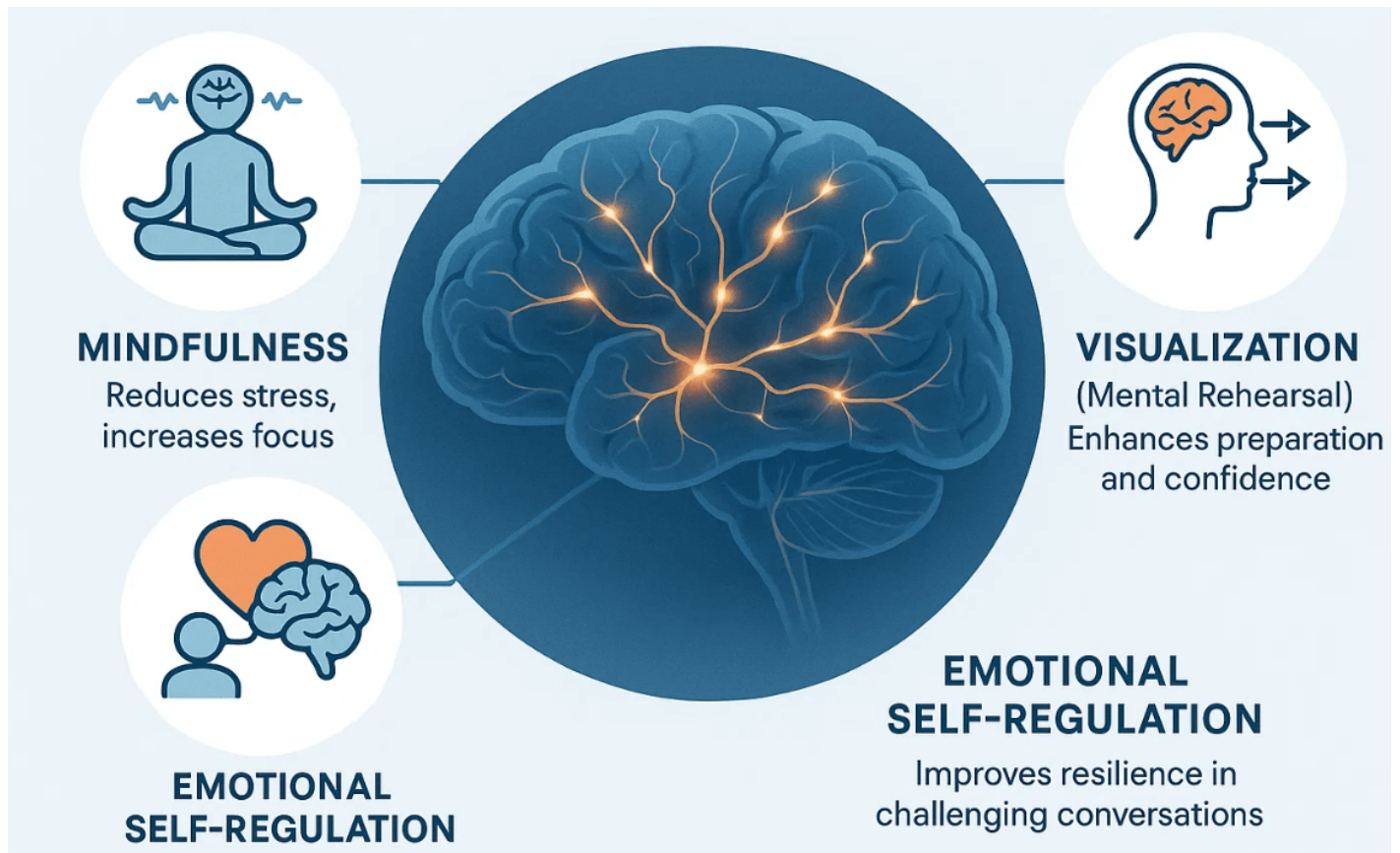


Figure 3. Neuroplasticity: training the brain for strategic impact in Medical Affairs.

Think of your brain as the most strategic tool you carry into any stakeholder interaction. Train it, and you amplify your influence.

Practical Neuroscience Tips

So how can you start applying neuroscience *tomorrow* in your daily work as an MSL? Here are six practical moves to sharpen your communication and influence with integrity:

1. **Read the mental mode.** Notice if your stakeholder reacts quickly and intuitively (System 1) or pauses for deeper analysis (System 2). Adapt your pace and level of detail accordingly (1).
2. **Anchor in threes.** The brain encodes information more effectively in patterns. Prepare three core messages and reinforce them in different ways—scientific, practical, and emotional (6).
3. **Listen with all your senses.** Pay attention not only to words, but also to tone, pauses, micro-expressions, and gestures. These cues often reveal what the brain hasn't verbalized yet (4).
4. **Reframe, don't confront.** Instead of challenging a bias head-on, open alternative perspectives: *"What if we looked at it from another angle?"* This reduces resistance and creates space for reflection (7).
5. **Prime your brain before the meeting.** Mentally rehearse scenarios, objections, and your calm responses. Visualization strengthens confidence and reduces stress (3,5).
6. **Close with a mental signature.** Summarize in one short, memorable phrase designed to stick—something your stakeholder can recall and even repeat to others (2).

Practical Neuroscience Tips for MSLs



Figure 4. Neuroscience tips for the MSL's daily practice.

In conclusion, the future of the MSL isn't only about mastering data or digital platforms. The real differentiator will be understanding the human brain—how it pays attention, how it remembers, how it decides whom to trust.

Neuroscience gives us more than theory. It offers a compass: to influence with integrity, to connect authentically, and to help stakeholders make better-informed decisions.

Maybe that's the hallmark of the next generation of Medical Affairs—professionals who combine scientific rigor with human insight, leaving every interaction not just informed, but transformed.

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Author's Note: This article was developed by *Martina Riosalido, MSc*, with the support of **ChatGPT** (content structuring) and **Sora** (image creation). All materials were reviewed and validated by the author to ensure accuracy and strategic alignment with her expertise in Medical Affairs.

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From Sales Rep to MSL, a Journey of Evolution and Discovery

By Antonio Castiglia, MSc | Fall 2025

The importance of being E.. xplorative!

The transition from pharmaceutical sales to Medical Science Liaison represents more than a career move; it's a transformation that demands curiosity, dedication, and the courage to step into an undefined role. My journey began when the company I was working for at that time decided to create its first MSL positions, selecting specialty sales representatives who demonstrated specific aptitudes for such a pioneering function.

Nurture your good skills; my selling style helped a lot.

As a biology graduate working as a specialized sales representative, I had always approached my role differently. My scientific background shaped my selling style, allowing me to engage healthcare professionals with a depth that transcended traditional promotional tactics. This scientific imprint on my professional performance didn't go unnoticed by my manager, who recognized it as a unique strength that set me apart.

Yet despite finding success in sales, I felt the pull toward deeper scientific engagement. The challenge was clear: pursuing post-graduate specialization would require significant time beyond my already demanding work schedule. That's when I discovered a solution perfectly suited for working professionals—a post-master's degree specialization program designed for physicians and

biologists, offering classes early in the morning, late afternoons into evenings, and on weekends.

I owe a lot to my Manager!

Transparency with my manager proved pivotal. When I shared my decision to pursue this specialized training, he not only supported it but also understood that this commitment reflected the very qualities that made me effective in my role. My scientific approach to sales had driven my performance, and this additional training would only deepen that foundation.

When the company's senior management announced its intention to evolve selected specialty sales representatives into Medical Science Liaison roles, my manager didn't hesitate. He immediately recognized the alignment between my profile and this emerging function. That intuition changed my career trajectory, and I owe much to his foresight in nominating me for consideration.

Embrace the pioneering opportunity.

The MSL position was entirely new to our organization—no established protocols, no experienced colleagues to shadow, just the opportunity to help define what this role would become. The company was taking a calculated risk, transforming sales representatives with the right aptitudes into medical affairs professionals. I became the sole MSL responsible for an innovative, life-changing therapeutic product across all of Italy—a daunting responsibility that would prove to be one of the most fulfilling challenges of my career.

Despite the significant workload and the steep learning curve, I embraced the role with enthusiasm. There was genuine joy in contributing directly to making an innovative treatment available to patients who desperately needed it. The impact felt immediate and meaningful in ways that transcended commercial metrics.

The importance of savvy and visionary management.

The company recognized that this transition couldn't happen without substantial support. They implemented a comprehensive re-training and change management program that made the transformation possible for those of us selected for this evolution. The initiative included extensive technical and scientific training, soft skills development, and crucially, guidance on maintaining business acumen while shifting focus from sales to scientific exchange.

This structured approach to transformation highlights an essential truth: transitioning from sales to medical affairs requires careful management from the organization, people managers, and the employee alike. Technical knowledge alone isn't sufficient; success demands mental agility, the ability to interpret diverse stakeholder needs (both internal and external), and the capacity to apply business understanding in a non-promotional context.

My learnings from this transition.

Reflecting on that experience, several critical factors enabled successful transitions. First, comprehensive training programs must address both technical competencies and the psychological adjustment required when shifting from commercially-driven objectives to scientific education priorities. The mindset change is profound—moving from closing deals to closing knowledge gaps, from persuading to educating, from quota-driven activities to insight generation.

Second, maintaining certain sales-developed competencies proved valuable. Business acumen, stakeholder relationship management, resilience, and the ability to work autonomously in the field all transferred effectively to the MSL role. These skills, refined in commercial environments, became strategic assets when applied to medical affairs objectives.

Third, organizational support cannot be overstated. Companies investing in internal mobility for these transitions demonstrate commitment to employee development while benefiting from institutional knowledge and established relationships that external hires must build from scratch.

Today's landscape.

Today's pharmaceutical companies approach MSL staffing with varying strategies. Some prefer hiring externally from academic or clinical settings, seeking candidates already versed in scientific communication. Others recruit directly from universities, bringing fresh perspectives but requiring extensive industry training. Still others, particularly during reorganizations, offer internal employees – including those from sales – opportunities to transition into medical affairs roles.

Each approach has merits, but internal mobility programs that successfully transition commercial professionals into MSL positions can yield exceptional results when supported with robust training, clear role definition, and appropriate change-

management resources.

A career worth pursuing.

Based on my experience spanning over fifteen years in medical affairs since that pivotal transition, the MSL role remains one of the most rewarding, motivating, and gratifying positions the pharmaceutical industry offers. The combination of scientific engagement with key opinion leaders, contribution to evidence generation, involvement in clinical development, and direct impact on patient care creates a uniquely satisfying career path.

For anyone working in pharmaceutical sales with scientific credentials and curiosity about medical affairs, I encourage exploring this transition. The journey requires dedication, continuous learning, and adaptation, but the professional and personal rewards are substantial. The MSL role allows you to leverage commercial skills while fulfilling the scientific calling that may have drawn you to this industry initially.

The path from sales representative to Medical Science Liaison isn't merely a career change; it's an evolution that, when supported properly and pursued with genuine curiosity, can unlock professional fulfillment few other industry roles provide.

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Global Medical Affairs professional with 15+ years of experience in the pharmaceutical industry, spanning multiple therapeutic areas including Immunology, Rare Disease, Respiratory, and Neurology. Throughout his career at leading companies, including Janssen, Celgene-Amgen, and Zambon, he has specialized in Medical Affairs Leadership, therapeutic commercialization strategy, and building international medical affairs teams. A passionate advocate for the MSL profession, advocating for the evolving role of MSLs in modern pharmaceutical organizations.

The Future of Personalized, Measurable MSL Engagement

By Susan Giacalone, MSN, BCMAS, BC-MSL | Fall 2025

Introduction

Medical Science Liaisons (MSLs) have established themselves as trusted partners to healthcare professionals (HCPs), with 58% of HCPs rating MSL interactions as more valuable than those with sales representatives—and an additional 18% rating them as much more valuable.

However, trust in itself is insufficient as MSLs encounter growing demands to provide high-impact scientific engagement amidst increasingly complex therapeutic landscapes and evolving HCP expectations. These challenges are compounded by constraints on time and resources, as well as the difficulty of quantifying impact.

The question is: How can MSLs teams achieve medical engagement with HCPs and brands that is both personalized and precise—while also delivering measurable impact?

Integrate AI into Field Medical Via Augmented Intelligence Engagement Augmented Intelligent Medical Engagement serves as the foundation for transforming Medical Affairs. This approach integrates AI tools and modular content systems to support MSLs in delivering personalized, efficient and measurable scientific engagement. It also enables a seamless transition to digital-first strategies, aligns field medical efforts with strategic goals, and empowers teams to process complex data, generate actionable insights, and engage HCPs with precision. Ultimately, it positions MSLs to thrive in a data-driven healthcare landscape by modernizing workflows, expanding reach and demonstrating clear ROI for the internal stakeholders. It also delivers relevant and valued scientific content to the HCPs.

Generate Timely and Meaningful Scientific Insights

In a data-rich healthcare environment, the ability to generate meaningful insights is essential for MSLs. Not all data points are created equal—while observations like meeting notes or HCP comments provide context, true insights require interpretation and strategic relevance. By applying structured processes such as reporting, targeting, forecasting, and impact analysis, teams can transform raw information into actionable guidance. Evaluating whether new data fills knowledge gaps, prompts action or enhances existing strategy ensures that insights are not only informative but also aligned with broader medical and business objectives.

Leverage Custom Measurable Metrics That Align with Brand Strategy and Scientific Goals

MSL deployment should start with influencer mapping—a comprehensive view of key opinion leaders (KOLs), payer influencers and provider decision-makers across therapeutic areas. This enables targeted engagement that reflects market-specific needs and strategic priorities. But mapping influence is just the beginning. To truly demonstrate value, MSLs must be equipped with custom metrics that track performance, execution and success. These include:

- KOL and HCP engagement rates
- Scientific Share of Voice (SSoV)
- Insight generation and strategic alignment
- Pre- and post-congress activity tracking
- Sentiment analysis via social listening

Conclusion

As the role of MSLs continues to evolve, staying ahead means embracing new tools, new metrics and new mindsets. A recent case study by EVERANA demonstrated the value MSLs can bring to the clinical development team. A clinical trial was falling behind its projected accrual timelines, compromising potential NDA filing timelines. Midway through the trial, deploying an MSL team to engage with investigators significantly accelerated site activation and patient accrual—leading to early trial completion. This saved the company substantial time in filing and reduced drug development costs. This example underscores the power of strategic MSL engagement in accelerating clinical outcomes and effecting corporate strategy and financial stability.

To build on that momentum, trust from HCPs must be matched with measurable, data-driven engagement. By integrating augmented intelligence, generating timely insights and aligning field efforts with custom metrics, MSLs can not only meet rising expectations but lead the way in shaping the future of scientific exchange.

Disclaimer: This article includes content developed with AI support.

About the author:



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Susan leads field medical efforts for EVERSANA. As a leader in the life sciences industry, she brings more than 20 years of medical affairs experience across multiple therapeutic areas, including oncology, hepatology and rare diseases, and she has successfully commercialized products in all market phases. Susan's career has included numerous senior-level positions, and she earned the MSL Society's U.S. Manager of the Year award in 2020. Susan holds a bachelor's degree in nursing from West Chester University in Pennsylvania and a Master of Science in nursing from Wayne State University.

Reducing Diagnostic Delays in Rare Diseases: The MSL's Role in Closing Knowledge Gaps

By Rohan Zaveri, PharmD | Fall 2025

Diagnostic delay is one of the biggest challenges in managing rare diseases. For example, narcolepsy patients often wait between 8 to 15 years from the onset of symptoms to receiving a proper diagnosis. This delay can severely disrupt their education, jobs, and mental health (Carter LP et al., *Postgrad Med* 2014; 126(3): 216-24). Closing this gap requires more than just scientific breakthroughs; it also needs focused education and communication. This is where Medical Science Liaisons (MSLs) play a crucial role.

MSLs act as a link between pharmaceutical research and clinical practice. By translating new data into clear, clinically relevant insights, they help healthcare professionals identify disease patterns earlier and use evidence-based care. The general symptoms of narcolepsy, such as excessive daytime sleepiness, fatigue, or muscle weakness triggered by strong emotions, can be easily mistaken for depression, ADHD, or other neurological issues. When MSLs provide structured, evidence-based education rooted in current literature and trial results, they expand the diagnostic language that clinicians across various fields can use. This reduces the chance of misclassification.

These educational efforts have real-world effects. Field-based scientific exchanges have shown they can improve clinician confidence and behavior. This aligns with findings from academic-detailing models, which demonstrate increased adherence to best practices and diagnostic accuracy (JAMA Netw Open 2021; Van Hoof et al., Res Social Adm Pharm 2022). The MSL role, focused on peer-to-peer, non-promotional, data-driven interactions, reflects a modern approach that speeds up the application of trial evidence in clinical settings.

Additionally, by presenting health-related quality-of-life (HRQoL) data like the SF-36, MSLs emphasize the significant impact of narcolepsy beyond just sleepiness. Patients report substantially worse HRQoL compared to the general population and even those with chronic diseases like diabetes, hypertension, multiple sclerosis, or epilepsy (Tadrous R et al., J Sleep Res 2021; 30(6): e13383). These insights allow clinicians to understand the broad effects of the disease, which aids shared decision-making and builds empathy.

Equally important, MSL-led education supports a collaborative approach to managing rare diseases. By engaging neurologists, psychiatrists, and primary-care providers at the same time, MSLs encourage a common understanding of overlapping symptoms and comorbidities. This teamwork can shorten the diagnostic process, improve the continuity of care, and ultimately lead to better patient outcomes. When clinicians have access to up-to-date information on disease prevalence, mechanisms, and treatment options, patients are less likely to be misclassified or under-treated.

Education remains a critical priority. Studies indicate that only 7% of primary-care physicians and 22% of sleep specialists can accurately identify all five main symptoms of narcolepsy (excessive daytime sleepiness, cataplexy, disrupted nighttime sleep, sleep paralysis, hypnopompic/hypnagogic hallucinations). Most only recognize excessive daytime sleepiness and cataplexy (Carter LP et al., Postgrad Med 2014; 126(3): 216-24). Proactive, evidence-based conversations led by MSLs directly address this knowledge gap, enabling clinicians to refer suitable patients for polysomnography or MSLT testing without delay

From a public health perspective, reducing diagnostic delays has clear benefits: better patient outcomes, lower healthcare use, and decreased socioeconomic strain. In a complicated and information-heavy healthcare environment, MSLs are key links to practical scientific knowledge. Through accurate, data-driven education, they turn years of uncertainty into prompt, life-changing diagnoses. This shows that effective medical engagement in the field is not just about corporate interests but is a meaningful advancement in national health.

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Rohan Zaveri is a Medical Science Liaison in Neuroscience at Takeda Pharmaceuticals. He completed a Global Medical Affairs Fellowship with Takeda and Northeastern University with experiences in neuroscience, rare diseases, and immunology TA. Dr. Zaveri has authored and presented research at national conferences and is passionate about advancing education and collaboration in the sleep medicine field.

Outside of work, Rohan is a certified breathwork and meditation instructor dedicated to improving mental health and well-being in his community. He enjoys hiking, painting, and playing the ukulele, and is passionate about integrating mindfulness and creativity into professional and personal growth.

Bridging the AI Dilemma Across Commercial, Medical Affairs, and Market Access Teams

By Zeinab Khaled Mohamed Awad | Fall 2025

Commercial, medical affairs, and market access are different departments that shape the strategy of pharmaceutical companies. And understanding their differences helps a lot in identifying the problems and solving them at the root. Though the rise of Artificial Intelligence technology threatens the working process among these departments with the risk of AI-replacement for some professions, as a cost-minimization. Artificial intelligence replacement is considered a crucial threat to most professions. But for human soft skills-based professions, they may not have a major threat. But we can't deny the fast evolution of this

technology and ask critical questions like: what if AI is a replacement for some professional and how we can solve the unemployment, how to adopt and use AI technology properly with any abuse or even for human soft skills-based professionals, will the AI be able to replace them in the near future through mimic some soft-skills such as presenting complex data and interpreting them or what if that our lack of awareness for how to use this tool is the big problem,...etc. Many more questions are provoking the human mind, which needs to be reconsidered for the future.

Dr Samuel Dyer in his last article issued in July 2025 titled “Is Medical Affairs About to Become Obsolete as a Result of AI?” has discussed how medical affairs is impacted by AI and showed us some interesting results considering AI magnitude effect on some medical affairs roles[1]. In a nutshell, it showed that AI affects automated technicalities, such as literature review, content creation, more than human soft skills-based technicalities, such as KOL engagement, negotiation. That’s why medical information specialists are more likely to be replaced with AI than Field MSL/Medical advisor. But there was no clear answer for how it could affect managerial/ leadership positions [1].

AI technology was more noticed when the digitalization of medical affairs rose in the COVID-19 pandemic era, because there was a change in thinking for digitalization and online work. This needs adaptation and a change of mind [2]. This gave me the motivation to ask a critical question, which is how the AI technology could affect the internal communication between the medical affairs team, commercial team, and market access team. This question was answered using three different AI platforms (Gemini AI, ChatGPT, DeepSeek) and trying to conceptualize their answers. The prompt used for this question was: “Do you think that the impact of AI may neglect the internal interactions between the Medical Affairs team, commercial team and Market Access team, and how this will affect leadership positions in the pharmaceutical industry?” Despite different AI algorithms for each platform and used model, their answers were similarly comprehensive the same that AI isn’t a replacement, it is an efficient tool for any automated task that could be made based on a built-in model, such as literature review, data mining, dossier drafting, Omnichannel Orchestration, or giving suggestions for next best actions or comparing pricing model. But AI technology can’t manage the human side, such as emotional intelligence, empathy, negotiations, clinical judgement, exchanging scientific information and building trust. In Table.1, Gemini-AI has summarized AI effects for each department and compares old trends and future ones.

Table 1, generated by Gemini-ai, the effect of AI on three different departments [3]).

Function	Old Collaboration Focus (Manual/Reactive)	New Collaboration Focus (AI-Augmented/Proactive)
Medical Affairs (MA)	Providing reactive, generic data/slides to Commercial/MAX.	Generating Proactive Insights: Using AI to analyze vast Real-World Data (RWD) and social sentiment to identify unmet needs, which MA then shares as actionable, compliant insights for Commercial strategy.
Commercial	Asking MA/MAX for basic information and then interpreting it for messaging.	Executing Hyper-Personalization: Receiving AI-driven, real-time “Next Best Action” recommendations, which are co-created with MA (for scientific accuracy) and MAX (for value messaging).
Market Access (MAX)	Creating rigid, one-size-fits-all value dossiers.	Dynamic Value Storytelling: Using AI to model patient and payer sub-segments and then working with Commercial to deliver customized value propositions and evidence (generated by MA) that speak directly to local payer needs.

Also, AI has some limitations like bias, ethical and legal considerations for data privacy, data duplication if each department is using AI solely. That’s why it is recommended for pharmaceutical companies to develop their own shared AI system, by which all departments (Medical affairs, Market access, commercial) could share their insights and data freely.

The leadership would be redefined from being a functional one into being an integrative and strategic one, which would be needed to avoid making each department work solely, increasing the fragmentation, resulting in working perfectly individually while missing out as a team.

In summary, AI technology is a fact that can’t be ignored anymore. It requires a high level of leadership with integrative and strategic vision to encourage others to start using AI- technology as tool instead of a replacement, and this will allow them to focus on other skills such as interpreting complex AI-generated data, a high level of soft skills, and having a different strategic vision. Thus, AI-human adoption would create new opportunities while diminishing others, such as the medical information role. That’s why it is needed to find solutions for diminished roles by offering them building capacity training, which helps them to strengthen their skills and start using AI as a tool.



Figure1, "Beyond Obsolete: AI Automates the Tasks, Humans Command the Strategy" [3]).

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Five Bioethical Foundations for Good Clinical Research & Practice

By Dallas V. Mullins II, MSc, MAT | Fall 2025



Genetic research and Biotech science Concept. Human Biology technology on an abstract digital background.

INTRODUCTION: In these times of rapid discovery, it is vital to remember five bioethical foundations undergirding all beneficial medical research. These foundations (summarized by the acronym **BNAIJ**) are **beneficence, nonmaleficence, autonomy, informed consent/assent**, and **justice**. Others have written more detailed explanations of these foundations. However, this primer is presented as a quick review for medical science liaisons (MSLs), key opinion leaders (KOLs), primary care providers (PCPs), clinical research coordinators (CRCs), clinical research associates (CRAs), pharmaceutical companies, medical institutions, and community leaders. The purpose of this primer is to optimize the evaluation and communication of not only today's medical marvels and dilemmas but also tomorrow's clinical wonders and challenges.

BENEFICENCE: Beneficence is ensuring that clinical research practices and projects always promote the well-being and best interests of those involved. While it includes following the time-honored Hippocratic Oath, it goes beyond that noble goal. In addition to ensuring that the practices and research do not harm patients and research subjects, it makes objectively verifiable benefits that outweigh any risks a concrete, non-negotiable goal. Thus, clinical research and practices must be based upon experimentally evaluated, objective scientific research, not upon opinions or philosophical trends. Such research and practices must also be supervised and conducted so well that the integrity of principal investigators, supporting institutions, and individual studies is never compromised.

NON-MALEFICENCE: Nonmaleficence is the coequal other side of the bioethical "coin" whose first side is beneficence. Thus, non-maleficence avoids harming patients and research subjects, or at least severely minimizes such harms, during the pursuit of objective, experimentally tested benefits. While ensuring non-maleficence is sometimes more easily said than done, preserving it is still a non-negotiable goal. When research and practice are properly balanced and executed, avoiding or minimizing such harms naturally arises from beneficence.

AUTONOMY: Autonomy is the respect and protection of individual patients' or research subjects' inherent rights to determine the course of their therapy or research participation. Respecting and preserving such autonomy are only possible when the patients/subjects are as well-informed as possible regarding procedures, benefits, and risks. Keeping patients and subjects sufficiently informed requires not only educating and updating them regarding potential benefits and risks throughout their treatment and participation but also respecting all their decisions during the full course of therapy and treatment. Typically, discussions of autonomy include active consideration of informed consent issues. Ensuring patient/subject autonomy is particularly difficult when dealing with members of vulnerable populations such as minors, the elderly, incarcerated individuals, persons with disabilities, and other groups.

INFORMED CONSENT / ASSENT: Informed consent, or at least informed assent, is traditionally considered to be the bioethical foundation of autonomy. While these foundations are closely related, it is useful to give special consideration to informed

consent and informed assent here as a separate, but intertwined, foundation of bioethics. This is because situations may become ethically murky when therapies & research are applied to vulnerable populations. It can be difficult to assess the ability of minor children, pre-adolescents, or late adolescents to fully understand the risks and benefits of more hazardous procedures. Likewise, it is sometimes tricky to balance the needs and desires of those individuals with the wishes and obligations of their parents or other guardians assigned to protect them. Therefore, additional caution with riskier treatments offering more uncertain outcomes is especially warranted. Children under the age of majority are especially vulnerable and have difficulty predicting or understanding the long-term consequences of certain treatments. For this reason, the term informed assent is sometimes used when discussing the more limited power of children to make informed decisions and extend greater protection to those children. Thus, special efforts must be made during study subject recruitment and implementation to ensure that both the minors and their guardians are properly informed. A similar need for caution exists when considering treatments and therapies for incarcerated individuals, the very elderly, cognitively impaired people, and other vulnerable populations.

JUSTICE: Justice is the fifth and final bioethical foundation discussed here. It rightfully requires the fair, beneficial distribution of healthcare benefits, resources, knowledge, and access to all members of a population. Thus, everyone in a population, without regard to membership in various demographics, should be given fair, scientifically objective access to various therapies while assuring simultaneous compliance with the other four bioethical pillars described above. This includes not only giving appropriate access to necessary, experimentally verified therapies, but also ensuring that incentives removing obstacles to research participation do not become tools for pressuring or coercing vulnerable populations into such participation.

CONCLUSIONS: Adhering to the five bioethical foundations (**BNAIJ**) of medical research and therapy summarized above will allow a society to maximize the benefits and minimize the risks of various therapies and research projects. Thus, MSLs, KOLs, PCPs, CRCs, CRAs, pharmaceutical companies, medical institutions, and community leaders should do their best to incorporate these foundations into all aspects of medical research and care both now and in the future.

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This article was written by Mr. Dallas V. Mullins II, M.Sc., M.A.T. Mr. Mullins most recently completed a 3-year stint as a Biology Instructional Coordinator for Northeast State Community College (NeSCC) in Blountville, Tennessee. In that crucial role, he not only prepared all Anatomy & Physiology labs, General Biology labs, and Microbiology labs for their primary campus but also taught courses in Majors Biology, Biology for Nonmajors, Anatomy & Physiology, Microbiology, Physical Sciences, and other science courses for NeSCC. Furthermore, Mr. Mullins taught courses in Anatomy & Physiology, Infectious Diseases, and Microbiology for nursing students at American National University (ANU) and General Biology courses for Virginia Highlands Community College (VHCC).

Mr. Mullins' work for all three institutions involved teaching not only on-site, in-person courses but also hybrid and exclusively online Biology courses using various LMS and instructional platforms. Finally, his extensive scientific employment experiences include many years as a science educator at both the high school and college level, document review work for a clinical research organization (CRO), a research internship in the bioanalytic product development lab of a pharmaceutical company, and quality-control work for both the pharmaceutical and general chemical industries. Over the years, his scientific interests coalesced into a passion for effective clinical communication and the optimization of ethics in the healthcare industry. He appreciates the opportunity to present his insights to the MSL Journal and its readership and welcomes greater collaboration between himself and the MSL industry.

Integrating HEOR and Real World Evidence: The Expanding Strategic Function of Medical Science Liaisons

By Nadia Najam, MBBS | Fall 2025

In today's data-driven healthcare landscape, the value of a therapy extends far beyond its efficacy in clinical trials. Payers, policymakers, and healthcare providers increasingly demand evidence that demonstrates real-world value.

This shift has placed Health Economics and Outcomes Research (**HEOR**) and Real-World Evidence (**RWE**) at the heart of medical strategy.

We explore how MSLs drive evidence generation by identifying knowledge gaps, gathering real-world insights, and translating data into impactful narratives that enhance payer, clinician, and patient confidence.

From Sharing Knowledge to Shaping Proof

Traditionally, MSLs engaged key opinion leaders (**KOLs**) to share data, gather feedback, and strengthen scientific credibility. While this remains vital, modern medical affairs functions are now tasked with demonstrating value across the product lifecycle—from early development to post-launch access.

MSLs embrace a unique position at the intersection of scientific, clinical, and market environments. In this role, they are ideally situated to:

1. Identify evidence gaps that undermine the confidence of stakeholders.
2. Gather actionable insights from real-world clinical settings.
3. Facilitate or help design HEOR and RWE studies to address these gaps.
4. Translate complex data into clear, meaningful clinical narratives that support decision-making..

By contributing to HEOR and RWE initiatives, MSLs strengthen not only the field medical strategy but also the overall value of the communication framework within an organization.¹

Building on this foundation, the next section highlights how MSL-driven scientific dialogue translates into measurable real-world impact.

I. Insights That Drive Evidence:

Every MSL interaction is a potential source of real-world intelligence. Through scientific exchange with clinicians, pharmacists, and payers, MSLs gain nuanced perspectives on:

- Variability in treatment practices and outcomes
- Barriers to therapy adoption or persistence
- Patient subgroups are underrepresented in clinical trials
- Cost drivers, resource utilization, and quality-of-life challenges

When systematically captured and analyzed, these insights form the foundation of the HEOR evidence roadmap.



Repeated feedback from clinicians about treatment discontinuation rates could highlight the need for a real-world adherence study or budget impact model. Similarly, MSLs reporting payer concerns about long-term safety might prompt RWE analyses from claims or registry data.

In this way, MSLs become frontline contributors to medical strategy, helping HEOR teams prioritize studies that are both scientifically relevant and stakeholder-driven.

II. Bringing Real-World Evidence to Life:

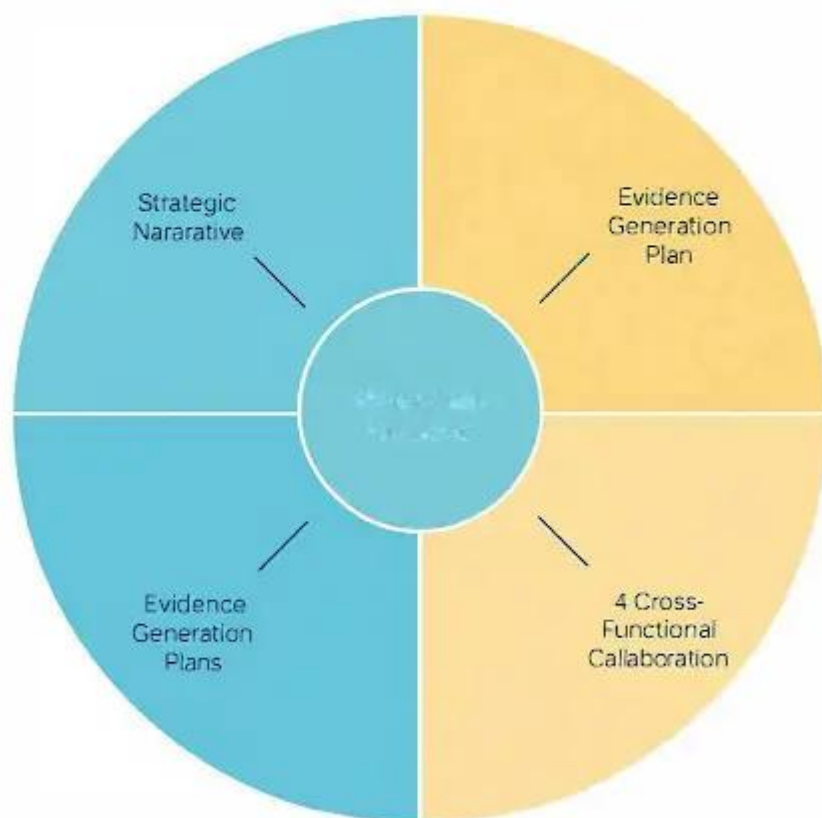
MSLs can actively facilitate the generation of RWD and RWE by bridging internal and external stakeholders. Their relationships with KOLs, research networks, and academic centers enable them to:

- Identify potential investigators and sites interested in outcomes or observational studies.
- Support scientific discussions on study rationale, endpoints, and feasibility.
- Ensure alignment between clinical practice realities and HEOR study design.
- Encourage participation in registries or pragmatic studies by explaining scientific value rather than commercial motives.

When investigators express interest in understanding treatment effectiveness in elderly populations, MSLs can channel this into collaborative RWE projects analyzing electronic health records (EHRs) or claims databases.²

Through these efforts, MSLs transform field intelligence into structured data generation, reinforcing the credibility and clinical relevance of HEOR outputs.

Integrating HEOR into Medical Affairs Strategy



III. Turning Data into Decisions:

Data alone does not drive change—interpretation and context do.

MSLs play a pivotal role in translating HEOR and RWE findings into insights that resonate with healthcare decision-makers. When equipped with a deep understanding of both clinical outcomes and economic implications,

MSLs can:

- Articulate how real-world effectiveness supports or complements clinical trial results.
- Explain cost-effectiveness outcomes in practical terms, linking improved adherence or fewer hospitalizations to measurable savings.
- Customize discussions to regional payer priorities or population-specific needs.³

By providing this bridge between clinical practice and health economics, MSLs ensure that evidence generation translates into evidence utilization.

IV. Connecting What We Learn to What We Do:

One of the most strategic contributions MSLs make is closing the loop between field insights and corporate strategy.

Insights gathered from scientific interactions are not anecdotal—they represent a continuous data stream that can:

- Refine future HEOR model assumptions (e.g., resource use frequencies, adherence rates).
- Influence medical publication priorities (e.g., highlighting underexplored endpoints).
- Shape access and pricing narratives, ensuring they reflect real-world practice realities.
- Identify opportunities for value demonstration studies in specific geographies or subpopulations.⁴

HEOR CONSIDERATIONS

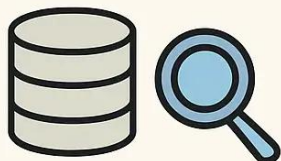
1 REGULATORY BOUNDARIES



2 DOCUMENTATION PRACTICES



3 DATA TRANSPARENCY



4 SCIENTIFIC BALANCE



When MSLs systematically report these insights, medical affairs can evolve from reactive data dissemination to proactive evidence planning—aligning clinical development, HEOR, and market access functions around shared objectives.

From Collaboration to Transformation

As regulatory and payer bodies increasingly accept RWE for decision-making, the collaboration between field medical teams and HEOR functions will deepen.⁵

To support this evolution, organizations can invest in targeted initiatives to:

- Train MSLs in HEOR fundamentals—study design, outcomes terminology, health technology assessment principles.
- Create standardized frameworks for collecting and communicating real-world insights.
- Integrate MSL feedback loops into HEOR study planning and post-launch data strategies.
- Encourage cross-functional partnerships that merge scientific exchange with value demonstration.⁶

When MSLs are empowered as both scientific communicators and evidence collaborators, medical affairs transforms into a true strategic engine, one that drives not only clinical credibility but also tangible healthcare impact.

MSLs form the bridge between healthcare delivery and research innovation. In an era where outcomes and economics define success, the MSL's evolving role in HEOR and RWE generation is not just an enhancement of medical strategy—it is its future.

Confidentiality: This article was written by Nadia Najam, MBBS, with support from AI tools to assist in organizing content and enhancing scientific clarity. All material has been thoroughly reviewed and refined by the author to ensure accuracy and alignment with current international standards and references

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Dr. Nadia Najam is a physician, research scientist, and aspiring Medical Science Liaison with expertise in molecular pathology, genetics, and precision medicine. She is passionate about translating real-world evidence and HEOR into actionable insights, advancing clinical research, and contributing to medical affairs. Her work spans clinical trials, health informatics, and AI/ML applications, with a commitment to fostering innovation and scientific collaboration in the evolving healthcare landscape.

Trust in Government Agencies Falters: MSLs Can Fill Credibility Gap and Combat Misinformation

By Justin O'Rourke, MA, MBA | Fall 2025

For decades, agencies under the U.S. Department of Health and Human Services (HHS) were regarded as the gold standard for medical and scientific guidance. Healthcare professionals (HCPs) trusted these agencies to provide reliable, evidence-based recommendations that shaped clinical practice standards and public health interventions. As federal health agencies face mounting criticism, politicization of science, and high-profile controversies, confidence among HCPs has eroded. The void left behind creates both a challenge and an opportunity for medical science liaisons (MSLs).

During the COVID-19 pandemic, 43% of physicians reported a decrease in trust in federal health agencies.¹ More recent events have further damaged the credibility of federal health agencies, including statements contradicting scientific evidence²⁻³ and the shortcutting of the FDA's rigorous approval process.⁴ Such incidents have led to coordinated efforts by federal healthcare workers to condemn HHS leadership for spreading misinformation,⁵⁻⁶ and medical groups and state agencies issuing guidance that contradicts federal recommendations.⁷⁻⁸

For HCPs, the stakes are high. Clinical practice depends on reliable, consistent sources of objective scientific information. When those sources appear fractured or politicized, practitioners face an environment of uncertainty. This erosion of trust compounds an already difficult reality: HCPs are inundated with information daily, not all of it accurate, and even highly trained clinicians are not immune to misinformation.⁹ In this environment, HCPs will increasingly look elsewhere for clarity and credibility.

Why HCPs Will Lean on MSLs

MSLs are uniquely positioned to fill the trust gap left behind by the federal government. Furthermore, the interpersonal relationships MSLs have with HCPs are well-suited to combat misinformation. These collegial relationships are built on trust and professional similarity. MSLs are perceived as peers, with scientific expertise, whose credibility stems from both their subject matter knowledge and their lack of political entanglement. These relational dynamics give MSLs a level of trust that federal agencies are struggling to maintain.

As the government's credibility declines, HCPs are likely to rely even more on MSLs to provide clarity amidst uncertainty. In a landscape of conflicting voices, MSLs who communicate reliably and transparently become stable, trusted advisors. In doing so, MSLs can reinforce HCPs' ability to make confident, evidence-based decisions.

Combating Misinformation in Clinical Spaces

Misinformation is no longer confined to patients scrolling social media. It has infiltrated clinical conversations as well. Even HCPs can become susceptible, particularly when federal guidance appears politicized or inconsistent. This creates an urgent need for credible, trusted information sources accessible to HCPs.



MSLs can help HCPs overcome misinformation by:

- **Detecting misinformation early.** Their close ties with clinicians allow MSLs to identify misconceptions and offer rapid, evidence-based clarification directly to HCPs.¹⁰
- **Acknowledging skepticism.** Rather than dismissing concerns outright, MSLs can validate HCPs' need for clarity and then provide the data and context necessary to evaluate claims critically.
- **Repeating corrections:** If an HCP is misinformed, repeated evidence-based corrections over time may be necessary for them to accept accurate information.¹¹
- **Reinforcing critical evaluation.** Medical misinformation often derives from misinterpretation or misrepresentation of scientific evidence. Many HCPs struggle to interpret scientific research data.¹²⁻¹³ By equipping HCPs with context and data literacy tools, MSLs strengthen clinicians' ability to distinguish sound evidence from distorted claims.
- **Providing alternatives.** Rather than only negating misinformation, MSLs can offer clear, evidence-based alternative explanations. By offering a factual narrative that fills the cognitive gap left by the correction, MSLs make it easier for HCPs to modify their understanding and ensure their decisions are based on accurate medical information.¹⁴

As trust in traditional authorities wavers, the integrity of medical decision-making increasingly rests with those who engage directly with clinicians. MSLs are uniquely positioned to meet this responsibility, not by replacing federal agencies but by reinforcing the foundations of evidence-based practice through credibility, transparency, and relational trust. Their role in combating misinformation is essential. As distrust in institutions deepens, MSLs are becoming even more important in safeguarding evidence-based medicine.

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Justin O'Rourke is a behavioral science subject matter expert specializing in relationships between pharmaceutical companies, prescribers, consumers, and other health care system stakeholder groups. In addition to an MBA from the University of Wisconsin-Whitewater, Justin holds a master's degree in industrial-organizational psychology from The Chicago School, where he is a doctoral candidate studying business psychology. Justin's research focuses on trust dynamics in the HCP-MSL relationship, peer-to-peer influence, physician decision-making, medical affairs engagement strategy, and health mis/disinformation.

The Science of Culture: How Values-Driven Leadership

Improves Results, Retention, and Reputation in Medical Affairs

By John Waid | Fall 2025

The Missing Ingredient in Scientific Success

In a profession that thrives on evidence, reproducibility, and rigor, one variable remains under-measured but over-influential: culture. For Medical Science Liaison (MSL) teams and broader life-science organizations, culture is not a soft metric — it's the hidden force that determines how knowledge flows, how people behave under pressure, and how decisions get made when data is incomplete.

The Proof Is in the People

Across industries, research keeps confirming the same truth: values and leadership behavior predict performance.

- Gallup (2024): Only 20% of employees strongly feel connected to their organization's culture — yet those who do show 9.8× higher engagement and 5× lower turnover.
- PwC Global Culture Survey: 72% of executives say culture directly enables successful change initiatives — and 85% of high-performing companies actively measure and manage their culture.
- Healthcare Meta-Analyses: Teams with strong values alignment report up to 30% fewer safety incidents and 20–25% higher patient satisfaction scores.
- Values Gap Research (Kang et al., 2023): Staff who believe leadership lives organizational values demonstrate 40% higher discretionary effort and 70% higher trust in decision-making.

These aren't HR numbers — they're performance multipliers.

Culture: The Silent Competitive Advantage

Think of culture as the operating system that runs your organization's behavior code. When it's coherent, consistent, and values-driven, people act predictably and ethically — even under uncertainty. When it's inconsistent, even the most brilliant strategies stall in execution.

In healthcare, a “toxic” culture can cost millions: lost engagement, burnout, rework, compliance breaches, and reputational damage. The U.S. Surgeon General estimated workplace stress costs businesses over \$300 billion annually in healthcare and turnover.

For MSLs, this translates into something even more valuable than money — credibility. Scientific trust erodes quickly when internal behaviors don't match external values.

Leadership: Culture's True Catalyst

Leaders shape culture more through what they tolerate than what they say. A values statement becomes real only when leaders are willing to make trade-offs — to choose integrity over speed, collaboration over ego, or transparency over convenience.

The data backs this up:

- When leaders consistently model organizational values, employees are 12× more likely to say their culture helps them perform.
- Conversely, when values are violated without consequence, trust — and performance — collapse faster than any market trend.

In MSL and scientific teams, leadership behavior defines whether insights are shared openly, whether dissent is safe, and whether collaboration or compliance drives the agenda.

The MSL Imperative: Operationalizing Culture

To make culture a competitive advantage, organizations should:

1. Define values as behaviors — turn words into observable actions that can be coached and measured.
2. Train leaders as culture carriers — not just as managers of projects, but as stewards of consistency and trust.
3. Measure the “culture delta” — the gap between declared values and daily reality. Close it through coaching, feedback, and recognition.
4. Embed psychological safety — especially in MSL work, where speaking truth about data and ethics can challenge hierarchy.
5. Link culture to outcomes — engagement, scientific credibility, speed of adoption, and compliance are all measurable culture effects.

Final Thought

In science, reproducibility is the ultimate test of truth. In business, predictability of behavior is the ultimate test of culture.

When values are clear, leadership is consistent, and culture is lived — performance becomes predictable. And in a world where trust in science and organizations is fragile, predictability is power

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John Waid

John Waid is the Founder and CEO of **Corporate Culture Consulting (C3)**, a global firm that works with organizations to build values-driven cultures that drive predictable behavior and performance. A sought-after speaker and author of *Reinventing Ralph*, John draws on leadership and sales experience at companies like IBM, PepsiCo, **Nestlé**, **Pfizer**, etc. to support CEOs and teams

in turning culture into a lasting competitive advantage.